

The Master List of Archibald Seed.

Prepared for the SRGC Archibald Archive www.srgc.net by David Stephens

by plant name indicates there is a link to a photo. Photo sizes vary.

EUROPEAN, WEST ASIAN & NORTH AFRICAN REFS. : 100.000 TO 999.999

- 101.001 : ACANTHOLIMON ACEROSUM** Turkey, Denizli, Honaz Dag. 2500m. Summit screes. (One of the most widespread prickly thrifts, distributed from W Turkey to NW Iran. Dense, compact mounds of spiny, glaucous rosettes with 10cm. tall, distichous spikes of pink flowers, whose papery white calyces persist to carry a single seed in each one.)
- 104.405 : ACANTHOLIMON ULICINUM** Turkey, Burdur, SE of Altinyayla. 1500m. Serpentine. (One of the most western species. A densely pulvinate, spiny, grey mound with almost stemless, congested spikes of bright pink flowers.)
- 106.810 : ACANTHUS MOLLIS** No data. A bold species from the W & central Mediterranean area with large, lobed, dark green leaves & 1m. high stems packed with pink flowers amid spiny calyces. Tough & immortal in a hot, dry site.
- 106.500 : ACANTHUS DIOSCORIDIS var. PERRINGII** Turkey, Adana, above Hasanbeyli. 1100m. Open stony areas on W-facing slopes. Seed collected under JJA 6812 on 2.7.85 and under 9859 on 15.7.88.
- 106.700 : ACANTHUS HIRSUTUS** Turkey, Icel, 30km. E of G_Inar. 800-1000m. Stony clay at edge of cultivated land. Seed collected under JJA 6743 on 25.6.85
- 106.901 : ACANTHUS SPINOSUS** Greece, Viotia, above Aliartos. 500m. Open slopes between cultivated land. 4.8.85
- 106.950 : ACANTHUS SPINOSUS var. SPINOSISSIMUS** No data. A horticulturally, if not botanically, distinct race of this fine, long-lived perennial from the E Aegean area. Close clumps of deeply cut, dark green foliage, bristling with stiff, white spines. Spires, over 1m. high, of hooded, purplish, white-lipped flowers in summer. For a well-drained soil in a hot, dry site in the UK.
- 111.950 : ACIS AUTUMNALIS** (subsp. *autumnalis*) (*Leucojum autumnale*) No data. Delightful, little white, pink-tinged bells dance on dark stems before the leaves appear, in autumn. Possible in a sunny, well-drained site outside in the UK
- 111.980 : ACIS LONGIFOLIA** (*Leucojum longifolium*) Corsica, Restonica valley. Growing with *Crocus corsicus*. D.Hoskins 05-06
- 630.358 : ACIS LONGIFOLIA** (*Leucojum longifolium*) Corsica, Foret de Carrozzica. c.950m. Edge of pine forest (with *Crocus corsicus*). D.M.Hoskins 05-05.
- 630.359 : ACIS LONGIFOLIA** (*Leucojum longifolium*) Corsica. Ex a T. Norman coll.
- 112.010 : ACIS NICAENSIS** (*Leucojum nicaense*) No data. Only known from the coastal corner of SE France near the Italian border, where it is all but extinct in the wild. Spring-flowering with wide, white bells on stems of 15cm. at most. Does not like to be too hot & dry in summer so is best grown in the alpine-house in 'cyclamen conditions'..
- 112.020 : #ACIS ROSEA** (*Leucojum roseum*) France, Corsica, Pointe de Revellata NW of Calvi. Pockets on granite. (Delicate, tiny, fairy-like autumn-flowering bulb. Shell-pink bells on thready, 5-10cm. tall stems.)
- 112.040 : #ACIS TINGITANA** (*Leucojum tingitanum*) Morocco, Rif, above Chaouene. Ex J.W. Blanchard 88-02. (A fine, spring-flowering plant, considered a doubtful species by many, until rediscovered & introduced. Large white bells on 20cm. stems. May be closest to *L. nicaense* & proving as easily grown in similar conditions in the alpine-house.)
- 112.050 : ACIS TRICHOPHYLLA** (*Leucojum trichophyllum*) Morocco, S of Rabat.
- 112.051 : ACIS TRICHOPHYLLA** (*Leucojum trichophyllum*) Spain, Cadiz, W of Jerez de la Frontera. 60m. Sandy soil. (From a beautiful, pink-flowered population of this exquisite, 20cm., early spring-flowering species for the alpine-house.)
- 112.052 : ACIS TRICHOPHYLLA** (*Leucojum trichophyllum*) Portugal, Algarve, Quinto do Lago. (A wild coll. of this exquisite, 20cm., early spring-flowering species for the alpine-house with pendant white or pink-flushed bells.)
- 112.100 : ACIS VALENTINA** (*Leucojum valentinum*)
- 112.140 : ACONITUM ANGUSTIFOLIUM** (*A. variegatum* group) (Yugoslavia)
- 112.150 : ACONITUM ANTHORA** France, Alpes-Maritimes, Vallon de Casterine. 1600m. Among grasses on steep, dryish, stony slopes. 16.10.83 (Distribution from Spain to Russia)
- 112.200 : ACONITUM COCHLEARE** Turkey, Van. 2700-3000m. (& Armenia)
- 112.300 : ACONITUM COMPACTUM** (*A. napellus* group) (*A. napellus* subsp. *vulgare*) France, Hautes-Pyrenees, Cirque de Troumouse. 2000m. Streamside & among wet rocks. 4.10.83 (Distribution in Pyrenees & W Alps)
- 112.400 : ACONITUM FIRMUM** (*A. napellus* group) (Distributed in Central Europe, E to Romania)
- 112.500 : ACONITUM LAMARCKII** (*A. vulparia* group) (*A. lycoctonum* subsp. *neapolitanum*) (Distributed through the mountains of S Europe from Spain to Bulgaria) Archibald Archive www.srgc.net
- 112.700 : ACONITUM LASIOSTOMUM** (*A. vulparia* group) (Romania & adjacent Russia)

- 112.720 : ACONITUM LEUCOSTOMUM** (C. Asia : Dzungarian Ala Tau, Tien Shan in both Kirgizstan & NW China) (near *A. orientale*)
- 112.800 : ACONITUM MOLDAVICUM** (*A. vulparia* group) (*A. lycoctonum* subsp. *moldavicum*) (Czech Republic to W Russia)
- 112.900 : ACONITUM NAPELLUS** (W & C Europe to E Austria)
- 113.100 : ACONITUM NASUTUM** (NE Turkey, 1700-2400m., & Caucasus)
- 113.100 : ACONITUM NASUTUM** Turkey, Ardahan, Yalnizçam Da_lari. 2500m. Among large rocks on open hillside. (A rather fine Caucasian monkshood, just entering Turkey in this NE corner. Only about 60cm. tall with palmately divided, deeply cut foliage & stiffly branched, glabrous stems of deep violet-blue, spurred helmets.)
- 113.200 : ACONITUM NEVADENSE** (*A. napellus* group) (Spain, Sierra Nevada)
- 113.300 : ACONITUM ORIENTALE** Turkey, Artvin, Genya Da_ above Artvin. 1700m. Wet meadow in *Picea* woodland. (A tall woodland species, distributed from
- 113.309 : ACONITUM ORIENTALE** Kyrgyzstan, Kyrgyz Alatau, Ala Archa, S of Bishkek. 2290m. A. Dickerson 00-03
- 113.400 : ACONITUM PANICULATUM** (*A. variegatum* group) (Distributed in the mountains of C Europe, S to C Italy & E to W Russia)
- 113.600 : ACONITUM SEPTENTRIONALE** (*A. vulparia* group) (*A. lycoctonum* subsp. *lycoctonum*) (Distributed in N Europe from Norway into Russia)
- 113.611 : ACONITUM SEPTENTRIONALE from WHITE FORM** (*A. vulparia* group) No data. From the creamy white clone, grown as 'Ivorine', of this subarctic species, distributed from Norway into Russia. Earliest of all monkshoods, starting to flower here towards the end of May, with stiff upright stems, less than 1m. high, densely set with deflexed, narrow helmets, rising above the neat clumps of darkest green, coarsely cut leaves. Seedlings may produce the normal, deep violet form as well as whites.
- 113.700 : ACONITUM TAURICUM** (*A. napellus* group) (*A. napellus* subsp. *tauricum*) (Distributed from E Alps to Romania)
- 113.800 : ACONITUM TOXICUM** (*A. variegatum* group) (C & W Yugoslavia, Romania)
- 113.900 : ACONITUM VARIEGATUM** (Mts. of C Europe to C Italy & Bulgaria)
- 114.100 : ACONITUM VULPARIA** (*A. lycoctonum* subsp. *vulparia*) (France E to Poland & Romania)
- 114.120 : ACONITUM VULPARIA** (*A. lycoctonum* subsp. *vulparia*) No data. A fine summer-flowering, central European perennial with branching stems about 1m. high carrying racemes of deep ivory helmets with curved spurs in summer. This is from Bob Brown's excellent clone 'Dark Eyes' with black stamens and stems and the deeply cut leaves even darker than usual.
- 115.000 : ACTAEA SPICATA** (Distributed through most of Europe & N Turkey)
- 118.510 : ##ADONIS VERNALIS** **2 pictures** No data. One of the most beautiful of spring-flowering perennials. Distributed from central Europe through Russia, it is essentially a northern steppe-plant from severe continental climates, best suited to an open, well-drained site in the garden. # [Great, glossy yellow buttercup-bowls](#) open with the unfurling, bright-green foliage, finely cut into linear segments, initially on short stems of about 10cm., gradually elongating to over 30cm. Irregular in germination & slow from seed.
- 118.709 : ADONIS WOLGENSIS** Turkey, Erzurum. R.& R. Wallis coll. (Distributed through S Russia & Armenia, this just enters the NE corner of Turkey. A dwarf rhizomatous perennial from montane steppe, more or less dormant in summer, flowering in early spring with bright yellow flowers on stems clad with leaves cut into thready segments..)
- 124.600 : ALCEA KURDICA** Turkey, Hakkari, Zap gorge from near Bagisli to below Hakkari. 1300-1500m. Steep, stony, igneous slopes. (8325 : 11.9.86) (White with yellow base. Lower colls. pale lilac-pink.) Archibald Archive www.srgc.net
- ALCEA SP.** Turkey, Van, between Catak & Van.
- 124.750 : ALCEA PALLIDA** Turkey, Denizli. (A tall perennial hollyhock, distributed through the Balkans and W Turkey. Bristly, lobed leaves and woolly stems, 1.5m. or more tall, with many, white-centred, lilac flowers in late summer.)
- 125.205 : ALCEA RUGOSA** No data. A fine clear-yellow hollyhock with lobed leaves & bristly stems of 1.5m. or more. Well illustrated in Phillips & Rix, Vol. 2, page 41. A very hardy perennial from the steppes of S Russia, SE to Turkmenistan.
- 127.200 : ALKANNA AUCHERIANA** Turkey, Icel, NNW of Mersin to Arslankoy. 500-1000m. Fissures on large limestone boulders and cliffs. (Grey rosettes & forget-me-not flowers, varying from pale blue to pink and white in this valley of the Cilician Taurus. Not impossible to grow & definitely best, in the UK, kept under glass throughout the year.)
- 127.202 : ALKANNA AUCHERIANA** Turkey, Icel, E of Gulnar. 800-1000m. Limestone fissures. (Silvery-grey pads & azure-blue forget-me-not flowers. In the finest, bluest form in the Gulnar area. A few seeds of this classic alpine-house plant.)
- 127.710 : ALKANNA ORIENTALIS** No data. A bristly perennial, native from S Greece into SW Asia and suitable for a hot, dry, sunny site in the UK. About 40cm. high with undulate, oblong, greyish leaves and dense racemes of yellow flowers.
- 128.300 : ALKANNA SAXICOLA** Turkey, Konya, S of Ermenek towards Kazanci. 1200m. N & W-facing limestone fissures. (5384 coll. 30.6.84.)

128.320 : ALKANNA SIEHEANA Turkey, Icel, above Zeyrek (NNE of Mut). 1400m. Fissures on limestone cliffs. (14675 coll. 5.6.94)

ALLIUM ACUTIFLORUM

130.000 : ALLIUM AFLATUNENSE Kirgizstan, Chatcal range. Ex a J. Ruksans coll. (The true central Asian species, not the stock long grown in cultivation under this name & now included under *A. hollandicum*. Dense umbels of rich violet flowers on stems reaching 1.2m. in height.)

130.001 : ALLIUM AFLATUNENSE Kyrgyzstan, Fergana range, Kugart valley. (The true central Asian species from a site adjacent to the Aflatun valley type-locality. Not the stock long grown in cultivation under this name & now included under Kurdish *A. hollandicum*. Dense umbels of rich purplish violet flowers on stems reaching 1.5m. in height.)

130.100 : ALLIUM AKAKA (Sect. *Acanthoprason*) Turkey, Erzurum, Palandöken Daglari, between Erzurum & Tekman. 2700m. Steep, igneous scree on exposed summit ridge.

130.110 : ALLIUM AKAKA (Sect. *Acanthoprason*) No data. From a particularly good, deep pink form grown by Alan Edwards. One of the dwarf & most western members of Sect. *Acanthoprason*, distributed from E Turkey to Transcaucasia & NW Iran, N into Armenia & Azerbaijan, frequently on loose shale or scree slopes. One or two, broad, glaucous leaves & short, stout stems with splayed shaving-brush umbels of many, campanulate flowers. Always attractive but often a pale or grubby shade of mauve. Bulb-frame or pot in the UK.

130.120 : ALLIUM aff. AKAKA (Sect. *Acanthoprason*) Turkey, Kars, Kagizman to Pasli gecidi. 1800m. Limestone scree on W-facing slope. (Does not quite match the description of *A. akaka* in the 'Flora of Turkey' (nor indeed other populations we have seen) but it is from the Georgian border & it may be closer to another Transcaucasian species. An attractive, dwarf, pinkish, ball-headed *Allium*, about 15cm. high, with about 3, grey-green leaves, narrower & more upright than typical *A. akaka*.)

130.121 : ALLIUM aff. AKAKA (Sect. *Acanthoprason*) Turkey, Erzurum. (Similar large form.)

130.200 : ALLIUM ALEXEJANUM (Sect. *Acanthoprason*) Tadjikistan, Turkestan range, Zaamin. 2700m. Ex ARJA 97-60 (Choice, very dwarf & local. Close to *A. nevskianum* but usually with only a single, elliptical leaf and umbels of green-white flowers with purple-veined segments on very short stems.)

130.300 : ALLIUM ALTISSIMUM Turkmenistan, Kopet Dag, near Manish. (More or less a taller, earlier flowering version of *A. jesdianum* with dense umbels of deep violet-purple flowers.)

130.300 : ALLIUM ALTISSIMUM Turkmenistan, Kopet Dag, near Manish. (Correctly identified material of this 1.5m. tall species with glossy green foliage and dense umbels of deep violet-purple flowers.)

130.410 : ALLIUM AMETHYSTINUM (Sect. *Allium*) No data. A SE European species with rounded umbels of many, cylindrical, purple flowers on 50cm. stems sheathed with linear, channelled leaves. For a dry, sunny site.

130.500 : ALLIUM ANACOLEUM Turkey, Van, Kavussahap Dag. 2500m. Stony slopes in steppe vegetation. (From the highest mountains of SE Turkey & N Iraq. Hemisphaerical umbels of little, purple-pink bells on 15cm. stems in summer.)

130.530 : ALLIUM AROIDES (Subgen. *Melanocrommyum*) Uzbekistan, Samarkand, Seravshan. (One of the last species in this subgenus to flower, towards the end of July in Europe. Lax umbels, about 10cm. across, of greenish white flowers with purple-brown midveins held on 20cm. tall stems. The specific name refers to the very large spathes. Needs dry conditions as soon as flowering starts.)

130.550 : ALLIUM ASCHERSONIANUM (Subgen. *Melanocrommyum*) Jordan, 20km. W of Kerak. (A robust, broad-leaved species with tight, hemispherical umbels of many, starry, deep purple flowers on stems, 30cm or more tall. Endemic to N Egypt, Israel and W Jordan. Records for Turkey are the result of misidentifications. This has probably not been tried in cultivation in the UK, where it will only be possible under glass in dry conditions with as much sun as possible.)

130.600 : ALLIUM ATROPURPUREUM No data. A handsome, 50cm. high plant from SE Europe & Turkey. Linear basal leaves & many-flowered umbels of starry flowers in deep, rich, red-purple on stems of about 50cm.

130.610 : ALLIUM ATROVIOLOCEUM

130.620 : ALLIUM BACKHOUSIANUM Kirgizstan, Fergana range. A little-known, rather splendid, tall species with tight umbels of white flowers, each with long, linear segments, carried on 1.5m. stems.

130.630 : ALLIUM BADAQSHANICUM Archibald Archive www.srgc.net

130.635 : ALLIUM BAISSUNENSE Uzbekistan, Baissun-tau. Ex ARJA 98-32 (Very recently introduced to cultivation and closely related to *A. caspium* with similar, huge, 30cm. diameter, lax umbels of green-white flowers carried on 40cm. tall stems. Native to a small area of arid, serpentine mountains, this needs care in watering & a completely dry rest in summer. Janis Ruksans rates this as his favourite *Allium* & compares the long-lasting flower-head to an exploding firework)

130.640 : ALLIUM BARSCZEWSKII Uzbekistan, Akbulak valley. Ex RKMP 82-95. According to Janis Ruksans, the collector, this is a particularly fine form of this 30cm. high Central Asian. Splendid, upward-facing, red-purple flowers.

130.641 : ALLIUM BARSCZEWSKII Uzbekistan, Pskem range, Urungachsai. Ex ARJA 97-46. (According to Janis Ruksans, a particularly fine form of this 30cm. high Central Asian. Splendid, upward-facing, pinkish-purple flowers.)

130.650 : ALLIUM BARSCZEWSKII No data. A 30cm. high Central Asian. Splendid, upward-facing, red-purple flowers.

130.670 :# ALLIUM BODEANUM (Sect. *Acanthoprason*) No data but originally from an Anne Ala coll. A splendid endemic of Khorasan, in NE Iran, & adjacent Turkmenistan. Related to *A. cristophii* but with fewer, shorter, wider, falcate, blue-grey leaves & a shorter, fatter scape carrying a huge, spherical umbel of large, starry, violet-purple flowers with whitish perigonia. Rated as highly garden-worthy by Per Wendelbo & “certainly one of the more remarkable species of its genus.”

130.750 : ALLIUM BRACHYSCAPUM

130.800 : ALLIUM BREVISCAPUM (Sect. *Acanthoprason*) (Endemic to Iran : Hamadan area.)

130.850 : ALLIUM BUCHARICUM

130.900 : ALLIUM BUNGEI (Central Iran, dry steppe.)

130.950 : ALLIUM CAERULEUM Kirghizstan, Alatau, near Bishkek. Ex a J. Ruksans coll. (Dense umbels of beautiful, bright sky-blue flowers on 1m. stems in midsummer.)

130.968 : ALLIUM CAESIUM Kazakhstan, Kurti. An ice-blue form of this Central Asian species, about 30cm. high with umbels of many flowers

130.969 : ALLIUM CAESIUM Turkestan Range, Zaamin. Ex ARJA 97-71.

130.970 : ALLIUM CAESIUM No data. Seeds from an excellent, richly coloured, bulbil-free form of this Central Asian species, originally received from Tashkent Botanic Garden. About 30cm. high with umbels of many, violet-blue flowers

131.000 : ALLIUM CALLIDICTYON Turkey, Agri, near Tutak. 1600m. Ex a N. Stevens coll.

131.100 : ALLIUM CALOCEPHALUM (Sect. *Melanocrommyum*) Archibald Archive www.srgc.net

131.185 : ALLIUM CAPITELLATUM Iran, Mazanderan, near Siabiche. 1900m. (Tight umbels of starry flowers, bright pinkish violet in this form, atop a slender, 30cm. tall stem, appear in late summer after the leaves are dormant.)

131.278 : ALLIUM CARDIOSTEMON (Sect. *Melanocrommyum*) Turkey, Trabzon, S of Of. 1150m. (An adaptable species from a wide variety of habitats in E Turkey, N Iraq, Armenia & NW Iran. Easy in a well-drained site. Dense many-flowered hemispherical umbels of darkest maroon-purple flowers on 60cm. stems, later in summer than most tall, ball-headed species. Seed from Janis Ruksans selected form from this locality, which he has now named ‘Purple Gem’.)

131.279 : ALLIUM CARDIOSTEMON Armenia, Aragats. 970m. (Another form from the Armenian Caucasus.)

131.280 : ALLIUM CARDIOSTEMON Armenia, Daralagaz bear Vardaovit. (A fine Caucasian form of this adaptable species from a wide variety of habitats in E Turkey, N Iraq, Armenia & NW Iran. Dense many-flowered hemispherical umbels of darkest maroon-purple flowers on 60cm. stems, later in summer than most tall, ball-headed species.)

131.301 : ALLIUM CARINATUM subsp. PULCHELLUM (Sect. *Codonoprasum*) Italy, Lombardia, S of Sabbio Chiese. 280m. Stony limestone slopes.

131.309 : ALLIUM CARINATUM subsp. PULCHELLUM (Sect. *Codonoprasum*) Croatia, Plitvice. (A robust form, reaching 50cm., with flowers twice as large as the usual garden-form & of an extraordinarily bright lilac-pink.)

131.320 : ALLIUM CARINATUM subsp. PULCHELLUM from DWARF FORM (Sect. *Codonoprasum*) No data. A compact form of one of the finest Europeans. Umbels of numerous pendant, purple bells with exerted yellow stamens open from erect buds.

131.380 : ALLIUM CAROLI-HENRICI

131.400 : ALLIUM CAROLINIANUM No data. Most material in cultivation appears to originate from the KBE 268 coll. at about 4000m. on the limestone of the Razbal Gali pass, Kashmir, in 1983. Attractive & little-known, red-purple species.

131.490 :# ALLIUM CASPIUM (Sect. *Kaloprason*) Iran, East Azerbayejan, SE of Marand. 1750m. Open stony slopes. (In the same section as *A. schubertii* & *A. protensum* &, like them, with flowers carried on pedicels of varying lengths but a dwarfier plant, 10- 20cm. tall, with smaller, rounded umbels of many, widely campanulate, pale-green flowers, tinted with rose & with projecting stamens. A hardy species, centred on the Caucasus, from a cold area near the border with the former USSR.)

131.510 : ALLIUM CASSIUM Syria, above Bludan. Ex an R.& R. Wallis coll. (An attractive, dwarf species from S Turkey, Syria & Lebanon. Rounded umbels of campanulate, white flowers with pink midveins on 15cm. stems.)

131.520 : ALLIUM CASSIUM var. HIRTELLUM Turkey, Icel, N of Gülek Bo_azi. c. 2000m. (A attractive, dwarf species from S Turkey, Syria & Lebanon. Rounded umbels of campanulate, white flowers with pink midveins, which suffuse the segments with rose as they age, on 15cm. stems above a few linear leaves, in this case pubescent.)

131.530 : ALLIUM CATHODICARPUM

ALLIUM CHAMAEMOLY

131.550 : ALLIUM CHAMAESPATUM Greece, Messinia, Pilos. 50m. Open, rocky hillside. B. Mathew coll. (An odd, 30cm. high, autumn-flowering bulb from the limestones of S Greece & Crete. The upper leaf sheathes the stem up to the rounded umbel of cylindrical, white flowers and projects above it in a most distinctive fashion. Possibly for the bulb-frame in the UK.)

131.560 : ALLIUM CHELOTUM Iran, Elburz, Kuh-i-Abr. Ex a P. Wendelbo coll. (A handsome, ball-headed species, confined to a few localities in the eastern Elburz. Near *A. jesdianum* & *A. rosenbachianum* with similar rounded umbels of violet-purple

flowers but the perianth-segments are more membranous and the foliage almost elliptic.)

131.570 : ALLIUM CHITRALICUM

131.575 : ALLIUM CHLORANTHUM Turkey. (Like *A. flavum* but flowers intense green.)

131.580 : ALLIUM CHRYSANTHERUM

131.581 : ALLIUM CHRYSANTHERUM Turkey, Malatya,

131.590 :# ALLIUM COLCHICIFOLIUM Turkey, Tunceli, NW of Tunceli to Ovacik. 1000m. Openings among deciduous scrub on steep slopes. (A relative of *A. orientale* and *A. kharputense* with 2 notably broad basal leaves. Hemispherical umbels of widely campanulate white flowers, usually with purple midveins on the segments, carried on sturdy, 15cm. stems.)

131.591 : ALLIUM COLCHICIFOLIUM Turkey, Malatya, NW of Maden. 1500m. Steep igneous slope. (Possibly Noe's 1852 type-locality.)

131.595 : ALLIUM CONVALLARIOIDES (Sect. *Codonoprasum*) Iran, N of Sardasht. (An eastern relative of *A. flavum* and *A. carinatum*, similar to these in general aspect but with rounder, denser umbels, comprising a larger number of white, slightly pink-tinged, flowers with brown midveins. For a sunny, well-drained site in the UK.)

131.600 : ALLIUM CRISTOPHII (*A. albopilosum*) (Sect. *Acanthoprasum*) Iran, 75km. W of Bojnurd, (17146 : 18.5.01)

131.605 : ALLIUM CRISTOPHII (*A. albopilosum*) (Sect. *Acanthoprasum*) No data. Purple-pink stars in showy, rounded umbels about 20cm. across on 50cm. stems. A very hardy plant from NE Iran & Turkmenistan & one of the best ball-headed ones for UK gardens.

131.750 : ALLIUM CUCULLATUM

131.800 : ALLIUM CUPANII (subsp. *cupanii*) Macedonia, Galicica Planina above Otesevo. 1700m. Fissures on limestone outcrops.

131.850 : ALLIUM CUPULIFERUM Tajikistan, Hissar range. Ex RM 82-66 (A most distinct & attractive, 50cm. high species with umbels of large, cup-shaped, lilac-pink flowers carried on elongating pedicels, extending to different lengths.)

132.000 : ALLIUM DARWASICUM Tajikistan, Varsob valley. Ex RM 82-74. (Dense, elegant umbels of upturned, white flowers. 50cm.)

132.001 : ALLIUM DARWASICUM Tajikistan, Peter I range, near Tovil-Dora. (Elegant umbels of upturned, narrowly cup-shaped white flowers on stems between 30cm. and 40cm. tall.)

132.005 : ALLIUM DARWASICUM from YELLOW FORM (Subgenus *Melanocrommyum*) Tajikistan, near Iol. (A rare colour in this subgenus. Dense umbels of upturned, narrowly cup-shaped flowers in slightly greenish yellow, rather than the usual white, carried on stems between 30cm. and 40cm. tall. Comes 'true' from seed. Dry rest in summer.)

132.050 : ALLIUM DASYPHYLLUM (Subgenus *Melanocrommyum*) Kirgizstan, Kirgizskiy Alatau foothills. (A very odd species with a solitary, linear leaf and 20cm. tall stem, both densely covered with short hairs. Umbels of brownish green flowers will appeal to 'lovers of the curious.' This will need a dry rest when dormant in summer.)

132.100 : ALLIUM DECIPIENS Ukraine, Krim. Archibald Archive www.srgc.net

132.150 : ALLIUM DERDERIANUM (Sect. *Acanthoprasum*) (Endemic to N Iran : central Elburz N of Teheran.)

132.159 : ALLIUM DERDERIANUM (Sect. *Acanthoprasum*) Iran, Tehran, Tochal. 1800-2200m. Ex GLUZ 98-018 (Endemic to exposed, stony or gravelly sites in the central Elburz of N Iran, this is a very choice, very dwarf member of this desirable section. The umbel of purple flowers sits almost stemless between the two, linear, flat, greyish leaves.)

ALLIUM DOLYCHOSTYLUM Sarimar range between Shurab & Sairob. 1200m. (Rhizomatous with dense, rounded heads of pink flowers on 50cm. tall stems.)

132.220 : ALLIUM ELBURZENSE (Sect. *Acanthoprasum*) (Endemic to NE Iran : E Elburz to S of Quchan.)

132.229 : ALLIUM ELBURZENSE (Sect. *Acanthoprasum*) Iran, Ku-e-Abr. Ex a P. Wendelbo coll. (The true plant, an endemic of the eastern Elburz range extending eastwards into the area S of the Kopet Dag of NE Iran. Closest to *A. bodeanum* and *A. cristophii* with two broad elliptic leaves, pressed to the ground with the 10-15cm. high stem appearing between them to carry a big, rounded umbel of large, wideopen stars in bright violet-purple. From a good bright form. A rare plant in cultivation and for the alpine-house or bulb-frame only at present.)

132.240 : ALLIUM ERIOCOLEUM (Sect. *Rhiziridium*) Kazakhstan, Karzhantau, Burguluk. (A yellow-flowered, clump-forming species allied to the Iranian *A. scabriscapum*. Pubescent leaves & globose umbels on 30cm. tall stems.)

ALLIUM ERUBESCENS Iran. (Dense heads of pink flowers on 30cm. tall stems.)

132.280 : ALLIUM FEDTSCHENKOI (Sect. *Melanocrommyum*) Turkey, Hakkari, Altin Daglari, NNW of Cukurca. 2500m. Ex a N. Stevens coll. (A striking species, as far as we know new to cultivation and little-known in the wild, where it has been recorded only a very few times in this corner of Turkey on the Iraqi border and in Kermanshah province of western Iran. Large, almost hosta-like, basal leaves, about 8cm. wide, and 70cm. tall stems with umbels, about 10cm. in diameter, of lilac flowers. A choice plant, possibly best given the protection of a bulb-frame in the UK because of its rarity.)

- 132.309 : ALLIUM FETISOWII** Kazakhstan, Chu-Ili range, near Chopkar. Ex RSK 77-17 (Dense, tight umbels of violet-pink, star-shaped flowers on 40cm. stems.)
- 132.350 : ALLIUM FIBRIFERUM**
- 132.400 : ALLIUM FLAVUM** (var. *minus*) (Sect. *Codonoprasum*) Greece, Ioanina, Katara. 1700m. SE-facing slope in serpentine scree. (This dwarf form is probably unsustainable botanically but in cultivation stays at 10-15cm. with heads of pendant, acid-yellow bells.)
- 132.470 : ALLIUM GIGANTEUM**
- ALLIUM GRIFFITHIANUM** Sarimar range, near Shurab. 1200m. Ex ARJA 98-42.
- 132.510 : ALLIUM GYPSACEUM** Uzbekistan, Baissun mts. Ex ARJA 98-36. (From the arid serpentines of S Uzbekistan, this must have careful watering and a long, dry, summer rest. A short, 15cm. stem carries a dense, globose umbel of large, cup-shaped, flowers, straw-coloured with bright purple midveins and margins, giving a dull crimson effect. 15cm.)
- 132.550 : ALLIUM HAEMANTHOIDES** (Sect. *Acanthoprasum*) (Iraq : Kurdistan ; Iran : Zagros Mts. from Dorud S to Shiraz area.)
- 132.551 : ##ALLIUM HAEMANTHOIDES 2 pictures** (Sect. *Acanthoprasum*) [#Second pic](#). Iran, Lorestan, WNW of Dorud, above Razan pass. 2200m. Limestone rock-ledges. (Endemic to the highest Zagros from Sulaimaniyah in Iraq S to the Shiraz area of Iran. A short, stout scape of less than 15cm. rises between 2-3 broad leaves with a big, spherical umbel of pale rose, green-tinted flowers with linear tepals, carried on pedicels of different lengths, as in *A. protensum* and *A. schubertii*. Possibly not in cultivation before.)
- 132.700 : ALLIUM HELDREICHII** Greece, Pieria, Oros Olimbos. 1200m. Shady limestone fissures in *Fagus* woodland.
- 132.720 : ALLIUM HELICOPHYLLUM** (E Elburz to Khorassan : rare in dry steppe.)
- 132.750 : ALLIUM HIRTIFOLIUM** (Sect. *Melanocrommyum*) Iran, Lorestan, WNW of Dorud. 2000m. Moist gulley.
- 132.751 : ALLIUM HIRTIFOLIUM** (Sect. *Melanocrommyum*) Iran, Esfahan, SE of Khonsar. 2600m.
- 132.760 : ALLIUM HISSARICUM** Tadzhikistan, N of Dushanbe, Harangon valley. (Related to and not dissimilar to *A. winklerianum* with cup-shaped violet-purple flowers but its distinctive, stiff, almost leathery perianth segments mean the flowers last in good condition for a very long time.)
- 132.770 : ALLIUM HUBER-MORATHII** Turkey, S of Cerkes. (A more delicate version of the S European *A. carinatum* with more diffuse umbels of lilac-suffused, pink flowers. A choice plant, little, if at all, known in gardens.)
- 132.780 : ALLIUM HYALINUM**
- 132.785 : ALLIUM ILIENSE**
- 132.790 : ALLIUM ILIENSE subsp. NURATENSE** Uzbekistan, Zhizakh, Nuratau, SW of Yangikishlak. Loose, slate stone-slide on open slope. (A few seeds of this very local ball-headed species, an edaphic endemic to the slates of the Nuratau.)
- ALLIUM INCONSPICUUM** Uzbekistan, E of Tashkent. (Clump-forming and close to *A. barsczewskii* but dwarfer with re-purple flowers with deep purple midveins on each segment. Dry summer rest.)
- 132.809 : ALLIUM INSUBRICUM** Italy, Comi di Canzo. 1300m. Archibald Archive www.srgc.net
- 132.810 : ALLIUM INSUBRICUM** No data. This is "*A. narcissiflorum* of gardens". Both species are closely related and equally local in the wild : *A. narcissiflorum* with sugar-pink, erect flowers in the French Alps ; *A. insubricum* from above Lake Como in N Italy with drooping bells in a lovely soft, dim wine-purple. Choice, slow-growing but not difficult in limestone scree.
- 132.900 : ALLIUM JAJLAE** Ukraine, Krim, near Simeiz. Stony, seaward-facing slope. Dense umbels of upward-facing, soft-purple flowers.
- 132.949 : ALLIUM JESDIANUM** Iran, Yazd, Kuh-i-Barfkhane. (From the southern, type-locality collection of this showy species, more widely distributed far to the North in Central Asia. Rounded umbels, about 15cm. in diameter, packed with purplish violet flowers on stems rising to as much as 1m.)
- 132.950 : ALLIUM JESDIANUM** Tadzhikistan, Seravschan, Shing valley. (A fine, variable, Central Asian, bulbous species, usually about 1m. high & long confused with *A. rosenbachianum*. Janis Ruksans has named a most distinct, early flowering clone, 'Shing', from this valley : extremely dense, dark purple umbels on 70cm. stems & yellowish-green foliage.)
- 132.951 : ALLIUM JESDIANUM** Afghanistan, Bamian. Ex Hedge, Wendelbo & Ekberg 4865. (Perhaps the finest form of this quite widely distributed Central Asian species, at one time wrongly attributed to *A. rosenbachianum*. Enormous umbels of deep purple flowers with white anthers on stems over 1m. high. A spectacular & eye-catching plant for a well-drained site.)
- 132.952 : ALLIUM JESDIANUM**
- 133.007 : ALLIUM KARATAVIENSE** (Sect. *Acanthoprasum*) Kazakhstan, Karzhantau, SE of Chimkent, Burguluk. 1300m. Loose stone-slides on open slopes. (The best-known member of this outstanding section & a well-established garden-plant of proven worth. We hope our 2002 wild collections will provide material showing the much greater diversity of the species than appears in standard Dutch stock and produce clones with more richly coloured flowers & even more striking foliage. This coll. is from a

range where bright red-purple flowered forms are reputed to occur & whence Janis Ruksans 'Red Globe' came.)

133.008 : ALLIUM KARATAVIENSE from GIANT FORM As 133.007 : from a clone with football-sized heads.

133.009 : ALLIUM KARATAVIENSE (Sect. *Acanthoprasum*) Kazakhstan, Djambil, Karatau, WSW of Taras. 900m. Slate & shale talus. (From the range where Janis Ruksans collected 'Kara-Tau' : pink with purple-tinged seed-capsules.)

133.010 : ALLIUM KARATAVIENSE (Sect. *Acanthoprasum*) Uzbekistan, Chatkal range.

133.011 : ALLIUM KARATAVIENSE from WHITE FORM No data. From the beautiful variant, 'Ivory Queen', of this splendid species, unrivalled in its broad basal foliage in grey with metallic purple tints. Large, rounded heads on 20cm. stems.

133.012 : ALLIUM KARATAVIENSE (Sect. *Acanthoprasum*) Uzbekistan From 'Red Globe'

133.013 : ALLIUM KARATAVIENSE (Sect. *Acanthoprasum*) Uzbekistan, Kuramin Range above Angren. Ex SAVV 95-25. (From a striking variant, named 'Red Giant' by Janis Ruksans. Huge umbels of deep red-purple flowers on short stems.)

133.020 : ALLIUM KARATAVIENSE No data.

133.022 : ALLIUM KARATAVIENSE subsp. HENRIKII Uzbekistan, Tashkent, Karzhantau range, Tovaksai. (An exceptionally robust, local population, originally distributed as 'Red Globe' by Janis Ruksans, who has recently elevated it to subspecific status. Bright red-purple flowers in huge umbels, up to 20cm. across, on 20-40 cm. tall stems.)

133.030 : ALLIUM KAZEROUNI Iran, Zagros Mts., Zardeh Kuh massif. (Barely in cultivation and extremely local in nature, confined to the Bakhtiari country of the highest Zagros. This is, in effect, a reduced dwarf version of its close relatives, such as the better-known *A. hollandicum* and *A. jesdianum*. Rounded umbels of violet-purple flowers on stems about 30cm. tall, rising above narrow, strap-shaped, glossy green leaves.)

ALLIUM KERMESIANUM Slovenia. (Dense umbels of re-purple flowers. 20cm.)

133.059 : ALLIUM KHARPUTENSE (Sect. *Melanocrommyum*) Iran, W Azerbayejan, Disaj to Agh Bolagh, near Sangar. Ex N. Stevens 1862. (A 40cm. high species from E Turkey, N Iraq & NW Iran, allied to *A. nigrum* & *A. orientale*. Dense, many flowered umbels of flowers with white segments reflexing around either green or black-maroon ovaries. Both forms here.)

133.070 : #ALLIUM KOMAROWII (Sect. *Melanocrommyum*) Tadjikistan, Seravschan, Antara-Sara valley. (A most distinct & striking species. The 2, narrowly elliptical leaves, in shape & colour recalling *A. karataviense*, remain in good condition through flowering. A 30cm. scape carries a dense hemisphaerical umbels of brilliant violet-purple flowers.)

133.100 : ALLIUM KUNTHIANUM Armenia, Zangezur range, Mt. Hustup.

ALLIUM LENKORANICUM Azerbaijan, Talish.x RSZ 87-07 (Very late-flowering and very beautiful with pinkish-brown flowers on thready pale lilac pedicels. 30cm. tall.)

ALLIUM LITWINOWII Uzbekistan, Chatkal range, near Sari-Chilek. (Bright blue, violet-veined flowers in tight umbels on 30cm. tall stems.) Archibald Archive www.srgc.net

133.200 : ALLIUM LONGISEPALUM (Iran : south & west.)

133.250 : ALLIUM LORATUM Pakistan, Quetta province. (Seldom collected and an extreme rarity in cultivation, this is a ball-headed species related to *A. elatum* (syn. *A. macleanii*) and *A. giganteum* but the rounded umbels of many lilac flowers are carried on stems only a third of the height of these and the leaves are much shorter.)

133.350 : ALLIUM MACLEANII

ALLIUM METEORICUM Small umbels of pink flowers on 15cm. stems.

133.450 : ALLIUM MATERCULAE (Sect. *Acanthoprasum*) (Endemic to Iran : Arak & Qom areas.)

133.650 : ALLIUM MICRODYCTION

133.680 : ALLIUM MINUTIFLORUM (Sect. *Acanthoprasum*) (Endemic to Iran : Bakhtiari & Yazd (Shir Kuh).)

133.700 : ALLIUM MIRUM

133.800 : ALLIUM MONOPHYLLUM

134.060 : ALLIUM MYRIANTHUM (Sect. *Codonoprasum*) Turkey, Denizli, Pamukkale. 400m. Ex a N. Stevens coll. (A type-locality coll. of this distinct, E Mediterranean, 80cm. high, plant with dense mop-heads of numerous, tiny, white flowers on purple pedicels.)

134.100 : ALLIUM NARCISSIFLORUM France, Hautes-Alpes, Pic de Gleize. 2000m. Unstable, limestone screes along S-facing side of summit-ridge. (In gardens, this name is still frequently applied to *A. insubricum*, its close, equally local relative from N Italy. From "high up in the most awesome shelves of the limestone Alps of Piedmont," this is "the glory of its race" according to Farrer. Close clumps of foliage & 15cm. stems carrying umbels of erect (not drooping as in *A. insubricum*) sugar-pink flowers.)

134.180 : ALLIUM NEVSEHIRENSE (Sect. *Allium*) (Sect. *Allium*) Turkey, Nev_ehir, near Zelve. 1000m. (Central Anatolian species with slender, 50cm. tall stems bearing tight, spherical umbels of yellow-green flowers in early summer.)

134.200 : ALLIUM NEVSKIANUM (Sect. *Acanthoprasum*) Tadjikistan, Varsob Gorge, near Chinoro. 1200m. Stone slip. Ex RK 81-39 (A splendid endemic of Tadjikistan & N Afghanistan, along the lines of *A. karataviense*. Large, round umbels of rich,

- dusky, pinkish-red flowers between two broad, blue-green leaves. Satisfactory outside so far with several growers in the UK.)
- 134.201 : ALLIUM NEVSKIANUM** (Sect. *Acanthoprasum*) Tajikistan, Hissar range, Harangon valley. (A splendid endemic of Tajikistan & N Afghanistan, along the lines of *A. karataviense*. Large, round umbels of rich, dusky, pinkish-red flowers between two broad, blue-green leaves. Satisfactory outside so far with several growers in the UK.)
- 134.230 : ALLIUM NIGRUM** (Sect. *Melanocrommyum*) Iran, West Azerbayejan, between Disaj & Agh Bolagh. 1500m. Ex N. Stevens 1862. (Identification dubious : *A. kharputense* ?)
- 134.270 : ALLIUM NOEANUM** (Sect. *Melanocrommyum*) (SE Turkey, N Syria, N Iraq, NW Iran.)
- 134.350 : ALLIUM NUTANS** No data. A hardy, Siberian species producing its bulbs on short rhizomes. Stems about 50cm. high carry spherical umbels, nodding before the rosy lilac, cup-shaped flowers with projecting stamens open in summer.
- 134.410 : ALLIUM OBLIQUUM** Russia, Siberia, Sajan range. (A fine, ball-headed species distributed through Central Asia into S Siberia. One of the last of the taller species to flower, up to 1m. high with dense, almost spherical, umbels of many, cup-shaped, pale-yellow flowers with projecting yellow stamens. A delicate contrast to the purple usual in this group.)
- 134.550 : ALLIUM OLIVIERI** (Sect. *Melanocrommyum*) (Iraq & SW Iran)
- 134.570 : ALLIUM OLYMPICUM** Turkey, Kastamonu, Ilgaz Da . 1800m. (A dwarf, NW Turkish endemic from coniferous forests & scrub. Only recently established in cultivation. Distantly allied to *A. carinatum* but only 15-25cm. tall with 2-3 flat, narrowly linear leaves & many-flowered umbels of pink bells with violet anthers in summer.)
- 134.680 : ALLIUM OREOPHILOIDES** Tajikistan, Seravschan, Antara-Sara valley. (A beautiful, dwarf, high altitude species, barely in cultivation. On a similar pattern to the well-known *A. oreophilum* (*A. ostrowskianum* of the bulb trade), though not closely related to it and altogether a more delicate, daintier affair. Thready leaves and 5cm. stems with cream-coloured flowers, suffused with pink and with a pink midrib to each perianth segment. This sets very little seed and is likely to remain a choice species for the specialist alpine-grower. Arnis Seisums tells us that it is "a beauty in a pot.")
- 134.700 : ALLIUM OREOPHILUM** (Sect. *Porphyroprason*) Uzbekistan, Seravschan, Agalik valley near Samarkand. (A magnificent, tall, early flowering form of this variable species, best known in gardens in the commercial stock grown as "*A. ostrowskianum*". This is an outstanding garden-plant with large umbels of purple flowers on 40cm. stems.)
- 134.701 : ALLIUM OREOPHILUM** (Sect. *Porphyroprason*) Uzbekistan, Tashkent, Kuramin range. 2800m Ex a J. Ruksans coll. (An exceptional, extremely dwarf form of this well-known species, widely distributed from NE Turkey to W Pakistan. Only about 6cm. high, with large, eye-catching flowers in very deep, rich purple. This is quite recently introduced from the Kuramin mountains, which lie along the border of Uzbekistan with the Fergana and Tajikistan. This is now an inaccessible 'security zone' and likely to remain so.)
- 134.702 : ALLIUM OREOPHILUM** (Sect. *Porphyroprason*) Kirghizstan, Fergana range, near Kugart. 2800m. Ex ARJA 97-19. (A distinct variant from a seldom visited locality. Fine rosy purple flowers.)
- 134.703 : ALLIUM OREOPHILUM** (Sect. *Porphyroprason*) Tajikistan, upper Kusavli-sai valley. 3200m. Ex a J. Ruksans coll. (Another most distinct and outstanding, very dwarf geographical variant. Umbels of rich red-purple flowers rise on short stems above 2-3 spirally curled, grey-green leaves which twist on the ground.)
- 134.704 : ALLIUM OREOPHILUM** (Sect. *Porphyroprason*) Russia, Dagestan, upper Samur valley. 2500m. Rocky slopes. (A fairly dwarf form from the Caucasus with large, dense umbels of purple-red flowers on 15cm. tall stems.)
- 134.801 : ALLIUM ORIENTALE** Turkey, Antalya, Irmasan gecidi. 1530m. Openings in *Abies*, on limestone. (From a worthwhile form of this variable, 50cm. high species. Rounded umbels of white flowers with lilac-purple anthers & filaments.)
- 134.820 : ALLIUM ORIENTALE** Jordan, Madaba, E of Macherus. (Dense, rounded umbels on 20-30cm. tall stems. Each white flower has a striking ovary, suffused with intense purple. Foliage of the Jordanian populations is more similar to the ones on Cyprus than those in Turkey. Full sun and good drainage.) Archibald Archive www.srgc.net
- 134.900 : ALLIUM OSCHANINII** Uzbekistan, mts. S of Fergana valley. Ex ARJA 98-40
- ALLIUM PALLASII** Uzbekistan, Fergana valley. (Dense umbels of a myriad small soft-pink flowers on 30cm. tall stems. Thread-like foliage.)
- 135.509 : ALLIUM PARADOXUM var. NORMALE** Azerbaijan, Talysh range. Ex RSZ 87-13. (A very beautiful species in the race without bulbils in the flower-heads. Large white flowers on 30cm. stems. In cultivation from a Paul Furse coll. made in the Iranian Talysh but seldom seen, though it always attracts attention and is quite easily grown outside in the UK.)
- 135.100 : ALLIUM PENDULINUM** (Sect. *Briseis*) Italy, Monte Rotondo. (By far the choicest member of this small section, a trio which includes *A. triquetrum* & *A. paradoxum*. Unlike these, this produces no bulbils and very few seeds. Its white flowers, carried in diffuse umbels, are widely opened not campanulate. A plant of moist, shady sites, only about 20cm. tall & of rather delicate appearance, it needs & deserves some care to maintain it in cultivation.)
- 135.900 : ALLIUM PROTENSUM** Uzbekistan, Samarkand, Seravshan, S of Amankutan. 1800m. Loose talus. (Rather like a more compact (and very much hardier) version of the better-known E Mediterranean *A. schubertii*. Similar, very large heads of pink flowers on pedicels of varying lengths, the whole starburst exploding on a 30-40cm. stem.)
- 135.909 : ALLIUM PROTENSUM** Uzbekistan, Susi-Stau range. (Rather like a more compact - and very much hardier - version of

the better-known E Mediterranean *A. schubertii*. Similar large pink heads on 30-40cm. stems.

- 135.950 : ALLIUM PSEUDOSERAVSCHANICUM** Turkmenistan, Kopet Da_, Arvaz valley. Stony meadow. (Spectacular, globose umbels of pale lilac-pink flowers on 70cm. tall stems.)
- 136.000 : ALLIUM PSKEMENSE** Uzbekistan, Pskem range, Akbulak valley. Ex RKMP 82-07. (A most splendid, exotic, late-flowering, giant onion, robust and up to 1m. tall, with huge, rounded umbels of green-white flowers. Like nothing else when its green fingers of foliage, up to 3cm. in diameter, push through in spring. If you want a really peppery, hot onion-flavour you can eat these, as the locals do, as well as admire them. Rare & restricted in nature but quite easy to grow.)
- 136.079 : ALLIUM REGELII** Turkmenistan, Kopet Da_.
- 136.150 : ALLIUM ROBUSTUM** Kazakhstan, Tarbagatai range, western foothills. (From northern Central Asia over near the border with China. Somewhat similar to *A. atropurpureum* with tight umbels of rich purple flowers on 50cm. stems. This flowers early and last in good condition for a long time. Needs a very dry rest in summer.)
- 136.180 : ALLIUM ROSENBACHIANUM** (subsp. *rosenbachianum*) Tajikistan, Darwas range, Baldshuan. (This superlative species, as a whole, is local in S Tadjikistan & N Afghanistan. It is rare in cultivation, where its name has been much misapplied to *A. hollandicum* and several cultivars of the much more widespread *A. jesdianum*. Violet-purple flowers carried in large, well-balanced umbels, about 15cm. in diameter, on 70cm. tall stems. Spreading, glossy, green basal leaves.)
- 136.185 : ALLIUM ROSENBACHIANUM subsp. KWAKENSE** Tajikistan, Harangon range. (This superlative species, as a whole, is local in S Tadjikistan & N Afghanistan. It is rare in cultivation, where its name has been much misapplied to *A. hollandicum* and several cultivars of the much more widespread *A. jesdianum*. Intense violet-purple flowers carried in large, well-balanced umbels, about 20cm. in diameter, on 70cm. tall stems. Spreading, glossy, green basal leaves. This subspecies is distinguished by its broad, more erect leaves, barely tapering at the bases. Needs a dry summer-rest.)
- 136.200 : # ALLIUM ROSEUM** 2 pictures. Portugal. Ex an A. Edwards coll. (A good form with no bulbils in the umbels. About 30cm. high with many, large, attractive, bright-pink flowers, each with darker stripes along the segments. Best grown in a warm site.) [# Second pic.](#)
- 136.250 : ALLIUM ROTUNDUM** Russia, Krasnodar, near Enem. (Black-purple flowers in dense heads on 50cm. stems.)
- 136.370 : ALLIUM RUBELLUM** Archibald Archive www.srgc.net
- 136.500 : ALLIUM SARAWSCHANICUM** (Sect. *Melanocrommyum*) Uzbekistan, Samarkand, Seravshan, S of Amankutan. 1800m. Loose stone-slide.
- 136.507 : ALLIUM SARAWSCHANICUM** (Sect. *Melanocrommyum*) Uzbekistan, Samarkand, Seravshan, Agalik. 1100m. (Stout, erect stems, about 80cm. in height, carry large, airy, globular umbels of green-centred, violet flowers on green pedicels. One of the finest tall, ball-headed species, both spectacular in the garden and outstanding for cutting.)
- 136.508 : ALLIUM SARAWSCHANICUM** (Sect. *Melanocrommyum*) Tajikistan, Chinoro gorge. (Rounded umbels of darker violet-purple flowers, carried on deep purple pedicels, which vary in length giving a diffuse effect.)
- 136.509 : ALLIUM SARAWSCHANICUM** (Sect. *Melanocrommyum*) Uzbekistan, Kuramin range.
- 136.510 : ALLIUM SARAWSCHANICUM** (Sect. *Melanocrommyum*) No data but from parents originating both in Uzbekistan (Seravschan range) & Tadjikistan : open-pollinated so they might have crossed. Stout, erect stems, about 80cm. in height, carry large, globular umbels of violet-purple flowers on greenish or purplish pedicels, which can vary in length giving a diffuse effect.
- 136.680 : ALLIUM SCABRIFLORUM** (Sect. *Allium*) Turkey, Karaman, SSE of Karaman. 1100m. Open steppe. (A neat, little bulbous plant of the central Anatolian steppe, related to the Palestinian *A. hierochuntinum*. Thready leaves and dense, firm, globose umbels of powder-blue flowers on wiry, 20cm. stems in summer. Very slow to increase vegetatively.)
- 136.700 : ALLIUM SCABRISCAPUM** (Sect. *Rhiziridium*) Iran, Zanjan, NW of Zanjan. 1250m. Sandy clay & gravel hills in river valley. (The only yellow flowered species in Iran. A choice, striking & worthwhile plant, which used to grow & flower well from a Paul Furse collection in the old bulb-frames at Wisley. Forms slowly expanding, narrow-leaved, clumps of bulbs with fibrous, netted tunics almost on the surface. Umbels of brilliant yellow flowers in early summer. 20cm. tall.)
- 136.701 : ALLIUM SCABRISCAPUM** Iran, Khorasan, Bojnurd, E of Tang Rah. 1200m. Steep, loose limestone slopes & among scrub.
- 136.805 : ALLIUM SCHUBERTII** (Sect. *Kaloprasum*) No data. A spectacular species with enormous rounded heads of purplish flowers up to 40cm. across on 50cm. stems. The flower-stalks vary greatly in length, giving an explosive, starburst effect. As attractive in seed as in flower, it dries beautifully. From Syria & Israel, it is best grown in a bulb-frame in the UK.
- 136.900 : ALLIUM SCOTOSTEMON**
- 137.010 : ALLIUM SENESCENS** No data. An excellent, hardy garden-plant, spread in the wild from SW Europe E into Siberia. Close clumps with flat foliage send up hemispherical umbels of lilac flowers on stems of about 30cm.
- 137.037 : ALLIUM SEWERZOWII** Uzbekistan, Tien Shan, Chimgan. (A somewhat more robust version of *A. fetisowii* with wider leaves and umbels of lilac-pink flowers on stems up to 1m. tall. Little-known in gardens.)
- 137.038 : ALLIUM SEWERZOWII** Kazakhstan, Boroldaitau, ENE of Chimkent. 950m. (A somewhat more robust version of *A. fetisowii* with wider leaves and umbels of lilac-pink flowers on stems up to 1m. tall. Little-known in gardens.)

137.039 : ALLIUM SEWERZOWII Uzbekistan, Kuramin range. Ex ARJA 98-83.

137.050 : #####ALLIUM SHELKOVNIKOVII (Sect. *Acanthoprasum*) 4 pictures Iran, Ardabil, W of Ardabil, Kuh-e-Sabalan. 2400m. Among steppe vegetation on tuffs of volcanic ash. (One of the dwarfest & most desirable of it section, introduced by ourselves & no doubt others in the 1960's but somehow lost in the intervening decades.) [#2nd pic.](#) [#3rd pic.](#) [#4th pic.](#)

137.051 : ALLIUM SHELKOVNIKOVII Iran, Kordestan, NW of Divandarreh. 2000m. Gravelly clay slopes. (A form a little closer to *A. akaka* (the two species may well merge) from an area where we collected it in the 1960's)

137.052 : ALLIUM SHELKOVNIKOVII Iran

137.100 : ALLIUM SIBTHORPIANUM Ex a N. Stevens coll.

137.309 : ALLIUM SOSNOWSKYANUM (Sect. *Allium*) Turkey, Artvin, above Demirkent. 1800m. In thorn-cushion association. Ex KPPS 93-30B. (From a Michael Kammerlander collection of this local, small species only recorded from Erzurum & Artvin provinces near the Georgian border in NE Turkey & virtually unknown in cultivation. Two narrow flattened leaves and spherical umbels of campanulate, white to pale pink flowers with dark central veins on each segment.)

137.400 : ALLIUM SPHAEROCEPHALON (subsp. *sphaerocephalon*) (Sect. *Allium*) Turkey, Icel, NNE of Anamur (31km. from Anamur to Ermenek). 950m. (Intense amethyst-pink flowers in globose umbels on stout stems of 60cm. or more in height. A fine geographical variant of this widespread species. "Nice indeed ! My colleagues were much fascinated of it." comments Arnis Seisums. A splendid leek which should be no trouble to grow in a well-drained, sunny site in the UK.)

138.500 : ALLIUM STAMINEUM (Iran : frequent in dry steppe.)

138.600 : ALLIUM STATICIFORME (Sect. *Codonoprasum*) No data but originally from a coll. in southern Greece. Dense umbels with a multitude (up to 200) of tiny white flowers, eventually drooping from erect buds, on 30cm. tall stems. Related to the Turkish *A. myrianthum* & in the same section as *A. carinatum* & *A. flavum*. Hot, dry site.

138.700 : ALLIUM STENOPETALUM Turkey, Sivas, W of Gurun. 1700m. In montane steppe-vegetation on open slopes. (Seldom collected & unknown in cultivation. Somewhat like *A. cardiostemon* but more robust & with coiled leaves. Densely packed umbels of many, small black-purple flowers on 50 cm. tall stems. Optimum drainage.)

138.900 : ALLIUM STIPITATUM Tadjikistan, Varzob. (A wild coll. of this imposing Central Asian, summer-flowering bulb. Ribbed stems of a 1m. or more high carry almost spherical umbels of starry, purple flowers with tapering, twisted segments.)

138.950 : ALLIUM SUBHIRSUTUM Greece, Skopelos, near Chora. Sea-level. Under *Pinus*. Ex a 1991 M. Jope coll.

138.999 : ALLIUM SUBVILLOSUM Algeria, Chrea. 1450m. Ex a P.Davis coll. (A W Mediterranean plant from maritime sands & grasslands. Related to the more widely distributed *A. subhirsutum*. About 50cm. high, with hairy foliage & many-flowered, hemispherical umbels of cup-shaped, pure-white, starry flowers. Warm site or bulb-frame in the UK.)

139.000 : ALLIUM SUBVILLOSUM No data. A W Mediterranean plant from maritime sands & grasslands, about 50cm. high, with many-flowered, hemispherical umbels of cup-shaped, pure-white flowers. Warm site or bulb-frame in the UK.

138.979 : ALLIUM SUWOROWII Uzbekistan, Chulbair range. (A fine, very hardy, Central Asian bulb with stems up to 1m. high carrying tight, hemispherical umbels of many purple-violet stars with linear segments which reflex & twist after flowering. This needs good drainage and a dry summer period during dormancy.)

138.980 : ALLIUM SUWOROWII No data. A fine, very hardy, Central Asian bulb with stems up to 1m. high carrying hemispherical umbels of many rosy-violet stars with linear segments which reflex & twist after flowering.

139.150 : ALLIUM TAENIOPETALUM Tajikistan, Mogoltau range. (A most attractive species and one that is rare in cultivation. Comparatively large, star-shaped, violet-purple flowers carried in loose, airy, globose umbels, about 10cm. in diameter on stems up to 50cm. in height. It should be possible outside in the UK in a very well-drained, sunny site.)

139.180 : ALLIUM TASCHKENTICUM (Sect. *Melanocrommyum*) Uzbekistan, Tashkent, Chimgan area. (Recently described, robust species with glossy, green leaves and 1m. tall umbels of green flowers, suffused with bronze, appearing late in the season. Not easy to grow outside with Arnis.)

139.200 : ALLIUM TAURICOLA (Sect. *Codonoprasum*) Turkey, Sivas, Ziyaret Tepe. 2200m. Limestone fissures. (An autumn-flowering Turkish alpine-endemic. About 15cm. high with fastigiate umbels of purple-pink flowers after the thready leaves have gone dormant.) Archibald Archive www.srgc.net

139.450 : ALLIUM TRACHYSCORDUM Kazakhstan, Chu-Ili range. (Similar in aspect to the related, yellow-flowered *A. eriocoleum* and *A. scabriscapum* but with red-purple flowers.)

139.500 : ALLIUM TRAUTVETTERIANUM (Sect. *Melanocrommyum*) Tajikistan, Darwas range, near Iol. (A very fine species, rare in the wild & virtually unknown in cultivation. Related to *A. giganteum* & *A. maclearii* but the shiny, bright violet-pink flowers are twice as large as those of its relatives. Large rounded umbels on 1m. tall stems.)

139.600 : ALLIUM TSCHIMGANICUM Uzbekistan, Tashkent, Chimgan. Ex ARJA 96-29. (From a type-locality collection. Spectacular, tight umbels, about 7cm. in diameter, of violet-purple flowers on stems 1m. or more tall.)

139.620 : ALLIUM UMBILICATUM Iran, Khorasan, Kopet Dag N of Quchan. 1750-2000m. Limestone slopes.

139.621 : ALLIUM UMBILICATUM Iran, Khorasan, Bojnurd, E of Tang Rah to Chesmeh Khan. 1200m. Steep, loose limestone

slopes & among scrub. Ex N. Stevens 1957. (From two colls. by Norman of what we think is most likely to be this pretty little species with clumps of bulbs, grassy leaves & rounded umbels packed with lilac-pink flowers on 15cm. stems.)

139.648 : ALLIUM VICTORIALIS (Sect. *Anguinum*) No data. A distinct & very hardy montane species distributed from the European ranges up into N Asiatic Russia. Bulbs with fibrous tunics cluster on a short rhizome sending up broad leaves and 50cm. stems carrying rounded umbels of starry, palest yellow flowers. This form is from the European Alps.

139.649 : ALLIUM VICTORIALIS Another form from the Carpathians. No further data.

139.705 : ALLIUM WINKLERIANUM Kyrgyzstan, Fergana range. Ex ARJA 97-13. (A very fine species related to *A. regelii* & similar to this. Somewhat similar also to *A. cupuliferum* but with more compact umbels of large, cup-shaped, violet-pink flowers on the 50-80cm. tall stems. A rare plant but offering no difficulty in cultivation.)

139.800 : ALLIUM WORONOWII Armenia, Dzhadzhur pass, near Spitak. (A showy species with umbels of large, pink, starry, carnation-scented flowers.)

139.801 : ALLIUM WORONOWII Armenia, near Vardaovit. (About 30cm. tall, with large, soft lilac-pink, starry, carnation-scented flowers in dense fasciculate umbels. "One of the showiest alliums" comments Janis Ruksans.)

140.510 : ALTHAEA CANNABINA No data. An elegant, airy perennial hollyhock from S and E Europe. Pink mallow-flowers on long wiry, axillary stems or in terminal panicles can rise to about 1.5m. above the lobed, downy leaves.

146.010 : #AMSONIA ORIENTALIS (*Rhazya orientalis*) No data. Only recorded from one or two lakeside sites in Bursa & Balıkesir provinces in NW Turkey & from winter-wet marshes on the coast of Thrace in NE Greece. Thought to be "near extinction" in nature but well established in UK gardens. A good, long-lived perennial, easily grown in a well-drained, sunny site in the UK, though not so easily obtainable. Woody-based clumps send up 50cm. stems, clad in narrow, grey-green, willow-like leaves & carrying terminal cymes of starry, long-tubed, soft-blue flowers over a long period in summer.

153.200 : #ANCHUSA UNDULATA Turkey, Mugla, Gök Tepe. 1500m. Open, stony area with sparse *Pinus*, on limestone. (Proving a pleasing, herbaceous perennial for a sunny, well-drained site ; 30-50cm high with cymes of deep violet-blue flowers.)

154.200 : ANDROCYMBIUM RECHINGERI Greece, Crete, Hania, Falassarna. Sea-level. Sandy soil among coastal, limestone rocks. Ex a P.& P. Watt coll. (One of two European species in this mainly S African genus, close to *Colchicum*. A smaller, choicer plant than the Spanish *A. europaeum*, until recently this was only known from the island of Elafonisos off the Cretan coast. A succession of stemless, delicately veined, white starry flowers cluster in the centre of a flat rosette of shiny green leaves in late winter. Surprisingly hardy so far in our unheated greenhouse, though sensitive to watering in damp weather.)

155.000 : ANDROSACE ALPINA Austria, Salzburg, Hohe Tauern, Hochtorn. 2600m. Stable areas of mica-schist on open, N-facing slopes.

155.050 : ANDROSACE ALPINA from COMPACT FORM No data. Seed from Jim Almond of a fine variant of this calcifuge European high alpine & one sought after by alpine-house specialists as, unlike most forms, which tend to straggle in cultivation at low altitudes, this remains quite tight. Its origins are obscure but we have seen photographs of very compact plants taken in Austria by Lionel Bacon. Apart from its habit, this is quite typical *A. alpina* with rich-pink flowers from green rosettes

155.200 : ANDROSACE BREVIS

155.400 : ANDROSACE CARNEA (subsp. *carnea*)

155.500 : ANDROSACE CARNEA subsp. BRIGANTIACA

155.600 : ANDROSACE CARNEA subsp. LAGGERI

155.700 : ANDROSACE CARNEA subsp. ROSEA

155.905 : ANDROSACE CILIATA Spain, (Pyrenees), above Cirque de Gavarnie. 2800m.

156.010 : ANDROSACE CYLINDRICA No data. An extremely local, saxatile alpine from shaded limestone cliffs in the W Pyrenees. Fortunately well-established in cultivation. Cushions of dark-green rosettes with short-stemmed white flowers.

156.100 : ANDROSACE HAUSMANNII Archibald Archive www.srgc.net

156.200 : ANDROSACE HEDRAEANTHA

156.300 : ANDROSACE HELVETICA

156.400 : ANDROSACE HIRTELLA

156.500 : ANDROSACE LACTEA

156.600 : ANDROSACE MATHILDAE

156.800 : ANDROSACE PUBESCENS

156.910 : ANDROSACE PYRENAICA No data. Narrowly endemic to the high granites of the central Pyrenees. Mossy, green hummocks of tiny rosettes, studded with stemless, white, primrose-flowers. Alpine-house but best outside in summer.

157.010 : ANDROSACE VANDELLII No data. A classic alpine-house plant from non-calcareous cliffs in the S Alps, the Pyrenees & the Sierra Nevada. Tight, symmetrical, silvered cushions cover themselves with white, yellow-eyed flowers.

157.200 : ANDROSACE VILLOSA Turkey, Gumushane, Kop Da_lari, above pass. 2500m. Alpine steppe on open slopes.

157.500 : ANDROSACE WULFENIANA

159.900 : ANEMONE ALTAICA

160.000 : ANEMONE APPENINA

160.100 : ANEMONE BAISSUNENSIS Uzbekistan

160.200 : ANEMONE BALDENSIS

160.300 : # ANEMONE BIFLORA

160.303 : ANEMONE BIFLORA Iran, Markazi, SW of Arak. 2300m. Exposed gravelly sites on summit ridge. (One of the finest and most striking plants of the Zagros Range, whose re-introduction is a priority for all those who remember it from the 1960's collections. In spite of a large number of tubers introduced under PF & BSBE numbers and a substantial 1966 seed-collection made by ourselves, it was not maintained in gardens, although a much-coveted potful grown by Molly Dawson appeared on AGS show-benches well into the 1970's. Expertise in the cultivation of summer-dormant species is now much greater, so we hope that we can once again see this marvellous plant in cultivation. Much-cut, rich-green foliage a few cm. high & 5-8cm. stems carrying "cup-shaped crimson-scarlet flowers an inch or more across & with a mass of golden anthers carried on crimson filaments" (Paul Furse, writing in 1965). After fertilization, the petals fold over the fluffy seeds & mature to coppery honey shades, until the growth dries, disintegrates & disperses. It had all blown away in 2000 and we could only salvage the last of it in 2001.)

160.320 : ANEMONE aff. BIFLORA Iran, Esfahan, pass SE of Khonsar. 2750m. R. & R. Wallis 04-095. (A more delicate plant from further South in the Zagros Range. Yellow, red-backed flowers. We are unsure if this represents another taxon or if it is the other end of a clinal variation. A few wild-collected seeds.)

160.321 : ANEMONE BIFLORA Iran, Fars, near Marvast. Ex JMM 01-19. (Yellow form)

160.402 : ANEMONE BLANDA Greece, Viotia, Oros Parnassos. 1500m. Openings in coniferous woodland. (Incomparable woodlander. Deep blues, sometimes called '*ingramii*', are common on Parnassus, but it can be paler blue & white.)

160.403 : ANEMONE BLANDA Turkey, Goksun to Pinarbasi. Steppe. Ex a N. Stephens coll.

160.480 : ANEMONE BUCARICA

160.610 : ANEMONE CAUCASICA No data. A delightfully dainty little plant, more or less a much smaller, more delicate version of *Anemone blanda* with blue or white flowers in early spring. Distinguished not only by its more diminutive size but by its glabrescent involucre leaves. A plant of cliff-ledges and scrub-covered rocky slopes, centred on the Caucasus but extending into the Pontus Range of NE Turkey & the Elburz of N Iran, this is very seldom seen in cultivation.

160.650 : ANEMONE COERULEA Russia, southern Altai. Little flowers in pale blue shades over finely cut foliage. Quite easy in similar conditions to *A. nemorosa*.

160.702 : ANEMONE CORONARIA Syria, near Asueda. R. & R. Wallis coll. (Brilliant red from down near Jordan.)

160.703 : ANEMONE CORONARIA Turkey, Antalya, Kemer. D.B. Stephens coll. 21.3.96 (Purples, mauves, whites.)

160.704 : ANEMONE CORONARIA Greece, Kythera, above Milopotamos. In phrygana. M. Jope 97-2. 16.4.97

161.003 : #ANEMONE HORTENSIS Italy, Sardinia. 850m. Ex a T. Norman coll. (A neglected W Mediterranean species & a special delight of Corsican & Sardinian woodlands with its myriad, many-petalled flowers in soft violets & pinks.)

161.100 : ANEMONE JENISEEJENSIS Russia, Siberia, near. Krasnojarsk. (Delicate version of *A. ranunculoides*.)

161.200 : ANEMONE NARCISSIFLORA (subsp. *narcissiflora*) Archibald Archive www.srgc.net

161.200 : ANEMONE NARCISSIFLORA (subsp. *narcissiflora*) Turkey, Trabzon, So_anli Da_lari above Caykara. 2300m. Hay meadows on igneous slopes. (A beautiful species of circumpolar distribution. Big, white, buttercup-flowers on branched stems, about 50cm. tall, above tufts of dark, divided leaves. A fine, large-flowered form in this locality.)

161.205 : ANEMONE NARCISSIFLORA (subsp. *narcissiflora*) (as *A. fasciculata*) Georgia, Bakuriani area, Tskhra-tskharo pass. 2100m. Alpine meadows.

161.300 : ANEMONE NARCISSIFLORA subsp. CHRYSANTHA (Caucasus)

161.350 : ANEMONE NARCISSIFLORA subsp. MOLLISSIMA Tajikistan, Pamir.

161.400 : ANEMONE NARCISSIFLORA subsp. WILLDENOWII (NE Turkey, 2400-3100m.)

161.400 : ANEMONE NARCISSIFLORA subsp. WILLDENOWII Turkey, A_ri, Tahir geçidi WNW of Ele_kirt. 2300m. Steep, stony, igneous slopes. (While the type-race grows from the northern Pontus into the Caucasus, this somewhat dwarfer, more eastern race with its involucre leaves cut into linear segments, occurs in drier, eastern Anatolia.)

161.500 : ANEMONE NEMOROSA

161.530 : ANEMONE GORTSCHAKOVII (Kazakhstan.)

161.560 : ANEMONE KOPETDAGHENSIS (Turkmenistan.)

- 161.610 : ANEMONE PALMATA** No data. A charming, small, summer-dormant, tuberous, SW European species seldom seen in cultivation. Lobed, rounded, basal leaves & yellow flowers, 3cm. across. No problem in a pan in the alpine-house.
- 161.800 : ANEMONE PAVONIANA** (N & central Spain.)
- 161.900 : ANEMONE PAVONINA** Greece, Lakonia, between Areopoli & Githio. 100m. Edge of scrub. (The epitome of spring in Greece. Brilliant, pure-scarlet flowers with a white central zone (var. *ocellata*). Seed grown outside in Dorset, UK.)
- 161.901 : ANEMONE PAVONINA** Greece, Lesbos. Coll. H. & I. Barton.
- 161.902 : ANEMONE PAVONINA** Greece, Lakonia, Oros Taigetos. Coll. P. & P. Watt.
- 161.903 : ANEMONE PAVONINA** Greece, Argolida, Parnon. Coll. P. & P. Watt.
- 161.904 : ANEMONE PAVONINA** Greece, Poros, near Poseidon's Temple. Coll. M. Jope.
- 161.905 : ANEMONE PAVONINA** Greece, Argolida, Parnon range. Coll. R. & R. Wallis. (The epitome of spring in Greece. Brilliant, pure-scarlet flowers, some with a white central zone (var. *ocellata*). A 2003 wild coll.)
- 161.950 : ANEMONE PAVONINA var. PURPUREO-VIOLACEA** Greece, near Ano Diokofto. 65m. Coll. R. & R. Wallis. (From the pink-flowered race, usually with a white base, which tends to flower a month or so earlier in the wild.)
- 162.050 : # ANEMONE PETIOLULOSA** No data. An attractive, dwarf, tuberous-rooted species, widespread through the montane steppe of the Tien Shan & Pamir-Alai ranges but still little-known in cultivation. Finely cut foliage below pure yellow flowers, opening in spring from globular bronze or red-tinted buds. Not difficult in the alpine-house or bulb-frame but, like most of the small, tuberous anemones, not extremely long-lived and most easily maintained from seed. This stock has been kept going by Norman Stevens from material he collected, mainly in Tadjikistan, about 20 years ago.
- 162.200 : ANEMONE RANUNCULOIDES**
- 162.220 : ANEMONE RANUNCULOIDES subsp. WOCKEANA** Italy, Como.
- 162.300 : ANEMONE SERAVSCHANICA** (Tadjikistan)
- 162.400 : ANEMONE SYLVESTRIS**
- 162.600 : ANEMONE TRIFOLIA** (subsp. *trifolia*)
- 162.650 : ANEMONE TRIFOLIA subsp. ALBIDA** (Spain & Portugal, usually califuge.)
- 162.700 : ANEMONE TSCHERNJAEWII** (Tadjikistan.) Archibald Archive www.srgc.net
- 163.050 : ANGELICA PACHYCARPA** No data. A very local species from coastal rocks near La Coruna in NW Spain & Ilha Berlenga in Portugal. Described by Tim Ingram as A "unique *Angelica* of compact, sturdy habit & remarkable, varnished, deep-green foliage." A fleshy perennial up to 1m. high - 'Flora Europaea' - biennial according to Tim. Hot, dry site in the UK
- 166.101 : ANTHERICUM LILIAGO** Greece, Oros Olimbos.
- 166.101 : ANTHERICUM LILIAGO** France, Hautes-Pyrenees.
- 166.101 : ANTHERICUM LILIAGO** France, Hautes-Alpes.
- 166.120 : ANTHERICUM LILIAGO** No data. The St. Bernard's lily, native to S Europe & S Turkey in open woods & dry grassland. About 60cm. tall with erect racemes of wideopen, starry flowers in early summer.
- 169.800 : ANTHRISCUS SYLVESTRIS from DARK-LEAVED FORM** From the intriguing form of this member of the *Umbelliferae*, widespread throughout Europe, currently circulating as 'Raven's Wing'. Dull, divided, brown-purple foliage & 1.5m. umbels of tiny pinkish-parchment flowers. Most purple-leaved plants come 'true' from seed but it will vary a little.
- 169.550 : ANTIRRHINUM MAJUS** (subsp. *majus*) Turkey, Izmir, Efes. (A woody-based perennial with 30cm. racemes of pink snapdragons. A collection of the wild ancestor of the bedding antirrhinums from crevices in the ruins of Ephesus.)
- 171.000 : AQUILEGIA ALPINA**
- 171.200 : AQUILEGIA AMALIAE** Greece, Pieria, Oros Olimbos.
- 171.400 : AQUILEGIA ARAGONENSIS**
- 171.500 : AQUILEGIA ATRATA**
- 171.560 : AQUILEGIA ATROVINOSA** Kyrgyzstan, Kyrgyz Alatau, Ala Archa, S of Bishkek. 2335m. A. Dickerson 00-01
- 171.561 : AQUILEGIA ATROVINOSA** Kazakhstan.
- 171.700 : AQUILEGIA AUREA** Bulgaria, Rila Mts., Malgovitsa valley. Ex an A. Edwards coll. (The only yellow-flowered European species. It is a rare plant in cultivation & it is quite a few years since we last listed this endemic of Bulgaria & adjacent Macedonia. About 30cm. high with uptilted, yellow flowers with short, hooked spurs.)
- 171.809 : AQUILEGIA BERNARDII** France, Corsica, Trou de la Bombe near Col de Bavella. 1400m. Limestone. Ex a J. Tournour coll.
- 171.900 : AQUILEGIA BERTOLONII** France, Alpes-Maritimes, above Vallon de la Gordolasque. 2000m. Ledges below N-facing

granite cliffs. (In fruit 23.9.91)

- 171.910 : AQUILEGIA BERTOLONII** No data. The 15cm. high, rich violet-blue columbine from the Alpes-Maritimes of France & adjacent N Italy. Not common in the wild but not difficult in the rock-garden or trough in cultivation in the UK
- 172.100 : AQUILEGIA CAZORLENSIS** Spain, Jaen, Cerro Cabanas. 2000m. Limestone.
- 172.200 : AQUILEGIA DICHROA**
- 172.300 : AQUILEGIA DINARICA**
- 172.400 : AQUILEGIA DISCOLOR**
- 172.409 : AQUILEGIA DISCOLOR** Spain, Picos de Europa. Ex a V. Horton coll. (An exquisite endemic of this limestone-range. 1 or 2, bicoloured flowers on unbranched 10cm. stems., blue sepals surrounding the spurred white petals.)
- 172.500 : AQUILEGIA EINSELEANA** Archibald Archive www.srgc.net
- 172.700 : AQUILEGIA GRATA** Slovenia, Julijske Alpe, below Mangartski Sedlo. 1500m. Among grass in mixed woodland. (coll. 20.8.85 & 16.9.88)
- 172.800 : AQUILEGIA GUARENSIS**
- 172.900 : AQUILEGIA HIRSUTISSIMA**
- 173.000 : AQUILEGIA KITAIBELII** Slovenia, below Predel Pass. 1100m. Roadside gravel, in sun. (In flower 28.7.84)
- 173.001 : AQUILEGIA KITAIBELII** Slovenia, Julijske Alpe, Mangrt. 1700-1800m. Loose limestone scree at cliff base & in limestone detritus by roadside. (In seed 20.8.85)
- 173.059 : AQUILEGIA KUHISTANICA** Tadjikistan, Pamiroalai, Hissar range. 3600m. Ex J.& J.Halda 920908.
- 173.200 : AQUILEGIA LITARDIERI**
- 173.300 : AQUILEGIA NEVADENSIS**
- 173.400 : AQUILEGIA NIGRICANS** (subsp. *nigricans*)
- 173.500 : AQUILEGIA NIGRICANS subsp. SCAPOSA**
- 173.600 : AQUILEGIA OLYMPICA** Turkey, Erzurum, Kop Da_, above Askale. 2400m. Wet flush on SE side of pass, among *Salix* & *Betula* scrub. (coll. 28.8.86)
- 173.601 : AQUILEGIA OLYMPICA** Turkey, Artvin, Genya Da_. 1700m. Wet meadow in clearing among *Picea*. (coll. 1.9.86)
- 173.602 : AQUILEGIA OLYMPICA** Turkey, Trabzon, SW of Hamsiköy. 2650m. Among *Rhododendron* on steep slopes. (A beautiful species, about 60cm. tall. Branched stems bear a succession of large, blue & white columbines.)
- 173.800 : AQUILEGIA OTTONIS** Greece, Ahaia, Ori Aroania, Helmos, E face above Zarouhla. 1300-1500m. Shady places at bases of limestone boulders in NE-facing gully. (In flower 13.6.86).
- 174.000 : AQUILEGIA PANCICII**
- 174.100 : AQUILEGIA PAUI**
- 174.200 : AQUILEGIA PYRENAICA** France, Pyrenees-Atlantiques, E of Gourette. 1600m. Among grass & scrub on limestone slope. (coll. 22.8.88)
- 174.201 : AQUILEGIA PYRENAICA** France, Pyrenees-Atlantiques, E of Col d'Aubisque. 1600m. Among *Fagus* scrub on limestone. (original coll. 15.9.91) (Like so many members of this genus, local and infrequent in the wild but not a problem in cultivation, at least under rock-garden conditions in moist climates. Exquisite, nodding, rich-blue columbines on branching, 20cm. stems above cut foliage.)
- 174.400 : AQUILEGIA THALICTRIFOLIA** Italy, Lombardia, Valvestino, below Magasa. 900m. Ledges on & at base of overhanging limestone cliffs. (original coll. 26.8.85)
- 174.500 : AQUILEGIA TRANSILVANICA**
- 174.600 : AQUILEGIA VULGARIS**
- 174.700 : AQUILEGIA VULGARIS var. BALLII**
- 174.750 : AQUILEGIA VULGARIS subsp. COSSONIANA**
- 185.550 : ARISTOLOCHIA LONGA subsp. PAUCINERVIS** Morocco, Middle Atlas Mts., SW of Ain el Leuh. 2000m. Stony, open, limestone slopes. (A dwarf, tuberous-rooted perennial with weird, elongated, yellow-brown flowers.)
- 194.752 : ARUM ALPINUM** Greece. Ex Christian, Elliott & Hoog 806. (Hardy European species with green spathes.)
- 194.759 : ARUM ALPINUM** No data.
- 194.760 : ARUM ALPINUM var. PANNONICUM** No data.
- 194.780 : ARUM APULUM** No data. A relative of *A. nigrum*, endemic to the hills of Puglia at 300-400m. near the southern heel of

Italy. "Attractive but little-known" writes Peter Boyce. Erect green spathes with purple interiors.

194.800 : ARUM BALANSANUM

194.809 : ARUM BALANSANUM Turkey, Bursa, between Tavşanlı & Dursunbey. Ex an A.J. Willis coll. (Allied to *A. orientale* but with a limited, inland distribution in deciduous woodland in W Anatolia, this is growable outside in the UK. In this form, the yellowish spadix contrasts with the deep purple interior of the short-stemmed spathe.)

194.850 : ARUM BESSERIANUM A very little known species, described from the NW Ukraine and once thought to be allied to *A. orientale*. In fact it seems very close to *A. alpinum*. Essentially a plant for the collector.

194.900 : ARUM BYZANTINUM

195.071 : ARUM CONCINNATUM (*A. nickelii*) Greece, Crete, Rethimno, Spili. Ex a 1989 D. Drummond coll.

195.072 : ARUM CONCINNATUM (*A. nickelii*) Ex an M. Salmon coll. in Jordan.

195.073 : ARUM CONCINNATUM (*A. nickelii*) No data. Ex a 1960 Furse & Syngé coll., presumably in Turkey. (Seldom seen in cultivation, this is a robust species. The foliage can be as much as 1m. high in a well-grown plant & the huge, yellowish spathes, often just rimmed with a purple tint, almost 30cm. long. From Mike Tucker's plant which supplied the material for Ann Farrer's painting, Plate 3, in the 'Genus Arum' by P. Boyce. Needs a warm, sheltered site to thrive outside in the UK.)

195.074 : ARUM CONCINNATUM (*A. nickelii*) Greece, Crete, above Agios Nikolaos. Ex a P. Boyce coll. (A robust species with foliage, in this form splashed with white, as much as 1m. high in a well-grown plant. Huge, yellowish spathes, often just rimmed with a purple tint, almost 30cm. long. Needs a warm, sheltered site to thrive outside in the UK.)

195.000 : ARUM CONOPHALLOIDES see *A. rupicola*.

195.110 : ARUM CRETICUM No data. Archibald Archive www.srgc.net

195.111 : #ARUM CRETICUM Greece, Karpathos. (Perhaps the most beautiful in the genus. Native to Crete & some adjacent islands, touching its toes on the Turkish mainland on the Marmaris peninsula, this is a plant of stony, scrub-covered, limestone slopes. Clumps of bright-green, hastate leaves overtopped by the 30cm high stalks carrying large, sweet-scented, wholly yellow spathes, reflexing, twisting & elegantly pointed, surrounding the curved, compressed spadix. From the outstanding coll. made by Mark Ogilvie-Grant on the island of Karpathos in the 1950's ("particularly reliable" writes Peter Boyce) : the F.C.C. form.)

195.120 : ARUM CYLINDRACEUM An obscure & somewhat dubious species, allied to *A. alpinum* & endemic to Sicily.

195.130 : ARUM CYRENAICUM Libya, Cyrenaica. Ex a M. Koenen coll. (Glossy, rich-green, sagittate leaves & large spathes, pale-green outside & purplish rose inside with deep purple spadices. A plant of the scrub along the 'green belt' in NE Libya. Perhaps safest protected from frosts but never damaged here & grows with minimal protection, planted out under polythene.)

195.140 : ARUM CYRENAICUM Greece, Crete. Ex a D. Drummond coll. (Only recently recognized as growing outside Libya & of very limited distribution on Crete. Differs a little (but not substantially) from the African plants.)

195.150 : ARUM DIOSCORIDIS (var. *dioscoridis*) Turkey, Mersin, NNW of Mersin towards Arslankoy. 500m. Crevices in limestone pavement. (Superb forms here, originally distributed by us in the 1980's as *A.d.* var. *spectabile*, merged in the 1993 P. Boyce revision, along with other S Turkish taxa, into *A.d.* var. *dioscoridis*. Here the very large spathes are often entirely velvety black-purple and these would not 'key-out' satisfactorily in Boyce's key. The species as a whole tends to be a plant of lower altitudes which needs a warm, dry site in the UK or is perhaps best grown in the bulb-frame so it can have a summer rest.)

195.151 : ARUM DIOSCORIDIS (var. *dioscoridis*) Turkey, Mersin, Silifke. 50m. In stony clay on limestone slopes. (A fine form with dark, almost entirely maroon-black, spathes surrounding the dull-purple spadix. Best in the bulb-frame in the UK)

195.152 : ARUM DIOSCORIDIS (var. *dioscoridis*) Turkey, Antalya, S of Akseki. 800m. Humus-filled limestone pockets.

195.153 : ARUM DIOSCORIDIS (var. *dioscoridis*) Turkey, Mersin, NNE of Gulnar to Mut. 1200m. Stony areas among large limestone boulders.

195.155 # ARUM DIOSCORIDIS (var. *spectabile*) [Flowered from seed in around 6 years for Jane McGary]

195.157 : ARUM DIOSCORIDIS (var. *dioscoridis*) Turkey, Izmir, between Selcuk & Efes. Ex a N. Stevens coll. (From an extremely fine & most unusual form with dark, almost entirely maroon-black, spathes around a contrasting yellow spadix, instead of the normal dull-purple one. A low altitude plant which needs a warm, dry site in the UK : best in the bulb-frame.)

195.158 : ARUM DIOSCORIDIS (var. *dioscoridis*) Turkey, Antalya, NE of Antalya, Aspendos. Ex a N. Stevens coll. (Dark, red-violet spathes.)

195.159 : ARUM DIOSCORIDIS (var. *dioscoridis*) Greece, Simi, NW of Emporios. 110m. Among scrub in terra rossa on limestone ridge. M. Denney 612 & 613. (A rare opportunity to acquire material from one of the few E Aegean island populations of this predominantly S Turkish plant. We tentatively list this under the type-race but note that Peter Boyce mentions the disjunct occurrence of *A.d.* var. *cyprum*, otherwise a plant of Cyprus & Syria, on Rhodes & adjacent islands, like Simi (improbably along with *A.d.* var. *dioscoridis*). *A.d.* var. *cyprum* has a black-purple spadix and the pale-green spathes stained purple only in the basal part. We are obviously dealing with a diverse population in this locality, so anticipate considerable variation.)

195.160 : ARUM DIOSCORIDIS (var. *dioscoridis*) (syn. *A.d.* var. *spectabile*) Turkey, Balıkesir. Ex Albury, Cheese & Watson 1965. (From a 1966 coll. maintained by Mike Tucker. Large spathes heavily blotched with velvety black-purple. The species as a

whole tends to be a plant of lower altitudes & will need a warm, dry site in the UK. It is perhaps best grown in the bulb-frame so it can have a summer rest.)

195.180 : ARUM DIOSCORIDIS var. CYPRIUM

195.220 : ARUM DIOSCORIDIS var. PHILISTAEUM Archibald Archive www.srgc.net

195.300 : ARUM DIOSCORIDIS var. SYRIACUM

195.310 : ARUM DIOSCORIDIS var. SYRIACUM No data. Seldom-seen race from the Amanus range in S central Turkey & adjacent NW Syria. Pale-green spathes with small, scattered purple blotches surround purple spadices.

195.509 : ARUM ELONGATUM (subsp. *elongatum*) Russia, Krasnodar district, near Enem. ("An attractive species" writes Peter Boyce in his 'The Genus Arum'. Distributed around the Black Sea & hardy in the UK. Related to *A. orientale* with an elegant, elongated spathe, in this case stained with red-purple around a maroon spadix. Only about 20cm. high in flower.)

195.510 : ARUM ELONGATUM (ssp. *elongatum*) No data but definitely authentic material from the plant used for the illustration in the Peter Boyce monograph, 'The Genus Arum', where the author comments that "virtually none of the material offered ...is correctly identified". "An attractive species", distributed around the Black Sea & hardy in the UK. Related to *A. orientale* with an elegant, elongated pale-green spathe, stained with purple inside around a maroon spadix

195.540 : ARUM ELONGATUM subsp. ALPINARIAE

195.600 : ARUM EUXINUM No data. A very hardy, slow-growing, dwarf species from cold, wet, NW Turkey. It resents heat & drought in summer. Compact, hastate, dark-green foliage & stubby, hooded purple-margined spathes.

195.650 : ARUM GRATUM

195.659 : ARUM GRATUM Turkey, Konya, Fa_ikan Geçidi between Ermenek & Ta_kent. 1550m. Ex a N. Stevens coll. (A sweet-scented relative of *A. orientale* with a purple-tinted spathe opening at ground-level among the deep-green, glossy leaves. With a North-South distribution from NW Turkey to the Lebanon, this is hardy but best appreciated in a pot.)

195.700 : ARUM HYGROPHILUM

195.709 : ARUM HYGROPHILUM No data but originally from an Israeli population grown in Tel Aviv Botanic. Green spathes with pinched-in waists & usually purple-margined, surround deep purple spadices. A species of the eastern Mediterranean but with disjunct populations in Morocco. Tender & safest grown with some protection in the UK.

195.800 : ARUM IDAEUM Long confused with *A. creticum*, this is a most striking & distinct high altitude species endemic to the ranges of central Crete at altitudes up to 1750m., often growing along the melting snow-line. A very hardy plant, seldom happy grown under glass. A white, hooded spathe surrounds the contrasting, deep purple spadix.

195.808 : ARUM IDAEUM Greece, Crete, W of Omalos. 1100m. Under scrub. Ex Salmon, Bird & Lovell 339.

195.809 : ARUM IDAEUM Greece, Crete, Omalos plateau. M. Jope 2024. (Long confused with *A. creticum* & thought to be a montane form of it, this is a very distinct high altitude species endemic to the mountain-ranges of central Crete at altitudes up to 1750m., often growing along the melting snow-line. Although likely to be intolerant of year-round wet conditions this is a very hardy plant, seldom happy grown under glass. Deep green, sagittate leaves & 20cm, purple-stained stems carrying white, hooded spathes surrounding contrasting, deep purple spadices : altogether most striking in flower & little-known in cultivation.)

195.900 : ARUM ITALICUM (subsp. *italicum*) Archibald Archive www.srgc.net

195.950 : ARUM ITALICUM from PURPLE-SPOTTED SPATHE FORM Italy, Sicily, SW of Campobello di Mazara. c.20m. Old limestone quarry. Ex a D. Drummond coll. (One of the best forms of *A. italicum* Mike Tucker has seen. Leaves spotted with dark maroon & spathes speckled with purple. A winter-grower but most races prove good garden-plants in the UK.)

196.009 : ARUM ITALICUM subsp. ALBISPATHUM Russia, North Ossetia, near Alagir. 650m. *Fagus* forest. Ex RP 83-33. (A handsome N Caucasian form of this hardy, eastern race, distributed round the NE corner of the Black Sea, from the Crimea through Georgia into NE Turkey. Unmarked dark-green, hastate leaves and elongated, translucent white spathes.)

196.010 : ARUM ITALICUM subsp. ALBISPATHUM No data. A handsome eastern race, which has been included under *A. orientale*, distributed round the NE corner of the Black Sea, from the Crimea through Georgia into NE Turkey. Unmarked dark-green, hastate leaves and particularly large, translucent white spathes with pale yellow spadices.

196.050 : ARUM ITALICUM subsp. CANARIENSE

196.060 : ARUM ITALICUM subsp. NEGLECTUM

196.109 : ARUM JACQUEMONTII Tadjikistan, near Hodji-Obi-Garm. (Not to be confused with *Arisaema jacquemontii*, this is the most eastern of the genus with a wide distribution extending from Afghanistan through India just into W China but a rare & little-known plant in gardens. From damp crevices among rocks at altitudes of up to 3,650m., it should be both hardy and growable outside in the UK. Much Central Asian stock appears intermediate with *A. korolkowii*.)

196.110 : ARUM JACQUEMONTII Not to be confused with *Arisaema jacquemontii*, this is the most eastern of the genus with a wide distribution extending from Afghanistan through India just into W China but a rare & little-known plant in gardens. From damp crevices among rocks at altitudes of up to 3,650m., it should be both hardy and growable outside in the UK.

196.200 : ARUM KOROLKOWII Turkmenistan, Kopet Da_, Arvaz valley. Moist soil among dense scrub. Ex a J. Ruksans coll. (A

Central Asian species from among scrub on rocky hillsides between 1,100 and 2,500m. along the borders of NE Iran and Afghanistan. The spathe is described by Janis as "chamois green & brown", rising well above the leaves to 50cm..)

196.201 : ARUM KOROLKOWII Uzbekistan, Tashkent, Chatkal range, SE of Parkent. 1000m. Among scrub on stony slope. (We provisionally include our more northern Central Asian collections under *A. korolkowii* but suspect many such populations may be or be intermediate with *A. jacquemontii*. In his monograph Peter Boyce is extremely vague about the distribution of these species. His maps show no *Arum* species for these areas. We cannot establish the identities until they flower.

196.202 : ARUM KOROLKOWII Uzbekistan, Tashkent, Chatkal range, above Beldersai. 1500m. Under *Juniperus*.

196.203 : ARUM KOROLKOWII Kazakhstan, Karzhantau, SE of Chimkent, Burguluk. 1100m. Among boulders.

196.300 : ARUM LUCANUM Italy, Puglia, Gioia de Colle. 300-400m. Narrowly endemic to these mountains in the heel of S Italy & closest to the *A. orientale* group. "Easily cultivated and attractive" according to Peter Boyce.

196.400 : ARUM MACULATUM

196.500 : ARUM NIGRUM Bosnia & Hercegovina, above Dubrovnik to Trebinje. 500m. Holes & crevices on limestone, usually in oak scrub. (Hardy & compact with shining, rich-green foliage & purple-black, satin spathes. Grow in light shade.)

196.510 : ARUM NIGRUM No data. Seed from Hermann Fuchs of this hardy species. We know it well in Bosnia & Hercegovina, growing above Dubrovnik towards Trebinje at about 500m. in holes and crevices of limestone, usually among oak scrub. Compact with shining, green foliage & purple-black, satin spathes. Grow in light shade.

196.609 : ARUM ORIENTALE (subsp. *orientale*) Ukraine, Krim, near Oreanda. Moist soil in forest clearing. (Big, purplish-brown spathes among shining, dark-green foliage.)

196.610 : ARUM ORIENTALE (subsp. *orientale*) No data. Mike Tucker's fine form of the genuine species with extremely large, erect, boat-shaped, dark purple-brown spathes with dull purple spadices and deep-green, floppy leaves. The species as a whole, widely distributed in E Europe & around the N of the Black Sea, is accordingly variable. It is seldom seen in cultivation in any form though most are excellent garden-plants in the UK, being native to similar habitats to *A. maculatum* in cold climates.).

196.611 : ARUM ORIENTALE (subsp. *orientale*) No data. From Herman Fuch's stock of this fine species with extremely large, erect, boat-shaped, dark purple-brown spathes with dull purple spadices and deep-green, floppy leaves. The species as a whole, widely distributed in E Europe & around the N of the Black Sea, is accordingly variable. It is seldom seen in cultivation in any form though most are excellent garden-plants in the UK, being native to similar habitats to *A. maculatum* in cold climates.).

196.700 : ARUM ORIENTALE subsp. LONGISPATHUM

196.800 : ARUM ORIENTALE subsp. SENTENISII

196.860 : ARUM PALAESTINUM No data. A magnificent species from Syria, Lebanon & Israel but unsuited to the cold, wet climate outdoors in most of the UK. No trouble here with unheated protection, forming large clumps of rich-green, sagittate leaves with huge, 50cm. high spathes, solid, velvety darkest maroon-purple inside & reflexing back around the erect, stout, black-purple spadices. Sweet-scented & more or less like a large, maroon-black version of *A. creticum*.

196.908 : ARUM PICTUM Italy, Sardinia, N of Alghero. Ex C.R. Lovell 214. Archibald Archive www.srgc.net

196.909 : ARUM PICTUM Spain, Islas Baleares, Mallorca, Cap Formentor. Ex C.Lovell. (Form with well-veined leaves.)

196.910 : ARUM PICTUM No data. Native to the Balearic Islands, Corsica & Sardinia, only member of the genus to flower in autumn & not to be confused with the form of *A. italicum*, grown as 'Pictum'. Short-stemmed, velvety, dark purple spathes with black-purple spadices appear with the superb, dark, lustrous-green, pale-veined foliage. Dwarf enough for a pot but successful outdoors in several parts of the UK.

197.000 : ARUM PURPUREOSPATHUM Greece, Crete, Samaria gorge. Below 100m. Ex P. Boyce 51. (From the type collection of this very local species, described in 1987 from a small area of SW Crete. Glossy, sagittate leaves & a uniformly rich purple spathe with a black-purple spadix.)

197.001 : ARUM PURPUREOSPATHUM Greece, Crete, base of Samaria gorge. Ex a N. Turland coll.

197.100 : ARUM RUPICOLA (var. *rupicola*) (*A. conophalloides*) Turkey, Antalya, S of Akseki. 1000m. Among limestone boulders. (5406 : 2.7.84)

197.101 : ARUM RUPICOLA (var. *rupicola*) (*A. conophalloides*) Turkey, Icel, NNE of Gulnar to Mut. 1200m. Stony turf in depression on limestone. (6771 : 25.6.85)

197.102 : ARUM RUPICOLA (var. *rupicola*) (*A. conophalloides*) Turkey, Van, foothills of Artos Da_, W of Van to Catak road. 2000m. Coarse stable limestone scree & among rocks. (6607 ; 8313 : 8.9.86)

197.103 : ARUM RUPICOLA (var. *rupicola*) (*A. conophalloides*) Turkey, Gumushane, Vauk Da_i below Guvercinlik. 1800m. Open rocky slopes. (10012 : 28.7.88)

197.104 : #ARUM RUPICOLA (var. *rupicola*) (*A. conophalloides*) Turkey, Kahramanmaraş, SSE of Goksun. 1550m. NE-facing limestone slope. (Elegant spathes with deep purple interiors surround massive, cylindrical, purplish-brown spadices. Withstands extremely low winter-temperatures but best protected from excess moisture in the UK by a bulb-frame.)

197.105 : ARUM RUPICOLA (var. *rupicola*) (*A. conophalloides*) Turkey, Ni_de, Hasan Da_i. Among stones at edge of cultivated

land. Ex a N. Stevens coll. (Tall stems carry elegant spathes with deep purple interiors surrounding massive, cylindrical, purple-brown spadices. A species inured to the extreme continental climate of the Anatolian Plateau, this withstands extremely low winter-temperatures but is best protected from excess moisture in the UK by a bulb-frame.)

197.119 : ARUM RUPICOLA Lebanon, above Barouk. 1250m. NW facing limestone slope. Ex Lovell & Bird 330.

197.149 : ARUM RUPICOLA var. VIRESCENS (*A. conophalloides*) Azerbaijan, Talysh, near Lerik. Open stony slopes & among sparse scrub. (Pale-green spathes held well above the foliage on 60cm. stems.)

197.150 : ARUM RUPICOLA var. VIRESCENS (*A. conophalloides*) No data. From several Turkish colls. of this widespread SE Asian species in the form with grey-green spathes, often narrowly purple-bordered, & massive, cylindrical lilac-grey spadices. Withstands very low winter-temperatures but best protected from excess moisture in the UK by a bulb-frame.

198.003 : ARUNCUS DIOICUS Turkey, Trabzon, SW of Hamsiköy. 2650m. Among *Rhododendron* on steep slopes. (A statuesque herbaceous woodland-plant with splendid basal foliage and great, astilbe-like heads of creamy white flowers, 1m. or more high. Growing from seed will give you both males & females : each with their own good qualities.)

198.010 : ARUNCUS DIOICUS No data.

200.020 : ASARUM EUROPAEUM No data. A woodlander with running underground stems sending up rounded leaves with strange flowers at ground-level, not so large as some N American or E Asian species but still intriguing.

201.100 : ASPERULA ARCADIENSIS Greece, Korinthia, S side of Lake Stimpalia. 500m. NW-facing, limestone cliffs.

202.800 : ASPERULA ORIENTALIS No data. A very fine blue-flowered annual distributed in the steppe & oak scrub areas of E Turkey & W Iran, S into Syria. About 25cm. high & as much across with angled stems, whorled with oblong leaves, carrying heads of bright-blue, tubular flowers, surrounded by a ruff of narrow bracts. Will sow itself, if suited in a dryish, sunny site.

203.000 : ASPERULA PONTICA Turkey, Gümüşhane, Soğanlı Dağları, N of Bayburt. 2300m. Turf & open, gravelly areas on S-facing slopes. (A choice, mat-forming alpine endemic to the mountains above this SE corner of the Black Sea. Tight tufts of tiny, shiny, awned, bright-green leaves set with heads of deep pink, tubular flowers.)

204.700 : ASPHODELINE BREVICAILIS (subsp. *brevicaulis*) Turkey, Adana, Nurdağ, above Hasanbeyli. 1150m. Among *Quercus* on shale slopes. (Clumps of grassy, blue-green leaves with 60cm. tall, branching stems bearing a very long succession of widely-spaced, starry, soft-yellow flowers, apricot-orange in bud & on the reverse. Needs a hot, dry site in the UK.)

204.902 : ASPHODELINE LIBURNICA Greece, Larissa, Oros Ossa W of Spilia. 1500m. Open limestone slopes. 8.6.96 (Handsome, 1m. high perennial with spires of starry, yellow flowers. Unlike *A. lutea*, this has no leaves on the upper stem.)

206.000 : ASPHODELUS ACAULIS Morocco, Middle Atlas, near Ifrane.

206.005 : ASPHODELUS ACAULIS Morocco, Middle Atlas, near Ain Leuh. Salmon & Fillan.

208.150 : ASTER AMELLUS subsp. IBERICUS Turkey, Artvin, Yalnızçam Dağı. 1800m. Open, stony slope. (A really excellent daisy flowering in late summer & autumn with corymbs of lavender-blue heads (it can vary to mauve-pink) on 30cm. stems from clumps of pointed, basal leaves, rising from a soundly perennial, woody rootstock.)

220.705 : ASTRANTIA MAXIMA (subsp. *maxima*) No data. An exquisitely lovely meadow-plant from the Caucasus & neighbouring NE Turkey. A little dwarfier with much larger heads than *A. major*, in green-veined, soft rose-pink & carried singly on 60cm. stems over a very long period in summer. The running-clumps with three-lobed, basal foliage enjoy a cool, rich soil

224.105 : ATHAMANTA MACEDONICA subsp. ARACHNOIDEA No data. The race of this Balkan member of the *Umbelliferae*, endemic to the Oros Taygetos of the Greek Peloponnese. Tim Ingram describes this slow-growing, 1m. high perennial as "a remarkable plant" with strong clumps of cut, grey, downy foliage erupting into a much-branched woolly inflorescence of numerous umbels of white flowers. Small basal shoots perennate to repeat the process. For a sunny, very well-drained place.

224.270 : ATHAMANTA TURBITH subsp. HAYNALDII No data. From the limestones of Albania & adjacent areas, this delightful perennial for a hot, dry site was highly regarded by Wilhelm Schacht. We used to grow it in Dorset & found it permanent, choice & slow-growing. A filigree of bright-green foliage cut into linear threads with delicate white umbels on 30cm. stems.

224.300 : ATHAMANTA VESTINA No data. Included under *A. cretensis* in 'Flora Europaea' & considered to be an eastern intermediate of it with *A. turbith* subsp. *haynaldii*, to which Tim Ingram compares it as a robust version. Fine filigree mounds of bright-green foliage & many, dainty, pure-white, 60cm. umbels. A good, choice perennial for a dry site.

225.400 : AUBRIETA DELTOIDEA (var. *deltoidea*) Greece, Crete, Omalos. M. Jope 95-042 (One of the parents of the cultivated hybrids. Red-violet to purple flowers cover the low, loose mounds of narrow-leaves in spring.)

227.000 : BELLEVALIA BREVIPEDICELLATA Greece, Crete, Palekastro. Ex M.Salmon 746

227.100 : BELLEVALIA CILIATA

227.150 : BELLEVALIA CLUSIANA

227.200 : BELLEVALIA CRASSA Turkey, Erzincan, N of Refahiye. 1600m. Steep screes. Ex LST 158. (Discovered in fruit by E.K.Balls in 1934 but not relocated for almost 60 years, this, like many *Bellevalia* spp., is a very local, specialized plant indeed. A

bizarre & extraordinary species, in habit rather like *Allium akaka* with a dense raceme of ivory white flowers with violet anthers, carried on a short stem between two, thick, wide, glaucous leaves with purple-tinged margins. In fruit, it is no less extraordinary in its compact cluster of large, fleshy, indehiscent, purple-pink tinted capsules.)

227.205 : BELLEVALIA aff. CRASSA Turkey, Malatya, ESE of Malatya. 1850m. Rock crevices. (Collected by us in fruit under the field number JJA 17901 in 2003, about 200km. S of the *B. crassa* habitat. Determination has not been fully checked out but it is very close to *B. crassa*. Either a remarkable disjunction for such a local plant or a new species.)

227.300 : BELLEVALIA CYANOPODA Iran Archibald Archive www.srgc.net

227.400 : BELLEVALIA DECOLORANS Iraq & Iran.

227.500 : BELLEVALIA DENSIFLORA (Syria, Palestine)

227.690 : BELLEVALIA DESERTORUM Jordan, N slopes of Wadi Mujib. (A dwarf, broad-leaved species, less than 10cm. tall, with a dense raceme of up to 20, comparatively large, violet-blue flowers, followed by big, inflated seed-capsules. The unique foliage is marbled with white spots and Arnis Seisums, who identified this material, comments that the densely packed cluster of huge capsules sitting on the extraordinary leaves gives the “impression of an alien from Mars.”)

227.702 : # BELLEVALIA DUBIA Italy, Sicily, Castel Mola near Taormina. (Ex an A. Edwards coll. The most striking of the European species in a selected form with particularly brilliant, ultramarine blue young flowers. Electric.) [#2nd Pic](#)

227.703 : BELLEVALIA DUBIA Italy, Calabria, near Monasterace. Ex an M. Salmon coll. (Similar S Italian form.)

227.704 : BELLEVALIA DUBIA Ex PB 119 (No further data)

227.705 : BELLEVALIA DUBIA Greece, Messinia, ESE of Kardamili, near Saidona. c.1000m. Under olives in rock-pockets on W-facing slope. D. Hoskins 98-9. 13.5.98. (Collected out of flower but almost certainly this fine species. *B. trifoliata* & *B. romana* also have cylindrical fruiting racemes & grow in S Greece.)

227.720 : BELLEVALIA EIGII Jordan, near Dana. 1500m. C.Lovell & P.Bird coll.

227.730 : BELLEVALIA FEINBRUNIAE (Afghanistan)

227.740 : BELLEVALIA FLEXUOSA (Lebanon, Syria, Palestine)

227.750 : BELLEVALIA FOMINII

227.770 : # BELLEVALIA FORNICULATA Turkey, Agri, W of Eleskirt. 2300m. Hay meadows. (Outstanding with buds & flowers of penetrating turquoise-blue. Restricted to a few sites in the chilly Erzurum area, where its amazing blue mists the melt-water meadows. Choice but growable - maybe best outside in the UK. If in a pot, don't overdry it in summer.)

227.800 : BELLEVALIA GRACILIS Turkey, Sivas, Camlibel Da., N of Yildizeli. 1600m. Exposed, stony areas.

227.801 : BELLEVALIA GRACILIS Turkey, Tunceli, S of Tunceli, Pulumur Cay valley. 1100m. Grassy openings among sparse *Quercus* scrub. (Related to the more widespread *B. sarmatica* & like it a ‘tumbleweed’ with the flower pedicels greatly elongating in fruit.)

227.820 : BELLEVALIA HACKELII Portugal.

227.825 : BELLEVALIA HEWERI Iran

227.830 : BELLEVALIA HYACINTHOIDES (*Strangweija hyacinthoides*, *S. spicata*)

227.840 : BELLEVALIA KURDISTANICA Turkey, Hakkari, Zab gorge at Bagisli. 1500m. Igneous scree.

227.841 : BELLEVALIA KURDISTANICA Turkey, Hakkari, pass between Yuksekova & Semdinli, 25km. SE of Yuksekova. 1700m. Steep stony slopes with steppe vegetation. Archibald Archive www.srgc.net

227.860 : BELLEVALIA LATIFOLIA

227.870 : BELLEVALIA LEUCANTHA Turkey, Elazig, W of Bingöl, Kuruca Geçidi. 1800-2000m. Among grasses in wet meadow. (Described in 2006)

227.880 : BELLEVALIA LIPSKYI (Krim)

227.900 : BELLEVALIA LONGIPES Turkey, Van, NNW of Baskale. 3000m. Open, stony slopes.

227.950 : BELLEVALIA LONGISTYLA Turkey, Van, E of Lake Van. 1800m. Heavy clay in moist, depression.

227.952 : # BELLEVALIA LONGISTYLA Turkey, Van. Ex Leep & Pasche 7044

227.953 : BELLEVALIA LONGISTYLA Turkey, Erzurum, W of Aşkale. 1870m. N. Stevens coll. (An elegant plant with nodding purple to white, green-veined flowers from purplish buds on pedicels elongating greatly in fruit.)

227.990 : BELLEVALIA MACROBOTRYS

227.999 : BELLEVALIA MACROBOTRYS Iran, Zagros Mts., Bazoft valley. (Cylindrical racemes of purple and olive-green flowers from violet buds. Pedicels elongate greatly in fruit. A southern species distributed from Egypt to Iran.)

228.030 : BELLEVALIA MODESTA (S Turkey)

228.040 : BELLEVALIA NIVALIS (Syria & Cyprus)

228.060 : BELLEVALIA PARADOXA

228.070 : BELLEVALIA PARVA (Iraq)

228.080 : BELLEVALIA PYCNANTHA Turkey, Van, NNW of Baskale. 2800m. Short turf in alpine meadows. (Near *B. forniculata* but with heads of strangely crumpled bells in deep, inky blue-black. An easily grown plant of moist meadows.)

228.081 : BELLEVALIA PYCNANTHA Iran, Kordestan, ESE of Sanandaj. 1800m. Among long grass in wet meadow. (Near *B. forniculata* but with heads of strangely crumpled bells in deep, inky blue-black. Quite easily grown in the UK.)

228.082 : BELLEVALIA PYCNANTHA Turkey, Agri, ESE of Hamur. 1700m. Among long grass in moist meadow. (Near *B. forniculata* but with heads of strangely crumpled bells in deep, inky blue-black. Quite easily grown in the UK.)

228.090 : BELLEVALIA PYCNANTHA No data. From E Turkey & adjacent areas of Iraq, Iran & Transcaucasia. Near *B. forniculata* but with heads of strangely crumpled bells in deep, inky blue-black. A plant of moist, montane meadows.)

228.130 : BELLEVALIA RIXII Turkey, Van, NNW of Baskale. 2800m. Talus on open slopes. (Only known from around the type-locality. Falcate leaves & 5cm. stems of purple-brown flowers with violet anthers. Not easy. Best in an alpine-house pan.)

228.150 : BELLEVALIA ROMANA Greece, Ioanina, Mitsikeli. 860m. Ledges on S-facing, limestone cliff. (Open-mouthed, white bells.)

228.160 : BELLEVALIA ROMANA No data. (Open-mouthed, white bells.)

228.200 : BELLEVALIA SARMATICA Archibald Archive www.srgc.net

228.210 : BELLEVALIA SESSILIFLORA

228.220 : BELLEVALIA SHIRAZIANA (Iran)

228.230 : BELLEVALIA TABRIZIANA (Iran)

228.250 : BELLEVALIA TAURI

228.300 : BELLEVALIA TRIFOLIATA

228.410 : BELLEVALIA WEBBIANA No data. N Italian species near *B. romana* but with deep purple-brown flowers.

16847 : BELLEVALIA SP. Iran, W Azerbayejan, between Agh Bolagh & Sangar. 1500m. Rocky limestone slope.

16930 : BELLEVALIA SP. Iran, Hamadan, NE of Assadabad. 2200m. *Astragalus*-steppe on slate & schist.

16973 : BELLEVALIA SP. Iran, Lorestan, SE of Aligudarz. 2250m. Clay & shale slopes.

17235 : BELLEVALIA SP. Iran, Kordestan, WNW of Sanandaj. 1700m. Loose, shale slopes.

17257 : BELLEVALIA SP. Iran, Kordestan, SW of Daraki. 2500m. SW-facing limestone slope.

17283 : BELLEVALIA SP. Iran, W Azerbayejan, S of Salmas. 1800m. Open stony ridge : crystalline rock.

R. & R. Wallis 99-13 : BELLEVALIA SP. Lebanon, N of Zahle. 1600m. Rocky hillside. (Racemes of white, slightly flared flowers.

R. & R. Wallis 99-33 : BELLEVALIA SP. Lebanon, above Laqlouq. 1750m. Limestone cliffs. (Bob : "pink-flushed pale-blue flowers and is close to if not the same as *B. flexuosa*". Rannveig : "quite different" (to *B. flexuosa*).)

231.900 : BIARUM ARUNDANUM No data. Spanish race of the widespread, very variable *B. tenuifolium*. Dark chocolate, velvety spathes with projecting, black-purple spadices, appear near the ground, before the narrow leaves, in autumn.

232.000 : BIARUM BOVEI

232.050 : BIARUM CARDUCHORUM No data. Stock Ex D.B. Stephens, 2000.

232.070 : BIARUM aff. CARDUCHORUM Turkey, Tunceli, NW of Tunceli to Ovacik. 950-1000m. Openings among deciduous *Quercus* scrub on steep slopes. (This seems to be the only name available for the E Turkish *Biarum* species but they are actually quite variable. A black-purple spathe appears in the centre of a rosette of rich-green, ovate leaves.)

232.100 : BIARUM CARRATRACENSE Spain, Jaen, Sierra de Cazorla, gorge of Guadalquivir below Puente de las Herrieras. 900m. Among limestone boulders in terra rossa.

232.101 : BIARUM CARRATRACENSE Spain. No further data available. Ex M. Salmon & M. Fillan 235. (Most magnificent of this confusing genus of tuberous aroids. Huge maroon-black spathes open on the ground in early autumn.)

232.110 : BIARUM CARRATRACENSE No data.

232.188 : BIARUM DAVISII Greece, Crete. R. & R. Wallis coll.

232.189 : BIARUM DAVISII Greece, Simi.

232.200 : BIARUM DAVISII MARMARISENSE

232.200 : BIARUM DAVISII subsp. MARMARISENSE Turkey, Mu_ la, Marmaris peninsula. R. & R. Wallis coll. (Little, chubby,

creamy white spathes appear near the ground, before the narrow leaves, in autumn.) 3 offset tubers :

232.220 : BIARUM DISPAR

232.239 : BIARUM EXIMIUM Jordan. Ex a D.B.Stephens coll. (1999)

232.240 : BIARUM FRAASIANUM Ex P. Bird 64. Stock ex D.B.Stephens, 2000.

232.250 : BIARUM OCHRIDENSE No data. Stock ex D.B.Stephens, 2000

232.260 : BIARUM PYRAMI

232.309 : BIARUM SPRUNERI Ex M. Salmon 93

232.400 : BIARUM TENUIFOLIUM

232.420 : BIARUM TENUIFOLIUM No data. Leafless maroon-black spathes in autumn. Bulb-frame or alpine-house.

232.450 : BIARUM TENUIFOLIUM var. ABBREVIATUM

232.500 : BIARUM TENUIFOLIUM var. ZELEBORII

232.505 : BIARUM TENUIFOLIUM var. ZELEBORII Turkey, Mugla, N of Marmaris. 300m. Woodland. Ex a N. Stevens coll. (The spring-flowering race, endemic to SW Turkey & some adjacent islands. Almost stemless, velvety, brown-purple spathes.)

BIARUM SP. Turkey, Nemrut Da_. Ex a D.B.Stephens coll. (1998).

236.000 : BONGARDIA CHRYSOGONUM Turkey, Hakkari, Yuksekova-Şemdinli pass.

236.001 : BONGARDIA CHRYSOGONUM Iran, Kordestan, SW of Negel (between Sanandaj & Marivan). 1350m. Openings among *Quercus* scrub on shale. (Plants do not come more distinct than this weird, summer-dormant, tuberous-rooted member of the *Berberidaceae*, distributed sporadically from the E Aegean to W Pakistan. Glauous, basal, pinnatisect leaves & 50cm. high panicles of starry, yellow flowers, followed by inflated fruits. Temperature-hardy but needs a summer-rest in the bulb-frame.)

236.002 : BONGARDIA CHRYSOGONUM Iran, Kordestan, WNW of Sanandaj to Marivan. 2100m. Loose talus slopes at top of pass. (Plants do not come much more distinct than this weird, tuberous-rooted member of the *Berberidaceae*, distributed sporadically from the E Aegean to W Pakistan. Glauous, red-blotched, basal, pinnatisect leaves & 50cm. high panicles of starry, yellow flowers, followed by inflated fruits. Temperature-hardy but needs a summer-rest in the bulb-frame.)

240.000 : BRIMEURA AMETHYSTINA France, Hautes-Pyrenees, Vallee d'Ossoue. 1500m. Stony clay over limestone. (More or less endemic to the Pyrenees. Like a dainty, miniature, brighter blue bluebell - easy & not seen as often as it should be.)

240.005 : BRIMEURA AMETHYSTINA Spain, Ordesa. Ex an A. Edwards coll. (More or less endemic to the Pyrenees. Like a dainty, miniature, brighter blue bluebell - easy & not seen as often as it should be.)

240.011 : BRIMEURA AMETHYSTINA from WHITE FORM

240.100 :# BRIMEURA FASTIGIATA France, Corsica, Pointe de Revellata. Sea-level. Among moss & stones in wet-flush (dry in summer). (Tiny bulb, only a few cm. high. Dense racemes of wide-open bells, lilac-pink in this form.)

240.101 : BRIMEURA FASTIGIATA France, Corsica. Ex an A. Edwards coll. (Slightly larger, white-flowered form.)

245.001 : BUPLEURUM ANGULOSUM France, Hautes-Pyrenees, Vallee d'Ossoue. 1500m. Steep limestone scree on S-facing slope. (A very choice, slow-growing perennial with neat tufts of narrow leaves & 30cm. branching stems of large, rounded, *Astrantia*-like heads in an exquisite, glauous jade-green, which always attract much attention & are coveted by flower-arrangers. Not at all difficult to grow in a well-drained site in sun or part-shade but needs some patience to establish.)

245.020 : BUPLEURUM AUREUM (*B. longifolium* subsp. *aureum*) No data. A hardy, erect, 60cm. tall perennial from central Russia. Foliage and stems are yellowish green and the *Astrantia*-like heads of small flowers are surrounded by conspicuous, rounded, veined bracts, which are bright golden-green and almost translucent.

245.050 : BUPLEURUM BENOISTII Morocco. Ex Gothenburg expedition to Atlas : check data. A small clump-forming perennial with narrow, glauous, evergreen leaves and stems, about 30cm. high, with sprays of little, *Astrantia*-like, yellow umbels, which deepen to orange shades as they age. Intriguing and hardy with Tim Ingram (Kent, UK)

245.090 : BUPLEURUM FRUTICOSUM No data. A shrubby, Mediterranean species, the only woody member of this genus in *Umbelliferae* much grown in the UK, where it is just on the borderline of hardiness. About 2m. high, it can be particularly fine on chalky soils & in maritime areas with its umbels of acid-yellow flowers against the leathery, blue-green foliage.

245.180 : BUPLEURUM SALICIFOLIUM No data. Endemic to cliffs at up to 1000m. in the western Canary Islands, this will tolerate a few degrees of frost but must be considered tender in most of the UK. An attractive small shrub with narrow, linear, grey-blue leaves and umbels of green-yellow flowers. Originally from stock grown at the Chelsea Physic Garden, UK.

245.210 : BUPLEURUM SPINOSUM No data. A classic hedgehog-hummock of the High Atlas. Low mounds, about 20cm. high, with rich green leaves and greeny-yellow flowers but the vicious, straw-yellow spines are the most obvious feature.

247.010 : CALLIANTHEMUM ANEMONOIDES No data. A beautiful, dwarf member of the *Ranunculaceae*, endemic to Austria, in the open coniferous woods of the NE Alps, usually on limestone. The complex white or pink-tinged flowers, almost double in appearance, open near the ground in early spring before the much-divided foliage expands.

- 247.105 : CALLIANthemum coriandrifolium** Italy, Cogne. 2270m. Archibald Archive www.srgc.net
- 250.300 : CAMPANULA alliariifolia** Turkey, Artvin, Genya Da_ above Artvin. 1200m. Open, gravelly banks. (A fine, easily grown, herbaceous perennial with 60cm. tall stems carrying many pendant, white bells.)
- 250.500 : CAMPANULA alpestris** (*C. allionii*) France, Vaucluse, Le Mont Ventoux. 1800m. Loose, limestone screes. (One of the most spectacular of European alpins with "immense flowers...of the most gorgeous satiny purple." Better grown outside in a scree-bed or trough in the UK than cosseted under glass, though it does well in the summer-heat of Denver.)
- 250.501 : CAMPANULA alpestris** France, Hautes-Alpes, Col d'Izoard. 2400m. Loose, unstable scree on steep slope.
- 251.300 : CAMPANULA arvatica** (subsp. *arvatica*) Spain, Leon, Picos de Europa, NE of Fuente De. 1900m. Fissures on limestone cliffs. (A delicate but soundly perennial endemic of this wet N Spanish range, towering up from the Atlantic. Dainty, prostrate stems carry profuse, wide-open, violet flowers. Quite amenable outside in scree or a trough in the UK.)
- 252.000 : CAMPANULA betulifolia**
- 252.006 : #CAMPANULA betulifolia** Turkey, Trabzon, So_anli Da_lari above Çaykara. 1500m. Fissures in igneous cliffs. (The core species of the confusing campanulas from the Çoruh drainage & adjacent mountains. An incomparable Turkish endemic with sprays of big white bells, often pink-flushed, hanging from tufts of neat, dark glossy foliage.)
- 252.700 : CAMPANULA carpatha** Greece, Karpathos. Shady, limestone crevices. Ex a H. & I. Barton coll. (A superlative alpine-house species, seldom without a profusion of its large, elongated bells in soft blue-violet against its downy foliage. Introduced by Peter Davis in 1950 & rapidly lost, this is from the Barton's 1983 re-introduction which we maintain here. This choice long-lived, Karpathos endemic, has been disadvantaged through the similarity of its name to that of the easy *C. carpatica*.)
- 253.450 : # CAMPANULA choruhensis** Turkey, Erzurum, Nof Tortum. 1350m. Igneous rock crevices. (Another splendid member of the *C. betulifolia* group (Sect. *Symphyandriiformes*). Thick-textured, slightly downy, greyish, toothed foliage and huge white bells, often pink-tinged externally. Introduced by us in 1986 as a form of *C. betulifolia*.)
- 253.600 : CAMPANULA collina** Turkey, Trabzon, So_anli Da_. 2300m. Open meadows. (One of the most adaptable & worthwhile Turkish species for the open rock-garden in the UK. About 20cm. high with profuse, violet bells.)
- 253.603 : CAMPANULA collina** Turkey, Rize, Kaçkar Da_lari. 2200m. In alpine turf (One of the most adaptable & worthwhile Turkish species for the rock-garden. About 20cm. tall with profuse violet bells from running mats.)
- 253.800 : CAMPANULA coriacea** Turkey, Van, W of Yukari Narlica. 2200m. Shady, conglomerate cliffs. (A most distinct species, restricted to the Van area of SE Turkey & of great promise for the alpine-house. Rosettes of thick-textured leaves with wide lilac-blue bells. Seed from plants maintained in Germany from our 1986 introduction.)
- 253.902 : CAMPANULA crispa** Turkey, Erzurum, SE of Horasan. 1600m. Fissures in igneous cliffs. (A spectacular species, somewhat like the SE European *C. versicolor* in habit but with wideopen, pure-white flowers packing the stiffly erect, 20-30cm. tall stems in midsummer. Sometimes perennial but usually appears to flower itself to death.)
- 254.900 : CAMPANULA formanekiana** Greece, Imathia, Oros Vermio, below Seli. 1300m. W-facing, limestone cliffs. (Very spectacular but definitely monocarpic endemic of the ranges along the Greek-Macedonian border. A 30cm. eruption of sumptuous bells in pale blue, in this locality, as well as in the white form familiar from Giuseppe's 1931 Macedonian introduction.)
- 256.001 : CAMPANULA hawkinsiana** Greece, Ioanina, Katara. 1700m. Unstable, S-facing serpentine scree. (Wiry, prostrate, tiny-leaved stems with wide bells in intense violet with electric-blue or white centres. Alpine-house or limefree scree.)
- 256.002 : CAMPANULA hawkinsiana** Greece, Ioanina, N of Konitsa. 700m. Loose, unstable serpentine detritus. 10.6.96 (A taller, 30cm. high, more upright race here than the preceding one, maybe better suited to the open garden, but with the same intense violet flowers. A local serpentine-endemic of the N Pindus, growable outside in a raised scree-bed in the UK.)
- 256.500 : CAMPANULA heterophylla** Greece, Kikhlades. Ex a P. Davis coll. (Maintained in cultivation since the Peter Davis introduction of 193??, this choice, little Cyclades endemic has never become as well-known in the alpine-houses of enthusiasts as it should be. Long-lived, long-flowering and no great trouble to grow.) Archibald Archive www.srgc.net
- 256.800 : CAMPANULA incurva** Greece, Magnisia, Oros Pilio, above Portaria. 1200m. Mica-schist cliffs. (A stunning monocarpic species, narrowly endemic to this area. Its widely radiating, prostrate, branching stems, which in nature spread over the face of the cliff, do need space but the profusion of huge, ice-blue 'Canterbury Bells' is breathtaking.)
- 257.400 : CAMPANULA laciniata** Greece, Karpathos, WSW of Arkassa, Cape Paleokastrou. Sea-level. Limestone fissures. Ex a H. & I. Barton coll. (Rosettes of slashed leaves send up a stout stem clustered with shallow bowls in "cold crystalline lavender" with large white centres. "The fairest Campanula in all Greece" wrote Tournefort, its discoverer ; "one of the finest monocarpic species known" wrote Peter Davis in 1938. Unique & unrivalled but again needs space under glass in the UK.)
- 257.500 : CAMPANULA lactiflora** Turkey, Trabzon, Zigana Da_ above Hamsikoy. 1800m. Open slopes in *Picea* woodland. (Varying shades of lilac - unexpectedly attractive in the wild with late flowers of magenta *Geranium psilostemon*.)
- 257.721 : CAMPANULA latifolia from WHITE FORM** From the outstanding white form of this easily grown, 1m. tall, clump-forming herbaceous perennial with profuse, large, elongated bells in summer. Native to most of Europe, eastward to W Siberia & N Iran, this is glorious in the wilder parts of the garden in sun or shade
- 259.111 : CAMPANULA morettiana from WHITE FORM** No data. Hand-pollinated between several white-flowered

clones by Ron Beeston, so should come almost completely 'true'. Joe Elliott's *C. morettiana* 'Alba' seed used to produce a lot of silvery lilacs (actually lovely things) as well as whites. Huge bells on short, prostrate, downy-leaved stems ensure that this choice, saxatile endemic of the Dolomite limestones remains high on the list of essential species for experienced alpine-house growers.

- 260.210 : CAMPANULA PATULA subsp. ABIETINA** No data. A comparatively dwarf, stoloniferous perennial in an attractive and variable species-group, seldom seen in cultivation but widespread through Europe to the Altai & Caucasus. This race is centred on the mountains of Romania from the Carpathians down into the N part of the Balkan peninsula. Rosettes of bright-green leaves send up wiry stems of about 20cm. bearing several upward-facing, open, starry flowers in rich purple. Rich, gritty soil.
- 260.355 : CAMPANULA PETROPHILA** Russia, "W Caucasus, Mt. Fist". 2800m. Ex J.& J. Halda 96-0809
- 262.750 : CAMPANULA SCHEUCHZERI** Pyrenees. No further data. (A delightful, little, creeping harebell from the mountain meadows of southern Europe. Mats of little rounded leaves and lots of violet bells on slender 20cm. stems.)
- 264.900 : CAMPANULA TOMMASINIANA** Croatia, Istra, Ucka. 1300m. Limestone crevices. (Narrowly endemic to this one mountain in Istria & close to *C. waldsteiniana* but with a profusion of more tubular bells in rich-violet on its 10cm. high tufts. These two are among the finest & choicest dwarf Campanulas which can be grown with care outside in the UK.)
- 265.403 : CAMPANULA TRIDENTATA** Turkey, Ardahan, Yalnızçam Da_ları, Çam Geçidi. 2500m. Turf-filled ledges on igneous outcrops. (A representative of an extremely complex, "taxonomically difficult group of closely allied" Transcaucasian plants, which have been separated into several species. We prefer to include them all under *C. tridentata* until a serious study is undertaken. All form compact cushions of leaf-rosettes from branched rhizomes and carry a profusion of large, violet-blue bells on stems only a few cm. long. Possibly the finest bellflowers for troughs or the rock-garden in the UK.)
- 265.500 : ##CAMPANULA TROEGERAE** 2 pictures Turkey, Artvin, Barhal Valley, NW of Yusufeli to Sarigol. 600-700m. Crevices in shady, igneous cliffs. (From our 1986 & 1988 introductions, now well established in cultivation. A magnificent relative of *C. betulifolia*, with which it intergrades in the adjacent Coruh valley. In this the great white bells of *C. betulifolia* are split down and opened out almost flat to form a breathtaking flower. The thick, greyish, densely pubescent leaves are also most distinct.) # [Second pic.](#)
- 265.801 : CAMPANULA VERSICOLOR** Greece, Lakonia, Oros Taigetos, W of Sparti. 500m. N-facing, limestone cliffs. (A very fine, late-flowering, long-lived perennial, far too seldom seen in gardens. Stiff, upright stems, about 30cm high & packed with lilac-blue cups with deep purple centres, rise from neat, woody-based rosettes of grey-green leaves.)
- 265.810 : CAMPANULA VERSICOLOR** No data. A very fine, late-flowering, long-lived perennial, characteristic of the limestone cliffs of Greece and Macedonia at middle-altitudes and far too seldom seen in gardens. Stiff, upright stems, about 30cm high & packed with lilac-blue cups with deep purple centres, rise from neat, woody-based rosettes of grey-green leaves.)
- 266.000 : CAMPANULA WALDSTEINIANA** Croatia, Velebit Planina, Mali Halan between Obrovac & Sveti Rok. 1100m. Fissures in vertical limestone. (Tiny, beautiful Velebit endemic, a few cm. high, with many, wide-open, blue flowers on branching, wiry, fine-leaved stems. Alpine-house, trough or limestone-scrub in the UK ; a great success on the rock-garden at Denver.)
- 266.001: CAMPANULA WALDSTEINIANA** Croatia, Velebit Planina, above Karlobag. Limestone fissures with *Primula kitaibeliana*, *Degenia velebetica*, *Daphne alpina*, *Calamintha*, etc. Archibald Archive www.srgc.net
- 274.101 : CARLINA ACANTHIFOLIA subsp. CYNARA** France, Hautes-Pyrenees, SE of Gedre. 1400m. Open, grassy slopes. (The Pyrenean race of this spectacular perennial. Wide rosettes of deeply slashed, dark-green foliage lie flat on the ground with huge central thistle-heads of deep yellow flowers surrounded by papery, clear-yellow bracts. Not difficult in a sunny site.)
- 280.010 : CENTAUREA ATROPURPUREA** No data. Acquired by Tim Ingram under the name "*C. benoistii*", which neither he nor we can trace, but it would appear to be this robust Balkan species (though naming *Centaurea* is never easy). A strong perennial up to 2m. high with clumps of pinnatisect leaves and red-purple flower-heads emerging from attractive, golden-brown, spiny involucre over a very long period in summer. Seems easy so far in any open, well-drained site.
- 280.510 : CENTAUREA BENOISTII** Name OK according to Alan Leslie. Native to Morocco.
- 283.010 : CENTAUREA HYPOLEUCA** Archibald Archive www.srgc.net
- 285.200 : CENTAUREA PYRRHOBLEPHARA** Turkey, Gumushane, between Kop Da_ & Guvercinlik. 2100m. Ledges on E-facing limestone cliffs. (Described in the 'Flora of Turkey' as "very distinct and showy", this neat, little species was raised from a few seeds we collected in 1988. Flat rosettes of grey-white felted leaves, usually lyrate and very variably cut but sometimes uncut. Upright, 20-30cm. stems carry purple-rose flower heads with widely radiant marginal flowers opening from buds clad in overlapping, papery phyllary appendages with dark brown fringes. Should adapt well to a raised bed or scree.)
- 287.000 : CENTAUREA UNIFLORA subsp. NERVOSA** Italy, Veneto, Dolomiti, above Passo di Fedaia. 2000m. Among grasses on open stony slopes. (A mountain-meadow plant distributed from the Alps to the Carpathians.)
- 290.800 : CEPHALARIA GIGANTEA** Çam Geçidi
- 292.000 : CERCIS SILIQUASTRUM** (subsp. *siliquastrum*) Greece, Messinia, Oros Taigetos, between Tripi & Langadas. 1000m. Limestone. D. Hoskins coll.
- 293.130 : CERINTHE MAJOR** No data. Annual widespread through the Mediterranean area from Portugal to Turkey. Up to 60cm. high with glaucous, red-tinted bracts & yellow to red flowers in bracteate cymes.

- 293.150 : CERINTHE MINOR subsp. AURICULATA** Turkey, Konya, NE of Beysehir. 1200m. Open slopes with diverse, steppe vegetation, disturbed for tree-planting. Yellow flowers. Perennial. 11.7.88
- 293.170 : CERINTHE RETORTA** No data. An annual from the SW Balkan peninsula in a small genus of *Boraginaceae*, which is becoming fashionable. About 30cm. high with big violet bracts about the pale yellow & violet flowers.
- 294.050 : CHAENORHINUM GLAREOSUM** Spain, Granada, Sierra Nevada, below Pico del Veleta. 3300m. Mica-schist crevices and detritus. (A Sierra Nevada endemic, one of the highest alpine there, or indeed in Europe. Thready stolons send up short, flopping stems with tiny, rounded, smooth leaves & racemes of comparatively large, flat, spurred flowers, in variable shades of bright-pink & lilac, with yellow palates. In 1913, Farrer singled it out as "the only undisputed member of its family to deserve attention...choice and delicate...neat and delightful." In 1935 (before the days of an AM from the 'Joint Rock'), it received a Certificate of Merit as *Linaria glareosa*. In 1998, it is little-known and very seldom-seen in alpine-houses. Sad !
- 294.550 : CHAEROPHYLLUM HIRSUTUM from PINK FORM** From the raspberry-pink form of this umbellifer from the mountain-meadows of S Europe. A robust perennial with cut, downy, soft-green basal foliage and 1.2m. stems with flat umbels of many tiny pink flowers. In character in the wild-garden or cottage-garden & well-behaved here in good, moist soil.
- 295.285 : CHAMAECYTISUS HIRSUTUS** No data. A very variable species, usually with a calcifuge tendency in nature, core of a complex of taxa extending E from central Europe into central Asia. This is a fine, erect-growing form of this neat shrublet, about 20cm. high, with downy leaves & racemes of bunched, rather large, yellow pea-flowers in late spring & early summer.
- 298.120 : CHIONODOXA FORBESII** Turkey, Mugla, SE of Fethiye. 1100m.. Under *Cedrus* on steep limestone slopes.
- 298.400 : # CHIONODOXA (NANA) CRETICA** Greece, Crete, Hania, Omalos. M. Jope coll., 1996. Note: (syn. *Scilla nana/cretica*) This very fine form named as 'Melvyn' <http://www.srgc.net/forum/index.php?topic=5879.msg163284#msg163284>
- 299.000 : CHORISPORA BUNGEANA** Kyrgyzstan, Terskey Alatau, S of Barskoon. 3115m. A. Dickerson 00-10 (A compact mound of smooth, spatulate, fleshy leaves surmounted by a succession of almost stemless, sweet-scented flowers, proportionately enormous purple wallflowers, succeeded by "a remarkable display" of erect, linear seed-pods. "A good form...will be almost without peer in the garden scree", wrote Sampson Clay in 1937. Maybe never an open-garden plant but very successfully cultivated in the alpine-house in the UK by the expert grower Jim Almond, who created a stir when he exhibited it a few years ago.)
- 301.000 : CHRONANTHUS ORIENTALIS**
- 302.000 : CICHORIUM SPINOSUM**
- CIRSIIUM HELENIODES**
- 307.110 : CISTUS OSBECKIFOLIUS** No data. A rather rare subalpine endemic of Tenerife in the Canary Islands, growing at about 2000m., so reaching a greater altitude than the other Canary Is. endemic *C. symphytifolius*.
- 309.000 : CLEMATIS ALPINA** Austria, Karnten, Karawanken, Koschuta. 1500m. Among *Pinus* scrub on limestone slopes.
- 309.001 : CLEMATIS ALPINA** Italy, Veneto, Dolomiti, S of Passo di Giau. 2200m. Base of limestone cliffs.
- 309.050 : CLEMATIS ALPINA (subsp. alpina)** No data. From the outstanding clone, 'Frances Ravis'. A restrained climber for a cool place, native from central Europe E into Russia. Elegant, rich-blue flowers with white staminodes appear in late spring.
- 309.055 : CLEMATIS ALPINA** From pink-flowered clones which may or may not come 'true' but should vary.
- 309.070 : CLEMATIS ALPINA subsp. SIBIRICA** Archibald Archive www.srgc.net
- 309.200 : CLEMATIS CAMPANIFLORA**
- 309.300 : CLEMATIS CIRRHOSA**
- 309.500 : CLEMATIS FLAMMULA** Croatia, S of Senj. 100m. Among limestone boulders on open slopes & gulleys
- 309.501 : CLEMATIS FLAMMULA** Greece, Lakonia, W of Sparti. 1200m. M. Jope coll., 15.11.96 (A characteristic woody climber of the S European limestones. Up to 5m. high with large panicles of many, small, fragrant, white flowers. Wonderful here in the autumn sunlight with its silvery seed-heads mingled with the scarlet hips of the rose over which it scrambled.)
- 309.710 : CLEMATIS INTEGRIFOLIA** No data. An attractive, very hardy, herbaceous species distributed through the grass-steppe of E Europe & Central Asia. A strong, compact rootstock sends up lax stems, up to 1m. long but usually much less, clothed in ovate leaves & carrying large, long-stemmed, lavender-blue flowers, each with four, reflexing sepals, in summer.
- 309.800 : CLEMATIS ORIENTALIS** Turkey, Artvin, Oltu valley W of Olur. 700m. Gravel banks above river.
- 309.801 : CLEMATIS ORIENTALIS** Turkey, Erzurum. N of Tortum. 1350m. Among rocks in open sites. (The true plant, distributed in continental Asia from Turkey to NW China but rare in cultivation. Not so spectacular as the allied eastern species, like *C. tibetana*, to which its name has been misapplied but well worth growing in a hot, dry site. Attractive, glaucous, leathery leaflets and cymes of many, small yellow flowers with strongly reflexed sepals and, often, purplish filaments.)
- 309.910 : CLEMATIS RECTA** No data. A herbaceous species spread from Central Europe E across Central Asia.
- 309.911 : CLEMATIS RECTA f. PURPUREA** The purple-leaved form which comes reasonably 'true' from seed. It varies but you can select out the best ones at an early stage. Very striking indeed if a good form is grown in full sun.

310.000 : CLEMATIS VITICELLA A most distinct climber from the E Mediterranean, extending on through Turkey to Georgia & NW Iran. Cultivated since the 16th C & a parent of many hybrids.

311.000 : COLCHICUM ALPINUM

311.009 : COLCHICUM ALPINUM France, Cevennes.

311.200 : COLCHICUM ARENARIUM Archibald Archive www.srgc.net

311.301 : COLCHICUM ATTICUM (*Merendera attica*) Turkey, Burdur, SSW of Tefenni. 1300m. Among scrub in clay over limestone. (Few linear leaves appear with dark-anthered white or pale pink flowers - in spring with this population.)

311.420 : COLCHICUM AUTUMNALE No data. A plant of European meadows. Pink flowers in early autumn

311.501 : COLCHICUM BALANSAE Turkey, Icel, NE of Gulnar. 1200m. Pockets of red clay on limestone. (A robust, S Turkish endemic. White to purple-pink flowers in autumn from amazingly long-necked corms.)

311.600 : COLCHICUM BAYTOPIORUM Turkey, Antalya, Gulluk Da. 750m. Among limestone boulders in dense scrub. (Ex a type-locality coll. of this local, medium-sized species. Pink flowers in autumn, with narrow, recurving leaves later.)

311.700 : COLCHICUM BIVONAE Turkey, Bolu, near Abant Golu. 1000m. Open areas among deciduous scrub and *Pteridium*.

311.701 : COLCHICUM BIVONAE Greece, Drama, Falakro, slopes near Agio Pnevma plateau. 1600m. Open, stony, limestone slopes. (JJA 7550)

311.702 : COLCHICUM BIVONAE Greece, Pieria, Oros Olimbos above Vrondou. 1000m. N-facing slopes. P.& P. Watt coll. (One of the finest of the larger species, distributed from S Europe into W Turkey and accordingly variable. This is the form once called *C. bowlesianum* with heavily tessellated rosy purple, broadly bell-shaped flowers. Very satisfactory outside in the UK.)

311.703 : COLCHICUM BIVONAE Greece, Kavala, Pangeo above Eleftheroupoli. 1000m. Openings in deciduous woodland. (JJA 8357, JJA 12000)

311.704 : COLCHICUM BIVONAE Greece, Thesprotia, between Gliki and Souli. c. 1000m. D.Hoskins coll., 1987

311.705 : COLCHICUM BIVONAE Greece, Preveza, above Lichnos beach near Parga. 500m. D.Hoskins coll., 1987

311.706 : COLCHICUM BIVONAE Greece, Pieria, Oros Olimbos above Papa Rima gorge. 850m. S-facing slopes. P.& P. Watt coll. (One of the finest of the larger species, distributed from S Europe into W Turkey and accordingly variable. This is the form once called *C. bowlesianum* with heavily tessellated rosy purple, broadly bell-shaped flowers. Very satisfactory outside in the UK.)

311.800 : COLCHICUM BOISSIERI Greece, Viotia, Parnassos. 1500m. Gravelly areas below *Pinus* & among *Daphne oleoides*. (A sweet little species forming long stoloniferous corms. Lilac-pink flowers in autumn, before the few linear leaves.)

311.808 : COLCHICUM BOISSIERI Turkey, Antalya, N of Kas, Sinekibeli. 1450m. Ex R.& R.Wallis 03-105.

311.809 : COLCHICUM BOISSIERI Greece, Koromelia. Ex R.& R.Wallis 00-09. (A sweet little species forming long soboliferous corms. Lilac-pink flowers in autumn, before the few linear leaves appear. Good in a pot.)

312.000 : COLCHICUM BORISII

312.100 : COLCHICUM BORNMUELLERI

312.150 : COLCHICUM BRACHYPHYLLUM Jordan, W of Kerak. (A dwarf, winter-flowering species with up to 15, white flowers appearing as the leaves develop, in January in its natural habitat. This part of Jordan receives comparatively more precipitation than most areas and this delightful species should not be impossible in the UK alpine-house.)

312.200 : COLCHICUM BURTTII

312.400 : COLCHICUM CALLICYMBIUM

312.600 : COLCHICUM CHALCEDONICUM (subsp. *chalcedonicum*)

312.649 : COLCHICUM CHALCEDONICUM subsp. **PUNCTATUM** Turkey, N of Nazilli. Ex R.& R.Wallis 03-117.

312.700 : COLCHICUM CHIMONANTHUM (Endemic to Greek Macedonia.) Archibald Archive www.srgc.net

312.800 : COLCHICUM CILICICUM Turkey, Icel, Nur Da. above Hasanbeyli. 1100m. Among deciduous *Quercus* scrub on W-facing slopes. (Large pale to deep purple-pink flowers in autumn. The robust species of the Taurus S into Syria. Almost certainly the parent of many of the garden-hybrids made about 100 years ago & usually easily grown in the UK.)

312.801 : COLCHICUM CILICICUM Turkey, Icel, S of Gulnar. 800m. Among stones on limestone at edges of fields & among scrub. (Large pale to deep purple-pink flowers in autumn. The robust species of the Taurus S into Syria. Almost certainly the parent of many of the garden-hybrids made about 100 years ago & usually easily grown in the UK.)

312.719 : COLCHICUM aff. CONFUSUM Greece. Ex R.& R. Wallis 00-29 (An autumn-flowering Greek endemic, described in 1999, in flower, rather like *C. autumnale*, though the colour is a deeper shade of purple. The leaves, however, are narrowly lanceolate, undulate and twisted. Usually a plant of schists and serpentines, distributed down the Pindus range from Corfu, Macedonia & Thessalia to Parnassos.)

313.010 : COLCHICUM CORSICUM No data. A dwarf species from lowish altitudes in S Corsica. Lilac-pink flowers in autumn,

followed by narrow, 10cm. high leaves. Reputedly uncommon in nature but easily grown & maintained in the UK.

313.209 : COLCHICUM COUSTURIERI Greece, Crete. Ex R.& R. Wallis 89-33. (Originally described by Greuter in 1967 from Gaiduronisi & Koufonisi islands off south-eastern Crete. Though this coll. is from the main island opposite the offshore islands, it has been confirmed by Chris Brickell as this taxon. Like a larger, much more robust version of *C. cupanii*, from which we feel it is most distinct horticulturally. Lots of rich pink flowers with purple-black anthers in autumn.)

313.259 : COLCHICUM CRETENSE Greece, Crete.

313.300 : COLCHICUM CROCIFOLIUM

313.404 : COLCHICUM CUPANII Greece, Thesprotia, above Gliko to Souli. 1000m. Open hillside. Ex a D. Hoskins coll. (Charming, little, autumn-flowering species for the alpine-house. Bright lilac-pink flowers with purple-brown anthers.)

313.405 : COLCHICUM CUPANII Greece, Crete, Hania, Omalos. M. Jope 95-43 (Charming, little, autumn-flowering species for the alpine-house. Bright lilac-pink flowers with purple-brown anthers just as the narrow leaves appear.)

313.406 : COLCHICUM CUPANII

313.600 : COLCHICUM DAVIDOVII

313.700 : COLCHICUM DECAISNEI Turkey, Izmir, Boz Da. 1000m. Schist detritus in wet-flush. = *C. micaceum*

313.708 : COLCHICUM DECAISNEI Syria, Jebel Nusairi above Slunfeh. 1400m Among *Quercus* scrub on W-facing hillside. Ex R.& R. Wallis 96-17. A small, neat, white to pink autumn-flowering species with a few glabrous, ligulate leaves. In 'Flora of Turkey', this is included under *C. troodii* from Cyprus. This coll. is from near the type-locality for *C. decaisnei*.)

313.709 : COLCHICUM DECAISNEI Turkey, Hatay, between Antakya & Yayladağı. Ex R.& R. Wallis colls. (A small, neat, white to pink autumn-flowering species with a few glabrous, ligulate leaves. In 'Flora of Turkey', Chris Brickell includes the Turkish plants under *C. troodii*, described from Cyprus. This coll. is from near the type-locality for *C. decaisnei*.)

313.800 : COLCHICUM DIAMPOLIS

314.000 : COLCHICUM DOERFLERI Macedonia, Galičica Planina, above Trpčica. 1600m. Open, limestone slopes. (Included under *C. hungaricum*, in 'Flora Europaea' - the cold-climate race of this with deeper pink flowers in early spring.)

314.100 : COLCHICUM EICHLERI

312.600 : COLCHICUM EUBOEUM

314.200 : COLCHICUM FASCICULARE

314.250 : # COLCHICUM FEINBRUNIAE Syria, near Laqlouq. Ex R.& R. Wallis 99-32. (A distinct, very attractive & floriferous, faintly tessellated, pink, medium-sized, autumn-flowering species, recently described & now introduced to cultivation. One of the first species to flower with us, usually appearing in mid-August.)

314.270 : COLCHICUM FILIFOLIUM (*Merendera filifolia*) No data. A low-altitude version of *C. montanum* from dry sandy soils in SE Spain & the Balearic Islands. Smaller rosy purple flowers & up to 10, extremely narrow leaves.

314.300 : COLCHICUM FREYNII Iran, E Azerbaijan, S of Jolfa. 1400m. Steep, loose, stony slope. (A small S Caucasian species, extending into NW Iran. White flowers, flushing to pink or rose-purple at the base, in early spring, before the 3 channelled, linear leaves develop)

314.350 : COLCHICUM GRAECUM Greece, Ahaia, Ori Aroania, Helmos, above Zarouhla. 1200m. Among *Pteridium* in clearings in *Abies* woodland. (listed in 1986 under 316.400 : *C. parnassicum*.)

314.400 : COLCHICUM HAYNALDII (Widely distributed Balkan endemic.)

314.450 : COLCHICUM HELDREICHII (Endemic to W central Turkey. This is the *C. kotschy* of western Turkey. True *C. kotschy* does not occur W of Pozanti)

314.500 : COLCHICUM HIEROSOLYMITANUM Archibald Archive www.srgc.net

314.603 : COLCHICUM HUNGARICUM Croatia, Velebit Planina, Mali Halan. 800m. Exposed, gravelly areas on limestone. (A diminutive species flowering, as the leaves appear in very early in spring, with white or pale pink flowers.)

314.650 : COLCHICUM INUNDATUM (A very narrow W Turkish endemic described in 1999. Only known from one valley on the border between Konya & Antalya provinces, where it once grew in quantity in the seasonally waterlogged meadows of the alluvial plain. Its habitat is now largely drained and is cultivated for chick pea production. Possibly closest to the distant, eastern *C. persicum* but with pale lilac-pink flowers in autumn, before the big, twisted leaves appear.)

314.708 : COLCHICUM KESSELRINGII Uzbekistan, Kuramin range, Kotch-Bulak near Angren. Ex S & V 94-90

314.709 : COLCHICUM KESSELRINGII Tajikistan, near Tovil-Dora. (A most distinct and beautiful, dwarf, spring-flowering, snow-melt species from the mountains of Central Asia, N Afghanistan & Chitral. The little, narrow leaves are barely developed when the erect, narrowly vase-shaped flowers appear. Each white segment is striped or suffused on the exterior with purple, fairly brightly in all the parent clones, though the species can be variable in this respect. For an alpine-house pan.)

314.752 : COLCHICUM KOTSCHYI Turkey, Hakkari, NE of Yuksekova. 1800m. In shale detritus on steep slopes. (Medium-sized, species, distributed E through Iraq & Iran. The white or pale-pink flowers often appear in late summer.)

- 314.753 : COLCHICUM KOTSCHYI** Turkey, Gaziantep, Nur Da. above Fevzipasha. 1100m. Among *Quercus* scrub on shaly slopes. (A widespread. medium-sized, species, distributed E from S Turkey to N Iraq & NW Iran. Compact enough for the bulb-frame, its white or pale-pink flowers often appear in late summer, earlier than most others.)
- 314.754 : COLCHICUM KOTSCHYI** Turkey, Gaziantep, W of Gaziantep. 850m. Openings among scrub on limestone. N. Stevens coll., June, 1998 (Medium-sized, species, distributed E through Iraq & Iran. The white or pale-pink flowers often appear in late summer.)
- 314.755 : COLCHICUM KOTSCHYI** Iran, Bakhtiari, E of Chalehgard. Margin of cultivated land. (A widespread. medium-sized, species, distributed eastwards from S Turkey to N Iraq & W Iran. Compact enough for the bulb-frame, its white or pale-pink flowers often appear in late summer, earlier than most others.)
- 314.780 : COLCHICUM KURDICUM** (*Merendera kurdica*) Turkey, Van, Kavuŝŝahap Da_ above Bah_esaray & slopes near Karabel Ge_idi. 2900m. Open slopes in stony clay around snow-patch hollows. (17.7.88 : in fruit but still in flower near melting snow.)
- 314.789 : COLCHICUM KURDICUM** (*Merendera kurdica*) Iran, Mazanderan, near Siabishe. 1900m. (A beautiful, spring-flowering, snow-melt species, better-known from SE Turkey and N Iraq but quite widely distributed in N Iran. The narrow, bronze-tinted foliage is just developing as the large, widely goblet-shaped flowers appear. In this collection, these have all flowered creamy white in cultivation rather than the rose-pink of the Turkish ones. This desirable alpine species is one of the most difficult to grow in the temperate climate of the UK. Never overheat or overdry it in summer.)
- 314.790 : COLCHICUM KURDICUM** Iran, Kordestan, S of Marivan. 2500m. SW-facing, limestone slope. (An interesting, high altitude collection from right on the Iraqi border. Might also be a form of *C. szovitsii*. These two are not easy to distinguish in fruit. Reports are that this is spring-flowering with white, yellow-throated flowers.)
- 314.800 : COLCHICUM LAETUM**
- 315.000 : COLCHICUM LINGULATUM** (subsp. *lingulatum*)
- 315.059 : COLCHICUM LINGULATUM subsp. RIGESCENS** Turkey, Mugla, Datca peninsula. 80m. Ex R. & R. Wallis 03-121.
- 315.200 : COLCHICUM LUSITANUM**
- 315.300 : COLCHICUM LUTEUM** Uzbekistan, Tashkent, Chimgan, 1200m. Open, stony areas below snow-patches. (A brilliant, Central Asian snow-melt species, distributed south-east to the western Himalaya. Like no other in the genus with its little, yellow, goblet-shaped flowers in earliest spring. In this population, these are very deeply coloured and with tubes fairly strongly suffused with purple. This is a mountain-plant and resents being too wet in winter and too hot and dry in summer.)
- 315.327 : COLCHICUM LUTEUM** Tajikistan, Vaksh Range, near Baldschuan. (Seeds from quite a distinct population with paler, larger, clear-yellow flowers, entirely lacking any purplish tinge on the tubes. This species is essentially one for the alpine-grower. Both of these are from segregated stocks and can be relied on to come evenly from seed.)
- 315.328 : COLCHICUM LUTEUM** Tajikistan, near Tovil-Dora. Archibald Archive www.srgc.net
- 315.329 : COLCHICUM LUTEUM X KESSELRINGII** Tajikistan, near Tovil-Dora. (This is not a man-made hybrid but one which very occasionally occurs naturally where the two species grow together. This seed is derived from 3 clones originally selected in flower in the wild in 1990. Though these hybrids are much less willing to set seed than the parent species, the resulting seedlings appear to be consistently intermediate in appearance. As the parents are very different and are also two of the most distinct species in the genus, the resulting hybrid is striking and like nothing else. Cream-coloured flowers with the distinctive purple stripe of *C. kesselringii* on the exterior of the outer segments. Grow cool and do not overdry in summer.)
- 315.400 : COLCHICUM MACEDONICUM**
- 315.601 : # COLCHICUM MACROPHYLLUM** Turkey, Mugla, Baba Da. SE of Fethiye. 1200m. Clay in shade of *Cedrus*. (Local in SW Turkey & adjacent islands. Large, pleated, *Veratrum*-like foliage. Pink & white chequered flowers in autumn.)
- 315.602 : COLCHICUM MACROPHYLLUM** Greece, Crete, Agios Ioannis (between Hora Sfakion & Agia Roumeli). 750m. Open scrub. M. Jope 96-11 : 22.4.96 (Local in SW Turkey & some adjacent islands & totally distinct in its large, pleated, *Veratrum*-like leaves. Usually with purple-pink & white chequered flowers in autumn, Melvyn Jope, who returned to this colony when it was in flower in October, tells us that not only is it outstandingly prolific & unusually variable in depth of colour here but that there were a good number of plants with pure white flowers. We have never heard of a pure-white *C. macrophyllum* & neither had Brian Mathew who was present with Melvyn at this site. It may be a long shot to expect whites from seed but you can hope.)
- 315.603 : COLCHICUM MACROPHYLLUM** Greece, Simi, NW of Simi to Emporios. 40m. Among scrub on N-facing limestone slope. M. Denney 607. (One of the most splendid of all *Colchicum* species, local in SW Turkey & on some of the adjacent E Aegean islands, such as Rhodes & Simi. Totally distinct from all others in its very large, pleated, *Veratrum*-like leaves. Usually with big purple-pink & white chequered flowers in autumn. Best in the bulb-frame or a warm, well-drained site in the UK.)
- 315.604 : COLCHICUM MACROPHYLLUM** Turkey, Mugla, between Marmaris & Bozborun. Ex V. Horton & N. Stevens 2146 (One of the most splendid of all *Colchicum* species, local in SW Turkey & on some of the adjacent E Aegean islands, such as Rhodes & Simi. Totally distinct from all others in its very large, pleated, *Veratrum*-like leaves. Usually with big purple-pink & white chequered flowers in autumn. Best in the bulb-frame or a warm, well-drained site in the UK.)
- 315.700 : COLCHICUM MICACEUM** Turkey, Izmir, Boz Da. 1000m. Mossy or turfy schist ledges or among schist detritus.

(From our 1985 coll., JJA 5963, but not described as a new species by Karin Persson until 1999. A very narrow W Turkish endemic only known from a few hollows, where late snow-patches lie, between 1000m. and 1800m. on the micaceous schists of Boz Dag and Babadag near Denizli. Up to 3, ground-hugging, oblong leaves and white-centred, rose-purple flowers on creamy white tubes in early autumn. A little alpine species, perhaps closest to *C. micranthum*).

315.750 : COLCHICUM MICRANTHUM

315.800 : COLCHICUM MINUTUM (Described in 1999, this tiny species has a very disjunct distribution along the southern slopes of the Cilician Taurus range, from above Alanya to near Adana. One of the few truly soboliferous species.)

315.900 : COLCHICUM MONTANUM (*Merendera montana*, *M. bulbocodium*) Spain, Aragon, N of Canfranc-Estacion. 1300m. (Bright, purple-pink flowers open flat in early autumn before the few, narrow, dark leaves. Easy & increases well.)

315.908 : COLCHICUM MONTANUM (*Merendera montana*, *M. bulbocodium*, *M. pyrenaica*) France, Pyrenees-Orientales, Cirque d'Estaupe. 1800m. Alpine turf between limestone rocks. P.& P.Watt coll. (Bright, purple-pink flowers herald the coming winter by opening flat in early autumn before the few, narrow, dark leaves. Easy & increases well in cultivation in the UK.)

316.000 : COLCHICUM MUNZURENSE Turkey, Tunceli, Pulumur Cay valley S of Kirmizi-Kopru. 1000m. Open areas among sparse deciduous scrub.

316.001 : COLCHICUM MUNZURENSE Turkey, Tunceli, NW of Tunceli to Ovacik. 950-1000m. Openings among deciduous *Quercus* scrub on steep slopes. (A type-locality coll. of this distinct little species, narrowly endemic to this area & described in 1999. It flowers in spring as the snow melts with fragrant, white to pale lilac-purple flowers just as the 3 furrowed, recurving, brown-tinged, lanceolate-linear leaves appear. While the soboliferous habit of its corms (like *C. sobolifera*, *C. psaridis* and *C. boissieri*) is a diagnostic character, this was not so evident late in the season, when the corms tended to be in dense clumps. This may be due to the restriction of the heavy clay in which it grows & it may be more pronounced in cultivation.)

316.100 : COLCHICUM NEAPOLITANUM

316.200 : COLCHICUM PARLATORIS

316.400 : # COLCHICUM PARNASSICUM Greece, Viotia, Oros Parnassos. 1600m. Among grasses on stony, limestone slopes. (Pale purple-pink autumn flowers followed by narrow leaves. Endemic to Parnassus & adjacent Elikon only.)

316.600 : COLCHICUM PELOPONNESIACUM

316.700 : COLCHICUM PERSICUM Archibald Archive www.srgc.net

316.707 : COLCHICUM PERSICUM Iran, Kordestan, SE of Marivan. 1350m. Among oak scrub on shale.

316.708 : COLCHICUM PERSICUM Iran, Kordestan, NE of Marivan. 1500m. Among tall, perennials on open, igneous slope.

316.709 : COLCHICUM PERSICUM Iran, Markazi, 5km. W of Abegarm. 1675m. Sandy clay slope. R.& R.Wallis 04-104. (Quite a robust, autumn-flowering species of dry, continental climates. Widespread in central Iran and extending westwards across the Syrian Desert to Lebanon. Purple-pink to deep violet-purple flowers, barely, if at all, tessellated. The broad, glossy, rather stiff leaves, push above the ground on a short stem in spring. Bulb-frame only in the UK.)

316.800 : COLCHICUM PIEPERIANUM

317.000 : COLCHICUM PINATZIORUM

317.100 : COLCHICUM POLYPHYLLUM Turkey, Adana, Nur Daglari above Hasanbeyli. 1100m. In heavy red clay among deciduous *Quercus* & *Styrax* scrub. (A most attractive, dwarf, autumn-flowering species with soft-pink flowers before the many, narrow, bright-green leaves appear. Very slow to increase vegetatively so seldom seen in cultivation.)

317.200 : COLCHICUM PSARIDIS Turkey, Gundogmus.

317.400 : COLCHICUM PUSILLUM Greece, Ahaia, NW of Halandritsa. 500m. Among macchie in gravelly soil over limestone.

317.430 : COLCHICUM RADDEANUM

317.460 : COLCHICUM RAUSII (Endemic to Greece, southern Pindos.)

317.480 : COLCHICUM RHODOPAEUM

317.500 : COLCHICUM ROBUSTUM Iran, Khorasan, W of Bojnurd. 1200m. Open, stony slopes. (about 5 linear leaves)(This & the following two colls. from NE Iran are from very different-looking plants, which would all appear to belong to the extremely variable *C. robustum* (a species of many synonyms : *C. hissarica*, *C. aitchisonii*, etc.): "There are no discernible disjunctions in the pattern of variation....it is not really possible to distinguish infraspecific units," writes Karin Persson in her monograph. Illustrated beautifully in Wendelbo's 'Tulips & Irises of Iran' as "*Colchicum persicum*." Flowers in early spring : usually white, often with dark anthers.)

317.501 : COLCHICUM ROBUSTUM Iran, Mazandaran, NE of Shahrud. 2200m. Exposed stony slopes. (2-3 broader leaves)

317.502 : COLCHICUM ROBUSTUM Iran, Mazandaran, ENE of Firuzkuh. 2000m. Among deciduous scrub on steep slope. (very long, strap-shaped leaves : 12cm. long by 1.5cm. wide)

317.585 : COLCHICUM SANGUICOLLE Turkey, Mugla, SE of Fethiye, Baba Dag. 1200m. Ex R.& R.Wallis 03-102. (Described in 1999 from Mugla, Antalya & Elmali provinces.)

317.586 : COLCHICUM SANGUICOLLE Turkey, Mugla, Ak Daglari, NW of Elmali. 1800m. Ex R.& R.Wallis 03-108. (A handsome and most distinct, medium-sized species, endemic to SW Turkey & described in 1999. Flowering in autumn before the leaves appear, it is unlike any other in the dark crimson cataphylls which surround and contrast with the pure-white perianth tubes, which support the campanulate flower in intense rose-purple.)

317.600 : COLCHICUM SCHIMPERI

317.649 : COLCHICUM SFIKASIANUM Greece, Lakonia, between Monemvasia & Pandanassa. S-facing limestone slope. R.& R. Wallis 03-14. (Bob & Rannveig's 2003 introduction of this Greek endemic.)

317.650 : COLCHICUM SFIKASIANUM Greece, Lakonia, N of Neapoli. 165m. SW-facing limestone slope. R.& R. Wallis coll. (A Greek endemic described in 1995, though it was named *C. polymorphum* by Orphanides in 1874 but never validated. A plant of the coastal limestones of S Greece and some of the Ionian islands below 500m. Long-tubed, autumn flowers, sparsely chequered with palest amethyst purple on a whitish ground, appear without the narrow leaves, which will lie in spring, twisted & undulate, "propeller-like on the ground". Illustrated in Rix & Phillips as "*C. parlatoris*",)

317.710 : COLCHICUM SOBOLIFERUM (*Merendera sobolifera*) No data. A distinct little plant from SE Europe across to Iran. Stoloniferous corms, like *C. boissieri* & *C. psaridis*, and starry, white to pink flowers over a long period in spring.)

[##Colchicum sp 14518](#) Goktepe 2 pictures [# Second pic.](#)

317.801 : COLCHICUM SPECIOSUM Turkey, Artvin, Altiparmak above Yusufeli. J. Drake coll. (Spectacular, robust species of the wet mountains of NE Turkey across to Iran. Huge, deep-pink goblets in autumn. The best one for UK gardens.)

317.802 : COLCHICUM SPECIOSUM Turkey, Rize, above Ikizdere. 1400m. Alpine meadows. N. Stevens coll. (A spectacular, robust species from the wet mountains along the Black Sea coast of NE Turkey across the Caucasus to the Caspian ranges of Iran. Huge, deep-pink goblets in autumn. The best one for outdoor cultivation in UK gardens and a parent of most hybrids.)

317.803 : COLCHICUM SPECIOSUM Iran, Mazandaran, Kandavan pass, north side. 2500m. Among grasses in wet-flush. (A spectacular, robust species from the wet mountains along the Black Sea coast of NE Turkey across the Caucasus to the Caspian ranges of Iran. Huge, deep-pink goblets in autumn. The best one for outdoor cultivation in UK gardens.)

317.804 : COLCHICUM SPECIOSUM Iran, Gilan, Talesh, SW of Asalem. 2000m. Among bracken in *Carpinus* woodland. (A spectacular, robust species from the wet mountains along the Black Sea coast of NE Turkey across the Caucasus to the Caspian ranges of Iran. Huge, deep-pink goblets in autumn. The best one for outdoor cultivation in UK gardens.)

317.900 : COLCHICUM STEVENII

317.909 : COLCHICUM STEVENII Jordan, Wadi al Wala between Madab & Dhibhan. (Possibly this southern species with up to 8 flowers, usually in deep-pink to purple, appearing in late autumn or early winter with the leaves, from 6-10 in number & narrowly linear. A beautiful species for the bulb-frame or alpine-house in the UK.)

318.000 : COLCHICUM SZOVITSII Turkey, Kayseri, Erciyas Da_ above Kayseri. 2000-3000m. In turf in moist depressions.

318.001 : COLCHICUM SZOVITSII Turkey, Trabzon, Zigana Da_lari. 2100m. With *Daphne* & *Vaccinium* in alpine turf on grazed slopes.

318.002 : COLCHICUM SZOVITSII

318.003 : COLCHICUM SZOVITSII Iran, Kordestan, ENE of Sanandaj. 1900m. Wet hay-meadow. (A large form of this spring-flowering species, characteristic of seasonally wet montane habitats. White to pale purple-pink.)

318.004 : COLCHICUM SZOVITSII Iran, Lorestan, E of Shulabad. By stream in igneous gully. (A large form of this spring-flowering species, characteristic of seasonally wet montane habitats. White to pale purple-pink.)

318.005 : COLCHICUM SZOVITSII Iran, Iran, West Azarbaijan, S of Silvaneh. 1600m. Grassy areas.

318.009 : COLCHICUM SZOVITSII Turkey, Malatya, W of Malatya. 1500m. Snow-melt. Ex R.& R.Wallis 86-32. (A small, dainty form of this variable species, characteristic of seasonally wet, montane habitats. White to pale-pink.)

318.050 : COLCHICUM SZOVITSII Azerbaijan, Nakhichevan, near Tivi. Ex a J. Ruksans coll. (From one of the Transcaucasian populations separated as *C. goharae* by Eleonora Gabrielian and once listed as *C. armenum* 'Tivi' by Janis Ruksans. Very large, pure-white flowers open into wide stars in the spring sunshine.) Archibald Archive www.srgc.net

318.051 : COLCHICUM SZOVITSII Armenia, near Vardaovit. (Janis Ruksans considers this "one of the most beautiful". Large, rounded, snow-white flowers, sometimes just flushed pink as they open in the spring.)

318.101 : COLCHICUM TRIGYNUM (*Merendera trigyna*) Turkey, Mugla, Gok Tepe. 1500m. Open stony areas among sparse *Pinus* on limestone. (Variable & near *C. atticum*. White to pale pink flowers in spring)

318.119 : COLCHICUM TRIGYNUM (*Merendera trigyna*) Azerbaijan, Nakhichevan, Bitschenag pass. (A variable, little species, near *C. atticum*, flowering in very early spring. The flowers in this population were all pure white.)

318.204 : COLCHICUM TRIPHYLLUM Turkey, Konya, Sultan Da. SW of Aksehir. 1750m. Exposed limestone ridge. (An outstanding, dwarf, high altitude, snow-melt species, ranging very locally from Morocco to Iran. Pink cups open in early spring, just as the leaves push through. Not the easiest to grow but an exquisite alpine-house plant if you can keep it cold.)

318.209 : #COLCHICUM TRIPHYLLUM Turkey, Konya, E of Bozkir. (An outstanding, dwarf, high altitude, snow-melt species,

- ranging very locally from Morocco to Iran. Pink cups open in early spring, just as the leaves push through. Not the easiest to grow in the UK but an exquisite alpine-house plant if you can keep it cold enough in winter.)
- 318.355 : COLCHICUM TROODII** Turkey, Hatay, between Antakya & Yaylada_i. Ex R.& R.Wallis colls. (A neat, white to pink autumn-flowering species. In 'Flora of Turkey', Chris Brickell includes the Turkish plants which can be called *C. decaisnei* under *C. troodii*, described from Cyprus. This coll. is from near the type-locality for *C. decaisnei*.)
- 318.400 : COLCHICUM TURCICUM**
- 318.600 : COLCHICUM UMBROSUM**
- 318.700 : COLCHICUM VARIANS** Iran, Esfahan, SE of Khonsar. 2600m. Steep shale slope. (Pale lilac-pink flowers in spring and close to *C. szovitsii* but a plant of drier habitats with more, narrow leaves.)
- 318.800 : COLCHICUM VARIEGATUM** Turkey, Antalya.
- 318.801 : # COLCHICUM VARIEGATUM** Turkey, Antalya, WNW of Gundogmus. 950m. Ledges on limestone outcrop with sparse *Pinus*.
- 318.802 : # COLCHICUM VARIEGATUM** Turkey, Antalya, N of Akseki. 1400-1600m. Limestone slopes with *Quercus*, *Pinus* or *Abies*. (An arresting, choice autumn-flowering species from SW Turkey & some adjacent E Aegean islands. Neat, thick-textured flowers with purple-black anthers & precise chequering in rich red-purple and off-white. Tidy, undulate leaves.)
- 318.803 : COLCHICUM VARIEGATUM** Turkey, Konya, NNW of Seydisehir. 1100m. Openings among *Juniperus* scrub. (An arresting and choice, dwarf, autumn-flowering species from SW Turkey & some adjacent E Aegean islands. Neat, thick-textured flowers with purple-black anthers & precise chequering in rich red-purple and off-white. Tidy, undulate leaves.)
- 318.819 : COLCHICUM VARIEGATUM** Greece, Samos. Ex a D.M. Hoskins coll.
- 318.900 : COLCHICUM VERNUM** (*Bulbocodium vernum*) France, Alpes-Maritimes, near Greolieres-les-Neiges. 1400m. Ex JMH 82-12. (A lovely, easily grown species with large, bright lilac-pink flowers thrusting through the ground in early spring, just before the foliage appears.)
- 319.000 : COLCHICUM VISIANII**
- 319.020 : COLCHICUM WENDELBOI** Iran, Bakhtiari, NW of Farsan. Between cultivated land. (A spring-flowering, snow-melt species endemic to the central & southern Zagros range. Rather like a larger version of the more northern *C. trigynum* with lilac-pink to bright rose flowers. Little tried in cultivation and possibly not too easy to grow.)
- 17176 : COLCHICUM SP.** Iran, W of Firuzkuh. 2200m.
- 17256 : COLCHICUM SP.** Iran, Kordestan, SW of Daraki. 2500m. Steep SW-facing limestone slope. (A slightly puzzling coll. from the high mountains on the Iraqi border. A robust plant with 3-4 very broad leaves, it could possibly be a form of autumn-flowering *C. persicum* or *C. kotschyi* or spring-flowering *C. kurdicum* or *C. szovitsii*.)
- 324.320 : CONVULVULUS BOISSIERI subsp. COMPACTUS** (*C. compactus*) Turkey, Mugla, Marmaris, W of Datca. 200m. (A low altitude, western collection from the Datca peninsula of this highly desirable species. We know it well in its habitats in the steppes of central Anatolia, whence our introductions in the 1980's proved difficult to grow and even more difficult to flower well. This seed is from an entirely different, softer, Mediterranean climatic zone, which holds out hopes of it being much easier to grow in British alpine-houses. Dense firm mounds of narrow, intensely silver leaves, which in nature can be covered in almost stemless white flowers from pink-tinted buds, make this one of the beautiful of cushion-plants. It can grow on limestone, shale and serpentine but it is always a plant of dry, stony sites in full sun. In the UK it will take full sun under glass.)
- 325.850 : CONVULVULUS SABATIUS** (*C. mauretanicus*) No data. Variable and spread over a considerable altitudinal range in North Africa but the form we have in cultivation appears to be the fairly low-altitude one from the dry limestones of Sicily. A profusion of beautiful lavender-blue flowers carried on prostrate stems over a very long period in summer. A little tender in most of the UK but can be superlative planted in a S-facing dry-stone wall. Archibald Archive www.srgc.net
- 325.850 : CONVULVULUS SABATIUS** No data. Beautiful lavender-blue wall-plant from the dry limestones of Sicily.
- 330.000 : CORTUSA MATTHIOLI** Archibald Archive www.srgc.net
- 330.700 : CORYDALIS AFGHANICA** (subsp. *afghanica*) Afghanistan : Kabul prov.
- 330.720 : CORYDALIS AFGHANICA subsp. ELEGANS** Afghanistan : Salang pass area.
- 330.740 : CORYDALIS AFGHANICA subsp. TENUIS** Afghanistan : Zabul prov.
- 330.800 : CORYDALIS ALEXEENKOANA** Georgia & Armenia (Transcaucasus)
- 330.900 : CORYDALIS AITCHISONII** (subsp. *aitchisonii*) Turkmenistan, Tadjikistan, SE Uzbekistan, SW Kirgizstan, NE Iran, N & W Afghanistan.
- 330.950 : CORYDALIS AITCHISONII subsp. KAMELINII** W Turkmenistan
- 331.000 : CORYDALIS ALPESTRIS** NE Turkey, Caucasus.
- 331.050 : CORYDALIS ANGUSTIFOLIA** NE Turkey, Caucasus, N Iran (Elburz)

- 331.060 : CORYDALIS ANGUSTIFOLIA** No data. A slender, 15cm. tall, tuberous species distributed in woodland from NE Turkey through the Caucasus to the Elburz range of N Iran. Racemes of ivory white flowers, sometimes suffused with lilac & tipped with purple. Easy outside and one of the first to flower in early spring.
- 331.100 : CORYDALIS BLANDA** (subsp. *blanda*) Montenegro, Albania, W Macedonia, NW Greece (Pindus)
- 331.150 : CORYDALIS BLANDA subsp. OLYMPICA** Greece, Pieria, Olimbos
- 331.170 : CORYDALIS BLANDA subsp. OXELMANNII** Endemic to Greece, Ahaia, Helmos
- 331.170 : CORYDALIS BLANDA subsp. OXELMANNII** Greece, Ori Aroania, Helmos, N side above Kalavrita. 2000m. & above. Alpine steppe. (332.070, as *C. parnassica*)
- 331.200 : CORYDALIS BLANDA subsp. PARNASSICA** Greece, Viotia, Oros Parnassos & adjacent mountains.
- 331.210 : CORYDALIS BLANDA subsp. PARNASSICA** Greece, Viotia, Oros Parnassos. 2100m. Open, stony limestone slopes. (A most desirable, tuberous-rooted endemic of the alpine zone on a few of the highest Greek mountains, where it sends up its glaucous leaves & large, palest pink, dark-tipped flowers on stems a few cm. high, as the snows melt.) (332.071 as *C. parnassica*)
- 331.211 : CORYDALIS BLANDA subsp. PARNASSICA** Greece, Viotia, Parnassos. 1500m. Deep humus over limestone in *Abies* woods. (331.300 as *C. bulbosa* subsp. *blanda* : this may be *C. cava* with introgression from *C.b.* subsp. *parnassica*.)
- 331.250 : CORYDALIS BRACTEATA** Russia, Kemerov district. (A sought-after, magnificent, Siberian species, about 15cm. high with very large, broadly winged, lemon-scented, bright yellow flowers. Rather like a robust *C. solida* in vegetative characters but not so easy to manage in the mild UK climate. Extremely hardy, it is most satisfactory in continental climates with snow-cover & long, consistently cold winters to ensure its dormancy underground until the warm spring weather arrives.)
- 331.261 : CORYDALIS BRACTEATA from WHITE FORM** Russia, Kemerov district, near Leninsk-Kuznetski. (From the superlative albino form, named 'Marina', originally found in the wild. Ivory in bud, opening & maturing pure white.)
- (331.200 : **CORYDALIS BULBOSA** : see *C. cava*)
- (331.300 : **CORYDALIS BULBOSA subsp. BLANDA** : see *C. blanda*.)
- (331.300 : **CORYDALIS BULBOSA subsp. BLANDA** Greece, Viotia, Parnassos. 1500m. Deep humus over limestone in *Abies* woods. (See *C. blanda* subsp. *parnassica*.)
- (331.400 : **CORYDALIS BULBOSA subsp. MARSCHALLIANA** : see *C. cava*.)
- 331.301 : CORYDALIS CAUCASICA** (subsp. *caucasica*)
- 331.350 : CORYDALIS CAUCASICA subsp. ABANTENSIS** Turkey, Bolu, Bolu to Gerede. 1050m. In beech scrub on N-facing slope.
- 331.401 : CORYDALIS CAVA** (including *C. marschalliana*)
- 331.410 : CORYDALIS CAVA** No data. Seed from Lithuania.
- 331.500 : CORYDALIS CHIONOPHILA** (subsp. *chionophila*) Turkmenistan, NE Iran & W Afghanistan
- 331.550 : CORYDALIS CHIONOPHILA subsp. FIROUZII** N Iran (E Elburz).
- 331.560 : CORYDALIS CHIONOPHILA subsp. PARVIFLORA** Afghanistan, Baghlan (N side of Salang pass).
- 331.600 : CORYDALIS CONORHIZA** Turkey & Caucasus. Archibald Archive www.srgc.net
- 331.600 : CORYDALIS CONORHIZA** Turkey, Trabzon, So_anli Da_lari, S of _aykara. 2300m. Alpine turf below snow-patches.
- 331.601 : CORYDALIS CONORHIZA** Turkey, Rize, Ovit Da_. 3000m. Wet turf below snow-patches.
- 331.630 : CORYDALIS DARWASICA** NE Uzbekistan, SE Kazakhstan
- (331.650 : **CORYDALIS DENSIFLORA** (*C. solida* var. *densiflora*) Greece, Ahaia, Ori Aroania, Helmos, N-side above Kalavrita. 2000m. Exposed, N, NE & NW-facing slopes in alpine-steppe vegetation ; with *C. parnassica* in limestone detritus.)
- (331.651 : **CORYDALIS DENSIFLORA** Greece, Viotia, Oros Parnassos. 2100m. Open, stony, limestone slopes. (A more widespread E European species than the next, growing above 1500m. in Greece & sympatric here with *C. parnassica*. Tuberous with finely cut foliage & dense inflorescences of many flesh-pink flowers amid feathery bracts on 10cm. stems.) (This and 331.650 are *C. solida* subsp. *incisa*.)
- 331.652 : CORYDALIS DENSIFLORA** (*C. solida* var. *densiflora*) S Italy, N Sicily ; Algeria (above two colls. are incorrectly named.)
- 331.660 : CORYDALIS EMANUELII** Caucasus : Georgia to Dagestan.
- 331.670 : CORYDALIS ERDELII** (*C. rutifolia* subsp. *erdellii*) S Turkey, Lebanon, Syria (Antilebanon & Djebel Druze)
- 331.680 : CORYDALIS FEDTSCHENKOANA** Pamirs. (Not tuberous)
- 331.690 : CORYDALIS GLAUCESCENS** Kirgizstan, near Bishkek
- 331.700 : CORYDALIS GORTSCHAKOVII** Distributed from the Altai S to NW Pakistan

- 331.700 : CORYDALIS GORTSCHAKOVII** Kyrgyzstan, Talas Alatau, Kara Bura pass S of Klyuchevka. 3040m. A. Dickerson 00-13.
- 331.720 : CORYDALIS GOTLANDICA** Sweden, Gotland
- 331.730 : CORYDALIS GRACILIS** Russia, near Krasnojarsk.
- 331.750 : CORYDALIS GRIFFITHII** Pakistan (Chitral), Afghanistan (E Hindu Kush)
- 331.770 : CORYDALIS HAUSKNECHTII** Turkey & Iraq. Archibald Archive www.srgc.net
- 331.790 : CORYDALIS HENRIKII** Turkey, Gaziantep, Kartal Da_
- 331.810 : CORYDALIS INTEGRALIA** (*C. wettsteinii*) No data. "A splendid garden-plant...wholly hardy in the open", comment Liden & Zetterlund in their 1997 monograph. Distributed through the mountains of SE Europe, the Aegean islands & NW Turkey, this is a robust perennial with branching flower-stems up to 30cm. high. Beautiful, divided, very glaucous foliage & long racemes of spurred white or palest pink flowers strikingly set-off by the black-purple tipped inner petals
- 331.850 : CORYDALIS INTERMEDIA** France, Alpes-Maritimes, Vallon de Casterine, NW of St. Dalmas de Tende. Among rocks in mixed deciduous woodland.
- 331.870 : CORYDALIS KUSNETZOVII** (*C. teberdensis*) Russia, Stavropol, near Teberda. (A very beautiful woodland species from the NW Caucasus. Close to *C. alexeenkoana* & *C. vittae*, it has been confused with both. Stout, 15cm. stems carry dense racemes of, in this form, creamy white flowers tinted with pink. We hope it may be as accommodating in cultivation in the UK as the closely related *C. malkensis* but it is still seldom seen in cultivation & it is too early to make predictions.)
- 331.880 : CORYDALIS LEDEBOURIANA** Uzbekistan, Chimgan.
(**CORYDALIS LUTEA** : see *Pseudofumaria lutea*.)
- 331.890 : CORYDALIS LYDICA** Turkey : Kutahya, Izmir (Boz Da_).
- 331.900 : CORYDALIS MACROCENTRA** Tadjikistan, N Afghanistan.
- 331.910 : CORYDALIS MALKENSIS** No data. "A most delightful plant...one of the true aristocrats...superb as a pot-subject and seductive in the rock-garden..." Endemic to the NW Caucasus & long-confused with white forms of *C. caucasica* & *C. kusnetzovii*, this has dense, 15cm. high racemes of broad-lipped, pure-white flowers, suffused with yellow-green in bud.)
- 331.920 : CORYDALIS MARACANDICA** Tadjikistan, Saravshan range.
(**CORYDALIS MARSCHALLIANA** : see *C. cava*) Archibald Archive www.srgc.net
- 331.930 : CORYDALIS NARINIANA** Armenia (Yerevan S to Nakhichevan) ; SE Turkey (Cuh pass).
- 331.950 : CORYDALIS NOBILIS** No data. A sturdy, long-lived, tap-rooted perennial about 50cm. high and rated by Liden & Zetterlund in their monograph as "probably the most conspicuous & eye-catching species in the genus." Dense heads of yellow, black-tipped flowers rise above the lush, deeply divided, glaucous foliage in late spring. By late summer the whole plant is dormant. An extremely hardy Siberian plant, distributed from the Altai to the Tien Shan & naturalized in Sweden, this is suited to severe continental climates. Seldom seen in UK gardens but perfectly growable. Dried seed normally stores well but it needs a significant cold period to germinate satisfactorily. Seedlings will not progress beyond the cotyledon stage in their first season..
- 331.960 : CORYDALIS NUDICAULIS** Tadjikistan, Varsob river valley. Humusy soils near streams & among shrubs on N-facing slopes. (In the small Central Asian Subsection *Brevinctaria*, with *C. schanginii* & *C. ruksansii*. Quite recently introduced and described as "a plant of great promise" & "trouble-free in the alpine-house." About 20cm. tall with long racemes of many, spurred, creamy white flowers, which are coffee coloured in the front third & have purple-tipped inner petals.)
(**CORYDALIS OCHROLEUCA** : see *Pseudofumaria alba*.)
- 331.980 : CORYDALIS OPPOSITIFOLIA** (subsp. *oppositifolia*) E Turkey
- 331.989 : CORYDALIS OPPOSITIFOLIA** (subsp. *oppositifolia*) Turkey, Erzincan, Sakaltutan Gecidi. 1800m. Stony, limestone 'flats'. Ex KPPZ 90-236
- 332.000 : CORYDALIS OPPOSITIFOLIA subsp. KURDICA** (*C. rutifolia* subsp. *kurdica*) SE Turkey, W Iran, NE Iraq.
- 332.000 : CORYDALIS OPPOSITIFOLIA subsp. KURDICA** (*C. rutifolia* subsp. *kurdica*) Turkey, Van, Kavuŝŝahap Da_. 2900m. Stony slopes below snow-patches.
- 332.050 : CORYDALIS PACZOSKII** Ukraine, Krim, near Oreanda.
- 332.070 : CORYDALIS PARNASSICA** Greece, Ori Aroania, Helmos, N side above Kalavrita. 2000m. & above. Alpine steppe.
- 332.071 : CORYDALIS PARNASSICA** Greece, Viotia, Oros Parnassos. 2100m. Open, stony limestone slopes. (A most desirable, tuberous-rooted endemic of the alpine zone on a few of the highest Greek mountains, where it sends up its glaucous leaves & large, palest pink, dark-tipped flowers on stems a few cm. high, as the snows melt.) (see 332.070 & 331.071 : *C. blanda* subsp. *parnassica*.)
- 332.080 : CORYDALIS PASCHEI** Turkey, Antalya : Sinekibeli (Kas to Elmali) ;Termessos.
- 332.100 : CORYDALIS PAUCIFLORA** Russia (S Siberia, Altai) ; W Mongolia

- 332.120 : CORYDALIS PODLECHII** Afghanistan : Laghman & Panjshir
- 332.140 : CORYDALIS POPOVII** W Pamir-Alai (W Tadjikistan, SE Turkmenistan, SE Uzbekistan.)
- 332.149 : CORYDALIS POPOVII** Tadjikistan, Sanglok.
- 332.160 : CORYDALIS PSEUDOALPESTRIS** Kazakhstan & NW China (Xinjiang) : endemic to Tarbagatai
- 332.180 : CORYDALIS PUMILA**
- 332.250 : CORYDALIS RUPESTRIS** Iran, Afghanistan & Baluchistan. (Not tuberous).
- 332.301 : CORYDALIS RUKSANSII** Tadjikistan, Seravshan, upper river Shink valley. Ex a J. Ruksans coll. (In Subject. *Brevinectaria* (with *C. schanginii*, etc.) & described in 1991. About 15cm. high with racemes of white flowers, sometimes tinged with violet & with purple mid-veins on the outer petals. The white inner petals have contrasting deep purple tips.)
- 332.400 : CORYDALIS RUTIFOLIA** Cyprus (endemic)
- (332.300 : CORYDALIS RUTIFOLIA subsp. ERDELII** : see 331.670 : *C. erdelii*.)
- (332.300 : CORYDALIS RUTIFOLIA subsp. ERDELII** Turkey, Van, Kavuŝŝahap Da_. 2900m. Stony slopes below snow-patches.) (This is 332.000 : probably *C. oppositifolia* subsp. *kurdica*.)
- (CORYDALIS RUTIFOLIA subsp. KURDICA** : see 332.000 : *C. oppositifolia* subsp. *kurdica*.)
- (CORYDALIS RUTIFOLIA subsp. UNIFLORA** : see 333.350 : *C. uniflora*.)
- 332.500 : CORYDALIS SAJANENSIS** Russia (S Siberia : Sajan range) ; central Mongolia.
- 332.600 : CORYDALIS SCHANGINII** (subsp. *schanginii*) Kirgizstan, Kirgiz Alatau, S of Bishkek. 1800-2000m. Among deciduous scrub on gritty slope. Ex a J. Ruksans coll. ("The most noble & largest flowered species in the section". Thick, glaucous foliage & 15cm. racemes of pale-pink, darker veined flowers, tipped with deep purple. Distributed from S Russia to W Mongolia, here it is at its southern limit. Very temperature-hardy but best in bulb-frame conditions with a dry summer-rest in the UK.)
- 332.650 : CORYDALIS SCHANGINII subsp. AINAE** Kazakhstan, Karatau , Berkara gorge. 1700-2000m. Among deciduous scrub on moist slopes. Ex a J. Ruksans coll. (From the type coll. of this yellow-flowered race, known only from two localities in the Karatau : "a gem in the genus" : "a plant you can never forget if you ever get a chance to see it." Up to 20 flowers in white grading to intense yellow with pink spurs & chocolate-purple tips. Considered easier than the pink race.)
- 332.800 : CORYDALIS SEISUMSIANA** Nakhichevan, Zangezur range. 1500-2000m. S-facing, rocky slopes.
- 332.850 : CORYDALIS SEWERZOWII** SE Kazakhstan, NW Tadjikistan, E Uzbekistan.
- 332.950 : CORYDALIS SOLIDA** (subsp. *solida*) Archibald Archive www.srgc.net
- 332.960 : CORYDALIS SOLIDA** (subsp. *solida*) From a form originally collected in the Western Alps. About 30cm. tall with purple-pink flowers in early spring. Delightful with wild primroses in a woodland setting
- 333.000 : CORYDALIS SOLIDA from ORANGE-RED CLONES** Potentially outstanding parents resulting from the ongoing selection of the finest orange-red seedlings by Hermann Fuchs.
- 333.002 : CORYDALIS SOLIDA from 'BLUSHING GIRL'** From a form found in a garden near Riga in Latvia by Janis Ruksans. Low-growing with dense racemes of flowers in an unusual shade of soft, creamy pink.
- 333.003 : CORYDALIS SOLIDA from PINK CLONES** Dense racemes in shades of soft pink.
- 333.004 : CORYDALIS SOLIDA from 'GEORGE BAKER'** "The red Corydalis of great fame ; really a superb plant." comment Liden and Zetterlund. The intensity of the terracotta-red varies according to temperature.
- 333.005 : CORYDALIS SOLIDA from 'NYMPHENBURG'** From a "striking coral-red", which usually yields a wide range of pink to pale-pink seedlings. The parent is usually grown in the UK as 'Munich Form'.
- 333.008 : CORYDALIS SOLIDA from 'PURPURFEUER'** From the finest dark red seedling so far. An outstanding, late-blooming cultivar, bred and selected by Hermann Fuchs..
- 333.011 : CORYDALIS SOLIDA from 'SNOWSTORM'** From a vigorous Latvian clone, found in the wild near the river Ogre. Very early flowering with glossy, bright-green leaves & sturdy, dense racemes of milky white flowers.
- 333.050 : CORYDALIS SOLIDA subsp. INCISA** Albania, Macedonia, Montenegro, Greece, Bulgaria.
- 333.050 : CORYDALIS SOLIDA subsp. INCISA** Greece, Ahaia, Ori Aroania, Helmos, N-side above Kalavrita. 2000m. Exposed, N, NE & NW-facing slopes in alpine-steppe vegetation ; with *C. parnassica* in limestone detritus. (Both this coll. & 333.051 originally distributed as *C. densiflora*, 331.650 & 331.651.)
- 331.051 : CORYDALIS SOLIDA subsp. INCISA** Greece, Viotia, Oros Parnassos. 2100m. Open, stony, limestone slopes. (Growing above 1500m. in Greece & sympatric here with *C. parnassica*. Tuberous with finely cut foliage & dense inflorescences of many flesh-pink flowers amid feathery bracts on 10cm. stems.)
- 333.060 : CORYDALIS SOLIDA subsp. INCISA** (*C. decipiens*) No data. Finely cut foliage & dense inflorescences of many,

delicately scented, flesh-pink to liac-pink flowers amid feathery bracts on 10cm. stems. A showy, robust plant from the alpine-meadows of the Balkan mountains. "The most elegant member within *C. solida*."

333.100 : CORYDALIS SOLIDA subsp. SUBREMOTA Russia : Yenisey ; Krasnojarsk ; Tuva

333.200 : CORYDALIS TARKIENSIS Russia, Dagestan, near Petrowsk (Makhatchkala), Mt. Tarki

333.250 : CORYDALIS TAURICOLA (*C. solida* subsp. *tauricola*) Turkey, S Anatolia : E Taurus & Amanus.

333.258 : CORYDALIS TAURICOLA (*C. solida* subsp. *tauricola*) Turkey, Ni_de, Kamirkazig Da_. 1750m. Calcareous rocks & slopes in ravine. Ex KPPZ 90-359.

333.259 : CORYDALIS TAURICOLA (*C. solida* subsp. *tauricola*) Turkey, Icel, N of Anamur to Ermenek. 1700m. In sparse *Abies* and *Cedrus* forest on rocky limestone slopes. Ex KPPZ 90-13

333.300 : CORYDALIS TRITERNATA Lebanon.

333.358 : CORYDALIS TURCZANINOWII from Gorin river

C. turczaninowii from nr Vladivostok (not ripe yet to be collected; fairly different from former).

333.380 : CORYDALIS UNIFLORA (*C. rutifolia* subsp. *uniflora*) Crete (endemic).

333.400 : CORYDALIS VERTICILLARIS (subsp. *verticillaris*) Iran (type Kuh Alwand, possibly also Elburz.)

333.430 : CORYDALIS VERTICILLARIS subsp. BOISSIERI Iran, W Azerbaijan.

333.450 : CORYDALIS VERTICILLARIS subsp. PARVIFLORA Iran, S Zagros range (type Kermanshah, Kerend).

333.500 : CORYDALIS VITTAE Georgia, Bakuriani.

333.600 : CORYDALIS WENDELBOI (subsp. *wendelboi*) Turkey, Denizli, Honaz Da_. 1650m. On limestone at tree-line. N. Stevens coll. (One of many recently recognized taxa, this is a variable, 15cm. high, tuberous-rooted species widespread in SW Turkey. Norman tells us it varies from white to pale-pink here and we hope this may include some of the "large-flowered, fragrant, usually white-flowered plants found in the west of its range" mentioned by Henrik Zetterlund.)

333.609 : CORYDALIS WENDELBOI (subsp. *wendelboi*) Turkey, Antalya, N of Akseki. 1400m. Calcareous slopes. Ex KPPZ 90-359

333.650 : CORYDALIS WENDELBOI subsp. CONGESTA

333.700 : CORYDALIS ZETTERLUNDII

334.000 : COTINUS COGGYRIA

338.000 : CREPIS

338.510 : CREPIS INCANA No data. A composite with class, easily grown & perennial in sunny limestone scree, this endemic from limestone crevices on the mountains of southern Greece between 1050 and 2400m. has never set a good seed with us in over 30 years. Simon Bond worked hard to acquire different clones & develop a fertile strain. Compact mounds of greyish green leaves covered with a succession of gentle-pink dandelion-flowers on 20cm. stems all summer.

339.600 : CROCUS ABANTENSIS Turkey, Bolu, above Abant golu. 1100m. Scree. Ex Horton & Stevens 2538

339.609 : #CROCUS ABANTENSIS Turkey, Bolu, near Abant golu. 1100m. (A beautiful spring-flowering species with flowers in clear, bright blue, contrasting with their yellow throats. It is only known from the area around Lake Abant, in the cold, wet, NW corner of Turkey. It does well outside in the UK and, if grown in a pot, should not be overdried in summer.)

339.700 : # CROCUS ADANENSIS Turkey, Adana, above Kurt Kalesi NE of Duzice. 1000m. Ex KPPZ 93 (Typically pale lilac-blue with a white throat, in spring. Related to *C. biflorus* & only found in this very small area but not too difficult to grow.)

339.701 : CROCUS ADANENSIS Turkey, Adana, above Kurt Kalesi. Ex a N. Stevens coll. (Typically pale lilac-blue with a white throat, in spring. Related to *C. biflorus* & only found in this very small area but not too difficult to grow and proving a very worthwhile plant under bulb-frame conditions in the UK. Norman's coll., made high up above Wolf Castle, has shown more variability than some earlier ones. Some are larger-flowered. Some have yellow throats with a diffuse white rim.)

339.800 : CROCUS AERIUS Turkey, Trabzon, Zigana Da. 2300m. Stable scree. D. Stephens 98-05, 28.5.98 (An extremely rare opportunity to acquire wild-collected seed of this snow-melt species limited to very high altitudes in the wet mountains S of Trabzon in NE Turkey. Indeed, only recorded from this site and Soganli Da. Virtually unknown in cultivation, though the name has been greatly misapplied, usually to forms of *C. biflorus* subsp. *pulchricolor*. We listed seed from such an impostor a year or so ago, under our reference 339.810, derived from the stock awarded a Preliminary Commendation by the Joint Rock Garden Plant Committee of the RHS, AGS & SRGC. In the face of misidentification by such authorities, we suggest that the true plant has hardly been seen in cultivation at all. Likely to be difficult and to need treatment like other truly alpine species, such as *C. scardicus*, *C. pelistericus*, *C. scharojanii*, etc. - cool and moist in summer. Dark-veined, blue flowers with pale yellow throats in spring.)

339.801 : CROCUS AERIUS Turkey, Trabzon, Zigana Da. 2000m. Ex KPPS 93-01A. (Only recorded from this site and Soganli Dag & virtually unknown in cultivation, though the name has been consistently misapplied to forms of *C. biflorus* subsp. *pulchricolor*. Such an impostor received an award from the Joint Rock Garden Plant Committee of the RHS, AGS & SRGC.

Difficult and needs treatment like other truly alpine species, such as *C. scardicus*, *C. pelistericus*, *C. scharojanii*, etc. - cool and moist in summer. Dark-veined, blue flowers with pale yellow throats in spring.) Archibald Archive www.srgc.net

- 339.810 : CROCUS AERIUS** No data. A snow-melt species limited to very high altitudes in the wet mountains S of Trabzon in NE Turkey. Seldom seen in cultivation, though the name has been much misapplied to forms of *C. biflorus* subsp. *pulchricolor*. This is from the stock grown by Bob & Rannveig Wallis & awarded a Preliminary Commendation by the Joint Rock Garden Plant Committee of the RHS, AGS & SRGC. In the face of such authorities, we suppress any lingering doubts over authenticity (these guys should know their crocuses as well as their onions). Dark-veined, blue flowers with pale yellow throats in spring.
- 339.840 : CROCUS ALATAVICUS** Uzbekistan, Tashkent, above Beldersai. Under scrub on steep slope of gravelly ridge. (The most eastern member of the genus & the northern version of *C. korolkowii* with snow-white flowers with yellow throats. Much more difficult to grow than *C. korolkowii* in our experience. It may depend on the origin of the stock : we also found it in moist alpine turf at about 3000m. in the Tien Shan of Kazakhstan. This coll. is from a habitat, which should yield much more amenable material. Reputedly populations in this area are very variable, variously marked on the exterior with purple-black speckles.)
- 339.850 : CROCUS ALATAVICUS** Kirgizstan, Aktash Tal. Ex E. Markus 854.
- 339.851 : CROCUS ALATAVICUS** Kazakhstan, Tien-Shan near Alma-Ata. Ex a J. Ruksans coll. (Reputedly from a very vigorous population of this most eastern member of the genus. Pure-white flowers with yellow throats, often speckled purple-black outside, in spring. Not usually too easy to grow & increase. We find it resents high spring-temperatures under glass.)
- 339.852 : CROCUS ALATAVICUS** Uzbekistan, Chimgan. Ex a J. Ruksans coll. (A snow-melt species with snow-white flowers. From a very variable population, variously marked on the exterior with purple-black speckles.)
- 339.860 : CROCUS ALATAVICUS** Kyrgyzstan, Tien Shan. From several recent wild colls. (The most eastern member of the genus. with white flowers, often speckled purple-black outside, in spring. Not too easy to grow & increase.)
- 339.860 : CROCUS ALATAVICUS** Kyrgyzstan, Tien Shan. From several wild colls. grown by D.B. Stephens. (The most eastern member of the genus. White flowers, often speckled purple-black outside, in spring. Not too easy to grow & increase.)
- 339.900 : CROCUS ALEPPICUS** Jordan, Ar Rashadiyya. Ex Lovell & Bird 66. (Dainty white flowers, feathered with inky blue outside, appear in midwinter.)
- 339.901 : CROCUS ALEPPICUS** Jordan, between Wadi Musa & Shobak. (Dainty white flowers, feathered with inky blue outside, appear in midwinter. A southern species which is not the easiest to manage in northern climates.)
- 339.910 : CROCUS ALEPPICUS** Jordan, between Petra & Jebel Mubrak. From several colls. made by P. Bird, C. Lovell & M. Salmon, grown by D.B. Stephens. (Starry, white flowers, variously marked outside, in mid-winter. Seldom grown.)
- 339.950 : CROCUS ALMEHENSIS** Iran, Gorgan, Almel. c. 1900m. ex a P. Wendelbo coll. (Only known from this small area & barely in cultivation. Nearest to *C. chrysanthus* with glossy, yellow-orange flowers, mahogany outside, in spring.)
- 340.000 : CROCUS ANCYRENSIS**
- 340.008 : CROCUS ANCYRENSIS** Turkey, Bolu. 1650m. Ex AHEP 83-13 Archibald Archive www.srgc.net
- 340.009 : CROCUS ANCYRENSIS** Turkey, Sivas, Seyfibel Gecidi. 1440m. Sandy clay along field edges. N. Stevens coll. (A coll. of this bright orange-yellow, spring-flowering, endemic of north-central Turkey, at the eastern extremity of its distribution. Growing here with *C. biflorus* subsp. *tauri*, so some seed of both may be included. Usually easy under glass in the UK.)
- 340.090 : CROCUS ANGUSTIFOLIUS** Ukraine, Krim, near Yalta. (A charming, small, spring-flowerer, virtually confined to the Crimea & adjacent Ukraine but with a few disjunct eastern populations. Clear yellow to deep orange-yellow flowers, very variably striped with purple-brown outside, sometimes entirely bronze-purple. Dry summer-rest.)
- 340.100 : CROCUS ANGUSTIFOLIUS** Armenia. Ex a Z. Artiushenko coll. (Heavy brown-purple feathering on the outer segments.)
- 340.200 : CROCUS ANTALYENSIS** Turkey, Antalya, SW of Hisarcandir (Antalya to Altinyaka). 900m. Openings among scrub, in heavy red clay. (Raised from a seed-collection in the type-locality, where it is now largely eliminated by road-construction.)
- 340.201 : CROCUS ANTALYENSIS** Turkey, Antalya, Bey Da_. N. Stevens coll. May, 1997. (A handsome robust species in Series *Flavi*, localised in several, limited, disjunct populations in W Turkey. Seldom-seen in cultivation and rather difficult in our experience, though Brian Mathew states it is easily grown. Though usually a plant of heavy clays, we find it resents excess moisture at any time. Pale to deep lilac-blue, yellow-throated flowers, sometimes buff or marked with violet outside, in spring.)
- 340.202 : CROCUS ANTALYENSIS** Turkey, Konya, S of Beysehir Golu. 1300m. Among scrub in heavy clay. (A handsome robust species in Series *Flavi*, localised in several, limited, disjunct populations in W Turkey. Seldom-seen in cultivation and rather difficult in our experience, though Brian Mathew states it is easily grown. Though usually a plant of heavy clays, we find it resents excess moisture at any time. Pale to deep lilac-blue, yellow-throated flowers, sometimes buff or marked with violet outside, in spring. We have never listed seeds from this population, far distant from the Antalya ones, before)
- 340.351 : CROCUS ASUMANIAE** Turkey, Antalya, N of Akseki. 1200m. Limestone slopes among sparse *Pinus*. (Quite a local species in the wild, limited to the oak-scrub region around Akseki in the western Taurus range, but it has proved to be one of the best of the saffron group in cultivation. Possible outside in a sunny, dry site and an easy, satisfying species under glass in the UK. Delicately veined, white to palest lilac flowers with showy, scarlet styles, generously produced in autumn.)

- 340.410 : CROCUS AUTRANII** No data. One of the rarest of species in cultivation and one of the most local in nature. Limited in its distribution to alpine-meadows at about 2100m in a small area at the tail-end of the Caucasus range in the troubled autonomous region of Ap'khazet'i (Abkhazia) in NW Georgia, where it is impossible to travel freely at present. A member of Series Kotschyani and related to *C. vallicola*, it flowers before the leaves appear in autumn with rich violet flowers with a large white centre and with a trifid, orange style. It should be treated like other alpine species, such as *C. scharojanii*, *C. vallicola*, *C. scardicus* and *C. pelistericus* : plenty water in early spring, kept moist and cool in summer but drier in winter though never dried out at any time. If it was easy to grow as these other species it would be as common as they are in cultivation.)
- 340.500 : CROCUS BANATICUS** Native to C, W & NW Roumania, NE Yugoslavia & SW Ukraine in meadows & deciduous woodland.
- 340.510 : CROCUS BANATICUS** No data. A lovely plant, like no other *Crocus* and in a subgenus of its own. Resents hot, dry conditions & is best grown outside in the UK in a cool, humus-rich site. Autumnal, bluish lilac to purple flowers have big, feathery, lilac styles, surrounded by wideopen outer segments and shorter, erect, inner ones, giving them an iris-like appearance.
- 340.600 : CROCUS BAYTOPIORUM** Turkey, Denizli, Honaz Dag. 1700m. In steppe vegetation over limestone. (From a type-locality coll. of this distinctive, SW Turkish endemic. Lucent, pure pale-blue spring flowers.)
- 340.601 : CROCUS BAYTOPIORUM** Turkey, Denizli, Honaz Dag. 1500m. Ex E.Pasche 82-104.
- 340.800 : CROCUS BIFLORUS** (subsp. *biflorus*) Italy, Basilicata, "between Trivigno & Arizi". 800m. Ex M. Oorgaard 95-36 (A rare plant in cultivation, the seldom-seen type-race from the limestones of S Italy. Parent of the sterile hybrid 'Scotch Crocus', usually with white flowers, strikingly striped with 3, brown-purple bands on the exterior segments.)
- 340.801 : CROCUS BIFLORUS** (subsp. *biflorus*) Italy, Puglia, between Altamura & Bari. 420m. Ex M. Oorgaard 95-28. (A rare plant in cultivation, the rarely seen type-race from the limestones of S Italy. Parent of the sterile hybrid 'Scotch Crocus', usually with white flowers, strikingly striped with 3, brown-purple bands on the exterior segments.)
- 340.802 : CROCUS BIFLORUS** (subsp. *biflorus*) Italy, Norma. Ex M.Salmon 957
- 340.900 : CROCUS BIFLORUS subsp. ADAMII**
- 340.909 : CROCUS BIFLORUS subsp. ADAMII** Azerbaijan, Nakhichevan, Bitschenag pass. Ex a J. Ruksans coll. (Described by Janis as "the best population" he has seen of this race. Large flowers, very variable in colour, from blue to violet-blue, and in the dark, external markings.)
- 341.980 : CROCUS BIFLORUS subsp. ALBOCORONATUS**
- 341.000 : CROCUS BIFLORUS subsp. ALEXANDRI**
- 341.100 : CROCUS BIFLORUS subsp. ARTVINENSIS**
- 341.105 : CROCUS BIFLORUS aff. subsp. ARTVINENSIS** Turkey, Kars, SE of Ardahan. c. 2000m. Ex E. Frank & M. Koenen colls. (From the far NE corner of Turkey, a little-visited area near the Georgian border. A montane, snow-melt plant, which does not altogether conform to the geographically close, obscure *C. b.* subsp. *artvinensis* (little-known from one much lower altitude locality, virtually in a Mediterranean climatic zone) nor to the closely related *C. biflorus* subsp. *adamii* (according to Mathews' monograph, this does not occur in Asiatic Turkey). The *C. biflorus* group is confusing. Feathered flowers in spring.)
- 341.150 : # CROCUS BIFLORUS subsp. CREWEI** Turkey, Denizli, Honaz Dag. 1650m. Open sites near tree-line, in stony clay over limestone.
- 341.200 : CROCUS BIFLORUS subsp. FIBROANNULATUS** Turkey, Artvin.
- 341.250 : ##CROCUS BIFLORUS subsp. ISauricus** 2 pictures Turkey, Antalya, Irmasan Geçidi N of Akseki. 1500m. Stony humus under *Abies* over limestone. (Spring-flowering race endemic to the W. end of the Taurus. In particularly fine form here & variable in colour & markings. Usually lilac-blue with strong, purple feathering on the exterior. Attractive & satisfactory under glass in the UK.)
- 341.252 : CROCUS BIFLORUS subsp. ISauricus** Turkey, Mugla, Gok Tepe. (Ex D.B Stephens & other colls. here)
- 341.253 : CROCUS BIFLORUS subsp. ISauricus** Turkey, Antalya, Gidengelmiz Dag, above Madenli. 1900m. Steep, N-facing, limestone slopes.
- 341.254 : CROCUS BIFLORUS subsp. ISauricus** Turkey, Karaman, W of Sertavul Gecidi. 1650m. Limestone slopes with sparse steppe vegetation. (Stippled outer segments.) Archibald Archive www.srgc.net
- 341.350 : CROCUS BIFLORUS subsp. MELANTHERUS** Greece, Arkadia, SW of Tripoli towards Megalopoli. 500-750m. Stony clay over limestone (growing with *C. hadriaticus*).
- 341.351 : CROCUS BIFLORUS subsp. MELANTHERUS** Greece, Lakonia, N of Sparti. 500m. Open areas ; in clay over limestone.
- 341.352 : CROCUS BIFLORUS subsp. MELANTHERUS** Greece, Arkadia, S of Tripoli. M. Harvey coll. (Endemic to the Peloponnese & the only autumn-flowering race of this diverse species. Long confused with the similar spring-flowering *C.b.* subsp. *crewei*, also with striking purple-black anthers. Always white with variable dark exterior stripes or speckles.)
- 341.353 : CROCUS BIFLORUS subsp. MELANTHERUS** Greece, Argolida, SW of Ligourio. Ex an M. Harvey coll. (Endemic to

- the Peloponnese & the only autumn-flowering race of this diverse species. Long confused with the similar spring-flowering *C.b.* subsp. *crewei*, (both have striking purple-black anthers). Always white with variable dark exterior stripes or speckles.)
- 341.354 : CROCUS BIFLORUS subsp. MELANTHERUS** Greece, Arkadia, S of Tripoli, near Manthirea. 770m. N-facing, grassy hillside. R. & R. Wallis coll. (Endemic to the Peloponnese & the only autumn-flowering race of this diverse species. Long confused with the similar spring-flowering *C.b.* subsp. *crewei*, (both have striking purple-black anthers). Always white with variable dark exterior stripes or speckles. In this area, it can grow with *C. hadriaticus* & some seed of this may be included.)
- 341.360 : CROCUS BIFLORUS subsp. MELANTHERUS** No data. From several collections of this fine race, endemic to the Peloponnese & the only autumn-flowering race of this diverse species. Long confused with the similar spring-flowering *C.b.* subsp. *crewei*, (both have striking purple-black anthers). Always white with variable dark exterior stripes or speckles.
- 341.400 : CROCUS BIFLORUS subsp. MUNZURENSIS**
- 341.450 : CROCUS BIFLORUS subsp. NUBIGENA**
- 341.455 : CROCUS BIFLORUS subsp. NUBIGENA** Turkey, Mugla, Gok Tepe, between Kazagac & Mentese. Ex D.B. Stephens 93-11.
- 341.456 : CROCUS BIFLORUS subsp. NUBIGENA** Turkey, Mugla, Gok Tepe N of Mugla. 1500m. Among sparse *Pinus* on limestone. N. Stevens coll. May, 1997. (It is not possible to place this population comfortably under any taxon but as Brian Mathew & David Stephens include it under *C.b.* subsp. *nubigena* we follow. It appears to be this mixed or intergrading with *C.b.* subsp. *isauricus* (with some *C. chrysanthus* thrown in) & is mentioned by Brian on p.82 of his monograph. Expect variable, mainly lilac, spring flowers but not all with have the black-maroon anthers characteristic of *C.b.* subsp. *nubigena*.)
- 341.457 : CROCUS BIFLORUS subsp. NUBIGENA** Turkey, between Belpinar & Ta_kent. Ex a Kletzing coll. (2002).
- 341.550 : CROCUS BIFLORUS subsp. PSEUDONUBIGENA**
- 341.555 : CROCUS BIFLORUS subsp. PSEUDONUBIGENA** Turkey, Gaziantep, W of Gaziantep. 800m. D. Stephens 98-21 (Described by Brian Mathew in 1982, this remains almost unknown in cultivation. Endemic to S central Turkey, more or less in an arc round the northern rim of the Syrian Desert, an area of high summer temperatures, this will need careful watering in winter & drought when dormant. Distinctively clove-scented, white to lilac flowers with dark-striped exteriors in spring.)
- 341.651 : CROCUS BIFLORUS subsp. PULCHRICOLOR** Turkey, Bursa, Ulu Dag. 1600-1800m. Openings in *Abies* & *Pinus* woodland, in granite grit. (A rich violet-blue, yellow-throated, spring-flowering race native to the cold, wet, NW corner of Turkey. Good outside in the UK. This seed is from B. Mathew 8514, as well as from our own collection.)
- 341.659 : CROCUS BIFLORUS subsp. PULCHRICOLOR** Turkey, Bolu, Abant golu. 1300m. Ex E. Pasche 82-06
- 341.670 :# CROCUS BIFLORUS subsp. PULCHRICOLOR** No data. From various forms of this rich violet-blue, yellow-throated, spring-flowering race native to damp meadows in the cold, wet, NW corner of Turkey. Good outside in the UK.
- 341.680 : CROCUS BIFLORUS subsp. PUNCTATUS**
- 341.700 : CROCUS BIFLORUS subsp. STRIDII** Greece. Ex Lovell & Bird 97-105. (An isolated, spring-flowering species, only known from the type-locality. Purple-black anthers - closest to the distant *C. biflorus* subsp. *nubigena* from SW Turkey.)
- 341.701 : CROCUS BIFLORUS subsp. STRIDII** Greece, Chortiatis. Ex R. & R. Wallis 01.18. (An isolated, spring-flowering subspecies, only known from the type-locality. Purple-black anthers : closest to the distant *C. biflorus* subsp. *nubigena* from SW Turkey.)
- 341.720 : CROCUS BIFLORUS subsp. TAURI** Archibald Archive www.srgc.net
- 341.721 : CROCUS BIFLORUS subsp. TAURI** Turkey, Sivas, Ziyaret Gecidi. 2100m. Among steppe vegetation on open slopes. D. Stephens 98-15. (The eastern race in this complex group, usually a snow-melt plant of dryish, montane steppe, extending from central Turkey into NW Iran and Armenia. In theory, distinguished by its combination of numerous, erect leaves, thin corm tunics, usually unmarked lilac flowers and silvery bracts but really a variable and confusing entity, to which David has applied this name as it is the only one available for plants from this area. Expect this and the following collections to vary.)
- 341.722 : CROCUS BIFLORUS subsp. TAURI** Turkey, Tunceli, 27km. NW from Tunceli to Ovacik. Ex KPPZ 209.
- 341.723 : CROCUS BIFLORUS subsp. TAURI** Turkey, Kayseri, S of Pinarbasi. Ex Horton & Stevens 2304.
- 341.724 : CROCUS BIFLORUS subsp. TAURI** Turkey, Sivas. Ex a J. Ruksans coll.
- 341.725 : CROCUS BIFLORUS subsp. TAURI** Turkey, Erzurum, Kop Da. 2400m. D. Stephens 98-07. (1997 seed collected from undehisced capsules on plants flowering along the margins of melting snow-patches at the end of May, 1998.)
- 341.726 : CROCUS BIFLORUS subsp. TAURI** Turkey, Agri, near Eleskirt. 2100m. D. Stephens 98-27
- 341.727 : CROCUS BIFLORUS subsp. TAURI** Turkey, Kayseri, N of Sariz. 1800m. Grazed turf. D. Stephens 98-17. (The eastern race in this complex group, usually a snow-melt plant of dryish, montane steppe, extending from central Turkey into NW Iran and Armenia. In theory, distinguished by its combination of numerous, erect leaves, thin corm tunics, usually unmarked lilac flowers and silvery bracts but really a variable and confusing entity : the only name available for plants from this area.)
- 341.750 : CROCUS BIFLORUS subsp. WATTIUM** (Type description : New Plantsman, September, 1995 : Vol.2, Part 3. : type locality Antalya, Tahtali Dag.)

341.760 : CROCUS BIFLORUS subsp. WELDENII

341.761 : CROCUS BIFLORUS subsp. WELDENII Greece, Drama, Falakro. Ex R.& R.Wallis 01-38

341.801 :# CROCUS BORYI Greece, Messinia, S of Pilos. 200m. Open limestone slopes. (Big, creamy white goblets with orange styles in autumn. More widespread in S Greece than the sympatric *C. niveus* but not so easy to grow with us.)

341.805 : CROCUS BORYI Greece, between Gliki & Souli. 1000m. Open hillside. Ex a D. Hoskins coll., 1987. (Creamy white goblets with orange styles in autumn. More widespread in S Greece than *C. niveus* but not so easy to grow with us.)

341.840 : CROCUS BOULOSII

341.880 : CROCUS CAMBESSEDESII Spain, Mallorca, Porto Cristo. Ex a D. Stephens coll. (This little Balearic endemic flowers from late autumn into early winter. Very variable from white to deep lilac-blue, usually purple-striped outside.)

341.881 : CROCUS CAMBESSEDESII Spain, Mallorca, Boquer valley near Puerto de Pollensa. Ex a D. Hoskins coll. (This little Balearic endemic flowers from late autumn into early winter. Very variable from white to deep lilac-blue, usually purple-striped outside.)

341.900 : CROCUS CANCELLATUS (subsp. *cancellatus*) Turkey, Icel, SE of Arslankoy. 1100-1450m. Among sparse conifers in clay over limestone. (The type-race from S Turkey into Israel. Scented, soft lilac-blue flowers in autumn.)

341.914 : CROCUS CANCELLATUS (subsp. *cancellatus*) Jordan, M'Taa. Ex D.B. Stephens 99-11

341.915 : CROCUS CANCELLATUS (subsp. *cancellatus*) Turkey, Seyhan. Ex an E. Pasche coll.

341.916 : CROCUS CANCELLATUS (subsp. *cancellatus*) No data. From the old commercial stock originating in S Turkey & grown as *C. cilicicus*. Given how temperamental some forms can be this is a surprisingly good garden plant..

341.920 : CROCUS CANCELLATUS subsp. DAMASCENUS

341.924 : CROCUS CANCELLATUS subsp. DAMASCENUS Turkey, Van, SW of Timar. 1860m. Open areas in stony clay. (The most southern race of *C. cancellatus*, spread from Israel to N Iraq & W Iran. Possibly the most difficult to grow. All repay a hot, dry rest in summer, for this it is essential. Lilac-blue flowers, often basally veined outside with violet, in late autumn.)

341.925 : CROCUS CANCELLATUS subsp. DAMASCENUS Jordan, Ar Rashadiyya. Ex Lovell & Bird 69.

341.926 : CROCUS CANCELLATUS subsp. DAMASCENUS Turkey, Adiyaman, Nemrut Da. 1350m. D. Stephens 98-23. (The most southern race of *C. cancellatus*, spread from Israel to N Iraq & W Iran, and possibly the most difficult to grow. All repay a hot, dry rest in summer, for this it is essential. Lilac-blue flowers, often basally veined outside with violet, in late autumn.)

341.927 : CROCUS CANCELLATUS subsp. DAMASCENUS Iran, Kordestan, NW of Divandarreh. 2000m. Gravelly clay slopes. (The most southern race, spread from Israel to N Iraq & W Iran, whence it is little-known in cultivation & reputedly variable, sometimes with white anthers (keying out as *C.c.* subsp. *pamphylicus*!). Possibly the most difficult to grow : all repay a hot, dry rest in summer, for this it is essential. Lilac-blue flowers, often basally veined outside with violet, in late autumn.)

341.928 : CROCUS CANCELLATUS subsp. DAMASCENUS Iran, Kordestan, E of Shuysheh. 1750m. Loose shale. (The most southern race, spread from Israel to N Iraq & W Iran, whence it is little-known in cultivation & reputedly variable, sometimes with white anthers (keying out as *C.c.* subsp. *pamphylicus*!). Possibly the most difficult to grow : all repay a hot, dry rest in summer, for this it is essential. Lilac-blue flowers, often basally veined outside with violet, in late autumn.)

341.929 : CROCUS CANCELLATUS subsp. DAMASCENUS Iran, Esfahan, SE of Aligudarz. 2200m. Steep, loose, stony slope.

341.930 : CROCUS CANCELLATUS subsp. DAMASCENUS Turkey, Sivas, W of Gurun, above Mazikiran Gecidi. 1800m. In montane steppe vegetation on open slopes. Archibald Archive www.srgc.net

341.970 : CROCUS CANCELLATUS subsp. LYCIUS Turkey, Antalya, NE of Hisarcandir. 750m. Stony clay in *Pinus* woodland.

341.971 : CROCUS CANCELLATUS subsp. LYCIUS Turkey, Antalya, E of Korkuteli. 1000m. Open slopes with sparse *Pinus* & *Quercus*. (ex 14598 & D.B. Stephens 96-07 : 22.3.96) (A local SW Turkish race with smaller, yellow-throated, creamy white flowers & widely spreading, rich orange style branches.)

341.972 : CROCUS CANCELLATUS subsp. LYCIUS Turkey, Antalya, between Kemer & Ovacik. Ex D.B. Stephens 97-02 (A local SW Turkish race with smaller, yellow-throated, creamy white flowers & widely spreading, rich orange style branches.)

342.002 : CROCUS CANCELLATUS subsp. MAZZIARICUS Greece, Evia, W of Halkida. 100m. E-facing limestone hills. (The attractive western race. Autumn-flowering with both white & lilac forms, often darkly veined.)

342.007 : CROCUS CANCELLATUS subsp. MAZZIARICUS Turkey, Burdur, W of Golhisar. 1150m. Openings among *Pinus* & *Quercus*. (Mainly SE European in its distribution, this race only enters Turkey in the SW corner.)

342.008 : CROCUS CANCELLATUS subsp. MAZZIARICUS Turkey, Denizli, above Cukurkoy to Kazik Beli. 900m. Among scrub on steep, loose, shale slopes.

342.010 : CROCUS CANCELLATUS subsp. MAZZIARICUS Greece, Pieria, Oros Olimbos. P.& P. Watt coll.

342.011 : CROCUS CANCELLATUS subsp. MAZZIARICUS Greece, Argolida, SW of Ligourio. M. Harvey coll., May, 1997 (This race is the most decorative of the five subspecies, well-suited to cultivation under glass in the UK, where it can be given the warm, dry rest it needs in summer. The species, as whole, with its characteristic, very coarsely reticulate tunic, is a plant of dry

habitats in nature, though it often grows in heavy, limestone clays.)

- 342.012 : CROCUS CANCELLATUS subsp. MAZZIARICUS** Greece, Samos, Profitis Ilias. 950m. Open, S-facing, mica-schist slopes. Ex a D.M. Hoskins coll.
- 342.050 : CROCUS CANCELLATUS subsp. MAZZIARICUS** No data. From old cultivated stock.
- 342.200 : CROCUS CANCELLATUS subsp. PAMPHYLICUS** Turkey, Antalya, above Fersin. 850m. Stony clay over limestone in *Pinus* woodland.
- 342.209 : CROCUS CANCELLATUS subsp. PAMPHYLICUS** Turkey, Antalya, Akseki. 1250m. Stony clay over limestone.
- 342.400 : CROCUS CANDIDUS** Turkey, Canakkale, near Lapseki. Ex N. Stevens 2074. (A most distinct plant of very limited distribution on the low, scrub-covered limestones of the Asian side of the Dardanelles. Often with only one, sometimes two, very broad, dark, glossy leaves and pure-white flowers, usually just misted outside with blue-grey, in early spring.)
- 342.600 : CROCUS CARPETANUS**
- 342.608 : CROCUS CARPETANUS** Spain, Sierra de Guadarrama, between Lozoya & Puerto de Navafría. D.B. Stephens 03-02
- 342.609 : CROCUS CARPETANUS** Spain, Sierra de Guadarrama, between Rascafría & Puerto de Navacerrada. D.B. Stephens 99-01. (Rather difficult to grow and very rare in cultivation but not uncommon in the wild, distributed through the alpine meadows of the Sierra de Guadarrama into NW Spain & N Portugal at altitudes up to 2300m. It needs lime-free soil and cool growing conditions but also a dry (but not hot) summer rest. Spring flowers variable in colour from lilac to white, variably veined with dark violet, with frilled white or lilac styles. A 1999 David Stephens coll., made more or less in Reuter's 1841 type locality.
- 342.802 : #CROCUS CARTWRIGHTIANUS** Greece, Evia. Ex Christian, Elliott & Hoog 613. (Spectacular autumn-flowers, almost as often white as lilac with huge flopping, scarlet styles. A Greek island plant - keep it dry under glass in the UK.)
- 342.810 : CROCUS CARTWRIGHTIANUS** No data : from several wild colls. of this spectacular autumn-flowerer. Almost as often white as lilac with huge flopping, scarlet styles. A lowish altitude Greek island plant - keep it dry under glass in the UK.
- 342.850 : CROCUS CARTWRIGHTIANUS var. CRETICUS** Greece, Crete, Hania, Akrotiri peninsula, near Falassarna. Growing as a chasmophyte on coastal cliffs. Ex a P. & P. Watt coll. (Dubiously sustainable taxon but from the area of the type-locality, so we keep the name. Silvery exterior.)
- 343.000 : CROCUS CASPIUS** Iran, Mazandaran, Caspian coast W of Chalus. Among scrub, in sand. (From both our own and P. Furse 5035 colls. made below sea-level along the Caspian shore in the 1960's. A beautiful autumnal species, with yellow-throated, white to lilac-pink flowers. Quite hardy in the UK but seldom seen - it does not like being too hot & dry in summer.)
- 343.001 : CROCUS CASPIUS** Iran, Mazandaran, SE of Sari. 200m. In deep shade of deciduous woodland. (From our recent inland coll., far to the E of the above locality. A beautiful autumnal species, with yellow-throated, white to lilac-pink flowers. Quite hardy in the UK but seldom seen - it does not like being too hot & dry in summer.)
- 343.200 : CROCUS CHRYSANTHUS**
- 343.204 : CROCUS CHRYSANTHUS** Greece, Viotia, Oros Parnassos. 1200m. Open sites, in clay. (5100 : 22.5.84)
- 343.205 : CROCUS CHRYSANTHUS** Turkey, Antalya, N of Akseki to Beyşehir. Ex a N. Stevens coll. (A very variable population, mostly striped on the outside.) Archibald Archive www.srgc.net
- 343.206 : CROCUS CHRYSANTHUS** Greece, Larissa, Oros Ossa, W of Spilia. 1700m. Openings among *Pinus*.
- 343.207 : CROCUS CHRYSANTHUS** Turkey, Konya, S of Beyşehir to Akseki. Ex D. Stephens 97-25. (Somewhat neglected by the specialist grower, doubtless due to the existence of its easily grown, widely available hybrids, the wild forms tend to be much smaller, daintier plants, often none too easy to grow well. Distributed from Serbia to central Turkey, it is essentially a yellow-flowered version of the *C. biflorus* complex and is similarly highly variable. Although no-one has yet dared to split it, the species may actually cover several taxa. Plants in this area constitute a diverse population, mostly striped on the outside.)
- 343.208 : CROCUS CHRYSANTHUS** Greece, Kozani, Oros Vourinos. Ex C. Lovell & P. Bird 97-188. (Somewhat neglected by the specialist grower, doubtless due to the existence of its easily grown, widely available hybrids, the wild forms tend to be much smaller, daintier plants, often none too easy to grow well. Distributed from Serbia to central Turkey, it is essentially a yellow-flowered version of the *C. biflorus* complex and is similarly highly variable. Although no-one has yet dared to split it, the species may actually cover several taxa.)
- 343.209 : CROCUS CHRYSANTHUS** Greece, "Mt. Kamvounia". Ex C. Lovell & P. Bird 97-234. (Somewhat neglected by the specialist grower, doubtless due to the existence of its easily grown, widely available hybrids, the wild forms tend to be much smaller, daintier plants, often none too easy to grow well. Distributed from Serbia to central Turkey, it is essentially a yellow-flowered version of the *C. biflorus* complex and is similarly highly variable. Although no-one has yet dared to split it, the species may actually cover several taxa.)
- 343.210 : CROCUS CHRYSANTHUS** Greece, Pieria, Oros Olimbos, W of Litochoron. Open pasture on foothills. Ex R. & R. Wallis 01-16
- 343.240 : CROCUS CHRYSANTHUS** Turkey, U_ak. (A very early-flowering form from this province of Western Turkey. It is particularly floriferous with brilliant orange flowers. Allegedly distinct cytologically and considered by some to merit separation at subspecific level at least.)

343.400 : CROCUS CORSICUS

343.402 : CROCUS CORSICUS France, Corsica, Restonica Valley. c.1260m. Between large rocks in openings in woods near tree-line. Ex D.M.Hoskins 05-06.

343.403 : CROCUS CORSICUS France, Corsica, Foret de Carrozzica. c.950m. Edge of pine forest (with *Crocus corsicus*). D.M.Hoskins 05-05.

343.404 : CROCUS CORSICUS France, Corsica, Restonica Valley. Ex an A. Edwards coll.

343.405 : CROCUS CORSICUS France, Corsica, NW of Porto-Vecchio. c. 1000m. (Bright lilac flowers usually with purple-striped, buff exteriors, in late spring. A higher altitude plant, reaching 2300m., than the only other Corsican species, *C. minimus*, whose more south-western distribution overlaps in this area, whence the occasional hybrid has been reported.)

343.410 : CROCUS CORSICUS No data.

343.600 : # CROCUS CVIJICII Greece, Imathia, Oros Vermio near Seli. 1500m. In turf under *Pinus* on N & W-facing slopes. (A very local, high altitude species, from the mountains where the Greek, Albanian & Macedonian borders meet. Scented spring-flowers in chrome-yellow to orange yellow. Tolerates summer-heat, dry under glass but maybe best kept cooler.)

343.800 : CROCUS CYPRIUS Cyprus, Troodos, Chionistra. 1950m. D.B. Stephens 96-08: 19.6.96 (Little member of the *C. biflorus* group, only known from high in the western Troodos range. Pale violet to white with brilliant, red-orange filaments.)

344.000 : CROCUS DALMATICUS

344.005 : CROCUS DALMATICUS Croatia, pass between Dubrovnik & Trebinje. Among oak scrub. Ex B. Mathew 5316 (May, 1969).

344.006 : CROCUS DALMATICUS Yugoslavia, Crna Gora, near Petrovac. 700m. Ex CEH 537.

344.200 : CROCUS DANFORDIAE Turkey, Konya, SW of Beysehir. 1150m. Ex KPPZ 354. (Clear yellow form.)

344.201 : CROCUS DANFORDIAE Turkey, Konya, E of Kiziloren. 1550m. Openings among scrub, in heavy, red clay over limestone. (Straw-yellow form.)

344.202 : CROCUS DANFORDIAE Turkey, Antalya, Saklikent. Ex M. Oolgaard 90-71

344.203 : CROCUS DANFORDIAE Turkey, Sivas, between Kangal & Sivas. 1550m. Rocky slopes. Ex KPPZ 90-261. (Yellow form.)

344.219 : CROCUS DANFORDIAE No data. From a pale yellow form of this little, variably coloured, spring species, usually dusted with grey-purple outside. From the colder, drier areas of W Turkey, it needs an alpine-house or bulb-frame in the UK.

344.400 : CROCUS ETRUSCUS No data.

344.609 : CROCUS FLAVUS (subsp. *flavus*) Greece, Ioanina, Oros Smolikas E of Konitsa.. Ex R.& R.Wallis 00-47.

344.610 : # CROCUS FLAVUS (subsp. *flavus*) No data but the true wild plant - not the sterile 'Dutch Yellow'. Native to SE Europe into NW Turkey, its profuse fiery, orange-yellow flowers in spring make it one of the finest garden-plants in the genus..

344.630 : CROCUS FLAVUS from 'LACTEUS' (syn. *C. lacteus*) No data. From the old, long-cultivated stock, described in the early part of the 19th Century as *C. lacteus*, a cream coloured variant of *C. flavus*. A rather weak grower and not at all a common plant nowadays though a beautiful one, which is worth just as much effort to maintain as many newer species.

344.650 : CROCUS FLAVUS subsp. DISSECTUS

344.659 : CROCUS FLAVUS subsp. DISSECTUS Turkey, Manisa, NNE of Demirci. 1425m. N. Stevens coll. (Seldom-collected, W Turkish endemic with a style divided into many slender branches. Yellow flowers in spring.)

344.802 : CROCUS FLEISCHERI Turkey, Mugla, Gok Tepe. 1500m. Open, stony areas with sparse *Pinus* on limestone. (Little, translucent white flowers with brilliant, feathery, scarlet styles in early spring.)

344.803 : CROCUS FLEISCHERI Turkey, Denizli, above Cukurkoy to Kazik Beli. 900m. Among scrub on steep, loose, shale slopes.

344.804 : CROCUS FLEISCHERI Turkey, Antalya, SSW of Korkuteli. 1300m. Among steppe vegetation on open, stony slopes.

344.850 : CROCUS FLEISCHERI No data. From several colls. in Mugla, Denizli & Antalya provinces of SW Turkey.

344.990 : ##CROCUS GARGARICUS (subsp. *gargaricus*) [#Turkey, Mugla, Gok Tepe N of Mugla](#). 1500m. Heavy clay in openings among *Pinus*. (This type-race is only known from here & Kaz Da., far to the NW. The Ulu Da. race (*C.g.* subsp. *herbertii*) is the commonly grown one - this is only very recently in cultivation. It has no stolons & a coarsely reticulate tunic. It also seems quite tolerant of drying-off in summer. Very hardy & neat with rich orange-yellow flowers in spring.) Archibald Archive www.srgc.net

345.000 : CROCUS GARGARICUS subsp. HERBERTII Turkey, Bursa, Ulu Da_. Ex a M.Harvey coll.

345.100 : # CROCUS GILANICUS Iran, Azerbaijan, between Heroabad & Asalem. 2400m. Ex Shirdelpur & Wendelbo 14910. (From a type-locality coll. of this local & little-known plant of the S Talysh, with white flowers in autumn. In Series *Kotschyani* & most resembling *C. kotschyanus* subsp. *suworowianus*, though possibly not closely related to it. A plant of pastures & the margins

of beech forest in a comparatively high rainfall area, so must not be dried off too thoroughly when dormant.)

- 345.200 : # CROCUS GOULIMYI** Greece, Messinia, S of Kalamata. 300m. In humus among stones, under *Quercus*. (Local in nature but easy under glass in the UK. Prolific, distinct & beautiful pale lavender flowers on very long tubes in autumn.)
- 345.201 : CROCUS GOULIMYI** Greece, Lakonia, coast beyond Neo Itilo. Sea-level. Among *Euphorbia* scrub down to water's edge. (Interesting & from an odd habitat. Dwarfier, more delicate & flowering a few weeks later than the above.)
- 345.210 : CROCUS GOULIMYI** From several forms, including 'Mani White' & the recently described *C.g. leucanthus*.
- 345.211 : CROCUS GOULIMYI from 'MANI WHITE'** From the fine white form of the type-race, which grows on the 'middle finger' of the Greek Peloponnese. This occurred in cultivation & is distinct from the wild *C.g. var. leucanthus*.
- 345.212 : CROCUS GOULIMYI from SELECTED VARIANTS** Greece, Lakonia, N of Areopoli. From several clones selected in the wild by Peter & Penny Watt : scented, deeply coloured, bicoloured and 'white stigma' forms.
- 345.220 : CROCUS GOULIMYI var. LEUCANTHUS** Greece, Lakonia, SW of Monemvassia. Ex an S. Keeble coll. (From type-locality material of this recently described, geographically isolated race, which is evenly & consistently white-flowered.)
- 345.401 : CROCUS GRAVEOLENS** Turkey, Icel, E of Gulnar. 900m. Hard clay in openings among *Pinus*. (Orange-yellow flowers in spring, usually marked with purple-brown outside. Distributed from S Turkey to N Israel.)
- 345.402 : # CROCUS GRAVEOLENS** Turkey, Icel, SE of Arslankoy. 1100-1450m. Among sparse conifers over limestone. (Orange-yellow flowers in spring, usually marked with purple-brown outside. Distributed from S Turkey to N Israel.)
- 345.601 : CROCUS HADRIATICUS** Greece, Fokida, Oros Parnassos, above Arahova. 1200m. Open, stony slope. (White autumnal flowers, usually with yellow throats. Shorter, more erect orange-red styles easily distinguish it from the allied, usually lilac, *C. cartwrightianus*.)
- 345.605 : CROCUS HADRIATICUS** Greece, Arkadia, S of Tripolis. Terra rossa, full exposure. Ex B. Mathew 5048 (7.4.66) (White autumnal flowers, usually with yellow throats. Shorter, more erect orange-red styles easily distinguish it from the allied, usually lilac, *C. cartwrightianus*.)
- 345.606 : CROCUS HADRIATICUS** Greece. Ex H. & M. Crook 2817 (Lilac-flowered form.)
- 345.607 : CROCUS HADRIATICUS** Greece, Arkadia, above Manthytrea. M. Harvey coll., May, 1997
- 345.620 : CROCUS HADRIATICUS** No data
- 345.800 : CROCUS HARTMANNIANUS**
- 345.805 : CROCUS HARTMANNIANUS** Cyprus. Ex the stock established at Goteborg Botanic Garden.
- 345.850 : CROCUS HERMONEUS** (subsp. *hermoneus*) Archibald Archive www.srgc.net
- 345.880 : CROCUS HERMONEUS subsp. PALAESTINUS**
- 345.900 : CROCUS HYEMALIS**
- 345.909 : CROCUS HYEMALIS** Jordan, near Ajlun. (Collected out of flower in NW Jordan but possibly this species, flowering in midwinter. Described from S Lebanon & best-known from Israel, where the populations are white-flowered with purple-veined exteriors & purple-black anthers. Not very frost-hardy and not easy to grow in cold, wet climates.)
- 346.000 : CROCUS IMPERATI** (subsp. *imperati*) Italy, Campania, between Montella & Aserno. 840m. Ex M. Oolgaard 95-44 (The fine type-race is a species of quite limited distribution in W Italy, SW from Naples just into Calabria. Rich purple, yellow-throated flowers open in spring but just as beautiful in bud with the solid buff of the outer segments feathered with black-purple.)
- 346.010 : CROCUS IMPERATI** (subsp. *imperati*) No data.
- 346.011 : CROCUS IMPERATI from WHITE FORM** No data.
- 346.100 : CROCUS IMPERATI subsp. SUAVEOLENS**
- 346.300 : # CROCUS KARDUCHORUM** Turkey, Bitlis, SW of Van Golu. c. 1900m. In clay among deciduous *Quercus*. (Only found in this small area & confused with a form of *C. kotschyanus* for almost 100 years after Kotschy's 1859 type coll. (after another 50 it still is in some bulb lists.). Still very little-known in gardens, where it is quite a fastidious species & should not be kept too hot & dry when dormant. A very lovely, leafless, lilac-blue autumn flower utterly distinct in its arresting, floppy, feathery, white style. "A gorgeous thing, my favourite autumn Crocus" commented Henrik Zetterlund.) [#2nd Pic](#)
- 346.301 : CROCUS KARDUCHORUM** Turkey, Bitlis, W of Hizan. 1900m. In clay in shade of deciduous *Quercus*. (Only found in this small area & confused with a form of *C. kotschyanus* for almost 100 years after Kotschy's 1859 type coll. (after another 50 it still is in some bulb lists.). Still very little-known in gardens, where it is quite a fastidious species & should not be kept too hot & dry when dormant. A very lovely, leafless, lilac-blue autumn flower utterly distinct in its arresting, floppy, feathery, white style. "A gorgeous thing, my favourite autumn Crocus" commented Henrik Zetterlund.)
- 346.350 : CROCUS KERNDORFFIUM** Turkey, "central Taurus." 900-1600m. Screes & among scattered *Quercus*, *Juniperus* & *Pinus*. Ex the type-collection, HKEP 90-10. (Described in 1993, in Series *Biflora* & possibly closest to *C. leichtlinii* but differs in the outside of the pale lilac-blue segments being consistently creamy white with a median violet stripe. Spring.)
- 346.400 : CROCUS KOROLKOWII**

- 346.406 : CROCUS KOROLKOWII** Tajikistan, Kugi Tang.
- 346.407 : CROCUS KOROLKOWII** Tadjikistan, Chinoro, Varzob gorge. Ex a J. Ruksans coll. (From a beautiful pure yellow form, unmarked outside except for a greenish tinge. A very fine parent, which has received RHS awards in the UK.)
- 346.408 : CROCUS KOROLKOWII** Uzbekistan, Samarkand, Seravshan, Agalik valley. Ex J. Ruksans colls. (From an extensive range of clones, selected and named by Janis Ruksans out of a very variable population. Pale yellow to deepest yellow flowers, very variably marked outside with brown stripes, some with solidly mahogany-brown exteriors. An excellent spring-flowering species, distributed from SE Uzbekistan through Tadjikistan into N Afghanistan. Vigorous under glass in the UK.)
- 346.409 : CROCUS KOROLKOWII** No data. From a wide range of forms, derived from wild collections made by J. Ruksans & others in Uzbekistan and the adjacent republics. Varnished, pale yellow to deepest yellow flowers in spring, very variably marked outside with brown stripes, some with solidly mahogany-brown exteriors. Enjoys cold winters with a good summer rest.
- 346.500 : CROCUS KOSANINII** Yugoslavia, Serbia, Kosovo, NNW of Kacanik. 300m. *Quercus* woodland. (A distinct little plant, quite recently described and only known from the oak woods of a small area of Kosovo. It likes cool summers & can be grown outside in the UK, though it is hardly as vigorous as *C. tommasinianus*, a form of which is currently circulating as *C. kosaninii*. Apart from many other substantial differences, the throat is white in *C. tommasinianus* & deep yellow in *C. kosaninii*. With bluish violet flowers, usually with dark stripes outside, in early spring, it is possibly closest to the N Italian *C. etruscus*.)
- 346.703 : CROCUS KOTSCHYANUS** (subsp. *kotschyanus*) Turkey, Kahramanmaraş, Armut Dag. 1300m. Open areas among *Quercus* on limestone. (Lilac flowers, with yellow-blotched throats, in autumn. Excellent grower & increaser.)
- 346.704 : CROCUS KOTSCHYANUS** (subsp. *kotschyanus*) Turkey, Hatay, E of Belen. 1250m. Stony areas & fissures on limestone outcrop. (Lilac flowers, with yellow-blotched throats, in autumn. Excellent grower & increaser.)
- 346.705 : CROCUS KOTSCHYANUS** (subsp. *kotschyanus*) Syria, Akra Dag, near Kasab. 800m. Scrub. Ex R. & R. Wallis 96-12 (Lilac flowers, with yellow-blotched throats, in autumn. Usually an excellent grower & increaser.)
- 346.706 : CROCUS KOTSCHYANUS** (subsp. *kotschyanus*) Syria, Slunfeh. 1450m. Ex R. & R. Wallis 96-18. (Lilac flowers, with yellow-blotched throats, in autumn. Usually an excellent grower & increaser.)
- 346.710 : CROCUS KOTSCHYANUS** (subsp. *kotschyanus*) No data - from several E. Pasche colls. - for the garden.
- 346.900 : CROCUS KOTSCHYANUS subsp. CAPPADOCICUS** Turkey, Sivas, Ziyaret Tepe. c. 2000m. Open sites, in turf & among limestone rocks. D. Stephens & N. Stevens colls. (From type-locality colls. of the lovely central Anatolian race. Lilac, autumn flowers, beautifully veined with a darker shade. Not so vigorous as the type-race but not at all difficult & seldom seen.)
- 346.901 : CROCUS KOTSCHYANUS subsp. CAPPADOCICUS** Turkey, Kayseri, N of Sariz. D. Stephens 98-16
- 346.902 : CROCUS KOTSCHYANUS subsp. CAPPADOCICUS** Turkey, Malatya, SW of Doganşehir. 1500m. Open, stony, limestone slopes.
- 347.000 : CROCUS KOTSCHYANUS subsp. HAKKARIENSIS** Turkey, Hakkari, SE of Yuksekova to Semdinli. 1700m. Among steppe vegetation, in clay, on steep slopes. Archibald Archive www.srgc.net
- 347.100 : CROCUS KOTSCHYANUS subsp. SUWOROWIANUS** Turkey, Erzurum, Palandoken Da. between Erzurum & Cat. 2500m. Among steppe vegetation on steep slopes.
- 347.101 : CROCUS KOTSCHYANUS subsp. SUWOROWIANUS** Turkey, Rize, Ovit Dag. 2600-3000m. Dryish, stony ridges. D. Stephens 98-36. (The most distinct, white-flowered race from high altitudes in NE Turkey into Georgia. Seldom seen in cultivation and not one of the easiest to grow. An alpine plant, adapted to considerable snow-cover in winter & to cold summers, this definitely resents both fluctuating and high soil temperatures, though unlike most alpine *Crocus* spp., it does not mind drying, as long as it is cool. Slower to flower from seed than some, it does so reliably with us when there is a small fall in the mean-temperature at any time from July on. Variable in size & markings, its creamy white flowers are usually delicately veined with violet.)
- 347.102 : CROCUS KOTSCHYANUS subsp. SUWOROWIANUS** Turkey, Kars, Yalnizcam Daglari, E of Savsat. 2625m. D. Stephens 98-34
- 347.103 : CROCUS KOTSCHYANUS subsp. SUWOROWIANUS** Turkey, Erzurum, Mescit Daglari, Golyurt Gecidi (Ispir to Erzurum). 2400m. D. Stephens 98-38
- 347.400 : CROCUS LAEVIGATUS**
- 347.402 : CROCUS LAEVIGATUS** Greece, Evia, above Nea Artaki. 300m. Clearings among *Pinus* & *Cistus*. (Endemic to Greece & its islands. Very variable autumn & winter flowers in white to lilac with diverse purple markings outside.)
- 347.403 : CROCUS LAEVIGATUS** Greece, Evia, SE of Karistos. 200m. Among scrub in open, stony areas.
- 347.405 : CROCUS LAEVIGATUS** Greece, Evia, Oros Ohi. c. 1000m.
- 347.406 : CROCUS LAEVIGATUS** Greece,
- 347.409 : CROCUS LAEVIGATUS** Greece, Evia, W of Seta. Ex R. & R. Wallis 00-05
- 347.410 : # CROCUS LAEVIGATUS** No data. From selections made by D.B. Stephens for size, colour & markings. Endemic to Greece & its islands with very variable autumn & winter flowers in white to lilac with diverse purple markings outside.

347.420 : CROCUS LAEVIGATUS Greece, Crete, Hania, Omalos. M. Jope coll., 1996. (An exquisitely tiny white flowered form, sometimes with fine maroon-black feathering outside.)

347.421 : CROCUS LAEVIGATUS Greece, Crete, Mt. Vouvala. Ex an A. Edwards coll. (An exquisitely tiny (though not quite so small as an Omalos coll. we grow) white flowered form, sometimes with fine maroon-black feathering outside.)

347.422 : #Crocus laevigatus

347.500 : CROCUS LEICHTLINII Turkey, Urfa, ESE of Siverek. 900m. Ex selected good turquoise forms of KPPZ 144. Limited to the volcanic area around Karaca Da. in SE Turkey - very cold in winter ; very hot & dry in summer. Spring flowers, usually in greyish blue, slatey outside, with deep yellow throats. A difficult, moisture sensitive plant for the specialist & still little known in cultivation.)

347.501 : CROCUS LEICHTLINII Turkey, Elazig, SE of Elazig. Ex KPPZ 182. (Limited to the volcanic area around Karaca Da. in SE Turkey - very cold in winter ; very hot & dry in summer. Spring flowers, usually in greyish blue, slatey outside, with deep yellow throats. A difficult, moisture sensitive plant for the specialist & still little known in cultivation.)

347.600 : CROCUS LONGIFLORUS Italy, Calabria, Monte Stella. Ex M. Salmon colls. (Autumn-flowering from S Italy & Malta. Scented, pale to deeper purple flowers, often with dark veins on a buff ground outside. Quite easy in the alpine-house.)

347.601 : CROCUS LONGIFLORUS Italy, Sicily, Madonie Nebrodi. Ex an A. Edwards coll. (Autumn-flowering from S Italy & Malta. Scented, pale to deeper purple flowers, often with dark veins on a buff ground outside. Quite easy under glass.)

347.602 : CROCUS LONGIFLORUS Malta. Ex a Graham Smith coll. (received by D. Hoskins, 28.9.76)

347.610 : CROCUS LONGIFLORUS No data. From a good, deep-coloured clone pollinated with one from Malta.

347.800 : # CROCUS MALYI Croatia, Velebit Planina above Karlobag. 500m. Among limestone boulders. (A splendid endemic of the stark limestones of the Velebit range, rising sheer above the Adriatic coast. Certainly one of the finest of all species with big, pure-white flowers with yellow throats in late spring. A good grower, said to be excellent outside in sun in the UK.)

347.900 : CROCUS MATHEWII Turkey, Mugla, SE of Fethiye, Baba Dag. 1150m. Clay over limestone in shade of *Cedrus*. (Corms include forms with & without purple-stained throats.) Archibald Archive www.srgc.net

347.909 : CROCUS MATHEWII Turkey, Antalya, Lycian Taurus. 400-1100m. Ex H.Kerndorff & E.Pasche 92-91.

347.910 : CROCUS MATHEWII No data. A recently described, lilac, autumn-flowering, SW Turkish saffron *Crocus* of somewhat debatable status. Distributed from SE Mugla into Antalya, it is close to the (apparently) geographically isolated *C. asumaniae* but is distinguished in the type-description mainly by its rich, deep-violet throat. The long-known population on Baba Dag (once assigned to *C. pallasii*), however, is not consistent in this respect and many plants lack this essential characteristic. Reputedly, some other populations are more even. This seed is from corms collected by E. Pasche in the undisclosed type-locality, supplemented with material from other colonies. Anticipate some variation from seed and the possibility that some selection in cultivation may be needed. So far proving almost as accommodating as *C. asumaniae*, under similar conditions, there is no doubt that once selected, purple-throated clones are available to gardeners, they will be rated among the most striking of all crocuses.

348.000 : CROCUS MEDIUS

348.008 : CROCUS MEDIUS Italy, Liguria, between Carcare & Ferrania. D.B. Stephens 98-47. (A very beautiful species allied to *C. nudiflorus* & *C. niveus*. Only known from a small area around the border of NW Italy & SE France, between 200m. & 1400m. Deep to pale lilac flowers, usually with darker, radiating lines, and much cut, scarlet styles in autumn.)

348.009 : CROCUS MEDIUS Italy, Liguria, Colle de San Bernardo between Albenga & Gressio. D.B. Stephens 98-46. (A very beautiful species allied to *C. nudiflorus* & *C. niveus*. Only known from a small area around the border of NW Italy & SE France, between 200m. & 1400m. Deep to pale lilac flowers, usually with darker, radiating lines, and much cut, scarlet styles in autumn. Once again, we are much indebted to David Stephens for this significant new introduction of wild seed.

348.200 : #CROCUS MICHELSONII Iran, Khorasan, Kopet Da_, N of Quchan. 2000m. Open, stony, limestone slopes. (Like *Fritillaria raddeana* s, endemic to the Kopet Dag area of S Turkmenistan & adjacent NE Iran. It inhabits open *Artemisia*-steppe in a severe continental climate and demands skilled cultivation. Very beautiful, large flowers in spring, translucent bluish white inside, stained or speckled outside with smoky lilac-blues to intense violet-blue.)

348.209 : CROCUS MICHELSONII Iran, Khorasan, Kopet Da_, Mashad to Kalat, (c. 50km. NE of Mashad). 1900m. Ex T4Z1116.

348.210 : CROCUS MICHELSONII No data. Like *Fritillaria raddeana* s, endemic to the Kopet Dag area of S Turkmenistan & adjacent NE Iran. It inhabits open *Artemisia*-steppe in a severe continental climate and demands skilled cultivation. A very beautiful spring flower, translucent white inside, stained or speckled outside with lilac-blue to intense violet-blue.

348.400 : CROCUS MINIMUS

348.405 : # CROCUS MINIMUS France, Corsica, Col de Bavella. Ex an A. Edwards coll. (From superlative richly coloured forms, selected in the wild & which come remarkably evenly from seed. The exterior of most is a solid, glossy, purple-black)

Crocus minimus Bavella 2nd photo- form with orange style

348.410 : CROCUS MINIMUS No data.

348.500 : CROCUS MOABITICUS

348.600 : CROCUS NEVADENSIS

348.602 : CROCUS NEVADENSIS = *C. serotinus* subsp. *salzmannii* stoloniferous form ex Sierra Nevada.

348.608 : CROCUS NEVADENSIS Spain, Sierra Segura, between Pantones & Hornas. Ex D.Stephens 03-09

348.609 : CROCUS NEVADENSIS Spain, Malaga, E of Ronda. Ex an R. & R. Wallis coll. (From a fine form of this spring-flowering species from SE Spain & NW Africa, with creamy white to pale lilac flowers. Wild, Sierra Nevada seed listed some years ago as this, under 348.602, proved to be an odd plant in the autumn-flowering *C. serotinus* group (*q.v.* under 352.099))

348.800 : # CROCUS NIVEUS Greece, Messinia, S of Kalamata. 100m. Olive groves on limestone. (Magnificent, pure-white, autumn-flowering species of the S Peloponnese with gorgeous scarlet styles. A good grower in the bulb-frame or pots.)

348.800 : CROCUS NIVEUS Greece, Messinia, S of Kalamata. 200m. Exposed limestone area. M. Jope 97-13. 22.4.97

348.800 : CROCUS NIVEUS Greece, Messinia, S of Kalamata. 200m. Among scrub on rocky, N-facing, limestones slopes. D. Hoskins 98-21. 18.5.98 (Magnificent, pure-white, autumn-flowering species of the S Peloponnese with gorgeous scarlet styles. One of the most satisfying & reliable in cultivation - a good grower in the bulb-frame or in pots.)

348.804 : CROCUS NIVEUS Greece, Lakonia, W of Pirgos Dirou. 100m. Ex D.M. Hoskins 95-7. (The pale lilac form)

348.805 : CROCUS NIVEUS Greece, Lakonia, near Pirgos Dirou. c. 100m. (Ex an S. Keeble coll., May, 1997). (From the locality where the exquisite pale lilac & bicoloured forms occur, so expect some fine variations in this wild coll.)

348.806 : # CROCUS NIVEUS Greece, Lakonia, N of Pirgos Dirou. c.150m. N-facing bank. D. Hoskins 98-2 (From a locality where the exquisite pale lilac-pink & bicoloured forms occur, so expect some fine variations in this wild coll.)

349.000 : CROCUS NUDIFLORUS

349.020 : CROCUS NUDIFLORUS No data. A splendid species from moist meadows in SW France & N Spain, reaching about 2000m. in the Pyrenees. One of the best outside in UK gardens, where its stoloniferous character can result in fine colonies. Elegant flowers, normally in rich purple (it can vary to paler shades) appear on long tubes before the leaves in autumn.

349.021 : CROCUS NUDIFLORUS - WHITE FORM ('Orla') Ex a J. Hulme coll.

349.200 : CROCUS OCHROLEUCUS

349.200 : CROCUS OCHROLEUCUS Lebanon, N of Mairouba. 1050m. R. & R. Wallis coll. (Having lost the fertile wild stock we collected in Lebanon over 30 years ago and been unable to trace any other cultivated fertile stock over these years, we are delighted to have this new coll. from Bob and Rannveig. Pure white flowers usually with orange yellow throats from late autumn into early winter. Centered on Lebanon but extending to SW Syria & N Israel. Quite easy & hardy but best under glass in the UK.

349.220 : CROCUS OCHROLEUCUS Lebanon : no further data : from several R. & R. Wallis colls. (Having lost the fertile wild stock we collected in Lebanon over 30 years ago and been unable to trace any other cultivated fertile stock, we are delighted to have these new colls. from Bob and Rannveig. Pure white flowers usually with orange yellow throats from late autumn into early winter. Centered on Lebanon but extending to SW Syria & N Israel. Quite easy & hardy but best under glass in the UK.)

349.305 : CROCUS OLIVIERI (subsp. *olivieri*) Greece, Arkadia, E of Tripoli. 750m. M. Harvey coll., May, 1997. (Spring-flowering & widespread (though, like many, rather local) at middle-altitudes through the Balkans & W Turkey. This type-race has bright orange-yellow flowers, usually without any exterior markings, other than some brown shading on the perianth-tube.)

349.306 : CROCUS OLIVIERI (subsp. *olivieri*) Turkey, SW of Beysehir to Ustumler. 1150m. Ex D.B. Stevens 97-21

349.409 : CROCUS OLIVIERI subsp. BALANSAE Greece, Samos, Ambelos. Ex a M. Harvey coll. (2002)

349.450 : CROCUS OLIVIERI subsp. ISTANBULENSIS

349.605 : CROCUS OREOCRETICUS Greece, Crete, Psiloritis (Mt. Ida), Anogia to the cave of Zeus. 1100-1900m. Among *Poterium* & *Berberis* scrub. Ex Brickell & Mathew 10124 (4.11.1980). (Autumn-flowers in mid- to deep lilac with purple veining & silvery to buff exteriors. A member of the *C. sativus* group from high up in the Cretan mountains.)

349.606 : CROCUS OREOCRETICUS Greece, Crete, Psiloritis (Mt. Ida). Ex SBL 347. (Autumn-flowers in mid- to deep lilac with purple veining & silvery to buff exteriors. A member of the *C. sativus* group from high up in the Cretan mountains.)

349.610 : CROCUS OREOCRETICUS No data. Autumn-flowers in mid- to deep lilac with purple veining & silvery to buff exteriors. A member of the *C. sativus* group from high up in the Cretan mountains.

349.800 : CROCUS PALLASII (subsp. *pallasii*) Archibald Archive www.srgc.net

349.801 : CROCUS PALLASII (subsp. *pallasii*) Turkey, Antalya, SW of Elmali. 1550m. Among *Pinus* on open slopes in heavy clay. (Pale lilac flowers with scarlet style branches, in autumn. Like others in the *C. sativus* group, it enjoys a hot, dry rest.)

349.802 : CROCUS PALLASII (subsp. *pallasii*) Turkey, Mugla, S of Gok Tepe. Ex D.B. Stephens 92/24

349.803 : CROCUS PALLASII (subsp. *pallasii*) Greece, Samos, Lazaros pass, between Vourliotes & Pandrosos. (Ex a P. Bird coll.) (Pale lilac flowers with feathery, scarlet style branches, in autumn. Like others in the *C. sativus* group, it enjoys a hot, dry rest in summer.)

349.820 : CROCUS PALLASII (subsp. *pallasii*) From several colls. made in SW Turkey & adjacent Aegean islands. Pale lilac flowers with feathery, scarlet style branches, in autumn. Like others in the *C. sativus* group, it enjoys a hot, dry rest in summer.)

349.900 : CROCUS PALLASII subsp. DISPATHACEUS Turkey, Antalya, S of Beysehir. 1100m. Among *Quercus* & *Juniperus* on steep, limestone slope.

349.909 : CROCUS PALLASII subsp. DISPATHACEUS Turkey, Icel, S of Gulnar. 500m. . P.& P.Watt. coll. (Local race with deeper coloured, red-purple flowers & paler, less conspicuous style branches.)

349.930 : CROCUS PALLASII subsp. HAUSSKNECHTII Iran, Kordestan, E of Sanandaj. 2000-2300m. Steep, stony slopes. (The race from W Iran & adjacent NE Iraq, distinct in its very deep red, club-like style branches. Pale lilac-blue flowers, usually with the segments notched apically, in autumn. Like all the saffron crocuses, it needs a hot, dry rest in summer.)

349.960 : CROCUS PALLASII subsp. TURCICUS Turkey, Elazig, SE of Elazig to Maden. 1350m. Among *Pinus*, in shaley clay.

349.961 : CROCUS PALLASII subsp. TURCICUS Lebanon, between Baalbek & Farnya, near Nabi Rchade. 2150m. Summit-plateau of pass. Ex C. Lovell & P. Bird 363 (The elegant but not well-defined, race from SE Turkey, Lebanon & Syria. More pointed segments & corms with long, fibrous necks.)

349.962 : CROCUS PALLASII subsp. TURCICUS Syria, Ras al Ma'Arra N of Damascus. 1700m. Bare, rocky hill. Ex R.& R. Wallis 96-40

349.980 : CROCUS PASCHEI Turkey, "eastern Taurus." 700-1400m. Among scrub. Ex the type-collection, HKEP 90-34. (Described in 1993, in Series *Flavi* & seems very close to the splendid *C. antalyensis*, which we have not found to be an easy plant to grow, but differs in several characters, as well as being geographically separated. Waisted, lilac-blue flowers, silvery or buff outside, with white zones above their yellow throats & trifid, orange-red stigmas, in spring.)

350.000 : CROCUS PELISTERICUS Macedonia, Karadzica Planina. Peaty turf. Ex H. Zetterlund 85/67

350.001 : CROCUS PELISTERICUS Greece, Pela, Kajmakcalan. 1700m. Wet mountain meadow on mica-schist. (Limited to a very few localities, usually above 1900m., on the Greek-Macedonian border. From a slightly lower altitude colony of this snow-melt alpine - may be more growable : keep it very moist all summer and dryish in winter. Near *C. scardicus* with striking flowers, described by Brian Mathew as having "an unusual intensity of colour, a deep rich violet with a very glossy surface.")

350.200 : CROCUS PESTALLOZAE

350.205 : CROCUS PESTALLOZAE Turkey, Aydos Da_ above Yakacik. 200-300m. Ex C. Brickell & B. Mathew 8554. (12.4.74)

350.211 : CROCUS PESTALLOZAE from BLUE FORM No data. Quite a strong-coloured form of this dainty, little species with bunches of small, neat, rounded blue-violet flowers with yellow throats, in early spring. Endemic to a comparatively small area around Istanbul in NW Turkey, this is usually white-flowered in wild populations. A good grower & a little sweetie.

350.400 : CROCUS PULCHELLUS

350.409 : CROCUS PULCHELLUS Greece. Ex R.& R.Wallis 01-34. (One of the most attractive, autumn-flowering species. Distributed from the Balkans into NW Turkey. Scented, lilac-blue flowers with yellow throats.)

350.420 : CROCUS PULCHELLUS No data.

350.450 : CROCUS PULCHELLUS - WHITE FORM

350.800 : CROCUS RETICULATUS (subsp. *reticulatus*) Croatia, Velebit Planina above Tucepi. 900m. Openings among scrub on limestone. (Local but widespread, spring-flowering species. Lilac, beautifully marked outside with very dark violet.)

350.809 : CROCUS RETICULATUS (subsp. *reticulatus*) Moldova. Ex J. Ruksans colls. (A variable, very vigorous stock originally from Janis Ruksans' selections. Expect large, pale blue flowers strongly striped outside with deep purple.)

350.900 : #CROCUS RETICULATUS subsp. HITTITICUS Turkey, Icel, E of Gulnar. **#2nd photo** 900m. Limestone slopes with sparse scrub. (This race of the widespread *C. reticulatus* is confined to a very small area of the Cilician Taurus in S Turkey. White to pale lilac flowers, striped or often speckled on the exterior & distinct in their purple-black anthers. Not so easy to grow.)

351.000 : #CROCUS ROBERTIANUS Greece, Ioanina, W of Metsovo to Ioanina. 600m. Leafsoil at base of *Quercus* & *Ostrya* scrub. Archibald Archive www.srgc.net

351.010 : # CROCUS ROBERTIANUS Ex a M. Harvey coll. (Pale to deeper lilac-blue with a frilly, orange style. Brian Mathew rates it "one of the best of the autumnal species." Not difficult under glass but said to be growable outside in the UK.)

351.100 : #CROCUS RUJANENSIS Serbia, Rujan Planina, Mamince near Preševo. 600m. Ex the type-locality N. Randjelovic 6591. (Recently described spring-flowerer. In effect a northern, disjunct population of *C. sieberi* subsp. *sublimis*. Rich lavender-blue flowers with yellow throats. May be worth distinguishing by gardeners as it is vigorous & growable under glass & may prove good outside in the UK.) **#2nd Pic**

351.200 : CROCUS SCARDICUS

351.205 : CROCUS SCARDICUS Macedonia, Bistra Planina. 1300m. Ex (Intense orange on opening.)

351.310 : CROCUS SCEPUSIENSIS No data

351.400 : CROCUS SCHAROJANII

- 351.600 : CROCUS SEROTINUS** (subsp. *serotinus*)
- 351.608 : CROCUS SEROTINUS** (subsp. *serotinus*) Spain, Puerto de los Abejas. Ex an R.& R.Wallis coll. (
- 351.609 : CROCUS SEROTINUS** (subsp. *serotinus*) Spain. Ex M. Salmon 534.
- 351.800 : CROCUS SEROTINUS subsp. CLUSII**
- 351.810 : CROCUS SEROTINUS subsp. CLUSII** No data. (Ex D.M.H. - A.K., 1.11.76)
- 351.811 : CROCUS SEROTINUS subsp. CLUSII** Ex an A. Edwards coll. (From the selected clone 'Gwen Edwards')
- 352.000 : CROCUS SEROTINUS subsp. SALZMANNII**
- 352.003 : CROCUS SEROTINUS subsp. SALZMANNII** Morocco, Mischliffen. ABS4350
- 352.004 : CROCUS SEROTINUS subsp. SALZMANNII** Morocco, Ksar el Ksiba. ABS4411
- 352.005 : CROCUS SEROTINUS subsp. SALZMANNII** Morocco, Larache. Ex M.Salmon & M.Fillan 242.
- 352.020 : CROCUS SEROTINUS subsp. SALZMANNII from WHITE FORM** Spain, Granada, El Torcal. Ex H. Christiansen 3069. (From a fine white selected in the wild. The species itself is usually one of the most vigorous autumn-flowering ones.)
- 352.099 : CROCUS SEROTINUS subsp. SALZMANNII** Spain, Granada, Sierra Nevada below Penones de San Francisco. 2300m. Turf in NW-facing depression. (A strongly stoloniferous race from alpine-turf. We came across it in 1970 but, other than recording its existence, no-one has thought it worth distinguishing. We have not seen any other quite like it but the *C. serotinus* group is more than a little complicated. Small corms with long, couch-grass-like stolons. Profuse, pale lilac flowers in autumn.)
- 352.400 : CROCUS SIEBERI** (subsp. *sieberi*) Greece, Crete, Hania, Omalos. Ex M. Jope 95-46. (The type-race, endemic to Crete and very rarely seen in gardens. Flowers in spring, always basically white but stained outside with purple brush-marks & with an orange or deep yellow throat - the invalid name *C.s. var. heterochromus* was apt. A rather difficult snow-melt plant.)
- 352.401 : #CROCUS SIEBERI** (subsp. *sieberi*) Greece, Crete, Hania, S of Omalos. 1200m. Under trees on rocky slopes. D.M. Hoskins 02-08. (A 2002 wild coll. of the beautiful type-race, endemic to Crete and very rarely seen in gardens. Flowers in spring, always basically white but very variably stained outside with purple brush-marks & with an orange or deep yellow throat : the invalid name *C.s. var. heterochromus* was apt. Reputedly a rather difficult snow-melt plant but no problem with us under glass.)
- 352.450 : CROCUS SIEBERI subsp. ATTICUS**
- 352.455 : CROCUS SIEBERI subsp. ATTICUS** Greece, Atiki-Pireas, Pendeli E of Athina. c. 800m. Ex an M. Harvey coll. (A type-locality coll. of this race, seldom seen in cultivation & with a restricted distribution, almost confined to Attica. Distinct in its very coarse, *C. cancellatus*-like corm-tunics. Yellow-throated, pale to deep violet-blue flowers in spring.)
- 352.500 : CROCUS SIEBERI subsp. NIVALIS** Greece, Oros Taigetos, above Paleopanagia. 1500m. Ex a D.M. Hoskins coll. (Larger and paler than next. The subspecies differs from *C. sieberi* subsp. *sublimis* in its glabrous, rather than pubescent throat.)
- 352.501 : CROCUS SIEBERI subsp. NIVALIS** Greece, Messinia, Langadas pass. 1600m. Moist areas under *Pinus*. Ex D.M. Hoskins 95-10. (The subspecies differs from *C. sieberi* subsp. *sublimis* in its glabrous, rather than pubescent throat..) (8+)
- 352.550 : CROCUS SIEBERI subsp. SUBLIMIS** Greece, Evia, Oros Dirfis. 1000m. Among bracken & in turf on open, limestone slopes. (From a type-locality coll. Lilac blue flowers with yellow throats as the snow melts in spring. The race from most of mainland Greece. Easier to grow than the Cretan type-race.)
- 352.552 : CROCUS SIEBERI subsp. SUBLIMIS** Greece, Viotia, Oros Parnassos. 1500m. Slope below *Abies* woods. 7.6.96 (Lilac blue flowers with yellow throats as the snow melts in spring. The race from most of mainland Greece. Easier to grow than the type.) Archibald Archive www.srgc.net
- 352.553 : CROCUS SIEBERI subsp. SUBLIMIS** Greece, Ahaia, Oros Helmos above Kalavryta. 2000m. & above. Exposed, N, NE & NW-facing slopes, in stony clay & limestone detritus.
- 352.554 : CROCUS SIEBERI subsp. SUBLIMIS** Greece, Trikala, Ori Kerketio, E of Trikala. Ex C. Lovell & P. Bird 97-227
- 352.700 : CROCUS SIEHEANUS**
- 352.705 : CROCUS SIEHEANUS** Turkey, Nigde, NE of Ulukisla, Caykavak Gecidi. 1600m. Open steppe. (Ex D. Stephens 97-13).
- 353.000 : CROCUS SPECIOSUS** (subsp. *speciosus*)
- 353.005 : CROCUS SPECIOSUS** (subsp. *speciosus*) Turkey, Kayseri, N of Sariz. 1750m. Grazed turf on open slope. (A choice, delicate, local race from S central Turkey. Small, pale blue, strongly veined flowers with white throats.)
- 353.109 : CROCUS SPECIOSUS subsp. ILGAZENSIS** Ilgaz Da_. Ex C.Lovell & P.Bird 595 & 599
- 353.120 : CROCUS SPECIOSUS subsp. XANTHOLAIMOS** Turkey, Sinop, SW of Kabali. 1350m. Ex AHEP 83-24 (Only known from *Abies* woodland in this wet area. More dainty than the type race with narrower leaves & smaller flowers, distinguished by their yellow, rather than white, throats, filaments & anthers. Otherwise, translucent, veined lilac-blue goblets in autumn.)
- 353.121 : CROCUS SPECIOSUS subsp. XANTHOLAIMOS** Turkey, Boyabat. Ex C.Lovell & P.Bird 593
- 353.200 : CROCUS THOMASII**

- 353.205 : CROCUS THOMASII** Croatia, Policnik NW of Zadar. Among *Quercus* scrub. Ex B. Mathew 7651. (Autumn-flowering & close to Greek *C. hadriaticus* but with lilac flowers. Native to S Italy & the limestones of the Adriatic coast-ranges, below 1000m. Needs a dry summer rest.)
- 353.210 : CROCUS THOMASII** No data. Autumn-flowering & close to Greek *C. hadriaticus* but with pale to deep lilac flowers. Native to S Italy & the limestones of the Adriatic coast-ranges, below 1000m., this will need a warm, dry summer rest.
- 353.400 : CROCUS TOMMASINIANUS**
- 353.408 : CROCUS TOMMASINIANUS** Bosnia-Herzegovina, near Trebinje. Ex Christian, Elliott & Hoog 534. (Pale lavender to violet flowers with silvery exteriors.)
- 353.409 : CROCUS TOMMASINIANUS** Ex "HC 93-32" : check collector & data
- 353.410 : CROCUS TOMMASINIANUS** No data.
- 353.411 : CROCUS TOMMASINIANUS FROM WHITE FORMS** From a fine pure-white form selected in Estonia by Aino Pavel.
- 353.412 : CROCUS TOMMASINIANUS FROM RED FORMS**
- 353.413 : CROCUS TOMMASINIANUS from 'PICTUS'** Though this species, actually a rather local plant in the Balkans and not at all well-known botanically, can be a (usually welcome) weed in some British gardens, some of its variants are more restrained. This distinct form with white tips to the lilac flowers is both striking & not at all widely available commercially.
- 353.420 : CROCUS TOMMASINIANUS from A WIDE RANGE OF CULTIVARS** Though this species, actually a rather local plant in the Balkans and not at all well-known botanically, can be a (usually welcome) weed in some British gardens, some of its variants are more restrained. Seed from a wide range of variants, many richly coloured & some rare in gardens.
- 353.600 : CROCUS TOURNEFORTII** Greece, Rhodes. Ex an I. Barton coll. (A charming plant of the Greek islands. Ideal for the alpine-house. Lilac-blue flowers with yellow throats open flat & stay open at night during late autumn into winter.).
- 353.601 : CROCUS TOURNEFORTII** Greece, Kiklades, Siros. Ex B. & M. Mathew 6927A (March, 1971).
- 353.602 : # CROCUS TOURNEFORTII** Greece, Karpathos, Finiki. Ex an I. Barton coll. (1983).
- 353.620 : CROCUS TOURNEFORTII** No data. (A charming plant of the Greek islands ideal for the alpine-house. Lilac-blue flowers with yellow throats open flat & stay open on cloudy days & at night, during late autumn and early winter.).
- 353.800 : CROCUS VALLICOLA** Turkey, Trabzon, Zigana Dag. 2100m. With *Vaccinium* & *Daphne* in alpine turf.
- 353.803 : CROCUS VALLICOLA** Turkey, Artvin, Genya Dag above Artvin. 1600m. Turf in woodland clearing.
- 354.002 : CROCUS VELUCHENSIS** Yugoslavia, Serbia, Kosovo, above Vratnica. 800m. Leaf-soil over clay in dense *Fagus* woods. (A splendid, woodland form from the area where Albania, Kosovo & Macedonia meet. Large, lavender-blue flowers shading to darker, violet tips, in spring. Likes it cool & not too dry. Does well here in a pot but may be just as good outside.)
- 354.003 : CROCUS VELUCHENSIS** Greece, Pieria, Oros Olimbos. 1500m. Open, S-facing slope. P. & P. Watt coll.
- 354.004 : CROCUS VELUCHENSIS** Macedonia, Sar Planina, Popova Sapka above Tetovo. 2200m. Open turfy slopes with *Vaccinium*. (The alpine race, distinguished as var. *micranthus*. Not easy but Mike Tucker thinks 'classier'.)
- 354.006 : CROCUS VELUCHENSIS** Greece, Larissa, Oros Ossa, W of Spilia. 1700m. In turf among sparse *Pinus*.
- 354.020 : CROCUS VELUCHENSIS** No data.
- 354.150 : CROCUS VENERIS** Cyprus (Ex GB stock.)
- 354.205 : CROCUS VERNUS** (subsp. *vernus*) Slovenia, near Novo Mesto. Ex W. McLewin 98-03. (The wild, central European ancestor of many hybrids, itself rarely seen in gardens. The eastern populations, once distinguished as *C. scepusiensis* and *C. heuffelianus*, have their large, lavender flowers tipped with darker purple 'Vs', though some Slovenian colonies are mainly white.)
- 354.400 : CROCUS VERNUS subsp. ALBIFLORUS**
- 354.409 : CROCUS VERNUS subsp. ALBIFLORUS** Switzerland, Jura, Col du Marchzirug. 1400m. (Very much a snow-melt species from high-alpine turf. Usually with smaller, white flowers but sometimes purple or striped. Not easy to grow.)
- 354.600 : CROCUS VERSICOLOR** France, Alpes de Haute Provence, Col de la Colle St. Michel. 1400m. Stony, S-facing slope. (Endemic to SE France, just crossing into Italy. Elegant white or pale lilac flowers, delicately feathered outside, in spring. Usually quite late with us, like the related *C. malyi*, but in 1998 it flowered very early - it all depends on the winter weather)
- 354.610 : CROCUS VERSICOLOR** From a coll. made in the Western Alps by Hermann Fuchs. (Endemic to SE France, just crossing into Italy. Elegant white or pale lilac flowers, delicately feathered outside, in spring. Usually flowers quite late with us, like the related *C. malyi*, but it all depends on the winter weather) Archibald Archive www.srgc.net
- 354.700 : CROCUS VITELLINUS**
- 354.705 : CROCUS VITELLINUS** Lebanon, N of Mairouba. 1050m. R. & R. Wallis coll. (In Turkey, this is spring-flowering & rather difficult to distinguish from the allied *C. graveolens*. The seldom-seen Lebanese race flowers from late autumn into mid-winter & is most distinct with deep orange-yellow, sweet-scented flowers. Its flowers need protection under glass in the UK.)

- 358.000 :# CYCLAMEN AFRICANUM** Algeria, Kabylie, E of Azazga. 850 m. Humus under deciduous *Quercus*. (Large, patterned, dark green leaves & big, pink flowers in autumn. Borderline hardiness in UK : best grown frost-free.)
- 358.012 : CYCLAMEN AFRICANUM from SELECTED LEAF-FORM** Data as above. Ex JCA855
- 358.200 : CYCLAMEN ALPINUM**
- 358.200 : CYCLAMEN ALPINUM** Turkey, Mugla, Eren Dag (ENE of Fethiye). 1300m. Ex P. Davis 25579.
- 358.201 : CYCLAMEN ALPINUM** Turkey, Mugla, Baba Dag (SE of Fethiye). 850-1100m. In humus beside limestone boulders, under *Pinus* and *Cedrus*.
- 358.202 : CYCLAMEN ALPINUM** Turkey, Antalya, Sinekibeli Gecidi (Kas to Elmali). 1600m. In shade of *Cedrus* over limestone.
- 358.219 : CYCLAMEN ALPINUM from 'TILEBARN' SELECTIONS** Turkey.
- 358.220 : CYCLAMEN ALPINUM from PALE PINK FORMS** Turkey. Ex an R. & R. Wallis coll.
- 358.221 : CYCLAMEN ALPINUM from WHITE FORMS** Selections from R. & R. Wallis colls. of this spring-flowering SW Turkish endemic. Closest to *C. coum* but with foliage more like *C. cilicium* & with wide, honey-scented flowers with distinctively twisted lobes, maroon at the bases. From crimson-nosed whites but expect some pale pinks, as well.
- 358.230 : CYCLAMEN ALPINUM (*C. trochopteranthum*)** No data. A spring-flowering, SW Turkish endemic, closest to *C. coum* but with foliage more like *C. cilicium*. Wide flowers with distinctively twisted lobes, in pink & carmine shades, maroon at the bases. Strongly honey-scented. Temperature-hardy but seldom successful outdoors in the UK.
- 358.500 : CYCLAMEN BALEARICUM** Spain, Mallorca, N of Andratx. 350m. In humus among *Quercus*. Ex a D.M. Hoskins coll. (Delicately pencilled, white flowers in spring. Likes a lot of shade, resents overdrying in summer & is best frost-free.)
- 358.501 : CYCLAMEN BALEARICUM** Spain, Mallorca, lower slopes of Puig Major. Ex P.& P. Watt colls.
- 359.003 : CYCLAMEN CILICIUM** Turkey, Konya, NW of Bozkir. 1100m. Base of N-facing, limestone cliffs. (Dainty, autumn-flowering species with pale pink flowers & small, rounded leaves. Hardy in a well-drained, sunny site in the UK.)
- 359.017 : CYCLAMEN CILICIUM from SELECTED DEEP PINK** Turkey, Antalya, Akseki. P.& P. Watt coll.
- 359.018 : CYCLAMEN CILICIUM from SELECTED LARGE PINK** No data. Superb selection by P.& P. Watt.
- 359.019 : CYCLAMEN CILICIUM** No data. Mainly from R.& R. Wallis selections. (Dainty, autumn-flowering species from SW Turkey with pale pink flowers & small, rounded, marbled leaves. Easy & hardy in a well-drained, sunny site in the UK.)
- 359.020 : CYCLAMEN CILICIUM : WHITE, PINK NOSE** No data. Ex a P. Davis coll., given to us by Ken Aslet.
- 359.020 : CYCLAMEN CILICIUM : WHITE, PINK NOSE** Turkey, Antalya, Akseki. Ex a P.& P. Watt coll. (From the same area as the pure white form. Similar to the P. Davis coll. we have listed previously.)
- 359.021 : CYCLAMEN CILICIUM f. ALBUM** Turkey, Antalya, N of Murtici to Akseki. Ex Frank & Koenen 82-10. From a pure white without a pink 'nose'. Dark, well-marked leaves. Usually comes surprisingly evenly from seed.
- 360.000 : CYCLAMEN COUM** (subsp. *coum*)
- 360.009 : CYCLAMEN COUM** (subsp. *coum*) Turkey, Yayladagi.
- 360.048 : CYCLAMEN COUM** (subsp. *coum*) Turkey, Artvin. 800m. Ex the Cyclamen Society 88-397 coll.
- 360.049 : CYCLAMEN COUM** (subsp. *coum*) Turkey. Ex E.K. Balls 371 (See also *C. coum* 'Nymans' & 'Quaker Pearl', under 6.360.055 & 6.360.056 respectively, in the section on garden selections. This fine form with silver leaves with a dark central pattern is also a selection from this EKB 1930's coll. The field-number has now little or no relevance.)
- 360.050 : CYCLAMEN COUM** (subsp. *coum*) Turkey, Bolu. 1000m. Beech leafmould over limestone. Ex BSBE 513. (Originally described as "scented ; dark purple ; some with plain green leaves" but this is now many generations removed from the original collection & the number is now applied (almost invariably incorrectly as "BSBE 518") only to selected silver-leaved forms. We retain the widely applied number only in the absence of another distinguishing name.)
- 360.100 : CYCLAMEN COUM f. ALBISSIMUM** Syria (Israeli Occupied Territory), Golan Heights near Mas'ada. Cyclamen Society 90-417. (The recently introduced pure white form of *C. coum*, lacking the dark 'nasal markings' of previously cultivated whites. Surely one of the most exciting of several variants brought to light & introduced through Cyclamen Society field-work. Rather thin-textured, round, unmarked, dark green foliage and big, broad flowers. Interesting not only in its distinct appearance but in its southern habitat. Because of the latter, as well as its rarity in cultivation, it will be best grown under glass in the UK for the present.)
- 360.500 : CYCLAMEN COUM subsp. ELEGANS** Iran, Mazandaran, S of Chalus. 20m. In humus & moss in wet *Fagus* woodland. = 362.000 : *C. elegans* Archibald Archive www.srgc.net
- 360.500 : CYCLAMEN COUM subsp. ELEGANS** Iran, Mazandaran, SE of Sari. 200m. In humus & moss in woodland. = 362.001 : *C. elegans*
- 360.509 : CYCLAMEN COUM subsp. ELEGANS** Iran, Mazandaran, Sari. 120m. Deciduous woodland. = 362.009 : *C. elegans*

- 360.510 : CYCLAMEN COUM subsp. CAUCASICUM** (*C. elegans*) Azerbaijan. No further data. = 362.020 : *C. elegans*
- 360.600 : CYCLAMEN COUM : DARK NOSE** No data. A very interesting race which was received among a batch of *C. coum* variants, wild collected in various localities in Transcaucasia & sent to Mike Salmon by the Russian botanist Zinaida Artiushenko, in the 1960's. As Mike was not especially interested in them, they were planted in his garden at 'Monocot'. When he was moving in the 1980's, we extracted a few plants of this one. As it is derived from wild material & originally came labelled as one of the so-called 'Russian splits' (like *C. circassicum* or *C. adzhanicum* or *C. abchasicum*), which western botanists currently dismiss as synonyms, without ever having visited living plants in the type-localities of any of them, we are reluctant to subsume it into the cultivated selections. In time we feel it may acquire its rightful name & prove to be an acceptable geographical race. It does not actually 'key-out' as anything in current western literature, though you could nudge it into *C. parviflorum*, but, of course, it does not match the description with its larger flowers & boldly patterned foliage. Mixed seed from both pink & white forms. Especially striking nearer eye-level under glass, where you can see the big purple-black blotch going back into the sinus.)
- 360.602 : CYCLAMEN COUM : DARK NOSE ; WHITE FLOWERS** No data. From white-flowered representatives of a very interesting race which was received among a batch of *C. coum* variants, wild collected in various localities in Transcaucasia & sent to Mike Salmon by the Russian botanist Zinaida Artiushenko, in the 1960's. As Mike was not especially interested in them, they were planted in his garden at 'Monocot'. When he was moving in the 1980's, we salvaged a few & these have been maintained by Dave Hoskins. As it is derived from wild material & originally came labelled as one of the so-called 'Russian splits' (like *C. circassicum* or *C. adzhanicum* or *C. abchasicum*), which western botanists currently dismiss as synonyms, without ever having visited living plants in their type-localities, we are reluctant to subsume it into the cultivated selections. In time we feel it may acquire its rightful name & prove to be an acceptable geographical race. It does not actually 'key-out' as anything in current western literature, though you could nudge it into *C. parviflorum*, but, of course, it does not match the description with its larger flowers & boldly patterned foliage. Especially striking in this white form, grown nearer eye-level under glass, where you can see the big purple-black blotch going back into the sinus.)
- 361.008 : CYCLAMEN CRETICUM** Greece, Crete, above Omalos. 1200m. Shaded limestone rocks. Ex D.M. Hoskins & P. & P. Watt colls. (This relative of *C. repandum* is not the easiest species to maintain and persuade to set seed in cultivation. It needs a lot of shade & is usually safest grown frost-free in the UK but these colls. were made at a high altitude for the species. Cordate, dull grey-green leaves usually with mottled bands of silvery grey & white flowers in spring.)
- 361.009 : CYCLAMEN CRETICUM** Greece, Crete, S of Kolimbari. Ex a M. Jope coll. (This member of the *C. repandum* group is not the easiest species to maintain and persuade to set seed in cultivation. It needs a lot of shade & is safest grown frost-free in the UK. Cordate, dull grey-green leaves usually with mottled bands of silvery grey. White flowers in spring.)
- 361.010 : CYCLAMEN CRETICUM** No data.
- 361.500 : CYCLAMEN CYPRIUM** Ex a M. Koenen coll.
- 361.510 : CYCLAMEN CYPRIUM** No data. Endemic to Cyprus with fragrant, white flowers with auricles & magenta blotches around their mouths, appearing in late autumn to winter. Distinctive, grey-marbled, dull-green leaves, crimson below. Seed from a good range of leaf-variations. Best grown frost-free with a dry summer-rest in the UK.)
- 362.000 : CYCLAMEN ELEGANS** (*C. coum* subsp. *elegans*) Iran, Mazandaran, S of Chalus. 20m. In humus & moss in wet *Fagus* woodland. (Maintained from our 1966 coll. by D. Hoskins, who is able to spare some seed this year. Not an easy plant to grow, seldom setting much seed, it continues to be a rarity in cultivation. It almost certainly merits specific status as *C. elegans* but more field-work in the Caspian forests is needed to establish the alleged clinal variation. Exquisite, large pink flowers without a white 'nose' & with elongated, acute petals above pointed, silver-patterned leaves, more heart-shaped than in western *C. coum*. It must have some protection in the UK & is best grown frost-free, shaded & cool in summer, when it should never be allowed to dry completely. Its peak flowering is in early winter, usually November in the UK, filling a gap in the *Cyclamen* season.)
- 362.001 : # CYCLAMEN ELEGANS** (*C. coum* subsp. *elegans*) Iran, Mazandaran, SE of Sari. 200m. In humus & moss in woodland. (Not an easy plant to grow, seldom setting much seed, it continues to be a rarity in cultivation. This coll. is from much further E than material established from our 1966 coll. It almost certainly merits specific status as *C. elegans* but more field-work in the Caspian forests is needed to establish the alleged clinal variation. Exquisite, large pink flowers without a white 'nose' & with elongated, acute petals above pointed, silver-patterned leaves, more heart-shaped than in western *C. coum*. It must have some protection in the UK & is best grown frost-free, shaded & cool in summer, when it should never be allowed to dry completely. Its peak flowering is in early winter, usually November in the UK, filling a gap in the *Cyclamen* season.)
- 362.009 : CYCLAMEN ELEGANS** (*C. coum* subsp. *elegans*) Iran, Mazandaran, Sari. 120m. Deciduous woodland. (Not an easy plant to grow, seldom setting much seed, it continues to be a rarity in cultivation. It almost certainly merits specific status as *C. elegans* but more field-work in the Caspian forests is needed to establish the alleged clinal variation. Exquisite, large pink flowers without a white 'nose' & with elongated, acute petals above pointed, silver-patterned leaves, more heart-shaped than in western *C. coum*. It must have some protection in the UK & is best grown frost-free, shaded & cool in summer, when it should never be allowed to dry completely. Its peak flowering is in early winter, usually November in the UK, filling a gap in the *Cyclamen* season.)
- 362.019 : CYCLAMEN ELEGANS** (*C. coum* subsp. *elegans*) Azerbaijan, Talysh, 15km. NW of Lerik. (Not quite the same as our colls. from further east on the Caspian coast of Iran but seems a little easier to grow & still has the characteristics of this distinct taxon.) Archibald Archive www.srgc.net
- 362.020 : CYCLAMEN ELEGANS** (*C. coum* subsp. *elegans*) Azerbaijan. No further data. From material derived from Moscow

Botanic Garden as *C. elegans* & originally collected in the former Soviet Azerbaijan. Not quite the same as our colls. from further east on the Caspian coast of Iran but seems a little easier to grow & still has the characteristics of this distinct taxon.)

362.900 : CYCLAMEN FATRENSE See under *C. purpurascens* 367.650

362.910 : CYCLAMEN FATRENSE No data. A localized population of *C. purpurascens* from the former Czechoslovakia. Rather small, leathery, plain green leaves.

363.003 : CYCLAMEN GRAECUM Greece, Lakonia, Agios Nikolaos NW of Githio. 500m. Steep slopes under olives. (From several forms, we selected in the wild in 1984 for the outstanding patterns & shapes of their leaves.)

363.005 : CYCLAMEN GRAECUM Greece, Argolida, near Galatas. Sea-level. Open stony areas. M. Jope coll., 1986.

363.006 : CYCLAMEN GRAECUM Greece, Argolida, Poros, near Askeli. Sea-level. Olive groves. M. Jope coll., 1986.

363.007 : CYCLAMEN GRAECUM

363.008 : CYCLAMEN GRAECUM Greece, Crete, Rhodopos peninsula. M. Jope 95-032 : 31.5.95

363.008 : CYCLAMEN GRAECUM (subsp *graecum*) Greece, Crete, Rodopos peninsula. 95m. Ex Cyclamen Society 94-046. (From a selected, very floriferous clone. Superb leaves with a striking, silver shield-pattern.)

363.009 : CYCLAMEN GRAECUM Greece, Crete, Malaxia. M. Jope 95-040 : 31.5.95

363.010 : CYCLAMEN GRAECUM Greece, Evia, between Aliveri & Amarinthos. 100m. Ex a D.M. Hoskins coll.

363.011 : CYCLAMEN GRAECUM Greece, Evia, above Nea Artaki. 300m. Ex a D.M. Hoskins coll.

363.015 : CYCLAMEN GRAECUM Greece, Lakonia. (From a coll. made in the Mani over 20 years ago by Alan Edwards (Surrey, UK) with whom it has survived outside since then and proved itself to be reliably free-flowering.)

363.016 : CYCLAMEN GRAECUM Greece, Messinia, between Kardamili & Petriovouni. M. Jope 98-07

363.017 : CYCLAMEN GRAECUM Greece, Messinia, SW of Hora. Ex an H. & I. Barton coll. (From two fine clones selected by Ivor Barton in 1980, both with excellent foliage and one with particularly deeply coloured, carmine-pink flowers.)

363.018 : CYCLAMEN GRAECUM Greece, Attiki, Imittos (Hymettus).

363.019 : CYCLAMEN GRAECUM Greece, Arkadia, N of Sparti. Ex an R. & R. Wallis coll. (From a most distinct clone selected by Bob & Rannveig. Flowers with elongated, narrow petals & striking foliage with a silver central zone.)

363.020 : CYCLAMEN GRAECUM Greece, Rhodes. Ex a C.C. Mountfort coll. (Very dwarf form grown by John Blanchard.)

363.021 : CYCLAMEN GRAECUM Greece, Lakonia, near Areopoli. Ex a P. & P. Watt coll. (From an outstanding, exceptionally richly coloured clone, "near carmine", selected by Peter & Penny Watt.)

363.022 : CYCLAMEN GRAECUM Greece, Lakonia, N of Chalkida. c.200m. Ex a D.M. Hoskins coll. (Seeds from an outstanding, exceptionally richly coloured clone, "near carmine", selected in the wild by Dave Hoskins, as the deepest coloured plant among thousands flowering in the Mani peninsula of southernmost Greece.)

363.030 : CYCLAMEN GRAECUM Greece, Rhodes. Ex C.C. Mountfort colls. (Originally derived from some very fine leaf-forms grown by John Blanchard's father. It is suggested that the Rhodes populations should be included under *C. graecum* subsp. *anatolicum* but the feeling among many who know them in the wild is to leave them under *C.g.* subsp. *graecum*.)

363.040 : CYCLAMEN GRAECUM (subsp *graecum*) Greece, Crete, near Kolibari. c.100m. Ex D.M.Hoskins 02-12

363.096 : CYCLAMEN GRAECUM from SILVER LEAF-FORM Greece, Lakonia, near. Areopili. (This and the following were originally selected from the thousands growing in the southern tip of the Mani by Peter & Penny Watt.)

363.097 : CYCLAMEN GRAECUM from SELECTED DARK-FLOWERED FORM Data as above.

363.098 : CYCLAMEN GRAECUM No data. Originally from the garden of John Blanchard's father, grown outside for many years by Dinah Batterham (Dorset, UK). It must be at least 50 years old and is huge, carrying hundreds of flowers, but this is the first time it has ever set seed with Dinah. "Lovely and has very deeply coloured, long petals," she writes.

363.099 : CYCLAMEN GRAECUM No data. From a wide range of this magnificent, autumn-flowering species, variable in colour from carmine-pink to shell-pink, in time of flowering (from August to November in the UK) &, of course, in size, shape & markings of the leaves. Well worth growing for the last quality alone. Safest frost-free, with a warm summer-rest.)

363.100 : CYCLAMEN GRAECUM f. ALBUM Data as for 363.003. (From the pure white form derived from an original plant selected in the wild by E. & R. Franke. A very beautiful and vigorous variant.) Archibald Archive www.srgc.net

363.101 : CYCLAMEN GRAECUM f. ALBUM from SELECTED LEAF-FORM (From David Richards)

363.149 : CYCLAMEN GRAECUM subsp. ANATOLICUM Turkey, Antalya, W of Kemer. 300m. Among *Pinus* on steep, limestone slope. (From a clone with well-marked foliage which, like many of the Turkish forms, is delicately scented.)

363.150 : CYCLAMEN GRAECUM subsp. ANATOLICUM Turkey, Antalya, E of Manavgat to Akseki. 500m. Among limestone rocks in *Pinus* woodland. (From a clone of this recently segregated & seldom grown, SW Turkish race with well-marked foliage. Unlike the type-race, many of these Turkish plants are delicately scented.)

- 363.159 : CYCLAMEN GRAECUM subsp. ANATOLICUM** Turkey, Muğla, near Fethiye. (Quite recently segregated & seldom grown, SW Turkish race with well-marked foliage, silver-patterned in this case and with pale-pink flowers. Unlike the type-race, many of these Turkish plants are delicately scented. Reluctant to set much seed in our experience.)
- 363.160 : CYCLAMEN GRAECUM subsp. ANATOLICUM** No data. From several selections made in SW Turkey by Bob & Rannveig Wallis. Unlike the type-race, most forms of this Turkish race are delicately scented.
- 363.199 : CYCLAMEN GRAECUM subsp. CANDICUM** Greece, Crete. (First listed by us under a *C. graecum* population ref. 363.008 from an M. Jope coll. in what is now the type-locality. Seed is from good dark & silver-leaved forms.)
- 363.200 : CYCLAMEN GRAECUM subsp. CANDICUM** Greece, Crete, Rodopos peninsula, near Astratigos. Olive groves. P.& P. Watt coll. (Recently described Cretan race. Previously listed by us under a *C. graecum* population ref. 363.008 from an M. Jope coll. in this locality.) (This population is not *C.g. candicum* but *C.g. graecum* : see 363.008)
- 364.003 : CYCLAMEN HEDERIFOLIUM** Greece, Evia, W of Karistos. 200m. Scrub on schist. (A distinct, large-leaved, large-flowered race, resembling *C. africanum*. Long, late flowering-season, well into November under glass with us.)
- 364.009 : CYCLAMEN HEDERIFOLIUM** Greece, Lakonia, Oros Taigetos, Profitis Ilias above Paleopanagia. 1500m. Steep, rocky slopes in deciduous woodland. Ex D. Hoskins 95-14.
- 364.010 : CYCLAMEN HEDERIFOLIUM** Greece, Crete, near Agia Sofia. c. 350m. Under trees on steep, rocky slopes. Ex a D.M. Hoskins coll. (The type-race from a very disjunct, isolated locality. A very local plant on Crete.)
- 364.020 : CYCLAMEN HEDERIFOLIUM** Turkey, Mugla, SW of Marmaris. Ex a P.& P. Watt coll. (An interesting & distinct plant with very large leaves and scented flowers, growing here with *Fritillaria sibthorpiana*.)
- 364.049 : CYCLAMEN HEDERIFOLIUM** Greece, Corfu. (Scented form.)
- 364.050 : CYCLAMEN HEDERIFOLIUM** Greece, Crete, Topolia. M. Jope 95-038 : 31.5.95 = 364.200 : *C. hederifolium* var. *confusum*.
- 364.099 : CYCLAMEN HEDERIFOLIUM** No data. From a wide range of cultivated forms of this incomparable, autumn-flowering species, the hardiest & best garden-plant of all, which will establish & sow itself in most of the UK. Pink flowers.
- 364.100 : CYCLAMEN HEDERIFOLIUM f. ALBUM** No data. From white-flowered plants. Variable foliage.
- 364.200 : CYCLAMEN HEDERIFOLIUM var. CONFUSUM** Greece, Crete, Topolia. Between limestone rocks, under *Pinus brutia*, on steep slopes. D.M.Hoskins. (Recently described. We listed seed from the the original discovery under *C. hederifolium*, population ref. 364.050, from the M. Jope 95-038 coll., before it had been seen in flower in 1996. This widespread species is extremely local in Crete and occurs in this very large-leaved, scented, tetraploid race. May not be so hardy as some.)
- 364.510 : CYCLAMEN INTAMINATUM**
- 364.515 : CYCLAMEN INTAMINATUM** No data but selected over decades from the E.K. Balls 628 coll. for its prominently silver-marked foliage. A beautiful leaf-form of this little, hardy species with small, veined, white flowers in early autumn.
- 364.518 : CYCLAMEN INTAMINATUM** No data. From both pale pink and white forms of this tiny, dainty, autumn-flowering species from SW Turkey. Variably marked leaves. Temperature-hardy in the UK but best in a trough.
- 364.519 : CYCLAMEN INTAMINATUM from PALE PINK FORM** No data. Archibald Archive www.srgc.net
- 364.520 : CYCLAMEN INTAMINATUM** No data. Distinct variant with dark, unmarked leaves, like a plain-leaved *C. coum*. Dainty, delicately veined, white flowers in early autumn. Usually a more enthusiastic grower than other forms of this.
- 365.000 : CYCLAMEN LIBANOTICUM** Lebanon, NE of Beirut. (From a collection made, in the 1960's, by Eliot Hodgkin guided by Pere Mouterde, who rediscovered this extremely local species in the wild. Distinct from the long-cultivated form in its elegant, longer-petalled, deeper-pink flowers & in its more distinctly marked leaves, often pink-tinted as they unfold.)
- 365.010 : CYCLAMEN LIBANOTICUM** No data. Most sumptuous of the spring-flowering ones with large, pale-pink flowers, distinctively marked with crimson. We have seen it grown successfully outside in the UK but it is best under glass.
- 365.500 : CYCLAMEN MIRABILE**
- 365.520 : CYCLAMEN MIRABILE** No data. A restricted SW Turkish endemic, mainly from R.& R. Wallis selections. Dark-green, rounded leaves, zoned with silver & often suffused with carmine-pink as they unfold. The autumnal, pink flowers, basally blotched with crimson, have corolla lobes with distinctly toothed margins. Temperature-hardy but needs a dry summer-rest.)
- 365.500 : CYCLAMEN PARVIFLORUM** Turkey, Trabzon, Zigana Dag. 2000m. In alpine turf on open slopes. (From a high altitude population, which grows among the matted roots of *Vaccinium* and *Daphne glomerata*. The only truly alpine *Cyclamen* and usually more difficult to grow than those from the lower altitude woodland just S of Trabzon. Very dwarf with dark, unmarked, thick-textured leaves close to the ground and squat flowers of pale purplish-pink with dark 'noses' on short stems in spring.)
- 365.505 : CYCLAMEN PARVIFLORUM** Turkey, Trabzon, Sumela.
- 366.500 : CYCLAMEN PERSICUM** Lebanon, S of Tripolis. (From material we collected in the 1960's in the Lebanese hills, where it fills the dry-stone walls of abandoned terraces with a profusion of white & pale pink, crimson-nosed flowers.)

- 366.509 : CYCLAMEN PERSICUM** Turkey, Izmir, E of Cesme. Ex a M. Koenen coll.
- 366.510 : CYCLAMEN PERSICUM** Greece, Rhodes. Ex an E. Sewell coll. (From an excellent form, dwarfer & altogether more compact than usual. This flowers profusely and always excites attention when exhibited.)
- 366.511 : CYCLAMEN PERSICUM** Greece, Rhodes, Filerimos, SW of Rodos.
- 366.512 : CYCLAMEN PERSICUM** Cyprus, Paphos.
- 366.520 : CYCLAMEN PERSICUM** Israel, Mt. Meron. (The so-called "hardy *C. persicum*", which has survived for many years outside in Peter Moore's Kent garden Seeds from a Cyclamen Society coll. (90-560) from an interesting southern locality. We have not tested its reputed hardiness.)
- 366.549 : CYCLAMEN PERSICUM** No data. From R. & R. Wallis selections mainly made in W Syria.
- 366.550 : CYCLAMEN PERSICUM** No data. From a range of wild-forms of this parent of the over-bred, florists' strains. Elegant flowers, mostly in crimson-nosed, palest pinks, in spring, & foliage which rivals *C. graecum*. Best frost-free in UK.
- 366.551 :# CYCLAMEN PERSICUM f. PUNICEUM** No data. From an exceptional crimson-pink form, grown by John Blanchard's father under the barely decipherable label 'Karpat'. It has been further selected by Peter Moore as 'Tilebarn Karpathos', though there was no other indication that the original came from that island. A lovely, deep, dusky colour.)
- 366.552 :# CYCLAMEN PERSICUM f. PUNICEUM** No data. From a corm collected by Bertie Blount, almost certainly in Syria. Not quite the same shade as the preceding but a rich rose-pink. Scented & with beautifully marked leaves.
- 366.560 : CYCLAMEN PERSICUM** - pure white. Israel.
- 366.561 : CYCLAMEN PERSICUM f. ALBUM** Greece, Rhodes. (Pure white without a pink 'nose')
- 366.810 : CYCLAMEN PONTICUM** (*C. purpurascens* subsp. *ponticum*, *C. colchicum*) No data. This is an isolated population allied to the European *C. purpurascens* from a small area of the breakaway autonomous region of Ap'khazet'i (Abkhazia) in NW Georgia, where it grows in woodland over limestone. Distinct in its leaves, margined with leathery teeth and stiffer, rosy flowers, which appear intermittently from mid summer through to the next spring with us.
- 367.005 : CYCLAMEN PSEUDIBERICUM** Turkey, Kahramanmaraş, Armut Dagi above Tekir. 1500m. Among deciduous oaks on N-facing slope. (Our cultivated seed from a colony we found in 1985 - it represents a considerable northern extension of the distribution, well into the Anti-Taurus & at the altitudinal limit recorded for the species. Its richly coloured flowers more closely resemble the old, long-mysterious 'Van Tubergen stock' than the Amanus populations. Well-marked, glossy foliage.)
- 367.006 : CYCLAMEN PSEUDIBERICUM** Turkey, Gaziantep, Nur Daglari, above Fevzipasa. 1150m. In shade of *Quercus* scrub. Ex JJA 17744A.
- 367.010 : CYCLAMEN PSEUDIBERICUM** No data. Among spring-flowering ones, this S Turkish endemic rivals the related *C. libanoticum* in its magnificent rich crimson-purple flowers. Possible outside & splendid in an unheated greenhouse
- 367.012 : CYCLAMEN PSEUDIBERICUM from SELECTED DARK FORM**
- 367.015 :# CYCLAMEN PSEUDIBERICUM f. ROSEUM** Turkey, Adana, near Dörtöl. Ex ACW 664. (From pale pink forms, originally selected out of the Albury, Cheese & Watson coll. of this very variable Amanus population by Jack Boggis in the late 1960's. Distinct from most cultivated forms, not only in the colour but in their elegant, more elongated petals.)
- 367.500 : CYCLAMEN PURPURASCENS** Italy, Friuli-Venezia-Giulia, N of Trieste. 100m. Among scrub. (Deep carmine-pink flowers in late summer & autumn. This low-altitude coll. enjoys warmer drier treatment than the Alpine ones.)
- 367.510 : CYCLAMEN PURPURASCENS** Austria, near Vienna. (Alan Edward's form "from the Vienna woods")
- 367.550 : CYCLAMEN PURPURASCENS** No data. Deep carmine-pink flowers in late summer & autumn.
- 367.599 : CYCLAMEN PURPURASCENS from SILVER-LEAVED FORMS** Italy, Lombardia, W of Lago di Garda. Ex an M. Koenen coll. (Rounded leaves suffused all over with a silver sheen. The original plants were variable selections made in the wild by Manfred Koenen & given to us in the 1970's. It has subsequently been labelled 'Limone form', 'Garda form', etc., though they did not grow in close proximity to either the towns or the lake. Slow-growing & best well-shaded.)
- 367.599 : CYCLAMEN PURPURASCENS from SILVER-LEAVED FORMS** Italy, near Lake Garda. Ex an M. Koenen coll.
- 367.600 : CYCLAMEN PURPURASCENS f. ALBUM** From the white-flowered form, derived from a clone selected in the wild in the former Yugoslavia by Robin White. It remains a rare variant in cultivation. Archibald Archive www.srgc.net
- 367.650 : CYCLAMEN PURPURASCENS** No data. From the race originally described from Czechoslovakia as *C. fatrense*. As we have this in cultivation, it is relatively distinct in its thick-textured, plain green foliage. Large purple-pink flowers but not easy to flower well nor to keep in good condition in the UK. It may be happier in more continental climates.
- 367.660 : CYCLAMEN PURPURASCENS subsp. PONTICUM**
- 367.900 : CYCLAMEN REPANDUM** (subsp. *repandum*) France, Corsica, N of Bastia. 100m. *Castanea* woodland. (From plants selected in the wild in 1962, as being outstanding in the richness of their colour, and which gained an FCC for this species, when exhibited by us many years ago.)
- 367.908 : CYCLAMEN REPANDUM** (subsp. *repandum*) France, Corsica, near Belogodere. c.350m. Under *Arbutus* in soil

pockets over slate. Ex D.M.Hoskins colls. (From selections made for the depth and intensity of flower colour. Not always the easiest of species to grow, though it can be seen naturalized in quantity in some mild, UK gardens. Variably patterned, ivy shaped leaves and elegant flowers of luminous carmine-pink in spring. Like cool, shaded conditions in summer.)

- 367.909 : CYCLAMEN REPANDUM** (subsp. *repandum*) Italy, Sardinia, Monte Limbara. (Carmine-pink type-race.)
- 367.970 : CYCLAMEN REPANDUM** (subsp. *repandum*) No data. From well-established British garden-stock of this elegant species with variably patterned, ivy shaped leaves and carmine-pink flowers in spring. Not always the easiest of species to grow in the UK, though it can be seen naturalized in quantity, especially in some mild coastal gardens.
- 367.971 : CYCLAMEN REPANDUM from 'SPINNERS' FORM** (subsp. *repandum*) No data. From the population well-established in the Hampshire garden of Peter Chappell. Reputedly particularly robust & vigorous. An elegant species with variably patterned, ivy shaped leaves and carmine-pink flowers in spring. Not always the easiest of species to grow in the UK, though it can be seen naturalized in quantity, especially in some mild coastal gardens.
- 367.980 : CYCLAMEN REPANDUM** (subsp. *repandum*) No data. From R.& R.Wallis stock, now extremely variable, having absorbed many geographical races. Pale to deep pink with a wide range of foliage variation. One for the garden.
- 367.990 : CYCLAMEN REPANDUM from WHITE FORMS** The cultivated white forms of the type race of *C. repandum* mainly originated from Corsican plants. Flowers are pure white without a pink nose and resemble those of *C. creticum* except for the exerted style. Seldom sets much seed but usually produces a good number of white-flowered seedlings.
- 368.000 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** Greece, Lakonia, Oros Taigetos, between Tripi & Langadas. 1000m. Leafsoil under *Platanus*. Ex D.M. Hoskins 93-17
- 368.002 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** Greece, Lakonia, Parori near Sparti. 250m. Beneath *Quercus* and *Buxus*, in humus. (From collections made by Ken Aslet, Peter & Penny Watt and ourselves in the Parori gorge, where the population often has fine white-stippled foliage and flowers in luminous neon-pink.)
- 368.003 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** Greece, Lakonia, Oros Taigetos, above Paleopanagia. 1400m. In humus under *Platanus*, *Abies* & *Pinus*. Ex JJA 5157 (From a clone with foliage, speckled all over with white, but this population, from a much higher altitude than that usually recorded for this subspecies, has extremely variable leaf-markings, many like the type-race. Flowers, however, are consistently the pale-pink with red noses to be expected in most Peloponnese *C. repandum*.)
- 368.004 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** Greece, Ahaia, Oro Aroania, Helmos, above Zarouhla. 1300-1500m. Among *Abies* & *Pinus* scrub at tree-line in NE-facing gully.
- 368.009 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** Greece, Lakonia, Oros Taigetos, Profitis Ilias. 2000m. Under rocks on open hillside. Ex D. Hoskins 98-23. (From a very high altitude coll. made well above the tree-line.)
- 368.010 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** Greece, Lakonia, S of Kardamili. 30m. At base of cliff with *Scilla* & *Lithodora*. Ex D. Hoskins 93-8. ("Superb leaf-form").
- 368.011 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** Greece, Lakonia, near Sparti. Ex B. Mathew 5053 .(10+)
- 368.050 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** Greece. No data. From a number of fine selections made by Peter & Penny Watt and others in the Peloponnese. Striking foliage, evenly speckled all over with white. Pale-pink, red-nosed flowers in spring.)
- 368.051 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM f. ALBIFLORUM** Pure white.
- 368.100 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM f. VIVIDUM** Greece, Lakonia/Arkadia, Oros Parnonas. c.500m. Ex a P.& P. Watt coll. (A poorly defined population localized in hills of the Parnon area of the central Peloponnese. It can be a rich, glowing crimson in colour but is extremely variable in foliage & flower-shape. Peter and Penny Watt tell us that the deepest-coloured forms only occur in open, terra rossa situations. In shady gulleys, paler shades predominate, so expect some variation. Superlative and absolutely striking at its best.) Archibald Archive www.srgc.net
- 368.200 : CYCLAMEN REPANDUM subsp. RHODENSE** No data. A distinct enough island-race, endemic to Rhodes. Leaves irregularly splashed with greyish white & white (or very pale pink) flowers with pink 'noses'. Not a vigorous plant.
- 368.201 : CYCLAMEN REPANDUM subsp. RHODENSE** Greece, Rhodes. Ex an E. Sewell coll. (A distinct enough island-race, endemic to Rhodes. Leaves irregularly splashed with greyish white & white (or very pale pink) flowers with pink 'noses'. Not a vigorous plant.
- 369.000 : CYCLAMEN ROHLFSIANUM** Libya, Cyrenaica, Benghazi to Jebel Akhdar. 200m. Among scrub in limestone pockets. (Pale to deep pink flowers with projecting cones of anthers in autumn. Beautiful rounded leaves. Must be frost-free.)
- 369.500 : CYCLAMEN TROCHOPTERANTHUM** Turkey, Mugla, Eren Dag (ENE of Fethiye). 1300m. Ex P. Davis 25579.
- 369.501 : CYCLAMEN TROCHOPTERANTHUM** Turkey, Mugla, Baba Dag (SE of Fethiye). 850-1100m. In humus beside limestone boulders, under *Pinus* and *Cedrus*.
- 369.502 : CYCLAMEN TROCHOPTERANTHUM** Turkey, Antalya, Sinekibeli Gecidi (Kas to Elmalı). 1600m. In shade of *Cedrus* over limestone.
- 369.519 : CYCLAMEN TROCHOPTERANTHUM from 'TILEBARN' SELECTIONS** Turkey.

- 369.520 : CYCLAMEN TROCHOPTERANTHUM from PALE PINK FORMS** Turkey. Ex an R. & R. Wallis coll.
- 369.521 : CYCLAMEN TROCHOPTERANTHUM from WHITE FORMS** Selections from R. & R. Wallis colls. of this spring-flowering SW Turkish endemic. Closest to *C. coum* but with foliage more like *C. cilicium* & with wide, honey-scented flowers with distinctively twisted lobes, maroon at the bases. From crimson-nosed whites but expect some pale pinks, as well.
- 372.010 : CYNARA CARDUNCULUS** One of the most striking and statuesque perennials growable in UK gardens. Great upright clumps of deeply slashed, grey foliage ; stout, branching, stems rise to 2m. or more, carrying big, royal-blue thistle-flowers opening from broad, spiny bracts. A Mediterranean species, which seldom sets much good seed in the UK : this is from Tim Ingram in Kent, where the summers are hotter than with us in Wales. Grow it in full sun in a good, deep, well-drained soil.
- 372.100 : CYNARA HYSTRIX** Morocco, Middle Atlas Mts., above Ifrane. 1700m. Open, stony areas on limestone. (Maintained from seed we collected in 1962, this remains little-known in cultivation as it so seldom sets enough seed for propagation. Desired by almost all who see it, this is one of the most striking of thistle-like plants with 50cm. stems of large heads of royal-blue flowers, surrounded by lilac-pink phyllaries, elongated into stiff, curved spines. In nature, the deeply cut foliage vanishes before it flowers in summer. No trouble & seems to live forever (without increasing much vegetatively) in a really hot, sunny, dry site.)
- 375.210 : CYTISUS BATTANDIERI** No data. A remarkable paragon in this genus, quite narrowly endemic to the Middle Atlas Mts. of Morocco at about 1800m., so perfectly temperature-hardy in the UK but it does need sun & good drainage. We have seen it forming neat, erect shrubs about 4m. high among the sparse cedars on the volcanic plug of the Djebel Hebri but it is usually of looser growth in the wetter UK, where it is often grown against a wall. Silky, silver-sheened trifoliate leaves & young shoots with long, upright cylindrical racemes packed with pineapple-scented yellow flowers in early summer.
- 380.420 : DAPHNE ALPINA** No data. Neat, dwarf, deciduous shrub with fragrant, white flowers in summer.
- 380.421 : DAPHNE ALPINA from DWARF FORM** From a clone originally sent to Ron Beeston from Czechoslovakia.
- 382.201 : DAPHNE GLOMERATA** Turkey, Trabzon, Zigana Da_ above Hamsiköy. 2020m. In alpine turf on open slopes (Considered by Brickell & Mathew to be “one of the finest species within the genus...an evergreen but slightly more compact *D. blagayana* (but even more beautiful...!)” Sadly one of the most difficult to grow though Eliot Hodgkin (Surrey, UK) successfully germinated & grew on seed we collected on the So_anli in 1966. We have not collected enough seed to list since then. A suckering shrub about 20cm. tall with, glossy green, leathery foliage & large, terminal heads of fragrant, creamy flowers followed (occasionally & irregularly) by fleshy, red fruits. Give it the same treatment as a dwarf *Rhododendron*.)
- 382.400 : DAPHNE GNIDIODES** Turkey, Antalya, N of Akseki. 1500m. Exposed limestone slopes. (Cream . 30cm.)
- 383.205 : DAPHNE KOSANINII** No data. Seeds from German-grown stock of this somewhat obscure native of the mountains bordering Greece & SW Bulgaria. Thought to be derived from *D. oleoides* and *D. cneorum*.
- 383.450 : DAPHNE LAUREOLA** No data. Dark, leathery evergreen leaves. Fragrant, yellow-green flowers in winter.
- 384.020 : DAPHNE MEZEREUM** No data. Glorious shrub. Purple-pink flowers wreath the naked branches in spring.
- 384.050 : DAPHNE MEZEREUM f. ALBA** No data. White flowers followed by yellow fruits. Comes 'true' from seed.
- 384.051 : DAPHNE MEZEREUM f. ALBA from 'BOWLES VARIETY'** Distinct, taller, erect growing variant..
- 384.055 : DAPHNE MEZEREUM "ALPINA"** No data. A dwarf form of this glorious shrub whose purple-pink flowers wreath the naked branches in spring. The horticultural name covers dwarf ecotypes which usually come 'true' from seed.
- 384.449 : DAPHNE OLEOIDES** (subsp. *oleoides*) Greece. No further data. Dwarf, grey-leaved evergreen shrubs with creamy flowers in spring, followed by bright orange-red fruits. Archibald Archive www.srgc.net
- 384.450 : DAPHNE OLEOIDES** (subsp. *oleoides*) No data. Dwarf, grey-leaved evergreen. Creamy flowers in spring.
- 385.050 : DAPHNE PONTICA** No data. An evergreen shrub, 1m. or more tall from the lands around the Black Sea. Lustrous, rich-green foliage and beautifully scented, spidery, yellow-green flowers in spring. Excellent in shade.
- 385.402 : DAPHNE SERICEA** Turkey, Gaziantep, Nur Da_lari above Fevzipaşa. 1100m. In shaly clay on open E and S-facing slopes. (A beautiful, 1m. high shrub. Greyish, evergreen leaves. Rosy pink, scented flowers & orange-red fruits.)
- 385.450 : DAPHNE SERICEA** No data. Grey-green leaves. Rosy pink, scented flowers & orange-red fruits.

DELPHINIUM KURDICUM

- 392.299 : DELPHINIUM SEMIBARBATUM** (*D. zalil*) Uzbekistan, Baisun-tau, Pulkhakim. 800m. Ex a J. Ruksans coll. (A tuberous-rooted perennial, distributed both in steppe & seasonally moist habitats from Afghanistan up across Central Asia into the Tien Shan. Absolutely temperature-hardy, this does well as a border-plant in Colorado but resents both summer & winter wetness in the milder UK, where it is best in the bulb-frame. About 70cm. high with leaves cut into thready divisions & branching stems carrying a succession of beautiful, spurred, soft-yellow flowers.)
- 392.300 : ##DELPHINIUM SEMIBARBATUM** (*D. zalil*) Uzbekistan, Aktau, S of Langar. 800m. In steppe-vegetation on open slopes. (A tuberous-rooted perennial, distributed both in steppe & seasonally moist habitats from Afghanistan up across Central Asia into the Tien Shan. Absolutely temperature-hardy, this does well as a border-plant in Colorado but resents both summer & winter wetness in the milder UK, where it is best in the bulb-frame. [#This dwarf steppe-form was only about 30cm. high](#) with leaves cut into thready divisions & branching stems carrying a succession of beautiful, spurred, soft-yellow flowers.)

- 392.310 : DELPHINIUM SEMIBARBATUM** (*D. zalil*) Uzbekistan, Baisun-tau, Pulkhakim. Ex a J. Ruksans coll. (A tuberous-rooted perennial, distributed in steppe from Afghanistan up across Central Asia into the Tien Shan foothills. Absolutely temperature-hardy, this does well as a border-plant in Colorado but resents both summer & winter wetness in the milder UK, where it is best in the bulb-frame. Stems of about 1m. high with leaves cut into thready divisions & branching spires of many beautiful, spurred, soft-yellow flowers in summer.)
- 392.509 : DELPHINIUM SPECIOSUM** (*D. caucasicum*) Russia, Caucasus, Elbrus.
- 392.550 : DELPHINIUM STAPHISAGRIA** Greece, Crete, Anapoli. 750m. Open scrub. M. Jope coll., 17.10.96 (A fine, sturdy biennial from the Mediterranean limestones. Seldom seen in gardens &, even if listed, we are told often turns out to be the wrong thing. Sow the large seeds in a hot site. Up to 1 m. high with pubescent, palmate leaves & dusky, deep-blue flowers.).
- 401.050 : DIANTHUS MYRTINERVIUS subsp. CAESPITOSUS** Greece, Pela, Kajmakcalan, Voras. 2000m. ZE & S 51664. (A superlative, very dwarf, tight, cushion-forming species endemic to the summit area of isolated Kajmakcalan, right on the border of Greece & Macedonia. First described in 1977 as *D. kajmaktzalanicus* and reduced to a subsp. of *D. myrtinervius* by Strid the following year. Jim visited it, with Robert Rolfe & Norman Stevens, in June, 1996, when it was in full flower : none of us had seen a more breathtaking alpine *Dianthus*. "Fantastic" is the comment of Hendrik Zetterlund, the collector. It grows on exposed ridges of micaceous schist overlaid with gravelly limestone, forming firm pads if tiny, stiff leaves, smothered with stemless flowers, usually in a deeper shade of pink than the type-race. Certainly one of Europe's great alpinists and virtually untried in cultivation : even if only a tenth as easy to grow as the accommodating type-race of *D. myrtinervius*, it will have a great future.)
- 403.400 : DIANTHUS SERRATIFOLIUS** Greece, Messinia, S of Pilos. Ex an A. Edwards coll. (This endemic of S Greece has proved a great success in Alan Edwards Surrey garden, flowering all summer into autumn. Its trailing, woody stems carry a succession of pink flowers with deeply toothed petals. Full sun and good drainage - not for cold, wet gardens.)
- 407.001 : DIGITALIS CARIENSIS** Turkey, Antalya, N of Akseki. 1300-1500m. Exposed limestone slopes. 2.7.84
- 407.210 : DIGITALIS DAVISIANA** A slender, SW Turkish, rhizomatous perennial, about 50cm. high, distributed from Mugla to Antalya, in limestone screes of the coniferous forest zone, between 600 & 1600m. Related to *D. grandiflora*, with pale yellow, orange-veined foxgloves. From a N. Stevens coll.
- 407.300 : DIGITALIS DUBIA** Spain, Mallorca. Ex a P. & P. Watt coll. (A choice, dwarf species, endemic to the limestones of the Balearic Islands. Neat, flat rosettes of narrow, downy, grey-green leaves send up many erect, 30cm. stems with spaced, down-turned foxgloves in pale sugar-pink with speckled white palates. Small & dainty enough for the shaded alpine-house.)
- 407.401 : DIGITALIS FERRUGINEA** (subsp. *ferruginea*) Greece, Trikala, above Panagia to Katara. 1500m. Margins of *Pinus* woodland. (Long, dense racemes of yellowish, orange-brown-netted flowers with projecting lips, on 1.5m. stems.)
- 407.402 : DIGITALIS FERRUGINEA** (subsp. *ferruginea*) Turkey, Bolu, near Abant Golu. 1000m. Woodland margins.
- 407.403 : DIGITALIS FERRUGINEA** (subsp. *ferruginea*) Turkey, Denizli, Kizilcaboluk. 1100m. (A stout perennial or biennial with long, dense racemes of yellowish, orange-brown-netted flowers with projecting lips, on 1.5m. stems.)
- 407.601 : DIGITALIS FERRUGINEA subsp. SCHISKINII** Turkey, Artvin, Genya Da_ above Artvin. 1700m. Open banks in *Picea* woodland. (The eastern race. Rather dwarfer with yellower flowers in this locality.)
- 407.804 : DIGITALIS GRANDIFLORA** France, Alpes-Maritimes, Vallon de Valmasque. 1700m. Among scrub.
- 407.806 : DIGITALIS GRANDIFLORA** Bosnia & Hercegovina, Bjelasnica Planina above Hadzici. 1500m. Clearings in *Picea* woodland.
- 408.000 : DIGITALIS LAEVIGATA** (subsp. *laevigata*)
- 408.009 : DIGITALIS LAEVIGATA** (subsp. *laevigata*) Croatia, Krk. Archibald Archive www.srgc.net
- 408.100 : DIGITALIS LAEVIGATA subsp. GRAECA**
- 408.300 : DIGITALIS LAMARCKII** Turkey, Gumushane, Vauk Dagı, Guvercinlik. 1800m. Open, stony slopes. (An outstanding perennial endemic to NE Turkey & perfectly distinct from *D. lanata* in this area. Clumps of narrow, dark-green leaves & 50cm. stems of large, soft-brown, baggy flowers with huge, prominent, white lips. Long-lived in a well-drained site in full sun.)
- 408.500 : DIGITALIS LANATA** Greece, Kavala, Pangeo. 1000m. Open areas in deciduous woodland.
- 408.505 : DIGITALIS LANATA** Bulgaria, Pirin Planina, near Bansko. Ex an A. Edwards coll. (A 1m. high Balkan perennial in Sect. *Globiflorae*, like the preceding two. Densely packed racemes of creamy, brown-veined flowers with white lips.)
- 408.700 : DIGITALIS LEUCOPHAEA** (subsp. *leucophaea*) Close to *D. lanata*.
- 408.800 : DIGITALIS LEUCOPHAEA subsp. IKARICA** (Endemic to Ikaria)
- 409.002 : DIGITALIS LUTEA** France, Alpes-Maritimes, Col de la Couillole. 1600m. Open limestone slopes.
- 409.050 : DIGITALIS LUTEA subsp. AUSTRALIS** (Endemic to S Italy & Corsica.)
- 409.200 : DIGITALIS MACEDONICA** (Only recorded from Smolikas, this is a somewhat mysterious plant, closest to *D. laevigata* but sharing some characteristics of *D. lutea* & *D. viridiflora*, one of which may be involved in its ancestry)
- 409.310 : DIGITALIS MARIANA** No data. A beautiful relative of *D. purpurea* (and included under it in 'Flora Europaea' as *D.p.*

- subsp. *mariana*) endemic to igneous rock-fissures in the Sierra Morena of central Spain & adjacent E Portugal. The broader leaves are clad in soft, silky, white wool, contrasting with the purple foxgloves.
- 409.402 : DIGITALIS OBSCURA** Spain, Soria, Puerto del Pinar. 1100m. Among limestone debris on open slopes. (A shrubby perennial with narrow, shiny foliage & amber foxgloves, yellow marked with rust-red inside. This population was only 20-30cm. high in the wild but is somewhat taller in cultivation. A most distinct Spanish endemic for a dry, sunny situation.)
- 409.610 : DIGITALIS PARVIFLORA** No data. A leafy, 60cm. perennial from the mountains of N Spain. In the Sect. *Tubiflorae*, like *D. lutea* & *D. viridiflora*, with long, dense, woolly racemes of tubular, red-brown, purple-veined flowers.
- 409.799 : DIGITALIS PURPUREA** (subsp. *purpurea*) UK, Wales, Ceredigion, below Ffostrasol. (100+)
- 409.800 : DIGITALIS PURPUREA** (subsp. *purpurea*) Spain, Granada, Sierra Nevada. 2500m. Gulleys & at base of E-facing cliffs.
- 409.850 : DIGITALIS PURPUREA subsp. MARIANA** No data. A beautiful race of *D. purpurea* endemic to igneous rock-fissures in the Sierra Morena of central Spain & adjacent E Portugal. The broader leaves are clad in white wool, contrasting with the purple foxgloves.
- 409.880 : DIGITALIS PURPUREA subsp. HEYWOODII** A most distinct local race, surely deserving of specific status. Endemic to the granites around Reguengos de Monsaraz in S Portugal, the whole plant is densely covered in white wool and the hairy flowers are white, only occasionally tinged with pink or pale yellow.
- 410.000 :# DIGITALIS THAPSI** Spain, Avila, Sierra de Gredos, Puerto del Pico. 1300m. Granite fissures & in loose, granite grit on steep slopes. (Another Iberian endemic, quite close to *D. purpurea* but a good perennial in a sunny, well-drained place or lime-free scree-bed. Leaves & stems all covered in yellowish indumentum & with many, large, downy, sugar-pink flowers.)
- 410.200 : DIGITALIS TROJANA** Related to *D. lanata* & *D. lamarckii* & distributed on the limestone around Kaz Dag in NW Turkey in Canakkale & Balikesir.
- 410.400 : DIGITALIS VIRIDIFLORA** Macedonia, Baba Planina, Pelister, towards Kula Vrv. 1500m. Dryish, grassy slopes.
- 411.000 : DIONYSIA ARCHIBALDII**
- 411.020 : DIONYSIA ARETIOIDES** No data. One of the most easily grown of this genus of saxatile cushion plants, closely related to *Primula*, but still needs some care under glass, in the hands of the experienced alpine-house grower. Endemic to shaded, limestone cliffs on the N-facing slopes of the Elburz range along the Caspian coast of northern Iran. Rounded cushions of soft, downy pale-green rosettes covered with long-tubed, yellow, primula-flowers. Seeds of this species are very fine and almost impossible to collect 'clean'. Sow the detritus thinly on top of a thin grit layer and let it wash down between.)
- 411.060 : DIONYSIA BORNMUELLERI**
- 412.180 : DIONYSIA INVOLUCRATA** Tadzikistan, Pamir-Alai, Khandar river gorge. 1000m. & over. Ex J. Halda colls. (This & *D. aretioides* have proved the most amenable of an intractable genus. Still a plant only for the experienced alpine-house grower. Cushions of sticky-leaved rosettes with umbels of sugar-pink flowers. A little hand-pollinated seed from Jim Almond)
- 412.190 : DIONYSIA INVOLUCRATA from WHITE FORM** From the excellent white-flowered form which occurred among a batch of seedlings at Goteborg Botanic Garden.
- 412.400 : DIONYSIA TEUCRIOIDES**
- 414.005 : DIPCADI SEROTINUM** Spain, near Bornos. Ex an R.& R. Wallis coll. (A strange bulb of sombre attraction, locally distributed in dry, rocky sites in SW Europe & NW Africa. In early summer, stems, about 30cm high, carry one-sided racemes of pendant greenish bells flushed with peach and brown shades. Seldom seen but not difficult in the bulb-frame.)
- 414.006 : DIPCADI SEROTINUM** Spain, Jaen, Navo de San Pedro. Ex an R.& R. Wallis coll.
- 414.007 : DIPCADI SEROTINUM** Morocco, High Atlas range, N of Asni. Crevices in large limestone boulders. 1150m. Ex an R.& R. Wallis coll.
- 415.000 : DORONICUM : 1000 NUMBERS** (24 SPP. : 8 ENDEMICS IN TURKEY)
- 415.000 : DORONICUM AUSTRIACUM** (C & S Europe, S to NW Spain & N Greece ; Turkey B1 : Kaz Dag)
- 415.040 : DORONICUM BALANSAE** (Turkey A7, A8, A9 : Trabzon, Coruh, Kars)
- 415.070 : DORONICUM BITHYNICUM** (NW Anatolia : 2 subspp.)
- 415.100 : DORONICUM CACALIIFOLIUM** (Turkey C3, C4 : Lycian Taurus, Ak Dag, Akseki, etc.)
- 415.130 : DORONICUM CARPETANUM** (N Spain & Portugal)
- 415.170 : DORONICUM CLUSII** (Alps, Pyrenees, Cord. Cantabrica & Carpathians.)
- 415.220 : DORONICUM COLUMNAE** (E Alps, Appenines, Romania, Balkans) Archibald Archive www.srgc.net
- 415.250 : DORONICUM aff. COLUMNAE** Greece, Pela, Kaimakcalan, NW of Edessa. 1800m. (In 1996, we collected material from two eye-catching clones of a fine yellow daisy from a variable population in a wooded gully on this Macedonian border mountain. These do not match either winter-dormant *D. columnae* or, the other possibility, allied, summer-dormant *D. orientale*, precisely & may be fertile hybrids or intergrades. Neat small, bright-green, basal leaves, partially dying away in summer, with

stems of about 50cm. carrying big, many-rayed, bright yellow daisy-heads, up to 7cm. across, in early spring.)

415.300 : DORONICUM CORSICUM (Corsica - by mountain streams.)

415.320 : DORONICUM DOLICHOTRICHUM (Turkey A9 ; Transcaucasia)

415.350 : DORONICUM GLACIALE (subsp. *glaciale*) (E Alps) Austria, Salzburg, Hohe Tauern, Hochtor. 2600m. Stable areas of mica-schist detritus on open, N-facing slopes.

415.380 : DORONICUM GLACIALE subsp. CALCAREUM (NE Alps)

415.400 : DORONICUM GRANDIFLORUM (Alps, S to N Spain, Corsica & Albania)

415.450 : DORONICUM HAKKIARICUM (Turkey C9 : Hakkari. 2900m. ; Nakhichevan)

415.460 : DORONICUM HAUSSKNECHTII (Turkey B6 : Goksun, 2200m., streamsides)

415.480 : DORONICUM HUNGARICUM (EC Europe to Balkans)

415.530 : DORONICUM MACROLEPIS (Turkey A7 : poss. Soganli, Zigana, etc.)

415.550 : DORONICUM MACROPHYLLUM (Turkey A9 : Coruh, Kutul ; Caucasia)

415.580 : DORONICUM MAXIMUM (NE & E Turkey, NW Iran : most widespread sp. in E Turkey ; type : Palandoken Dag, streamsides)

415.630 : DORONICUM OBLONGIFOLIUM (Turkey A9 : Yalnizcan Dag, 10km. ESE of Savsat ; Caucasia, Pamir-Alai, Tien-Shan.)

415.650 : DORONICUM ORIENTALE (*D. caucasicum*) (SE Europe, W Turkey, Lebanon, Caucasus)

415.710 : DORONICUM PARDALIANCHES No data. A stoloniferous W Europe species, extending to SE Germany & Italy. Branching stems rise over shaggy basal leaves to carry bright yellow daisies over quite a long period in spring.

415.750 : DORONICUM PLANTAGINEUM (W Europe N to N France)

415.800 : DORONICUM RETICULATUM (Turkey B2, B3 : Boz Dag 1700m. & Sultan Dag 2000m.)

415.850 : DORONICUM TOBEYI (Turkey A7 : Giresun, Karagol. 2600m. Stream.)

418.500 : DRABA ACAULIS Turkey, Nigde, Ala Daglari, E of Camardi. 3500-3700m. Dolomitic limestone crevices.

419.000 : DRABA ARARATICA

419.250 : DRABA BRUNIIFOLIA Turkey, Gumushane, Kop Daglari. 2500m. Alpine steppe on open, stony slopes.

419.500 : DRABA CAPPADOCICA Turkey, Kayseri, Erciyes Dag, above Kayseri. 1500m. Fissures on NW-facing igneous cliffs.

420.000 : DRABA HEDERIFOLIA (subsp. *hederifolia*)

420.050 : DRABA HEDERIFOLIA subsp. COSSONIANA

420.250 : DRABA HISPANICA var. SEGURENSIS Spain, Sierra de Cazorla, Prado Redondo above Cazorla. 1500m. N-facing limestone crevices on summit rocks.

420.400 : DRABA LONGISILIQUA

420.500 : DRABA LUTESCENS

420.705 : DRABA MOLLISSIMA No data. Archibald Archive www.srgc.net

421.000 : DRABA OREADUM

421.250 : DRABA PARNASSICA

421.500 : DRABA POLYTRICHA Turkey, Rize, Ovut Dag. 3000m. & above. Rock crevices of various aspects.

421.501 : DRABA POLYTRICHA Turkey, Trabzon, Soganli Daglari above Caykara. 2300m. Rock-crevices on outcrops among N-facing meadows.

422.000 : DRABA ROSULARIS Turkey, Van, Ispiriz Daglari, NNW of Baskale. 2700m. Crevices on gneiss outcrops.

424.080 : DRACUNCULUS CANARIENSIS Ex Erich Pasche.

424.120 : DRACUNCULUS VULGARIS No data. When we were collecting in the E Mediterranean area in the 1980's, we listed this regularly but we have not had wild seed for some years. This is UK seed of this spectacular aroid, up to 1m. high, with pedately divided foliage & huge, fleshy, brown-purple spathes on maroon-spotted stems. Arresting in a hot, dry site in the UK.

424.125 : DRACUNCULUS VULGARIS (var. *creticus*) Greece, Crete, Omalos. M. Jope 97-61 : 15.10.97 (A wild collection from the Cretan form, which usually has the large divided leaves spectacularly marked with oblique silver slashes.)

424.126 : DRACUNCULUS VULGARIS (var. *creticus*) Greece, Crete, S of Hania, Therisso. M. Jope 98-14. (A wild collection from the Cretan form of this spectacular aroid, up to 1m. high, with pedately divided foliage & huge, fleshy, brown-purple spathes on maroon-spotted stems. This island race usually has the large divided leaves spectacularly marked with oblique silver slashes. Usually possible in the open garden in the S of the UK & arresting in a hot, dry site but safest in a bulb-frame in colder areas.)

- 424.127 : DRACUNCULUS VULGARIS** (var. *creticus*) Greece, Crete, W of Rodopos, Nopigia. M. Jope 2027. (A wild collection from the Cretan form of this spectacular aroid, up to 1m. high, with pedately divided foliage & huge, fleshy, brown-purple spathes on maroon-spotted stems. This island race usually has the large divided leaves spectacularly marked with oblique silver slashes. Usually possible in the open garden in the S of the UK & arresting in a hot, dry site but safest in a bulb-frame in colder areas.)
- 428.250 : EBENUS CRETICA** Greece, Crete, N of Moni. 125m. M. Jope 97-69 : 17.10.97 (One of the most outstanding of the chasmophytes endemic to the limestone cliffs & gorges of Crete. Also, in our experience, one of the most growable in this splendid, little genus in the pea family, centred on SW Turkey. We kept it for many years in a pot in our alpine-house in Dorset and Joy Hulme grew it well on her rock-garden in Surrey for a long period. Getting hold of it in the first place has always been the problem (though cuttings can be rooted with some difficulty) as wild seed is not easy to collect & is rarely available. A dwarf shrub, usually more erect & compact in cultivation in the UK, where it seldom exceeds 20-30cm. high, than in nature, with its neat, silky, grey-white foliage & stems providing a perfect setting for the dense racemes of bright-pink flowers, amid papery, silvery bracts in summer.)
- 428.270 : EBENUS CRETICA** var. **MICROPHYLLA** Greece, Crete, Topolia. 310m. M. Jope 97-63 : 16.10.97 (Melvyn collected seed from two populations, distinct in their aspect & habit, one of which we guess may be separated under this name.)
- 432.300 : ECHIUM RUSSICUM** No data. A striking plant, almost 1m. high, from the dry grasslands of E central Europe, N into Russia. Spike-like inflorescences of many rusty-red flowers with the stamens exerted on long, red filaments. A bristly, short-lived perennial, evocatively illustrated, growing in Russian *Stipa*-steppe, in Rix & Phillips 'Perennials' Vol. 1., p. 170.
- 433.800 : EDRAIANTHUS PUMILIO** Croatia, Biokovo Planina.
- 434.200 : EDRAIANTHUS SERPYLLIFOLIUS** Croatia, Biokovo Planina.
- 436.000 : EMINIUM INTORTUM** (S & E Anatolia ; Syrian Desert)
- 436.050 : EMINIUM LEHMANII** Uzbekistan, Tashkent, Chatkal range, SE of Parkent. 1000m. Sandy clay on exposed, S-facing slope. (A spectacular, dwarf aroid. Large, floppy spathes of deepest maroon plush sit at ground-level in early summer. The first time we have been able to list seed from any member of this small, seldom-grown genus native to deserts & dry steppes from N Africa to Central Asia They are close to *Biarum* but with 3-lobed leaves, usually present at flowering)
- 436.100 : EMINIUM RAUWOLFII** (E Anatolia ; Syrian Desert)
- 436.150 : EMINIUM RAUWOLFII** var. **KOTSCHYI** (S Anatolia ; Syrian Desert)
- 436.200 : EMINIUM REGELII**
- 436.300 : EMINIUM SPICULATUM** (var. *spiculatum*) (S Anatolia ; Syria, Palestine ; other vars. from Egypt to Iraq & Iran.)
- 438.000 : EPIGAEA GAULTHERIODES** (*Orphanidesia gaultherioides*) Turkey, Rize, Kaçkar Da_lari SSE of Çamlıhem_in. 2100m. With *Vaccinium* & *Rhododendron* at upper limits of *Picea orientalis* forest. (The most beautiful of a trio of classic Tertiary relicts : its closest relatives grow in NE Asia & eastern N America. An ericaceous shrub, creeping in the acid humus-layer of this high rainfall area. Prostrate, brown-haired stems, set with bristly, leathery leaves, carry terminal racemes of bowl-shaped, pink-flushed, white flowers, each up to 6cm. across. Must have a moist, acid soil in deep, humid shade with shelter from drying winds. The very fine seeds need *Rhododendron* treatment : sow uncovered on the surface of a sterile, peaty soil, in gentle warmth & full shade, water from below, and cover with a pane of glass or keep in a plastic bag.)
- 441.900 : ERANTHIS CILICICA** Turkey, Antalya, N of Akseki. 1500m. Limestone, in stony humus under *Abies*. N. Stevens coll. May, 1997. (The large-flowered Turkish race of the winter aconite, included under *E. hyemalis* in 'Flora of Turkey' but this is debatable. Illustrated in this classic site, where it grows with *Cyclamen cilicium* & *Crocus biflorus*, in 'The Bulb Book' p. 29. A very rare chance to acquire some fresh, wild seed, which should germinate well if sown promptly (no point ordering this after September). Glorious yellow flowers above ruffs of bronze-tinted cauline leaves in earliest spring. 10cm. or less.)
- 442.010 : ERANTHIS HYEMALIS** No data. From garden-stock of this brilliant little, early spring flower.
- 442.012 : ERANTHIS HYEMALIS** from 'AURANTIACUS' Very freshly collected 2004 Australian seed. A brilliant little, early spring, bright yellow flower. We have no idea how this cultivar differs from the form usually grown. Both this and the 2004 German seeds have been stored appropriately and should germinate well if sown promptly.
- 442.015 : ERANTHIS HYEMALIS** from 'GRUNLING' From a new selection of this brilliant little, early spring flower bred by Frau Treff in Germany. In this variant, the glorious yellow flowers, appearing above ruffs of cauline leaves on 10cm. stems in earliest spring, are strikingly stained with green.. A rare chance to acquire some fresh seed, which has been stored appropriately and should germinate well if sown promptly. There is no point in ordering these after September.
- 442.020 : ERANTHIS HYEMALIS** from 'SCHWEFELGLANZ' From new pale sulphur-yellow selections made by Frau Treff. Seeds from both of these have been sent by the outstanding German plantsman Hermann Fuchs. Though essentially seed-raised strains, we are uncertain as to how great a proportion will come evenly.
- 442.025 : ERANTHIS HYEMALIS** from **DOUBLE-FLOWERED FORM** From a fertile double clone.
- 442.030 : ERANTHIS X TUBERGENII** From a fertile clone of the cross between *E. hyemalis* & *E. cilicica*.
- 442.050 : ERANTHIS LONGISTIPITATA**
- 443.000 : EREMOSTACHYS GLABRA** (Native to E Anatolia (Kars, 900m.), Armenia & Iran.)

- 443.100 : EREMOSTACHYS LACINIATA** Turkey, Hakkari, Zap Gorge near Bagisli. 1500m. Loose, igneous scree & among rocks on steep slopes. (Native to Syria, S & E Anatolia, Iran & Central Asia.)
- 443.200 : EREMOSTACHYS MOLUCCELLOIDES** Turkey, Gumushane, N of Bayburt. 1500m. Clayey loam in fallow field. (7888 & 9994). (Native from Syria & Iran to Central Asia & Mongolia.)
- 443.500 : EREMOSTACHYS SPECIOSA** Kyrgyzstan, Kyrgyz Alatau, Too Ashuu pass S of Kara Balta. 2350m. A. Dickerson 00-18.
- 443.750 : EREMURUS AITCHISONII** (*E. elwesii*, *E. robustus* var. *elwesii*)
- 443.800 : EREMURUS ALTAICUS**
- 443.809 : EREMURUS ALTAICUS** Kazakhstan. No further data. A comparatively dwarf species with quite slender, erect stems about 1m, tall carrying racemes of yellow flowers with projecting yellow anthers carried on dark brown filaments. Quite close to *E. spectabilis* & the most northern species, extending along the Chinese border to the Altai.
- 443.850 : EREMURUS ANISOPTERUS** (*E. korolkowii*)
- 443.900 : EREMURUS BUCHARICUS**
- 443.950 : EREMURUS CAPPADOCICUS** E Anatolia & NE Iraq, in steppe, 1000-1400m.
- 443.970 : EREMURUS CAUCASICUS** (*E. spectabilis* group) S Ukraine to Central Asia
- 444.005 : EREMURUS COMOSUS** No data. From Central Asia & adjacent N Afghanistan & seldom seen in cultivation. Fascinating rather than showy. Slender racemes of brownish flowers, emerging from papery white bracts, on stems over 1m. high
- 444.029 : EREMURUS CRISTATUS** Kirghizstan, near Bishkek. (One of the dwarfiest species in the genus. Seldom more than 60cm. tall with stubby spires. Each segment of the bell-shaped, chocolate-brown flowers has a broad white margin & the colourful, orange anthers are thrust out widely on long, dark filaments.)
- 444.040 : EREMURUS FUSCUS**
- 444.043 : EREMURUS FUSCUS** Uzbekistan, Kusalvli-sai. 2000m. (The 1m. high racemes of pale yellow flowers with projecting anthers turn brown as they mature. Close to *E. altaicus*, whose flowers do not turn brown & which occurs to the NE)
- 444.044 : EREMURUS FUSCUS** No data.
- 444.055 : EREMURUS HIMALAICUS**
- 444.060 : EREMURUS HIMALAICUS** No data. A magnificent NW Himalayan species with 2m. spires packed with white flowers. This is one of the earliest of this genus to flower in UK gardens, where it is usually one of the more reliable ones.
- [444.062 : #EREMURUS INDERIENSIS](#)**
- 444.070 : EREMURUS KAUFMANNII**
- 444.072 : EREMURUS KOPETDAGENSIS** Archibald Archive www.srgc.net
- 444.075 : EREMURUS LACTIFLORUS** Kazakhstan, Karzhantau, SE of Chimkent, Burguluk. 1300m. Stable stone-runs on open slopes. (A beautiful species quite widespread in SE Kazakhstan & the adjacent Central Asian republics though local & restricted in its habitats. Rosettes of broad, blue-green leaves & stems about 1m. tall carry racemes of large, spaced-out, milk-white flowers opening widely from yellow buds & followed by large, inflated seed-capsules. Described as “extremely handsome” by Charles Grey, who records it as in cultivation in the UK in the 1930's but it seems to have been lost long ago.)
- 444.076 : EREMURUS LUTEUS** Iran, Zanjan, NW of Zanjan. 1250m. Sandy clay & gravel hills in river valley with *E. olgae* & *E. persicus* (all flowering at different times). (Erect, 1.5m. tall spires like a pale yellow *E. spectabilis*.)
- 444.077 : EREMURUS OLGAE** No data. Distributed from Iran into Central Asia, this is perhaps our favourite species : the more so since we saw it in 2002, growing by the thousand on the steppes of SE Uzbekistan. By far the latest to flower with 2m high, tapering, cylindrical racemes of soft-pink flowers, carried on long, wiry pedicels in summer. Essentially a steppe-species, less likely to tolerate excess moisture than many when dormant but superlative when well-grown.
- 444.078 : EREMURUS OLGAE** Uzbekistan, between Denau & Termez. Low hills. (Distributed from Iran into Central Asia, this is our favourite species : the more so since we have seen it, growing by the thousand on the steppes of SE Uzbekistan. By far the latest to flower with 2m high, tapering, cylindrical racemes of soft-pink flowers, carried on long, wiry pedicels in summer. Less likely to tolerate excess moisture than many when dormant but superlative when well-grown.)
- 444.080.1 : EREMURUS PERSICUS** Iran, Zanjan. Ex JJA 1934.
- 444.080 : EREMURUS REGELII** Uzbekistan, Tashkent, Chatkal range, SE of Parkent. 1000m. Open, stony slopes. (Narrow, 2m. high spires densely packed with mahogany-brown flowers, followed by distinctive wrinkled seed-capsules.)
- 444.083 : EREMURUS REGELII** Uzbekistan, Tashkent, Chimgan. (Cultivated seed from Janis Ruksans.)
- 444.084 : EREMURUS ROBUSTUS** Uzbekistan, Tashkent, Chimgan. (As imposing as related *E. himalaicus* but later flowering with racemes of soft-pink flowers towering to 2.5m. A local plant of rich, mesic, montane habitats in the wild, where it grows on damp slopes & even, in the Seravshan, along streams with roses & willows. One of the best for the UK.)

- 444.085 : #EREMURUS ROBUSTUS** No data. As imposing as the related *E. himalaicus* but much later flowering with racemes of soft-pink flowers towering to 2.5m. A local plant of rich, mesic, montane habitats in the wild
- 444.086 : EREMURUS ROBUSTUS from WHITE FORM** No data..
- 444.090 : EREMURUS SOGDIANUS** Uzbekistan, Aktau, above Langar. 1500m.. Open, stony slope. (Possibly this 1.5m tall species with airy racemes of white flowers carried on long pedicels, elongating further in fruit. Identification of our wild-collections is a little tentative : we are still getting to know this complex genus, where wild populations are sometimes hybrids.)
- 444.101 : EREMURUS SPECTABILIS** Turkey, Kahramanmaras, SSE of Goksun. 1550m. (Spires of green-white flowers with exerted orange-brown anthers. 1.5m. In spite of its name, not actually so spectacular as some but fascinating.)
- 444.102 : EREMURUS SPECTABILIS** Turkey, Gumushane, Kop Dag. 1300m. Ex a N. Stephens coll.
- 444.103 : EREMURUS SPECTABILIS** Uzbekistan, Tashkent area. Ex a H. Fuchs coll.
- 444.104 : EREMURUS SPECTABILIS** Turkey, A_rı, Tahir geçidi WNW of Ele_kirt. 2300m. Stony slope.
- 444.140 : EREMURUS STENOPHYLLUS** (subsp. *stenophyllus*) Iran, Khorasan, Kopet Dag N of Quchan. 1750m. Open, stony limestone slopes.
- 444.150 : #EREMURUS STENOPHYLLUS** (subsp. *stenophyllus*) (*E. bungei*) No data. Cylindrical racemes of brilliant yellow flowers, about 1.5m. high. A showy species from N Iran through southern Central Asia to W Pakistan. The main influence on the hybrids grown for cutting & one of the easiest to grow in the UK, in spite of its dry, steppe habitats in nature.
- 444.155 : EREMURUS STENOPHYLLUS** Uzbekistan, Sangardak valley. (In this local variant, the bright yellow flowers are carried on very short pedicels, resulting in an elegant, very slender raceme.).
- 444.200 : EREMURUS STENOPHYLLUS subsp. AURANTIACUS**
- 444.300 : EREMURUS TURKESTANICUS**
- 444.409 : EREMURUS ZENAIDAE** Kirghizstan, near Dzhahalabad. Archibald Archive www.srgc.net
- 16712 : EREMURUS SP.** Iran, Zanjan, NW of Zanjan. 1250m. Sandy clay & gravel hills in river valley.
- 16858 : EREMURUS SP.** Iran, Kordestan, S of Saquez. 1670m. Steppe vegetation on open, stony slope.
- 17520 : EREMURUS SP.** Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. Open, gravelly slopes
- 17554 : EREMURUS SP.** Uzbekistan, Zhizakh, Nuratau, SW of Yangikishlak. Loose, slate stone-slide on open slope.
- 17645 : EREMURUS SP.** Kazakhstan, Almatinskaya, ENE of Kordai. 1900m.. Among grasses on gentle slopes.
- 458.510 : ERYNGIUM ALPINUM** No data. Very local in its distribution through the limestone ranges of S Europe, E from SE France. Most distinct in its cylindrical, dome-shaped, blue heads surrounded by a great ruff of finely cut, feathery, steely-blue bracts, which are softly, not sharply, spiny - nor are the toothed, cordate basal leaves. For good, well-drained soil in sun.
- 459.010 : ERYNGIUM AMETHYSTINUM** No data. A fine SE European species with lobed, leathery basal foliage & branching stems carrying lots of small, metallic-blue heads surrounded by spiny, lanceolate bracts. Hot, dry site in the UK.
- 459.400 : ERYNGIUM BILLARDIERI**
- 460.010 : ERYNGIUM BOURGATII** (subsp. *bourgatii*) No data. A fine, 40cm. high, very hardy perennial, distributed from the Pyrenees through Spain. Much-cut, spiny basal foliage & rounded, blue heads, encircled by dissected, spiny bracts.
- 460.011 : ERYNGIUM BOURGATII** (subsp. *bourgatii*) No data. From the outstanding form of this splendid, 40cm. high, very hardy perennial grown by Graham Stuart Thomas. Much-cut, spiny basal foliage & rounded, blue heads, encircled by dissected, spiny bracts. "Superb" comments Tim Ingram who sent this. The subspecies is distributed from the Pyrenees through Spain.
- 460.100 : ERYNGIUM BOURGATII subsp. HELDREICHII**
- 460.210 : ERYNGIUM CAMPESTRE** No data. A Central European perennial, actually recorded in S England but very seldom seen in gardens. Cut, spiny, leathery basal leaves & erect corymbs about 50cm. high, "beautifully structured in green-white" writes Mike Tucker, with whom this has proved very slow-growing, taking several years to flower. "Worth the wait", he says.
- 460.800 : ERYNGIUM GIGANTEUM** Turkey, Gumushane, Vauk Dagi at Guvercinlik. 1800m. Open, stony slopes. (A magnificent species, closest to *E. alpinum*, from rain shadow valleys, S of the Black Sea in N Turkey & Georgia. Monocarpic but easily grown & sows itself in hot, dry sites in the UK. Large heads & bracts of bluish white mature & dry to parchment shades..)
- 460.801 : ERYNGIUM GIGANTEUM** Turkey, Artvin, Yalnizçam Da_ları SE of Ardanuç. 1800m. Open, stony areas. (A magnificent species from rain-shadow valleys, South of the Black Sea. Closest to *E. alpinum*, monocarpic but easily grown & sows itself in dry sites in the UK. Large heads & bracts of bluish white mature & dry to parchment shades.)
- 461.000 : ERYNGIUM GLACIALE** Spain, Granada, Sierra Nevada, towards Pico del Veleta. 2700m. Exposed stony slopes & schistose screes. (An alpine endemic of the Sierra Nevada & High Atlas, this is the smallest perennial species, 5-20cm. high with deeply-cut, spiny foliage & silver-blue stems & spiny bracts. Long-lived & accommodating in sunny scree in the UK.)
- 461.500 : ERYNGIUM MARITIMUM** UK, England, Devon, Exmouth. Among grass on stable sand-dunes just above sea-level. Ex

a M. Tucker coll. (The Sea Holly itself, maybe the loveliest of the genus but little-known in gardens & by no means easy. Spiny basal leaves, stems & bracts all in the same matt bluish-grey, a little paler than the blue flower-heads. Less than 30cm. high & slow-growing, it merits every care in sunny scree or a raised bed, where it never fails to attract attention.)

461.501 : ERYNGIUM MARITIMUM UK, England, Cornwall, The Lizard, Loe Bar. M. Tucker coll. (The true Sea Holly from the southernmost tip of England. Maybe the loveliest of the genus but little-known in gardens & by no means easy. Spiny basal leaves, stems & bracts all in the same matt bluish-grey, a little paler than the blue flower-heads. Less than 30cm. high & slow-growing, it merits every care in a sunny scree or a raised bed, where it never fails to attract attention.)

462.200 : ERYNGIUM SPINALBA France, Vaucluse, Le Mont Ventoux. 1800m. Limestone scree & stony areas. (A superlative species, local on the limestones of the SW Alps. This originates from our 1984 coll., maintained by Mike Tucker (Somerset, UK), who finds it has proved a neat, "low-growing plant, silvery all over, like a dwarf silver *E. alpinum*." The flowers are an unusual, pale blue-green and the whole plant is seldom more than 30cm. high. Give it as much sun & sharp drainage as possible.

462.201 : ERYNGIUM SPINALBA France, Hautes-Alpes, below Col de Gleize NNW of Gap. 1600m. Exposed, stony, limestone slopes.

471.909 : ERYTHRONIUM CAUCASICUM (*E. dens-canis* var. *caucasicum*) Russia, Aibha near Sochi. A fresh Black Sea coast coll. of this representative of the *E. dens-canis* group extending E from here through the Caucasus and Talysh into the Caspian forests NW Iran. Mottled leaves & flowers

471.910 : #ERYTHRONIUM CAUCASICUM No data. The representative of the *E. dens-canis* group in the Caucasus and Talysh, extending into the Caspian forests NW Iran.

472.000 : ERYTHRONIUM DENS-CANIS Yugoslavia, Srbija, Kosovo, above Vratnica, between Tetovo & Urosevac. 800m. Leaf soil over clay in dense *Fagus* woodland. (7423 on 1.6.86)

472.001 : ERYTHRONIUM DENS-CANIS Greece, Drama, Falakro, above Agia Pnevma to Hionotripa. 1800m. Depression on open, grassy slope with sparse *Juniperus*. (12027 on 9.6.90 ; stock ex RRW 01-35)

472.002 : ERYTHRONIUM DENS-CANIS Bosnia & Hercegovina, NW of Bosanski Petrovac. W. McLewin 98-31 (Freshly collected in the infamous "Bihac pocket" of N Bosnia ("very creepy now" writes Will). Perhaps the finest in the genus with beautifully brown-mottled, grey-green leaves and rosy purple flowers. Easy outside in the UK but slower to establish than some.)

472.003 : ERYTHRONIUM DENS-CANIS Slovenia, near Ljubljana. W. McLewin 98-23. (From an extraordinary site, a vestigial ancient meadow almost within the city boundary of the Slovenian capital, to which Will was taken by local botanists to see *Iris sibirica* in flower. Among the *Iris* clumps, the *Erythronium* was in seed.)

472.050 : ERYTHRONIUM DENS-CANIS subsp. NIVEUM Romania, Bibor Mts. Archibald Archive www.srgc.net

472.200 : ERYTHRONIUM SIBIRICUM (subsp. *sibiricum*) (*E. dens-canis* var. *sibiricum*) Russia, Kemerov district. (The eastern version of *E. dens-canis*. Distinct in its yellow anthers and somewhat larger pink flowers. There is little information available in English on its habitat in nature & it is still an obscure plant in cultivation. It may be less easy in the milder climate of the UK than *E. dens-canis* but should be ideally suited to the cold, continental climates of central Europe and the eastern USA. This seed from Janis Ruksans in Latvia has been correctly stored and will be sent out damp-packed.)

472.250 : ERYTHRONIUM SIBIRICUM subsp. ALTAICUM Russia, Tuva, Altai, upper course of Ka-hem river. 2300-2500m. Alpine meadows. (The high altitude, montane populations of the Altai are generally earlier flowering (in cultivation), taller plants of more open habitats. They seem to be consistently white-flowered. Like *E. dens-canis niveum*, they are possibly worthy of the subspecific status to which they have been elevated recently. Damp-packed seeds.)

472.500 : EUPHORBIA ACANTHOTHAMNOS

473.000 : EUPHORBIA AMYGDALOIDES

473.500 : EUPHORBIA ANACAMPSEROS

473.600 : EUPHORBIA ANACAMPSEROS var. TMOLEA

474.000 : EUPHORBIA ARMENA

474.500 : EUPHORBIA BROTERI

475.000 : EUPHORBIA CAPITULATA

475.250 : EUPHORBIA CERATOCARPA No data. A tall, 1m. high, perennial from dry sites in S Italy & Sicily. Smooth, pointed, lanceolate leaves with many branching flower-stems from the leaf-axils. Needs a well-drained place in full sun in the UK.)

475.500 : EUPHORBIA CHARACIAS (subsp. *characias*) Spain, Granada, Sierra Nevada, Puerto de la Ragua. 1900m. Open stony shale slopes. (From a collection we made in 1990 & which has proved a surprising success in our cool, wet garden. The black-eyed western type-race is distinct from the more familiar eastern, yellow-eyed *E. characias* subsp. *wulfenii* (which is not a satisfactory with us) not only in its red-black, short-horned glands but in its much more compact habit. It rarely exceeds 80cm., whereas the latter can tower to 2m. Plants from this Spanish population have proved very hardy (it was collected at a fair altitude), tolerant of our wet acid clay, remained compact with outstanding blue-green foliage and carried striking, yellow-green, flowering columns, which rival the best '*wulfenii*' in girth, if not in height. From our experience, we can recommend this unreservedly.)

- 475.603 : EUPHORBIA CHARACIAS subsp. WULFENII** Croatia, Biokovo Planina, SE of Makarska. 500m. Open stony limestone slopes. 31.5.90
- 475.604 : EUPHORBIA CHARACIAS subsp. WULFENII** Greece.
- 475.605 : EUPHORBIA CHARACIAS subsp. WULFENII** Turkey, Antalya, Gullukdagi. 700m. Among scrub on limestone slopes. 3.7.84.
- 475.620 : EUPHORBIA CHARACIAS subsp. WULFENII** No data. Seed from a fine, strong form of this splendid, shrubby perennial, mainly distributed on the limestones down the Adriatic coast. Striking, cylindrical heads of greenish yellow rise above the evergreen, blue-grey foliage in spring. Usually reliable in a well-drained, sunny site in most UK gardens.
- 476.000 : EUPHORBIA CRASPEDIA**
- 476.500 : EUPHORBIA DAVISII**
- 477.002 : EUPHORBIA DENDROIDES**
- 477.500 : EUPHORBIA DENTICULATA** Turkey, Malatya, above Yukariulupinar. SE of Darende. 1200m. Loose stony slopes on igneous hills. (6672 : 13.6.85)
- 477.501 : EUPHORBIA DENTICULATA** Turkey, Adana, between Pinarlar & Saimbeyli. Among *Pinus* in sandy soil. (6715 : 14.6.85)
- 477.502 : EUPHORBIA DENTICULATA** Turkey, Bitlis, Nemrut Dag. 2500m. Among sparse *Juniperus* or steppe vegetation. (7978 : 1.8.86)
- 477.503 : EUPHORBIA DENTICULATA** Turkey, Van, Kavussahap Dag, E of Bahcesaray. 2300-2500m. Steppe vegetation on open, stony slopes. (8020 : 5.8.86 ; 9881 : 17.7.88)
- 477.504 : EUPHORBIA DENTICULATA** Turkey, Kahramanmaras, SSE of Goksun. 1550m. Among diverse, montane steppe vegetation on NE-facing limestone slope. (14754 : 12.6.94)
- 477.505 : EUPHORBIA DENTICULATA** (Sect. *Myrsiniteae*) Turkey, Tunceli, NW of Tunceli to Ovacik. 950-1000m. Openings among deciduous *Quercus* scrub on steep slopes. (An arresting relative of *E. mysinites* with prostrate stems clad with broad blue-grey leaves, often tinged with purple. Terminal heads of flowers with large crimson glands. The yellow-green raylet leaves, like those of *E. rigida*, are sometimes suffused with orange. Not so easy to grow as *E. myrsinites* in the UK.)
- 477.506 : EUPHORBIA DENTICULATA** (Sect. *Myrsiniteae*) Iran, Kordestan, W of Sanandaj. 1600m. Exposed, shale slope. (An arresting relative of *E. mysinites* with prostrate stems clad with broad blue-grey leaves, often tinged with purple. Terminal heads of flowers with large crimson glands. The yellow-green raylet leaves, like those of *E. rigida*, are sometimes suffused with orange. Not so easy to grow as *E. myrsinites* in the UK.) Archibald Archive www.srgc.net
- 477.950 : EUPHORBIA GLABRIFLORA** (Sect. *Helioscopia*) Greece. Ex MESE 519. (A little, woody-based Balkan endemic from stony mountain-slopes. About 15cm. tall with glaucous, linear leaves and yellow raylet-leaves.)
- 478.000 : EUPHORBIA HELDREICHII**
- 478.210 : EUPHORBIA HYBERNA** (subsp. *hyberna*) (Sect. *Helioscopia*) No data. An easily grown, western European species from moist, shady sites. About 60cm. tall with fresh-green foliage often tinted with pink or red.
- 478.500 : EUPHORBIA KOTSCHYANA** Turkey, Konya, E of Ermenek to Mut. 1300m. Open stony limestone slopes. (5382 : 30.6.84)
- 478.501 : EUPHORBIA KOTSCHYANA** Turkey, Antalya, N of Akseki to Irmasan Gecidi. 1300m. With sparse *Quercus* scrub on stony, limestone slopes. (9798 : 11.7.88)
- 478.980 : EUPHORBIA MACROCLADA** Turkey, Konya, NE of Beysehir. 1200m. Steppe vegetation on open slopes. (9810 : 11.7.88)
- 479.001 : EUPHORBIA MACROSTEGIA** Turkey, Icel, NE of Gulnar. 1200m. Fissures on large limestone boulder. (An odd saxatile plant, about 30cm. high with highly polished foliage, which we have only seen growing in limestone fissures in the Gulnar area but which is proving a good garden-plant. It is illustrated in Phillips & Rix 'Perennials' Vol. 2, growing in Jack Elliott's garden (Kent, UK) from our 1985 coll., captioned *E. kotschyana*. It bears as little resemblance to the taller, narrower leaved, widespread *E. kotschyana*, as it does to the robust, purple-tinged, SW Iranian forms of *E. macrostegia*. It needs a distinguishing name.)
- 479.500 : EUPHORBIA MARSCHALLIANA** (Subsect. *Myrsiniteae*) Turkey, Artvin, Ardanuc to Ardahan. N. Stevens coll. (Described by Norman as a small, procumbent version of *E. rigida* with more rounded, fleshy, grey leaves & red-tinted seed-heads, this would be most likely to be *E. marschalliana* on distributional grounds but the seeds (the most important diagnostic character) are not quite right. However, this remote NE corner of Turkey has several local members of Subsection *Myrsiniteae* & field studies are non-existent.)
- 479.660 : EUPHORBIA MELLIFERA** No data.
- 480.000 : EUPHORBIA MYRSINITES**
- 480.500 : EUPHORBIA NICAEENSIS** (subsp. *nicaeensis*)

- 480.508 : EUPHORBIA NICAENSIS** (subsp. *nicaensis*) (Sect. *Paralias*) France, Pyrenees-Orientales. M. Tucker coll. (Blue-grey stem leaves and yellow-green raylet leaves. A fine species, about 50cm. tall, from southern Europe, widespread and variable. This Pyrenean form is taller and bushier than the 480.509 coll. Dry, sunny site in the UK.)
- 480.509 : EUPHORBIA NICAENSIS** (subsp. *nicaensis*) (Sect. *Paralias*) France, Aude, between Maury & Quembus. 300m. Limestone. M. Tucker coll. (Blue-grey stem leaves and yellow-green raylet leaves. A fine, 50cm. tall species from southern Europe, widespread and variable. This seed is from compact, red-stemmed plants on the hot limestones of the Corbieres.)
- 480.700 : EUPHORBIA NICAENSIS** subsp. **GLAREOSA** (var. *glareosa*)
- 481.000 : EUPHORBIA ORPHANIDIS**
- 481.500 : EUPHORBIA RIGIDA** (Sect. *Myrsiniteae*) Greece, Lakonia, Oros Taigetos above Paleopanagia. 1400m. Steep schist slopes. JJA 5159 (30.5.84) (Much esteemed member of Sect. *Myrsiniteae* with erect, sculptured stems of spirally arranged, pointed, fleshy leaves, about 30cm. high. In spring, its flat acid-yellow heads stand out against the blue-grey evergreen foliage. Usually perfectly hardy in a hot, dry site in the UK.)
- 481.501 : EUPHORBIA RIGIDA** (Sect. *Myrsiniteae*) Greece, Lakonia, N of Sparti to Tripolis. 500m. Exposed, gravelly areas. JJA 5163 (31.5.84) (Much esteemed member of Sect. *Myrsiniteae* with erect, sculptured stems of spirally arranged, pointed, fleshy leaves, about 30cm. high. In spring, its flat acid-yellow heads stand out against the blue-grey evergreen foliage. Usually perfectly hardy in a hot, dry site in the UK.)
- 481.502 : EUPHORBIA RIGIDA** (Sect. *Myrsiniteae*) Greece, Fokida, N of Amfissa. 850m. Open, gravelly slope. 6.6.96 (Much esteemed member of Sect. *Myrsiniteae* with erect, sculptured stems of spirally arranged, pointed, fleshy leaves, about 30cm. high. In spring, its flat acid-yellow heads stand out against the blue-grey evergreen foliage. Usually perfectly hardy in a hot, dry site in the UK.)
- 481.503 : EUPHORBIA RIGIDA** (Sect. *Myrsiniteae*) Turkey, Antalya, Bey Da., between Kemer & Ovacik. N. Stevens coll. (Much esteemed member of Sect. *Myrsiniteae* with erect, sculptured stems of spirally arranged, pointed, fleshy leaves, about 30cm. high. In spring, its flat acid-yellow heads stand out against the blue-grey evergreen foliage. In this area of Turkey it often has the raylet leaves flushed with orange and pink in bud and again later, as they mature. Usually perfectly hardy in a hot, dry site in the UK.)
- 481.504 : EUPHORBIA RIGIDA** (Sect. *Myrsiniteae*) Turkey, Icel, NE of Gulnar. 800m. Among stones on limestone slopes. (Much esteemed species with erect, sculptured stems of spirally arranged, pointed, fleshy leaves, about 30cm. high. In spring, its flat acid-yellow heads stand out against the blue-grey evergreen foliage. In this area of Turkey it often has the raylet leaves flushed with orange and pink in bud and again later, as they mature. Usually perfectly hardy in a hot, dry site in the UK.)
- 481.509 : EUPHORBIA RIGIDA** (Sect. *Myrsiniteae*) Greece, Lakonia, N of Monemvasia, Malea peninsula. 100m. R. & R. Wallis coll. (Much esteemed member of Sect. *Myrsiniteae* with erect, sculptured stems of spirally arranged, pointed, fleshy leaves, about 30cm. high. In spring, its flat acid-yellow heads stand out against the blue-grey of the evergreen foliage. In this coll. the raylet leaves flushed with orange and pink as they matured. Usually perfectly hardy in a hot, dry site in most of the UK.)
- 482.050 : EUPHORBIA SEGETALIS** (Sect. *Paralias*) : annual. Archibald Archive www.srgc.net
- 482.100 : EUPHORBIA SEGUIERIANA** subsp. **NICICIANA**
- 482.180 : EUPHORBIA SERRATA** (Sect. *Carunculares*) France, Pyrenees-Orientales, between Tautavel & Vingrau. M. Tucker coll. (Most distinct with its narrow, sharply toothed foliage. About 30cm. tall & native to SW Europe.)
- 482.209 : EUPHORBIA SERRULATA**
- 482.410 : EUPHORBIA STYGIANA** No data. An erect, shrubby species, which has proved remarkably hardy in a well-drained site in W Wales. Endemic to the Azores, in the craters of extinct volcanoes at between 500m. & 800m. altitude. In Section *Pachycladae* with the tender Mediterranean *E. dendroides* & somewhat like a more compact version of the Canary Is. *E. mellifera* with beautiful, fresh-green foliage and wide, much branched umbels of flowers.
- 482.500 : EUPHORBIA THOMPSONII**
- 485.060 : FERULA COMMUNIS** No data.
- 485.110 : FERULA COMMUNIS** subsp. **GLAUCA** No data. A distinct variant of the giant fennel of the Mediterranean area with greyish leaves, distinctly silvery glaucous beneath. One of the most spectacular members of the *Umbelliferae*, towering to 2m. or more high with its huge, yellowish umbels on stout stems rising above the great mounds of finely-cut foliage.
- 485.510 : FERULA TINGITANA** No data. The giant fennel of SE Spain & NW Africa. Close to the more widespread *F. communis* but less robust in habit & the lobes of the dissected basal foliage are much shorter & with revolute margins, rather than thread-like. One of the most spectacular members of the *Umbelliferae*, towering to 2m. high with its huge, yellowish umbels on stout stems rising above the great mounds of finely-cut glossy, almost varnished, leaves. Spectacular in a hot, dry site.

EDIT: Note re Fritillaria collections: On the [Fritillaria Icones](#) website are several accessions that relate to material offered by Jim. Those supplied direct from JJA Seeds have their population references in the associated text. Thanks to Laurence Hill for his assistance. The links to the Fritillaria Icones pages are given in the list as [#Frit.Icone link](#)

- 490.000 : #FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) Turkey, Antalya, Gullukdagi, NW of Antalya. 800m. Grassy & stony areas among scrub. (Round-shouldered, elegantly waisted bells, usually in yellow-green with brown central shading.)
- 490.001 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) Turkey, Antalya, SW of Hisarcandir. 900m. Openings among scrub in heavy, red clay. (Assumed to be *F. acmopetala* at the time of collection, this appears to be either *F. montana* (not previously recorded from Turkey) or a new taxon close to this. Living material is now with Martyn Rix and no new population number is being assigned until Martyn has expressed an opinion.)
Edit: 0.490.001 *Fritillaria acmopetala* subsp. *acmopetala* = 500.320 *F. montana*
- 490.005 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*)
- 490.006 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) Turkey, Adana, N of Saimbeyli. 1300m. Steep, stony bank. Ex R.& R. Wallis 93-35.
- 490.007 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) Syria, N of Jopetbirgal. Steep hillside. Ex R.& R. Wallis 95-29
- 490.008 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) Syria, Jebel Nusairi, above Slunfeh. 950m. Ex R.& R. Wallis 96-24.
- 490.009 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) Syria, N of Qneyeh. 310m. Ex R.& R. Wallis 96-8.
- 490.010 : FRITILLARIA ACMOPETALA** No data. Round-shouldered, elegantly waisted bells, usually in yellow-green with brown central shading. A lovely thing, about 30cm. high, & one of the easiest in a bulb-frame or even outside in the UK.
- 490.011 : #FRITILLARIA ACMOPETALA from DARK FORMS** No data but mainly derived from material collected by Bob & Rannveig Wallis in Kahramanmaras, SE Turkey. Comes fairly 'true' from seed & should produce some fine things.
- 490.100 : #FRITILLARIA ACMOPETALA subsp. WENDELBOI** Turkey, Antalya, S of Madenli. 1900m. Pockets of black soil & limestone talus. (The high altitude inland race, recorded in 3 sites above 1600m. in the Cilician Taurus. This is from a collection made with Norman Stevens in 1994, in the area of the type locality, NE of Akseki. It differs substantially from the typical race in its much broader foliage and its large flowers with sharply angular, rather than rounded, 'shoulders'. We have not seen other material cultivated as this and described as 'smaller'. As we have it, this is a big, bold plant with spectacular flowers in chocolate and a luminous, lime yellow-green, most eye-catching and utterly distinct in general appearance from the type-race.)
- 490.500 : FRITILLARIA ALBURYANA** Turkey, Erzurum, Palandoken Dag. 2500m. Bare patches of rock detritus on open slopes.
- 490.501 : FRITILLARIA ALBURYANA** Turkey, Erzurum, Kop Dag. 2550m. Exposed, bare patches of rock detritus along sides of depression above late snow-patch. Ex O. Sonderhausen 877.
- 490.509 : FRITILLARIA ALBURYANA** Turkey, Erzurum, Kop Dag. 2400m. Ex Leep & Pasche 72-47. (Hand-pollinated seed of the famous, intractable 'pink frit.' from stock established in Germany for the past 30 years. Needs very cold winters to do well.)
- 490.510 : FRITILLARIA ALBURYANA** No data. Hand-pollinated in Sweden from the stock originally grown by the Czech bulb enthusiast, Milan Prasil, who successfully grew this unprotected in the open, until his garden was flooded.
- 490.511 : FRITILLARIA ALBURYANA** Turkey, Erzurum, W of Erzurum. Snow-melt. Ex R.& R. Wallis 93-24.
- 490.709 : FRITILLARIA ALFREDAE** (subsp. *alfredae*) Lebanon, E of Beirut, Broumana. 750m. Ex R.& R. Wallis 99-02 (Dainty, glaucous-green bells. A delicate, smaller, more slender plant than the following. Something of a collector's piece & an extreme rarity in cultivation, existing only as one or two bulbs, surviving from our 1966 coll. near Jezzin, until Bob & Rannveig's important new introductions from further N. This coll. is from the type-locality.)
- 490.800 : ## FRITILLARIA ALFREDAE subsp. GLAUCOVIRIDIS** Turkey, Adana, above Hasanbeyli to Fevzipasa. 1100m. Open stony areas among *Quercus* scrub on W-facing slopes. (A most graceful & beautiful species : elegant, yellow-green flowers with a glaucous sheen. Endemic to this corner of Turkey near the Syrian border. Not difficult in a bulb-frame in the UK.)[#2ndPic](#)
- 490.801 : FRITILLARIA ALFREDAE subsp. GLAUCOVIRIDIS** Turkey, Kahramanmaras, N of Yenicekele. 600m. Openings in dense *Quercus* scrub under *Pinus*. (Seedlings raised from a single capsule we collected in 1994 have proved to be robust, vigorous forms of this most graceful & beautiful species - elegant, yellow-green flowers with a glaucous sheen. Endemic to this corner of Turkey near the Syrian border. Not difficult in a bulb-frame in the UK.)
- 490.900 : FRITILLARIA ALFREDAE subsp. PLATYPTERA** Turkey, Hatay, 5 km. N of Yayladag. Ex O. Sonderhausen
- 491.000 : FRITILLARIA AMANA**
- 491.003 : FRITILLARIA AMANA** Turkey, Hatay, E of Belen. 1250m. Among *Quercus* scrub on steep, limestone slopes. (Very different to much Syrian & Lebanese material formerly assigned to *F. hermonis* subsp. *amana*. A splendid representative of this new species with very large, elongated green bells, tessellated or marked with purple-brown & with clear green fascia.)
- 491.004 : FRITILLARIA AMANA** Turkey, Kahramanmaras, SE of Goksun. 1550m. NE-facing limestone slope. (From a more or less consistently yellow to yellow-green flowered population, which will come 'true' from seed (unlike single yellow clones in other species). Names such as 'Goksun Gold' have been applied to individual plants.) Archibald Archive www.srgc.net
- 491.004 : FRITILLARIA AMANA** Turkey, Kahramanmaras, SE of Goksun. 1550m. NE-facing limestone slope. (We have previously listed seed from a clone ex Horton & Stevens 2333 (which has been named 'Goksun Gold') under this population

reference number but we have now flowered a batch of seedlings from a small wild seed-collection made with Norman Stevens in 1994 on the same site & find they are all yellower than those we have seen in other localities. Our experience with yellow forms of other species is that only a very small proportion, if any, come 'true' in the first generation (note our comments under *F. ehrhartii*) but in this case, we are dealing with a geographical variant. Expect yellow to yellow-greens.) (14757 : 12.6.94)

491.006 : FRITILLARIA AMANA Turkey, Kahramanmaras, Zeytun, Kuru Dag. 1678m. Limestone screes & turf. Ex E.K. Balls 1034. (From the 1934 type-locality collection, still maintained by UK enthusiasts.)

491.007 : FRITILLARIA AMANA Turkey, Maras, W of Kahramanmaras. 1300m. Under scrub. Ex R. & R. Wallis 86-37

491.020 : FRITILLARIA AMANA No data. From several colls. of this fine member of the *F. crassifolia* group, including the E.K. Balls type. Centred on the Amanus range in S central Turkey, S into Syria & the Lebanon, at about 1500m. Long, greenish or yellowish bells, tessellated with brown purple & with clear, green fascia. Stems of about 20cm.

491.100 : FRITILLARIA ARGOLICA Greece, Argolida, near Ermioni. Ex an R. & R. Wallis coll. (Recently acknowledged taxon, supposedly a hybrid or intergrade between *F. graeca* & *F. rhodocanakis* & more or less intermediate in appearance.)

491.101 : FRITILLARIA ARGOLICA Greece. Ex V. Horton 1415 (Originally collected as a hybrid between *F. graeca* & *F. rhodocanakis*, this appears to fit in here, though it is closer to *F. rhodocanakis* than to *F. graeca* or the 491.100 coll.)

491.102 : FRITILLARIA ARGOLICA Greece, Argolida, Poros. 200m. Uncultivated olive-groves. Ex a M. Harvey coll. (From an island off the NE tip of the Argolida peninsula (next to the *F. rhodocanakis* island of Idra) perhaps likely to be more homogeneous than the mainland ones.)

491.110 : FRITILLARIA ARGOLICA No data.

491.150 :# FRITILLARIA ARIANA Afghanistan, Herat, N of Herat. 600m. Grassy slopes. (A coll. by a Turkmen botanist from this NW corner of Afghanistan, bordered by Turkmenistan & Iran. A little-known species in subgenus *Rhinopetalum*, growing in sandy steppe, sometimes even in unstable dunes, which just enters Iran near here and extends NW to near Ashkhabad. Distinguished from *F. gibbosa* by its unspotted flowers, narrower basal leaves & largely glabrous stems. A small plant is illustrated in Rix & Phillips' "The Bulb Book" but it can grow up to about 20cm. high with about 12, flat, horizontal, dark-centred, soft-pink flowers with deeply impressed nectaries. A very beautiful & desirable species but most unlikely to be easy to cultivate.)

491.159 : FRITILLARIA ARIANA No data. (Cultivated seed from Bob & Rannveig Wallis of this little-known species in subgenus *Rhinopetalum*, growing in sandy steppe, sometimes even in unstable dunes, in W Afghanistan, just entering Iran and extending NW to near Ashkhabad in Turkmenistan. It can grow to about 20cm. high with about 12, flat, horizontal, dark-centred, soft-pink flowers with deeply impressed nectaries. A beautiful & desirable species but most unlikely to be easy to cultivate.)

491.200 : FRITILLARIA ARMENA Turkey, Erzurum, Palandoken Dag. c.2500m.

491.201 : FRITILLARIA ARMENA Turkey, Erzurum, Kop Dag. 2550m. Exposed, gravelly areas. (The small, dark, snow-melt endemic of the E Turkish mountains, seldom-seen in cultivation. Nodding bells, purple-black inside & out.)

491.205 : FRITILLARIA ARMENA Turkey, Agri, Tahir Gecidi. 2350m. Ex R. & R. Wallis 93A-36. (The small, dark, snow-melt endemic of the E Turkish mountains, seldom-seen in cultivation. Nodding bells, purple-black inside & out.)

491.500 : FRITILLARIA ASSYRIACA (subsp. *assyriaca*) Turkey, Sivas, WSW of Hafik. 1300m. Among diverse steppe-vegetation on calcareous hills. Archibald Archive www.srgc.net

491.501 : FRITILLARIA ASSYRIACA (subsp. *assyriaca*) Syria, Kassab. 700m. Flooded fields. R. & R. Wallis 96-11. (From a locality about 400km. away from any other record, this is described by the collectors as a distinct "giant form." In any form, the species is not often seen in cultivation, where the name is still frequently misapplied to *F. uva-vulpis*.)

Edit: 0.491.501 *Fritillaria assyriaca* subsp. *assyriaca* = 0.495.750 *F. frankiorum*

491.600 : FRITILLARIA ASSYRIACA subsp. MELANANTHERA Turkey, Icel, between Anamur & Silifke. 200m. Rocky slope near the coast. Ex a R. & R. Wallis coll. (An extremely local plant in the wild, limited to a few colonies at low altitudes in a hot area around Silifke on the coast towards Mut inland. It merits full specific status & is a great rarity both in nature & in cultivation. Linear, channelled grey leaves & narrow bells with pointed, flaring, perianth segments, striped green & black inside, & with black anthers, on slender 15 cm. stems. Considered to be the ancient ancestor of *F. elwesii* & *F. latakiensis*.)

491.601 : FRITILLARIA ASSYRIACA subsp. MELANANTHERA Turkey, Içel, NE of Gulnar. 950m. Limestone. (The above is from near the site of the original introduction, V. Horton & N. Stevens 2257. This is from a more recent higher altitude coll., made in an inland locality towards Mut. A little different to the above but still obviously the same taxon.)

491.602 : FRITILLARIA ASSYRIACA subsp. MELANANTHERA Turkey, Içel, W of Silifke. 850m. In stony terra rossa on scrub-covered limestone ridge. (A new 2003 coll. under our field-number 17731 & from a new locality. We assume this dwarf, slender, narrow-leaved plant will belong to this taxon. If not, it is something even more interesting.)

491.700 : FRITILLARIA ATROLINEATA Iran, West Azarbayegan, Ghasemlu valley. 1500-1800m. Rock crevices in moist sand below cliffs. Ex G.Bakhshi Khanishi 063. (From the type collection of this recently described species, only known from this locality. In the *F. caucasica* group & possibly nearest to *F. chlorantha* but taller, 20-25cm. high, with narrower, glaucous leaves & more narrowly campanulate green flowers with distinctive, long, linear black nectaries inside.)

491.800 : FRITILLARIA AUREA Turkey, Sivas, Ziyaret Tepe. 2000m. In turf, among limestone rocks. (Big, broadly bloated,

bright citron-yellow bells, with ghostly browner chequering. Usually opens almost at ground-level & the stem gradually elongates to about 15cm. in height. A good form of this endemic of the high, central Turkish mountains from near Bolkar Dag NE into Sivas & Malatya. A plant of alpine-steppe, usually on limestone, between 1800 and 3000m.)

491.805 : FRITILLARIA AUREA Turkey, Malatya, near Doğanşehir. 1800m. (This exceptionally robust form seems to be a local race, prevalent only in a small area at the SE extremity of the range of this glorious plant. It was once thought that it might not belong in *F. aurea* at all & it seems consistently distinct in the shape of its bulbs, its early-flowering & in the size of its huge, yellow, brown-chequered bells. Opening near ground-level on stems elongating to 20cm. in height.)

491.805 : FRITILLARIA AUREA Turkey, Malatya, near Doganşehir. 1800m. Ex a N. Stevens coll. & W.M.M. Baron 2108, from the same area. (This exceptional form seems to be a local race, prevalent only in a small area at the SE extremity of the range of this glorious plant. In fact, it was once thought that it might not belong in *F. aurea* at all & it seems consistently distinct in the shape of its bulbs, its early-flowering & in the size of its big, broadly bloated, bright citron-yellow bells, with ghostly browner chequering. These usually open almost at ground-level & the stem gradually elongates to about 20cm. in height.)

491.809 : FRITILLARIA AUREA No data. From an extremely fine dwarf, large-flowered form originally from the skilled German grower, Josef Mayr. Big, broadly bloated, bright citron-yellow bells, with ghostly browner chequering. Usually opens almost at ground-level & the stem gradually elongates to about 15cm. in height. A Turkish endemic from the high mountains near Bolkar Dag NE into Sivas & Malatya. A plant of alpine-steppe, usually on limestone, between 1800 and 3000m.)

491.810 : FRITILLARIA AUREA No data. From several other forms, mainly from the populations at the E end of the Cilician Taurus. The species extends from the high mountains near Bolkar Dag NE into Sivas & Malatya, a plant of alpine-steppe, usually on limestone, between 1800 and 3000m. Huge yellow bells on stems of less than 15cm., clad in glaucous grey leaves, one of the most delectable species. This is the year for *F. aurea* - the first time we have had much seed of any form.)

491.850 : FRITILLARIA AUREA X PINARDII Turkey, Malatya to Kayseri. 2000m. Ex M. Rix 1603 (From a series of hybrids found by Martyn Rix in the wild, illustrated with the parents in 'The Bulb Book'. Seed from both of the extremes shown there - vigorous intermediates with rather more conical bells than *F. aurea*, variably chequered & shaded with brown.)

492.101 : FRITILLARIA BITHYNICA Greece, Samos, Ambelos. 700m. Under *Castanea* in leaf-soil on mica-schist. Ex a D.M. Hoskins coll. (Glaucous, yellow-green bells, yellower inside. The island, Samos & Khios, races are little-known.)

492.104 : FRITILLARIA BITHYNICA Turkey, Mugla, Göktepe. Upper limits of *Pinus* woodland. N. Stevens coll. (A 2004 wild seed-collection from mainland Turkey of this attractive, dwarf species, usually with winged capsules.)

492.105 : FRITILLARIA BITHYNICA Turkey, Denizli, S of Denizli. 1700m. Sparse *Pinus* woods on limestone. Ex R. & R. Wallis 90-38. (Collected at a high altitude for this species and described as a good, dwarf, yellow form, it has an unwinged capsule but has been confirmed by Martyn Rix as *F. bithynica*.)

492.106 : FRITILLARIA BITHYNICA Turkey, Mugla. Ex an R. & R. Wallis coll. (From a distinctly green form.)

492.107 : FRITILLARIA BITHYNICA Turkey, Mugla, E of Mugla. 650m. Ex R. & R. Wallis 90-29.

492.108 : FRITILLARIA BITHYNICA Turkey, Mugla, S of Mugla. Ex R. & R. Wallis 93-02.

492.170 : FRITILLARIA BOISSIERI Spain, Catalunya, Sierra de Montserrat. 900m. Between conglomerate rocks on steep slopes. P. & P. Watt coll. (In 1970, Jim & Lyn Weeks collected a puzzling *Fritillaria* on top of the massive conglomerate lump of Montserrat. It was not *F. pyrenaica*; nor did it fit comfortably into the *F. lusitanica* group. Martyn Rix tells us this has been described as *F. boissieri*. It was not an easy plant to grow & we lost the 1970 stock. We asked Peter & Penny Watt to collect seed again this year.)

492.200 : FRITILLARIA BUCHARICA [#Frit.Icone link](#) Tadjikistan, ENE of Dushanbe, Romit. Ex a N. Stevens coll. (From a particularly fine population of this very beautiful and distinct Central Asian species, distributed from NE Afghanistan into the Pamir-Alai at altitudes up to 2400m. Stems of about 30cm. carry 10 or many more, green-tinted, white, wide-open bells with dark-tinged nectaries. No trouble in the bulb-frame in the UK & a success with us in a large pot where it takes a lot of water when in growth.)

492.201 : FRITILLARIA BUCHARICA Tadjikistan, Hissar range, N of Dushanbe, upper Varzob valley near Hodji-obi-Garm. 2100m. Ex a J. Ruksans coll. (From another very vigorous, floriferous population.) Archibald Archive www.srgc.net

492.220 : FRITILLARIA BUCHARICA No data. Beautiful Central Asian, distributed from NE Afghanistan into the Pamir-Alai at up to 2400m. Up to 10, open, green-tinted, white bells on 20cm. stems. No trouble in the bulb-frame in the UK.

492.202 : FRITILLARIA BUCHARICA Uzbekistan, Chul-Bair range. (A much later flowering population, greatly extending the season for the enjoyment of this beautiful species.)

492.400 : FRITILLARIA CARICA (subsp. *carica*) Greece, Samos, Ambelos. 950m. Under *Pinus* on mica-schist. Ex a D.M. Hoskins coll. (From an isolated island population of this predominantly SW Turkish species, one of the most charming of this group with grey-green leaves & dark nectaries inside its clear-yellow bells. .)

492.401 : FRITILLARIA CARICA (subsp. *carica*) Turkey, Mugla, Gök Tepe. 1500m. Open, stony area with sparse *Pinus* on limestone. (14520 : 28.5.94)

492.402 : FRITILLARIA CARICA Turkey, Burdur, W of Yesilova, Saldi Beli. 1280m. Loose serpentine talus on open slope. (A fine & distinct little plant, growing in a precisely similar habitat with the same serpentine-associates as *F. carica* subsp. *serpenticola*

but not the same taxon. Named (illegimately) "*F. saldensis*" in a recent article on Turkish fritillaries. Not easy.)

492.403 : FRITILLARIA CARICA Turkey, Burdur, W of Golhisar. 1150m. Openings among *Pinus* & *Quercus*. (14565 : 30.5.94)

492.404 : FRITILLARIA CARICA (subsp. *carica*) Turkey, Mugla, SE of Fethiye. 1250m. Under *Cedrus* on limestone. Ex R. & R. Wallis 90-22. (A fine yellow form from mainland Turkey, originally collected high up on Baba Dag. This is Bob & Rannveig's Certificate of Merit form.)

492.405 : FRITILLARIA CARICA (subsp. *carica*) Turkey, Mugla, SE of Fethiye. 1250m. Under *Cedrus* on limestone. Ex R. & R. Wallis 90-21. (An intriguing little greenish yellow and brownish yellow variant from the same area as the preceding.)

492.406 : FRITILLARIA CARICA (subsp. *carica*) Turkey, Mugla, SE of Fethiye. 850m. In humus beside boulders in deep shade of *Pinus*. (A pretty, little form, surprisingly growing here with *F. forbesii*.)

492.407 : FRITILLARIA CARICA (subsp. *carica*) Turkey, Aydin, Samsun Dag. Ex P. Wendelbo 72-8A

492.500 : FRITILLARIA CARICA subsp. SERPENTICOLA Turkey, Antalya, above Altinyayla. 1750m. Stony, serpentine slopes. Ex E. Pasche & M. Koenen 85-23. (From a type-locality coll. of this rather difficult narrow serpentine-endemic, thought by some to deserve specific status. Little yellow conical bells on 10cm. stems with a few broad, glaucous leaves.)

492.501 : FRITILLARIA CARICA subsp. SERPENTICOLA Turkey, Antalya, SE of Altinyayla, Dirimli Gecidi. 1650m. Stony, serpentine slopes. Ex R. & R. Wallis 03-110. (From a type-locality coll. of this rather difficult narrow serpentine-endemic, thought by some to deserve specific status. Little yellow conical bells on 10cm. stems with a few broad, glaucous leaves.)

492.700 : FRITILLARIA CAUCASICA [#Frit.Icone link](#) Turkey, Kars, W of Sarikamis. 2000-2200m. Heavy, peaty soil in open, stony areas of coniferous zone. N. Stevens coll. (Not often seen in cultivation, the species extends from this cold NE corner of Turkey across Transcaucasia into NW Iran. A fresh 1998 coll. of a form we have grown here without too much trouble for over a decade, though it barely increases vegetatively. Rather a fine thing with quite large, conical, glaucous purple-brown bells.)

492.718 : FRITILLARIA CAUCASICA Armenia, Aragats range, Kasah river valley. (*F. caucasica* as a whole is not often seen in cultivation & we have little, if any, material from so far E in the UK. The species supposedly extends from the cold NE corner of Turkey across Transcaucasia into NW Iran. As we know it in Turkey, it is rather a fine thing with quite large, conical, glaucous purple-brown bells but we have not seen this form.)

492.719 : FRITILLARIA CAUCASICA Armenia, near Lake Sevan. Ex a J. Ruksans coll.

492.720 : FRITILLARIA CAUCASICA No data.

492.721 : FRITILLARIA aff. CAUCASICA Iran, West Azerbayejan, S of Salmas. 1780m. Montane grassland on open slope. (Our wild collections have been listed as *Fritillaria* sp., under the field-numbers 16820 and 17279.) (We have suggested this population, was *F. chlororhabdota*, which is recorded from this area & is the plant assigned to "*F. canaliculata*" in the 1960's. It does not have canaliculate leaves & is certainly not this. Nor does it match the description of *F. atrolineata*, another recently described taxon from this area. Bob Wallis says he could call it *F. zagrica* if it had yellow-tipped flowers (a similar plant may account for the record of *F. zagrica* near the Turkish border at Esendere) and could key it out as the Turkish endemic *F. armena*. The habitat seems wrong for both of these : a rich meadow not steppe and moreover this is a slender plant 20cm. or more high. We think it best placed close to the northern *F. caucasica* but who can say it will not end up as another new species.)

492.750 : FRITILLARIA CHITRALENSIS Afghanistan. Ex a P. Carter coll. (Seed ex B. Mathew sown 1999. Flowered 2004.)

492.800 : FRITILLARIA CHLORANTHA No data. (From several colls. made in the Zagros Range of NW Iran, in the 1960's, mostly to the N of Kuh-i-Ushtaran, where it grows on open, grassy slopes, with *Tulipa stapfii* & *F. persica*., between 1800m. & 3000m. After 40 years, it remains one of the rarest *Fritillaria* spp. in cultivation. It is not easy, though Martyn Rix kept our 1966, 1609 coll. all those years. Broad, shining-green foliage & green bells with a glaucous bloom on stems of 10cm. or less.

492.808 : FRITILLARIA CHLORANTHA Iran, Lorestan. Ex G. Bakhshi Khanishi 088. (Apparently restricted to the area around Oshtaran Kuh, where it grows on open, grassy slopes, with *Tulipa stapfii* & *F. persica*., at 1800m. to 3000m. It remains one of the rarest *Fritillaria* spp. in cultivation. It is not easy, though Martyn Rix has kept our 1966, 1609 coll. for 40 years. Broad, shining-green foliage & green bells with a glaucous bloom on stems of 10cm. or less.) Archibald Archive www.srgc.net

492.809 : FRITILLARIA CHLORANTHA Iran, Lorestan, pass W of Razan. 2350m. N-facing, stony slopes below large rock-outcrops. R. & R. Wallis 04-089. (Colony-forming with 2 or 3 large mature bulbs and a few large bulblets per colony.)

492.850 : # FRITILLARIA CHLORORHABDOTA Iran, Kordestan, SW of Negel (between Sanandaj & Marivan). 1350m. *Quercus* scrub on shale. (Collected in 2000 under our field-number 16897, this has proved to be this elegant, very recently described species, allied to *F. assyriaca* & endemic to Iran. About 20cm. in height with striped yellow & brown flowers. It was attributed to "*F. canaliculata*" in the 1960's but stock introduced then is not still in general cultivation.)

492.870 : FRITILLARIA CHLORORHABDOTA Iran, Lorestan, Dorud, N of Thiun village, Oshtaran Kuh. Ex G. Bakhshi Khaniki 084. (From the type-locality collection of this elegant, recently described species, allied to *F. assyriaca* & endemic to Iran. About 20cm. high with striped yellow & brown flowers. Attributed to "*F. canaliculata*" in the 1960's but stock introduced then is not still in cultivation. We have since found it in several parts of the N Zagros, where it tends to grow as isolated plants rather than in colonies and it is consequently difficult to make a significant wild seed collection.)

492.900 : FRITILLARIA COLLINA

- 492.904 : FRITILLARIA COLLINA** Georgia, Caucasus, Kazbegi. 2500m. Ex R.Holmberg 88-13. (A desirable, dwarf, Caucasian endemic, short-stemmed with huge, fat yellow bells, more or less chequered with brown. Along the lines of *F. aurea*, *F. tubiformis* & *F. latifolia* but absolutely distinct. It is native to moist, alpine meadows & strongly resents complete drying with high soil-temperatures when dormant in summer. Not the easiest species but very striking.)
- 492.905 : FRITILLARIA COLLINA** Russia, N Ossetia, Truso valley. 2100m. Ex H. Zetterlund 82-39
- 492.906 : FRITILLARIA COLLINA** Russia, N Ossetia, near Holst. 2400m. Among grasses & scrub in moist meadow. Ex a J. Ruksans coll.
- 493.000 : # FRITILLARIA CONICA** Greece, Messinia, S of Pilos. 200m. Edge of *Quercus* scrub on open limestone slope. (One of the more robust in the group of E Mediterranean, yellow-flowered species. Up to 25cm. high with large bells & rich-green, glossy foliage. Extremely local in nature but not at all difficult to grow in the alpine-house or bulb-frame in the UK.)
- 493.001 : FRITILLARIA CONICA** Greece, Messinia, SE of Pilos. Edge of macchie. M. Harvey coll., May, 1997.
- 493.300 : FRITILLARIA CRASSIFOLIA** (subsp. *crassifolia*) [#Frit.Icone link](#) Turkey, Erzurum, Palandoken Dag, NW of Tekman. 2800m. Gravelly areas & loose talus.
- 493.305 : FRITILLARIA CRASSIFOLIA** (subsp. *crassifolia*) Turkey, Erzurum, Kop Dag. 1700m. Ex R.& R. Wallis 93A-17. (The type race has a wide but very local distribution across Turkey from Denizli in the W to Erzurum in the E. Always in isolated sites & always growing in steep, loose, unstable talus-slides. In general, a dwarf plant with fleshy, twisted, greyish foliage & big, greenish yellow, brown-chequered bells. This is a very fine form but the least easy to grow of those listed here.)
- 493.306 : FRITILLARIA CRASSIFOLIA** (subsp. *crassifolia*) Turkey, Gumushane, S of Soganli Gecidi. 1600m. Ex R.& R. Wallis 93A-46. (An interesting northern extension of the range well into the Pontus and a vigorous grower in cultivation.)
- 493.307 : # FRITILLARIA CRASSIFOLIA** (subsp. *crassifolia*) Turkey, Kahramanmaras, Ahir Dag. Ex R.& R. Wallis 93-25. (A southern population from well within the distribution of the allied *F. hermonis* subsp. *amana*, which oddly does not seem to occur on this mountain. A particularly dwarf form with somewhat yellower flowers than the preceding two. All are distinct.)
- 493.308 : FRITILLARIA CRASSIFOLIA** (subsp. *crassifolia*) Turkey, Kahramanmaras, Maras to Kozludere, E of Kafarli. 1390m. to 1600m. Limestone scree. Ex R.& R. Wallis 92-34 & 92-35.
- 493.309 : FRITILLARIA CRASSIFOLIA** (subsp. *crassifolia*) Turkey, Agri, Tahir Da_. Ex an R.& R. Wallis coll.
- 493.350 : # FRITILLARIA aff. CRASSIFOLIA** Iran, Kordestan, SW of Daraki (S of Marivan). 2500m. SW-facing limestone slope. (Originally listed as an unidentified *Fritillaria* sp. under our field-number 17255, this coll. has to be almost precisely on Wendelbo's Iranian locality for *F. crassifolia* subsp. *poluninii* but this is a big, robust plant about 25cm. high with up to four flowers. The first thought was that it had to be something to do with *F. straussii* but the leaves are alternate, neither paired nor whorled. It may be best to consider it a new taxon in the *F. crassifolia* complex. Oleg Polunin collected a herbarium specimen of a similar plant in Iraq in the 1950's (at the same time as the type-collection of *F.c.* subsp. *poluninii*) but it has been ignored (maybe because he recounts that his herbarium sheets blew away & the data may be muddled). This area, high in the mountains right on the Iraq-Iran border, has long been inaccessible & is still virtually uncollected. We doubt that it would be possible to repeat our visit. Perhaps "*F. crassifolia* subsp. *axis-mali*" might be a currently appropriate name.) [# 2nd pic](#)
- 493.405 : FRITILLARIA CRASSIFOLIA subsp. HAKKARENSIS** Turkey, Hakkari, E of Y_ksekova. 2300m. Ex R. & R. Wallis 87-26. (Rare in cultivation & seldom available. A difficult race, endemic to snow-patch hollows on the high mountains of Hakkari. This sometimes grows on the same slopes as *F.c.* subsp. *kurdica* but remains distinct in its habitat, as well as in its shiny green foliage & more pointed inner segments.)
- 493.406 : FRITILLARIA CRASSIFOLIA subsp. HAKKARENSIS** Turkey, Hakkari, S of Y_ksekova. Moist scree and dried river-bed. Ex R. & R. Wallis 87-19, 87-20 & 87-21. (Very rare in cultivation & seldom available. A difficult race, endemic to snow-patch hollows on the highest mountains of Hakkari. This sometimes grows on the same slopes as *F.c.* subsp. *kurdica* but remains distinct in its habitat, as well as in its shiny green foliage & more pointed inner segments.)
- 493.500 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Turkey, Van, NNW of Baskale. 2800m. Open, stony slopes. (In this site, very variable in the colour & markings of its plump, chequered bells, striped & tinted in red-brown to yellow-green. Seed from red forms, selected as R.& R. Wallis 87-27, & a fine, green-striped form selected by ourselves under 6526 in 1985.)
- 493.502 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Turkey, Van, N of Van, near Timar. 1700m. N. Stevens coll. (On slopes with *Iris barnumae*. A distinct local form with small, deeply coloured bells. 15cm.)
- 493.503 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Iran, Kordestan, S of Salmas. 1980m. Rocky, S-facing slope. (An extremely robust form of this variable race with up to four, brown-chequered bells on each 20cm. stem.)
- 493.505 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Turkey, Van, E of Bahcesaray. 2350m. Ex R.& R. Wallis 87-27. (From a fine, rich red form, selected in the wild in this Mecca for bulb-enthusiasts on the shoulders of Artos Dag.)
- 493.506 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Turkey, Van, E of Bahcesaray. 1900m. Ex R.& R. Wallis 87-31. (From an outstanding dark form, selected in the wild in the same area of SE Turkey by Bob & Rannveig.)
- 493.507 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Turkey, Hakkari, Esendere. 1700m. Ex a Z. Zvolanek coll. (From right against the Iranian border and showing a range of variation somewhat similar to the population 493.503.)

- 493.515 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Iran, East Azerbaijan, SW of Ahar. 1820m. Montane steppe. (Listed in 2000 under the field-number 16773) (A distinct eastern development of the variable *F. crassifolia* complex. Found in the Tabriz area, it has been described as *F. karadaghensis*. A fine dwarf plant with big, yellow and brown bells.)
- 493.520 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Turkey, Siirt, W of Sason, Halkis Da. 1900m. Rocky summit area. Ex a N. Stevens coll. (An interesting collection from a long way to the W of the recorded range of this variable subsp. but it keys out as this & it seems best to place this under it for the moment. "Brownish, tessellated bells - not unlike *F. montana*", writes Norman. Rannveig Wallis, growing an E.& R. Franke coll. from this mountain, describes it as a "big, dark bell".)
- 493.530 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Azerbaijan, Talish, near Gosmolyan. 1860m. Ex RSZ 87-19. (Seeds from Janis Ruksans in Latvia. We have not seen this population in flower. From the extreme NE limit of the distribution of this widespread and very variable taxon. As far as we know it does not occur in the Iranian Talish.)
- 493.531 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Armenia, near Lake Sevan.
- 493.532 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** Armenia, Mt. Aragats. Archibald Archive www.srgc.net
- 493.600 : FRITILLARIA CRASSIFOLIA subsp. POLUNINII** Iran, Kordestan, pass between Daraki & Nowsud (S of Marivan). 2500-2600m. Ex P. Wendelbo 78-01. (Known only from Oleg Polunin's type coll. from limestone screes at 2400m., above Suleimaniya in Iraqi Kurdistan, until Per Wendelbo collected it on the Iranian side of the border. The two races are different and may be best regarded at infraspecific level under *F. poluninii* as a full species. This is the smaller - the dwarfiest 'frit.' - and reputedly the easier to grow. Tiny with large, whitish, brown-veined bells.) Edit: 0.493.600 *Fritillaria crassifolia* subsp. *poluninii* = 0.501.900 *F. poluninii*
- [494.000 :# FRITILLARIA DAVISII](#)** Greece, Lakonia, NW of Pargos Dirou. Low, limestone hills. (Endemic to the S tip of the Mani peninsula & close to *F. graeca* but with shiny bright-green leaves & no green stripes on its tubby, brown-purple chequered bells. Although one of the most localised species in nature, it has proved to be one of the easiest in cultivation.)
- 494.001 : FRITILLARIA DAVISII** Greece, Lakonia, N of Pargos Dirou. Uncultivated olive-groves. M. Harvey coll. 1997
- 494.002 : FRITILLARIA DAVISII** Greece, Lakonia, N of Areopoli, above Itilo. D. Hoskins coll.
- 494.003 : FRITILLARIA DAVISII** Greece, Lakonia, above Limoni. N-facing, old terraces. D.M. Hoskins 98-16.
- 494.010 : FRITILLARIA DAVISII** No data.
- 494.011 : FRITILLARIA DAVISII from YELLOW FORMS** No data. Seeds from three fine, yellow clones, which occurred with us. These have unmarked, clear, translucent yellow-green flowers & have been pollinated between themselves. This is a most attractive variation &, like the typical brown forms, a good grower in cultivation.
- 494.400 : FRITILLARIA DRENOVSKII** Greece, Drama, Falakro above Volokas. 1500m. Among sparse *Pinus* in subalpine meadow. (One of our favourite species. Slender & elegant, with thin, greyish leaves on 15-20cm. stems. Narrow brown bells, varying in this site from dark chocolate to honey-brown shades. Endemic solely to the Greek-Bulgarian border-ranges.)
- [494.401 :# FRITILLARIA DRENOVSKII](#)** Greece, Drama, Menikio. Ex R.& R.Wallis 01-46. (One of our favourite species. Slender & elegant, with thin, greyish leaves on 15-20cm. stems. Narrow brown bells, varying in this site from dark chocolate to honey-brown shades. Endemic solely to the Greek-Bulgarian border-ranges.)
- 494.604 : FRITILLARIA EDUARDII** Tadjikistan, E of Duschanbe, Romit. (Distributed at about 2000m. in & around Tadjikistan, this is a distinct, dwarfer relative of *F. imperialis*, flowering much earlier in spring. At about 40cm. (though we are told it can reach 1m.), it is generally even more compact than the more western *F. raddeana*. The pendant bells look outwards or upwards & are more open & broader than those of *F. imperialis*. They also reputedly lack the foxy smell. Their widespread segments are often in what Alan Edwards describes as 'barley-sugar' colour : a soft yellow-orange, though we believe they can vary to deeper reddish shades. We have never seen it in flower & it remains a rare plant in cultivation in the UK.)
- 494.605 : FRITILLARIA EDUARDII** No data. Distributed at about 2000m. in & around Tadjikistan, this is a distinct dwarfer relative of *F. imperialis*. At about 40cm., even more compact than the more western *F. raddeana*. The pendant bells are broader with widespread segments and are in what Alan Edwards describes as 'barley-sugar' colour - a soft yellow-orange.
- [494.800 :#### FRITILLARIA EHRHARTII](#)** Greece, Evia, E of Karistos. [#2nd Photo](#) 200m. Seasonally damp, N & W-facing sides of gully on mica-schist. (A beautiful native of S Euboea & the neighbouring Kiklades. Big, bloomy, yellow-tipped, grape-black bells glow to ruby in the evening sun. Stout 20-30cm. stems can carry up to 6 flowers. Not often seen but easy here under glass.)
[#3rd pic](#) [#4th pic](#)
- 494.811 : FRITILLARIA EHRHARTII var. PRASINANTHA** Field data as above. From a single clear-yellow clone we found here in April, 1985. The variety was described by Kamari from the island of Tinos but it is only distinguished by its colour so the name can be legitimately applied to this similar phase from Evia. We have grown several hundred seedlings from this to flowering & so far have had two more yellows. These have been back-crossed with the original clone but we have not yet flowered these seedlings so can give no guarantees.
- 495.004 : FRITILLARIA ELWESII** [#Frit.Icone link](#) Turkey, Icel, Findikpinar above Mersin. P. Davis 26500. (Very elegant with greyish, linear foliage and narrow, purple-black bells, striped with grey-green, on 30cm. stems.)
- 495.005 : FRITILLARIA ELWESII** Turkey. Ex R.& R. Wallis 92-09

- 495.006 : FRITILLARIA ELWESII** Turkey, Antalya, NW of Fersin. 850m. Ex J. Persson 87-17.
- 495.007 : FRITILLARIA ELWESII from GREEN FORM** Turkey, Içel, between Aydıncık & G_İnar. 1000m. Ex a N. Stevens coll. (Distinct from the PD 26500 stock we grow (which is self-sterile) in its predominantly grey-green flowers. Very elegant with greyish, linear foliage and 3 or 4 narrow bells, barely striped with purple-black, on 30cm. stems.)
- 495.200 :# FRITILLARIA EPIROTICA** Greece, Ioanina, Oros Smolikas E of Konitsa. 2300m. Loose, stony, E-facing, serpentine slopes. (Fat, purple-brown bells, dimly tessellated with yellow-green, sit almost on the ground, where the prostrate, thick, grey-green leaves twist & curl. From the type-locality, where the E.K. Balls 3434 coll. was made in 1937. This very dwarf, alpine species is almost exclusively endemic to the serpentine screes around the summit of Smolikas. One of the most desirable of all species, both exquisite and appropriate grown in an alpine-house pan, it is still little-known in cultivation & should be cherished.)
- 495.205 : FRITILLARIA EPIROTICA** Greece, Ioanina, Katara. 1700m. Serpentine. (Though some plants from lower altitudes on the Katara pass vary in height & approach *F. montana*, according to Kamari, this seed is from forms almost indistinguishable from the Smolikas population. Seed listed from an R. Baker coll., under our population reference 495.200 a couple of years ago, should have been given this reference. A little detective work by Robert Rolfe established its origin on the Katara.)
- 495.400 : FRITILLARIA EUBOEICA** Greece, Evia. (Narrowly endemic to the limestones of the island of Euboea & confused with the Turkish *F. sibthorpiana* until Martyn Rix described it in 1975. One or two yellow bells on glaucous-leaved stems up to 10cm. tall. A higher altitude plant than the very closely related *F. rixii*. Difficult & seldom seen in cultivation.)
- 495.405 : FRITILLARIA EUBOEICA** Greece, Evia. Ex R. & R. Wallis 01-09
- 495.550 : FRITILLARIA FLEISCHERIANA** Archibald Archive www.srgc.net
- 495.559 : FRITILLARIA FLEISCHERIANA** Turkey, Ankara, Akyarın Geçidi N of Ankara. Ex HN 01-01. (Seldom-collected steppe-species. Glaucous, channelled, linear leaves & narrow, brown-purple bells with green fascia. 15cm. tall.)
- 495.700 :# FRITILLARIA FORBESII** Turkey, Mugla, Baba Da. SE of Fethiye. 850m. Humus beside boulders in shade of *Pinus*. (From near Forbes' 1842 type-locality & a little different to the serpentine populations on the Marmaris peninsula. Lime-tinged, yellow bells. Near *F. carica*, with which it grows, but taller, at 20cm. or so, & with narrow, linear, bright-green leaves.)
- 495.709 : FRITILLARIA FORBESII** Turkey, Mugla, S of Fethiye, Baba Da., between Uludeniz & Ovacık. I. Robertson coll.
- 495.711 : FRITILLARIA FORBESII** Turkey, Mugla, Marmaris peninsula. c. 300m. Among scrub on serpentine. R. & R. Wallis coll. (Lime-tinged, yellow bells. Near *F. carica* but taller, at 20cm. or so, & with narrow, linear, bright-green leaves.)
- 495.750 : FRITILLARIA FRANKIORUM** [#Frit.Icone link](#) Syria, Kassab. 700m. Flooded fields. Ex R. & R. Wallis 96-11. (Originally thought by Bob & Rannveig Wallis to be a "giant form" of *F. assyriaca* but described by them as a new species in 2003. We were a little uncomfortable about its specific rank as it appeared to be sterile, only increasing vegetatively. However, to celebrate its naming, it confounded us by setting seed. This is a distinct, elegant plant, in foliage resembling *F. assyriaca* but with wider, yellow-green bells. This is not a difficult species to cultivate and we are sure it will soon become widely grown.)
- Edit: 0.491.501 *Fritillaria assyriaca* subsp. *assyriaca* = 0.495.750 *F. frankiorum*
- 495.850 : FRITILLARIA GIBBOSA**
- [# FRITILLARIA GIBBOSA](#) fine JJA form grown by Jane McGary -JJA number unknown
- 495.853 : FRITILLARIA GIBBOSA** Iran, Zanjan, NW of Zanjan. 1250m. Sandy clay & gravel hills in river valley. (A fresh coll. of this exquisite and desirable pink-flowered species which is such a challenge to grow well. Slower than some from seed & may be best started into growth later in autumn. It is an early-flowering plant of dry areas with an extreme continental climate : very cold in winter and very hot in summer, though its bulbs can grow deeply. Mottled pink-alabaster flowers on 20cm. stems.)
- 495.854 : FRITILLARIA GIBBOSA** Iran, Khorasan, Neyshabur, Akhlamad, Abshar valley. 1700m. Ex G.Bakhshi Khaniki 94-46
- 495.855 : FRITILLARIA GIBBOSA** Iran, Mazandaran, Gorgan. Ex a P. Furse coll. (From the same part of Iran as the growable *F. raddeana*, this race may establish this temperamental species more widely in cultivation. Martyn Rix & others consider this a 'good doer' with up to 12 flowers on robust stems. Paul Furse mentions finding this in 1964 "in varying shades of brick-pink or even apricot-pink." Slower than some from seed &, like other Central Asians, may be best started into growth later.)
- 495.856 : FRITILLARIA GIBBOSA** Iran, Markazi, SW of Arak. 2300m. Exposed gravelly sites on summit ridge. (Not at all the sort of site in which we should have expected to find *F. gibbosa*, usually a plant of clay or gravel hills at lower altitudes, but its winged capsules are unmistakable. As might be expected in this habitat, in a very dwarf (and we hope more growable) form.)
- 495.857 : FRITILLARIA GIBBOSA** Iran, 75km. W of Bojnurd. (17147 : 18.5.01)
- 495.858 : FRITILLARIA GIBBOSA** Iran, Gorgan, Golestan forest, near Almehr. 1400m. Archibald Archive www.srgc.net
- 495.859 : FRITILLARIA GIBBOSA** Iran, Teheran, 75km. S of Teheran. 1250m.
- 495.860 : FRITILLARIA GIBBOSA** Ex NS stock.
- 496.000 : FRITILLARIA GRAECA** (var. *graeca*) Greece, Ahaia, Helmos above Kalavrita. 2000m. In alpine-steppe on stony, limestone slopes. (A superb, alpine race (illustrated in Rix & Phillips 'The Bulb Book' from Polunin & Chater 13017, collected here). Extremely dwarf & grey-leaved with very large, elongated, chestnut-orange bells, strikingly striped with yellow-green, almost at ground-level. Appears & flowers much later than the others listed & is not so easy to grow.)

- 496.002 : FRITILLARIA GRAECA** (var. *graeca*) Greece, Lakonia, Akrotiri Tainaro (Cape Matapan). Near sea-level. Ex an A. Edwards coll. (Certainly this is *F. graeca*, though an extraordinary coll. from the territory of *F. davisii* & apparently sympatric with it. A very dwarf race, somewhat similar in flower to the Taigetos population we grow under 496.005, this is much more variable & has produced some charming pale greeny yellow forms, which we have not seen in any other populations of *F. graeca*.)
- 496.002 : FRITILLARIA GRAECA** (var. *graeca*) Greece, Lakonia, Akrotiri Tainaro (Cape Matapan). Near sea-level. R. & R. Wallis 03-18. (In 2003, Bob & Rannveig went all the way down to investigate this paradoxical colony. Certainly this is *F. graeca*, though an extraordinary disjunction in the territory of *F. davisii* & apparently sympatric with it. A very dwarf race, somewhat similar in flower to the Taigetos population we grow under 496.005, but much more variable. It has produced some charming pale greeny yellow forms, which we have not seen in any other populations of *F. graeca*.)
- 496.003 : FRITILLARIA GRAECA** (var. *graeca*) "Dwarf form" ex P. & P. Watt colls. - may be same as 496.000
- 496.004 : FRITILLARIA GRAECA** (var. *graeca*) Greece, Lakonia, Oros Taigetos. Woodland. Ex an A. Edwards coll.
- 496.005 : FRITILLARIA GRAECA** (var. *graeca*) Greece, Lakonia, Oros Taigetos. Ex an N. Stevens coll.
- 496.006 : FRITILLARIA GRAECA** (var. *graeca*) Greece, Attiki, Imittos (Hymettus). Ex a R. & R. Wallis coll. (Described by Rannveig as particularly good black form with a prominent green central stripe down the centre of the segments.)
- 496.007 : FRITILLARIA GRAECA** (var. *graeca*) Greece, Evia. Ex R. & R. Wallis 01-07. (A little 'sweetie' from a little-known locality for this. Classic, little *F. graeca* greeny yellow & black, neatly banded bells, on a very compact plant.)
- 496.020 : FRITILLARIA GRAECA** (var. *graeca*) No data. From several colls. on Parnes, etc. Most will have single, more broadly campanulate bells than 496.000, on stems of about 15cm. Purple-brown segments with distinct yellow-green fascia.
- 496.099 : FRITILLARIA GRAECA var. GUICCIARDII** Greece, Attiki-Pireas, Parnis. 1300m. Exposed, S-facing slope. Ex R. & R. Wallis 00-59. (Authentic material from a type-locality coll. of this taxon, first described from the summit area of Parnis. It has been considered to be doubtfully worth separating from the variable *F. graeca* but Georgia Kamari gives it varietal status. She distinguishes it on its longer bells, carried, up to 5, on slightly taller, broader-leaved stems.)
- 496.100 : FRITILLARIA GRAECA var. GUICCIARDII** Greece, Attiki, Parnis. Ex an N. Stevens coll. (From a type-locality coll. of this taxon, first described from the summit area of Parnes. Doubtfully worth separating from the variable *F. graeca* but Kamari gives it varietal status. She distinguishes it on its longer bells, carried, up to 5, on slightly taller, broader-leaved stems.)
- 496.501 : FRITILLARIA GUSSICHIAE** Macedonia, Pelister above Magarevo. 1400m. Among scrub on steep slopes of igneous rock. (Very local in the Bulgarian & Macedonian border ranges. Up to six, yellow-green bells, tinged with brown. Distinct from *F. graeca* & *F. thessala* in its winged capsules. Seldom-seen in cultivation but proving growable outside in the UK.)
- 496.508 : FRITILLARIA GUSSICHIAE** Macedonia, Mukus pass. Ex S&Z 88-72. (Very local in the montane scrub of the Bulgarian & Macedonian border ranges. Up to six, yellow-green bells, tinged with brown. Distinct from *F. graeca* & *F. thessala* in its ridged capsules. Seldom-seen in cultivation but proving growable outside in the UK.)
- 496.509 : FRITILLARIA GUSSICHIAE** Greece. Ex R. & R. Wallis G00-59. (Very local in the border ranges between Greece, Bulgaria & Macedonia. Up to six, yellow-green bells, tinged with brown. Distinct from *F. graeca* & *F. thessala* in its winged capsules. Seldom-seen in cultivation but proving growable outside in the UK.)
- 496.950 : FRITILLARIA HERMONIS** Syria, Mt. Hermon, NE slopes between Quatana & Barqash. 1450m. From selected clones under R. & R. Wallis 96-45. (Varying here in the type-locality from reddish with a slight green tessellation to grey-green with some red chequering. Before Bob & Rannveig's recent investigations, which have produced some horticulturally distinct plants, this dwarf race, previously only recognized from Mt. Hermon, was little-known botanically & unknown in cultivation. The range of variability within their collections has necessitated a reappraisal of the species and the separation of *F. amana*.)
- 496.951 : FRITILLARIA HERMONIS** Syria, Mt. Hermon, NE slopes between Quatana & Barqash. 1450m. Ex R. & R. Wallis 96-45b (We have kept this darker, plum-coloured clone separate. It comes near to the original type-form. Unlike *F. amana*, usually an oak-scrub species, *F. hermonis* is a plant of screes & open stony slopes with a more southern distribution.)
- 496.952 : FRITILLARIA HERMONIS** Syria, NW of Rankous. 1800m. Limestone scree. Ex R. & R. Wallis 95-07b
- 496.954 : FRITILLARIA HERMONIS** Lebanon, Chouf, Jebel Barouk. 1775m. Scree. Ex R. & R. Wallis 99-15.
- 496.955 : FRITILLARIA HERMONIS** Lebanon, E of Faraya. 1815m. Steep, rocky slope. Ex R. & R. Wallis 99-60.
- 497.000 : FRITILLARIA HERMONIS** Syria, NW of Rankous to Sarghya (Antilebanon). 1850m. Scree. Ex R. & R. Wallis 96-39.
- 497.001 : FRITILLARIA HERMONIS** Syria, Bludan (Antilebanon). 1900m. Scree. Ex R. & R. Wallis 96-43.
- 497.002 : FRITILLARIA HERMONIS** Syria, near Rankous (N of Damascus). 1800m. Ex R. & R. Wallis 95-07. (A dwarf plant with glaucous green bells.)
- 497.003 : FRITILLARIA HERMONIS subsp. AMANA** Turkey, Hatay, E of Belen. = 491.003 *F. amana*
- 497.004 : FRITILLARIA HERMONIS subsp. AMANA** Turkey, Kahramanmaraş, SE of Goksun. = 491.004 *F. amana*
- 497.005 : FRITILLARIA HERMONIS** Lebanon, above B'Shari Cedars. 2000m. Terra rossa on limestone outcrops. (Ex ACW 963 & a W.K. Aslet coll. from the same area, distributed in the 1960's as *F. crassifolia*. A neat little plant with dimly chequered, green

bells, close to some of the Syrian populations. Maintained for over 40 years but not always easy to grow.)

- 497.006 : FRITILLARIA HERMONIS subsp. AMANA** Turkey, Kahramanmaras, Zeytun, Kuru Dag. = 491.006 *F. amana*
- 497.020 : FRITILLARIA HERMONIS subsp. AMANA** No data. From several colls. of this fine member of the *F. crassifolia* group, including the E.K. Balls type. Centred on the Amanus range in S central Turkey, S into Syria. = 491.020 *F. amana*
- 497.300 : FRITILLARIA IMPERIALIS** Turkey, Hakkari, pass between Yuksekova & Semdinli.
- 497.301 : FRITILLARIA IMPERIALIS** Iran, Esfahan, SE of Khonsar. 2600m. Sandy clay slopes in steep-sided gulley. (The beautiful Crown Imperial, the tallest & perhaps the most spectacular species in the genus, distributed from SE Turkey, where it is very local, through W Iran. Heads of huge, richly coloured, amber-orange bells on stems 1m. or more in height.)
- 497.302 : FRITILLARIA IMPERIALIS** Iran, Lorestan, SE of Dorud, Oshtaran-Kuh above Thiun.
- 497.303 : FRITILLARIA IMPERIALIS** Iran, Lorestan, E of Shulabad. Steep, loose, NW-facing, igneous slope. (The beautiful Crown Imperial, the tallest, most spectacular species in the genus, distributed from SE Turkey through W Iran. Heads of huge, richly coloured bells on stems 1m. or more in height. Both orange-red and yellow forms in this locality.)
- 497.310 : FRITILLARIA IMPERIALIS** No data. The beautiful Crown Imperial, most spectacular of the genus, distributed from SE Turkey through W Iran & beyond. Heads of big, amber-orange bells on stems of 60cm. or more.
- 497.609 : FRITILLARIA INVOLUCRATA** France, Alpes de Haute-Provence, near Caussols. 1000m. Limestone pavement. Ex a P. & P. Watt coll. (From all-green & well-chequered clones, selected in the wild.) Archibald Archive www.srgc.net
- 497.610 : # FRITILLARIA INVOLUCRATA** No data. From Mike & Polly Stone's garden-stock of this European species, often successful outside in the UK. Wild in Provence & the Alpes-Maritimes of SE France & in NW Italy, its narrow-leaved stems of about 20cm. each carry a whorl of three linear bracts above a solitary, broad, green, purple-chequered bell.
- 497.660 : FRITILLARIA KARELINII** Turkmenistan, Kara Kum, N of Nebit Dag. 600m. Grassy hillsides. (We list this pink-flowered member of subgenus *Rhinopetalum* under the name received. The species is obscure & was originally described from N of the Caspian, extending in a curve into Turkmenistan. It may or may not be distinct from *F. gibbosa*, from which it is apparently distinguished by its narrower flower-segments &, most strikingly, by its wingless seed-capsules. We have a little, excellent wild-collected seed again but no capsules! Unknown in cultivation & from a seldom-visited locality. Probably difficult.)
- 497.700 : FRITILLARIA KITTANIAE** We are no longer listing seed of this "species", which is a nonsense, obviously based on individual clones selected from a very variable, wild, hybrid population. Most seedlings approximate to *F. carica*.
- 497.700 : FRITILLARIA KITTANIAE** Turkey, Antalya, SW of Elmali. 1500m. Ex O. Sonderhausen 1310 & 1318. (From type-locality colls. made on Ole Sonderhausen's last trip. This is an odd, variable entity, like several recently described 'species' very doubtfully deserving specific status. It is obviously based on individual clones selected from a very variable, wild, hybrid population. Thought by some to be intermediate between *F. carica* & *F. pinardii*, Henrik Zetterlund thinks it is more likely to be derived from *F. carica* & *F. elwesii*, resembling the former in shape & size but with the latter showing in the green & brown stripes, which can certainly be most striking. Most seedlings will approximate to yellow *F. carica* but it is still worth growing & selecting from seed as the striped ones are so worthwhile.)
- 497.750 : FRITILLARIA KOTSCHYANA** Iran, Mazandaran, Kandevaran pass
- 497.751 : FRITILLARIA KOTSCHYANA** Iran. Ex P. Wendelbo 75-84 (A stoloniferous form of this *F. crassifolia* relative, endemic to the N slopes of the Elburz Mts., from the tree-line to 2700m. Pendant bells variably chequered with pale green & brown sometimes open almost at ground-level though it can be 20cm. high. Very seldom cultivated but not unduly difficult.)
- 497.752 : FRITILLARIA KOTSCHYANA** [#Frit.Icone link](#) Iran, Mazandaran, Chalus, Siahbishah. 2100-2300m. Ex G. Bakhshi Khaniki 94-101
- 497.752 : FRITILLARIA KOTSCHYANA** Iran, Mazandaran, Chalus, Siahbishah. 2100-2300m. (From central Elburz forms, selected in the wild by the SLIZE expedition, to cover the variation in this colony, which is considerable. A *F. crassifolia* relative, endemic to the N slopes of the Elburz Mts., from the tree-line to 2700m. Pendant bells variably chequered with pale green & brown sometimes open almost at ground-level though it can be 20cm. high.)
- 497.753 : FRITILLARIA KOTSCHYANA** Iran. Ex P. Wendelbo 75-957
- 497.760 : FRITILLARIA KOTSCHYANA** Iran, Gilan/Ardabil, E of Khalkhal. 1900m. Alpine turf & moist gulleys. (An intriguing form of this *F. crassifolia* relative from the Talesh range, near the border with Azerbaijan. Geographically, close to the Azerbaijan Talysh endemic *F. grandiflora* but different to it. Distinct as well from the cultivated, central Elburz forms, which grow about 300km. to the SE. Broad, glossy green foliage & big, pendant, pale-green bells with a variable, ghostly brown chequering or tinge. This has not been in cultivation before but this is a wet range & it does not seem to be unduly difficult.)
- 497.905 : FRITILLARIA LATAKIENSIS** Turkey, Hatay, Yayladag. Ex R. & R. Wallis 93-17. (Native to the oak scrub area of the adjacent NW corner of Syria & considered to be allied to both *F. assyriaca* & *F. acmopetala*. Little-known in cultivation and in the wild. Slim untesselated purple-brown bells, yellow-green inside, on narrow-leaved, 20cm. stems.)
- 497.920 : FRITILLARIA aff. LATAKIENSIS** Turkey, Icel, S of Gulnar. 800m. Among scrub on limestone. N. Stevens coll. (From one of the puzzling colonies in the valleys along the S side of the Cilician Taurus range. Certainly closest to this more eastern species but with touch more of *F. acmopetala* in its broader, greener bells.) Archibald Archive www.srgc.net

- 498.199 : FRITILLARIA LATIFOLIA** Turkey, Ardahan, Çam geçidi ESE of _av_at. 2300m. Among grasses on rocky slope. (A magnificent mountain-plant, distributed from NE Turkey into the Caucasus. This form from near the Georgian border is closer to the Caucasian plants in appearance than the next. This is a plant from habitats which have extremely cold winters with considerable snow-cover followed by cool summers. It has never been considered easy to grow in the UK but is worth every effort. Shining green leaves & immense, darkest maroon-purple bells on 20-30cm. tall stems.)
- 498.200 : FRITILLARIA LATIFOLIA** Turkey, Rize, Ovit Dag.
- 498.205 : #FRITILLARIA LATIFOLIA** [+ #Frit.Icone link](#) Turkey, Güümü hane, Köse Geçidi. 1960m. Gravelly area on N-facing slope. (The sumptuous dwarfer form, which was originally described as *F. nobilis*, in which the comparatively huge, broad bells, heavily tessellated with rich red-purple, open, almost stemless, sitting on the glossy, green basal leaves.)
- 498.205 : FRITILLARIA LATIFOLIA** Turkey, Gumushane, Kose Gecidi. 1960m. Ex R.& R. Wallis 93A-48. (A sumptuous plant, especially in the dwarfer, Turkish forms, which have been separated as *F. nobilis*, when the comparatively huge, broad bells, heavily tessellated with rich red-purple, sit, almost stemless, on the glossy, green basal leaves. Don't overdry in summer.)
- 498.206 : FRITILLARIA LATIFOLIA** Turkey, "Kara Dag, Kilickaya." 2100m. Ex R.& R. Wallis.
- 498.503 : FRITILLARIA LUSITANICA** Spain, Jaen, Sierra de Cazorla. Ex an A. Edwards coll. (The variable fritillaries of the Iberian peninsula, all currently 'lumped' under this name, do not seem to be satisfactorily divisible into distinct taxa. About 30cm. high with wide bells, flaring at their mouths, in shades of brown with central, yellow-green stripes down each segment.)
- 498.504 : FRITILLARIA LUSITANICA** Spain, Malaga, near Ronda. Ex an R.& R. Wallis coll.
- 498.505 : FRITILLARIA LUSITANICA** Spain, Cadiz, near Grazalema. Rocky field-edges. Ex an R.& R. Wallis coll.
- 498.510 : FRITILLARIA LUSITANICA** Spain, Granada, Sierra Nevada, below Penones de San Francisco. 2400m. Open dryish, NW-facing slope. (Seed from Norman Stevens of this superlative high altitude form of this species. We first saw it in the wild in 1970 but have never located it since, when we have been in the area to collect seed. In the 1970's, Paul Furse told us that the name "*F. nevadensis*" could be applied to this population but we have never been able to trace its origin or validity. Several, large, elongated, grey-green bells variably striped & chequered with maroon on 15cm stems with narrow, curling, greyish leaves.)
- 498.520 : FRITILLARIA LUSITANICA** Spain, Segovia, San Rafael. 1550m. R.D. Dominguez coll. (as *F. pyrenaica*.)
- 498.530 : FRITILLARIA aff. LUSITANICA** Spain, Cordillera Cantabrica, Coriasco S of Potes. Ex C. Ruby
- 498.531 : FRITILLARIA aff. LUSITANICA** Spain, Cordillera Cantabrica, Piena Prieta S of Potes. Ex C. Ruby
- 498.800 : FRITILLARIA MACEDONICA**
- 499.010 : FRITILLARIA MELEAGRIS** No data. An elegant, easy garden-plant in the UK, often sowing itself. Native to S England across central Europe to S Russia, often in the flood plains of rivers. Seed from both purple-chequered & white forms..
- 499.100 : FRITILLARIA MELEAGRIS subsp. BURNATII** Italy, Lombardia, E of Val Camonica, Passo di Croce Domini. 1900m. Turf in moist depression on limestone. (The alpine-meadow race of the south-central Alps with fat, vinous-purple-chequered bells on short stems. Tending to *F. tubiformis* in several characters & much confused in literature with it, as well as being even rarer than it in cultivation. Possibly needs cooler, moister summer conditions than *F. tubiformis*.)
- 499.200 : FRITILLARIA MELEAGROIDES** Native to wet meadows & streamsides from W central Bulgaria, through central Ukraine & S Russia. Stems up to 60cm. with a single broad bell, blackish outside & greenish inside, tessellated with purplish-brown.
- 499.205 : FRITILLARIA MELEAGROIDES** Russia, Volgograd Prov.
- 499.206 : FRITILLARIA MELEAGROIDES** Ukraine, Poltav district. (A local plant of moist meadows & streamsides, distributed from central Bulgaria, through the Ukraine & S Russia. Very little-known in cultivation in western gardens, this is in the same confusing group as *F. montana*, *F. orientalis* & *F. ruthenica*. A slender, elegant plant, about 30cm. high, with narrow leaves & up to 3, dark red-brown, rounded bells late in the *Fritillaria* season. Almost certainly growable outside in the UK.)
- 499.401 : FRITILLARIA MESSANENSIS** (subsp. *messanensis*) Greece, Pieria, Oros Olimbos above Vrontou. 1000m. Steep, stony, limestone slopes. (7528 : 18.6.86)
- 499.401 : #FRITILLARIA MESSANENSIS** (subsp. *messanensis*) Greece, Pieria, Oros Olimbos above Vrontou. 1000m. Steep, stony, limestone slopes. (The classic form of this species with the upper leaves in a whorl of 3 above the nodding bells, variably chequered with brown-purple on a greenish ground & expanding below their pinched-in waists. Seldom-seen.)
- 499.402 : FRITILLARIA MESSANENSIS** (subsp. *messanensis*) Greece, Pieria, Oros Olimbos above Papa Rima. 750m. W-facing slope. P.& P. Watt coll. Archibald Archive www.srgc.net
- 499.407 : FRITILLARIA MESSANENSIS** (subsp. *messanensis*) Greece, Pieria, Oros Olimbos, W of Litochoron. 650m. In mixed scrub on E-facing rocky slopes. Ex R.& R. Wallis 01-48
- 499.408 : FRITILLARIA MESSANENSIS** (subsp. *messanensis*) Greece, Lefkada, Karya. Old olive groves.
- 499.409 : FRITILLARIA MESSANENSIS** (subsp. *messanensis*) Greece, Crete, near Spilia. 850m. S-facing slope. D.M.Hoskins 02-10. (A 2002 wild coll. of the island race from Crete, often strikingly banded with green & elegantly urn-shaped.)
- 499.450 : FRITILLARIA aff. MESSANENSIS** (subsp. *messanensis*) Croatia, Biokovo Planina, above Tucepi. 900m.. Among

limestone boulders. (A most intriguing plant raised from a small seed collection we made in 1990, under our field number 11944. Subsequently misidentified by us and listed once as *F. montana*, under the population ref. 500.301. At the time, we were quite sure this was not *F. messanensis* subsp. *gracilis* & the habitat seemed right for *F. montana*. This it certainly is not but neither is it quite right for anything else. It actually most resembles the stock we have of the Greek *F. mutabilis*. A fine thing, variable in the maroon chequering on its big bells, which have striking, brilliant green fascia of varying width on the outer segments.)

499.600 : FRITILLARIA MESSANENSIS var. ATLANTICA (*F. oranensis*) Morocco, S of Marrakesh, 3000m. Grassy slopes amongst rocks. The only African member of the genus with dark brown flowers on 20cm stems.

499.601 : #FRITILLARIA MESSANENSIS VAR. ATLANTICA Morocco, High Atlas, Djebel Oukaimeden. 2000 m. N-facing slopes among igneous rocks. (cultivated seed from our 1992 coll. While accepting *F. oranensis* is a name applicable to lower altitude plants, I am not at all happy about being left with only varietal status for these mountain races from NW Africa – distinct taxa to me). Note by Laurence Hill: The North Africa accession 0.499.601 is the same as that currently offered by Jānis Rukšāns. Attached is a photo taken of the parent stock in Wales in 2007.

499.700 : #FRITILLARIA MESSANENSIS subsp. GRACILIS Bosnia & Hercegovina, W of Trebinje. 500m. Among *Quercus* scrub over limestone. (Untessellated, chestnut-brown bells, edged with gold. Very hardy & one of the finest, most vigorous species with us, though never numerous in the wild. Definitely worth trying outside in the UK, in a sunny, well-drained site.)

499.701 : FRITILLARIA MESSANENSIS subsp. GRACILIS Bosnia & Hercegovina, Bjelasnica (NE of Dubrovnik). (Untessellated, chestnut-brown bells, edged with gold. Hardy & one of the finest, most vigorous species with us, though never numerous in the wild. A limestone, oak-scrub species worth trying outside in the UK, in a well-drained site.)

499.711 : FRITILLARIA MESSANENSIS subsp. GRACILIS from DARK FORM From stock now grown by Norman Stevens but originating with Cedric Morris.

499.905 : FRITILLARIA MICHAILOVSKYI Turkey, Kars, Sarikamis. 2100m. Ex Mathew & Tomlinson 4295. (From stock maintained since this 1965 introduction. Shiny, mahogany bells, rimmed with yellow or sometimes just gold-tipped.)

499.906 : #FRITILLARIA MICHAILOVSKYI Turkey, Kars, Sarikamis. 2300m. Ex R. & R. Wallis 93-30 & 93-39. (From a fine, classic form of this arresting & growable species. Large, polished mahogany bells, broadly rimmed with yellow. This form is not so readily obtainable as the ubiquity of the name may suggest : many commercial stocks are now poor & very variable.)

500.000 : FRITILLARIA MINIMA Turkey, Van, Artos Dag. 2000m. Steep limestone scree on open NE-facing slope. (From our 1986 wild seed coll. grown in Germany. Not impossible to cultivate but unsuited to our mild, moist Welsh winters. We have given up on it & passed on our stock to a good Scottish grower. Like other high-alpine, snow-melt species, it is also difficult to flower well. Dainty, yellow bells, the twin of the N American *F. pudica*. Native only to Artos Dag & the adjacent mountains.)

500.001 : FRITILLARIA MINIMA Turkey, Van, Kavussahap Dag. 2700m. Steep limestone screes on open slopes. (This is mainly ex O. Sonderhausen 824, grown in Sweden, with some of our seed - the first time we have had any, perhaps due to our cold 1995-96 winter & spring. Not impossible to cultivate but, like some other high-alpine, snow-melt species, extremely difficult to flower well. Dainty, yellow bells, the twin of the N American *F. pudica*. Native only to Artos Dag & the adjacent mountains.)

500.101 : FRITILLARIA MINUTA Turkey, Bingol, Kuruca Pass. 2000m. E.M. Rix 1625. (Little, narrow, terracotta-coloured bells. A neater, dwarfer form than more recent collections from the Van area.) 10+ bulbils :

500.109 : FRITILLARIA MINUTA Turkey, Van. 2900m. Ex Mertens & Pasche 85-126. (Glossy green foliage & little, narrow, terracotta-coloured bells on 10cm. stems. A snow-melt species growing up to 3500m. in SE Turkey.)

500.300 : FRITILLARIA MONTANA Macedonia, Galicica Planina above Trpjeica. 1600m. Exposed, dry, limestone slopes. (A slender, dwarf form of this variable, widespread group. Globular, brownish bells & bulbs with a stoloniferous habit.)

500.303 : FRITILLARIA MONTANA [#Frit.Icone link](#) France, Alpes-Maritimes, NW of Gourdon. 1000m. Among sparse Juniperus on N-facing, limestone slope. Ex P.J. Christian 282. (The name *F. caussolensis* has been applied to plants from this area. A good grower in cultivation with bells heavily chequered in red-brown to wine-red.)

500.320 : #FRITILLARIA MONTANA Turkey, Antalya, SW of Hisarcandir (Antalya to Altinyaka). 900m. Openings among scrub, in heavy red clay. (Raised from a single capsule collected in 1994, in a habitat now largely eliminated by road-construction, this has proved to be *F. montana*, not previously recorded from Turkey & greatly extending the range of this widespread species, the nearest known site being in NE Greece. A particularly fine, tall, elegant form with big dark, brown-purple bells.) [#Frit.Icone link](#) Edit: 0.490.001 *Fritillaria acmopetala* subsp. *acmopetala* = 500.320 *F. montana*

500.329 : FRITILLARIA MONTANA No data. From an excellent, vigorous form, about 50cm. high, possibly originating in E Europe. Up to 4 broad bells densely tessellated with purple-brown on green. Possible outside in the UK.

500.330 : FRITILLARIA aff. MONTANA Greece, Ossa. 1850m. N-facing ridge. P. & P. Watt coll.

500.400 : FRITILLARIA MUTABILIS Greece, Fokida, Oros Giona SW of Kaloskopi. 1800m. Among grasses on open, limestone slopes. (Kamari's name, in her 1991 account, for the populations from the N Peloponnese to the S Pindus, which do not fit into her concepts of *F. graeca* & *F. thessala*. These Greek mainland plants pose the same problem as the Iberian ones. 'Lumping' all under *F. graeca* obscures the utterly distinct nature of the extremes. 'Splitting', dubiously sustainable botanically, though it gives more names to gardeners, means that several 'species' may be found together in populations of 'hybrids' or integrades.).

- 500.401 : FRITILLARIA MUTABILIS** Greece, Viotia, Oros Parnassos, Kelaria. 1700m. Ex an R.& R.Wallis coll
- 500.402 : FRITILLARIA MUTABILIS** Greece, Viotia, Oros Parnassos, Gerondovrachos. 1750m. R.& R.Wallis coll.
- 500.504 : FRITILLARIA OBLIQUA** Greece, Attiki-Pireas, near Marathon. Ex R.& R.Wallis 01.01.
- 500.505 : #FRITILLARIA OBLIQUA** Greece, Attiki-Pireas. Ex an O. Sonderhausen coll. (One of the most local European species, of guaranteed authenticity. Some years ago Martyn Rix sent us seed from this Sonderhausen coll. We grew all of this on to flowering to provide a permanent, genetically diverse seed-source. Up till now we have not been comfortable about distinguishing stocks of this & *F. tuntasia*. This seed is from plants which are certainly distinct from what we list under *F. tuntasia*, though we are no nearer knowing the full range of variation within either species. Mainly 'keyed-out' on its fewer flowers with longer style-branches, *F. obliqua* has similar, bloomy, blackish bells to *F. tuntasia* but these are carried on shorter stems, with far fewer leaves, which lie mainly at the base of the 20cm. stem, where they are broad & glaucous.)
- 500.506 : FRITILLARIA OBLIQUA** No data. Ex N. Stevens form. ("The true plant" writes Norman but this certainly behaves differently to the preceding stock : "the first *Fritillaria* to flower, out in late February or early March.")
- 500.507 : FRITILLARIA OBLIQUA** No data. Ex H.& I.Barton form. (The Bartons were frequent visitors to the Athens area but we have no documentation on this. Distinct from the above & from our stock of *F. tuntasia*.)
- 500.510 : ##FRITILLARIA OBLIQUA** No data. Endemic to a small part of Attica, on the Greek mainland. Close to *F. tuntasia* of the Cyclades. Similar black bells: stockier with fewer flowers & leaves, which lie mainly at the base of the 15cm. stem. [#2nd pic](#)
- 500.700 : FRITILLARIA OLGAE** Tajikistan, Fani Mts., near Iskanderkul lake. (A beautiful species, extremely local in the wild and very rare in cultivation. Pale green flowers with a brownish suffusion on 50cm. stems. Like several eastern species, it is never truly dormant. New root-growth starts before the leaves of the previous season have died back. So, do not dry it off in summer.)
- 500.701 : FRITILLARIA OLGAE** Tadzikistan, Varsob valley. Archibald Archive www.srgc.net
- 500.702 : FRITILLARIA OLGAE** Uzbekistan, Samarkand, near Urgut. Ex a M. Hammer coll. (A beautiful species, extremely local in the wild and very rare in cultivation. From material collected in the mountains on the Uzbek side of the border with Tajikistan (where the species has its main distribution), currently a 'security area' inaccessible to travellers. Pale green flowers suffused with pink on 50cm. stems. Like several eastern species, it is never truly dormant. New root-growth starts before the leaves of the previous season have died back. So, give it a rest but do not dry it off completely in summer.)
- 500.800 : # FRITILLARIA OLIVIERI** Iran, Hamadan, Alwand. Damp meadows. Ex EKB coll.
- 500.801 : FRITILLARIA OLIVIERI** Iran, Kurdistan, E of Sanandaj. 1800m. Damp meadows beside stream. Ex P. Furse 2057. (From the Paul Furse, 1962 coll. In recent years, we have revisited both of these localities with Bob Wallis & Norman Stevens & failed to find this species. The fact that it has persisted in cultivation for so long indicates how trouble-free it is & how well it increases vegetatively but very little seed is ever set. It much dislikes being dried out and baked in summer.)
- 500.802 : FRITILLARIA OLIVIERI** Iran, Kurdistan, ESE of Sanandaj. 2100m. Stony, melt-water gully. (A robust species with big green and brown bells. In 2005, we again visited a series of wet hay meadows, which would appear to be the locality for the 1962 Paul Furse coll., PF 2057. We first went there in 1966 and revisited them in 2000 and 2001. We and others have consistently failed to find this species. In 2005, we climbed up a melt-water gully above the meadows and there was our plant. It probably grows in running water when in flower but it does not grow in the "damp meadows beside stream" with the *Scilla persica*, *Bellevia pycnantha* & orchids. We have had no seed from selfing the PF coll. but this wild coll. should give us much more diversity. Though its habitat is dry after snow-melt, it much dislikes being baked in summer.)
- 500.803 : FRITILLARIA OLIVIERI** Iran, Zanzan, NE of Zanzan. 2400m. Among stones in meltwater gulleys. (A good year for *F. olivieri*. This is another collection of this very local species from hundreds of miles away in a new locality for it in the mountains of N Iran. Here it grows in a precisely similar habitat. We have not seen this colony in flower.)
- 500.808 : FRITILLARIA OLIVIERI** Iran, Hamadan, between Hamadan & Quazvim, N of Razan, 5 km. before Razan pass. 2000m. Ex JMM 01-150
- 500.809 : FRITILLARIA OLIVIERI** Iran, Kurdistan, between Dorud and Azna, Rostamghalah. 1800m. G.Bakhshi Khaniki 82
- 500.810 : FRITILLARIA OLIVIERI** No data. From Alan Edwards.
- 501.200 : FRITILLARIA ORIENTALIS** Full data not available but the genuine species from material collected in the Caucasus by M. Pavelka & grown by N. Stevens. An obscure, little understood plant in the confusing *F. montana* group, where names have been much misapplied. The synonym *F. tenella* is appropriate - slender, 20-30cm. stems with many, linear leaves, the uppermost in a whorl of 3, incline to hang out up to 5 dark bells, densely chequered brown-purple outside & reddish inside.
- 501.205 : FRITILLARIA ORIENTALIS** No data but the genuine species from material originally from Martyn Rix. An obscure, little understood plant in the confusing *F. montana* group, where names have been much misapplied. The synonym *F. tenella* is appropriate : slender, 30cm. stems with many, linear leaves, the uppermost in a whorl of 3, incline (even in cultivation not only on its native cliff faces) to hang out up to 5 dark bells, densely chequered brown-purple outside & reddish inside.
- 501.210 : FRITILLARIA ORIENTALIS** Ex R. Beeston stock as *F. tenella*. No data.
- 501.400 : FRITILLARIA PALLIDIFLORA** Kazakhstan, Tarbagatai range. Ex a J. Ruksans coll. (From a coll. of this splendid Central Asian species, made in this seldom-visited range, on the Sinkiang border N of the Dzungarian Alatau. About 30cm. high

with broad, grey leaves & big pale-yellow bells. One of the finest & most satisfactory to grow outside in the UK.)

- 501.410 : FRITILLARIA PALLIDIFLORA** No data. Splendid Central Asian from the Ala-Tau & Tien Shan. 30cm. or more high with broad, grey leaves & big pale-yellow bells. One of the finest & most satisfactory to grow outside in the UK.
- 501.411 : FRITILLARIA PALLIDIFLORA from SELECTED YELLOW** From Mike & Polly Stone's good lemon-yellow form of this 30cm. tall Central Asian. One of the finest & most satisfactory to grow outside in the UK.
- 501.480 : FRITILLARIA PELINAEA** Greece, Chios. (An endemic of this E Aegean island, known from only three small populations & described by Georgia Kamari in 1996. Much more distinct than many of her new taxa : yes, it is another E Mediterranean plant, about 20cm. tall with green-tinged yellow conical bells but it is not like any other in its broad, glaucous foliage. It should certainly be conserved in cultivation & will prove a worthwhile plant for alpine-house growers.)
- 501.500 : FRITILLARIA PERSICA**
- 501.501 : FRITILLARIA PERSICA** Iran, West Azerbayejan, S of Silvaneh. 1600m. Steep, E-facing, clay slope over limestone. (Well-known in cultivation & quite frequent in the western Iranian mountains. This can reach 1m. in height, though usually about half that, with racemes of up to 20, grey-green to purplish bells. Iranian colonies can be very variable and the yellowish variant described as "*eggeri*" is not uncommon. Possible outside in good, well-drained soil in a sunny site in the UK.)
- 501.505 : FRITILLARIA PERSICA** Turkey, Icel, S of Gulnar. 800m. Among stones on limestone at edge of field. (Well-known in cultivation & quite frequent in the Iranian Zagros but most uncommon in Turkey. Recorded up to 1m. high, though usually less than half that, with racemes of up to 20 bells, here in a vinous purple. Possible outside in a sunny site in the UK.)
- 501.506 : FRITILLARIA PERSICA** Iran, Esfahan, SE of Khonsar. 2700m. Steep, stony slopes.
- 501.507 : FRITILLARIA PERSICA** Iran, Bakhtiari, NW of Farsan. Steep, stony slopes. Archibald Archive www.srgc.net
- 501.508 : FRITILLARIA PERSICA** Iran, Kordestan, NE of Marivan. 1500m. Among tall, perennials on open, igneous slope. Iranian colonies can be very variable and the yellowish variant described as "*eggeri*" is not uncommon.
- 501.520 : FRITILLARIA PERSICA** Jordan, W of Kerak. (The southern populations have been called *F. arabica*. Seed from a very vigorous population, often more than 1m. tall with broad leaves. Flower remains indicate very dark bells.)
- 501.801 : # FRITILLARIA PINARDII** Turkey, Denizli, Honaz Dag. 1650m. Stony clay over limestone. (This is good : a very neat plant & an excellent grower with us. Dwarf with yellow bells, which mature, through greyish browns, to rust-red. Suspiciously like *F. carica* on opening but the altitude & habitat seem wrong for this. *Fritillaria* is not so clear-cut as many growers imagine & it is not possible to reliably distinguish *F. carica* from *F. pinardii* except on the colour.)
- 501.802 : FRITILLARIA PINARDII** Turkey, Antalya, N of Kas, Sinekibeli Gecidi. 1600m. Among sparse *Cedrus* on ledges of outcropping limestone cliffs.
- 501.803 : FRITILLARIA PINARDII** Turkey, Antalya/Konya, Gidengelmez Dag S of Madenli. 1900m. Steep, N-facing slopes at tree-line. (Small form with brownish yellow flowers, flared petal tips.)
- 501.804 : FRITILLARIA PINARDII** Turkey, Antalya, above Yarpuz N of Akseki. 1300m. Open limestone slopes with sparse *Quercus*.
- 501.810 : FRITILLARIA PINARDII** Turkey, Kayseri, S of Pinarbasi. 1400m. Ex R. & R. Wallis 93-30. (A black form of this immensely variable species, widespread throughout Turkey & something of a rag-bag entity.)
- 501.811 : # FRITILLARIA PINARDII** Turkey, Adiyaman, Nemrut Dag. 2000m. Rocky, limestone slopes. N. Stevens coll. (Last year we listed cultivated seed ex E. Frank 87-10 from this locality. This was from a most distinct brick-orange form, which might almost be mistaken for *F. minuta*, but we do not know if it is typical of the entire population on Nemrut Dag.)
- 501.812 : FRITILLARIA PINARDII** Turkey, Cankiri, Ilgaz Dag. Ex a N. Stevens coll. ("Best form" according to D.M.H.)
- 501.813 : FRITILLARIA PINARDII** Turkey, Konya, SSE of Bozkir. 1640m. Ex a J. Ruksans coll. (The bell-shaped flowers with recurved tips to the segments, on stems about 10cm. high are purplish-brown edged with yellow outside and yellow inside. Centred on Turkey, this diverse species-group extends to Armenia, W Iran, Syria & the Lebanon.)
- 501.814 : FRITILLARIA PINARDII** Turkey, Antalya, SW of Bey_ehir, Ye_ilda_. 1000m. Among scattered *Quercus* on grassy slopes. N. Stevens coll. (2006 wild collected seed from this immensely variable species. This a neat 10-15cm. tall form with yellow flowers, of which the outer segments are heavily bronze-tinted and recurved.)
- 501.850 : FRITILLARIA PINARDII** No data. From a wide range of variants of this diverse species, grown by Norman Stevens, who must be the prime candidate to hold the National Collection of *F. pinardii* forms. Bell-shaped flowers on stems from 5-20cm. high can vary from purplish to greyish outside and from greens through yellows to orange-browns inside. The stigma can be either entire or trifid. Centred on Turkey, the species-group extends to Armenia, W Iran, Syria & the Lebanon.
- 501.900 : FRITILLARIA POLUNINII** (*F. crassifolia* subsp. *poluninii*) [#Frit.Icone link](#) Iran, Kordestan, pass between Daraki & Nowsud (S of Marivan). 2500-2600m. Ex P. Wendelbo 78-01. (Rare in cultivation & local in nature. Known only from Oleg Polunin's 1958 type coll. from limestone screes at 2400m., above Suleimaniya in Iraqi Kurdistan, until Per Wendelbo collected it on the Iranian side of the border in 1978. After several earlier attempts Norman Stevens & Jim relocated it here in seed in 2005 (growing adjacent to *F. straussii*). Bob & Rannveig Wallis then found it in flower in 2006, growing in limestone rock-crevices. Recently elevated to specific level by G. Bakhshi Khanishi & K. Persson, this is the dwarfest 'frit',

tiny with large, whitish, brown-veined bells. A high altitude, snow-melt plant, it is one of the latest species to emerge & flower in spring) Edit: 0.493.600 *Fritillaria crassifolia* subsp. *poluninii* = 0.501.900 *F. poluninii*

502.000 : FRITILLARIA PONTICA Turkey, Bolu, near Abant Golu. 1000m. Deep shade among conifers with *Astrantia*, *Daphne*, etc. (6961 : 16.7.85)

502.008 : FRITILLARIA PONTICA Ex M.Prasil 1276 (No further data but probably a Bulgarian population. Big pale green, brown-tinged bells hang below a whorl of green leaves. Usually easy outside in shade in the UK.)

502.009 : FRITILLARIA PONTICA Turkey. Ex P. Furse 67.

502.010 : FRITILLARIA PONTICA No data. A plant of moist shade in the woodlands of Bulgaria & NE Turkey, so, not surprisingly, one of the best to grow outside in the UK. Big, soft-green, brown-tinged, round-shouldered bells.

502.101 : FRITILLARIA PONTICA var. SUBSTIPELATA Greece, Lesbos. Ex a H.& I. Barton coll.

502.102 : FRITILLARIA PONTICA var. SUBSTIPELATA Greece, Lesbos, between Keramia & Agiassos. c.350m. In terra rossa on steep slope half-shaded by *Platanus*. Ex D.M. Hoskins 97-1. (An interesting island-race adapted to much warmer, drier habitats than the mainland type-race. In this coll., it is a taller, more slender plant with narrower foliage than the mainland ones. Longer, waisted, pale-green bells heavily blotched with purple-brown at the tips inside. A very fine thing, rare in cultivation.)

502.103 : FRITILLARIA PONTICA var. SUBSTIPELATA Greece, Lesbos, between Agiassos & Plomari. c.700m. Shaded clay banks at edge of *Quercus* & *Castanea* woodland. Ex D.M. Hoskins 97-5 Archibald Archive www.srgc.net

502.300 : FRITILLARIA PYRENAICA

502.310 : #FRITILLARIA PYRENAICA No data. An excellent garden-plant in the UK. Endemic to the mountain meadows of the wet, W Pyrenees. Broad, dark purple-brown bells, opening at the mouths to show the greenish yellow interiors.

502.311 : FRITILLARIA PYRENAICA from LARGE FORM No data. From authentic stock, given to Norman Stevens by Cedric Morris of the very robust, striking, large flowered form grown by the latter as his 'giant form'.

502.320 : FRITILLARIA PYRENAICA from YELLOW FORMS The beautiful, clear greenish-yellow variants are among the loveliest fritillaries. For long rare in cultivation, they have only been increased vegetatively. Pollinated with typical *F. pyrenaica*, they produce no yellows. A few appear in the second generation, if seedlings are back-crossed. This seed from Rannveig Wallis was produced by crossing two yellow clones (one the fine 'Bernard Tickner') & should give good results.

502.400 : FRITILLARIA RADDEANA Iran, Mazandaran, Gorgan, W of Bojnurd. 1200-1500m. Limestone valley. Ex P. Furse 8953. (From one of the seed & bulb colls. (PF 5162, etc.) made by Paul Furse in 1964 & 1966, in & around what was then the royal hunting reserve in Gulestan. Like a dwarf, primrose yellow version of *F. imperialis*. Small enough for a pot or the bulb-frame but growable outside in the UK though it starts & flowers early, so protection safeguards both flowers & seed-set.)

502.401 : FRITILLARIA RADDEANA Turkmenistan, Kopet Dag, Arvaz valley. (Like a dwarf, primrose yellow version of *F. imperialis*. Small enough for a pot or the bulb-frame but growable outside in the UK though it starts to grow & flower early, so protection safeguards both flowers & seed-set. The cultivated UK stock seems almost wholly derived from the N Iran P. Furse colls. made in the 1960's. This is wild collected seed from the other side of the border. A rare opportunity.)

502.402 : FRITILLARIA RADDEANA Iran, Khorasan. Ex a 1983 Erich Pasche coll.

502.403 : FRITILLARIA RADDEANA Iran, Khorasan, Bojnurd, E of Tang Rah. 1200m. Among scrub on limestone. (Our 2001 wild collection from a little to the E of the earlier PF collections.)

502.420 : FRITILLARIA REGELII

502.440 : FRITILLARIA REUTERI [#Frit.Icone link](#) Iran, Esfahan, N of Daran. 2500m. Among grasses in stony, melt-water gulleys.

502.441 : FRITILLARIA REUTERI Iran, Esfahan, SE of Khonsar. 2600m. Among grasses in wet-flush.

502.450 : #FRITILLARIA REUTERI Iran, NW of Esfahan. (Extremely local in the Bakhtiari country of the central Zagros range but numerous in a few, seasonally moist, stony meadows at 2500-3000m. Wide mahogany bells, broadly bordered with yellow, not unlike *F. michailovskyi* but taller & more delicate, both in habit & constitution. Not easy & scarce in cultivation, though several growers have found it takes well to life outside in N Europe. It certainly prefers not being too dried-out in summer.)

502.451 : FRITILLARIA REUTERI Ex G.Bakhshi Khaniki 94-92

502.452 : FRITILLARIA REUTERI Iran, Esfahan, pass S of Khonsar. 2700m. Seasonally waterlogged soil, where a small rivulet had spread out in a flatter area. RRW 04-097. (Extremely local in the Bakhtiari country of the central Zagros range but numerous in a few, seasonally moist, stony meadows at 2500-3000m. Wide mahogany bells, broadly bordered with yellow, not unlike *F. michailovskyi* but taller & more delicate, both in habit & constitution. Not easy & scarce in cultivation, though several growers have found it takes well to life outside in N Europe. It certainly prefers not being too dried-out in summer.)

502.500 : FRITILLARIA RHODIA Greece, Rodos. M. Harvey coll., June, 1997. (A delicate, very narrow-leaved Rhodes endemic with yellow bells, close in appearance, as well as geographically, to the SW Turkish *F. forbesii* but distinguished from it by a glabrous style and wider inner perianth-segments. Not an easy species to grow well & seldom seen in cultivation.)

502.600 : FRITILLARIA RHODOCANAKIS Greece, Argolida, Idra, above Idra town. 150m. M. Harvey coll., 1997

502.601 : FRITILLARIA RHODOCANAKIS Greece, Argolida, Idra. Ex an R.& R. Wallis coll. (Endemic to the island of Hydra, off the SE Peloponnese. Neat, about 10cm. tall, & usually with yellow-tipped, chocolate-brown, widely flaring bells. Wholly yellow-green forms seem not to be uncommon & seed from one is included, though they do not appear to come 'true' in first generation seedlings.)

502.605 : FRITILLARIA RHODOCANAKIS from YELLOW-GREEN FORM Data as above. See preceding comments.

502.606 : FRITILLARIA RHODOCANAKIS No data. Endemic to the island of Hydra, off the SE Peloponnese. Neat, about 10cm. tall, & usually with yellow-tipped, chocolate-brown, widely flaring bells. Wholly yellow-green forms seem not to be uncommon.) Archibald Archive www.srgc.net

502.620 : #FRITILLARIA RIXII Greece, Evia. (Described by Zaharof in 1986, from 700-800m. on Xiron & Kandhili on Euboea. Georgia Kamari (1991) considers it a "poorly defined ecotype" of the higher altitude *F. euboeica*. As the latter is still a little-known plant in cultivation, this will make it no less desirable to the specialist, especially as Norman Stevens commends as a form more likely to appeal to gardeners. About 20cm. high with yellow bells : perhaps closest to the Turkish *F. sibthorpiana*.)

502.700 : FRITILLARIA RUTHENICA Russia, (formerly Mordovskaya ASSR), Penza district. (From a wild coll. of this seldom-seen, northern species in the Volga basin, SE of Moscow & N of the Caspian. In the *F. montana* group & closest to the equally obscure *F. orientalis* (q.v.), from which it is easily distinguished by the curled, cirrhose tips of the upper leaves. Though this name is sometimes misapplied to other members of this group in cultivation, we grew the genuine plant years ago from material given to us by Paul Furse but originating from Moscow Botanic Garden. A very elegant thing it was with narrow leaves & dark maroon-red, chequered bells. It should be a plant which is possible in the open garden in the UK.)

502.701 : #FRITILLARIA RUTHENICA Russia, (formerly Mordovskaya ASSR), Saratov district. (From a wild coll. of this seldom-seen, northern species in the Volga basin, towards the border with Kazakhstan. Closest to the equally obscure *F. orientalis* (q.v.), from which it is easily distinguished by the curled, cirrhose tips of the upper leaves. Though this name is sometimes misapplied to other members of this group in cultivation, we grew the genuine plant years ago from material given to us by Paul Furse but originating from Moscow Botanic Garden. A very elegant thing it was with narrow leaves & dark maroon-red, chequered bells. A very hardy plant which should be possible in the open garden in the UK & colder areas of N America.)

502.740 : FRITILLARIA SEWERZOWII Kazakhstan, , Karzhantau, SE of Chimkent, Burguluk. 1300m. Rock-crevices & among scrub on open slopes. (An exciting & most distinct Central Asian species, with affinities to *F. imperialis* & to *Lilium*. Split by some into the monotypic genus *Korolkowia*. Like no other in its pendant, narrow bells with widespreading tips. Quite variable in colour from brilliant yellow-green to blackish brown. About 30cm. or more high with broad, grey-green leaves.)

502.741 : FRITILLARIA SEWERZOWII Kazakhstan, Djambil, Karatau, WNW of Koktal . 800m. Open slopes.

502.742 : FRITILLARIA SEWERZOWII Kazakhstan, Djambil, Karatau, WSW of Karabastai. 1100m. Steep slopes

502.750 : FRITILLARIA SEWERZOWII Uzbekistan, Chimgan valley. (A wild coll. of this exciting & most distinct Central Asian species, with affinities to *F. imperialis* & to *Lilium*. Split by some into the monotypic genus *Korolkowia*. We have always found it a difficult plant but others grow it successfully. Like no other in its pendant, narrow bells with widespreading tips to the segments of brilliant yellow-green to blackish brown. About 30cm. or more high with broad, grey-green leaves.)

502.759 : FRITILLARIA SEWERZOWII Uzbekistan, Pskem, Ihnachsai. (From a selected dark brown form.)

502.760 : FRITILLARIA SEWERZOWII No data. An exciting, distinct Central Asian species, with affinities to *F. imperialis* & to *Lilium*. Split by some into the monotypic genus *Korolkowia*. We have always found it difficult but others grow it successfully. This seed is from Germany : it may enjoy a more continental climate. Like no other in its pendant, narrow bells with widespreading tips to the segments of brilliant yellow-green to blackish brown. About 30cm. or more high with broad, grey-green leaves.)

502.804 : FRITILLARIA SIBTHORPIANA Turkey. M. Harvey coll., June, 1997.

502.805 : FRITILLARIA SIBTHORPIANA (subsp. *sibthorpiana*) Turkey, Muğla, above Bayir to Bozborun. Ex an R.& R. Wallis coll. (Described in 1809 & 'lost' for 185 years after Sibthorp's type-coll. (meanwhile its name was widely misapplied). Still only known from a few localities on the peninsulas SW of Marmaris in the extreme SW corner of Turkey. Distinct from the others with bright yellow bells in its two, or occasionally three, broad, glaucous leaves, clasping the 20-30cm. stem.)

502.810 : FRITILLARIA SIBTHORPIANA (subsp. *sibthorpiana*) No data.

502.820 : # FRITILLARIA SIBTHORPIANA subsp. ENGINII Turkey, Mugla, NE of Marmaris. 50-1450m. (Described in 1995 from the inland ranges on the opposite side of Marmaris from the type-race, which is exclusively a limestone plant, and easily distinguished by its 4 (rather than 2), shiny green leaves and dull-yellow to greenish yellow flowers. Originally thought to be a serpentine race, it has also since been found on shales & occasionally limestone. Both subspecies are extremely local plants confined to a few very small colonies & we hope they can now be maintained by specialists in cultivation.)

Note : name on Fritillaria.org.uk given as subsp. *enginiana* No other record found.

502.870 : FRITILLARIA SORORUM [#Frit.Icone link](#) Turkey, Icel, NNE of Anamur (31km. from Anamur to Ermenek) 950m. In scrub. J.Persson 87-97.

502.871 : FRITILLARIA SORORUM Turkey, Icel, NNE of Anamur (24km. from Anamur to Ermenek). 500m. In scrub. J.Persson 87-99.

- 502.880 : FRITILLARIA aff. SORORUM** Turkey, Icel, N of Gulnar. 700m. Ex a N.Stevens coll. (Described in 1998 from the J.& K.Persson 87-99 coll., without a precise type-locality, though a much earlier coll. (Davis & Polunin 26044) was made in this area & noted by Martyn Rix, who did not see fit to consider it as a new species in his 'Flora of Turkey' account of 1984 nor indeed in his account of *F. whittallii* alongside the typification of *F. sororum* in 1998. Martyn's reluctance to proliferate specific names in *Fritillaria* is commendable but nevertheless this is, horticulturally, quite distinct, somewhat intermediate between *F. acmopetala* & the much more western *F. whittallii* in appearance, though the short type-diagnosis compares it with *F. involucrata* from the Alpes-Maritimes. About 30 cm. high with alternate linear leaves & rounded, rather than angular, bells of glaucous green chequered with purple-brown.)
- 502.881 : FRITILLARIA aff. SORORUM** Turkey, Icel, N of Gulnar. 700m. Ex a N.Stevens coll. (Somewhat dwarfer than the preceding with more strongly coloured bells. Not listed by us before.) Archibald Archive www.srgc.net
- 502.882 : FRITILLARIA aff. SORORUM** Turkey, Icel, Gulnar to Boza_a_. 700m. Shaded, humus pockets on limestone outcrops. Ex R.& R.Wallis 92-104. (The form Bob & Rannveig have exhibited as *F. sororum*.)
- 502.900 : FRITILLARIA SPETSIOTICA** Greece, Spetse, ridge below Profitis Ilias. Ex a M. Harvey coll. (Described from the island of Spetse off the S tip of Argolida as a new species by Georgia Kamari in 1986. Kamari also considers that it and its hybrid with *F. rhodokanakis* occur on the neighbouring mainland peninsula. The complex group to which this belongs also includes *F. davisii*, *F. graeca*, *F. argolica* & *F. rhodokanakis*. Brownish purple chequered bells.)
- 503.000 : FRITILLARIA SKORPILII**
- 503.200 : FRITILLARIA STENANTHERA** Uzbekistan, Tashkent, Chatkal range above Beldersai. 1400m. Exposed gravelly ridge. (A Central Asian species in subgenus *Rhinopetalum*, which usually offers fewer problems in cultivation than some of its allies. Several widely flared flowers with dark nectaries, usually in pearly white, pink-tinged to varying degrees (some populations are quite rich pinks) on grey-leaved, 20 cm. stems. These *Rhinopetalum* spp. have been successfully grown in the UK by keeping them dry through the winter and not watering until weather warms in spring but this can be risky with young stock.)
- 503.201 : FRITILLARIA STENANTHERA** Kazakhstan, Djambil, Karatau WNW of Koktal. 800m. Stony ridge.
- 503.207 : FRITILLARIA STENANTHERA** Uzbekistan, Tashkent, N slope of Pskem range, 30km. NE of Chimgan village..
- 503.208 : FRITILLARIA STENANTHERA** Uzbekistan, Tashkent, 5-7km. W of Chimgan village. 1900m. (Rich pink form)
- 503.209 : FRITILLARIA STENANTHERA** Afghanistan, Balkh, S of Mazar-i-Sharif. 2000m. Grassy hillsides.
- 503.210 : FRITILLARIA STENANTHERA** Uzbekistan, Pskem range, Ihnatschsai. 2700m. Ex a J. Ruksans coll.
- 503.211 : FRITILLARIA STENANTHERA** Uzbekistan, Uch-Uzen. 1500m. Ex a J. Ruksans coll.
- 503.300 : FRITILLARIA STRAUSSII**
- 503.305 : FRITILLARIA STRAUSSII** Iran, Kordestan, S of Marivan. 2500m. Among limestone rocks on top of col. (This sought-after species in the *F. crassifolia* group is robust with paired or whorled shiny green leaves and broadly bell-shaped flowers. The few clones from the 1960's we have had in cultivation, where it has always been rare and not easy to grow have been rich red-brown, tessellated all over and opening from green buds. Recent investigations indicate much more variation but it remains a somewhat mysterious plant and several undescribed taxa may have been attributed to it. This 2005 collection from right on the border between Iraq and Iran is from a much higher altitude than previous records.)
- 503.306 : FRITILLARIA STRAUSSII** Iran, Kermanshah, 5km. S of Kerend in side valley E of main road. 1600m. N-facing rock-crevices in low cliffs. Growing amongst large herbaceous *Umbelliferae* & shaded by small *Quercus* trees. R.& R.Wallis 04-077. (A wild Iranian seed-collection from near to the Thomas Strauss 1903 type-locality. We searched for seed in this area, towards the Iraqi border, unsuccessfully in the 1960's. This is an early-flowering. oak-scrub plant from quite low-down in the western foothills of the Zagros, where it is hot in summer but snow-covered for a period in winter. This sought-after species in the *F. crassifolia* group is robust with paired or whorled shiny green leaves and broadly bell-shaped flowers in rich red-brown, tessellated all over and opening from green buds. It is not easy to grow.)
- 503.307 : FRITILLARIA STRAUSSII** Iran, Kermanshah, SW of Govevar (approx. 1km. below summit). 1900m. Shady crevices in E-facing cliffs & rock outcrops amongst small, multistemmed oak-trees. R.& R. Wallis 04-075
- 503.308 : FRITILLARIA STRAUSSII** Turkey, Hakkari, NNW of Semdinli (12km. from Semdinli). Among *Quercus* scrub on loose slopes. Ex O. Sonderhausen 936. (A collection from the point where the borders of Turkey, Iran and Iraq meet. A heavy Turkish army presence makes it impossible to get near this area at present and it will doubtless remain inaccessible as long as Iraq is occupied. This sought-after species in the *F. crassifolia* group is a robust plant with paired or whorled shiny green leaves and broadly bell-shaped flowers in rich red-brown, tessellated all over and opening from green buds. Not easy to grow.)
- 503.309 : FRITILLARIA STRAUSSII** Iran, Kermanshah, pass between Ilam & Eslamabad. Ex G. Bakhshi Khaniki 051. (This coll. is from near to the Thomas Strauss 1903 type-locality. We searched for seed in this area, towards the Iraqi border, unsuccessfully in the 1960's. This is from a 1994 coll. by an Iranian botanist. This is an oak-scrub plant from quite low-down in the western foothills of the Zagros, where it is hot in summer but snow-covered for a period in winter.)
- 503.320 : FRITILLARIA aff. STRAUSSII** Iran, Kordestan, pass between Daraki & Nowsud. 2250m. Among *Astragalus* on N-facing, steep, stony slopes immediately on N side of top of pass. R.& R.Wallis 04-063.
- 503.500 : FRITILLARIA STRIBRNYI** [#Frit.Icone link](#) Turkey, Canakkale, Gelibolu (Gallipoli). Ex V. Horton & N. Stevens

2067. (Extremely local in SE Bulgaria & adjacent European Turkey, just crossing the Bosphorus into Asia here. Elegant, about 20cm. high with linear, greyish foliage & narrow, glaucous, untesselated, purple & green bells. Slow, seldom available but not so difficult.)

503.600 : FRITILLARIA THESSALA (subsp. *thessala*) Greece, Ioanina, Peristeri above Metsovon. 1980m. Among grass on steep N-facing slope. (453 : 3.8.64 ; this does not look at all like *F. thessala* but what else?) Archibald Archive www.srgc.net

503.601 : #FRITILLARIA THESSALA (subsp. *thessala*) (*F. graeca* subsp. *thessala*) Greece, Trikala, below Katara . 1500m. Open W-facing slope with *Pinus* & *Juniperus*. (5090 : 19.5.84). Quite an even population & a distinct enough species here in the central Pindus. Big, long bells, variably chequered with brown-purple hang below the topmost whorl of 3 broad, grey-green leaves.)

503.602 : FRITILLARIA THESSALA Greece, Ioanina, Oros Smolikas above Agios Paraskevi. 1500m. Open pasture on limestone. Ex P. Christian & A. Hoog 880. (Very variable in its ghostly chequering on a subtle range of ground-colours. We have even a few yellows with soft-green chequering in this batch of wild seedlings. Seed of these in included but it is a long-shot.)

503.603 : FRITILLARIA THESSALA Greece, Pieria, Oros Olimbos. Ex an A. Edwards coll. (Most unlikely. Not recorded from Olympus - **do not list** until stock checked in flower. Possibly *F. messanensis* subsp. *messanensis*.)

503.604 : FRITILLARIA THESSALA Greece, Ioanina, E of Eptahori (NE of Konitsa). 1200m. Margin of coniferous woodland. 10.6.96 (Not seen in flower here but Kamari places populations from this area under *F. thessala* subsp. *ionica*.)

503.650 : FRITILLARIA THESSALA No data. Mainly from quite dwarf forms with pale-green, dimly chequered bells, fairly representative of the plants of the central Pindus.

503.651 : FRITILLARIA THESSALA from YELLOW FORMS Greece, Ioanina, Oros Smolikas above Agios Paraskevi. 1500m. Open pasture on limestone. (From three pale yellow clones with soft-green chequering we have selected out of a batch of seedlings from the P. Christian & A. Hoog 880 coll., segregated and pollinated among themselves.)

503.700 : FRITILLARIA THESSALA subsp. IONICA (*F. ionica*) Greece, Kerkira, Pantokrator. Ex an E Sewell coll. (Doubtfully separable from mainland populations but we retain the name for the Corfu island-race, which is fairly consistent in its single green bells just touched with a purple or pink tessellation on the margins. Dwarfier & a good grower in the UK.)

503.719 : #FRITILLARIA THESSALA subsp. REISERI Greece, Aetolia, E of Mesolongi. Koutsiliaris. 10-75m. Shaded by *Phlomis*, *Salvia* & *Euphorbia dendroides* in phrygana on NW-facing slope. Ex R. & R. Wallis 03-34. (A disjunct, low-altitude endemic of the W Greek limestones of Aetolia below 200m. barely known in cultivation. Broad, shining green leaves & dusky purple-brown bells, sometimes with indistinct tessellation. A most distinct, robust plant, the most striking of the variable *F. thessala* complex and more worthy of specific status than some others to which this rank is accorded.)

503.720 : FRITILLARIA THESSALA subsp. REISERI Greece, Aetolia, Akarnanika. (A low-altitude endemic of the W Greek limestones of Aetolia below 200m., barely known in cultivation. Broad, shining green leaves & dusky purple-brown bells, sometimes with indistinct tessellation. A most distinct, robust race, perhaps the most striking of the variable *F. thessala* complex. See also the coll. attributed to *F. messanensis* from the island of Lefkada just off the coast of Akarnanika.)

503.800 : # # FRITILLARIA TUBIFORMIS (subsp. *tubiformis*) #2nd pic France, Hautes-Alpes, Pic de Gleize NNW of Gap. 1800m. Among *Helictotrichon* on steep, SE-facing limestone slopes. (One of the finest alpine species with huge, fat, chequered, brown-purple bells on short stems. Absolutely hardy & better grown cool in a frame or even a raised bed outside than cooked under glass, though this population from a summer-dry site seems more accommodating than those from moister, meadow-habitats.)

504.000 : FRITILLARIA TUBIFORMIS subsp. MOGGRIDGEI

504.004 : FRITILLARIA TUBIFORMIS subsp. MOGGRIDGEI France, Alpes-Maritimes, Col de la Lombarde. 2000m. In acidic turf between granite-rocks on W-facing slopes. P. & P. Watt coll. (Difficult, little, yellow alpine. Few.)

504.005 : FRITILLARIA TUBIFORMIS subsp. MOGGRIDGEI Ex a J. Hulme coll.

504.006 : FRITILLARIA TUBIFORMIS subsp. MOGGRIDGEI France, Caktrino (Casterino?), W of Malga Sottan in Val Fontanalba. 500m. Ex O. Sonderhausen 718

504.209 : FRITILLARIA TUNTASIA Greece, Kiklades, Serifos

504.210 : FRITILLARIA TUNTASIA No data but endemic to the islands of Kithnos & Serifos in the Kiklades, off the coast of Attica in Greece. A somewhat taller, more slender plant than the allied *F. obliqua* with more greyish leaves more evenly distributed up the 30cm. stems & up to 5 flowers. There seems confusion between these two in cultivation & it appears that this species is a very variable entity in the wild. We have not yet been able to flower assess seedlings of the above wild coll. but you will find authentic seed of *F. obliqua* listed. The two stocks are most distinct & neither offer any great problems under glass in the UK. Some excellent seed this year of this strikingly beautiful plant, whose conical bells are virtually black with a glaucous bloom outside.

504.510 : FRITILLARIA UVA-VULPIS No data.

504.580 : FRITILLARIA VERTICILLATA [#Frit.Icone link](#) Kazakhstan, Altai Mts., Kara-Sumbe valley. (The species (or at least populations allied to it) supposedly extends from here through eastern Asia. This collection is from the southernmost Altai, more or less at a point where the borders of Russia, Kazakhstan, Mongolia and Chinese Xinjiang meet. It is quite

different to plants familiar in cultivation under this name or *F. thunbergii*. A beautiful, free-flowering plant, about 50cm. tall and possibly most closely allied to the Chinese *F. tortifolia*, with pure-white flowers, delicately veined with green and opening widely.)

504.581 : FRITILLARIA VERTICILLATA Kazakhstan, Tarbagatay Range, near Urdzhar. (From a collection of this quite variable but little-known species made in eastern Kazakhstan where this mountain-range runs on into Chinese Xinjiang. Distinct from the Kara-Sumbe valley form, from further N in the Altai, in its straighter, narrower, white bells. Janis Ruksans considers this “very beautiful” and suggests there may be several taxa involved in our concept of this species, which, of course, has little to do with plants familiar in cultivation under this name or *F. thunbergii*. Possibly most closely allied to the Chinese *F. yuminensis* but with pure-white flowers, delicately veined with green and opening more widely.)

504.600 : FRITILLARIA VIRIDIFLORA

504.650 : FRITILLARIA WALUJEWII

504.659 : FRITILLARIA WALUJEWII Uzbekistan, Alaiskiy range, near Scachimardan. (A handsome Central Asian species, with very large, very broad, shouldered bells, dimly chequered with maroon and greenish-grey, pendant on 20cm. stems, below whorls of narrow, attenuate leaves. According to Martyn Rix, this is locally distributed from the Pamir Alai, N through the E Tien Shan to the Dzungarian Ala Tau, often growing among *Juniperus* scrub in peaty soil over limestone.)

504.660 : FRITILLARIA WALUJEWII No data. A handsome Central Asian species, little known in cultivation. Very large, very broad, shouldered bells, dimly chequered with maroon and greenish-grey, pendant on 20cm. stems, below whorls of narrow, attenuate leaves. According to Martyn Rix, this is locally distributed from the Pamir Alai, N through the E Tien Shan to the Dzungarian Ala Tau, often growing among *Juniperus* scrub in peaty soil over limestone. We are currently growing material from NW China ourselves but this stock most probably originated in the former USSR.

504.700 : FRITILLARIA WHITTALLII Turkey, Antalya, SW of Elmali. 1600m. Opening among *Cedrus* in pocket of black soil mixed with limestone talus. (Exceptionally local, this appears limited to patches of humus-rich scree at about the tree-line of cedar-forest in Antalya & Isparta provinces. Elegant with linear leaves & wide pale-green bells, tessellated with purple.)

504.703 :# FRITILLARIA WHITTALLII Turkey, Antalya, Ciglikara forest near Gombe. 1320m. Ex R.& R. Wallis 90-11. (Exceptionally local, this appears limited to patches of humus-rich scree at about the tree-line of cedar-forest in Antalya & Isparta provinces. Elegant with linear leaves & wide pale-green bells, tessellated with purple.) Archibald Archive www.srgc.net

504.704 : FRITILLARIA WHITTALLII Turkey, Antalya, N of Akseki, above Irmasan Gecidi. 1900m. Leafmould in rock-pockets at upper limit of mixed forest. Ex R.& R. Wallis 90-52. (Exceptionally local, this appears limited to isolated patches of humus-rich scree at about the tree-line of cedar-forest in Antalya & Isparta provinces. Its elegant habit with linear leaves & large, pale-green, purple-tessellated bells, recall *F. meleagris*.)

504.705 : FRITILLARIA WHITTALLII Turkey, Isparta. Ex a N.Stevens coll. (Exceptionally local, this appears limited to isolated patches of humus-rich scree at about the tree-line of cedar-forest in Antalya & Isparta provinces. Its elegant habit with linear leaves & large, pale-green, purple-tessellated bells, recall *F. meleagris*.)

504.706 : FRITILLARIA WHITTALLII Turkey, Antalya, E of Elmali, Bey Dag. Ex a N.Stevens coll. (Exceptionally local, this appears limited to isolated patches of humus-rich scree at about the tree-line of cedar-forest in Antalya & Isparta provinces. Its elegant habit with linear leaves & large, pale-green, purple-tessellated bells, recall *F. meleagris*.)

504.707 : FRITILLARIA WHITTALLII Turkey, Antalya, N of Akseki, above Irmasan Gecidi. 1900m Leafmould in rock-pockets in forest. Ex R.& R. Wallis 90-52. (An interesting coll. signalled out for mention by Martyn Rix.)

504.710 : FRITILLARIA WHITTALLII No data. From several N. Stevens colls.

504.798 : FRITILLARIA ZAGRICA Iran, Esfahan, SE of Aligudarz. 2300m. Among steppe-vegetation on steep slopes. (A dwarf species, characteristic of dryish, steppe habitats in the mountains in the central Zagros range & dependant on snow-melt for its moisture. Introduced in the 1960's but it became very rare in cultivation, where it is by no means easy to maintain. Glaucous, black to dark plum-purple bells, distinctively & characteristically tipped with yellow. Our 2005 collections cover a wide area of its distribution and we hope may yield some more growable forms.)

504.799 : FRITILLARIA ZAGRICA Iran, Markazi, SW of Arak. 2200-2300m. Open rocky slopes. (listed in 2001 under field-number 17197) (A classic form of this dwarf species, characteristic of the mountains in the central Zagros range, often as a snow-melt plant. Introduced in the 1960's but it became very rare in cultivation, where it is by no means easy to maintain. Extraordinarily unvariable in its glaucous, black to dark plum-purple bells, distinctively & characteristically tipped with yellow.)

504.800 : FRITILLARIA ZAGRICA Iran, Esfahan, SE of Khonsar. 2600m. Sandy clay. (listed in 2000 under field-number 16980) (also ex G. Bakhshi Khaniki 089) (A classic form of this dwarf species, characteristic of the mountains in the central Zagros range, often as a snow-melt plant. Introduced in the 1960's but it became very rare in cultivation, where it is by no means easy to maintain. Extraordinarily unvariable in its glaucous, black to dark plum-purple bells, distinctively & characteristically tipped with yellow.)

504.801 : FRITILLARIA ZAGRICA Iran, Kordestan, NW of Divandarreh. 2000m. Gravelly clay slopes. (listed in 2000 under field-number 16869) (A coll. from further N than we expected to find this species. Browner, yellow-tipped bells.)

504.802 : FRITILLARIA ZAGRICA Iran, Esfahan, SE of Aligudarz. 2200m. Steep, loose, stony slope.

504.810 : FRITILLARIA ZAGRICA Iran, Hamadan. (From several P. Wendelbo colls. made in this area of W Iran. A little

species, 5-10cm. high, from up to 3000m. in the central Zagros range, often as a snow-melt plant. Now rare in cultivation. Extraordinarily unvariable in its glaucous, black to dark plum-purple bells, distinctively & characteristically tipped with yellow.)

504.850 : FRITILLARIA aff. ZAGRICA Iran, Kordestan, ESE of Sanandaj. 2100m. Open, stony slope. (Possibly very robust forms of *F. zagrica* or may be hybrids with *F. olivieri*, which grows nearby in seasonally wetter habitats.)

16737 : FRITILLARIA SP. Iran, Gilan, Talesh, E of Khalkhal. 2000m. Moist turf. 24.5.00 (The only two species recorded from the Talesh are *F. kotschyana* and *F. grandiflora*, an allied taxon described from immediately adjacent Azerbaijan.)

16773 : FRITILLARIA SP. Iran, East Azerbayejan, SW of Ahar. 1820m. Montane steppe. 26.5.00 (The only species recorded from this area is the yellow and brown flowered member of the *F. crassifolia* complex described as *F. karadaghensis*.)

16878 : FRITILLARIA SP. Iran, Kordestan, WNW of Sanandaj. 2100m. Loose talus on steep slopes. 31.5.00 (The species recorded from this area are *F. crassifolia* subsp. *poluninii*, *F. chlorantha* and *F. straussii*.)

16897 :# FRITILLARIA CHLORORHABDOTA Iran, Kordestan, SW of Negel (between Sanandaj & Marivan). 1350m. *Quercus* scrub on shale. 31.5.00 Archibald Archive www.srgc.net

16904 : FRITILLARIA SP. Iran, Kordestan, WNW of Sanandaj. 1600m. Loose, stony clay on W-facing slope. 31.5.00 (Species recorded from this area : *F. crassifolia* subsp. *poluninii*, *F. chlorantha* and *F. straussii*.)

16907 : FRITILLARIA SP. Iran, Kordestan, ESE of Sanandaj. Steep, rocky slopes with diverse steppe-vegetation. 1.6.00 (Species recorded from this area are *F. olivieri* (a wet-grower for which we searched unsuccessfully) and *F. zagrica*)

16929 : FRITILLARIA SP. Iran, Hamadan, NE of Assadabad. 2200m. *Astragalus*-steppe on slate & schist. 2200m. 2.6.00 (The only species recorded from this area is *F. zagrica*.)

16936 : FRITILLARIA SP. Iran, Lorestan, WNW of Dorud, Razan pass. 2000m. Loose, sandy clay slope. 3.6.00 (Species recorded from this area : *F. chlorantha*, *F. zagrica* and *F. chlororhabdota*.)

16980 : FRITILLARIA SP. Iran, Esfahan, SE of Khonsar. 2600m. Sandy clay. 5.6.00 (Species recorded from this area : *F. reuteri* (unlikely as wet-grower) & *F. zagrica*.)

17197 : FRITILLARIA SP. Iran, Markazi, SW of Arak. 2200-2300m. Open rocky slopes.

17233 : FRITILLARIA SP. Iran, Kordestan, E of Sanandaj to Marivan. 1700m. Loose shale slopes.

17242 : FRITILLARIA SP. Iran, Kordestan, E of Shuysheh (SE of Marivan). 1750m. Open shale slopes.

17255 :## FRITILLARIA SP. Iran, Kordestan, SW of Daraki (S of Marivan). 2500m. SW-facing limestone slope. #2nd pic

(This coll. has to be almost precisely on Wendelbo's Iranian locality for *F. crassifolia* subsp. *poluninii* but this is a big, robust plant about 25cm. high with up to four flowers. The first thought was that it had to be something to do with *F. straussii* but the leaves are alternate, neither paired nor whorled. It may be best to consider it a new taxon in the *F. crassifolia* complex. Oleg Polunin collected a herbarium specimen of a similar plant in Iraq in the 1950's (at the same time as the type-collection of *F. c.* subsp. *poluninii*) but it has been ignored (maybe because he recounts that his herbarium sheets blew away & the data may be muddled). This area, high in the mountains right on the Iraq-Iran border, has long been inaccessible & is still virtually uncollected. We doubt that it would be possible to repeat our visit. Perhaps "*F. crassifolia* subsp. *axis-mali*" might be a currently appropriate name)

17279 : FRITILLARIA SP. Iran, West Azerbayejan, S of Salmas. 1780m. Montane grassland on open slope. (Our 2000 coll. was listed under the field-number 16820) (Last year we suggested this population, which we have not seen in flower, was almost certainly *F. chlororhabdota*, which is recorded from this area & is the plant assigned to "*F. canaliculata*" in the 1960's. Bob & Rannveig Wallis have now flowered a few specimens and can say it does not have canaliculate leaves & is certainly not this. Kurt, who accompanied Norman & Jim in 2001 has distributed some seed of this as *F. atrolineata* but it does not match the description of this species (another recently described taxon from this area, which we failed to locate near the type-locality but did collect in 2000, not 2001, a short distance to the N near Silvaneh). Bob says he could call it *F. zagrica* if it had yellow-tipped flowers (a similar plant may account for the record of *F. zagrica* near the Turkish-Iranian border crossing at Esendere) and could key it out as the Turkish endemic *F. armena*. The habitat seems wrong for both of these : a rich meadow not steppe and moreover this is a slender plant 20cm. or more high. Maybe it is nearer the northern *F. caucasica* but who can say it will not end up as another new species.)

507.300 : # GAGEA FIBROSA Turkey, Hatay, E of Belen. 1250m. Stony areas & fissures on limestone outcrop. ("One of the largest & most striking" writes Martyn Rix. Starry, bright-yellow flowers with long perianth segments, which persist in seed.)

507.301 : GAGEA FIBROSA Syria, Slunfeh. 1200m. Open, rocky summit. Ex R. & R. Wallis 95-24

508.000 : GALANTHUS ALPINUS (var. *alpinus*)

508.050 : GALANTHUS ALPINUS var. **BORTKEWITSCHIANUS**

508.060 : GALANTHUS ANGUSTIFOLIUS

508.100 : GALANTHUS CILICICUS

508.200 : GALANTHUS ELWESII

508.300 : GALANTHUS ELWESII subsp. **GRAECUS**

- 508.500 : GALANTHUS FOSTERI** Turkey, Hatay, E of Belen. 1250m. Shaded crevices on limestone outcrops. (A distinct snowdrop with shiny, green leaves, from central Turkey, S through Syria into Lebanon. Does well pot-grown.)
- 508.510 : GALANTHUS FOSTERI** No data. Ex several R.& R. Wallis colls. from S Turkey & Syria. (A distinct snowdrop with shiny, green leaves, It has a N-S distribution through central Turkey & Syria into Lebanon. Does well pot-grown.)
- 508.600 : GALANTHUS GRACILIS**
- 508.700 : GALANTHUS IKARIAE**
- 508.750 : GALANTHUS KOENENIANUS**
- 508.800 : GALANTHUS KRASNOVII**
- 508.850 : GALANTHUS LAGODECHIANUS**
- 508.902 : GALANTHUS NIVALIS** Croatia, near Vocin. W. McLewin 98-27. (The classic, winter-flowering snowdrop.)
- 508.903 : GALANTHUS NIVALIS** Slovenia, near Bregana. W. McLewin 97-35. (We guess these two colls. from either side of the Croatian-Slovenian border are 'standard' *G. nivalis* but they approach areas where plants called *G. elwesii* var. *maximus* grow. They may provide some variants and will certainly give growers outside Europe the chance to acquire this species at last.)
- 508.904 : GALANTHUS NIVALIS** Croatia. W. McLewin 98-09. (We guess this coll. from near the Croatian-Slovenian border is 'standard' *G. nivalis* but it is from near areas where plants called *G. elwesii* var. *maximus* grow. It flowers later than our local *G. nivalis* &, unlike them, is highly fertile, giving growers outside Europe the chance to acquire this species at last.)
- 508.950 : GALANTHUS NIVALIS subsp. CILICICUS** Ex N. Stevens. Archibald Archive www.srgc.net
- 509.000 : GALANTHUS NIVALIS subsp. REGINAE-OLGAE**
- 509.100 : GALANTHUS PESHMENII** Turkey, Antalya. Ex an R.& R. Wallis coll.
- 509.150 : GALANTHUS PLATYPHYLLUS**
- 509.209 : GALANTHUS PLICATUS** (subsp. *plicatus*) Ukraine, Krim, near Yalta. (The type-race of this fine snowdrop has two main population centres, one in E Romania & the other here in the Crimea. This is the one which has given rise to fine garden cultivars like the wild-collected 'Warham', which reputedly came to England around 1855, during the Crimean War.)
- 509.250 : GALANTHUS PLICATUS subsp. BYZANTINUS**
- 509.260 : GALANTHUS PLICATUS subsp. BYZANTINUS** No data. From open-pollinated English garden stock of this race from the deciduous woodlands of cold, wet NW Asiatic Turkey, below 300m. & a little to the S & E of Istanbul. Quite broad, explicate, greyish-green leaves & early flowers with two green marks on each inner segment. Usually very reliable in the UK.
- 509.300 : GALANTHUS REGINAE-OLGAE** (subsp. *reginae-olgae*) Greece, Messinia, Oros Taigetos, Langadas pass. 1200m. Humus under *Platanus*. (Hand-pollinated seed from the type-race of this beautiful snowdrop, flowering in autumn before the leaves appear.)
- 509.301 : GALANTHUS REGINAE-OLGAE** (subsp. *reginae-olgae*) Greece, Lakonia, Oros Taigetos, Profitis Ilias. 1400m. Light shade under *Platanus* & *Pinus*. Ex D.M. Hoskins 98-22. (A high altitude coll. from the tree-line. The classic form of this beautiful snowdrop, flowering quite early in autumn well before any leaves appear. Good drainage & some sun in the UK.)
- 509.302 : GALANTHUS REGINAE-OLGAE** (subsp. *reginae-olgae*) Greece, Messinia, Oros Taigetos, Vryos Gorge E of Kalamata. M. Jope 04-22. (The classic form of this beautiful snowdrop, flowering quite early in autumn well before any leaves appear. Good drainage & some sun in the UK.)
- 509.360 : GALANTHUS REGINAE-OLGAE subsp. VERNALIS** Italy, Sicily, Mte. Peloritani. 1050m. (A new coll. from NE Sicily from this predominantly Greek, midwinter snowdrop, flowering in the wild from October into spring. Aaron Davis, in his recent account of the genus, regards this subspecies, described in the 1980's, as "rather imperfectly differentiated" and is ambiguous about whether the Sicilian snowdrops should be placed under subsp. *vernalis* or under subsp. *reginae-olgae*.)
- 509.400 : GALANTHUS RIZEHENSIS**
- 509.500 : ###GALANTHUS TRANSCAUCASICUS** Iran, Gilan, Talesh E of Khalkhal. 1850m. Among loose stones in steep, snow-melt gully. (The first material of the only Iranian snowdrop to be collected for many years. Primarily a species of the Caspian forests of Azerbaijan and the Iranian Talesh, this is a high altitude coll. from above the tree-line. Closely allied to *G. woronowii* from E of the Black Sea but with matt, dull-green leaves and differently shaped, single green markings on the inner segments.) [#2nd photo](#) [#3rd photo](#)
- 509.609 : GALANTHUS WORONOWII** Russia, near Sochi, Black Sea coast. (Confused with the allied Aegean *G. ikariae* for many years, this splendid plant with broad, glossy, light green leaves has now been recognized at full specific level in the most recently published account of this confusing genus. Distributed between 70m. & 1400m. altitude in the forests to the E of the Black Sea from S Russia through Georgia.)
- 511.000 : GALEGA OFFICINALIS**
- 512.000 : GENISTA**
- 515.006 : GENTIANA ACAULIS** (*G. kochiana*) France, Alpes-Maritimes, Vallon de la Gordolasque. 2000m. Ledges below N-

- facing granite cliffs. (The classic, European blue trumpet gentian, core of a species-complex, superficially similar in flower but in reality most distinct taxa botanically with widely different habitats and soil requirements. This is a calcifuge species.)
- 515.049 : GENTIANA ACAULIS** (*G. kochiana*) A superb form of this magnificent, calcifuge trumpet gentian from Andorra. Huge, rich-blue trumpets up to 6cm. across sit on tight, glossy-leaved mats in spring. Rich, lime-free scree.
- 515.050 : GENTIANA ACAULIS** No data. From a fine garden-form in the *G. acaulis* group. A classic rich-blue trumpet gentian, reliably floriferous with Alan Edwards in Surrey, UK. Most cultivars in British gardens, grown under this blanket-name, seem closest to *G. dinarica* from the eastern limestones & may be of hybrid origin. Good, rich, well-drained soil in sun
- 515.201 : GENTIANA ALPINA** France, Pyrenees-Orientales, Puigmal, above Las Planes. 2200m. Among *Rhododendron* in stony turf on open slopes. (Another calcifuge blue trumpet gentian, most distinct in its almost orbicular leaves.)
- 515.400 : GENTIANA ANGUSTIFOLIA** France, Hautes-Alpes, Pic de Gleize, NNW of Gap. 1900m. Steep, stony, limestone slopes. (A spectacular, rich-blue trumpet gentian, limited to the limestones of the SW Alps & in especially fine form here with narrow-leaved clumps, which can dry up almost completely in summer, and huge trumpets on short stems. We were told that trials of the *G. acaulis* group were abandoned at Wisley "because they all looked the same" ; one can only assume the material submitted was wrongly named. The species are very distinct indeed - this one is of special importance in warm, dry, limy gardens.)
- 515.650 : GENTIANA ASCLEPIADEA** No data. The elegant willow gentian, one of the loveliest of autumn-flowering, herbaceous plants. Slow from seed but gradually builds up clumps of 60cm. stems carrying clusters of rich-blue trumpets in the axils of the pointed, lanceolate leaves from late summer until the frosts. A species of moist woodland spread from the mountains of central Europe, E along N Turkey to the Caucasus and well-suited to semi-shade in UK gardens.) Archibald Archive www.srgc.net
- 515.651 : GENTIANA ASCLEPIADEA var. ALBA** From the white form of this graceful species. Usually we find white gentians disappointing anomalies but this with its paler foliage stands out even more in the shady places which it enjoys.
- 515.652 : GENTIANA ASCLEPIADEA from PALE BLUE FORM** From a beautiful paler, turquoise-blue form of the elegant willow gentian, one of the loveliest of autumn-flowering, herbaceous plants. Slow from seed but gradually builds up clumps of 60cm. stems carrying clusters of blue trumpets in the axils of the pointed, lanceolate leaves from late summer until the frosts. A species of moist woodland spread from the mountains of central Europe, E along N Turkey to the Caucasus and well-suited to semi-shade in UK gardens.)
- 515.653 : GENTIANA ASCLEPIADEA from PINK FORM** Croatia, near Plitvice. (From 'Pink Cascade', selected in the wild by Robin & Sue White in 1987. Further selection has taken place in cultivation and a substantial number of seedlings will flower pink but they should all be ideally grown to flowering and 'rogued'.)
- 515.654 : GENTIANA ASCLEPIADEA from DEEP VIOLET FORM** Striking variant from Hermann Fuchs.
- 516.720 : GENTIANA BURSERI** (subsp. *burseri*) No data. The type-race, endemic to the Pyrenees, one of the robust perennials in Sect. *Gentiana*, possibly closest to the Alpine *G. purpurea*. Rosettes of pointed leaves send up stems to about 50cm., carrying large clusters of yellow, bell-shaped flowers, often dotted with brown. A good, permanent, hardy plant but little-grown.)
- 517.201 : GENTIANA CLUSII** Italy, Lombardia, Monte Tremalzo, WSW of Riva. 1900m. Steep, stony limestone slopes. (Another splendid, local, calciphile member of the *G. acaulis* group. "Glossy tufts" with "celestial goblets" in "indigo masses", wrote Farrer. This is another possibility for the origin of much cultivated "*G. acaulis*".
- 517.620 : GENTIANA DINARICA** No data. A classic "*G. acaulis*" in the limestone race from central Italy & the Balkans. From Simon Bond's splendid form, which originated as either a collection or selection by the unacknowledged Scottish king of these European alpine, trumpet species, Jimmy Stitt. Generously reliable with its stunning blue flowers on glossy-leaved pads.
- 518.400 : GENTIANA GELIDA** Turkey, Gumushane, Kop Dag. 2300m. Moist to dryish turf. (A handsome, late-flowering species, superficially rather like *G. septemfida* but with creamy yellow flowers, deeper yellow striped with green outside. Not too easy to grow but but successful with some. This seed is from Dinah Batterham who grows it well outside in Dorset, UK.)
- 518.402 : GENTIANA GELIDA** Turkey, A_rı, Tahir geçidi WNW of Ele_kirt. 2400m. Among grasses on steep slopes. (A very handsome, late-flowering species, about 20cm. tall. Superficially rather like *G. septemfida* but with creamy yellow flowers, shading to deeper yellow striped with green outside. Not too easy to grow but but successful with some.)
- 518.403 : GENTIANA GELIDA** Turkey, Ardahan, Yalnızçam Da_ları, Çam Geçidi. 2600m. In alpine turf on open slope. (A fine, more compact form with a purple-stained exterior. The species extends E to NW Iran.)
- 518.510 : GENTIANA LAGODECHIANA** No data. Ex Dinah Batterham
- 518.849 : GENTIANA LUTEA** Spain, Aragon. 1400m. W.McLewin coll.
- 518.850 : GENTIANA LUTEA** No data. The tall yellow gentian of the S European ranges. Beautiful, large basal leaves & erect, 1.5m. stems, whorled with starry yellow flowers. A magnificent, very long-lived perennial but slow from seed.
- 519.000 : GENTIANA OCCIDENTALIS** France, Pyrenees-Atlantiques, E of Gourette. 1500m. Stony turf at base of limestone cliffs. (A little-known member of the *G. acaulis* group, endemic to the W Pyrenees & Spanish Picos de Europa. Seldom-seen in cultivation and very local in the wild, in our experience. Possibly closest to the Italian *G. clusii*.)
- 519.001 : GENTIANA OCCIDENTALIS** Spain, Huesca, Puerto de Portalet. 1700m. Meadow-vegetation on steep, grassy slope.

- 519.002 : GENTIANA OCCIDENTALIS** Spain, Leon, Picos de Europa, NE of Fuente De. 1900m. Turfy ledges on SW-facing limestone cliffs. (The western extremity of its distribution.)
- 519.200 : GENTIANA OLIVIERI** Turkey, Hakkari, Zap gorge S of Hakkari. 1300m. Limestone scree on steep E-facing slope with *Quercus* & *Paliurus*.
- 519.201 : GENTIANA OLIVIERI** Iran, Kordestan, SW of Negel (between Sanandaj & Marivan). 1350m. Openings among *Quercus* scrub on shale. (The most western member of the mainly Central Asian Sect. *Aptera* : a beautiful, spring-flowering species with clustered heads of white-throated, sapphire-blue flowers on erect 20cm. stems from neat rosettes of strap-shaped leaves. It goes completely dormant in summer and needs bulb-frame treatment or a rest in the alpine-house, if grown in the UK.)
- 519.500 : GENTIANA PARADOXA** Georgia, Abkhazia. (A relict surviving in a few places on the limestones between Sochi & Sukhumi at around 1300m. Unlike any other. Erect, 20cm. stems, clothed in linear, verticillate leaves & each bearing 1 or 2 trumpets, olive-green outside with pale-blue plicae & lobes. Not too difficult outside but choice enough for the alpine-house.)
- 520.399 : GENTIANA PYRENAICA** France, Pyrenees-Orientales, Val d'Eyne. 2300m. Damp, acidic turf on open mountainside. (A little fresh, wild-collected seed of this superlative but difficult alpine Tertiary relict in the Pyrenean type-race, distinct in the colour of its trumpets in an incredibly rich, deep imperial violet. Just received from Peter & Penny Watt who comment that they have had little success with stored seed themselves, so could we list it straightaway. Here it is.)
- 520.400 : GENTIANA PYRENAICA** Andorra, above Port d'Envalira. 2600m. Depressions on open hillside, among short grasses in acid, peaty soil. (Superlative but difficult alpine Tertiary relict in the Pyrenean type-race, distinct in the colour of its trumpets in an incredibly rich, deep imperial violet.) Archibald Archive www.srgc.net
- 520.402 : GENTIANA PYRENAICA** Turkey, Trabzon, Zigana Daglaru. 2100m. Alpine turf on grazed slopes with *Daphne* & *Vaccinium*.
- 520.900 : GENTIANA SEPTEMFIDA** Turkey, Artvin, Genya Dag. 1800m. Dryish, open meadows along summit ridge. (A robust, erect version of this excellent species from up near the Georgian border - possibly the taxon described as *G. cordifolia*. Perhaps the finest and most reliable garden-plant in the genus with clusters of deep-blue bells on leafy, 20cm. stems)
- 520.902 : GENTIANA SEPTEMFIDA** Turkey, Gümüshane, Soğanlı Dağları, N of Bayburt. 2300m. Exposed, alpine turf. (A much dwarfer, more compact plant with fewer flowers, though it may not remain so in cultivation.)
- 521.920 : GENTIANA VERNA** No data.
- 524.000 : GERANIUM ARGENTEUM**
- 524.050 : GERANIUM ASPHODELOIDES**
- 524.055 : GERANIUM ASPHODELOIDES** Greece, Crete. Ex a J. Fielding coll. Leafy, almost evergreen, mounds of foliage with starry flowers in white, pink or pink with darker veins.
- 524.100 : GERANIUM BIUNCINATUM** Yemen, Jebel Bura.
- 524.150 : GERANIUM CANARIENSE**
- 524.200 : GERANIUM CATARACTARUM** Spain, Jaen, source of Guadalquivir. Ex an R. Barneby coll.
- 524.220 : GERANIUM CATARACTARUM subsp. PITARDII** Morocco, Middle Atlas.
- 524.260 : GERANIUM CHARLESII** Tajikistan, Hissar range, foothills above Dushanbe. (A dwarf, tuberous-rooted species forming a cushion of purple-pink flowers before going dormant in summer. Slow-growing and choice.)
- 524.300 : GERANIUM CINEREUM** (var. *cinereum*)
- 524.350 : GERANIUM CINEREUM subsp. NANUM** Morocco, High Atlas, Tachdirt to Ayachi. 3200-3500m.
- 524.370 : GERANIUM CINEREUM var. OBTUSILOBUM**
- 524.390 : GERANIUM CINEREUM var. PALMATIPARTITUM**
- 524.400 : GERANIUM CINEREUM var. SUBCAULESCENS**
- 525.450 : GERANIUM COLLINUM**
- 525.459 : GERANIUM COLLINUM** Uzbekistan. A Central Asian form of this bushy perennial, distributed in moist meadows from SE Europe to Siberia & the NW Himalaya. Deeply divided foliage & red-veined, pink flowers in summer.
- 525.500 : GERANIUM DALMATICUM**
- 525.550 : GERANIUM ENDRESSII**
- 525.600 : GERANIUM GLABERRIMUM**
- 525.650 : GERANIUM GRACILE** Georgia, Bakuriani area, Woodland.
- 525.750 : GERANIUM IBERICUM** Georgia, Bakuriani area, Tskhra-tskharo pass. 2300m. Alpine meadows. (About 50cm. high with much-divided, hairy leaves, cut into many deep lobes. A multitude of purple-veined, violet-blue flowers in summer. Seldom seen in cultivation, where its name is often misapplied to *G. x magnificum*, its sterile hybrid with *G. platypetalum*.)

- 525.900 : GERANIUM LIBANI** Syria, Nusairi range, above Slunfeh. 1200m. Among deciduous *Quercus* scrub. Ex R. & R. Wallis 96-17 (A most distinct, very early-flowering plant, which goes dormant in summer. In Subsect. *Mediterranea*, the *G. platypetalum* group, and rather like this : 40cm. high with large violet-blue flowers, but flowering with the early spring bulbs, long before its Caucasian allies have started growth. This seems very hardy & tolerant of open garden conditions in W Wales, in a sunny, well-drained site.)
- 526.000 : GERANIUM LINEARILOBUM**
- 526.310 : GERANIUM MACRORRHIZUM** Croatia, Velebit Planina, N of Mali Halan. 900m. Moist, stony humus. (Queen of ground-covers in a very vigorous, fertile form with deep magenta-pink flowers. Aromatic bright-green leaves.)
- 526.350 : GERANIUM MACROSTYLUM**
- 526.400 : GERANIUM MADERENSE** No data but our stock is traceable back to original material sent from Madeira by Major Pickering to our old friend Trevor Crosby, at that time Curator of the Leeds University Botanic Garden., before it had been described as a new species. At about 1.5m. high, the largest *Geranium*, with trunk-like stems, propped up by the old, reflexed leaf-stalks, bearing an immense mound of purple-pink flowers. Essentially a winter-growing plant, it is really safest, frost-free under glass in the UK but we grew it well outside in Dorset for a time & it is certainly worth attempting in milder coastal areas.
- 526.500 : GERANIUM MALVIFLORUM**
- 526.510 : GERANIUM MALVIFLORUM** No data. Archibald Archive www.srgc.net
- 526.511 : GERANIUM MALVIFLORUM from PINK FORM** Spain. Ex a W. Baker coll. (A member of Subsect. *Tuberosa* collected in S Spain. This has deep lilac-pink flowers, produced about two weeks later than the violet-blue N African forms usually grown.)
- 526.600 : GERANIUM NODOSUM**
- 526.630 : GERANIUM PALMATUM** (*G. anemonifolium*) No data. The other Madeiran endemic in Sect. *Anemonifolia*, sometimes confused in cultivation with the preceding, this lacks the trunk-like stem & persistent, propping leaf-stalks of *G. maderense*. Slightly smaller, it still forms massive rosettes of fleshy divided leaves with inflorescences, over 1m. high, with hundreds of purple-rose flowers on stems covered with purple, glandular hairs. Possible in a sheltered site outside in S & W Britain.
- 526.660 : GERANIUM PELOPONNESIACUM** A 60cm. high, glandular hairy, rhizomatous perennial, which is in Subsect. *Mediterranea*, close to *G. libani*, later-flowering but also goes dormant in summer. "A lovely plant, producing sprays of large pastel-blue flowers in May on long stalks which sway in the breeze" writes Peter Yeo.
- 526.710 : GERANIUM PHAEUM** (var. *phaeum*) No data
- 526.711 : GERANIUM PHAEUM - FROM WHITE FORM** No data.
- 526.720 : GERANIUM PHAEUM var. LIVIDUM**
- 526.800 : #GERANIUM PLATYPETALUM** Georgia. No further data. Ex a R. Lancaster coll. (From a clone collected by Roy Lancaster & named 'Georgia Blue' but seems quite typical of this species. Darkly veined, rich violet-blue flowers in midsummer on plants of about 30cm. Rounded, hairy, lobed leaves, less cut than the allied *G. ibericum*. Excellent & long-flowering.)
- 526.801 : GERANIUM PLATYPETALUM** Turkey. No further data. (From a clone originally received as *G. ibericum* but definitely *G. platypetalum*. The two are perfectly distinct in foliage alone. This is an especially compact form. Darkly veined, rich violet-blue flowers in midsummer on plants of about 30cm. Rounded, hairy, lobed leaves, less cut than the allied *G. ibericum*. Excellent & long-flowering.)
- 526.900 : GERANIUM PRATENSE**
- 526.920 : GERANIUM PRATENSE f. ALBIFLORUM** No data. From a vigorous, 1m. high, white-flowered form of our native meadow cranesbill, a species which extends E to the Himalayas. Fine in the wild-garden with its deeply cut foliage.
- 526.925 : GERANIUM PRATENSE from PINK FORMS**
- 526.926 : GERANIUM PRATENSE from PALE BLUE FORMS**
- 526.930 : GERANIUM PRATENSE 'STRIATUM'** In this odd form of the British meadow cranesbill, some flowers are blue, some white & some variably streaked with violet-blue on a white ground. Most seedlings usually inherit this eccentricity.
- 527.000 : GERANIUM PSILOSTEMON** Turkey, Artvin, Genya Dag. 1700m. Wet meadow in *Picea* woodland. (Our favourite among the larger ones with its stunning, luminous, magenta flowers, darkly veined & with glossy black centres. About 1m. high with large, cut, basal leaves, which emerge from shiny, crimson sheaths in spring & colour to orange & scarlet in autumn.)
- 527.005 : GERANIUM PSILOSTEMON** Georgia, Bakuriani area, Tskhra-tskharo pass. 2300m. Meadows. (Taller than our Turkish form with larger flowers. Jenny always refers to this as "the good form". Jim thinks the Turkish one is better.)
- 527.200 : GERANIUM REFLEXUM**
- 527.400 : GERANIUM RENARDII**
- 527.410 : GERANIUM RENARDII** No data. Beautiful low mounds of lobed, wrinkled, grey-green velvet leaves & dense, 20cm. high clusters of flowers with notched white petals feathered with violet. An unmistakeable Caucasian endemic for a sunny, well-

drained site. Sadly, we do not find it a satisfactory plant in our wet, acid soil and suspect it needs lime as well as sun.

527.600 : GERANIUM RIVULARE (*G. sylvaticum* subsp. *rivulare*)

528.220 : GERANIUM SANGUINEUM No data. Mainly from Max Frei's selected clone 'Elspeth'. A long-flowering, reliable species, widespread through Europe to the Caucasus, usually in dryish, limestone habitats but does not resent our acid soil in a wet climate. A bushy growth of much-branched stems, clad in deeply cut leaves, with a profusion of bright magenta-pink flowers.

528.221 : GERANIUM SANGUINEUM from WHITE FORM From the garden cv. 'Album', quite a tall, loose-growing clone with pure-white flowers over a long period. This grew better on our alkaline soil in Dorset than here in Wales.

528.300 : GERANIUM SANGUINEUM var. STRIATUM (*G. sanguineum lancastriense*) From a good, compact form of this local race native to Walney Island off the Cumbrian coast of England. Blush-pink flowers diffusely veined with red-purple.

528.500 : #GERANIUM SYLVATICUM Greece, Drama, Falakro. 2200m. Moist meadow. (From a fine form of this widespread European species. Good rose-pink flowers with large white centres on erect, leafy plants, about 1m. high.)

528.520 : GERANIUM SYLVATICUM No data. From Amy Doncaster's dwarfier, blue selection - rich lavender-blue flowers with tidy white centres on plants of about 60cm. These two may have crossed but the seedlings should all be worthwhile.

528.600 : GERANIUM TUBEROSUM

528.700 : GERANIUM VERSICOLOR

530.100 : GEUM COCCINEUM Macedonia, Baba Planina, Pelister to Kula Vrv. 1500m. Wet, rocky gulley near stream. (7119 : 12.8.85)

530.101 : GEUM COCCINEUM Greece, Kajmakalan. Archibald Archive www.srgc.net

530.109 : GEUM COCCINEUM Bulgaria, Rila Planina. Ex an A. Edwards coll.

531.802 : GLADIOLUS ANATOLICUS Turkey, Adana, Nur Dag, above Hasanbeyli. 1100m. Stony clay among *Quercus* scrub. (A handsome, purple-pink S Turkish endemic, 30-40cm. high, related to the Cypriot *G. triphyllus*. Easy in a bulb-frame.)

531.809 : GLADIOLUS ANATOLICUS Turkey, Antalya, N of Akseki. 1300m (A handsome, purple-pink S Turkish endemic, 30-40cm. high, related to the Cypriot *G. triphyllus*. Usually grows in scrub over limestone. Easy in a bulb-frame.)

531.902 : # GLADIOLUS ANTAKIENSIS Turkey, Hakkari, Zab gorge at Bagisli. 1500m. Among *Quercus* on stony slopes. (Confined in Turkey to the oak-scrub areas of the SE corner. Fine carmine-pink flowers, marked white. About 50cm. high.)

531.949 : GLADIOLUS aff. ANTAKIENSIS Turkey, Hakkari, Beyez Dag. 1800-2000m. Ex a N. Stevens coll. (Probably a new species but the E Turkish gladioli are a taxonomic mess and it would be rash to publish it as such without a more complete review of the genus there. Based on a few herbarium sheets, Kit Tan's account does not work well in the field - disparate taxa have to be fitted into the existing names. Hamilton's *G. antakiensis*, only published in 1983, has to be taken to cover diverse dry-growers. Taxa are quite well defined geographically and ecologically, so competent field-work could instil some order. With martial law in operation throughout the SE and unhindered travel impossible, this is hardly likely at present. This is an attractive & distinct, dwarf plant, only about 20cm. high, with 3-5 flowers, occasionally white but mainly soft-pink, darkening with age.)

532.000 : GLADIOLUS ATROVIOLACEUS Iran, Lorestan, W of Azna. 1900m. Fallow-fields & margins of cultivated land. (The splendid, 60cm. high species which stains the fresh green fields of the high Zagros valleys with its rich, dusky violet-purple flowers in spring. Seldom seen in gardens but an extremely hardy plant, suited to a well-drained site in full sun in the UK.)

532.001 : GLADIOLUS ATROVIOLACEUS Turkey, Malatya, N of Akcadag. 1600m. Steppe vegetation on open slopes. (The splendid, 60cm. high species which stains the fresh green fields of the high Zagros valleys with its rich, dusky violet-purple flowers in spring. Seldom seen in gardens but an extremely hardy plant, suited to a well-drained site in full sun in the UK.)

532.009 : GLADIOLUS ATROVIOLACEUS Turkey, Erzurum, N of Erzurum, Guzelyayla Gecidi.

532.100 : GLADIOLUS COMMUNIS (subsp. *communis*)

532.200 : GLADIOLUS COMMUNIS subsp. BYZANTINUS

532.250 : GLADIOLUS HALOPHILUS

532.280 : GLADIOLUS HUMILIS Turkey, Adiyaman. Nemrut Da. (Only known from around 2100m. on the rocky, S-facing slopes of Nemrut Dag.)

532.300 : GLADIOLUS ILLYRICUS

532.309 : GLADIOLUS ILLYRICUS Spain, Segovia, El Espinar. 1300m.

532.360 : GLADIOLUS IMBRICATUS Lithuania. Wet meadow. (A very hardy species from eastern central Europe through Russia to the Ukraine. Dense, one-sided spikes with up to 12, purple flowers on stems up to 80cm. high. Like the somewhat more southern *G. palustris*, a species of seasonally wet habitats in cold climates, which should be well suited to British gardens.)

532.400 : GLADIOLUS ITALICUS

532.600 : GLADIOLUS KOTSCHYANUS

532.601 : GLADIOLUS KOTSCHYANUS Turkey, Van, NNW of Baskale. 2800m. Along seasonal, snow-melt stream. (A soft-

- lilac, 30cm., alpine-meadow form of this characteristic species of spring-wet, grassland habitats in cold E Anatolia.)
- 532.602 : GLADIOLUS KOTSCHYANUS** Turkey, Erzurum, Kop Dag. 2400m. Among *Salix* in wet-flush. (A good deep-crimson form, originally collected as a dwarf variant but it now reaches 40cm. in cultivation.)
- 532.605 : GLADIOLUS KOTSCHYANUS** Turkey, Van, W of Yukari Narlica. 2200m. Stony alluvium near stream. (Pale mauve marked with white. These three montane forms are more slender & dainty than those from lower hay-meadows.)
- 532.620 : GLADIOLUS KOTSCHYANUS from WHITE FORMS** Turkey, Van, W of Yukari Narlica. 2200m. Stony alluvium near stream. From creamy whites which occurred among the pale lavenders of the colony listed under 532.605. Hand-pollinated, selfed seed but we do not know if seedlings will be white.
- 532.705 : GLADIOLUS MICRANTHUS** Turkey, Mugla, SE of Altinyayla. 1560m. Open, rocky, serpentine slope. Ex a N. Stevens coll. (An extremely fine species, little known in cultivation & from a very limited area in SW Turkey. Norman thinks this is the best of the W Turkish *Gladiolus* species. Maybe closest to the more eastern *G. atrovioleaceus* and *G. persicus*, with about 3, rather glaucous leaves with parallel veins and up to 6 rich violet-purple flowers on stems of about 30cm.)
- 532.810 : GLADIOLUS PALUSTRIS** No data. An attractive plant very seldom seen in UK gardens, though it is utterly hardy and well-adapted to the climate. Distributed, usually in moist meadows, here and there though central & E Europe, from SE France to the Ukraine. About 30cm. high with a loose, second spike of up to 6 purplish red flowers in early summer.
- 532.900 : GLADIOLUS PERSICUS**
- 533.000 : GLADIOLUS PETRAEUS**
- 533.100 : GLADIOLUS TRIPHYLLUS**
- 17206 : GLADIOLUS SP.** Iran, Hamadan, SE of Qorveh. 1900m. Sandstone & clay hills with *Hulthemia*
- 17251 : GLADIOLUS SP.** Iran, Kordestan, SW of Negel (Sanandaj to Marivan). 1350m. Oak scrub on clay slopes.
- 17281 : GLADIOLUS SP.** Iran, W Azarbayejan, S of Salmas. 1780m. Open ridgetop ; on crystalline rock.
- R. & R. Wallis 96-6 : GLADIOLUS SP.** Syria, between Salkeen and Kafratak-harem. 58m.
- 534.310 : GLAUCIUM CORNICULATUM** No data. Archibald Archive www.srgc.net
- 534.300 : GLAUCIUM FIMBRILLIGERUM** Kazakhstan, Djambil, Karatau, WSW of Taras. 900m. Loose gravelly slopes. (A horned poppy from the Central Asian steppe. Branching 30cm. stems with a multitude of soft-yellow flowers.)
- 534.901 : GLAUCIUM LEIOCARPUM** Turkey, Burdur, N of Altiyayla. 1000m. (A biennial or short-lived perennial, the inland version of coastal *G. flavum*. About 30cm. tall with lots of orange-yellow poppies with darker centres.)
- 542.000 : GYMNOSPERMIUM ALBERTII** Uzbekistan, Tashkent, Chimgan. 1200m. Open, stony area below snow-patch. (A tuberous member of the *Berberidaceae* (or *Podophyllaceae*), related to *Bongardia* & *Leontice*. A snow-melt species, flowering as soon as the snows recede & opening its nodding racemes of yellow flowers, tinged with copper, on red-tinted stems, close to the ground before rising to about 20cm. Possibly better not overheated nor overdried when dormant in summer.)
- 542.000 : GYMNOSPERMIUM ALTAICUM** Altai.
- 542.000 : GYMNOSPERMIUM DARWASICUM** Tajikistan, Varsob gorge.
- 542.000 : GYMNOSPERMIUM SYLVATICUM** E Afghanistan
- 543.010 : GYNANDRIRIS SISYRINCHIUM** Greece, Crete. Ex an A. Edwards coll. ("good form")
- 548.000 : HACQUETIA EPIPACTIS** Slovenia, S of Cerknica (E of Postojna). 300m. Deciduous woodland on limestone. (7412)
- 548.001 : HACQUETIA EPIPACTIS** Slovenia, NW of Postojna. 600m. Deciduous woodland on limestone. (11902)
- 548.010 : HACQUETIA EPIPACTIS** No data. A delightful, dwarf umbellifer, flowering close to the ground in early spring with heads of bright yellow flowers surrounded by ruffs of varnished, brilliant green bracts. Local but characteristic of the early spring flora of the wooded, limestone karst of south Central Europe, N from NE Italy & Slovenia into S Poland.
- 551.000 : HANNONIA HESPERIDIUM** Morocco, S of Chichaoua. Dry river-banks. J. Blanchard 93-04 (A small, autumn-flowering relative of *Narcissus*, endemic to NW Morocco, where it often occurs in coastal limestone-fissures.)
- 553.100 : HEDYSARUM CANDIDISSIMUM** Turkey, Malatya, WNW of Darende. 1500m. Exposed shale slopes & clay banks.
- 553.300 : HEDYSARUM FEDTSCHENKOANUM** Kyrgyzstan, Talas Alatau, Kara Bura pass S of Klyuchevka. 2320m. A. Dickerson 00-4
- 553.400 : HEDYSARUM HEDYSARIOIDES subsp. EXALTATUM** Italy, Lombardia, above Passo do Croce Domini ESE of Breno. 1900m. Alpine turf on steep limestone slope, stepped by soil-slip & grazing.
- 554.050 : HEGEMONE LILACINA** Kazakhstan, Tien Shan. 2900m. H. Fuchs coll. (An exquisite, dwarf, snow-melt, alpine member of the *Ranunculaceae*, allied to *Trollius* and characteristic of the higher ranges of Central Asia. With such a wide range it is variable both in the substance & colour of its flowers, which can be almost semi-double in appearance and flushed with a lucent, ethereal lavender-blue, on 10cm. stems above cut, lobed leaves. Beautifully illustrated, growing in this area, on page 279 of the September, 1999, AGS Bulletin. It is being successfully grown in the UK by a few and, coming from "wet, cold, alpine

meadows" is said to require "a fairly heavy, perpetually moist soil." It sounds suitable for ground-cover planting in our own cold, wet, Welsh garden. We jest. It is early days to write of cultivation. "No pains would be too much to make it happy" wrote Farrer of this "capricious little creature", "the jewel of all". An unprecedented opportunity to acquire really fresh seed collected in August, 1999.)

559.610 : HELICODICEROS MUSCIVORUS No data.

559.810 : HELLEBORUS ARGUTIFOLIUS (*H. corsicus*) No data. Endemic to Corsica & Sardinia but a splendid, reliable garden-plant throughout the UK. Leathery, overwintering, spine-edged leaves & huge, 1m. high heads of pale-green cups.

560.002 : HELLEBORUS ATRORUBENS Slovenia, near Novo Mesto. W. McLewin 98-03. (Variable in foliage & colour, this is one of the most local & least-known Balkan species. Not all are purple but it can produce some striking purple-flowered plants with purple-tinged leaves. The name is still misapplied in gardens to hybrids, usually of *H. orientalis* subsp. *abschasicus*.)

560.010 : HELLEBORUS ATRORUBENS Slovenia, near Novo Mesto. (1998 cultivated seed from Alan Edwards grown from an earlier W. McLewin coll. in the same locality as above. Though the parents are authentic, this may have crossed in cultivation. There was little wild seed in 1998 and this is an alternative for the non-purist. Same qualification applies to the next.)

560.500 : HELLEBORUS CROATICUS Croatia, near Osijek. Ex a W. McLewin coll. (Though regarded by Brian Mathew as synonymous with *H. torquatus*, Will thinks this recently described taxon is distinct & sustainable. It might be best placed at infraspecific level under *H. atrorubens*. Extremely local in the wild, this is from a type-locality collection.)

560.510 : HELLEBORUS CROATICUS Croatia, near Osijek. Ex a W. McLewin coll. (Though regarded by Brian Mathew as synonymous with *H. torquatus*, Will thinks this recently described taxon is distinct & sustainable. It might be best placed at infraspecific level under *H. atrorubens*. UK cultivated seed from plants raised from a type-locality collection but it may well have hybridized. The parents flower well with small flowers, reddish outside and green inside. It is extremely local in the wild & Will tells us that its one or two habitats have deteriorated recently. He is not optimistic regarding further wild collections.)

560.628 : HELLEBORUS CYCLOPHYLLUS Macedonia. No further data. (Seed collected by a Croatian botanist of this species, typical of the interior areas and mountain ranges of Macedonia & Greece. Very hardy & suited to cold, continental climates, less easy in the mild, damp UK. Leaves, backed with silvery hairs in spring, seldom overwinter. Big, clear-green flowers.)

560.629 : HELLEBORUS CYCLOPHYLLUS Greece, Ioanina, Oros Smolikas, E of Konitsa. 2000m. Openings in *Abies* woodland. 11.6.96 (In the late 1996 season, we were a little early for collections of this widespread species of the Greek mountains. Some ripe seed here, where it only grows lower down on the limestones, not on the serpentine. Colonies are 'pure' in Greece, where *H. odoratus* does not occur. Leaves, backed with silvery hairs in spring, seldom overwinter. Big, clear-green flowers.)

560.631 : HELLEBORUS CYCLOPHYLLUS Greece, Pieria, Oros Olimbos. P. & P. Watt coll.

560.801 : HELLEBORUS DUMETORUM Slovenia, near Maribor. W. McLewin coll. (A distinct, dainty species of mature, deciduous woodland, growing here near the Austrian border. Deciduous leaves, usually finely toothed, appear with the small, somewhat conical green flowers, pendant on slender pedicels. Elegant & reputedly a good garden-plant in the UK.)

560.802 : HELLEBORUS DUMETORUM Hungary, Vertes Mts. W of Budapest. W. McLewin coll. (May be the type-locality for this graceful, little plant, distributed from SE Austria & Slovenia across Hungary to Romania.)

560.803 : HELLEBORUS DUMETORUM Croatia, Slavonija, NE of Pakrac. W. McLewin. Archibald Archive www.srgc.net

560.804 : HELLEBORUS DUMETORUM Croatia, Slavonija, near Vocin. W. McLewin 98-27 (A distinct, dainty species of mature, deciduous woodland, growing here near the Hungarian border. Deciduous leaves, usually finely toothed, appear with the small, somewhat conical green flowers, pendant on slender pedicels. Elegant & reputedly a good garden-plant in the UK.)

561.018 : HELLEBORUS FOETIDUS Spain, Aragon, Benasque. 550m. W. McLewin 00-45. (A Pyrenean form with markedly pale (for *H. foetidus*) green foliage.)

561.019 : HELLEBORUS FOETIDUS Spain, Aragon, Odesa. 650m. W. McLewin 00-44 (Neat, dark foliage.)

561.020 : HELLEBORUS FOETIDUS No data. A fine, easy native plant worth growing for its dark, divided leaves as well as for the big heads of purple-rimmed, green cups. This is from the form found in many Welsh cottage gardens around here. .

561.021 : HELLEBORUS FOETIDUS from 'WESTER FLISK' Our British native caulescent hellebore with dark, divided foliage & stout heads of many green, purple-rimmed cups. This is originally from a Scottish selection with narrow leaf segments, sometimes tinged red, & beetroot-red stems. This & the following forms may vary a little when grown from seed, which can be slower to germinate than others (except *H. vesicarius*), sometimes waiting for a second winter, even if sown freshly.)

561.022 : HELLEBORUS FOETIDUS from 'RUTH' Outstanding black-green foliage, pale grey-green underneath. As the flowers set seed & mature, the sepals & upper bracts become suffused with pink. Distinct & striking.

561.023 : HELLEBORUS FOETIDUS from 'SIENA' Italian race with bluish-green leaves.

561.024 : HELLEBORUS FOETIDUS from 'SOPRON' Hungarian form with lead-green leaves. Feathery bracts.

561.402 : HELLEBORUS LIVIDUS Spain, Mallorca. (From parents raised from wild seed but open-pollinated in the UK, so 'contamination' with *H. argutifolius* cannot be ruled out. About 30cm. high with untoothed, silver-veined, purple-backed leaves & cream-green flowers flushed with pink. Best grown shaded & frost-free but can survive in a sheltered site in the UK.)

561.410 : HELLEBORUS LIVIDUS No data. (A local endemic of the island of Mallorca in the Spanish Islas Baleares. From a

good, compact form originally given to Tim Ingram by Kath Dryden. Open-pollinated in the UK, so 'contamination' with *H. argutifolius* cannot be completely ruled out. About 30cm. high with untoothed, silver-veined, purple-backed leaves & cream-green flowers flushed with pink. Best grown shaded & frost-free but can survive in a sheltered site in the UK.)

561.502 : HELLEBORUS MULTIFIDUS (subsp. *multifidus*) Croatia, Velebit Planina, near Krasno. W. McLewin coll. (Core species of a confusing, essentially Yugoslavian, complex of cut-leaved hellebores with pendant, green-tinged yellow flowers. The currently recognized taxa intergrade both with each other & with adjacent species. This is from a superlative colony with beautiful divided foliage. These inland, deciduous species do best in the UK in an open, well-drained situation.)

561.505 : HELLEBORUS MULTIFIDUS (subsp. *multifidus*)

561.506 : HELLEBORUS MULTIFIDUS (subsp. *multifidus*) Croatia, Cres. W. McLewin coll. (A rare coll. from an isolated population on the elongated Adriatic island of Cres, E of Krk & S of Rijeka. In theory, these should be *H. m.* subsp. *multifidus*, but they look more like intermediates with *H. m.* subsp. *istriacus*. This is a confusing group.) Archibald Archive www.srgc.net

561.580 : HELLEBORUS MULTIFIDUS subsp. BOCCONEI Italy, Toscana, W of Firenze, near border with Emilia-Romagna. W. McLewin coll. (This & the next have certainly close affinities with the Yugoslavian *H. multifidus* complex & we are more than happy to list them as 'authentic' *H. m. bocconeii*, a very little-known taxon in cultivation, sought by the specialist & never previously listed by us. The main diagnostic difference, a dubious one, is theoretically in the foliage but these are quite distinct in flower, generally with larger, more rounded flowers in greenish yellow, on shorter pedicels than Yugoslavian plants.)

561.581 : HELLEBORUS MULTIFIDUS subsp. BOCCONEI Italy, Emilia-Romagna, S of Bologna, near Imola. W. McLewin coll. (Seed of both these central Italian populations is the result of a long, specific journey & we have only small quantities.)

561.582 : HELLEBORUS MULTIFIDUS subsp. BOCCONEI Italy, Toscana, near Siena. (Close to the Yugoslavian *H. multifidus* complex, the central & southern Italian hellebores are all currently regarded as *H. m. bocconeii*, a little-known taxon sought by the specialist. The main diagnostic difference, a dubious one, is theoretically in the foliage but these can also be quite distinct in flower, generally with larger, more rounded flowers in greenish yellow, on shorter pedicels than Yugoslavian plants.)

561.583 : HELLEBORUS MULTIFIDUS subsp. BOCCONEI Italy, Umbria-Marche, N of Perugia. W. McLewin coll. (Close to the Yugoslavian *H. multifidus* complex, the central & southern Italian hellebores are all currently regarded as *H. m. bocconeii*, a little-known taxon. The main diagnostic difference, a dubious one, is theoretically in the foliage but these can also be quite distinct in flower, generally with larger, more rounded flowers in greenish yellow, on shorter pedicels than Yugoslavian plants.)

561.584 : HELLEBORUS MULTIFIDUS subsp. BOCCONEI Italy, Lazio, SW of Terni. W. McLewin coll. (Close to the Yugoslavian *H. multifidus* complex but quite distinct in flower, generally with larger, more rounded flowers in greenish yellow, on shorter pedicels. Absolutely authentic material of this little-known race from well down into Italy.)

561.585 : HELLEBORUS MULTIFIDUS aff. subsp. BOCCONEI This and the following are likely to be described shortly as new taxa. This race from NW Italy has foliage like *H. odoratus* but the flowers are white and start opening in November.

561.586 : HELLEBORUS MULTIFIDUS aff. subsp. BOCCONEI Central Italian race. Very divided foliage.

561.603 : HELLEBORUS MULTIFIDUS subsp. HERCEGOVINUS Yugoslavia, Crna Gora, N of Risan, near Grahovo. (The first wild collection of this sought-after plant for a decade. Not from the classic locality near Trebinje but from a little to the E. This appears to be a plant of very limited distribution, restricted to the oak scrub areas around the northern base of the limestone mountain massif of Orjen, where the borders of Croatia, Bosnia & Montenegro meet. Utterly distinct in its much-divided leaves, usually cut into well over 100 toothed segments, like little palm-trees. It takes an established plant some time to build up to this ; seedlings can look quite 'ordinary'. Will tells us the flowers of many plants here are much yellower than those he has seen elsewhere.)

561.704 : HELLEBORUS MULTIFIDUS subsp. ISTRICUS Croatia, near Buzet. (This tends to intergrade with *H. odoratus* further N. This is from a population well into the Istrian peninsula & should produce less variable seedlings.)

561.705 : HELLEBORUS MULTIFIDUS subsp. ISTRICUS Croatia, Istria, Ucka. W. McLewin coll. (While this subspecies tends to intergrade with *H. odoratus* further N. This coll. is from a population in the woodlands on the highest mountain in Istria, well into the Istrian peninsula. It should produce less variable seedlings, which can certainly be called authentic *H. m. istriacus*.)

561.706 : HELLEBORUS MULTIFIDUS subsp. ISTRICUS Croatia, Krk. W. McLewin coll. (Island population.)

561.707 : HELLEBORUS MULTIFIDUS subsp. ISTRICUS Slovenia, Slavnik Vrh. W. McLewin 97-53 (The populations of this subspecies with less-divided foliage, tend to intergrade with *H. odoratus* nearer to the Italian border. Nevertheless, it is acceptable as quite a distinct entity, though, as usual with hellebores, the distinction defies consistent & accurate description.)

561.802 : HELLEBORUS NIGER Italy, Brescia, above Limone on Lago di Garda. Woodland over limestone. M. Jope 04-33. (A 2004 wild coll. of the classic Christmas Rose with huge white, bowl-shaped flowers above low clumps of dark, glossy green, divided foliage. Plants in this area approximate to the poorly defined *H. niger* subsp. *macranthus*.)

561.806 : HELLEBORUS NIGER Slovenia, Bohinj. W. McLewin coll. (The classic Christmas Rose with huge white, bowl-shaped flowers above low clumps of dark, glossy green, divided foliage. This wild seed is from the outstanding population, which Will discovered & called 'Sunset'. A large percentage of the plants have flowers which flush to red shades as they mature.)

561.807 : HELLEBORUS NIGER Slovenia, SE of Jesenice. W. McLewin coll. (From another population in the Julian Alps, here on the N slopes of the Triglav. Will's 'Sunrise' - a good percentage are pink-flushed & mature to red. Lovely things.)

- 561.820 : HELLEBORUS NIGER** No data. From a fine clump we have in the garden - it flowers by Christmas & continues into spring. Probably crossed with neighbours of *H.n.* subsp. *macranthus* persuasion from N Italy, which set no seed.
- 561.903 : HELLEBORUS OCCIDENTALIS** UK, Gloucestershire, near Stroud. (The little British race, which so readily crosses in gardens. From an isolated & undisturbed colony, secure on private-land. Deeply toothed leaves.)
- 561.906 : HELLEBORUS OCCIDENTALIS** Germany, Wurttemberg. (A Black Forest coll. of the little northern plant, native to Britain, with small green cups & deeply toothed leaves, soon to be separated from the southern *H. viridis*.)
- 561.904 : HELLEBORUS OCCIDENTALIS** UK, Wales, Carmarthenshire. R. Wallis coll. (Wild Welsh seed of the little British race, which so readily crosses in gardens. Distinct, dark, deeply toothed leaves & pendant, green cups.)
- 562.004 : HELLEBORUS ODORUS** Bosnia & Hercegovina, above Borike between Visegrad & Rogatica. c.1000m. Among *Crataegus* & *Juniperus* in stony turf over limestone. Archibald Archive www.srgc.net
- 562.005 : HELLEBORUS ODORUS** Hungary, Pilis Mts. W. McLewin coll. (Hungarian populations of all the species tend to be much more isolated and more homogeneous than those to the S in former Yugoslavia, where most intergrade confusingly. If you want really good green flowers, go no further than this with its big, bright-green, outward-facing cups on sturdy stems.)
- 562.006 : #HELLEBORUS ODORUS** Hungary, Mecsek Mts., near Pec. W. McLewin 98-29. (Hungarian populations of all the species tend to be much more isolated and more homogeneous than those to the S in former Yugoslavia, where most intergrade confusingly. If you want really good bright-green flowers, go no further than this with its big, outward-facing cups on sturdy stems)
- 562.050 : HELLEBORUS ODORUS** Bosnia. From authentic wild material but hybrids can occur in gardens.
- 562.399 : HELLEBORUS ORIENTALIS** Turkey, Artvin-Kars, Yalnizcam Daglari, ESE of Ardanuc. 1800m. N. Stevens coll. (A 1998 Turkish coll. from an interesting locality on a range which runs on into Georgia, well away from the Black Sea coast-ranges to which this species is largely confined in NE Turkey. Not seen in flower but most Turkish populations are greenish cream.)(15+)
- 562.405 : HELLEBORUS ORIENTALIS** Georgia, N of Tblisi. From a superb colony with rounded, cream-coloured flowers. Will visited some of these Georgian populations in flower in 1996. Having seen his photographs of this, we can see where so-called hybrid clones, such as 'Sirius' may have their origins - in fact rather than having progressed, they may have regressed.
- 562.411 : HELLEBORUS ORIENTALIS** Georgia, SE of Bordzhomi. Both creams & deep pinks with intermediates.
- 562.415 : HELLEBORUS ORIENTALIS** Ukraine, near Nalchik. From an interesting locality N of the Black Sea.
- 562.510 : HELLEBORUS ORIENTALIS subsp. ABCHASICUS** Cultivated seed from Georgia, gathered from authentic material seen in flower by Will & originally collected in Abkhazia, currently very much a 'no-go area', which is unlikely to become accessible in the foreseeable future. Until we can regard it otherwise, this is separated as the purple-flowered race of *H. orientalis*.
- 562.520 : HELLEBORUS ORIENTALIS subsp. GUTTATUS** Ukraine, Matzesta near Sochi. (An exciting, 'one-off' wild-collection from the forests along the NE corner of the Black Sea, near the border of Abkhazia. As far as we know, no authentic wild-collected material of this spotted race has been seen in western gardens. Plants recently introduced from Georgia were from stock grown in a botanic garden. According to Georgian botanists, this subspecies does not occur in Georgia. We are told that it is only known from this area. Whether this or the preceding taxon merit subspecific status is another matter. In both cases, they appear to be merely colour variants occurring in variable colonies. The Russian collector describes the plants here as both spotted and unspotted on a green or cream-white ground (this colour possibly due to the age of the flower), so expect a wide range of diversity.)
- 562.600 : HELLEBORUS PURPURASCENS** Hungary, Bukk Mts. W. McLewin coll. (Will tells us there are some superb dull-purple clones in these populations of this neat, predominantly Hungarian species, still very little-known in cultivation. Comparatively dwarf & deciduous, it is more resentful of winter wetness than some & needs a well-drained site in the UK.)
- 562.601 : HELLEBORUS PURPURASCENS** Hungary, Borzsony Mts., NE of Budapest. W. McLewin coll.
- 562.620 : HELLEBORUS PURPURASCENS** Ukraine, near Rakhov. (From the foothills of the central Carpathians, down in the corner of the SW Ukraine where it borders on Romania & Moldova. About as far E as this continental-climate species goes. These peripheral populations are often more homogenous and this should produce distinct & interesting plants)
- 562.621 : HELLEBORUS PURPURASCENS** Romania. No further data. (From one of the more eastern populations of this continental-climate species. It should produce some desirable, distinct, compact, purple-flowered plants)
- 562.621 : HELLEBORUS PURPURASCENS** Romania. No further data. (Cultivated seed from a superb, selected form from one of the more eastern populations of this continental-climate species. While this is garden seed and there is a possibility of some hybridization, it should still produce some desirable, distinct, compact, purple-flowered plants)
- 562.802 : HELLEBORUS TORQUATUS** Yugoslavia, Crna Gora, N of Kolasin. 1100m. Open areas of stony, grazed grassland. (We have not listed a wild collection from this site since 1990, when we made one ourselves. Will McLewin visited Montenegro earlier in 2000 and made contact with the local botanist who made this collection. These are classic Montenegrin *H. torquatus*, variable in colour from yellowish greens to dove colours & slate shades. This is the site where, in 1971, Elizabeth Strangman collected the doubles, which she called Dido and Aeneas & which have influenced much recent breeding. They were there when we last saw them in 1990 and Will tells us they still survive.

- 562.804 : HELLEBORUS TORQUATUS** Bosnia & Hercegovina, N of Bosanski Petrovac. 500m. Among scrub & on open, grassy slopes. W. McLewin 98-20. (A superlative colony here in the 'Bihac Pocket' at the N tip of Bosnia - different to the southern populations ascribed to *H. torquatus* in Montenegro. Essentially *H. multifidus* subsp. *multifidus* with variable inky-purple flushing & veining on the flowers. Some exquisite things here - one is illustrated on p.106 of Brian Mathew's monograph.)
- 562.806 : HELLEBORUS TORQUATUS** Cultivated seed from parents derived from populations in the Kolasin & Andrijevisa areas of Montenegro. May have crossed to some extent with other members of Section *Helleborastrum*.
- 563.000 : HELLEBORUS VESICARIUS** Turkey, Adana, Nur Da. above Hasanbeyli. 1150m. Among deciduous *Quercus* on shaley slope. (Some British, cultivated seed from this extraordinary relic thanks to the skill of Dinah Batterham, who has established this from our 1985 coll. in the open garden in Dorset. Like no other in its inflated seed-capsules, up to 15cm. long, this is summer-dormant & usually best suited to the bulb-frame in the UK. Cultivated seed is still very limited & likely to remain so.)
- 563.001 : HELLEBORUS VESICARIUS** Turkey, Gaziantep, hills between Gaziantep & Sakcagoz. c. 1000m. Among sparse scrub in terra rossa over limestone. N. Stevens coll. (Both wild and cultivated seed germinates irregularly. The cucumber-like seedlings usually go dormant without producing true leaves. These first-year, dormant roots can be lost through overdrying & this is the most critical period. Viability of seed lasts for many years so do keep ungerminated seed.)
- 563.002 : HELLEBORUS VESICARIUS** Turkey, Maras, SW of Kahramanmaras to Turkoglu. 750m. Among sparse *Paliurus* scrub on NE-facing slope. Archibald Archive www.srgc.net
- 563.003 : HELLEBORUS VESICARIUS** Turkey, Hatay, E of Belen. 1200m. Among *Carpinus* and *Quercus* scrub on NW & W-facing limestone slopes.
- 563.208 : HELLEBORUS VIRIDIS** (subsp. *viridis*) Spain, Aragon, near Zuriza. 1300m.
- 563.209 : HELLEBORUS VIRIDIS** Italy, Lombardia, near Lago di Como. The green-flowered species, distributed from the Pyrenees to N Italy. Quite different to the northern populations soon to be elevated into the species *H. occidentalis*.
- 563.253 : HELLEBORUS VIRIDIS subsp. OCCIDENTALIS** UK, Gloucestershire, near Stroud. (The little British race, which so readily crosses in gardens. From an isolated & undisturbed colony, secure on private-land. Deeply toothed leaves.)
- 563.254 : HELLEBORUS VIRIDIS subsp. OCCIDENTALIS** UK, Wales, Carmarthenshire. R. Wallis coll. (Wild Welsh seed of the little British race, which so readily crosses in gardens. Distinct, dark, deeply toothed leaves & pendant, green cups..)
- 565.005 : HEMEROCALLIS LILIOASPHODELUS** Russia, near Tomsk. (Wild-collected, Siberian seed of this elegant species, long-cultivated but rarely seen in gardens, though it is the only European species in an otherwise E Asian genus. Occuring sporadically eastwards from NE Italy, it very seldom sets seed in SE Europe. As the species is self-sterile, one suspects most western colonies are derived from single clones. Much more graceful than the bloated hybrids of unscented *H. fulva* with lily-like, bright yellow flowers on 1m. stems. It has "an unforgettable fragrance" and "great quality and charm" according to G.S. Thomas.)
- 566.020 : HEPATICA NOBILIS** Czech Republic, near Prague. Deciduous woodland on karst. Z. Zvolanek & J. Carruthers coll. (From a very variable colony of this beautiful, little central European woodlander, well known to Zdenek, who has made many fine selections from it. Some garden seed of these is included but most of this is wild-collected and stored since receipt in a refrigerator. We hope this may ensure good germination. Mainly from pale to deep blues but with some fine pinks as well.)
- 566.024 : HEPATICA NOBILIS**
- 566.025 : HEPATICA NOBILIS from BLUE FORMS** Classic pale to deep blues originally from the Western Alps.
- 566.030 : HEPATICA NOBILIS from SELECTED DEEP BLUE** Dark-blue with striking snow-white anthers.
- 566.035 : HEPATICA NOBILIS from SELECTED PINK** Soft pink with central white stripe. Western Alps.
- 566.040 : HEPATICA NOBILIS from RED FORMS** Outstanding reds selected in the Western Alps.
- 566.045 : HEPATICA NOBILIS from LILAC FORMS** Selected in southern France.
- 566.050 : HEPATICA NOBILIS from PINK FORM WITH MOTTLED LEAVES** Bright-pink selected in S France.
- 566.055 : HEPATICA NOBILIS from PYRENEAN WHITES** White flowers & distinctive white-marked leaves.
- 566.057 : HEPATICA NOBILIS from PYRENEAN PALE BLUES** Pale blue flowers with white centres and the distinctive white-marked leaves of the Pyrenean plants. "Sehr schön !" comments Hermann Fuchs..
- 566.058 : HEPATICA NOBILIS from PYRENEAN DARK BLUES** Similar foliage with deep-blue flowers.
- 566.060 : HEPATICA NOBILIS from PYRENEAN PINKS** From plants with foliage with particularly striking white-patterns and with strong-pink flowers. Seed from Hermann Fuchs' best selections
- 566.200 : HEPATICA TRANSILVANICA** (Central Romania)
- 566.600 : HERACLEUM MINIMUM from PINK FORM** No data. A low-growing rhizomatous perennial in *Umbelliferae*, quite narrowly endemic to calcareous screes in SE France. Its smooth, cut foliage is remarkably similar to *Corydalis bulbosa* & the pinkish umbels are carried on stems under 30cm. high. For a well-drained sunny site or a scree-bed in the UK.
- 567.020 : HERMODACTYLUS TUBEROSUS** No data. The irresistible, green & velvety-black iris of the Mediterranean. Tuberous-rooted & summer-dormant, this is easy enough to grow outside in the UK but needs a very hot, dry spot to flower well.

- 570.950 : HYACINTHELLA ACUTILOBA** Turkey, Sivas, Ziyaret Tepe. 2100m. Thin, limestone gravel on exposed ridges. (Wiry, 10cm. stems with up to 20, little china-blue bells rising from 2-3 distinctively broad, glaucous leaves, often basally tinged with purple. A plant of the severe continental climate of N central Anatolia.)
- 570.952 : HYACINTHELLA ACUTILOBA** Turkey, Kayseri, Nof Sariz. (Wiry, 10cm. stems with up to 20, little china-blue bells rising from 2-3 distinctively broad, glaucous leaves, often basally tinged with purple. A plant of the severe continental climate of N central Anatolia.) Archibald Archive www.srgc.net
- 570.953 : HYACINTHELLA ACUTILOBA** Turkey, Kayseri, S of Pinarbasi, near Asagibeycahir. 1200m. Limestone fissures & pockets. (Wiry, 10cm. stems with up to 20, little china-blue bells rising from 2-3 distinctively broad, glaucous leaves, often basally tinged with purple. A plant of the severe continental climate of N central Anatolia.)
- 570.954 : HYACINTHELLA ACUTILOBA** Turkey, Erzincan, N of Erzincan to Kolcekmezdagı Gecidi. 1800m. Among steppe vegetation on stony slopes. (Wiry, 10cm. stems with up to 20, little china-blue bells rising from 2-3 distinctively broad, glaucous leaves, often basally tinged with purple. A plant of the severe continental climate of N central Anatolia.)
- 570.955 : HYACINTHELLA ACUTILOBA** Turkey, Malatya, W of Akcadag to Karahan Gecidi. 1700m. In steppe vegetation on open stony slopes. (Wiry, 10cm. stems with up to 20, little china-blue bells rising from 2-3 distinctively broad, glaucous leaves, often basally tinged with purple. A plant of the severe continental climate of N central Anatolia.)
- 571.000 : ###HYACINTHELLA ATCHLEYI** Greece, Evia, mainland hills opposite Halkida. 200m. [#2nd pic](#). Open limestone slopes with sparse scrub. (Lots of little, clear-blue bells on wiry, 10-15cm. stems in early spring. Only grows around here & Thebes.) [#3rd pic](#)
- 571.020 : HYACINTHELLA ATROPATANA**
- 571.050 : HYACINTHELLA CAMPANULATA** An obscure species, only known from a small area W of Konya.
- 571.100 : HYACINTHELLA DALMATICA**
- 571.120 : HYACINTHELLA GLABRESCENS** Turkey, Nigde, SW of Ciftehan, foothills of Bolkar Dagları above Gumus. 1500m. Steep, loose, stony slope. (A very local plant, limited to the Bolkar Dag area of the Cilician Taurus mountains. Close to *H. heldreichii* but with broader leaves & less deeply coloured violet-blue bells on the 10cm. stems.)
- 571.125 : HYACINTHELLA GLABRESCENS** Turkey, Nigde, NW of Pozanti. 1050m. Ex R. & R. Wallis 92-10.
- 571.140 : HYACINTHELLA HELDREICHII** Turkey, Antalya, SE of Korkuteli. c. 1000m. Open slopes with sparse *Quercus*, *Pinus* & *Daphne*. (Sessile, deep blue bells on wiry, 10cm. stems. Not quite so dark as the allied *H. lazulina*.)
- 571.145 : HYACINTHELLA HELDREICHII** Turkey, Antalya, between Beysehir & Akseki. Ex R. & R. Wallis 90-50. (Sessile, deep violet-blue bells on wiry, 10cm. stems. Not quite so dark as the allied *H. lazulina* from further east.)
- 571.146 : HYACINTHELLA HELDREICHII** Turkey, Içel, 12km. from Ermenek to Mut. Among sparse *Pinus*. Ex RUDA 03-016. (Sessile, deep blue bells on wiry, 10cm. stems. Not quite so dark as the allied *H. lazulina*.)
- 571.160 : #HYACINTHELLA HISPIDA** Turkey, Nigde, E of Ulukisla. 1500m. Steep, exposed, limestone slopes. (Distinct, hairy leaves & 10cm. racemes of up to 30 blue-violet flowers. Like most in this dainty & neglected genus, a local plant.)
- 571.200 : #HYACINTHELLA LAZULINA** Turkey, Icel, NE of Gulnar. 800m. Among stones on limestone slopes. (Recent 'split' from *H. heldreichii*, mainly from the area S of Karaman. Glaucous leaves & deepest blue, violet-shot flowers.)
- 571.201 : HYACINTHELLA LAZULINA** Turkey, Karaman, SSE of Karaman. c. 1100m. Open steppe. (Recent 'split' from *H. heldreichii*, mainly from the area S of Karaman to Gulnar. Glaucous leaves & deepest blue, violet-shot flowers.)
- 571.202 : HYACINTHELLA LAZULINA** Turkey, Icel, S of Gulnar. 800m. Among stones on limestone at edge of field. (Recent 'split' from *H. heldreichii*, mainly from the area S of Karaman. Glaucous leaves & deepest blue, violet-shot flowers.)
- 571.250 : HYACINTHELLA LEUCOPHAEA** (subsp. *leucophaea*)
- 571.270 : HYACINTHELLA LEUCOPHAEA subsp. ATCHLEYI** Greece, Evia, mainland hills opposite Halkida. 200m. Open limestone slopes with sparse scrub. (Lots of little, clear sky-blue bells on wiry, 10-15cm. stems in early spring. Once considered to grow only around here & Thebes, it is now recognized as extending to W Bulgaria & E Serbia.)
- 571.300 : HYACINTHELLA LINEATA** Ex an R. & R. Wallis coll. (Most western of the Turkish endemics with about 20 little bells in quite deep violet-blue on 10cm. stems.)
- 571.330 : HYACINTHELLA MICRANTHA**
- 571.340 : HYACINTHELLA MILLINGENII** No data. A low altitude species endemic to the limestones of Cyprus. Spike-like racemes of about 10, sessile, pale-blue bells above 2 glaucous leaves. Possibly most closely allied to the two S Turkish & Syrian species, *H. nervosa* & *H. siirtensis*.
- 571.360 : HYACINTHELLA NERVOSA** Turkey, Urfa, E of Birecik, slopes of Kara Dag. 800m. Limestone ledges & fissures. (A seldom collected species from the N edge of the Syrian Desert, an extremely hot area in summer. Dense racemes of about 20, stemless blue bells, sometimes violet-tinged, above two twisting leaves with undulate margins.)
- 571.361 : HYACINTHELLA NERVOSA** Turkey, Urfa, WSW of Urfa. 700m. Exposed, very stony areas. (A seldom collected species from the N edge of the Syrian Desert, an extremely hot area in summer. Dense racemes of about 20, stemless blue bells,

sometimes violet-tinged, above two twisting leaves with undulate margins.)

571.369 : HYACINTHELLA NERVOSA Jordan, W of Kerak, Jabal Karun. (A seldom collected species distributed around the N & W edges of the Syrian Desert, an extremely hot area in summer. Dense racemes of about 20, stemless blue bells, sometimes violet-tinged, above two twisting leaves with undulate margins. Our material from S Turkey has not been easy to grow & flower.)

571.400 : HYACINTHELLA PALLASIANA

571.410 : HYACINTHELLA PALLENS

571.430 : HYACINTHELLA PERSICA Iran, Qazvin, S of Lowshan. 600m. Stony clay on open slopes. (Quite different to the others here & the only member of Sect. *Atropatana* listed. Curved 10cm. stems with up to 20, small, pale blue bells rise above two thready leaves. Only known from a very small area in N Iran & not very easy to grow in our experience.)

571.500 : #HYACINTHELLA SIIRTENSIS Turkey, Mardin, NE of Mardin, Hop Gecidi. 1110m. Open, stony, limestone slopes. (Dense racemes of pale-blue bells. A Turkish endemic, closest to the other species from the northern edge of the Syrian Desert, *H. nervosa*, but with differently structured flowers & well separated geographically from it.)

571.501 : HYACINTHELLA SIIRTENSIS Turkey, Mardin, NW of Mardin, Akresta Gecidi. 1100m. Among steppe vegetation on open, stony slopes. (Dense racemes of pale-blue bells. A Turkish endemic, closest to the other species from the northern edge of the Syrian Desert, *H. nervosa*, but with differently structured flowers & well separated geographically from it.)

572.005 : HYACINTHOIDES ALGERIENSIS (*H. hispanica* var. *algeriensis*) Morocco, Middle Atlas, ESE of El Ksiba, Tizi-n-Ifar. Ex JWB 89-18A (An attractive, disjunct, relict Moroccan bluebell, rather like *H. reverchonii* (with wide-open, *Scilla* flowers) and, like it, often a plant of limestone-fissures. Worthwhile & easily grown under glass.)

572.050 : HYACINTHOIDES HISPANICA

572.059 : HYACINTHOIDES HISPANICA Spain, Segovia, El Espinar, Aguas Vertientes. 1300m. R.D. Dominguez coll. (A wild coll. of the Spanish Bluebell.) Archibald Archive www.srgc.net

(572.090 : HYACINTHOIDES HISPANICA ALGERIENSIS)

572.108 : HYACINTHOIDES ITALICA France, La Turbie. Ex P.Bird & M. Salmon 380

572.109 : HYACINTHOIDES ITALICA France, Alpes de Haute-Provence, near Caussols. 1000m. Limestone pavement. (Wide-open starry, violet-blue flowers in a dense, terminal raceme on 20cm. stems. Likened by Brian Mathew to a more robust version of *Scilla verna*.)

572.201 : #HYACINTHOIDES NON-SCRIPTA UK, Wales, below Ffostrasol. 150m. Mixed, deciduous woodland. (From our own population of bluebells, most spectacular of native British bulbs, hardly in need of 'conservation' around here.) (20++)

572.300 : HYACINTHOIDES REVERCHONII Spain, Jaen, Sierra de Cazorla, above source of the Guadalquivir. 1400m. Red clay pockets on limestone cliffs. (An obscure, narrow-endemic but easy to grow here under glass. Alan Edwards grows it outside in Surrey & has had hybrids with *H. non-scripta*. Glossy leaves & 15cm. stems carrying, distinct, rich-blue flowers : wide-open and not in the least 'bluebell' like.)

572.340 : HYACINTHOIDES VICENTINA from WHITE FORM Only known from the Cabo S. Vicente in S Portugal. Ex a V. Horton coll. (White form of this disjunct relative of *H. italica*, distinguished by its yellow, instead of blue, pollen.)

572.500 : #HYACINTHUS LITWINOWII Iran, Khorasan, W of Bojnurd. 1200m. Steep, open, loose, stony slopes. (From our 2001 reintroduction from the Iranian population of this Kopet Dag endemic. Material from Turkmenistan is in cultivation but is very rarely seen. Most distinct in its rosettes of very broad, flat basal leaves, in the centre of which several very short, arching stems appear to carry a succession of delicately scented hyacinth-flowers, variable from palest ice-blue to soft lilac-pink. These open near ground-level in early spring &, as with so many early-flowering species from cold climates, the challenge is to prevent them appearing prematurely in the milder UK weather. It needs a hotter, drier summer rest than the other species.)

572.550 : HYACINTHUS ORIENTALIS (subsp. *orientalis*) Turkey, Gaziantep, Nur Daglari, above Fevzipasa. 1150m. In shade of *Quercus* scrub. Ex JJA 17744 (The more southern, lower altitude type of the ancestor of the bloated commercial hyacinths. Up to 12, waxy bells on 20cm. stems in soft, celestial blue with a heavenly scent. A very beautiful plant seldom seen in cultivation.)

572.551 : HYACINTHUS ORIENTALIS (subsp. *orientalis*) Turkey, Mersin, E of Gulnar. 900m. Shaded limestone cliffs. Ex JJA 17729. (The more southern, lower altitude type-race of the wild ancestor of the bloated commercial hyacinths. Up to 12, waxy bells on 20cm. stems in soft, celestial blue with a heavenly scent. A very beautiful plant seldom seen in cultivation.)

572.600 : #HYACINTHUS ORIENTALIS subsp. CHIONOPHILUS Turkey, Sivas, Ziyaret Tepe. 2100m. Limestone crevices & among rocks. (The dwarfer, fewer-flowered high-altitude race of the wild ancestor of garden hyacinths. A snow-melt alpine from the high mountains in S Central Turkey. Pale slate-blue, waxy flowers with long, reflexing perianth lobes, on short stems. Stays neat here under glass & is worth growing for its most exquisite scent alone.)

572.601 : HYACINTHUS ORIENTALIS subsp. CHIONOPHILUS Turkey, Tunceli, along Munzur river. 950m. Calcareous scree slopes. Ex KPPZ 90-215.

572.650 : HYACINTHUS TRANSCASPICUS Iran, Mazandaran, S of Azad Shahr to Shahrud. 2200m. Rock crevices & at base of cliffs. (An Iranian endemic from the ranges at the eastern end of the Elburz. From similar habitats to Turkish *H.o.* subsp. *chionophilus* & probably more closely allied to this than to *H. litwinowii*. A very dwarf, alpine species with a few pale-blue

- hyacinth-flowers on very short stems in early spring. Not easy &, like *H. litwinowii*, tends to flower prematurely.)
- 572.658 : HYACINTHUS TRASCASPICUS** Iran, Mazandaran, Tuyeh. 2000m. Ex a 1978 P. Wendelbo coll. (An Iranian endemic from the mountain-ranges at the eastern end of the Elburz. From similar habitats to Turkish *H.o.* subsp. *chionophilus* & probably more closely allied to this than to *H. litwinowii*. A very dwarf, alpine species with a few pale-blue hyacinth-flowers on very short stems in early spring. Not easy &, like *H. litwinowii*, tends to flower prematurely.)
- 572.659 : HYACINTHUS TRASCASPICUS** Iran, Mazandaran, Kosh-e-Yelagh. Ex a 1978 P. Wendelbo coll. (An Iranian endemic from the mountain-ranges at the eastern end of the Elburz. From similar habitats to Turkish *H.o.* subsp. *chionophilus* & probably more closely allied to this than to *H. litwinowii*. A very dwarf, alpine species with a few pale-blue hyacinth-flowers on very short stems in early spring. Not easy &, like *H. litwinowii*, tends to flower prematurely.)
- 580.100 : IBERIS CANDOLLEANA** France, Vaucluse, Le Mont Ventoux. 1800m. Loose, limestone scree on summit ridge. (Most refined of its genus and the piece de resistance among the fascinating flora of this isolated Provencal limestone massif, where it grows "tucked in among the rocks, its leaves completely hidden by corymbs of lilac flowers" (wrote Dwight Ripley in 1938). A thoroughly perennial tiny shrublet, mysteriously 'disappeared' into the annual *I. pruitii* complex in 'Flora Europea'. Remaining only a few cm. across & long-lived, even in our wet garden, though more likely to be white than lilac in cultivation.)
- 582.510 : INULA MAGNIFICA** No data. A splendid 2m. high Caucasian, which needs space in moist, rich soil. "Superb and dignified" with "heads of brown buds opening to large, vivid deep-yellow daisies" writes Graham Stuart Thomas.
- 582.610 : INULA ORIENTALIS** (*I. glandulosa*) No data. A stout, rhizomatous perennial from wet slopes & streamsides in the mountains of NE Turkey into the Caucasus. Big, downy leaves & unbranched, erect, 60cm. stems carrying large yellow daisies with many, narrow rays, opening from hairy, brown buds, in late summer. Excellent in wild, wet places.
- 583.050 : IRIS ACUTILOBA** (Sect. *Oncocyclus*)
- 583.100 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, Zanjan, NE of Miyaneh. Among steppe vegetation in stony clay. Not *I. acutiloba* but a form of *I. meda* extremely close to *I. sari* : bright lemon yellow ground colour veined with dull crimson-brown ; dense beard of bright yellow hairs immediately above a maroon-black signal patch.
- 583.101 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, Ardabil, W of Ardabil, Kuh-e-Sabalan. 2400m. Among steppe vegetation on tuffs of volcanic ash. Archibald Archive www.srgc.net
- 583.102 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, East Azerbaijan, SW of Ahar. 1820m. Montane steppe. (Exquisitely elegant. Pointed whitish segments with dark veins & a small maroon-black signal-patch.)
- 583.102 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, East Azerbaijan, SW of Ahar. 1820m. Montane steppe. (More or less similar in flower to the Sabalan population.)
- 583.103 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, East Azerbaijan, S of Tabriz, Shibli pass. 2020m. Degraded montane steppe.
- 583.104 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, Kordestan, NW of Divandarreh. Among steppe vegetation on gravelly clay slopes. (Quite distinct from the more northern, Azerbaijan, collections : more pointed, attenuate segments ; yellower ground colour ; finer, darker veining ; a smaller, blacker signal-patch. Equally compact.)
- 583.105 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, W Azerbaijan, pass between Agh Bolagh & Disaj. 2200m. Among steppe vegetation on stony slopes & ridgetops.
- 583.106 : IRIS ACUTILOBA subsp. LINEOLATA** Iran, Ardabil, E of Khalkhal. 2000m. Among steppe vegetation & sparse Crataegus on steep, open slopes.
- 583.107 : IRIS ACUTILOBA subsp. LINEOLATA** Iran, East Azarbayjan, NE of Aghkand. 1800m. Among steppe vegetation on open, stony, igneous slope..
- 583.120 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, Khorasan, Bojnurd, E of Tang Rah. 1200m. Steep, loose limestone slopes & among scrub.
- 583.121 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, Khorasan, 75km. W of Bojnurd, NE of Chaman Bid. 1300m. Exposed ridgetop.
- 583.122 : IRIS ACUTILOBA subsp. LINEOLATA** (Sect. *Oncocyclus*) Iran, Khorasan, Kopet Dag N of Quchan. 2000m. Open stony slope above top of pass.
- 583.205 : IRIS AFGHANICA** (Sect. *Regelia*) Afghanistan. Ex P. Furse
- 583.300 : IRIS AITCHISONII** (Subgen. *Scorpiris*)
- 583.320 : IRIS AITCHISONII var. CHRYSANTHA** (Subgen. *Scorpiris*) Pakistan, Sirikot Hills. 900m. (Narrow leaves & branched stems, about 30cm. tall with up to 3 deep yellow flowers. An extremely difficult junco to grow.)
- 583.400 : IRIS ALBERTII** (Sect. *Iris*) Kazakhstan, Tien Shan, S of Almaty, Alm Atinska river valley. 850m. Very steep, stony slopes & rock-ledges. (A Kazakh endemic from the NE extremity of the distribution of this section. Branched, 50cm. stems with several lavender to purple, white-bearded flowers overtop the comparatively short, broad, grey-green leaves.)
- 583.450 : IRIS ALBICANS** (Sect. *Iris*)

- 583.470 : IRIS ALBOMARGINATA** (Subgen. *Scorpiris*) Uzbekistan, Pskem range, Ihnatschsaï valley. (From a type-locality coll. of this seldom-collected species, unknown in cultivation until this recent collection. The name has been (and continues to be) widely misapplied to a variety of species and intraspecific hybrids. All commercial stocks bearing this name are incorrectly named with the sole exception of that grown by Janis Ruksans in Latvia. This is a dwarf, high altitude species from a few currently inaccessible localities. It is only about 15cm. tall with up to 5 flowers, usually in sky-blue but some tend to pale violet, with pale, almost white, blades to the falls with dark feathering. Hand-pollinated seed.)
- 583.480 : IRIS ALBOMARGINATA** (Subgen. *Scorpiris*) No data. Probably wrongly named.
- 583.485 : IRIS ANTILIBANOTICA** (Sect. *Oncocyclus*)
- 583.500 : IRIS APHYLLA** (Sect. *Iris*)
- 583.600 : IRIS ASSADIANA** (Sect. *Oncocyclus*)
- 583.750 : IRIS ATROFUSCA** (Sect. *Oncocyclus*)
- 583.800 : IRIS ATROPURPUREA** (Sect. *Oncocyclus*)
- 583.820 : IRIS ATROPURPUREA var. GILEADENSIS** (Sect. *Oncocyclus*) Archibald Archive www.srgc.net
- 583.900 : IRIS ATTICA** (Sect. *Iris*) Greece, Viotia, Oros Parnassos. 1200m. Clay in limestone pockets. (Mainly from pale yellow forms with some blues & purples. The dwarfest bearded iris, ideal for an alpine-house pan with frequent repotting.)
- 583.905 : IRIS ATTICA** (Sect. *Iris*) Turkey, Kutahya, NE of Kuhtaya. 1000m. In steppe vegetation on open limestone slopes.
- 584.300 : IRIS AUCHERI** (*I. sindjarensis*) (Subgen. *Scorpiris*) Turkey, Diyarbakir, NW of Diyarbakir. 800m. Ex A.N. McMurtrie 2282 (From the famous, variable, Leylek Station population. Most seedlings are likely to be some shade of blue, though this colony can vary from pure whites to deep violet-blues. One of the easier ones to grow in the UK. 15-30cm. high.)
- 584.305 : IRIS AUCHERI** (Subgen. *Scorpiris*) Syria, Bishmishli. Among limestone boulders. R. Wallis coll. (About the S limit for the species.)
- 584.306 : IRIS AUCHERI** (Subgen. *Scorpiris*) Turkey, Van, Bahcesaray. Ex an A. McMurtrie coll. (Hand-pollinated Canadian seed from a good, mid-blue form, sometimes tinged with mauve.)
- 584.307 : IRIS AUCHERI** (Subgen. *Scorpiris*) Iran, West Azarbayejan, between Agh Bolagh & Sangar. 1500m. In heavy clay on rocky, limestone slope. (An excellent Juno and one of the easier ones to grow in the UK. About 30-50cm. high with several blue flowers appearing successively from among papery bracts. Old flowers indicate a good deep-coloured form here.)
- 584.308 : IRIS AUCHERI** (Subgen. *Scorpiris*) Iran, Kordestan, E of Sanandaj. 2000-2300m. Rock-ledges & on open stony slopes....
- 584.320 : IRIS AUCHERI** (Subgen. *Scorpiris*) No data. Mainly from clones from the variable Diyarbakir, Leylek Station population pollinated with material from near Bahcesaray, Van. Should produce some vigorous seedlings. One of the easier ones to grow in the UK. 15-30cm. high with flowers in shades from mid-blue to violet blue.
- 584.321 : IRIS AUCHERI from WHITE FORMS** (Subgen. *Scorpiris*) Turkey, Diyarbakir, Leylek. 800m. Ex KPPZ 90-156 (From the outstanding clone 'Snowflake' originally selected in flower in the wild from this extraordinarily variable population & hand-pollinated in cultivation. Don't miss these superlative junos, which are not so difficult to grow.)
- 584.322 : IRIS AUCHERI from DEEPEST BLUE-PURPLE FORMS** (Subgen. *Scorpiris*) Field data as above. Ex KPPZ 90-157 (Seeds from 'Shooting Star' hand-pollinated with other exceptionally deep ink-violet forms : "anything darker will be black". "Amazing plants" comments Henrik Zetterlund. A show-stopper when well-grown.)
- 584.323 : IRIS AUCHERI from LILAC-PINK FORM** (Subgen. *Scorpiris*) Turkey, Diyarbakir, NW of Diyarbakir. 800m. Field with deep clay, flooded in spring. Ex KPPZ 90-158 (Hand-pollinated seed from a single, lilac-pink clone, named 'Leylek Lila', selected by the KPPZ expedition from the famously variable, Leylek Station population. Unlike anything we have seen in gardens so far but likely to come fairly true from seed. The species is one of the easier Junos in the UK. 30cm. high.)
- 584.500 : IRIS AURANTICA** (Sect. *Oncocyclus*)
- 584.550 : IRIS BAKERIANA** (Subgen. *Hermodactyloides*)
- 584.600 : IRIS BALDSCHUANICA** (Subgen. *Scorpiris*)
- 584.700 : IRIS BARNUMAE** (f. *barnumae*) (Sect. *Oncocyclus*) Turkey, Van, E of Ozalp. 2100m. In sandy clay among steppe vegetation on low hills.
- 584.701 : IRIS BARNUMAE** (f. *barnumae*) (Sect. *Oncocyclus*) Turkey, Van, SW of Timar. 1880m. Among steppe vegetation on open slopes.
- 584.750 : ##IRIS BARNUMAE f. PROTONYMA** (Sect. *Oncocyclus*) Iran, West Azarbayejan, N of Khoi, Khamsian pass. 1585m. Residual steppe between cultivated areas. (Possibly the first time material of this sumptuous, dwarf steppe-plant has been available since the 1960's. [#Beautifully proportioned flowers](#) in pure, penetrating, rich red-violet. The standards are slightly paler than the falls with their glossy, black-violet signal-patches below distinctive beards of dense, short, black hairs, like patches of moleskin. The black-bearded race is endemic to NW Iran and this colony has the finest forms we have seen.)
- 584.800 : IRIS BARNUMAE f. URMIIENSIS** (Sect. *Oncocyclus*) see 600.600 : *Iris urmiensis*

- 584.900 : IRIS BASALTICA** (Sect. *Oncocyclus*)
- 585.000 : IRIS BIGGERI** (Sect. *Oncocyclus*)
- 585.050 : IRIS BISMARCKIANA** (*I. nazarena*) (Sect. *Oncocyclus*)
- 585.070 : IRIS BLOUOWII** (Sect. *Psammiris*)
- 585.100 : IRIS BOISSIERI** (Subgen. *Xiphium*)
- 585.200 : IRIS BOSTRENSIS** (Subgen. *Scorpiris*)
- 585.209 : IRIS BOSTRENSIS** (Subgen. *Scorpiris*) Jordan, (North, 7-10km.) E of Yarmouk (University). VISA04-43 (2 clones).
- 585.300 : IRIS BUCARICA** (Subgen. *Scorpiris*)
- 585.309 : IRIS BUCARICA** (Subgen. *Scorpiris*) Tadjikistan, near Duschanbe. Ex an A.Kruminsch coll. (From an extremely fine, tall, vigorous form with flowers entirely of a rich, deep yellow : not bicoloured as in old commercial stocks distributed under this name.) Archibald Archive www.srgc.net
- 585.320 : IRIS BUCARICA** (Subgen. *Scorpiris*) No data. Originally from the old commercial, bicoloured stock with creamy white flowers with a bright yellow blade to the falls but successive generations of seedlings have tended to become altogether yellower, like the wild forms. Vigorous, increasing well, about 30cm. tall with several flowers appearing from the axils of the upper, shiny green leaves. Like *I. magnifica*, successful in a sunny site in drier parts of the UK.)
- 585.400 : IRIS CABULICA** (Subgen. *Scorpiris*) Afghanistan
- 585.430 : IRIS CAPNOIDES** (Subgen. *Scorpiris*) Uzbekistan, Tashkent, Baschkizilsai valley. (From a type-locality coll. of this dwarf juno made in the western Tien Shan. Stems up to 15cm. high with 1-3 flowers, described by Brian Mathew as "smoky grey-green with a yellow crest" & with 3-lobed "pale violet standards". The bulbs have distinctive, swollen roots.)
- 585.431 : IRIS CAPNOIDES** (Subgen. *Scorpiris*) Up to 15cm. high with 1-3 flowers in "smoky grey-green with a yellow crest" & 3-lobed "pale violet standards". Distinctive, swollen roots. See the collection under our field number 17515.
- 585.431 : IRIS CAPNOIDES** (Subgen. *Scorpiris*) Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. Igneous rock pockets & ledges. (Listed in 2001 under our field-number JJA 17515 as an unidentified wild coll., this has settled down well in cultivation with us. It appears to differ a little from the type description but is almost certainly this species. Several flowers of translucent, smoky, brownish grey on 15 cm. stems.)
- 585.460 : IRIS CARTERORUM** (Subgen. *Scorpiris*) Afghanistan
- 585.500 : IRIS CAUCASICA** (subsp. *caucasica*) (Subgen. *Scorpiris*)
- 585.520 : IRIS CAUCASICA** (Subgen. *Scorpiris*) No data. Ex A. McMurtrie. (Easier than some but still a temperamental plant for the specialist. Translucent, pale chartreuse-yellow flowers between grey-green leaves on 15cm. stems.)
- 585.600 : IRIS CAUCASICA subsp. TURCICA** Turkey, Bitlis, Nemrut Dag above Tatvan. 2500 m.
- 585.601 : IRIS CAUCASICA subsp. TURCICA** Turkey, Gumushane, Kop Dag. 2500 m. Stony, igneous slopes.
- 585.602 : IRIS CAUCASICA subsp. TURCICA** (Subgen. *Scorpiris*) Turkey, A_ri, Tahir geçidi WNW of Ele_kirt. 2300m. Steep, stony slopes. (Easier than some 'junos' but still a temperamental plant for the specialist. Up to 4 translucent, yellow flowers, sometimes green tinged, open on stems of about 15cm., clothed with 4-7, broad, grey-green leaves.)
- 585.609 : IRIS CAUCASICA subsp. TURCICA** (Subgen. *Scorpiris*) Turkey, Artvin, above Demirkent. 2000m. Montane steppe. Ex KKPS 93-33 (From a Michael Kammerlander coll. of this mountain-plant from N & NE Turkey. Up to 4 translucent, yellow flowers, sometimes green tinged, open on stems of about 15cm., clothed with 4-7, broad, grey-green leaves)
- 585.680 : IRIS CEDRETI** (Sect. *Oncocyclus*) Lebanon. R.& R.Wallis coll.
- 585.681 : IRIS CEDRETI** (Sect. *Oncocyclus*) Lebanon, above B'Shari Cedars. 2000m. Terra rossa on limestone outcrops. C.Lovell & P.Bird 407
- 585.690 : IRIS COERULEA** (Subgen. *Scorpiris*)
- 585.700 :# IRIS CYCLOGLOSSA** (Subgen. *Scorpiris*) Afghanistan, SW of Herat. 1450-1700m. Seasonally moist, grassy places near streams. Ex Hedge, Wendelbo & Ekberg 7727. (A superlative & spectacular species, unlike any other Juno, or indeed any other *Iris*, & known only from the currently inaccessible type-locality. Slender, branching stems, about 30cm high, with up to 3, large, flat, violet-blue flowers, shaded white & yellow-blotched on the falls. Not difficult in the bulb-frame or alpine-house but still needs some skill & care to maintain, though it has been grown successfully by some in the open garden in the UK.)
- 585.850 : IRIS DAMASCENA** (Sect. *Oncocyclus*)
- 585.900 : IRIS DANFORDIAE** (Subgen. *Hermodactyloides*) Turkey, Nigde, SW of Ciftehan to Maden. 1800m. Open limestone slope. Ex JJA 17968. (4km. from Maden at junction on col.) (Well known in cultivation from a widely available sterile triploid clone but fertile wild stock is virtually unknown in gardens. The species has a very local, disjunct distribution along the 'Anatolian diagonal', obliquely across the mountains of central Turkey, between 1000 & 2000m., from the Toros in Nigde & Adana to Gumushane in the NE.)

585.909 : IRIS DANFORDIAE (Subgen. *Hermodactyloides*) Turkey. Stock ex J. Ruksans. (Well known in cultivation from a widely available sterile triploid clone but fertile wild stock is virtually unknown in gardens. The species has a very local, disjunct distribution along the 'Anatolian diagonal', obliquely across the mountains of central Turkey, between 1000 & 2000m., from the Toros in Nigde & Adana to Gumushane in the NE.)

585.930 : IRIS DARWASICA (Sect. *Regelia*)

585.950 : IRIS DEMAENDICA (Sect. *Oncocyclus*) (syn. *I. barnumae* subsp. *demavendica*) Iran, Mazandaran/Tehran, Elburz Range above Gach Sar. 2850m. Steep, stony, clay slope with *Onobrychis* & *Astragalus*.

586.000 : IRIS DOABENSIS (Subgen. *Scorpiris*) Afghanistan

586.050 : IRIS DREPANOPHYLLA (Subgen. *Scorpiris*)

586.050 : IRIS DREPANOPHYLLA subsp. CHLOROTICA (Subgen. *Scorpiris*) Afghanistan

586.108 : IRIS EDMENSIS (Subgen. *Scorpiris*) Jordan, N of Wadi Musa, near Shobak. (One of the most extraordinary dwarf junos. The only species with its flowers densely spotted and striped with violet-purple on a creamy background. Apart from the distinctive colour pattern, the widely open winged hafts of the falls make for an unusual and distinct flower-shape. Otherwise, its silver-dged, falcate foliage and habit are similar to *I. persica*. Endemic to a small region of Jordan, around 1400m., growing on open calcareous slopes, often in *Artemisia*-steppe. We have found it exceptionally difficult to cultivate and intolerant of our humid atmosphere and low light-levels in winter. It is used to drying desert winds, intense sunlight & summer heat.)

586.109 : IRIS EDMENSIS (Subgen. *Scorpiris*) Jordan. D.B.Stephens coll. Archibald Archive www.srgc.net

586.400 : IRIS FILIFOLIA (Subgen. *Xiphium*)

586.410 : IRIS FILIFOLIA (Subgen. *Xiphium*) No data. Native to SW Spain & NW Africa in dry, stony places, usually on limestone. "A very beautiful" bulbous iris about 30cm. high with very narrow, linear leaves & long-tubed flowers in rich red-purple, slashed with yellow on each fall. Not a high altitude species so it will be best in the bulb-frame or a cold greenhouse in the UK

586.420 : IRIS FILIFOLIA (subsp. *latifolia*) (Subgen. *Xiphium*) Morocco, Benzu. Ex M.Salmon & M. Fillan 332

586.800 : IRIS FOETIDISSIMA (Ser. *Foetidissimae*)

586.900 : IRIS FOSTERIANA (Subgen. *Scorpiris*) Iran, Khorasan, Kopet Dag N of Quchan. 1750-2000m. Open, stony, limestone slopes. (One of the most striking & distinct of junos, *I. cycloglossa* notwithstanding. Centred on the Kopet Dag, the mountain-range along the border between Turkmenistan & Iran, it has never really settled down in cultivation. Perhaps the increasing & more widespread skill in cultivating these irises might give this new collection a better chance. It increases well in the wild, forming clumps of bulbs, which send up tufts of silver-edged leaves & 15cm. stems carrying one or two, large, bicoloured flowers : cream to yellow falls & upstanding style-branches overtopping the prominent, large (for a juno), strongly deflexed, deep purple standards. Perhaps planting this out in a raised bed under glass or in a bulb-frame might give this more chance of success than in a pot.)

17153: ### [Iris fosteriana](#) 3 pictures [# Second pic.](#) [#Third pic.](#)

587.000 : IRIS GALATICA (Subgen. *Scorpiris*)

587.001 : IRIS GALATICA (Subgen. *Scorpiris*)

587.002 : IRIS GALATICA (Subgen. *Scorpiris*)

587.003 : IRIS GALATICA (Subgen. *Scorpiris*) Turkey, Kayseri, W of Pinarba_i. 1500m. (A. Seisums coll. No number.)

587.004 : IRIS GALATICA (Subgen. *Scorpiris*) Turkey, Kayseri, NE of _rg_p.1500m. Among steppe vegetation on open sites.

587.005 : IRIS GALATICA (Subgen. *Scorpiris*) Turkey, Kayseri, E of Nev_ehir. 1200m. Among steppe vegetation on open sites.

587.020 : IRIS GALATICA (Subgen. *Scorpiris*) Turkey, Erzincan, N of Erzincan to Kol_ekmezda_i Ge_idi. 1800m. In steppe vegetation on open slopes.

587.021 : IRIS GALATICA (Subgen. *Scorpiris*) Turkey, Tunceli, N of P_l_m_r. Openings among deciduous scrub on steep, loose slopes. (Rich chestnut-red forms.)

587.200 : IRIS GATESII (Sect. *Oncocyclus*)

587.650 : IRIS GERMANICA subsp. FLORENTINA (Sect. *Iris*)

587.900 : IRIS GRAEBERIANA (Subgen. *Scorpiris*)

587.910 : IRIS GRAEBERIANA (Subgen. *Scorpiris*) No data but the genuine species, not the more robust, sterile hybrid sold under this name. Pale, pure ice-blue flowers with white, dark-tipped falls.

588.000 : IRIS GRAMINEA (Ser. *Spuriae*)

588.020 : IRIS GRAMINEA var. PSEUDOCYPERUS (Ser. *Spuriae*) No data. A robust race of this easy S European plant. Fine, red-purple flowers, white-pencilled & yellow-shaded, nestle in the 30cm. clumps of broad, rich-green, glossy foliage.

588.200 : IRIS GRANT-DUFFII (Ser. *Syriacae*)

- 588.250 : IRIS HAURANENSIS** (Sect. *Oncocyclus*)
- 588.280 : IRIS HAYNEI** (Sect. *Oncocyclus*)
- 588.310 : IRIS HERMONA** (Sect. *Oncocyclus*)
- 588.330 : IRIS HEYLANDIANA** (Sect. *Oncocyclus*)
- 588.400 : IRIS HISTRIO** (subsp. *histrío*) (Subgen. *Hermodactylóides*)
- 588.407 : IRIS HISTRIO** (subsp. *histrío*) (Subgen. *Hermodactylóides*) Turkey. From R. & R. Wallis 93-11.
- 588.408 : IRIS HISTRIO** (subsp. *histrío*) (Subgen. *Hermodactylóides*) Lebanon, Chouf mountains, Jbel Barouk, east side. 1480m. R. & R. Wallis 99-19. (An exquisite, early-flowering species native from the Lebanon up through Syria into S Turkey, usually in oak scrub. Pale to mid-blue flowers, ridged with yellow and mottled with darker blue on the falls. Well suited to cultivation in the alpine-house or bulb-frame, where it appreciates a warm summer rest. This is the first time we have been able to list wild-collected seed and it may well be the only time !)
- 588.409 : #IRIS HISTRIO** (subsp. *histrío*) (Subgen. *Hermodactylóides*) No data. From several R. & R. Wallis coll. made in Gaziantep & Hatay in S Turkey. Archibald Archive www.srgc.net
- 588.450 : IRIS HISTRIO subsp. AINTABENSIS** (Subgen. *Hermodactylóides*) Only known from the Gaziantep area between about 600 & 1000m. Distinguished by its thready filaments & narrower falls which have a smaller central zone of blue blotches.
- 588.800 : IRIS HISTRIOIDES** (Subgen. *Hermodactylóides*) A local N Turkish species from between 1300 & 1750m. in a moister area than *I. histrío* & most of its relatives.
- 588.809 : IRIS HISTRIOIDES** (Subgen. *Hermodactylóides*) No data. From the clone 'Lady Beatrix Stanley', which according to Brian Mathew is fairly typical of the wild plant but seed has been open-pollinated in the UK and may produce some hybrids. One of the most sumptuous of dwarf, bulbous irises. Its large violet-blue flowers, heavily spotted on the falls, push through the bare earth in early spring. The species is endemic to a small area of Samsun & Amasya provinces in NW Turkey at between 1300 & 1750m., in the coniferous forest zone of a much moister area than *I. histrío* & most of its relatives. Growable outside in the UK.)
- 588.810 : IRIS HISTRIOIDES** (Subgen. *Hermodactylóides*) No data. A local N Turkish species from between 1300 & 1750m. in a moister area than *I. histrío* & most of its relatives.
- 588.909 : IRIS HOOGIANA** (Sect. *Regelia*) Tajikistan, Varsob Gorge, near Chinoro. Ex a J. Ruksans coll. (A local Tajikistan endemic, perhaps the easiest of the 'arils' & often considered the epitome of what an iris should be. Large, beautifully proportioned flowers of classic shape, in pure, soft lavender-blue with linear, yellow beards on 40cm. stems. A stout species which has been grown outside in the UK but is easier with protection.)
- 588.910 : #IRIS HOOGIANA** (Sect. *Regelia*) No data. A stout species from Tadjikistan, perhaps the easiest of the 'arils', often considered the epitome of what an iris should be. Large, beautifully proportioned flowers of classic shape, in pure, soft lavender-blue with linear, yellow beards on 40cm. stems. Has been grown outside in the UK but easier with protection.
- 588.911 : IRIS HOOGIANA from WHITE FORM** (Sect. *Regelia*) Tajikistan, Varsob Gorge, near Chinoro. Ex an A. Seisums coll. (Seeds from a superb pure-white clone with a golden yellow beard, selected in the wild by Arnis Seisums, not from the commercial stocks, sold as 'Alba', which are tinged with pale blue.)
- 589.200 : IRIS HUMILIS** (*I. arenaria*, *I. flavissima*) (Sect. *Psammiris*)
- 589.300 : IRIS HYMENOSPETHA** (Subgen. *Scorpiris*) Iran, 32km. S of Tehran. (Collected out of flower in 1996 & most likely to be this. Material we had of these Iranian desert species in the 1960's was extremely difficult to maintain.)
- 589.350 : IRIS HYMENOSPETHA subsp. LEPTONEURA** (Subgen. *Scorpiris*) Iran, Hamadan, NE of Assadabad. 2200m. *Astragalus*-steppe on slate & schist. (16928 : 2.6.00)
- 589.351 : IRIS HYMENOSPETHA subsp. LEPTONEURA** (Subgen. *Scorpiris*) (16946) Iran, Lorestan, WNW of Dorud, Razan pass. 2200m. Limestone rock-ledges. 3.6.00
- 589.352 : IRIS HYMENOSPETHA subsp. LEPTONEURA** (Subgen. *Scorpiris*) (16954) Iran, Lorestan, SE of Dorud, Oshtaran-Kuh above Thiun.
- 589.353 : IRIS HYMENOSPETHA subsp. LEPTONEURA** (Subgen. *Scorpiris*) (16974) Iran, Lorestan, SE of Aligudarz. 2250m. Clay & shale slopes. 5.6.00
- 589.354 : IRIS HYMENOSPETHA subsp. LEPTONEURA** (Subgen. *Scorpiris*) Iran, Kordestan, SE of Qorveh. 1900m. Eroded clay hills. (A distinct, little-known dwarf relative of *I. persica*, currently unknown in cultivation. It apparently extends S from the Hamadan area through the Zagros towards Esfahan. One or two pale, translucent yellow, almost stemless flowers with navy-blue zones below their yellow crests appear between curved, silver-edged leaves. Very difficult to grow, though perhaps less so than the southern, desert race, *I.h.* subsp. *hymenospetha*.)
- 589.355 : IRIS HYMENOSPETHA subsp. LEPTONEURA** (Subgen. *Scorpiris*) Iran, Hamadan, NW of Hamadan. 1750m. Open gravelly clay slopes. (Our 2000 colls. under the field-numbers 16928, 16965, 16954 & 16974 were also this subspecies.)
- 589.380 : IRIS aff. HYMENOSPETHA** (Sect. *Scorpiris*) Iran, Kordestan, (SE of Marivan. 1350m. Among oak scrub. (A superb white juno, tinged & veined with violet, & with a central, yellow, purple-rimmed crest along the broad falls. It would probably

'key-out' as *I. hymenospatha* subsp. *leptoneura* but is nothing like the Zagros populations listed.)

589.500 : IRIS HYPPOLYTI (Subgen. *Scorpiris*) Only recorded from the Kokcha area at the western extremity of the Aktau.

589.550 : IRIS IBERICA (subsp. *iberica*) (Sect. *Oncocyclus*)

589.509 : IRIS IBERICA (subsp. *iberica*) (Sect. *Oncocyclus*) Georgia. No further data. Stock ex J. Ruksans.

589.600 : IRIS IBERICA subsp. ELEGANTISSIMA (Sect. *Oncocyclus*) Turkey, Erzurum, SE of Horasan. 1550m. Among *Artemisia* & other steppe vegetation on open slopes.

589.602 : IRIS IBERICA subsp. ELEGANTISSIMA (Sect. *Oncocyclus*) Turkey, Erzurum, Aras valley W of Horasan to Pasinler. 1600m. Open slopes.

589.603 : IRIS IBERICA subsp. ELEGANTISSIMA (Sect. *Oncocyclus*) Turkey, Kars, SSW from Sarikamis to Horasan. 1800m. Steep S, SE & SW facing slopes on N side of Aras valley among *Artemisia* in loose soil derived from igneous rock.

589.604 : IRIS IBERICA subsp. ELEGANTISSIMA (Sect. *Oncocyclus*) Turkey, Kars, S from Sarikamis to Karakurt. 1800m. Among rich steppe vegetation on sedimentary clay & sand hills.

589.609 : # IRIS IBERICA subsp. ELEGANTISSIMA (Sect. *Oncocyclus*) Turkey, Erzurum, between Kirekli pass & Tortum. 2200m. Montane steppe. Ex KKPS 93-44 (Maybe the most spectacular of the dwarf Irano-Turanian steppe irises. Huge flowers with upright, cream standards & vertical, concave falls, so densely veined & stippled with darkest maroon as to appear almost black. From an area with very cold winters, extending in May, and dry summers, which are not too hot.)

589.601 : IRIS IBERICA subsp. ELEGANTISSIMA (Sect. *Oncocyclus*) Turkey, Agri, WNW of Eleskirt, Sac Gecidi. 2300m. Among montane steppe vegetation on steep slopes of stony clay.

589.700 : # IRIS IBERICA subsp. LYCOTIS (Sect. *Oncocyclus*) = 590.800 et seq. : *I. lycotis*

589.801 : IRIS ILLYRICA (Sect. *Iris*) Slovenia, NW of Permani. 500m. Open karst, in rich, meadow vegetation. (An attractive, medium-sized, violet-purple bearded iris, occasional on the limestone from here to the N Croatian coast. 30cm.)

589.850 : IRIS IMBRICATA (Sect. *Iris*)

589.870 : IRIS INCONSPICUA (Subgen. *Scorpiris*)

589.900 : IRIS JORDANA (Sect. *Oncocyclus*) Jordan, W of Amman, caves E of Iraq el Amir. Ex C.Lovell & P.Bird 4 & a D.B. Stephens coll.

589.901 : IRIS JORDANA (Sect. *Oncocyclus*) Jordan, 16km. S of Jerush. Roadside banks. Ex M.Salmon & C.Lovell 38. ("Vigorous clone." Black flowers.)

590.000 : IRIS JUNCEA (Subgen. *Xiphium*)

590.100 : IRIS JUNONIA (Sect. *Iris*) Turkey, Antalya, Gidengelmez Dag, S of Madenli. 1900m. Fissures on limestone-cliff. (A very local bearded iris from high altitudes in the Taurus. Here, in the W of its distribution it inclines towards the W Turkish *I. purpureo-bracteata*, in its somewhat inflated, purple-tinged bracts. Pale yellow, tinged with purple in this form. 30-40 cm. high.)

590.200 : IRIS KERNERIANA (Ser. *Spuriae*) Turkey, Gumushane, S of Kelkit. Ex Horton & Stevens 2508. (An elegant N Turkish endemic with very narrow leaves & creamy-yellow flowers on slender, 30cm. stems. For a sunny, well-drained site.)

590.210 : IRIS KERNERIANA (Ser. *Spuriae*) No data. An elegant N Turkish endemic forming clumps of very narrow leaves, above which rise creamy-yellow flowers on stiff, slender, 30cm. stems. Choice but reliable in a sunny, well-drained site.)

590.250 : IRIS KIRKWOODII (Sect. *Oncocyclus*)

590.255 : IRIS KIRKWOODII (Sect. *Oncocyclus*)

590.256 : #IRIS KIRKWOODII (Sect. *Oncocyclus*) Syria, W of Aleppo, Bishmishli. Rocky outcrops between cultivated fields. Ex R. & R.Wallis 95-09 (From a type-locality collection of this spectacular relative of *I. gatesii* from around the border of Turkey & Syria. Somewhat intermediate between this and the dark-veined, more southern species centred on *I. sofarana*. About 30-40cm. tall with huge flowers with tucked-in falls. Standards veined & stippled with violet on a whitish ground. Falls veined with deeper purple. A vigorous plant, possibly needing richer treatment than the Iranian steppe-species.)

590.257 : # IRIS KIRKWOODII (Sect. *Oncocyclus*) Syria. Ex R. & R.Wallis 96-33 Archibald Archive www.srgc.net

590.258 : IRIS KIRKWOODII (Sect. *Oncocyclus*) Turkey, Hatay, 14km. N of Yayladagi. M.Salmon & C.Lovell 555.

590.268 : IRIS KOLPAKOWSKIANA (Subgen. *Hermodactyloides*) Uzbekistan, Tashkent, W of Chimgan. (A very odd species, placed in this subgenus with the 'reticulatas' & resembling them in its bulbs but somewhat 'juno-like' in its narrow, channelled leaves. Pale blue or purple flowers with rich, red-purple blades. A plant of open, stony slopes at up to 1300m. in the western Tien Shan, where it flowers along the melting snow-patches, this has always been a challenge to grow.)

590.269 : IRIS KOLPAKOWSKIANA (Subgen. *Hermodactyloides*) Uzbekistan, Tashkent, SE of Parkent. 1200m. (A very odd species, placed in this subgenus with the 'reticulatas' & resembling them in its bulbs but somewhat 'juno-like' in its narrow, channelled leaves. Pale blue or purple flowers with rich, red-purple blades, which have a white ridge in this form, not the yellow one of the stock usually seen in cultivation. A plant of open, stony slopes at up to 1300m. in the western Tien Shan, where it flowers along the melting snow-patches, this has always been a challenge to grow and maintain.)

- 590.270 : IRIS KOLPAKOWSKIANA** (Subgen. *Hermodactyloides*) No data. A very odd species, placed in this subgenus with the 'reticulatas' & resembling them in its bulbs but somewhat 'juno-like' in its narrow, channelled leaves. Pale blue or purple flowers with rich, red-purple blades below the orange-yellow ridge of the falls. A plant of open, stony slopes at up to 1300m. in the Tien Shan of Kazakhstan, where it flowers along the melting snow-patches, this has always been a challenge to grow & maintain.)
- 590.300 : IRIS KOPETDAGENSIS** (Subgen. *Scorpiris*) Iran, Khorasan, Bojnurd, E of Tang Rah. 1200m. Steep, loose limestone slopes & among scrub. (Extending from this area, through the Kopet Dag & into Afghanistan, this is, like so many junos collected in the 1960's, not currently in general cultivation. Stems about 20cm. high in flower, hidden by the broad, curved, overlapping leaves, with up to 9 yellow-green flowers with bright yellow crests on the falls, appearing from the upper leaf-axils.)
- 590.301 : IRIS KOPETDAGENSIS** (Subgen. *Scorpiris*) Iran, Khorasan, Kopet Dag N of Quchan. 1750 - 2000m. Open, stony, limestone slopes. Archibald Archive www.srgc.net
- 590.330 : IRIS KOROLKOWII** (Sect. *Regelia*) Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. 1300m. Among grasses on open, stony, igneous slopes. (One of the most elegant & beautiful of all irises, deservedly featured on the cover of Brian Mathews' monograph of the genus. The erect or incurving standards & long, pointed, sharply deflexed falls with sparse, dark-haired beards are both in ivory-white, delicately veined with dark brown to brown-purple, which flushes into the ground-colour. The name is seen quite frequently but try to find the genuine species (we think plants sold as *I. korolkowii violacea* are Regelio-cyclus hybrids). The last *I. korolkowii* we purchased (from a highly reputable specialist in Central Asian species) was *I. hoogiana*. We have had to go to Uzbekistan to find a mate for our clone, which came from Mike Salmon over twenty years ago. It is not as easy to grow as literature would lead you to believe but it is less trouble than any *Oncocyclus* species.)
- 590.340 : IRIS KOROLKOWII** (Sect. *Regelia*) Stock ex Michael Salmon
- 590.341 : IRIS KOROLKOWII** (Sect. *Regelia*) Stock ex Janis Ruksans : this is *I. hoogiana*
- 590.360 : IRIS KUSCHAKEWICZII** (Subgen. *Scorpiris*)
- 590.370 : IRIS KUSCHKENSIS** (Sect. *Regelia*)
- 590.405 : IRIS LACTEA** (Ser. *Ensatae*) Russia, near Tomsk. (Wild, Siberian seed of this widespread species, the only member of its series. Distributed through Central Asia, S to the Himalayas & E to NW China & Korea, this is variable and rejoices in many synonyms (this seed was collected as *I. biglumis*). Clumps of tough, narrow foliage and several, fragrant, purple-blue flowers on stems of about 30cm. in early summer. A very hardy, drought-resistant species, usually easy in an open site.)
- 590.500 : IRIS LATIFOLIA** (*I. xiphioides*) (Subgen. *Xiphium*)
- 590.600 : IRIS LAZICA** (Ser. *Unguiculares*) Turkey, Rize, E of Rize. 100m. Base of N-facing cliffs. (This Black Sea coast version of the classic winter-flowering iris is much better in our cool, moist Welsh climate than its Mediterranean cousins. Clumps of broader, shiny, green foliage produce a succession of deep lavender flowers from late autumn well into spring.)
- 590.615 : IRIS LEPTORHIZA** (Subgen. *Scorpiris*)
- 590.625 : #IRIS LINEATA** (*I. karategina*) (Sect. *Regelia*) Tadjikistan. No further data. (Raised from seed received as *I. stolonifera* from material collected in Tadjikistan. Stoloniferous it certainly is but the rhizomes are smaller & thinner than *I. stolonifera*. The blue-bearded, darker segments of the flowers on 30cm. stems are more pointed & it flowered about a month earlier with us. *I. lineata* was merged with the allied *I. darwasica* by Dykes but not by Brian Mathew. These species are obscure and all three may run into each other in the wild. Not too difficult but less vigorous than the clones of *I. stolonifera* we grow.)
- 590.640 : IRIS LINIFOLIA** (Subgen. *Scorpiris*) No data but the true species, native to Pamir-Alau & Tien Shan at around 2500m.. Dwarf, less than 10cm. high, with curved, narrow leaves & slender flowers in yellow & white. Easier than some junos.
- 590.650 : IRIS LOCZYI** (Ser. *Tenuifoliae*) China, Xinjiang, Tien Shan, Bogda Shan, Sangong He valley. 2180m. T. Dickerson 94/05
- 590.651 : IRIS LOCZYI** (Ser. *Tenuifoliae*) Kyrgyzstan, Terskey Alatau, S of Barskoon. 2930m. A. Dickerson 00-21 (A fresh coll. of this dwarf, tufted species, widespread on the mountains of Central Asia. Leaves 15-30cm. high from tussocks of persistent leaf-bases & almost stemless, long-tubed, blue-purple flowers, the falls veined with purple on a creamy ground.)
- 590.700 : IRIS LORTETII** (Sect. *Oncocyclus*)
- 590.754 : IRIS LUTESCENS** (*I. chamaeiris*) (Sect. *Iris*) France, N of Grasse. Archibald Archive www.srgc.net
- 590.755 : IRIS LUTESCENS** (*I. chamaeiris*) (Sect. *Iris*) France, Barrene. B.S. 389
- 590.756 : IRIS LUTESCENS** (*I. chamaeiris*) (Sect. *Iris*) Italy, Grosseto. Ex B.S. 337
- 590.757 : IRIS LUTESCENS** (*I. chamaeiris*) (Sect. *Iris*) Italy, Castelpescara. Ex M.Salmon 952
- 590.758 : IRIS LUTESCENS** (*I. chamaeiris*) (Sect. *Iris*) Italy, Monte Argentario. Ex M.Salmon 953
- 590.759 : IRIS LUTESCENS** (*I. chamaeiris*) (Sect. *Iris*)
- 590.800 : IRIS LYCOTIS** (*I. iberica* subsp. *lycotis*) (Sect. *Oncocyclus*) Iran, West Azerbayejan, N of Khoi. 1380m. Among steppe vegetation on low hills. (Huge flowers densely veined on both standards and falls with a netting of maroon-black on a grey-white ground & with a big, dark, velvety signal-patch are carried on comparatively short stems. We use the only name available for these very variable, dark-veined irises, which extend from the type-locality in Nakhichevan, where they intergrade with *I. iberica*, locally all the way down the western mountains of Iran to the ranges behind Esfahan, Shiraz and beyond.)

- 590.801 : IRIS LYCOTIS** (*I. iberica* subsp. *lycotis*) (Sect. *Oncocyclus*) Iran, West Azerbayejan, N of Khoi. 1380m. Among steppe vegetation on low hills. (Huge flowers, densely veined on both standards and falls with a netting of maroon-black on a grey-white ground & with a big, dark, velvety signal-patch, are carried on short stems. This population is not so far from the type-locality, Nakhichevan across the border in Armenia, but the name is the only one available for all the very variable, dark-veined irises, which extend from this area down the western mountains of Iran to the ranges behind Esfahan, Shiraz and beyond.)
- 590.802 : IRIS LYCOTIS** (*I. iberica* subsp. *lycotis*) (Sect. *Oncocyclus*) Iran, West Azerbayejan, N of Khoi. (Huge flowers densely veined on both standards and falls with a netting of maroon-black on a grey-white ground & with a big, dark, velvety signal-patch are carried on comparatively short stems. We use the only name available for these very variable, dark-veined irises, which extend from the type-locality in Nakhichevan, where they intergrade with *I. iberica*, down the western mountains of Iran to the ranges behind Esfahan, Shiraz and beyond.)
- 590.803 : IRIS LYCOTIS** (*I. iberica* subsp. *lycotis*) (Sect. *Oncocyclus*) Iran, West Azerbayejan, S of Silvaneh. 1600m. Ledges on rock outcrops on steep, E-facing slope. (A robust form of this magnificent iris from the eastern foothills of the border-ranges. Huge flowers densely veined on both standards and falls with a netting of maroon-black on a grey-white ground & with a big, dark, velvety signal-patch are carried on comparatively short stems. These dark-veined irises extend from the type-locality in Nakhichevan, where they intergrade with *I. iberica*, down the western mountains of Iran, along the Turkish & Iraqi borders southwards to the ranges behind Esfahan, Shiraz and beyond. This is the first fresh material from this area to be available for over 30 years.) Archibald Archive www.srgc.net
- 590.804 : IRIS LYCOTIS** (Sect. *Oncocyclus*) Iran, Esfahan, SE of Khonsar. 2600m.
- 590.805 : IRIS LYCOTIS** (Sect. *Oncocyclus*) Iran, Lorestan, WNW of Dorud, Razan pass. 2200m. Limestone rock ledges.
- 590.806 : IRIS aff. LYCOTIS** (Sect. *Oncocyclus*) Iran, Lorestan, WNW of Dorud. 2100m. In steppe vegetation on steep, N-facing slope. (Huge flowers densely veined on both standards and falls with a netting of maroon-black on a grey-white ground & with a big, dark, velvety signal-patch are carried on comparatively short stems. Intergrades with *I. iberica* further North.)
- 590.819 : IRIS LYCOTIS** (Sect. *Oncocyclus*) Turkey, Hakkari, near Yuksekova. BATMAN 04-124. (2 clones).
- 590.900 : ## IRIS MAGNIFICA** (Subgen. *Scorpiris*) 2 pictures [#Second pic.](#) Uzbekistan, Samarkand, Seravshan, S of Amankutan. 1800m. Among scrub in seasonally moist site. (Best known & easiest to grow but actually a rather rare, localized species in the wild. Reaching about 60cm. in height this is the tallest of the junos with glossy, green leaves & up to 7, pale lilac-blue flowers.)
- 590.909 : IRIS MAGNIFICA** (Subgen. *Scorpiris*) Uzbekistan, Seravshan, Agalik. (A wild coll. from Janis Ruksans of this splendid Central Asian, which we hope may show some variation on the following, more generally cultivated, form.)
- 590.910 : IRIS MAGNIFICA** (Subgen. *Scorpiris*) No data. A splendid Central Asian, possibly the easiest junco to grow (even outside in a sunny bed) in the UK. Large pale lavender flowers & glossy, green leaves on stout stems of 60cm. or more..
- 590.911 : IRIS MAGNIFICA from WHITE FORM** Hand-pollinated by A. McMurtrie from a selected, absolutely pure white.
- 590.940 : IRIS MARACANDICA** (Subgen. *Scorpiris*) Uzbekistan, Zhizakh, Nuratau, SE of Temirkovuk. Among *Artemisia* on open, rocky, W-facing slope. (Our collection under the field-number JJA 17548 from the little-collected central Nuratau. dwarf junco, flowering at about 10cm. in height with 1-4 creamy yellow flowers. Not an easy plant to grow in the UK.)
- 590.950 : IRIS MARACANDICA** (Subgen. *Scorpiris*) No data but the true species from the Pamir-Alai. Dwarf at less than 15cm. & yellow-flowered. Until recently little-known in cultivation but, now we have it established, proving not too difficult.
- 590.970 : IRIS MARIAE** (Sect. *Oncocyclus*)
- 590.990 : IRIS MARSICA** (Sect. *Iris*)
- 591.000 : IRIS MASIA** (Ser. *Syriacae*)
- 591.050 : IRIS MEDA** (Sect. *Oncocyclus*)
- 591.060 : IRIS MEDA** (Sect. *Oncocyclus*) Iran, E Azerbayejan, NE of Miyaneh. 1500m. Among steppe vegetation in stony clay. (A striking *Iris* with extremely long spathe-valves. Very close to *I. sari* (not accepted as occurring in Iran) but the falls are tucked in. Bright lemon yellow to straw-yellow ground-colour veined with dull brown & a dense beard of bright yellow hairs immediately above a maroon-black signal patch. About 20cm. high & much more robust than the small forms from the Kurdish steppes far to the SW, the only ones we saw in flower in the 1960's. Material from this locality, not accessible by road in the 1960's, has not been in cultivation before, though several collections were made then from very variable, low altitude populations on the mudhills of the Zanjan Chay river-valley, on the main road to Tehran, SSE of Miyaneh, which must be allied to this.)
- 591.061 : IRIS MEDA** Iran, Esfahan, SE of Aligudarz. 2400m. Among steppe-vegetation on steep slopes. (A striking *Iris*, very close to *I. sari* (not accepted as occurring in Iran) but the falls are tucked in. The ground-colour is basically yellow, veined with dull brown & with a dense beard of bright yellow hairs above a maroon-black signal patch. This collection is from the central Zagros range, much further S than we would have expected to find *I. meda* & into the territory of the big *I. lycotis* forms. From a spectacular and diverse colony with flowers varying in ground colour from bright yellows to browns.)
- 591.069 : IRIS MEDA** (Sect. *Oncocyclus*) Iran, Lorestan, 30km. N of Miyan Dasht (3km. N of Dareh Sareh village). 2400m. E-facing shale, sand & clay slopes. RRW 04-092. (Yellow & dwarfer, pale-straw forms)
- 591.070 : IRIS aff. MEDA** (Sect. *Oncocyclus*) Iran, E Azerbayejan, SSE of Miyaneh, N of Rajeim. 1100m. Loose sandy loam on

mudhills of Zanzan Chay river-valley.

591.080 : IRIS aff. MEDA ('Moleskin')

591.089 : IRIS aff. MEDA (Sect. *Oncocylus*) Iran, Hamadan, 25km. NW of Saleh Abad. 2100m. N-facing sides and summits of sand & limestone (with sea-shells) hillocks. RRW 04-083. (Lilac & purple forms with 'moleskin' beard..)

591.100 : IRIS MELANOSTICTA (Ser. *Syracae*)

591.120 : IRIS MESOPOTAMICA (Sect. *Iris*) Syria, Jebel Nusairia, NW of Misayaf. Deciduous oak-scrub on N-facing slope. Ex R. & R. Wallis 96-27. (A very tall, robust bearded *Iris* with branched stems reaching 1.2m. or more above large clumps of pale grey-green leaves. Pale lavender, yellow-bearded flowers. A southern plant likely to be vulnerable outside in the UK.)

591.150 : IRIS MICROGLOSSA (Subgen. *Scorpiris*) Afghanistan

591.200 : IRIS NARBUTII (Subgen. *Scorpiris*) About 10cm. tall with 1-2 bicoloured flowers : yellow falls with a black-purple patch surrounded by a white zone ; spectacular, deflexed, bright violet standards. See our collection 17548.

591.210 : IRIS NARBUTII (Subgen. *Scorpiris*) No data. A spectacular, dwarf juno from the mountains between Tashkent & Samarkand. About 10cm. tall with glossy, bright-green leaves and 1-2 bicoloured flowers. The yellow falls with a black-purple patch, surrounded by a white zone, contrast with deflexed, bright violet standards. Archibald Archive www.srgc.net

591.230 : IRIS NECTARIFERA (Sect. *Oncocylus*)

IRIS NICOLAI (Subgen. *Scorpiris*) : See the 596.059 *Iris rosenbachiana* listing.

591.250 : IRIS NICOLAI (Subgen. *Scorpiris*) Tadjikistan, Varzob valley, near Kandara. (A striking, dwarf Juno, which can be considered a differently coloured race of *I. rosenbachiana* but we retain the name for the material from this locality which corresponds to the protologue of the species in its combination of brown-purple and cream flowers with bright orange crests. Hand-pollinated seeds should produce similar seedlings. Not easy and resents excess moisture at any time.) .

591.280 : IRIS NIGRICANS (Sect. *Oncocylus*)

591.287 : IRIS NIGRICANS (Sect. *Oncocylus*) Jordan, plateau on S side of Wadi Mujib. VISA 04-63. (1 clone)

591.288 : IRIS NIGRICANS (Sect. *Oncocylus*) Jordan, S of Rodobe. VISA 04-48 (2 clones).

591.289 : IRIS NIGRICANS (Sect. *Oncocylus*) Jordan, E of Diban. VISA 04-55 (2 clones).

591.300 : ### IRIS NUSAIRIENSIS (Subgen. *Scorpiris*) Syria, Alladiqiyah, Jabal an Nu_ayriyah. 1400m. Ex R. & R. Wallis 95-23. (Fairly recently described from exposed slopes on the top of the Jebel Nusairi in N Syria. A dwarf, sturdy plant with 10cm. stems sheathed with wide, curved leaves from the axils of which appear 1 or 2 large, sessile flowers in soft-blue to ice-blue with palest yellow crested ridges on the falls. Extremely rare in cultivation but, though a very choice plant, not among the truly difficult to cultivate.) [#2nd photo](#) [# 3rd photo](#)

591.311 : ## IRIS aff. NUSAIRIENSIS (Subgen. *Scorpiris*) [#2nd photo](#) Turkey, Malatya, ESE of Malatya. 1850m. Among sparse *Acantholimon* & *Astragalus* in gravelly soil on exposed summit ridge. (From an extraordinary colony, like nothing any of us have seen previously in Turkey. In facies like *I. nusairiensis* & from a very similar habitat (quite different to the habitats of any *I. aucheri* we know in Turkey, Syria or Iran). Both this & *I. nusairiensis* occur just beyond the extreme periphery of *I. aucheri* distribution. Arnis Seisums suggests we provisionally place it close to *I. nusairiensis* rather than list it as a much reduced form of *I. aucheri* (which is more or less what both these plants are). It has 1 to 3 flowers but the details & colour are as yet unknown. Whether this ends up as a new species or is placed at some level under *I. aucheri* or *I. nusairiensis* will depend on the results of the cytological work Arnis is undertaking at present, so it will be some time before it is scientifically described.)

591.320 : IRIS ODONTOSYLA (Subgen. *Scorpiris*) Afghanistan Archibald Archive www.srgc.net

591.330 : IRIS ORCHIOIDES (Subgen. *Scorpiris*) Uzbekistan, Tashkent, Chatkal range, SE of Parkent. 1200m. In gritty clay or between granite boulders on NW-facing slope. (Listed in 2002 under field-number JJA 17505. About 20cm. tall with 3-4 creamy, pale yellow or almost white flowers, variably tinted with purple & blotched with deep yellow on the falls, on violet-tinged tubes. Local populations can vary a lot & it is likely that the species will be divided into several taxa. Nothing to do with the easily grown, taller plant (a yellow-flowered form of *I. bucharica*) circulating under this name in cultivation..)

591.331 : IRIS ORCHIOIDES (Subgen. *Scorpiris*) Uzbekistan, Tashkent, Chimgan area. (A vigorous population, about 30cm. tall with 3-4 pale greenish-yellow flowers with a barely dissected deeper yellow crest. The form illustrated in Rix & Phillips. Local populations can vary a lot & it is likely that the species will be divided into several taxa. None has anything to do with the easily grown, taller plant (a yellow-flowered form of *I. bucharica*) circulating under this name in cultivation..)

591.334 : IRIS ORCHIOIDES from DWARF FORM (Subgen. *Scorpiris*) Uzbekistan, Tashkent, Kurama range (The shortest, stockiest form known. Only about 15cm. tall, if grown in character, with up to 4 white flowers, suffused with lemon-cream & with a deeply fringed, lemon-yellow crest. Hand-pollinated seed from isolated plants.)

591.335 : IRIS ORCHIOIDES (Subgen. *Scorpiris*) No data but the genuine species (not the yellow form of *I. bucharica* distributed as this). Pale yellow flowers, tinted with purple & blotched with deep yellow on the falls, on violet tubes. 20-30cm.)

591.336 : IRIS aff. ORCHIOIDES (Sect. *Scorpiris*) Kazakhstan, Karzhantau, SE of Chimkent, Burguluk. 1300m. Open slopes. (From our 2002 collection, under the field number JJA 17603, which belongs to a taxon to be described by Arnis Seisums as a new species. The type-locality will be N Uzbekistan. This coll. from S Kazakhstan differs slightly from the Uzbek material but

essentially represents an extension of the previously known distribution from the southern slopes of this border range to the northern ones. This is a fine new plant barely in cultivation at present but far from impossible to grow.)

- 591.340 : IRIS ORIENTALIS** (*I. ochroleuca*) (Ser. *Spuriae*) Greece, Lesvos. Damp meadow. Ex a H.& I. Barton coll.
- 591.350 : IRIS ORIENTALIS** (Ser. *Spuriae*) (*I. ochroleuca*) No data. An easily grown, imposing species of 1m. or more, native to saline marshes from NE Greece into Turkey. Pure-white flowers with striking yellow blotches on the rounded falls
- 591.400 : IRIS PALAESTINA** (Subgen. *Scorpiris*)
- 591.409 : IRIS PALAESTINA** (Subgen. *Scorpiris*) Lebanon, between Damour & Beit el Din. 60m. SW-facing limestone slopes near coast. Ex Lovell & Bird 324. Archibald Archive www.srgc.net
- 591.450 : IRIS PALLIDA** (Sect. *Iris*)
- 591.500 : IRIS PALLIDA subsp. CENGIALTII** (Sect. *Iris*)
- 591.900 : IRIS PAMPHYLICA** (Subgen. *Hermodactyloides*) Turkey, Antalya, S of Akseki.
- 591.909 : IRIS PAMPHYLICA** (Subgen. *Hermodactyloides*) Turkey, Antalya, 10km. W of Gundogmus. Ex an A.& J. Mayr coll.
- 592.320 : IRIS PARADOXA** (f. *paradoxa*) (Sect. *Oncocyclus*) Armenia, near Lake Sevan. Ex a M. Prasil coll. (The northern, Transcaucasian type-race from Georgia & Armenia. Small, stiff, horizontal falls covered in black velvet & large, upright standards veined with deep-purple on a violet ground, in contrast to the white ground-colour of the more familiar SE Turkish & NW Iranian *I.p.* var. *choschab*. These are very dark forms approaching f. *atrata*.)
- 591.350 : IRIS PARADOXA f. CHOSCHAB** (Sect. *Oncocyclus*) Turkey, Van, NW of G_zelsu (Hoşab). 1800m. Among steppe vegetation in open sites. (More or less a type-locality coll. (unless you count the clump growing on a soil-slip next the petrol-station in Hoşab itself) of this striking plant limited to the alluvial clays of two quite small areas, one SE of Lake Van in Turkey & the other NW of Lake Urumiyeh in Iran. Disproportionately huge white standards, veined with purple, wave above the small black-velvet falls.)
- 591.370 : # IRIS PARADOXA f. MIRABILIS** (Sect. *Oncocyclus*) Iran, E Azerbaijan, S of Jolfa. 1450m. Stony slopes. (also RRW 04-042 coll.)
- 591.370 : IRIS PARADOXA f. MIRABILIS** (Sect. *Oncocyclus*) Iran, E Azerbaijan, S of Jolfa. 1450m. Stony slopes.
- 592.404 : IRIS PARVULA** (Subgen. *Scorpiris*) Tajikistan, Hissar range, Karatag valley. (A distinct species with 10cm. stems clothed with a few, narrow, strap-shaped leaves and bearing translucent, greenish cream flowers.)
- 592.405 : IRIS PARVULA** (Subgen. *Scorpiris*) No data.
- 592.500 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Bitlis, Hizan to Tatvan. 1800m. Among deciduous Quercus..
- 592.501 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Malatya, above Yukariulupinar SE of Darende. 1200m. Loose, stony, igneous slopes.
- 592.503 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Nigde, E of Ulukisla. 1500m. Steep, stony, limestone hillsides.
- 592.504 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey. Ex J. Persson 87-58.
- 592.505 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Van. Ex a J.G. Elliott coll. (From one of the most eastern colonies of this exquisite but difficult Juno, which does not actually appear to extend to Iran. Often a plant of sparse oak-scrub rather than steppe. These forms are in shades of jade-green, emerald, smoky green and yellow-green, all with pronounced markings.)
- 592.506 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey (BC'96)
- 592.507 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey (BC'96)
- 592.508 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Tunceli, Pulumur Cay valley S of Kirmizi-Kopru. 1000m. Open areas among sparse deciduous scrub.
- 592.509 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Tunceli, NW of Tunceli to Ovacik. 950-1000m. Openings among deciduous scrub on steep slopes. (Rich red-purple and red-brown forms.)
- 592.510 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Malatya, E of Malatya, foothills of Saksak Dagı. 1050m. In steppe vegetation on open slopes. Archibald Archive www.srgc.net
- 592.511 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Malatya, W of Akcadag to Karahan Gecidi. 1700m. In steppe vegetation on open stony slopes.
- 592.512 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Nigde, S of Aksaray. 1000m. Tuffs of loose volcanic ash with *Euphorbia*, *Verbascum*, *Stipa*, etc.
- 592.513 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Nigde, SW of Ciftehan to Maden. 1200m. Open, loose, igneous slope.
- 592.514 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Nigde, SW of Ciftehan to Maden. 1800m. Open limestone slope.
- 592.515 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Nigde, SW of Ciftehan, foothills of Bolkar Dagları above Gumus. 1500m. Steep, stony slope.

- 592.516 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Bitlis, WNW of Hizan. 1700m. Among deciduous *Quercus* scrub on steep slopes.
- 592.517 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Van, W of Gevas. E side of Kuskunciran Gecidi. 2100m. Among steppe vegetation on open slopes.
- 592.518 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Diyarbakir, NW of Ergani, W slope of Sakiz Dagi. 850m. Steep slopes of calcareous shale. (Arnis has seen an Erich Pasche coll. from this area : rich yellow with purple blotches on the falls.)
- 592.519 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Mardin, NW of Mardin, Akresta Gecidi. 1100m. Among steppe vegetation on open slopes.
- 592.520 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Mardin, NE of Mardin, Hop Gecidi. 1100m. Open, limestone slopes.
- 592.521 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Adana, Nur Daglari above Hasanbeyli. 1100m. In heavy red clay among deciduous *Quercus* & *Styrax* scrub. (This will be Siehe's *Iris issica*, one of the more distinct taxa sunk into *I. persica*.)
- 592.522 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Mersin, E of Arslankoy. 1000m. In *Pinus* woodland on steep slopes. (This area should be the type-locality for *I. bolleana*, described by Siehe, who was resident in Mersin. Likely to be a plant with broad, shapely falls in rich brown-purple, rimmed with straw-yellow.)
- 592.523 : IRIS PERSICA** (Subgen. *Scorpiris*) Turkey, Seyhan, NE of Pozanti, Findikli. 1200m. Calcareous slopes with sparse *Juniperus excelsa*. Ex KPPZ 90-323.
- 592.550 : IRIS PERSICA** (Subgen. *Scorpiris*) From several colls. of this rather difficult & temperamental juno from S Turkey, usually in oak-scrub or open pine woods. Needs very careful cultivation and is moisture sensitive. Translucently tinted, yellow-crested flowers in browns & plum-purples to blue-green.
- 592.700 : IRIS PETRANA** (Sect. *Oncocyclus*) Jordan. D.B.Stephens coll.
- 592.701 : IRIS PETRANA** (Sect. *Oncocyclus*) Jordan, King's Highway between Tafila & Petra. 1450m. Open flat ground among *Artemisia herba-alba* scrub. Ex C.Lovell & P.Bird 74. (Not one of the tall, robust, southern species : a dwarf, dark-flowered, desert plant, not unlike the Iranian *I. barnumae* but with a sparser beard of maroon-black hairs. Temperature-hardy & forming clumps of narrow, greyish foliage here but less easy to flower well and definitely much more difficult to keep in peak condition than the northern steppe-species. This may be better placed under *I. nigricans* but these southern 'species' intergrade.)
- 592.702 : IRIS PETRANA** (Sect. *Oncocyclus*) Jordan, between Abu al Hasan & Ras an Naqb. VISA 04-58 (2 clones).
- 593.000 : IRIS PLANIFOLIA** (Subgen. *Scorpiris*)
- 593.200 : IRIS PLATYPTERA** (Subgen. *Scorpiris*) Afghanistan. Archibald Archive www.srgc.net
- 593.400 : IRIS PONTICA** (Ser. *Spuriae*)
- 593.450 : IRIS PORPHYROCHRYSA** (Subgen. *Scorpiris*) Afghanistan
- 593.500 : IRIS POSTII** (Subgen. *Scorpiris*)
- 593.800 : IRIS PSEUDACORUS**
- 594.200 : IRIS PSEUDOCAUCASICA** (Subgen. *Scorpiris*) Iran, West Azerbayejan, between Disaj & Agh Bolagh. 1870m. Gravelly clay slopes. (A small juno, about 10cm. high, with several curved, channelled leaves with silver-white ribs & margins & up to 4 flowers with yellow-crested falls. The ground-colour is usually in translucent shades of yellow and yellow-greens in this area. Not easy but usually less of a problem than *I.h.* subsp. *leptoneura* & many others.)
- 594.201 : IRIS PSEUDOCAUCASICA** (Subgen. *Scorpiris*) Iran, W of Firuzkuh. 2200m. (17175 : 22.5.01)
- 594.202 : IRIS PSEUDOCAUCASICA** (Subgen. *Scorpiris*) Iran, East Azarbayejan, SE of Tabriz, Shibli pass. 2020m. Among steppe-vegetation on steep, gravelly slopes. (Neat blue forms distinct from the E Elburz smoky blues occur here.)
- 594.250 : IRIS PSEUDOCAUCASICA** (Subgen. *Scorpiris*) Turkey, Van, NW of G_zelsu (Hoşab). 1800m. Open steppe. (A local plant in Turkey, previously recorded from only a couple of sites there. All known Turkish plants are yellow-flowered.)
- 594.251 : IRIS PSEUDOCAUCASICA** (Subgen. *Scorpiris*) Turkey, Van, E of Ozalp. 2100m. Among steppe vegetation on low hills. (Almost on the Iranian border here. Arnis tells us that especially richly coloured yellows occur in this area.)
- 594.252 : IRIS PSEUDOCAUCASICA** (Subgen. *Scorpiris*) Turkey, Van, SW of Timar. 1880m. Among steppe vegetation on open slopes. (From much further N than any previous colls., greatly extending the range of this species in Turkey.)
- 594.609 : IRIS PSEUDOPUMILA** (Sect. *Iris*) Italy, Sicily. Ex C.Lovell 64.
- 594.610 : IRIS PSEUDOPUMILA** (Sect. *Iris*) No data.
- 595.000 : IRIS PUMILA** (Sect. *Iris*)
- 595.005 : IRIS PUMILA** (Sect. *Iris*) Ukraine, Krim (Crimea). From plants originally raised from wild-collected seed received from the Nikita Botanic Garden in Yalta, many years ago.
- 595.300 : IRIS PURPUREOBRACTEA** (Sect. *Iris*)
- 595.350 : IRIS REGIS-UZZIAE** (Subgen. *Scorpiris*) Jordan, near Ras el-Naqb. Ex a D.B. Stephens coll. (A recently described Juno

with short, 15cm stems, packed with curved leaves at the base & carrying up to 3 flowers, in the parents of cool, blue-tinged yellow with yellow ridged falls thought it can apparently vary to pale lilac-blues. Only known in Jordan from around this area but described from the Negev of Israel. So far, it has responded quite well under glass with minimal, careful watering.)

595.351 : IRIS REGIS-UZZIAE (Subgen. *Scorpiris*) Jordan, hills SW of Ras an Naqb. (A recently described juno with short, 15cm stems, packed with curved leaves at the base & carrying up to 3 flowers, in this population predominantly pale lemon-yellow with deep-yellow-ridged falls but we have grown plants from this area in cool, blue-tinged yellows & it can vary to pale lilac-blues as well. Only known in Jordan from around this area but described from the Negev of Israel. It responds quite well under glass in the UK with minimal, careful watering & we have listed our UK-grown seeds but we must confess we lost our stock in a particularly cold, wet winter. It is possibly safest grown with minimal frost-protection.)

595.400 : IRIS REICHENBACHII (Sect. *Iris*)

595.405 : IRIS REICHENBACHII from PURPLE FORM (Sect. *Iris*) Greece, Kavala, Pangeo, Akrovouni. 480m. Maquis on limestone pavement. Ex R. & R. Wallis 01-24 (The dwarf bearded iris of the central Balkan mountains. Not very easily separable from *I. suaveolens* but distinct from *I. pumila* and *I. attica*. About 20cm. tall with 1-3 dusky violet-purple flowers.)

595.406 : IRIS REICHENBACHII from YELLOW FORM (Sect. *Iris*) Greece, Kavala, Pangeo, Akrovouni. 480m. Maquis on limestone pavement. Ex R. & R. Wallis 01-24 (A yellow-flowered form from the same locality.)

595.420 : IRIS REICHENBACHII (Sect. *Iris*) No data. Seeds from both purple and yellow flowered clones.

595.798 : IRIS RETICULATA (var. *reticulata*) (Subgen. *Hermodactyloides*) Turkey, Tunceli, P_1_m_r Çay valley S of Kirmizi-Köpr_. 1000m. Open areas among sparse deciduous scrub. Ex JJA 17872

595.799 : IRIS RETICULATA Turkey, Bitlis, W of Hizan. 1900m. In clay in shade of deciduous *Quercus*. Ex JJA 17789

595.800 : IRIS RETICULATA (var. *reticulata*) Archibald Archive www.srgc.net

595.805 : IRIS RETICULATA (var. *reticulata*) (Subgen. *Hermodactyloides*) Iran, W Azerbayejan, Disaj to Agh Bolagh. 1870m.

595.806 : IRIS RETICULATA (var. *reticulata*) (Subgen. *Hermodactyloides*) Iran, W Azerbayejan, S of Silvaneh. 1700m. (16828) (Red purple form, not unlike commercial 'Krelagei'.)

595.807 : IRIS RETICULATA (var. *reticulata*) (Subgen. *Hermodactyloides*) Iran, Hamadan, Razan pass.

595.808 : IRIS RETICULATA (var. *reticulata*) (Subgen. *Hermodactyloides*) Iran, Kordestan, E of Sanandaj. 2000-2300m. Rock- ledges & on open stony igneous slopes. (Almost certainly one of the eye-catching, Kurdish bicoloured forms of *I. reticulata* (or *I. bakeriana* : we cannot see how the distinction can be maintained in Iran), which were introduced in the 1960's but have now vanished from cultivation. Pale-blue standards & velvety, deepest violet falls with yellow crests.)

595.809 : IRIS RETICULATA (var. *reticulata*) (Subgen. *Hermodactyloides*) Turkey, Tunceli, along Munzur river towards Ovacik. 950m. Ex KPPZ 90-206.

595.810 : IRIS RETICULATA (Subgen. *Hermodactyloides*) Iran, Kordestan, SW of Daraki. 2500m. Loose, SW-facing limestone slope. (It is extremely seldom that we have been able to collect more than a few seeds from any wild *I. reticulata* : little is usually set and those that are, dehiscing at ground-level from almost stemless capsules, are rapidly carried away by ants. This population, from the same slope on the Iraqi border as our mysterious *Fritillaria* collection 17255, carried its capsules on long, arching, wiry pedicels, in the previously unique manner of *I. pamphylica* but more or less erect rather than drooping. Flowers are ice-blue, almost white, dark on the blade of the falls, approaching but distinct from the bicoloured forms from the Kurdish steppe.)

595.811 : IRIS RETICULATA (Subgen. *Hermodactyloides*) Iran, Kordestan, NE of Marivan. 1800m. Open, igneous slope.

595.812 : IRIS RETICULATA (var. *reticulata*) (Subgen. *Hermodactyloides*) Iran, West Azarbayjan, SE of Disaj. 1900m. Among steppe vegetation on gravelly clay slopes.

595.820 : IRIS RETICULATA (var. *reticulata*) (Subgen. *Hermodactyloides*) Armenia, near Lake Sevan. Hand-pollinated Canadian seed of a distinct form, originally collected in the E Caucasus at the northern limits of the species-distribution. Wide segments of red-purple which age to lighter, pinker shades. See the garden-hybrid section at the end of this list for hybrids using this form. 'Reticulata' seed, which we hardly ever have available, often takes two winters to germinate.

596.059 : # IRIS ROSENBACHIANA (Subgen. *Scorpiris*) Tajikistan, Hissar range, Harangon valley. (An exquisite, very variable, dwarf juno with bright green foliage. Currently accepted as including *I. baldschuanica* and *I. nicolai*, this variant is rated by Janis Ruksans as "one of the most beautiful forms" as well as being a good grower. The large flowers are basically white, tinted with bluish violet and with a prominent rich red-purple blotch below the broad orange-yellow crest on the blade of the falls. The species can be rather difficult to maintain over a long period but usually progresses well from seed, once you have induced it to germinate. This is by far the easiest to grow of the local variants known in cultivation.)

596.060 : IRIS ROSENBACHIANA (Subgen. *Scorpiris*) No data. An exquisite juno from the Tajikistan, N Afghanistan & SE Uzbekistan at altitudes up to 2000m. Intolerant of excess moisture & can be rather difficult to maintain over a long period but usually progresses well from seed. Bright green leaves & rich-purple flowers with bright-orange crests on the falls.

596.061 : IRIS ROSENBACHIANA (Subgen. *Scorpiris*) Uzbekistan, Surchandare, Chulbair range, NW of Sina. 1700m. Ex a J. Ruksans coll. (A form from near the type-locality of *I. rosenbachiana*. Creamy flowers with black-purple falls.)

596.062 : IRIS ROSENBACHIANA from DEEP PURPLE FORM (Subgen. *Scorpiris*) Tadjikistan, Peter the Great range, near

Tovil Dora. (All cultivated material of this striking variant is derived from a selection made in the wild by Arnis Seisums. This hand-pollinated seed from isolated plants can be relied on produce plants with this colour.)

596.063 : IRIS ROSENBACHIANA (Subgen. *Scorpiris*) Tajikistan, Darvas, near Iol. (Quite distinct with somewhat smaller, earlier flowers than the Harangon population. Cream with a smoky suffusion. Violet purple blotch on the falls.)

596.200 : IRIS RUTHENICA

596.500 : IRIS SAMARIAE (Sect. *Oncocyclus*)

596.600 : IRIS SARI (Sect. *Oncocyclus*) Turkey, Kayseri, between Pinarbasi & Sariz. 1200m. Among *Astragalus* on steep, loose, igneous slopes. Archibald Archive www.srgc.net

596.601 : IRIS SARI (Sect. *Oncocyclus*) Turkey, Gaziantep, W of Gaziantep. 850m. Openings among scrub on limestone slopes. (A robust Turkish endemic with widely distributed but very local populations on both limestone & igneous rocks. It is most closely allied to the Iranian *I. meda*. Some find it one of the easier members of this difficult section to cultivate. Both standards & falls are veined with deep maroon on a straw-yellow ground. A large signal-patch of velvety maroon-black stains the falls below the cream to deep yellow beard of dense, short hairs. Some plants in this locality vary to bluish tones, perhaps due to introgression from *I. kirkwoodii*, but this variation has not appeared in the clones we grow.)

596.602 : IRIS SARI (Sect. *Oncocyclus*) Turkey, Van, above Yukari Narlica to Karabel Gecidi. 2800m. Open stony slopes.

596.603 : IRIS SARI (Sect. *Oncocyclus*) Turkey, Malatya, ESE of Malatya. 1850m. Among montane steppe vegetation on open slopes.

596.604 : IRIS SARI (Sect. *Oncocyclus*) Turkey, Sivas, W of Gurun, above Mazikiran Gecidi. 1800m. In montane steppe vegetation on open slopes.

596.700 : IRIS SCARIOSA (Sect. *Iris*) A plant of dry steppe at up to 3000m., from the Urals to the Tien Shan.

596.800 : IRIS SCHACHTII (Sect. *Iris*) Turkey, Kayseri, S of Pinarbasi, near Asagi Beycahir. 1200m. Bases of limestone boulders.

596.801 : IRIS SCHACHTII (Sect. *Iris*) Turkey, Sivas, W of Gurun. 1700m. Among steppe vegetation on open, gravelly slopes.

596.802 : IRIS SCHACHTII (Sect. *Iris*) Turkey, Malatya, WNW of Darende. 1500m. Open, limestone slopes. (Mainly pale yellow forms here of this fine, dwarf bearded iris, 15-20cm. high & endemic to central Anatolia. More or less a dwarfer version of *I. taochia* but much less vigorous with us, though it has settled in & flowers well here under glass.)

596.803 : IRIS SCHACHTII (Sect. *Iris*) Turkey, Konya, E of Kiziloren (W side of Hanoni Beli). 1550m. Openings among scrub, in heavy red clay over limestone.

596.804 : IRIS SCHACHTII from PURPLE FORMS (Sect. *Iris*) Turkey, Sivas, W of Gurun, above Mazikiran Gecidi. 1800m. In montane steppe vegetation on open limestone slopes. (From selected rich wine-purple forms, which seemed to predominate at this higher altitude.)

597.009 : IRIS SEROTINA (Subgen. *Xiphium*) Spain, Cuenca. 1200m. R.D.Dominguez coll Archibald Archive www.srgc.net

597.400 : IRIS SIBIRICA

597.800 : IRIS SINTENISII (subsp. *sintenisii*) (Ser. *Spuriae*) Greece, above Konitsa. (A Balkan & NW Turkish species, about 30cm. high & an excellent garden-plant. Clumps of grassy leaves & rich violet-blue flowers, rather like large versions of *I. reticulata*.)

597.801 : IRIS SINTENISII (subsp. *sintenisii*) (Ser. *Spuriae*) Macedonia - no further data. (A Balkan & NW Turkish species, about 30cm. high & an excellent garden-plant. Clumps of grassy leaves & rich violet-blue flowers, rather like large versions of *I. reticulata*.)

597.802 : IRIS SINTENISII (subsp. *sintenisii*) (Ser. *Spuriae*) Turkey, Bolu, near Abant Golu. 1000m. Ex a N. Stevens coll. (A Balkan & NW Turkish species, about 30cm. high & an excellent garden-plant. Clumps of grassy leaves & rich violet-blue flowers, rather like large versions of *I. reticulata*.)

597.810 : IRIS SINTENISII (subsp. *sintenisii*) (Ser. *Spuriae*) No data. Balkan & NW Turkish species, about 30cm. high & an excellent garden-plant. Clumps of grassy leaves & rich violet-blue flowers, rather like large versions of *I. reticulata*.

597.900 : IRIS SINTENISII subsp. BRANDZAE (Ser. *Spuriae*)

597.940 : IRIS SOFARANA (Sect. *Oncocyclus*)

597.950 : IRIS SOFARANA var. KASRUWANA (Sect. *Oncocyclus*) Lebanon, Laqlouq. C.Lovell & P.Bird 400 (2 clones)

597.970 : IRIS SONGARICA (Ser. *Tenuifoliae*) Iran, Markazi, NE of Arak. 1700m. Open *Hulthemia*-steppe. (A characteristic species of the dry steppes of Central Asia but difficult to grow in the damp climate of NW Europe. Broad tussocks of grassy leaves with many 60cm stems each bearing numerous grey-lavender flowers.)

597.971 : IRIS SONGARICA (Ser. *Tenuifoliae*) Uzbekistan, Aktau, S of Langar. 800m. In steppe-vegetation on open slopes. (A characteristic species of the dry steppes of Central Asia but difficult to grow in the damp climate of NW Europe. Broad tussocks of grassy leaves with many 60cm stems each bearing numerous grey-lavender flowers.)

- 598.000 : IRIS SPRENGERI** (*I. elizabethae*) (Sect. *Oncocyclus*) Turkey, Nigde, S of Aksaray, base of Hasan Dagı near Taspınar. 1000m. Tufts of loose volcanic ash with *Euphorbia*, *Verbascum*, *Stipa*, etc. (Endemic to this area, one of the dwarfest & most beautiful of all. We have grown a single clone since 1984 & have a reasonable stock from vegetative increase but this is the first year we have induced it to set selfed seed. It has not crossed with another species as it flowers here before any others. Close to *I. acutiloba* but widely separated geographically. Extremely falcate, greyish leaves, curve over to touch the ground)
- 598.001 : IRIS SPRENGERI** (*I. elizabethae*) (Sect. *Oncocyclus*) Turkey, Nigde, S of Aksaray. 1000m. Tufts of loose volcanic ash with *Euphorbia*, *Verbascum*, *Stipa*, etc. (Endemic to this area, one of the dwarfest & most beautiful of all. Close to *I. acutiloba* but widely separated geographically. Extremely falcate, greyish leaves, curve over to touch the ground)
- 598.200 : IRIS SPURIA** (subsp. *spuria*) (Ser. *Spuriae*)
- 598.250 : IRIS SPURIA subsp. CARTHALINIAE** (Ser. *Spuriae*)
- 598.300 : IRIS SPURIA subsp. DEMETRII** (Ser. *Spuriae*)
- 598.350 : IRIS SPURIA subsp. HALOPHILA** (Ser. *Spuriae*)
- 598.400 : IRIS SPURIA subsp. MARITIMA** (Ser. *Spuriae*)
- 598.450 : IRIS SPURIA subsp. MUSULMANICA** (Ser. *Spuriae*)
- 598.500 : IRIS SPURIA subsp. NOTHA** (Ser. *Spuriae*)
- 598.550 : IRIS SPURIA subsp. SOGDIANA** (Ser. *Spuriae*) Kazakhstan. Archibald Archive www.srgc.net
- 598.800 : IRIS STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Turkey, Kayseri, NE of Pınarbasi, near Karakuyu. 1700m. Among steppe vegetation on open slopes.
- 598.801 : IRIS STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Turkey, Malatya, NW of Darende. 1500m. Open limestone slopes..
- 598.802 : IRIS STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Turkey, Kayseri, N of Sarız, above Dokuzdolanbâç Gecidi. 1850m. Among steppe vegetation on open slopes..
- 598.803 : IRIS STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Turkey, Kayseri, S of Pınarbasi. 1800m. Among steppe vegetation on open slopes.
- 598.804 : IRIS STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Turkey, Sivas, W of Gurun, above Mazikiran Gecidi. 1800m. In montane steppe vegetation on open slopes..
- 598.847 : IRIS STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Turkey, Konya, WSW of Konya, Erenler Dağları W of Erenkaya. 1650m. Open areas of rotten granite along ridge. (Deep, velvety purple flowers.)
- 598.848 : IRIS STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Turkey, Konya, NE of Beyşehir (30km. NE to Konya). 1350m. Gravelly slopes. Ex KPPZ 346.
- 598.849 : IRIS STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Turkey, Konya, SW of Beyşehir (85km. from Akseki to Beyşehir). 1150m. Ex KPPZ 355.
- 598.850 : IRIS STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Not enough seed from any one coll. So, amalgamated seed (mainly from KPPZ colls. in Konya) of this beautiful, 10cm. high, yellow-crested, rich violet-blue to purple juno from the interior, steppe areas of central S Turkey. Needs care but not impossible - generally considered a little easier than the related *I. persica*.
- 598.851 : IRIS aff. STENOPHYLLA** (subsp. *stenophylla*) (Subgen. *Scorpiris*) Turkey, Mersin, W of Silifke towards Gülnar. 850m. In very stony terra rossa on scrub-covered limestone ridge. (If this is *I. stenophylla*, it is a very disjunct population indeed, at a comparatively low altitude in a Mediterranean plant-association on the S side of the Taurus.)
- 599.001 : # IRIS STENOPHYLLA subsp. ALLISONII** (Subgen. *Scorpiris*) Ex J. Persson 87/12
- 599.002 : IRIS STENOPHYLLA subsp. ALLISONII** (Subgen. *Scorpiris*) Turkey, Antalya, W of Gündoğmuş. Ex KPPZ 90-04.
- 599.100 : IRIS STOCKSII** (Subgen. *Scorpiris*)
- 599.130 : IRIS STOLONIFERA** (Sect. *Regelia*) Uzbekistan, Samarkand, Seravshan, S of Amankutan. 1800m. Among grasses on open, stony slope. (A 20-30cm. high species from S Uzbekistan & Tadjikistan. Its ruffled flowers with linear sky-blue beards are distinct but it is very variable in colour in tints of violets & blues shading into chocolate-browns. A good plant to choose to introduce yourself to the 'arils' : much easier than any in the allied Section *Oncocyclus* but still needs a dry summer rest.)
- 599.138 : #IRIS STOLONIFERA** (Sect. *Regelia*) Uzbekistan, Chulbair range, near Sina. Ex ARJA 98-04. (From clones selected in the wild from a variable population. A 20-30cm. high species from S Uzbekistan & Tadjikistan. Its ruffled flowers with linear sky-blue beards are distinct but it is very variable in tints of violets & blues shading into chocolate-browns. A good plant to choose to introduce yourself to the 'arils' : much easier than any in the allied Section *Oncocyclus* but still needs a dry summer rest.)
- 599.139 : IRIS STOLONIFERA** (Sect. *Regelia*) Tadjikistan, N of Dushanbe, Varsob valley. (A 20-30cm. high species from S Uzbekistan & Tadjikistan. Its ruffled flowers with linear sky-blue beards are distinct but it is very variable in colour in tints of

violets & blues shading into chocolate-browns. A good plant to choose to introduce yourself to the 'arils' : much easier than any in the allied Section *Oncocyclus* but still needs a dry summer rest.)

599.140 : IRIS STOLONIFERA (Sect. *Regelia*) No data. (From several forms of this 30cm. high species from S Uzbekistan & Tadjikistan. Its ruffled flowers with linear sky-blue beards are distinct but it is very variable in colour in tints of violets & blues shading into chocolate-browns. Much easier than any in the allied Section *Oncocyclus* but still needs a dry summer rest.)

599.200 : IRIS SUAVEOLENS (Sect. *Iris*)

599.205 : IRIS SUAVEOLENS (Sect. *Iris*) Greece, Edessa. Ex an A. Edwards coll. (From both purple & yellow forms)

599.206 : IRIS SUAVEOLENS (Sect. *Iris*) Greece. Ex a R. & R. Wallis coll. (From both purple & yellow forms)

599.206 : IRIS SUAVEOLENS (Sect. *Iris*) Greece, Avestohori. Ex Salmon, Bird & Lovell 508. (Yellow form)

599.610 : #IRIS SUBBIFLORA (Sect. *Iris*) No data. Bearded iris, about 30cm. high, from Portugal. Upright leaves and flowers in a silky, imperial violet. Said to be satisfactory outside in the UK but we give it a warm summer-rest under glass here.

599.650 : IRIS SUBDECOLORATA (Subgen. *Scorpiris*) Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. Igneous rock pockets & ledges. (Listed in 2002 under our field-number JJA17515. Very dwarf, only about 8cm. tall, with 1-3 flowers in translucent palest green to lilac shades with violet veins & a green blotch around the white crest. Not easy in the UK.)

599.680 : IRIS SVETLANAE (Subgen. *Scorpiris*) Archibald Archive www.srgc.net

599.700 : IRIS SWENSONIANA (Sect. *Oncocyclus*)

589.750 : IRIS TADSHIKORUM (Subgen. *Scorpiris*)

599.800 : IRIS TAOCHIA (Sect. *Iris*) Turkey, Erzurum, NE of Oltu. 1300m. Steep, stony, igneous slopes.

599.805 : IRIS TAOCHIA (Sect. *Iris*) Turkey, Erzurum, N of Tortum. 1600m. Steep, open, stony slopes. Ex a R. & R. Wallis coll. (A choice, compact, local iris from igneous slopes in a small area NE of Erzurum. Prominent, broad foliage & branched stems reaching about 30cm. with flowers in pale yellow or dusky purple with yellow-haired beards. From both colour forms.)

599.806 : IRIS TAOCHIA from PURPLE FORM (Sect. *Iris*) Turkey, Erzurum, N of Tortum. 1600m. Steep, open, stony slopes. (A choice, compact, local iris from igneous slopes in a small area NE of Erzurum. Prominent, broad foliage & branched stems reaching about 30cm. with flowers in dusky shades of both yellow & purple with yellow-haired beards. From a vigorous, floriferous form. These are growing next each other &, although seed is hand-pollinated, it may produce a range of colours.)

599.807 : IRIS TAOCHIA from YELLOW FORM (Sect. *Iris*) Data as above. Large flowers in smoky, pale-yellow.

599.830 : IRIS TENUIFOLIA

599.860 : IRIS TIANSHANICA

599.905 : IRIS TIMOFEJEVII (Sect. *Iris*) Russia, Dagestan. (A dwarf bearded iris, endemic to the Caspian republic of Dagestan & little-known in cultivation. It needs some care in the UK but, though similar treatment to members of Sect. *Oncocyclus* or Sect. *Regelia* has been recommended, we find it has a different growth-cycle & appreciates quite a lot of water during and after flowering. About 10cm. high in flower with narrow, curved, pale-green foliage and red-purple flowers with white beards on long perianth-tubes. Our stock is that brought back in the 1960's by Eliot Hodgkin from the (then) Leningrad Botanic Garden.)

600.000 : IRIS TINGITANA (var. *tingitana*) (Subgen. *Xiphium*)

600.020 : IRIS TINGITANA var. FONTANESII (Subgen. *Xiphium*) Morocco. Ex ABS 4521

600.099 : IRIS TROJANA (Sect. *Iris*) Turkey, Mugla, N of Mugla. Edge of woodland. Ex an A. Edwards coll. A bearded iris with distinctive, bicoloured flowers. Pale blue standards & red-purple falls with beards of white, yellow-tipped hairs. 60cm. Usually quite satisfactory grown outside in a hot, dry, well-drained site in the UK.

600.100 : IRIS TROJANA (Sect. *Iris*) No data. W Turkish bearded iris with distinctive, bicoloured flowers. Pale blue standards & red-purple falls with beards of white, yellow-tipped hairs. 60cm. Usually good outside in a hot, dry site in the UK.

600.200 : IRIS TUBERGENIANA (Subgen. *Scorpiris*) About 15cm. high in flower with broad, white-margined leaves & 1-3 bright yellow flowers with crested falls. See our collections under field numbers

600.209 : IRIS TUBERGENIANA (Subgen. *Scorpiris*) Uzbekistan, Tashkent, SE of Parkent. 1100m. (About 15cm. high in flower with broad, white-margined leaves and 1-3 bright yellow flowers with crested falls. Hand-pollinated seeds.)

600.300 : IRIS UNGUICULARIS (subsp. *unguicularis*)

600.320 : IRIS UNGUICULARIS f. ALBIFLORA

600.411 : IRIS UNGUICULARIS subsp. CARICA (var. *angustifolia*) (Ser. *Unguiculares*) Greece, Fokida, Oros Parnassos above Gravia. 1000m. Open, stony slope & margin of scrub. 7.6.96 (The smaller, narrower leaved eastern race of the classic winter-flowering iris, excellent outside in most of the UK, in a well-drained sunny site. Deep violet flowers all winter.)

600.414 : IRIS UNGUICULARIS subsp. CARICA (var. *angustifolia*) Greece, Messinia, above Kardamili. 100m. Base of NE-facing cliff. 14.5.95. D.M. Hoskins 95-8 (The S Peloponnese forms tend to be dwarfer and incline to the Cretan race.)

600.415 : IRIS UNGUICULARIS subsp. CARICA (var. *angustifolia*) Greece, Lakonia, S of Areopoli. M. Jope 98-08. (The

smaller, narrower leaved eastern race of the classic winter-flowering iris, excellent outside in most of the UK, in a well-drained sunny site. Beautiful, deep violet flowers rise on long tubes among the tufts of grassy foliage, on and off all winter with a profusion as spring approaches. The S Peloponnese forms tend to be dwarfer than those from further N and incline to the Cretan race.)

600.416 : IRIS UNGUICULARIS subsp. CARICA Greece, Messinia, Kardamili to Petriovouni. M. Jope 98-09.

600.600 : IRIS URMIIENSIS (Sect. *Oncocyclus*) (*I. barnumae* subsp. *barnumae* f. *urmiensis*) Iran, West Azerbayejan, S of Salmas. 1780m. Montane grassland over crystalline rock & on open, stony slopes. (A very beautiful & unmistakeable *Iris*, a restricted endemic from a range of hills S of Salmas, running at a right angle from the Turkish-Iranian border mountains towards Lake Orumiyeh. About 20cm. high with clumps of little, curved, grey-green leaves & large clear-yellow flowers, varying a little in depth of colour, with beards of dense, orange-yellow hairs above deep-yellow signal-patches on the falls. Hand-pollinated seed from our 2000 coll.)

600.800 : IRIS VARIEGATA (Sect. *Iris*)

600.801 : IRIS VARIEGATA (Sect. *Iris*) Czech Republic. No further data. Stock ex Norman Stevens.

600.802 : IRIS VARIEGATA (Sect. *Iris*) Czech Republic. No further data. Stock ex Tony Dickerson.

600.803 : IRIS VARIEGATA (Sect. *Iris*) Hungary. Ex W. McLewin (Two forms) Archibald Archive www.srgc.net

600.810 : IRIS VARIEGATA (Sect. *Iris*) No data. Original stock ex Mike Salmon.

600.850 : IRIS VARTANII (Subgen. *Hermodactyloides*) Recorded from Israel, Lebanon, S Syria & NW Jordan at 300-1000m.

600.905 : IRIS VICARIA (Subgen. *Scorpiris*) Tadjikistan, Varsob valley. Ex a J. Ruksans coll. (A splendid Central Asian species, sometimes confused with *I. magnifica* (most obviously, it differs in lacking wings on the falls) : almost as robust & growable as it is. About 50cm. high with pale blue-violet flowers, crested with white & blotched with yellow on the falls.)

600.909 : IRIS VICARIA (Subgen. *Scorpiris*) Uzbekistan, Surchandare, Chulbair range, NW of Sina. 1800m. Ex a J. Ruksans coll. (Rated by Janis as one of the most beautiful forms. Pale violet-blue with a very large yellow blotch on the falls.)

600.910 : IRIS VICARIA (Subgen. *Scorpiris*) No data. Central Asian, sometimes confused with *I. magnifica* : almost as robust & growable. About 50 cm. high with pale blue-violet flowers, crested with white & blotched with yellow on the falls.

600.950 : IRIS VVEDENSKIYI (Subgen. *Scorpiris*)

601.000 : ##IRIS WARLEYENSIS (Subgen. *Scorpiris*) Uzbekistan, Samarkand, Seravshan, S of Amankutan. 1800m. Among grasses on steep, open slope. (A superlative & spectacular species. About 30cm. high with up to 5 flowers in sky-blue with the broad blade of the falls in contrasting rich violet-purple, edged with white & with a yellow zone around the orange-yellow crest. According to both Janis Ruksans & Arnis Seisums, the forms in this area are especially fine. [#Still a rare plant in cultivation](#), as it is slow to increase vegetatively, but not particularly difficult to grow in bulb-frame conditions in the UK.)

601.005 : IRIS WARLEYENSIS (Subgen. *Scorpiris*) Uzbekistan, Seravshan, Tahta-Karacha pass. (About 40cm. high with up to 5 sky-blue flowers with deep violet falls, rimmed with white & crested with orange-yellow.)

601.012 : IRIS WARLEYENSIS from SELECTED DEEP VIOLET FORMS (Subgen. *Scorpiris*) Uzbekistan, Susi-Stau range. (Hand-pollinated seeds from the most richly coloured forms, selected in a different area of southern Uzbekistan to the population we regularly list. With its contrasting orange-yellow crests, this is indeed a striking junio.)

601.030 : IRIS WENDELBOI (Subgen. *Scorpiris*) Afghanistan.

601.060 : IRIS WESTII (Sect. *Oncocyclus*)

601.100 : IRIS WILLMOTTIANA (Subgen. *Scorpiris*) A superlative dwarf species, described originally from material grown in the UK in 1901. This led to confusion & Russian botanists sometimes apply the invalid name *I. caerulea* to it. It is very rarely seen in cultivation (the plant grown as "*I. willmottiana alba*" is a form of *I. bucharica*). About 20cm. high, with glossy leaves & showy, white-crested, soft lavender-blue flowers, blotched with white & deeper purple on the falls. See our collections from S Kazakhstan under field numbers 17603, 17620, 17628 & 17635.

601.100 : IRIS WILLMOTTIANA (Sect. *Scorpiris*) Kazakhstan, Djambil, Karatau, WSW of Taras. 900m. Slate & shale talus. **17620**

601.101 : IRIS WILLMOTTIANA (Sect. *Scorpiris*) Kazakhstan, Djambil, Karatau, WNW of Koktal. 800m. Rocky slopes. **17628**

601.102 : IRIS WILLMOTTIANA (Sect. *Scorpiris*) Kazakhstan, Djambil, Karatau, WSW of Karabastai. 1000m. Rocky slopes. **17635**

601.108 : IRIS WILLMOTTIANA (Subgen. *Scorpiris*) Kazakhstan, Djambil, Karatau, foothills of Berkara valley. (Hand-pollinated seed of this superlative dwarf junio, described originally in 1901 from material grown in the UK by Ellen Willmott. This led to confusion & Russian botanists sometimes apply the invalid name *I. caerulea* to it. It is very rarely seen in cultivation (the plant grown as "*I. willmottiana alba*" is a form of *I. bucharica*). About 20cm. high, with glossy leaves & up to 8, showy, white-crested, soft lavender-blue flowers, blotched with white & deeper purple on the falls.)

601.109 : ###IRIS WILLMOTTIANA (Subgen. *Scorpiris*) 3 pictures Kazakhstan, Djambil, Karatau, Sajasu valley. (Hand-pollinated seed of this superlative dwarf junio, described originally in 1901 from material grown in the UK by Ellen Willmott.

This led to confusion & Russian botanists sometimes apply the invalid name *I. caerulea* to it. It is very rarely seen in cultivation (the plant grown as "*I. willmottiana alba*" is a form of *I. bucharica*). About 20cm. high, with glossy leaves & up to 8, showy, white-crested, soft lavender-blue flowers, blotched with white & deeper purple on the falls.) [#2nd pic.](#) [#3rd pic.](#)

- 601.110 : IRIS WILLMOTTIANA** (Subgen. *Scorpiris*) No data. From the Pamir-Alai but described originally from material grown in the UK in 1901. Very rarely seen today - the plant grown as "*I. willmottiana alba*" appears to be a form of *I. bucharica*. 15-20cm. high, with glossy leaves & white-crested, soft-lavender flowers, blotched with white & deeper purple on the falls.
- 601.150 : IRIS WINKLERI** (Subgen. *Hermodactyloides*) Kyrgyzstan, Fergana range, Kugart valley. (From a type-locality coll. of this almost mythical plant, the first and only collection since it was described in 1884. Barely enough seed to list.)
- 601.200 : IRIS WINOGRADOWII** (Subgen. *Hermodactyloides*) Georgia, Gori, Lomis-Mta. Subalpine meadows. (This beautiful pale-yellow species, close to *I. histrioides*, is only known from its type-locality in the W Caucasus, where there are almost certainly fewer plants than there are now in cultivation. Resents drying & is usually much better grown outside in the UK.)
- 601.250 : IRIS XANTHOCHLORA** (Subgen. *Scorpiris*) Afghanistan. Archibald Archive www.srgc.net
- 601.300 : IRIS XANTHOSPURIA** (Ser. *Spuriae*)
- 601.400 : IRIS XIPHIIUM** (Subgen. *Xiphium*) Spain, Jaen, Sierra de Cazorla, E of Puerto de las Palomas. 850m. Among grasses & rushes on open, wet slope.
- 601.409 : IRIS XIPHIIUM** (Subgen. *Xiphium*) Spain, Segovia, El Espinar, Monte del Cristo. 1300m. Wet granite fissures (dry in summer). R.D.Dominguez coll.
- 601.560 : IRIS YEBRUDII** (Sect. *Oncocyclus*)
- 601.650 : IRIS ZAPRJAGAJEWII** (Subgen. *Scorpiris*) Tajikistan, Pamir. 2200m. (Related to *I. rosenbachiana* & *I. nicolai* but appearing much later, though like them, flowering as the greyish leaves surface. Pure-white, grey-lined, slightly cream-tinted, yellow-crested flowers, sometimes suffused violet on their tubes.)
- 601.651 : IRIS ZAPRJAGAJEWII** (Subgen. *Scorpiris*) Tajikistan, Pamir, Bidchon Dara. 3200m. (Related to *I. rosenbachiana* & *I. nicolai* but appearing much later, though like them, flowering as the greyish leaves surface. Pure-white, grey-lined, slightly cream-tinted, yellow-crested flowers, sometimes suffused violet on their tubes.)
- 601.700 : IRIS ZENAIDAE** (Subgen. *Scorpiris*) Kyrgyzstan, Fergana range, Kugart valley. 2700m. (Hand-pollinated seed of this beautiful juno from material collected in its seldom-visited type-locality. About 3, large flowers in rich violet-blue, heavily marked with even deeper blue on the haft of the falls & around the white crest. Little-seen yet in the UK but, though it is early days, so far proving to be a "very good grower" in the Baltic republics.)
- 16783 : IRIS SP.** (Sect. *Scorpiris*) Iran, East Azarbayejan, SE of Tabriz, Shibli pass. 2020m. Degraded steppe. 26.5.00
- 16791 : IRIS SP.** (Sect. *Scorpiris*) Iran, East Azarbayejan, SE of Marand. 1750m. Open stony slopes. 27.5.00
- 16806 : IRIS SP.** (Sect. *Scorpiris*) Iran, West Azarbayejan, N of Khoi. 28.5.00
- 17190 : IRIS SP.** (Sect. *Scorpiris*) Iran, Markazi, SW of Arak. 2200-2300m. Open stony slopes.
- 17240 : IRIS SP.** (Sect. *Scorpiris*) Iran, Kordestan, E of Shuysheh (Sanandaj to Marivan.) 1750m. Loose, shale slope.
- 17250 : IRIS SP.** (Sect. *Scorpiris*) Iran, Kordestan, SW of Negel (SE of Marivan). 1350m. Among oak scrub on clay. (A superb white juno, tinged & veined with violet, & with a prominent, central, yellow, purple-rimmed crest along the broad falls. It would probably 'key-out' as *I. hymenospatha* subsp. *leptoneura* but is nothing like the Hamadan populations listed.)
- 17282 : IRIS SP.** (Sect. *Scorpiris*) Iran, W Azarbayejan, S of Salmas. 1800m. Exposed stony slopes.
- 17285 : IRIS SP.** (Sect. *Scorpiris*) Iran, W Azarbayejan, NNE of Hashtiyani. 1500m. Open stony slopes.
- 17505 : IRIS SP.** (Sect. *Scorpiris*) Uzbekistan, Tashkent, Chatkal range, SE of Parkent. 1200m. In gritty clay or between granite boulders on NW-facing slope. (Possibly *I. orchioides*. *I. tubergeniana* & also recorded in this area.)
- 17515 : IRIS SP.** (Sect. *Scorpiris*) Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. Igneous rock pockets & ledges. (Distinctive roots, so possibly *I. capnoides* or *I. subdecolorata*. *I. orchioides* also recorded in this area.)
- 17548 : IRIS SP.** (Sect. *Scorpiris*) Uzbekistan, Zhizakh, Nuratau, SE of Temirkovuk. Among *Artemisia* on open, rocky, W-facing slope. (From the little-collected central Nuratau. Possibly *I. narbutii* or *I. maracandica* both recorded from the Nuratau near the town of Zhizakh, about 120km. to the SE. *I. hippolyti* grows near Kokcha, about the same distance to the W.)
- 17565 : IRIS SP.** (Sect. *Scorpiris*) Uzbekistan, Tashkent, Chatkal range above Beldersai. 1400m. Gritty slope.
- 17590 : IRIS SP.** (Sect. *Scorpiris*) Uzbekistan, Tashkent, Ugam range, Chimgan, 1300m. Open, stony slope above snow-patch.
- 17594 : IRIS SP.** (Sect. *Scorpiris*) Uzbekistan, Tashkent, above Sanganak. 21.6.02 Archibald Archive www.srgc.net
- 17620 : IRIS SP.** (Sect. *Scorpiris*) Kazakhstan, Djambil, Karatau, WSW of Taras. 900m. Slate & shale talus.
- 17628 : IRIS SP.** (Sect. *Scorpiris*) Kazakhstan, Djambil, Karatau, WNW of Koktal. 800m. Rocky slopes.
- 17635 : IRIS SP.** (Sect. *Scorpiris*) Kazakhstan, Djambil, Karatau, WSW of Karabastai. 1000m. Rocky slopes.
- 604.030 : IXIOLIRION TATARICUM** (subsp. *tataricum*) Kazakhstan, Karzhantau, SE of Chimkent, Burguluk. 1100m. Among

boulders in gorge.

604.031 : IXIOLIRION TATARICUM (subsp. *tataricum*) Iran, West Azarbayjan, S of Silvaneh. 1600m. Cultivated land. (For us, 2005 was the year of the *Ixiolirion* in Iran. Whenever we travel to Iran or Central Asia, we always end up with small envelopes each containing a few seeds of *Ixiolirion* from various localities but seldom enough of any to list. In 2005, we made several good collections, mainly in the central Zagros, though this one is from the NW. We have no idea why this year suited it. This is an excellent bulb with an umbel of big, violet-blue trumpets on wiry stems about 30-60cm. tall. Very hardy and quite easily grown outside in most of the UK if given a sunny, dry, well-drained site. If you don't grow it, try it.)

604.032 : IXIOLIRION TATARICUM Iran, Bakhtiari, E of Chalehgard. Cultivated land.

604.033 : IXIOLIRION TATARICUM Iran, Esfahan, SE of Aligudarz. 2200m. Steep, loose, stony slope.

604.034 : IXIOLIRION TATARICUM Iran, Lorestan, E of Shulabad. Steep, loose, NW-facing, igneous slope.

604.050 : IXIOLIRION TATARICUM (subsp. *tataricum*) No data. Native from S Turkey to Central Asia.

605.002 : JANKAEA HELDREICHII Greece, Pieria, Oros Olimbos, north side. 1300-1400m. Limestone fissures in shady ravine. (The famous endemic of Mt. Olympus with rock-hugging, grey-velvet rosettes and crystalline lavender flowers. The greatest challenge & the most beautiful of European chasmophytes : it can be grown successfully from the dust-like seeds, as Harry Jans has demonstrated. See our comments under its close relative *Ramonda* for a few suggestions on seed-raising.

612.500 : KNAUTIA MACEDONICA Macedonia, NW of Bitola. 900m. Open hay-meadows & margins of scrub. (Variable in colour from lilac-pink to many shades of crimson.) Archibald Archive www.srgc.net

612.510 : KNAUTIA MACEDONICA No data. From the deep crimson form usually found in cultivation.

617.010 : LAPIEDRA MARTINEZII A distinct, isolated monotypic genus in *Amaryllidaceae*, growing in calcareous crevices in a few sites in S Spain & extending to some coastal cliffs in NW Morocco. Umbels of up to 9 white, flat flowers open on 20cm. stems in late summer before the appearance of the dark, linear leaves with grey central stripes. This needs a good baking in summer to flower well but has proved perfectly temperature-hardy with us under unheated glass.

617.610 : LASERPITIUM SILER No data. An attractive member of the Umbelliferae native to the mountains of southern Europe. About 1m. tall with deeply divided, somewhat leathery, blue-green foliage and large umbels of white flowers.

618.110 : LATHYRUS AUREUS No data. A fine non-climbing species in Sect. *Orobus*, distributed, mainly in moister, wooded areas at altitudes up to about 2000m., along the edge of the Black Sea. Lush-green, pinnate leaves & erect racemes of about 20 flowers in a distinctive, ginger-orange shade in summer, on stems up to 80cm. tall. A fine unusual plant for light shade.

618.800 : LATHYRUS JAPONICUS subsp. MARITIMUS UK, England, Suffolk, near Aldeburgh. Sea-level. Shingle beach. D. Stephens coll. (A 'classy' rhizomatous perennial with procumbent stems, clad with pale glaucous-green, pinnate leaves & carrying many stalked racemes of up to 12 purple flowers, fading to blue. The species as a whole occurs from Japan to both the N Pacific & N Atlantic coasts of America, hence to the shores of NW Europe but in the UK it is known only from a few sites in SE England, around Aldeburgh, where the local people are said to have survived starvation in 1555, by eating its seeds.)

619.010 : LATHYRUS LATIFOLIUS from WHITE FORM From the outstanding white version of this vigorous, perennial pea, usually grown as 'White Pearl'. Beloved by Gertrude Jekyll, it climbs to about 3m. with lots of pure-white sweet-peas.

619.450 : LATHYRUS ROSEUS Turkey, Ardahan, Yalnızçam Da_ları. 2500m. Among rocks on open hillside. (A very distinct & really fine, non-climbing, herbaceous species, on its own in Section *Orobus* & incredibly little-known in gardens. Wiry, erect stems form a tidy, bushy mound about 50cm. tall with pairs of neat, little, rounded leaflets & lots of small, brilliant carmine-pink flowers in summer. We grow a rather wishy-washy pink form. Those in this area are brightly coloured.)

619.510 : LATHYRUS ROTUNDIFOLIUS No data. Another excellent perennial climber. From W Asia & more restrained than the preceding, usually with winged stems of 1-2m. & sweet-peas in a distinctive shade of pink in summer.

619.710 : LATHYRUS TINGITANUS from PINK FORM Morocco, near Tangier. (Fine, seldom-seen form of this, usually purple-flowered, annual from S Spain & NW Africa. Climbing to over 1m. it sows itself in Harry Hay's Surrey garden.)

619.850 : LATHYRUS VERNUS No data. From the typical, purple-blue form of this compact, early-flowering perennial, with erect stems, eventually about 30cm. high but flowering as they burst through the bare earth in early spring. An adaptable delight with such spring flowers as the woodland *Corydalis* & *Anemone* spp. & with tidy clumps of foliage later in the season.

619.860 : LATHYRUS VERNUS from PINK & WHITE FORM From the form with bicoloured, pink & white flowers, called 'Albo-roseus', which can be expected to come quite evenly from seed. This compact, early-flowering perennial, about 30cm. high, is far too little grown. An adaptable delight with other early spring flowers & with tidy clumps of foliage later in the season.

619.861 : LATHYRUS VERNUS from WHITE FORM

620.210 : LAVANDULA DENTATA

624.950 : LEONTICE ARMENIACA (syn. *L. minor*) Iran, East Azerbayejan, SE of Marand. 1750m. Open stony slopes. (A sweetie & the dwarfiest in the genus with unbranched stems of about 15cm. carrying compact inflorescences of bright yellow flowers, held just above the ground-hugging, lobed, fleshy, bluish leaves. Though Coode places it under *L. leontopetalum*, as *L.l.* subsp. *armeniicum*. we are glad to see it retained at specific level in Stearn's more recent review. We do not believe it is close to *L. leontopetalum*. The two can grow on the same hillside with no obvious intergradation.)

- 624.951 : LEONTICE ARMENIACA** (syn. *L. minor*) Iran, Kordestan, WNW of Sanandaj. 2100m. Loose talus on steep slope. (A sweetie & the dwarfest in the genus with unbranched stems of about 15cm. carrying compact inflorescences of bright yellow flowers, held just above the ground-hugging, lobed, fleshy, bluish leaves. Though Coode places it under *L. leontopetalum*, as *L.l.* subsp. *armeniicum*. we are glad to see it retained at specific level in Stearn's more recent review. We do not believe it is close to *L. leontopetalum*. The two can grow on the same hillside with no obvious intergradation.)
- 624.952 : LEONTICE ARMENIACA** (syn. *L. minor*) Iran, Esfahan, SE of Khonsar. 2700m. Steep, stony slopes. (A sweetie & the dwarfest in the genus with unbranched stems of about 15cm. carrying compact inflorescences of bright yellow flowers, held just above the ground-hugging, lobed, fleshy, bluish leaves. Though Coode places it under *L. leontopetalum*, as *L.l.* subsp. *armeniicum*. we are glad to see it retained at specific level in Stearn's more recent review. We do not believe it is close to *L. leontopetalum*. The two can grow on the same hillside with no obvious intergradation.) Archibald Archive www.srgc.net
- 625.000 : LEONTICE LEONTOPETALUM** (subsp. *leontopetalum*) Greece, Viotia, above Aliartos. 500m. Cornfield. 25.5.84
- 625.001 : LEONTICE LEONTOPETALUM** (subsp. *leontopetalum*) Turkey, Mardin, W of Kiziltepe. 700m. Fallow fields. (12.5.85) (One of the odd tuberous members of the *Berberidaceae* or the *Podophyllaceae* (depending who you follow) from the E Mediterranean & Central Asia. Branched terminal inflorescences of many yellow flowers rising to about 50cm. above the fleshy, glaucous, cut & lobed foliage & are followed by inflated, balloon-like, pink tinted capsules, becoming papery before the stem blows off, tumbleweed fashion, when the plant goes dormant in summer.)
- 625.070 : LEONTICE LEONTOPETALUM subsp. EWERSMANNII** Iran, Kordestan, ESE of Sanandaj. 2050m. Steep, rocky slopes with diverse steppe vegetation. (The dubiously separable, more eastern race with narrower leaf-segments and the fruiting pedicels angled upwards. All these are very handsome, summer-dormant plants in flower, foliage & fruit, which are suited to bulb-frame conditions. They do not increase vegetatively and must be grown from seed, a fairly slow procedure, so they remain unobtainable in commerce & virtually unknown in gardens.)
- 625.071 : LEONTICE LEONTOPETALUM subsp. EWERSMANNII** Iran, Bakhtiari, NW of Farsan. Steep, stony slopes.
- 625.100 : LEONTICE MINOR** Iran,
17536 : LEONTICE SP. Uzbekistan, Samarkand, above Amankutan.
- 626.050 : LEONTOPODIUM ALPINUM subsp. NIVALE** No data. The most desirable & distinct dwarf race of edelweiss, localised in the Appenines, Montenegro & the Pirin range of SW Bulgaria, whence most cultivated material probably originates. Pads of leaves densely covered with white wool on both surfaces and the typical edelweiss heads carried on stems less than 5cm. high. By no means easily grown outside in the UK and definitely merits careful cultivation in the alpine-house.
- 627.801 : LEUCANTHEMOPSIS RADICANS** (*L. pectinata*) Spain, Granada, Sierra Nevada, SE of Pico del Veleta. 3000m. Open, stony areas on schist. (Endemic to the Sierra Nevada & one of the choicest of alpine *Compositae*. Tight mats of tiny, much-cut, greyish leaves produce sulphur-yellow daisies, which flush crimson as they age. To Farrer, it was "a treasure to be much desired" and to Giuseppi, who probably introduced it in 1933, "one of the prettiest plants in existence...a difficult plant to grow but more than worth the trouble it gives." Try it in a Spartan, acid scree-mix in full sun in the alpine-house or a trough. Giving it too much water in summer can be just as dangerous as in winter - these are dry & windy mountains after snow-melt is over
- 630.120 : LEUCOJUM AUTUMNALE** (subsp. *autumnale*) No data. Delightful & dainty with little white, pink-tinged bells dancing on dark stems before the leaves appear, in autumn. Possible in a sunny, well-drained site outside in the UK
- 630.357 : LEUCOJUM LONGIFOLIUM** Corsica, Restonica valley. Growing with *Crocus corsicus*. D.M.Hoskins 05-06
- 630.358 : LEUCOJUM LONGIFOLIUM** Corsica, Foret de Carrozzica. c.950m. Edge of pine forest (with *Crocus corsicus*). D.M.Hoskins 05-05.
- 630.359 : LEUCOJUM LONGIFOLIUM** Corsica. Ex a T. Norman coll. Archibald Archive www.srgc.net
- [630.410 :# LEUCOJUM NICAENSE](#)** No data. Only known from the corner of SE France near the Italian border & all but extinct in the wild. Spring-flowering with wide, white bells on stems of 15cm. at most. Not difficult in the alpine-house.
- 630.450 : LEUCOJUM ROSEUM** France, Corsica, Pointe de Revellata NW of Calvi. Pockets on granite. (Delicate, tiny, fairy-like autumn-flowering bulb. Shell-pink bells dance on thready stems. Best under glass in 'cyclamen conditions' in the UK.)
- 630.480 : LEUCOJUM TINGITANUM** Morocco, Rif, above Chaouene. Ex the J. Blanchard (JWB 88-02) & T. Norman colls. (A fine, spring-flowering plant, considered a doubtful species by many, until recently rediscovered & introduced. Large white bells on 20cm. stems. May be closest to *L. nicaense* & proving as easily grown in similar conditions in the alpine-house.)
- 630.500 : LEUCOJUM TRICHOPHYLLUM** Morocco, S of Rabat.
- 630.501 : LEUCOJUM TRICHOPHYLLUM** Spain, Cadiz, W of Jerez de la Frontera. 60m. Sandy soil. (From a beautiful, pink-flowered population of this exquisite, 20cm., early spring-flowering species for the alpine-house.)
- 630.502 : LEUCOJUM TRICHOPHYLLUM** Portugal, Algarve, Quinto do Lago. (A wild coll. of this exquisite, 20cm., early spring-flowering species for the alpine-house with pendant white or pink-flushed bells.)
- 630.600 : LEUCOJUM VALENTINUM**
- 630.710 : LEUCOJUM VERNUM** No data. The large spring snowflake, a lover of moist sites, with green-tipped, white bells, in a vigorous form grown by Alan Edwards but originating, like many good garden-plants, from Sir Cedric Morris.

- 630.730 : LEUCOJUM VERNUM var. CARPATHICUM** Stock ex Janis Ruksans : eastern Carpathians near Podpolozje
- 630.740 : LEUCOJUM VERNUM var. CARPATHICUM** No data. A variant of the large, early spring snowflake from the Carpathians with acid yellow (instead of green) tips to its big white bells. A hardy lover of moist sites.
- 630.745 : LEUCOJUM VERNUM var. VAGNERI** No data. A Hungarian race with two bells (instead of one) on each stem. Reputedly the most impressive race to grow, though our *L.v. var. carpathicum* often carries two bells as well.
- 631.150 : LEUZEA CONIFERA** Spain, Guadalajara.
- 631.500 : LIGULARIA MACROPHYLLA** Kazakhstan, Tien Shan. Ex an H. Fuchs coll. (A slow-growing, stoutly perennial Tien Shan endemic, spectacular both in foliage & flower. Tight pyramidal heads of a multitude of small yellow flowers rise on sturdy, upright stems above the clumps of big, broad, erect leaves in an intense blue-grey. Though it needs plenty moisture in spring, it will tolerate drier conditions in full sun later in the year. Splendid but seldom seen in gardens.)
- 631.650 : LIGUSTICUM LUCIDUM** No data. A striking, monocarpic member of the *Umbelliferae* from the mountains of S Europe, from Spain to Greece. Neat clumps of finely cut foliage send up solid, 1.5m. high stems with very full umbels packed with white flowers.
- 632.001 : LILIUM ALBANICUM** Greece, Ioanina, Katara. 1700m. Ex an F. Baxter coll. (The beautiful, yellow, sparsely speckled race of *L. carniolicum* from the acid mountains around Albania, in Macedonia & NW Greece. About 60cm. high.)
- 632.010 : LILIUM ALBANICUM** (*L. carniolicum* subsp. *albanicum*) No data. The beautiful, 60cm. tall, yellow, sparsely speckled lily of the acid mountains around Albania, in Macedonia & NW Greece. Cool, peaty soil in sun.
- 632.110 : LILIUM ARMENUM** (*L. monadelphum* var. *armenum*) No data. Distributed from NE Turkey to Armenia, this is the most southern race of these beautiful, fragrant, pale yellow Transcaucasian lilies. The flowers have narrower, pointed segments and are more funnel-shaped than *L. szovitsianum*. Lime-tolerant but not so easy to grow as this. Archibald Archive www.srgc.net
- 632.200 : LILIUM BOSNIACUM**
- 632.401 : LILIUM BULBIFERUM** (var. *bulbiferum*) Italy, Friuli-Venezia-Giulia, below Passo di Predil. 1100m. Openings in *Picea* & *Fagus* woodland on limestone. (The eastern type-race of this spectacular lily. Upward-facing flowers in a deeper orange-red than *L.b. var. croceum* of Alpine meadows. No trouble in the open-garden here. Stem-bulbils sent till winter. 60cm. high.)
- 632.600 : LILIUM CANDIDUM** Greece, Lakonia, W of Sparti. 500m. Steep, limestone slopes among *Euphorbia*, *Phlomis*, etc. (Incomparable, pure-white lily. Older cultivated stock is sterile & full of virus. This is from stock maintained here by hand-pollination from our 1983 wild seed coll. It survives outside in our wet climate but we grow it under glass for seed.)
- 633.000 : LILIUM CARNIOLICUM**
- 633.200 : LILIUM CHALCEDONICUM** Greece, Ioannina, above Metsovon. 1700m. In hay-fields with *Pteridium*.
- 633.201 : LILIUM CHALCEDONICUM** Greece, Magnissia, Oros Pilio above Portaria. 1500m. Steep, SW-facing schist slope, with *Pteridium*, *Phlomis*, *Helleborus*, etc.
- 633.202 : LILIUM CHALCEDONICUM** Greece, Viotia, Oros Elikonas above Evangelistria. 1500m. Margin of *Quercus* & *Abies* woodland. (Stunning, scarlet lily, about 1m. high with up to 15 flowers in mid-summer. Good drainage & sun.)
- 633.203 : LILIUM CHALCEDONICUM** Greece, Messinia, Oros Taigetos, Langadas pass above Tripi. 1200m. Deep leaf-soil under *Platanus*.
- 633.209 : LILIUM CHALCEDONICUM** Greece, Lakonia, Oros Taigetos, Profitis Ilias above Paleopanagia. 1400m. Steep, rocky slopes in light, mixed woodland. Ex D. Hoskins 98-22. (Scarlet lily, about 1m. high with up to 15 flowers in summer.)
- 633.400 : LILIUM CILIATUM**
- 633.412 : LILIUM aff. CILIATUM** Turkey, Gümü_hane, Zigana Geçidi, NE of Torul. 1900m. (A tall turkscape lily endemic to this area & up to 1.5m. high. Easily distinguished from all the other Turkish lilies earlier in the season by the wavy indumentum on the leaf-margins & perianth tips but by the time the plants are in seed the hairs have fallen off. This seed is from plants growing in a large colony with extremely variable foliage but which still show some degree of hairiness ! Up to 15 nodding flowers with strongly reflexed perianth segments in sulphur yellow, densely speckled & with striking brown-purple centres. Most distinct but we suspect becoming increasingly involved with *L. monadelphum* or maybe *L. ponticum*.)
- 633.800 : LILIUM JANKAE** Eastern Yugoslavia (E Serbia), Bulgaria (Rhodope), Romania (Siebenburg) Leaves pubescent on veins beneath (*L. albanicum* is glabrous on veins beneath). Flowers yellow, occasionally spotted.
- 633.810 : LILIUM JANKAE** Separated from *L. albanicum* (*L. carniolicum* subsp. *albanicum*) on the basis of the hairy undersides of the leaves but with similar yellow flowers, sometimes with a few dark speckles. A 50cm tall plant of eastern Serbia, Bulgaria & Romania & the local representative there of a disjunct group of lilies distributed from the E Alps to the Caucasus & placed by some botanists together under *L. carniolicum* or even *L. pyrenaicum*.
- 633.900 : LILIUM KESSELRINGIANUM** Turkey, Artvin, Yalnızçam Da_lari, ESE of _av_at. 1800m. Margins of *Picea* woodland. (A beautiful, heavily scented lily, about 1.5m. tall, distinct from *L. monadelphum* in colour & in its acute segments, which recurve like *L. rhodopeum*. Wide-open, outward-facing, creamy-yellow flowers with a few purple speckles in their throats and orange anthers. Endemic to the a few areas along the border between NE Turkey & Georgia.)

- 633.910 : LILIUM KESSELRINGIANUM** No data. Seed from Georgia of this beautiful, creamy-yellow lily with wide-open, outward-facing flowers, distinct from *L. monadelphum* in colour & in its acute, recurved segments, like *L. rhodopeum*.
- 633.950 : LILIUM LEDEBOURII** Iran, Gilan, Talish. 1700-1900m. Openings in degraded *Fagus* forest. Ex an A. Ala coll. (A very local species, known from one site in the Caspian forest of Iran & one or two in neighbouring Azerbaijan. A superlative plant, now well-established & proving accommodating in several British gardens from Anne Ala's original coll. in the 1970's. Stems about 1m. high with up to 15, white flowers, banded with yellow-green & lightly speckled with purple, with deep orange anthers.).
- 633.955 : LILIUM LEDEBOURII** Azerbaijan, Talysh, near Lerik. (A very local species, known from one site in the Caspian forest of Iran & one or two in neighbouring Azerbaijan. Stems about 1m. high with up to 15, white flowers, banded with yellow-green & lightly speckled with purple, with deep orange anthers.).
- 634.015 : LILIUM MARTAGON var. CATTANIAE** (*L. m.* var. *dalmaticum*) No data. This name, now of horticultural relevance only, is taken to cover all the very dark-coloured forms of this widespread, lime-loving Euro-Siberian turkscap lily. Most originated in the Balkans and tend to be taller than some other races as well as having the characteristic deep burgundy-red to almost black flowers. This seed is from clones grown by Mike & Polly Stone, Inverness-shire, Scotland.
- 634.020 : LILIUM MARTAGON var. DAUGAVENSE** Latvia, Daugava river valley. (From an isolated population (or maybe a naturalized escape) in this Baltic republic, where it grows in part-shade on calcareous soils. Flowers varying from mid-purple-pink to very pale pink are always heavily spotted with deep purple. Reported to be an outstanding form of this 2m. high, widespread Euro-Siberian species with its heads of turkscap flowers above whorled leaves.)
- 634.030 : LILIUM MARTAGON var. PILIOSCULUM** Russia, near Tomsk. (An interesting Siberian wild coll. of this very variable, widespread & usually easily grown species. This race has been considered a distinct taxon & separated at specific, subspecific and varietal levels, the last possibly being the most acceptable. Distinguished by its narrower leaves and sparsely spotted, vinous-purple flowers, covered outside with long hairs and opening from cobwebby buds.)
- 634.040 : LILIUM MARTAGON** No data. From a wide range of forms of this widespread Euro-Siberian turkscap lily. Stems of about 2m., whorled with dark leaves carry speckled, pendant flowers in pale pink to maroon. Easy in UK in light shade.
- 634.050 : LILIUM MARTAGON f. ALBUM** No data. From some fine green-tinged whites. Usually comes 'true'.
- 634.150 : LILIUM MONADELPHUM** No data. UK grown seed. Usually one of the best garden-plants in the genus. Doubtfully consistently separable from *L. szovitsianum* & others in this intergrading group of beautiful, fragrant, pale yellow Transcaucasian lilies, which are mainly distinguished by the dimensions & proportions of their flowers. All are beautiful.
- 634.200 : LILIUM MONADELPHUM var. ARMENUM** Turkey, Trabzon, Zigana Da_ above Hamsiköy. 1800m. Among *Rhododendron* scrub in sparse *Picea* woodland. (A magnificent plant in a confusing group. Stems about 1m. tall with spirally arranged, lanceolate leaves & about 10, large, funnel-shaped soft-yellow flowers with slightly recurving tips to the segments & sometimes with a few dark brown speckles. In 2005, we could not locate the sites on the old dirt-road where we knew pure populations of this & *L. ciliatum* from the 1980's. There are still plenty lilies in the area but the colonies in fruit lacked consistency in foliage. This collection is as close as we could find to a pure colony of *L. monadelphum*.)
- 634.202 : LILIUM MONADELPHUM var. ARMENUM** Turkey,.
- 634.203 : LILIUM MONADELPHUM var. ARMENUM** Turkey,.
- 634.210 : LILIUM MONADELPHUM var. ARMENUM** No data. Archibald Archive www.srgc.net
- 634.401 : LILIUM POMPONIMUM** France, Alpes-Maritimes, Montagne de Maurel, NE of La Mure. 1000m. Among scrub in steep-sided limestone gully. (Establishing an adequate breeding stock of this superlative, little lily has been a long project but we now have a substantial number of different clones, originating from wild seed, growing well under cover and likely to provide us with a reliable source of seed in future. This is perhaps the most restricted & local of the European lilies in the wild. Its purplish stems set with many, twisting, linear leaves rise only to about 50cm. and can carry up to 10 scarlet flowers. As Woodcock & Stearn remark, "no-one who has suddenly come across this jewel in the Maritime Alps, flaunting it brilliant little sealing-wax-red turkscap blooms, with minute black spots, like fairy lamps, is ever likely to forget that moment." It is not so difficult to enjoy it in the garden every year. Joe Elliott grew it well in his Cotswold garden and used to list seed, if not bulbs, regularly in his catalogues but it now seems to have become very scarce in cultivation. It should thrive in a well-drained, sunny site in clay with plenty of limestone chips. A raised bed or the rock -garden is ideal. It is no problem to raise from seed sown in the autumn, so here you are.
- 634.500 : LILIUM PONTICUM** (var. *ponticum*) (*L. carniolicum* subsp. *ponticum*) Turkey, Trabzon, So_anli Da_lari above Çaykara. 2000-2200m. Steep slopes among *Rhododendron* & *Vaccinium* scrub.
- 634.650 : LILIUM PONTICUM var. ARTVINENSE**
- 634.660 : LILIUM PONTICUM aff. var. ARTVINENSE** (*L. carniolicum* subsp. *ponticum*) Turkey, Rize, above İkizdere. 1650m. Steep hay meadows. (This is a superlative population which we first saw in flower in 1988. More or less intermediate between the two varieties & tending to have the tawny orange flowers of var. *artvinense* but these are variably suffused with mahogany. In some cases the segments are mahogany with an orange-yellow picottee edge. About 1m. tall with up to 10 flowers on a stem. We have a fine collection salvaged from the margins of the sloping hay meadows. Don't miss it.)
- 634.808 : LILIUM PYRENAICUM** Ariège, Pyrenees. (About 60cm. or more tall with bright yellow, brown-spotted, turkscap flowers held above close-packed, narrow leaves. Usually an easily grown species in UK gardens.)

- 634.809 : LILIUM PYRENAICUM** Andorra. Pyrenees. (About 60cm. or more tall with bright yellow, brown-spotted, turkscape flowers held above close-packed, narrow leaves. Usually an easily grown species in UK gardens.)
- 634.810 : #LILIUM PYRENAICUM** UK, Wales, below Ffostrasol. 200m. Mixed deciduous woodland on acid soil.. (May or may not be native, though the distribution fits other Pyreneans, but certainly now wild. Dwarfier than populations we have seen in the Pyrenees, at about 60cm., with bright yellow, brown-spotted, turkscape flowers above close-packed, narrow leaves.)
- 635.000 : LILIUM RHODOPAEUM** Endemic to central Rodopi. Archibald Archive www.srgc.net
- 635.008 : LILIUM RHODOPAEUM** Greece, Drama, Megalo Livadi ENE of Dipotamo. 1500m. Ex A.Strid 55897.
- 635.009 : LILIUM RHODOPAEUM** Greece, Xanthi. 1200m. Ex K.T.& V. 27507.
- 635.210 : LILIUM SZOVITSIANUM** Georgia, Bakuriani area. Woodland. (Doubtfully consistently separable from *L. monadelphum* & others in this intergrading group of beautiful, fragrant, pale yellow Transcaucasian lilies, which are mainly distinguished by the dimensions & proportions of their flowers. All are beautiful, worthwhile & likely to appear distinct in the garden.)
- 635.220 : LILIUM SZOVITSIANUM** No data. UK grown seed. Usually one of the best garden-plants in the genus. Doubtfully consistently separable from *L. monadelphum* & others in this intergrading group of beautiful, fragrant, pale yellow Transcaucasian lilies, which are mainly distinguished by the dimensions & proportions of their flowers. All are beautiful.
- 641.510 : LINARIA GENISTIFOLIA** Bulgaria, Rila Planina, Borovets. Ex an A. Edwards coll.
- 642.505 : LINARIA TRIORNITHOPHORA** Portugal, Alto Alentejo, Castelo de Vide, Estrada da Senhora da Penha.
- 644.000 : LINDELOFIA** Kazakhstan, Karatau. W of Koktas. (17638 : 27.6.02)
- 654.801 : LITHODORA ZAHNII** Kardamili. Ex a D.M. Hoskins coll., 28 May, 1993
- 662.900 : LYSIMACHIA ATROPURPUREA** A rhizomatous perennial (annual in Flora of Turkey!) from damp, sandy sites in the Balkans & W Turkey. Erect, 50cm. stems clad in glaucous, undulate leaves carry terminal spikes of flowers in an unexpected shade of dark purple.
- 663.000 : LYSIMACHIA EPHEMERUM** Spain, Jaen, Sierra de Cazorla. 850m. Among grasses & rushes on open, wet slope. (A most distinguished-looking herbaceous perennial, esteemed by discriminating gardeners from A.T. Johnson to G.S. Thomas yet seldom seen. Erect stems of about 1.5m., clad with thick, smooth, greyish leaves, end in slender spires of many, little, white, lilac-tinged flowers. Easy but restrained in any good border soil in the UK, though a wet-grower in the wild.)
- 667.210 : MANDRAGORA OFFICINARUM** No data. A weird member of the Solanaceae wrapped in myths and fables. Greenish flowers followed by large, rounded fruits nestles in the basal rosette of big, wrinkled leaves. The parent of this seed grew happily outside at the base of a S-facing wall in our Dorset nursery and was moved by Mike Tucker in 1983..
- 672.500 : MEGACARPEA**
- 673.005 : MELITTIS MELISSOPHYLLUM** (subsp. *melissophyllum*) UK, England, Sussex. Ex an R. Wallis coll. (A handsome, shade-loving, hardy perennial member of the *Labiatae*, surprisingly neglected by British gardeners, though it is a very local British native. About 60cm. high with wrinkled, coarsely toothed leaves & verticillasters of fragrant, long-tubed white flowers with large, pale-purple lips. The species occurs locally throughout Europe with other subspecies in the south & east.)
- 673.010 : MELITTIS MELISSOPHYLLUM** (subsp. *melissophyllum*) No data. A handsome, shade-loving, hardy, perennial member of the *Labiatae* (*Lamiaceae*), surprisingly neglected by British gardeners, though it is a very local British native. About 60cm. high with wrinkled, coarsely toothed leaves & verticillasters of fragrant, long-tubed flowers with large, purple-marked lips. The form from Sussex which we listed a few years ago was basically white-flowered. This one has a pink ground-colour. The species as a whole occurs locally throughout Europe with other subspecies in the south & east.)
- 680.000 : MINUARTIA**
- 681.510 : MOLOPOSPERMUM PELOPONNESIACUM** (*Molopospermum cicutarium*) No data. A magnificent perennial, distributed sporadically from the Pyrenees through the southern Alps down to Greece. Slow-growing but eventually makes imposing clumps of huge, smooth, deeply incised leaves. Robust, 2m. stems with head-high umbels of creamy flowers. "Wonderful & unique" writes Tim Ingram of this monotypic genus in *Umbelliferae* deserving of a prominent, well-drained site, where it can develop undisturbed.
- 682.400 : MOLTKIA PETRAEA** Yugoslavia, Crna Gora, Lovcen. Archibald Archive www.srgc.net
- 692.810 : MYRRHIS ODORATA** No data.
- 687.800 : MUSCARI ADILII** Turkey, Ankara, between Beypazari & Sekli, Dogandede Tepe, above Kochamet fountain. 1000m. 'Marly' white limestone hills. Ex LST 097. (Described in 1999. Confined to a very narrow niche-habitat. Large, fleshy capsules.)
- 687.950 : ##MUSCARI ANATOLICUM** 2 pictures (Subgen. *Botryanthus*) Turkey, Konya, Sultan Dag. 1760m. Exposed limestone ridgetop. (Appears to be this tiny, recently described species, rather like *M. discolor* in its open-mouthed, white-tipped flowers but easier to flower here.) [# Second picture](#)
- 688.002 : MUSCARI ARMENIACUM** (Subgen. *Botryanthus*) Turkey, Gaziantep. Ex a N. Stevens coll. (From a very striking brilliant ultramarine blue form.)

- 688.012 : # MUSCARI ARMENIACUM from PINK FORM** Turkey, Konya, S of Beysehir Golu. 1100m. Roadside verge. Ex R.& R. Wallis 90-50. (From a selection made in Turkey by Bob & Rannveig Wallis over a decade ago. This has now been named 'Gul', Turkish for rose. Pinkish white flowers blush to deep pink as they mature. Though it is rather shy at setting much seed, a good percentage come 'true' after two generations of selection.)
- 688.101 : MUSCARI AUCHERI** (Subgen. *Botryanthus*) Turkey, Bolu, near Abant Golu. 1000m. Ex N. Stevens 2541 (A striking bicoloured form of this easily grown species. Mid-blue and white flowers over short, neat foliage. From a cool, moist part of Turkey.)
- 688.200 : MUSCARI AZUREUM** (Subgen. *Pseudomuscari*)
- 688.205 : # MUSCARI AZUREUM** (Subgen. *Pseudomuscari*) Turkey, Kahramanmaras, S of Goksun. 1240m. Cultivated field. Ex R.& R. Wallis 93-28 (A very local plant in the wild, occurring sporadically in central Turkey, mainly in the eastern Cilician Taurus. Close to *M. pseudomuscari* & *M. mcbeathianum* with dense, ovoid racemes of open-mouthed, sky-blue bells on 10cm. stems. Usually represented in cultivation by a atypical clones. The true wild species does not proliferate vegetatively and needs some care.)
- 688.206 : MUSCARI AZUREUM** (Subgen. *Pseudomuscari*) Turkey, Emli Valley. 1240m. Ex R.& R. Wallis 92-18 (A very local plant in the wild, occurring sporadically in central Turkey, mainly in the eastern Cilician Taurus. Close to *M. pseudomuscari* & *M. mcbeathianum* with dense, ovoid racemes of open-mouthed, sky-blue bells on 10cm. stems. Usually represented in cultivation by a atypical clones. The true wild species does not proliferate vegetatively and needs some care.)
- 688.400 : MUSCARI BOTRYOIDES** (Subgen. *Botryanthus*) Greece, Viotia, Parnassos.
- 688.500 : MUSCARI BOURGAEI** (Subgen. *Botryanthus*) Turkey, Denizli, Honaz Dag, SE of Denizli. 1700m. Gravelly areas on exposed, limestone ridge. (W Turkish, alpine endemic, only recorded above 1500m. Glaucous foliage & very dense heads of globular flowers, in mid-blue to violet-blue, with paler lobes, on 10 cm. stems. Not too easy but settling down with us under glass.)
- 688.555 : MUSCARI BUCCHARICUM** No data
- 688.600 : MUSCARI CAUCASICUM** (Subgen. *Leopoldia*) Turkey, Kars, SSW of Sarikamis. 1800m. Stony, igneous slopes. (Very handsome *Leopoldia*, extending across Transcaucasia to NW Iran. About 30cm. high in this form. Striking, amethyst-violet sterile flowers.)
- 688.602 : MUSCARI CAUCASICUM** (Subgen. *Leopoldia*) Turkey, S of Karaman . 1100m. Open steppe. (Taller form, 50-60cm high.)
- 688.603 : MUSCARI CAUCASICUM** Turkey, Adana, N of Saimbeyli. Archibald Archive www.srgc.net
- 688.704 : MUSCARI COELESTE** (Subgen. *Pseudomuscari*) Turkey, Nigde, SW of Ciftehan, foothills of Bolkar Daglari. 1700m. In turf of alpine meadow by stream. (A diminutive Turkish alpine endemic with a classic Anatolian diagonal distribution, obliquely from here almost to the Georgian & Iranian borders. Only a few cm. high with tight, rounded racemes of open-mouthed, sky-blue bells followed by turquoise-blue tinted capsules. Little-known & will resent hot, dry conditions.)
- 688.705 : MUSCARI COELESTE** (Subgen. *Pseudomuscari*) Turkey, Nigde, Kamirkazik Dag, 1700-1750m. Ex KPPZ 90-318. (A diminutive Turkish alpine endemic with a classic Anatolian diagonal distribution, obliquely from here almost to the Georgian & Iranian borders. Only a few cm. high with tight, rounded racemes of open-mouthed, sky-blue bells followed by turquoise-blue tinted capsules. A very local species, which is little-known but will certainly resent hot, dry conditions.)
- 688.800 : MUSCARI COMMUTATUM** (Subgen. *Botryanthus*) Greece, (Peloponnese - as *Narcissus serotinus*!)
- 689.050 : MUSCARI aff. COMOSUM** (Subgen. *Leopoldia*) Greece, Ioanina, N of Konitsa. 800m. Clay over shale. (Will not key-out as *M. comosum* as the bulb tunics are not pink but otherwise similar. We successfully dissuaded Kit Tan from describing it as a new species.)
- 689.210 : MUSCARI CYCLADICUM** (Subgen. *Leopoldia*) No data. A distinct *Leopoldia* endemic to the Kiklades off the Greek coast. About 30cm. high with cylindrical racemes of brown fertile flowers with bright tawny-yellow teeth and colourful sterile flowers on pale-violet pedicels. The true plant from the stock grown at Berlin Botanic Garden.
- 689.300 : MUSCARI aff. DISCOLOR** Turkey, Sivas, Ziyaret. 2100m. Exposed, limestone-gravel ridges. (Similar to but not the same as typical *M. discolor* from the N edge of the Syrian Desert. Tiny with white-mouthed, dark-blue bells.)
- 689.350 : MUSCARI EBURNEUM**
- 689.450 : ### MUSCARI GRANDIFOLIUM** (Subgen. *Botryanthus*) Morocco, Middle Atlas Mts., above Ifrane. 1700m. Red clay on limestone. (Not unlike a large version of *M. latifolium*, but best with some protection as flowers & foliage can be damaged outside, though the bulbs are totally hardy. Fine heads of blue-black flowers from china-blue buds. 20-30cm.) #[2ndpic](#) #[3rd pic](#)
- 689.600 : MUSCARI GUSSONEI** (Subgen. *Leopoldia*) Sicily & Calabria, in maritime sands.
- 689.700 : MUSCARI INCONSTRICTUM** (Subgen. *Botryanthus*) Hatay, W Syria, Cyprus, N Iraq & Iran.
- 689.704 : MUSCARI INCONSTRICTUM** (Subgen. *Botryanthus*) Syria, Rankous. 1800m. Windswept, barren, rocky hillside. Ex R.& R. Wallis 96-37. (A seldom-seen species. It just enters Turkey in Hatay but occurs locally from W Syria to N Iraq & Iran. Racemes of up to 30, very dark blue tubular flowers, not pinched in at their mouths, topped by a few sterile ones.)

- 689.705 : MUSCARI INCONSTRICUM** (Subgen. *Botryanthus*) Jordan. Zai. Ex M.Salmon & C.Lovell 15. (A southern species little-known in gardens. Just enters Turkey in Hatay but distributed through Syria & N Iraq into Iran. Rather loose racemes of up to 30, very dark blue tubular flowers, not pinched in at their mouths, topped by a few sterile ones.)
- 689.800 :# MUSCARI LATIFOLIUM** (Subgen. *Botryanthus*) Turkey, Balikesir, Kaz Da. 1200m. Openings in coniferous woodland. (A very local species but an easy garden-plant in the UK. Racemes of deepest violet-black flowers from pale-blue buds.)
- 689.850 : MUSCARI LEUCOSTOMUM** (Subgen. *Botryanthus*) Turkmenistan, Kopet Dag, near Duschak. Ex a J. Ruksans coll. (An eastern species, allied to *M. neglectum*, barely known in cultivation. Distinct blue-black flowers.)
- 689.851 :# MUSCARI LEUCOSTOMUM** (Subgen. *Botryanthus*) Tadjikistan, no further data. (An eastern species, allied to *M. neglectum*, barely known in cultivation. Distinct blue-black flowers.)
- 689.901 : MUSCARI LONGIPES** (Subgen. *Leopoldia*) Turkey, Sivas, WSW of Hafik. 1300m. Calcareous hills. (Distinct *Leopoldia* with a big tassel of violet, sterile flowers. The pedicels elongate greatly in fruit & the dry stem blows away tumbleweed-fashion.)
- 690.000 : MUSCARI MACROCARPUM** Greece, Samos, Mt. Vigla. 800m. S-facing walls of old, terraced olive-groves. Ex a D. Hoskins coll. (15 May, 1990) (A gloriously scented species, near *M. muscarimi*, very local in SW Turkey & some E Aegean islands. Greyish, channelled leaves & yellow flowers opening from dull-purple buds on 15cm. stems.)
- 690.010 : MUSCARI MACROCARPUM** (Subgen. *Muscari*) No data. A gloriously scented species, near *M. muscarimi*, very local in SW Turkey & some E Aegean islands. Greyish, channelled leaves & yellow flowers opening from dull-purple buds on 15cm. stems.
- 690.040 : MUSCARI MASSAYANUM** (Subgen. *Leopoldia*) Turkey, Nigde, SW of Ciftehan to Maden. 1200m. Loose, igneous, rock detritus on steep, open slope.
- 690.060 : MUSCARI aff. MASSAYANUM** (Subgen. *Leopoldia*) Turkey, Icel, NNE of Mut to Kirobasi, below Zeyrek. 1300m. Openings among scrub, in stony clay. (From the locality given for a Huber-Morath coll. made in the 1950's and identified as *M. massayanum*, this does not wholly match the description of this species. Little material attributable to *M. massayanum* has been seen & it is difficult to assess how much variation the name might be taken to cover. Cylindrical racemes of violet-tinged buds open to grey-green flowers below a coma of pinkish lilac, rather than lilac-pink, sterile flowers. Channelled, grey-green leaves. Only increases by seed, not easy & needs careful watering.)
- 690.080 :## MUSCARI MCBEATHIANUM** 2 pictures (Subgen. *Pseudomuscari*) # [Turkey](#), Adana, ENE of Tufanbeyli. 1200m. Open areas among *Pinus* in moist, fine sand. (A charming, delicate and none-too-easy little species we discovered in 1985 and which was named by Kit Tan in 1988 in honour of our old friend Ron McBeath, at that time responsible for growing *Muscari* at the RBG Edinburgh and now returned to commercial horticulture in Berwickshire. Stupidly, we gave almost all of the few bulbs we collected to Edinburgh and Kew (both establishments have since apparently killed this living material, according to Margaret Johnson of the Jodrell Laboratory) and it has taken us over 12 years to build up a sufficiently large stock to produce enough seed to list. Two generations of hand-pollinated seed (a very fiddly job) have now been raised and we now have a breeding-stock of over 100 clones. It may be the only substantial stock as Norman Stevens and Jim could not even relocate the pine-wood, its only known habitat, in 1994. It is now time for these to disseminate and multiply! A splendid crop of hand-pollinated seed this season.)
- 690.100 : MUSCARI MICROSTOMUM** (Subgen. *Botryanthus*) Turkey (A5, B6)
- 690.150 : MUSCARI MIRUM** (Subgen. *Leopoldia*) Turkey, Mugla, SE of Altinyayla. 1650m. Open, stony slope on serpentine ridge. (Recently described & distinct in flower, foliage & seed. Subtle rather than spectacular in dull gold & purple. Not an easy species to maintain and grow well in our experience, it needs care in watering and must be hand-pollinated to set seed.)
- 690.200 : MUSCARI MUSCARIMI** (Subgen. *Muscari*) Turkey, Burdur, foothills of Esler Dag above Salda Golu. 800m. Serpentine detritus on exposed slopes. (Group C, as the next.)
- 690.201 : MUSCARI MUSCARIMI** (Subgen. *Muscari*) Turkey, Burdur, W of Yesilova. 1280m. Loose, serpentine talus on open slope. (Local, SW Turkish endemic, always on serpentine in our experience. Grey-green leaves & racemes of pale yellow flowers opening from grey-tinted buds. Famously scented (deliciously different to *M. macrocarpum*) & esteemed for this for over 200 years. This coll. is not from a widely grown form : it would belong to Group C in the somewhat premature paper on this species by Kocak, Ozhatay & Mathew in 'The New Plantsman', Vol.7, Part 2.)
- 690.202 : MUSCARI MUSCARIMI** (Subgen. *Muscari*) Turkey, Mugla, SE of Altinyayla. 1600m. Open, stony slope on serpentine ridge. (Another little-grown, comparatively bright yellow, local form from Mugla & Burdur provinces : Group B in the above account with an accompanying illustration of it growing on the Dirmil pass near this locality.)
- 690.220 : MUSCARI MUSCARIMI** (Subgen. *Muscari*) No data. The best-known form (Group A in the account mentioned above) from the serpentines of Antalya & Usak provinces. Whitish flowers from buds, tinted violet-blue, earlier in spring.
- 690.400 : MUSCARI NEGLECTUM** (Subgen. *Botryanthus*)
- 690.550 : MUSCARI PALLENS** (Subgen. *Pseudomuscari*) Russia, N Ossetia, near Holst. 2400m. Rock crevices. Ex RP 83-27 (A most distinct, beautiful & local plant from the mountains of the northern Caucasus. One of the latest species to flower & allied to *M. pseudomuscari*, with 15cm. stems bearing compact heads of open-mouthed, palest ice-blue or creamy white flowers.)

- 690.610 : # MUSCARI PARVIFLORUM** (Subgen. *Botryanthus*) No data. The only autumn-flowering species with a low altitude, Mediterranean distribution from Spain to Turkey, mainly on the islands. Racemes of little, soft-blue bells, barely pinched at their mouths. Not often seen or available & reputedly difficult to flower but we have had no trouble in doing so.
- 690.700 : # MUSCARI PSEUDOMUSCARI** 2 pictures [# Second pic.](#) (Subgen. *Pseudomuscari*) Iran, Mazandaran, S of Chalus. 1500m. Ledges on limestone cliffs. (A lovely endemic of the Chalus gorge on the wetter, Caspian slope of the Elburz, described as *M. chalusicum* in the 1960's, though *M. pseudomuscari* has priority. Refined heads of china-blue bells, open at the mouths, not pinched in.)
- 691.008 : MUSCARI SPREITZENHOFERI** (Subgen. *Leopoldia*) Crete. Ex A N. Stevens coll. Archibald Archive www.srgc.net
- 691.009 : MUSCARI SPREITZENHOFERI** (Subgen. *Leopoldia*) Crete, Monasteraki gorge. Ex M.Salmon 690.
- 691.200 : MUSCARI TENUIFLORUM** (Subgen. *Leopoldia*) Turkey, Kayseri, S of Pinarbasi. 1200m. Limestone fissures. (To 50cm. high & distinct from *M. caucasicum* & *M. comosum* in the black teeth of the fertile perianths. Violet sterile flowers.)
- 691.201 : MUSCARI TENUIFLORUM** (Subgen. *Leopoldia*) Turkey, Karaman, SSE of Karaman. 1100m. Open steppe (6087)
- 691.202 : MUSCARI TENUIFLORUM** (Subgen. *Leopoldia*) Turkey, Antalya, S of Bakaran. 1200m. Among sparse scrub on limestone slope. (6055)
- 691.249 : MUSCARI aff. TENUIFLORUM** (Subgen. *Leopoldia*) Turkey, Hakkari. Ex a N. Stevens coll. (A distinct taxon, which merits recognition at some level and a name. It seems to be confined to both sides of the ranges of Kurdistan, along the border of Turkish Hakkari & Iran, possibly extending S into N Iraq. Paul Furse dubbed it the 'bluehot poker' & we still grow an Iranian bulb, collected in the 1960's, which is self-sterile. The tallest of all, almost up to 1m. in the wild & at least 60cm. here, this can be keyed-out to *M. longipes*, as the lower pedicels elongate in seed & it is then intermediate between these two species.)
- 691.250 : MUSCARI aff. TENUIFLORUM** (Subgen. *Leopoldia*) Iran, Kordestan, SW of Negel (between Sanandaj & Marivan). 1350m. *Quercus* scrub on shale. (A new wild collection of this distinct taxon, which merits recognition at some level and a name. It seems to be confined to the oak-scrub areas along the southern & western flanks of the mountain-ranges of Kurdistan, along the border of Turkish Hakkari & NW Iran, possibly extending S into N Iraq. With its big coma of violet-blue sterile flowers, Paul Furse dubbed it the 'bluehot poker'. We still grow an Iranian bulb, collected in the 1960's, which is self-sterile. The tallest of all, 1m. or more high in the wild, this can also be keyed-out to *M. longipes*, as the lower pedicels elongate in seed. It could be considered intermediate between these two species.)
- 691.305 : MUSCARI TURCICUM** Turkey, 8km. From Akseki to Beysehir. 1500m. Ex J. Persson 87-76
- 691.359 : MUSCARI VERTICILLARIS** Iran, 1km. S of Amam Zada Hashim. 2500m. Ex SLIZE 031
- 691.409 : MUSCARI WEISSII** (Subgen. *Leopoldia*) Turkey, Antalya, Gulluk Da_i. 500m. Terra rossa. Ex a P.& P.Watt coll. (Local on some Greek & Turkish islands & in SW Anatolia.)
- 691.410 : MUSCARI WEISSII** (Subgen. *Leopoldia*) No data. Greek & Turkish islands, SW Anatolia.
- MUSCARI SP.** Iran, Gilan, Asalem to Khalkhal.
- 17133 : MUSCARI SP.** Iran, Khorasan, Bojnurd, E of Tang Rah. 1200m. Limestone talus on steep slopes
- 693.400 : NARCISSUS ABSCISSUS** France, Pyrenees, Val d'Aran. Ex J.W.Blanchard 92-06. (Yellow form.)
- 693.500 : NARCISSUS ALBIDUS** Morocco
- 693.600 : NARCISSUS ALBIDUS var. ZAIANICUS** Morocco
- 693.650 : NARCISSUS ALCARACENSIS** Spain, Albacete, Sierra de Alcaraz, Paterna. Ex JWB 01-07. (Rated by John as a good garden-plant for the UK with up to 4 flowers on each stem.)
- 693.651 : NARCISSUS ALCARACENSIS** Spain, Albacete, Sierra de Alcaraz. Ex JWB 86-16. (Collected by John as a pale form of *N. longispathus* & distributed by us some years ago as such (before *N. alcaracensis* was described). From a locality not too far from the type. Rated by John as a good garden-plant for the UK with up to 4 flowers on each stem.)
- 693.701 : NARCISSUS ALPESTRIS** (included under *N. moschatus* in 'Flora Europaea') Spain, Aragon, above Cerler, SE of Benasque. 1500m. Ex JWB 94-06 & 94-08 (The loveliest but most difficult trumpet-daffodil. Drooping, white flowers & glaucous leaves. 15cm.)
- 693.702 : NARCISSUS ALPESTRIS** Spain, Col de Espina. Ex JWB 92-08 Archibald Archive www.srgc.net
- 693.800 : # NARCISSUS ASSOANUS** (*N. juncifolius*, *N. requienii*) France, Haute-Pyrenees, Vallee d'Ossoue. 1500m. S & W-facing limestone cliffs & slopes. (Little, clear yellow jonquil. A delight in a pot but accommodating in the garden.)
- 693.819 : NARCISSUS ASSOANUS** Spain, Grazalema, N side of Puerto de las Palomas. Ex a T. Norman coll.
- 693.850 : NARCISSUS ASSOANUS** (Michael Salmon's "var. *minutus*") Teruel, Ejidre, Travesa. Ex JWB 87-15 (A dwarfer, variant with a very small corona, which looks rather like *N. gaditanus* but is much easier to flower well.)
- 694.005 : NARCISSUS ASTURIENSIS** Spain, Picos de Europa, Puerto de San Isidro. Ex a JWB coll. ("A good, free-flowering form.")
- 694.006 : NARCISSUS ASTURIENSIS** Spain, Galicia, near Lugo. JWB 03-01 (A few seeds available from an extremely

interesting wild coll.made in the hope of locating the mysterious *Narcissus lagoi*, which has never been in cultivation and was thought to be extinct. *N. lagoi* is close to *N. asturiensis* but the flowers are held horizontally on stems about 40cm. tall. We are provisionally listing this under *N. asturiensis* but it is very much a gamble for the specialist.)

694.007 : NARCISSUS ASTURIENSIS Spain, Galicia, Xiabre, Padron. JWB 03-03 (A few seeds available from an extremely interesting wild coll.made in the hope of locating the mysterious *N. lagoi*, which has never been in cultivation and was thought to be extinct. *N. lagoi* is close to *N. asturiensis* but the flowers are held horizontally on stems about 40cm. tall. We are provisionally listing this under *N. asturiensis* but it is very much a gamble for the specialist.)

694.100 : NARCISSUS ATLANTICUS Morocco, High Atlas, above Amizmiz. 2000m. Among scrub, in soft, moist loam. Ex the 1936, E.K. Balls type coll. (A very local plant in the wild &, after almost 70 years, still rare in cultivation, where it is by no means easy to grow. Sweetly scented, creamy white jonquils carried singly on 15cm. stems. Distinct from the *N. rupicola* group in its deeper, cup-shaped corona & in the arrangement of the anthers, it most resembles a white version of *N. cuatrecasasii*.)

694.101 : NARCISSUS ATLANTICUS Ex the J.W. Blanchard re-collection in the same area.

694.305 : NARCISSUS BICOLOR No data. Unknown in the wild, though reputedly recently found in the Pyrenees. About 30cm. high with horizontal or ascending flowers. White or cream segments surround the lobed, yellow trumpet.

694.605 : NARCISSUS BROUSSENETII Morocco, between Sebt Korimate & Et Tnine.

694.800 : NARCISSUS BUJEI Spain, Cordoba, Sierra de Cabra. Among *Crataegus* & *Quercus* scrub in moist area. Ex JWB 87-13. (A trumpet-daffodil recently described from southern Spain, the extremity of distribution of this section. Thought to be a race of the mysterious *N. hispanicus* but maintained at specific level in one of the latest Spanish floras. A "garden-worthy plant", according to John : about 30cm. high with concolorous yellow flowers.)

694.801 : NARCISSUS BUJEI Spain, Cordoba, Sierra de Cabra. Ex JWB 90-15. (A trumpet-daffodil recently described from southern Spain, the extremity of distribution of this section. Thought to be a race of the mysterious *N. hispanicus* but maintained at specific level in one of the latest Spanish floras.. This seed is from a population with flowers varying from concolorous yellow to bicolors.)

694.802 : NARCISSUS BUJEI Spain, Malaga, Serrania de Ronda. Ex JWB 91-05. (A trumpet-daffodil recently described from southern Spain. Maybe a race of the mysterious *N. hispanicus* but currently maintained at specific level. A "garden-worthy plant", about 30cm. high with concolorous yellow flowers.)

694.811 : NARCISSUS aff. BUJEI Spain, Albacete, NE of Alcaraz. Ex JWB 02-06. (From a huge population of trumpet-daffodils, located a very long way from other sites for *N. bujei*.)

695.050 : NARCISSUS BULBOCODIUM Porto de Mos. Ex JWB 85-01 Archibald Archive www.srgc.net

695.051 : NARCISSUS BULBOCODIUM Portugal, Torrão. On limestone rocks in river. Ex JWB 91-25

695.109 : NARCISSUS BULBOCODIUM var. CITRINUS Spain, Picos de Europa, Covadonga. Ex JWB 00-17. (A lemon-yellow 'hoop-petticoat' from the wettest mountain-range in Spain, towering above the Bay of Biscay. Plants from this area are the latest of this section to flower (May in the UK) & are virtually evergreen both in the wild & in UK gardens.)

695.110 : NARCISSUS BULBOCODIUM var. CITRINUS No data. The cool lemon yellow race of hoop-petticoats, mainly prevalent in N Spain & often quite late-flowering. Usually among the best for growing outside in UK gardens, the seed listed this year is from the vigorous colony thriving & self-seeding in Peter Chappell's Hampshire garden, 'Spinners'.

695.400 : NARCISSUS BULBOCODIUM var. GRAELLSII Spain, Sierra de Guadarrama. Ex a 1983 JWB coll. (Distinct, dwarf, slightly greenish-white race, surprisingly neglected in literature but proving easy to grow in acid soil.)

695.401 : # NARCISSUS BULBOCODIUM var. GRAELLSII Spain, Sierra de Guadarrama, Rascafria. JWB coll. (A 2002 wild coll. of this distinct, dwarf race in slightly greenish-white to pale greenish-yellow. Endemic to central Spain but surprisingly neglected in literature. We have not listed this for a few years but it is usually quite easy to grow in acid soil.)

695.402 : NARCISSUS BULBOCODIUM var. GRAELLSII Spain, Sierra de Guadarrama, Navacerrada. Ex JWB 03-08. (Distinct, dwarf, slightly greenish-white race, surprisingly neglected in literature but quite easy to grow in acid soil.)

695.403 : NARCISSUS BULBOCODIUM var. GRAELLSII Spain, Segovia, El Espinar. 1000m. Wet meadows. R.D. Dominguez coll. (A distinct, dwarf race in slightly greenish-white to pale greenish-yellow. Endemic to central Spain, particularly the Sierra de Guadarrama, but surprisingly neglected in literature. Quite easy to grow in acid soil.)

695.404 : NARCISSUS BULBOCODIUM var. GRAELLSII Spain, Avila, Aldeavieja. 1200m. Wet meadows.

696.200 : # NARCISSUS BULBOCODIUM subsp. NIVALIS (as applied by Maire in 'Flore de l'Afrique du Nord') Morocco, High Atlas Mts., above Tizi-n-Tichka. 2000m. In turf. (A dwarf, snow-melt plant different to the following Spanish one sometimes called '*nivalis*'. Broad, prostrate, glossy foliage & brilliant yellow, upward-facing flowers with much exerted anthers.)

696.250 : NARCISSUS BULBOCODIUM var. NIVALIS (possibly misapplied by various authors) Spain, Avila, Sierra de Gredos, NE of Pico Almanzor. 1800m. In turf on steep, open slopes. (A miniature alpine hoop-petticoat with small, bright-yellow flowers. Utterly different to the preceding not only in flower but in its thready, upright foliage. Delightful in a pan.)

696.258 : NARCISSUS BULBOCODIUM var. NIVALIS Portugal, Braganca. Ex JWB 03-05. (Petunioid form)

696.258 : NARCISSUS BULBOCODIUM var. NIVALIS Spain, Sierra de Guadarrama. Ex JWB 03-06

- 696.259 : NARCISSUS BULBOCODIUM var. NIVALIS** Portugal, Serra da Estrella. Ex JWB 90-21
- 696.400 : NARCISSUS BULBOCODIUM subsp. OBESUS** Portugal, Serra de Arrabida. Ex JWB 90-13 (Big, horizontal or ascending, deep-yellow hoop-petticoats on 10cm. stems. Dark-green, sinuous, prostrate leaves. Reputedly grows better in alkaline conditions than the other, Iberian, yellow *N. bulbocodium* races, which usually grow in very acid soils.)
- 696.401 : NARCISSUS BULBOCODIUM subsp. OBESUS** Portugal, Arrifana. Ex JWB 90-07.
- 696.410 : NARCISSUS BULBOCODIUM subsp. OBESUS** No data. From a very fine, free-flowering form grown by D. Batterham. Dark leaves & rich soft-yellow flowers with large, satisfyingly obese, horizontal coronas. Good outside in UK gardens. Archibald Archive www.srgc.net
- 696.411 : NARCISSUS BULBOCODIUM subsp. OBESUS** No data. From the very fine, free-flowering garden-form grown & shown by Lee Martin. Dark leaves & short-stemmed, rich-yellow flowers with extremely large, satisfyingly obese, horizontal coronas. A winner of many 'firsts' & 'Farrers' but no doubt just as worthwhile outside in UK gardens.
- 696.600 : #NARCISSUS BULBOCODIUM var. PALLIDUS** Morocco, High Atlas, Tizi Gourane above Amizmiz. 1800m. Schist fissures. (Cultivated seed from our 1982 coll. Recently named *N. jacquemondii*, (q.v.), by Fernandez Casas.)
- 696.700 : #NARCISSUS BULBOCODIUM subsp. PRAECOX** Morocco, High Atlas Mts., Moulay Brahim gorge below Asni. 1000m. Humus-filled pockets on limestone boulders. (A fine, robust & distinct race. Big, soft-yellow flowers with narrower, more funnel-shaped trumpets than similarly coloured *N. romieuxii* forms, in late winter or earliest spring. Alpine-house in UK.)
- 696.701 : NARCISSUS BULBOCODIUM subsp. PRAECOX** Morocco, High Atlas Mts., Tizi-n-Test, south side. Ex R.& R.Wallis 88-26 (F)
- 696.750 : NARCISSUS BULBOCODIUM subsp. PRAECOX var. PAUCINERVIS** Morocco. Ex M.Salmon 36 (?)
- 698.250 : NARCISSUS BULBOCODIUM var. TENUIFOLIUS** Portugal. Ex a J.W. Blanchard coll. (Vigorous, floriferous, very deep yellow, dwarf hoop-petticoat with dark, thready leaves. Excellent alpine-house pan-plant.)
- 698.251 : NARCISSUS BULBOCODIUM var. TENUIFOLIUS** Portugal, Oliveira do Hospital. Ex Salmon & Blanchard 185.
- 698.260 : NARCISSUS BULBOCODIUM var. TENUIFOLIUS** No data. Archibald Archive www.srgc.net
- 698.350 : NARCISSUS BULBOCODIUM var. "VIRIDITUBIS"** Portugal. Ex Salmon & Blanchard 204. (Persistent green tube.)
- 699.500 : NARCISSUS CALCICOLA** Portugal, Algarve, Benafin. Ex JWB 90-09. (A tidy, little relative of *N. scaberulus* in Sect. *Apodanthae*, endemic to Portugal & of very restricted distribution in the wild. Glaucous keeled leaves & 15cm. stems with 2-5 flowers with cup-shaped coronas & entirely of a rich, deep yellow. A choice species seldom seen in cultivation.)
- 699.806 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Spain, Malaga, near Estepona. Ex a B. Corneille coll. (A reliable & free-flowering form with profuse, pure-white hoop-petticoat flowers in early winter to brighten the alpine-house.)
- 699.807 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Morocco, Djebel Zerhoun. Ex a T. Norman coll. (An excellent, reliable free-flowering form. Profuse, pure-white hoop-petticoats in winter brighten the alpine-house.)
- 699.808 : # NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Morocco, Djebel Tazzeke. Ex JWB 88-09.
- 699.809 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Morocco, Targuist. Ex JWB 89-30.
- 699.810 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Morocco, Beni Arouss, between Tangier & Chefchaouen. Ex JWB 89-06
- 699.811 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Spain, Puertollano, Castillo de Calatrara. Ex JWB 91-17.
- 699.812 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Spain, Puertollano, S of Puerto de Mestanza, Los Rehoyos. Ex JWB 99-06 (All these local variants flower at slightly different times from early winter into spring.)
- 699.813 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Spain, Jimena de la Frontera. Ex JWB 98-04.
- 699.814 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Spain, Madrid, Aldea del Fresno. 500m. Clay. R.D.Dominguez coll. (The beautiful, dwarf, early-flowering species with pure-white hoop-petticoat flowers)
- 699.815 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Spain, Segovia, Vegas de Matute. 970m. Calcareous ground. R.D.Dominguez coll. (The beautiful, dwarf, early-flowering species with pure-white hoop-petticoat flowers)
- 699.819 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) No data. From several *N.cantabricus* variants, flowering at different times from early winter into spring. White to creamy white hoop-petticoat flowers.)
- 699.824 : NARCISSUS CANTABRICUS** (subsp. *cantabricus*) Spain, Puertollano, S of Puerto de Mestanza, Los Rehoyos. JWB 02-13A (A 2002 wild coll. from the same site as population 699.812 but seed collected only from plants growing in proximity to *N. triandrus pallidulus*, in the hope some may produce the scarce & delectable natural hybrid *N. x susannae*.)
- 699.825 : NARCISSUS CANTABRICUS** (var. *foliosus* ?) Morocco, Ounara W of High Atlas. Ex JWB 93-03. (What Mike Salmon calls "*occidentalis*" but John Blanchard suggests aff. var. *foliosus*.)
- 699.830 : NARCISSUS CANTABRICUS var. FOLIOSUS** No data. From the garden-stock, cultivated under this name by our late friend, Ivor Barton. Flowers in early winter with profuse, milk-white hoop petticoats.

699.835 : NARCISSUS CANTABRICUS var. KESTICUS

699.845 : NARCISSUS CANTABRICUS subsp. MONOPHYLLUS Spain, Sierra de los Filabres. Ex JWB 86-14 (John is convinced this is distinct : flowers “uniformly icy sparkling white” & single leaves, threadlike, sinuous & prostrate.)

699.845 : NARCISSUS CANTABRICUS subsp. MONOPHYLLUS Spain, Sierra de los Filabres. JWB 02-03 (John is convinced this is distinct in the wild : flowers “uniformly icy sparkling white” & single leaves, threadlike, sinuous & prostrate.)

699.850 : # NARCISSUS CANTABRICUS var. PETUNIOIDES Selfed seed from the original clone of this spring-flowering taxon, described by Fernandes from material grown by John Blanchard's father. (It should have had a *clonal* name.) All will be white but some will have the distinct, flat, round corona of the parent. The name can be applied legitimately only to these. [#pic2](#)

699.860 : NARCISSUS CANTABRICUS subsp. TANANICUS

699.950 : NARCISSUS CAVANILLESII (*Tapeinanthus humilis*) Morocco, N of Ounara, ESE of Essaouira (Mogador). J.W. Blanchard 93-02. (A little stored, wild seed left of this distinct plant, only recently placed in *Narcissus*. Upward-facing, starry, yellow flowers before the leaves, in autumn. In exceptionally fine form in this area with broader segments & 2-3 flowers per stem.)

699.951 : # NARCISSUS CAVANILLESII (*Tapeinanthus humilis*) Morocco, ESE of Essaouira (Mogador), between Sebt-Korimate & Et -Tnine. Ex Salmon & Fillan 260. (A distinct plant, only recently placed in *Narcissus*. Upward-facing, starry, yellow flowers before the leaves, in autumn. In exceptionally fine form in this area with broader segments & 2-3 flowers per stem, as well as proving easier to grow & flower than material from the populations in around Tangier & in S Spain.)

699.990 : NARCISSUS CONFUSUS Spain, Madrid, Santa Maria de la Alameda. 1400m. Wet meadows. R.D.Dominguez coll. (A wild coll. of this splendid, concolorous, deep yellow trumpet daffodil with flowers held horizontally or slightly drooping. Considered to be synonymous with *N. major* & merged under *N. pseudonarcissus* subsp. *major* by Webb.)

699.991 : NARCISSUS CONFUSUS Spain, Segovia, El Espinar. 1100m. Wet meadows. R.D.Dominguez coll.

700.000 : NARCISSUS CORDUBENSIS Spain, Malaga, Serrania de Ronda, SW of Ronda. J.W. Blanchard 99-15. (A fine, scented, deep yellow jonquil, near *N. fernandesii*, with up to 3 flowers on 20-30cm. stems. Pots or the bulb-frame.)

700.001 : NARCISSUS CORDUBENSIS Spain : no further data. Ex a T. Norman coll.

700.002 : NARCISSUS CORDUBENSIS Spain, Cadiz, Grazalema to Ubrique. Ex J.W. Blanchard & T.Norman colls. (Scented, yellow jonquil, near *N. fernandesii*. Up to 3 flowers on 20-30cm. stems. Accommodating in pots or the bulb-frame.)

700.003 : NARCISSUS CORDUBENSIS Spain. Ex a R. & R. Wallis coll.

700.020 : NARCISSUS CORDUBENSIS No data. [[# Picture of unnumbered coll. of N. cordubensis](#)]

700.105 : NARCISSUS CUATRECASASII Ex JWB.

700.105 : NARCISSUS CUATRECASASII Spain, Cadiz, near Grazalema. Limestone crevices. Ex a J.W. Blanchard coll. (In Section *Apodanthae* with solitary, rich-yellow flowers with cup-shaped coronas.) 5+ offset bulbs :

700.120 : NARCISSUS CUATRECASASII var. SEGIMONENSIS Spain, Jaen, Almaden. Ex J.W. Blanchard 01-01.

700.200 : NARCISSUS CUPULARIS Italy, Sardinia. 800m. Ex a T. Norman coll. (Dwarf, pale yellow to cream, more or less concolorous tazetta, 15-20cm. high. Listed in the past as *N. tazetta* subsp. *aureus* (it would be this in 'Flora Europaea') & *N. bertolonii primulinus*. John Blanchard currently favours the name *N. patulus*.) Archibald Archive www.srgc.net

700.300 : NARCISSUS CYCLAMINEUS Portugal, Sigueiro near Santiago de Compostella. Ex JWB 02-01. (We offer a little seed with field data from this recently discovered colony. This extraordinary species has always been little-known in the wild and was thought to be all but extinct. It was grown before 1608 but 'lost' for 300 years until rediscovered in Portugal in 1885 before being 'lost' again in recent decades. Parent of a multitude of larger hybrids, the wild plant is still unrivalled : an irresistible, little, brilliant yellow daffodil, like no other in its extraordinarily long, narrow trumpet and fully reflexed perianth segments.

700.310 : # NARCISSUS CYCLAMINEUS No data. Little-known in the wild & once thought to be all but extinct but well established in UK gardens, where it can sow itself when suited in rather heavy, acid loam. Grown before 1608 but 'lost' for 300 years until rediscovered in Portugal in 1885. Parent of a multitude of larger hybrids, the wild plant is still unrivalled : an irresistible, little, brilliant yellow daffodil, like no other in its extraordinarily long, narrow trumpet and fully reflexed perianth segments.

700.320 : NARCISSUS DUBIUS Spain, Valencia, Villena. Ex JWB 87-01. (Smallest of Section *Tazettae*, sometimes separated into its own Subsection *Dubiae*, & thought to have originated from a hybrid between *N. papyraceus* & *N. assoanus*.)

700.321 : NARCISSUS DUBIUS Spain. Ex M. Salmon 528. No further data. (Smallest of Section *Tazettae*, sometimes separated into its own Subsection *Dubiae*, & thought to have originated from a hybrid between *N. papyraceus* & *N. assoanus*. An attractive little plant which seldom sets much seed & remains little-known in cultivation.)

700.322 : NARCISSUS DUBIUS Spain, Valencia, Alzira. JWB 02-05 (A wild coll. of the smallest member of Section *Tazettae*, sometimes separated into its own Subsection *Dubiae*. Thought to have originated from a hybrid between *N. papyraceus* & *N. assoanus*, this attractive little plant remains little-known in cultivation, where it seldom sets much seed.)

700.323 : NARCISSUS DUBIUS Spain. Ex M. Salmon 879. No further data. (Smallest of Section *Tazettae*, sometimes separated

into its own Subsection *Dubiae*, & thought to have originated from a hybrid between *N. papyraceus* & *N. assoanus*. An attractive little plant which seldom sets much seed & remains little-known in cultivation.)

700.905 : NARCISSUS ELEGANS

700.980 : NARCISSUS EUGENIAE Spain, Teruel, Montes de Tarascon above Valdolinales. 1500m. In turf. Ex JWB 87-14 (From a type-locality coll. of this dwarf, snow-melt trumpet daffodil, opening its yellow flowers on very short stems. Currently included as a subsp. of *N. pseudonarcissus* & beautifully illustrated on p. 73 of John's monograph.)

(**NARCISSUS EYSTETTENSIS** : Queen Anne's Double Daffodil, first recorded 1601.)

701.002 : NARCISSUS FERNANDESII Portugal, Samora Correia. Ex M. Salmon 449. (From a type-locality collection.)

701.003 : NARCISSUS FERNANDESII Spain, La Carolina, Collado de los Jardines. A 2001 John Blanchard wild coll s.n. but from the same site as JWB 91-12. (An excellent yellow jonquil, distributed locally along the drainage of the Tagus. A poorly defined species in a confusing group but all variations are worthwhile & usually good growers in UK conditions.)

701.004 : NARCISSUS FERNANDESII Luciana to El Chiquaro, Puebla de Don Rodrigo. Ex JWB 86-01.

701.005 : NARCISSUS FERNANDESII Fuente Bel Agua. Ex JWB 91-18.

701.020 : NARCISSUS FERNANDESII No data. From several J.W. Blanchard colls. of this yellow jonquil, distributed locally along the drainage of the Tagus. A poorly defined species in a confusing group but all variations are worthwhile.)

701.049 : NARCISSUS aff. FERNANDESII Spain, between Collado de Montonar & Andujar. Ex J.W. Blanchard 98-15 (Does not quite fit *N. fernandesii* nor *N. jonquilla minor*. Archibald Archive www.srgc.net

701.050 : NARCISSUS aff. FERNANDESII Spain, Ciudad Real, SE of Almaden. Ex J.W. Blanchard 86-03 (See 701.980 : *N. jonquilla "minor"*. Originally from an isolated colony mentioned on p.83 of John's monograph. M. Tucker writes "stunning" - a tall jonquil with up to seven large flowers.)

701.205 : NARCISSUS GADITANUS Spain, Teruel. Ex JWB 87-15

701.505 : NARCISSUS HEDRAEANTHUS Spain, Jaen, Sierra de Cazorla, Collado de los Jardines. Ex JWB 02-10

701.600 : NARCISSUS HISPANICUS No data. A fine, rich- yellow trumpet daffodil, known in cultivation for over 400 years but of obscure origin and debatable taxonomic status. Included under *N. pseudonarcissus* subsp. *major* by Webb.

701.609 : NARCISSUS HISPANICUS Portugal, Fereira de Zezera. Ex JWB 90-26. (Originally collected & distributed by John as *N. lusitanicus* (currently equated with *N. maximus* by some Spanish botanists). This would in fact appear to be a wild colony of *N. hispanicus*, a fine, rich- yellow trumpet daffodil, known in cultivation for over 400 years but of obscure origin. The name has always been of debatable taxonomic status & was included under *N. pseudonarcissus* subsp. *major* by Webb.)

701.805 : NARCISSUS JACETANUS Spain, E of Pamplona. 1100-1500m. Among *Buxus* scrub on S-facing, limestone slopes. Ex M. Salmon 899.

701.850 : NARCISSUS JACQUEMONDII (see also 696.600 : *Narcissus bulbocodium* (subsp. *vulgaris*) var. *pallidus*) Morocco, High Atlas Mts., between Asni & Amizmiz. Ex a J.W. Blanchard coll. (From a type-locality coll. by John of this recently named little hoop-petticoat, which appears to be the same taxon we have listed under Maire's name. Suit yourselves. A good alpine-house plant with pale to deeper primrose flowers in early spring (much later than *N.b.* subsp. *praecox*). About 10cm. high.)

701.870 : NARCISSUS JEANMONODII (*N. bulbocodium* subsp. *nivalis* as applied by Maire in 'Flore de l'Afrique du Nord') Morocco, High Atlas Mts., above Tizi-n-Tichka. 2000m. In turf. (Previously listed under 696.200 as *N. b.* subsp. *nivalis* of Maire, this is a dwarf, snow-melt plant of the High Atlas, quite different to the Spanish ones, which have also been called '*nivalis*'. We have long said 'this needs a new name' but we did not anticipate anyone describing it at specific level. We fear that we are all now stuck with this legitimately published epithet from the Spanish 'splitter' Fernandez Casas, even if the taxon is eventually placed at a sensible subspecific level as "*N.b.* subsp. *jeanmonodii*". Anyway, this is an excellent & distinct race with broad, prostrate, glossy foliage & brilliant yellow, upward-facing flowers with much exerted anthers. An easy grower & possible outside in the UK.)

701.910 : NARCISSUS JONQUILLA Spain, Cordoba, Sierra de Cabra, La Nava. Ex JWB 87-12. (An excellent yellow jonquil, which grows well outside in several UK gardens. Rewarding under glass as well, of course.)

701.955 : NARCISSUS JONQUILLA var. HENRIQUESII Ex a T. Norman coll. Archibald Archive www.srgc.net

701.980 : NARCISSUS JONQUILLA var. MINOR Spain, Ciudad Real, SE of Almaden. Ex J.W. Blanchard 86-03 (Previously listed by us under 701.050 as *N. aff. fernandesii*, this is a splendid plant, which both John & Mike Salmon are agreed should be placed under *N. jonquilla* var. *minor*, previously considered a rather obscure entity. This was originally from an isolated colony mentioned on p.83 of John's monograph. Mike Tucker (Somerset, UK) writes "stunning" - up to seven large flowers.)

701.981 : NARCISSUS JONQUILLA var. MINOR Spain, Cordoba, Sierra Morena, N of Andujar. Ex a T. Norman coll. (Seed from John Blanchard, who also thinks highly of this fine jonquil, which has rapidly settled down well in cultivation.)

701.982 : NARCISSUS JONQUILLA var. MINOR Spain, Puertollano, San Lorenzo. Ex JWB 98-12

702.100 : NARCISSUS LONGISPATHUS Spain, Albacete, Sierra de Alcaraz. Ex JWB 86-17 (This & *N. nevadensis* differ from all other trumpet daffodils in having 2-4 flowers per stem. In a wet, rich site in nature, this has been recorded approaching 2m. in height but expect much less in cultivation. It will possibly be happiest outside in the UK. Ascending yellow trumpets.)

- 702.101 : NARCISSUS LONGISPATHUS** Spain, Albacete, Sierra de Alcaraz. Ex JWB 86-17 (Pale bicoloured form.)
- 702.102 : NARCISSUS LONGISPATHUS** Spain, Jaen, Sierra de Cazorla. Ex JWB 86-16 (Pale form.)
- 702.200 : NARCISSUS LUSITANICUS** Portugal, Zezera valley. Ex J.W.Blanchard 90-26. (Currently equated with *N. maximus* by some Spanish botanists.) : see *N.hispanicus* 701.609
- 702.305 : NARCISSUS MINOR**
- 702.450 : NARCISSUS NEVADENSIS** Spain, Granada, Sierra Nevada, upper Rio Monachil valley. 2200m. Wet-flush on W-facing slope. (Isolated, very local Sierra Nevada endemic, much easier to grow than *N. longispathus* & generally best outside in the UK. Differs from *N. longispathus* mainly in its white & pale yellow, bicoloured flowers. Usually about 30cm. high.)
- 702.451 : NARCISSUS NEVADENSIS** Spain, Granada, Sierra Nevada. Ex J.W.Blanchard 01-18
- 702.472 : NARCISSUS NOBILIS** Spain, Leon, Puerto de San Glorio. Ex an A. Edwards coll. (A splendid, bicoloured trumpet-daffodil from N Portugal & N Spain, where it can occur in extensive colonies. Ascending flowers with white segments surrounding deep-yellow coronas on 50cm. stems. Differs in several characteristics from *N. bicolor* and is seldom seen in cultivation.) Archibald Archive www.srgc.net
- 702.480 : NARCISSUS NOBILIS var. LEONENSIS** No data. The imposing, western race of this large, striking trumpet daffodil, with pale-yellow to white segments around the deep yellow trumpet. From the Picos de Europa in NW Spain & beyond.
- 702.481 : NARCISSUS NOBILIS var. LEONENSIS** Spain, Picos de Europa, Riaño. Ex JWB 00-01. (The imposing, western race of this large, striking trumpet daffodil, with pale-yellow to white segments around the deep yellow trumpet.)
- 702.500 : #NARCISSUS OBVALLARIS** UK, Wales, below Ffostrasol. 150m. Open grassland & deciduous woodland. (Our lovely, local Welsh trumpet daffodil. Really an imaginary taxon but generally, if not consistently, different to more eastern British colonies of *N. pseudonarcissus* in its horizontal to upward-facing flowers which tend to be concolourous rather than bicoloured.)
- 702.600 : NARCISSUS PACHYBOLBUS** Morocco, N of Taourirt, near Barrage Mohamet V. Ex JWB 89-09
- 702.630 : NARCISSUS PALEARENSIS** Spain, above Santa Maria de Meia. Ex JWB 94-07 (Closely allied to *N. assoanus* & very doubtfully separable from it.)
- 702.650 : NARCISSUS PALLIDIFLORUS**
- 702.680 : #NARCISSUS PANIZZIANUS** Spain, Cadiz, near Grazalema. Ex C. Stocken & J.W. Blanchard colls. (An excellent, dwarf, white tazetta, more or less a dwarf *N. papyraceus*. The name (originally applied to a NW Italian plant) may or may not be correctly applied but it is as good as any for this distinct Andalusian population. Flowers over a long period in spring with successive stems, 30cm. or less high, bearing clusters of up to 8, scented, white flowers. For decades, grown by John outside in Dorset, in a raised bed against a S-facing wall.)
- 702.700 : NARCISSUS PAPYRACEUS** (subsp. *papyraceus*) Gibraltar. Ex an I. Barton coll.
- 702.701 : NARCISSUS PAPYRACEUS** (subsp. *papyraceus*) Morocco, Taza. Ex JWB 88-08
- 702.702 : NARCISSUS PAPYRACEUS** Cyprus. Ex a C.C. Mountfort coll. (A fine, vigorous, early-flowering tazetta, long grown by John Blanchard as *N. pachybolbus*. Possibly most safely labelled *N. papyraceus* Cyprus form. Clusters of scented, white flowers.)
- 702.703 : NARCISSUS PAPYRACEUS** (subsp. *papyraceus*) Morocco, SE of Marrakech. M. Jacobi coll. (A coll. made in December, 1998 from a colony not seen in flower. This seed may just be from the autumn-flowering *N. broussonetii* but the locality seems a long way inland for this species and is more likely to be from the white tazetta, *N. papyraceus*.)
- 702.720 : #NARCISSUS PAPYRACEUS** No data but from a vigorous, free-flowering clone, almost certainly originating in Morocco. (Clusters of richly scented, white flowers in late winter. Needs a hot, dry summer rest to flower well.)
- 702.805 : NARCISSUS PAPYRACEUS subsp. PANIZZIANUS** Spain, Cadiz, near Grazalema. Ex C. Stocken & J.W. Blanchard.
- 703.000 : NARCISSUS PEREZ-CHISCANOI** Spain, Ciudad Real, Montes de Toledo near Almaden. Ex an M. Salmon coll. (A recently described central Spanish trumpet daffodil, at first thought to be the original *N. obvallaris* but actually quite distinct from this in its shorter, twisted, perianth-segments. Like it, however, in proving a good garden-plant in the UK so far.)
- 703.001 : NARCISSUS PEREZ-CHISCANOI** Spain, Ciudad Real, Montes de Toledo near Almaden. (Puebla de Don Rodrigo.) Ex JWB 87-08. (A recently described central Spanish, yellow trumpet daffodil, at first thought to be the the same as *N. obvallaris* but actually quite distinct from this in its shorter, twisted, perianth-segments. Like it, however, in proving a good garden-plant in the UK so far.)
- 703.200 : NARCISSUS POETICUS** (subsp. *poeticus*) Spain, Lerida, S of Puerto de Viella. 2000m. Among grass on W-facing granite slope.
- 703.500 : NARCISSUS PRIMIGENIUS** Spain, Picos de Europa, Puerto de los Sa_ales. Ex J.W.Blanchard 00-04. (Bicoloured form.)
- 703.501 : NARCISSUS PRIMIGENIUS** Spain, Picos de Europa, Puerto de los Sa_ales. Ex J.W.Blanchard 00-04A. (All yellow form.)
- 703.600 : NARCISSUS PROVINCIALIS** Pic de l'Aigle. (Note in SRGC Journal Vol. XXVII, pt. 4, June 2002, p314)

- 703.701 : NARCISSUS PSEUDONARCISSUS** UK, Hampshire, E of Ringwood. Light oak woodland. (From authentic parents of the English Lent Lily with its nodding, pale yellow flowers with deeper yellow coronas. The parent colony is extremely wet in winter and spring, when the plants are in growth and in flower, though it dries out later in summer.)
- 703.705 : NARCISSUS PSEUDONARCISSUS** France, Auvergne. Ex J.W. Blanchard 94-01 (From the stunning population illustrated on the dust jacket of John's monograph. For what it is worth, the general current consensus is that these should be placed under *N. bicolor* but the French populations have been called *N. pseudonarcissus* for so long that we stick with this for the present. Don't get bogged down with names, these are really super little trumpet daffodils for the open garden in cool areas.)
- 703.750 : NARCISSUS PSEUDONARCISSUS 'THE O'MAHONY'S VARIETY'** No data. An early-flowering (sometimes opening in January in the UK), uniformly bright yellow trumpet daffodil, originating in Ireland but without a precise wild counterpart. Though seldom seen now in cultivation, it is fertile and seems to come quite evenly from seed.
- 704.900 : NARCISSUS RADINGANORUM** Spain, Albacete, N of Almansa, Sierra de Palomera. 1000m. (Another yellow (or slightly bicoloured) trumpet daffodil recently described by Fernandez Casas. Possibly allied to *N. pseudonarcissus* rather than to *N. hispanicus* but still a somewhat obscure plant. Closest to *N. eugeniae* with upward-tilted flowers.)
- 705.100 : # NARCISSUS ROMIEUXII** (subsp. *romieuxii* var. *romieuxii*) Morocco, Middle Atlas Mts., above Ifrane. 1700m. Leafsoil over clay in mixed woodland. (From a splendid colony from which we first collected in 1962. Best-known under the field-number JCA 805. Extremely variable in form & colour from cream to deeper yellows.)
- 705.120 : NARCISSUS ROMIEUXII** - Ex 'Julia Jane' selfed Data as above. From an outstanding clone, selected in flower here from among thousands. The parent is virtually a pale yellow version of *N. cantabricus* var. *petunioides* with large flowers, whose coronas open flat or even slightly reflex. The clonal name, of course, should not be applied to seedlings, which will vary.)
- 705.200 : NARCISSUS ROMIEUXII var. RIFANUS** Morocco, Rif Mts., Iguermalet. Ex J.W. Blanchard 89-28 (From authentic material of this delightful, pale-yellow hoop-petticoat, proving to be a good grower under glass in the UK.)
- 705.201 : NARCISSUS ROMIEUXII var. RIFANUS** Morocco. Ex JWB 89-29 Archibald Archive www.srgc.net
- 705.302 : NARCISSUS ROMIEUXII subsp. ALBIDUS** Morocco. Ex JWB 91-17 (A pretty, distinct, pure-white hoop petticoat from NE Morocco & W Algeria. Projecting, scattered anthers. It may be better placed as a race of *N. cantabricus*.)
- 705.405 : #NARCISSUS ROMIEUXII subsp. ALBIDUS var. ZAIANICUS** Morocco, Zaian Mts., near Oulmes. Ex JWB 89-23. (Wild collected seed from this moist, lower altitude locality produced an amazing range of forms, including really splendid clones - possibly a group of hybrids or intergrades, like the Ifrane *N. romieuxii* population. The name is probably not worth much botanically - pick out a pale yellow one to call *N.r.a.* var. *zaianicus*! A diversity of creams & soft citron yellows.)
- 705.406 : NARCISSUS ROMIEUXII subsp. ALBIDUS var. ZAIANICUS** Data as above. Ex JWB 89-24 (Selected citron form)
- 705.500 : NARCISSUS RUPICOLA** (subsp. *rupicola*) Spain, Avila, Sierra de Gredos, NE of Pico Almanzor. 1800m. In turf on open slopes. (A very neat member of Sect. *Apodanthae* with flat, clear-yellow flowers & glaucous leaves. A plant of acid soils in nature, this is a rather choice, small, high altitude race and one of the last *Narcissus* to flower with us.)
- 705.501 : NARCISSUS RUPICOLA** (subsp. *rupicola*) Spain, Sierra de Guadarrama. Ex a 1983 JWB coll.
- 705.502 : NARCISSUS RUPICOLA** (subsp. *rupicola*) Spain, Caceres, Sierra Guadalupe. Ex a T. Norman coll.
- 705.503 : NARCISSUS RUPICOLA** (subsp. *rupicola*) Spain, Segovia, El Espinar, Aguas Vertientes. 1400m. R.D. Dominguez coll. (A very neat member of Sect. *Apodanthae* with flat, clear-yellow flowers & glaucous leaves. A plant of acid soils in nature, these higher altitude, Spanish races are among the last of the genus *Narcissus* to flower with us.)
- 705.520 : NARCISSUS RUPICOLA** (subsp. *rupicola*) No data. Derived from stock grown by John Blanchard's father. Its origins are unknown but it has always been designated as 'Early Form'. Flowering at least a month before the preceding, this is a slightly larger plant and increases vegetatively more than the preceding. It may have a more southern or lower elevation origin.
- 705.600 : # NARCISSUS RUPICOLA subsp. MARVIERI** Morocco, Middle Atlas, S of Ksar-el-Ksiba. 1700m. N-facing, limestone slope with *Quercus* & *Cedrus*. (The yellow race endemic to Morocco. Larger & flowers earlier here than the preceding but not quantifiably different. Not easy in our experience. Needs careful watering & appreciates a warmer, drier rest in summer.)
- 705.601 : NARCISSUS RUPICOLA subsp. MARVIERI** Morocco, Middle Atlas, ESE of El Ksiba, Tizi-n-Ifar. Ex a JWB coll.
- 705.620 : NARCISSUS RUPICOLA** Morocco, Taza. Ex Salmon, Bird & Lovell 64. (In theory, this should be *N. rupicola* subsp. *marvieri*, a limestone race, but this was collected on an acid substrate rather to the NE of the known distribution.)
- 705.701 : NARCISSUS RUPICOLA subsp. WATIERI** Morocco, High Atlas Mts., above Tizi-n-Tichka. 2300m. Moist or shaded sites on rocky slopes. (One of the most beautiful of wild daffodils. The incomparable, crystalline-white race from the great massifs of the central High Atlas. We have only found it on acid soils. Grow it cool & never bake it when dormant.)
- 705.702 : NARCISSUS RUPICOLA subsp. WATIERI** Morocco, High Atlas, below Oukaïmeden. 1800-2000m. N & NW-facing slopes in stony clay.
- 706.000 : NARCISSUS SCABERULUS** (Endemic to a small area in the upper Mondego Valley in N central Portugal.)
- 706.250 : NARCISSUS SEGURIENSIS** Spain, Jaen, Sierra de Segura. Ex JWB 01-05. (From type-locality material of this recently described yellow trumpet daffodil, in effect a 'split' from *N. longispathus*, always with 2 flowers to each scape. A plant of seasonally wet sites.)

- 706.303 : NARCISSUS SEROTINUS** Morocco, Zaian Mts., Pont Martin. 900m. JWB 93-09 (Widespread, autumn-flowering species. White flowers with orange coronas before the leaves. Keep it hot & dry in summer.)
- 706.304 : NARCISSUS SEROTINUS** Portugal, Castillo Marim. JWB 03-08. (Wild-collected seed from this autumn-flowering species, which is seldom seen in cultivation. White flowers with yellow coronas appear before the leaves. Not difficult to grow but it needs to be kept very hot & dry in summer to ensure regular flowering.)
- 706.305 : NARCISSUS SEROTINUS** Spain, Cadiz, N of Moron. JWB 03-09. Orange corona. (= *N. miniatus*)
- 706.400 : NARCISSUS SUBNIVALIS** Spain, Sierra de Cuenca. Ex J.W.Blanchard 04-15
- (**NARCISSUS TENUIOR** (*N. jonquilla* x *N. poeticus*) : First described by Curtis in 1797.) Archibald Archive www.srgc.net
- 706.600 : NARCISSUS TAZETTA** (subsp. *tazetta*)
- 706.620 : NARCISSUS TAZETTA** (subsp. *tazetta*) Italy, Sicily, Madonie Nebrodi. Ex an A. Edwards coll. (From the superlative, classic Sicilian tazetta photographed by Alan for the frontispiece of John Blanchard's monograph (Plate 2). Clusters of flowers with broad, pure-white segments surrounding the orange-yellow, cup-shaped coronas, on stems of about 30cm.)
- 706.621 : NARCISSUS TAZETTA** (subsp. *tazetta*) Italy, Sicily, Mte. Peloritani. 1100m. (NE Sicilian tazettas we have seen have been of superlative, classic form : see the frontispiece of John Blanchard's monograph (Plate 2) from the adjacent Madonie Nebrodi : broad, pure-white segments surrounding the orange-yellow, cup-shaped coronas, on stems of about 30cm.)
- 706.800 : NARCISSUS TAZETTA subsp. AUREUS** : see *N. cupularis* for Sardinian collection.
- 706.850 : NARCISSUS TAZETTA var. DISCOLOR** Algeria, Akfadou forest. Ex a T. Norman coll.
- 707.200 : NARCISSUS TORTIFOLIUS** Spain, Almeria, Sierra de los Filabres, near Sorbas. 400m. Near gypsum quarries. JWB 02-02 (A remarkable species, described in 1977. A specialized, very local endemic of these hot, gypsum hills, introduced by John in 1986. Possibly closest to *N. dubius*, it may have originated by hybridizaion between members of Sections Tazetta & Jonquillae. Quite dwarf with creamy, clustered flowers & short twisted glaucous leaves, lying flat on the ground. Most desirable but extremely slow-growing & difficult to flower in cultivation in the UK.)
- 707.319 : NARCISSUS TRIANDRUS** (var. *triandrus*) Spain, Puebla de Lillo near Riano. Ex JWB 00-16
- 707.320 : NARCISSUS TRIANDRUS** (var. *triandrus*) No data. A delightful species with up to 6 elegant white flowers, their tepals reflexing back from the cup-shaped coronas, on 20-30cm. stems. The sole member of Section *Ganymedes* & not very satisfactorily divisible into subspecific taxa. The pure-white, broader leaved type-race seems confined to NW Spain & perhaps adjacent N Portugal. Not always the easiest to grow - a cool site outside in acid, sandy soil seems the ideal in the UK.
- 707.413 : NARCISSUS TRIANDRUS var. CERNUUS** (syn. subsp. *pallidulus*) Spain, Alcaraz. Ex J.W.Blanchard 04-12.
- 707.414 : NARCISSUS TRIANDRUS var. CERNUUS** (syn. subsp. *pallidulus*) Spain, Segovia, El Espinar, Aguas Vertientes. 1600m. R.D. Dominguez coll. (A delightful species with up to 6 elegant flowers, their tepals reflexing back from the cup-shaped coronas, on 20-30cm. stems. The sole member of Section *Ganymedes* & not satisfactorily divisible into subspecific taxa. Over much of Portugal & Spain, cream to pale yellow-flowered colonies occur, usually narrower-leaved. Northern plants, such as those from the S. de Guadarrama generally tend to be whitish. The pure-white, broader leaved type-race seems confined to NW Spain & N Portugal. Not always the easiest to grow. A cool site in acid, sandy soil seems the ideal in the UK.)
- 707.415 : NARCISSUS TRIANDRUS var. CERNUUS** (syn. subsp. *pallidulus*) Portugal, Mondego valley. Ex a P. Bird coll. (Over much of Portugal & Spain, cream to pale yellow-flowered colonies occur, sometimes varying to deeper shades & usually narrower-leaved. Just as beautiful & just as fastidious as the white race..)
- 707.418 : NARCISSUS TRIANDRUS var. CERNUUS** (syn. subsp. *pallidulus*) Portugal. Ex Salmon & Bird 206 (Bicoloured form but does not come 'true' from seed.)
- 707.419 : NARCISSUS TRIANDRUS var. CERNUUS** (syn. subsp. *pallidulus*) Portugal : no further data. (From stock originally from Coimbra Botanic Garden in the 1980's. Over much of Portugal & Spain, cream to pale yellow-flowered colonies occur, sometimes varying to deeper shades & usually narrower-leaved. Just as beautiful & fastidious as the white race.)
- 707.420 : NARCISSUS TRIANDRUS var. CERNUUS** (syn. subsp. *pallidulus*) No data. Over much of Portugal & Spain, cream to pale yellow-flowered colonies occur, sometimes varying to deeper shades & usually narrower-leaved. Just as beautiful & just as fastidious as the white race. Archibald Archive www.srgc.net
- 707.505 : NARCISSUS TRIANDRUS var. CONCOLOR** Ex JWB 90-19
- 707.600 : NARCISSUS VARDULIENSIS** Spain, Vitoria, Oquina. Along river-banks. J.W.Blanchard 06-01. (Wild collected seeds of this trumpet daffodil, quite recently described in 1988. A bicolour notable for the clear-cut nature of the pure-white perianth segments, without a hint of yellow, surrounding the bright yellow trumpet. Growable outside in the UK.)
- 707.700 : NARCISSUS VIRIDIFLORUS** Morocco, W of Tetouan. M. Jacobi coll. (The first time we have been able to list seed of this unique green, autumn-flowering jonquil : not many seed-collectors are around in Morocco in mid-winter. Almost always flowering without leaves, the umbels of up to 5, heavily scented, rather bluish, olive-green flowers open on 20cm. stems, which elongate greatly after flowering. A low altitude, coastal plant of heavy soils distributed from here in Morocco, S to near Agadir on the Atlantic, it is not easily grown, under glass of course, in the UK, possibly due to low light intensity in winter. It needs a long, warm summer rest and plenty water when in growth. A very rare opportunity to acquire wild seed coll. Dec., 1999.)

- 707.700 : NARCISSUS VIRIDIFLORUS** Morocco, W of Tetouan, SE side of P37, 62.4 km. W of Tetouan.
- 708.000 : NARCISSUS WILLKOMII**
- 708.009 : NARCISSUS WILLKOMII** Portugal. Ex a P.J. Christian coll.
- 708.100 : NARCISSUS YEPESII** Spain, Jaen, Sierra de Segura. Ex JWB 01-03. (Always with a single flower to each scape.)
- 708.950 : NECTAROSCORDUM MELIOPHILUM** Ukraine, Krim. (Endemic to the Crimea with dense umbels of flowers, like *N. tripedale* but the colour is lilac and the stems do not exceed 50cm. in height.)
- 709.010 : NECTAROSCORDUM SICULUM** (subsp. *siculum*) No data. Tall, handsome *Allium*-relative from the W Mediterranean area. Stems of about 1.2m. carry umbels of drooping creamy bells, tinged with green & flushed with pink. Easy.
- 709.050 : NECTAROSCORDUM SICULUM subsp. BULGARICUM** The E Mediterranean race, distributed from Bulgaria to the Crimea & NW Turkey.
- 709.109 : NECTAROSCORDUM TRIPEDALE** Armenia. (A choice & beautiful plant, rare in the wild (also recorded from a few sites in SE Turkey but we have never seen it there) and equally seldom seen in cultivation. Stems about 1m. in height carry dense, terminal umbels of numerous, large, bell-shaped flowers, basically white but veined with purple to give a bright-pink effect. Flowers much earlier than *N. siculum* & may need a dryish summer rest. Slow-growing but worth every effort.)
- 710.320 : NEPETA HELIOTROPIFOLIA** Turkey, Artvin, Genya Da_ 1800m. Among scrub at margin of *Picea* forest. (A very fine, herbaceous perennial with stems, at least 1.5m. tall here, with widely branched inflorescences of many small, lilac-blue flowers. We are not too happy about identifying this plant which we have not seen here previously. *Nepeta* is a 'difficult' genus & this is in a complex group. It may belong to a Caucasian species, not previously recorded from Turkey.)
- 713.410 : #OMPHALODES LUCILIAE** No data. One of the most beautiful limestone chasmophytes, widespread very locally on high-alpine cliffs from Greece through Turkey to Iraq & Iran. Most, if not all, UK-cultivated material seems to belong to *O. l.* subsp. *scopulorum* from Greece & SW Anatolia, with its blue-grey foliage exquisitely offsetting the milky-blue flowers.
- 718.350 : ONONIS ROTUNDIFOLIA**
- 720.502 : ONOSMA ALBO-ROSEUM**
- 735.001 : ORIGANUM ACUTIDENS** Turkey, Erzurum, NW of A_kale. 2000m. Steep, loose, eroded shale slopes. (A woody-based subshrub, about 50cm. tall, in *Labiatae* (*Lamiaceae*), endemic to E Anatolia. Very near the next in appearance but somewhat taller & usually forming larger clumps. Both of these have drooping spikes, stacked with striking creamy bracts, which remain attractive long after the small white or pinkish flowers are over.) Archibald Archive www.srgc.net
- 736.301 : ORIGANUM ROTUNDIFOLIUM** Turkey, Artvin, Genya Da_ above Artvin. 1500m. Open, gravelly banks. (An outstanding species, about 30 tall when in flower, confined to the Çoruh drainage in NE Turkey & Georgia. Accommodating in the open rock-garden in the UK & extremely good value with its long display of cream bracts.)
- 738.000 : ORNITHOGALUM ALPIGENUM**
- 738.030 : ORNITHOGALUM ANATOLICUM**
- 738.050 : ORNITHOGALUM ARABICUM**
- 738.100 : ORNITHOGALUM ARCUATUM** Turkey, Van, W of Yukari Narlica. 2200m. Stony alluvium in dried river bed. (A tall, handsome species, in effect a giant version of *O. narbonense*, distributed from E Turkey into NW Iran & N Iraq. Cylindrical racemes of many white flowers, with green fascia outside, on 1.5m. stems. Restrained but quite easy outside in the UK.)
- 738.130 : ORNITHOGALUM ARIANUM** Turkmenistan, Kopet Dag.
- 738.150 : ORNITHOGALUM ARMENIACUM**
- 738.200 : ORNITHOGALUM ATTICUM**
- 738.220 : ORNITHOGALUM AUCHERI**
- 738.225 : ORNITHOGALUM BALANSAE** Turkey, Ulu Dag.
- 738.230 : ORNITHOGALUM BUNGEI** Iran, Mazanderan, near Siabishe. 1900m. Ex SLIZE 98-71. (A handsome Persian endemic, restricted to the Elburz Mts. along the Caspian coast of northern Iran. Up to 25 big, white flowers with grey-green-tinged exteriors arranged in a fairly dense raceme on a 30cm. tall scape. Best given a long, dry rest in summer.)
- 738.250 : ORNITHOGALUM CHIONOPHILUM**
- 738.270 : ORNITHOGALUM COLLINUM**
- 738.300 : ORNITHOGALUM COMOSUM**
- 738.320 : ORNITHOGALUM COMOSUM** Morocco, High Atlas : According to Mike Salmon, this is 83A : check name in notes from Maire & field number. *O. comosum* very unlikely. Plenty seed from 1997.
- 738.350 : ORNITHOGALUM COSTATUM**
- 738.400 : ORNITHOGALUM DIVERGENS**

738.450 : ORNITHOGALUM EXARATUM

738.500 : ORNITHOGALUM EXSCAPUM

738.510 : ORNITHOGALUM EXSCAPUM No data. A dwarf, Mediterranean species with almost stemless inflorescences of white flowers, striped with green on the backs of the segments, sitting on the ground.

738.550 : ORNITHOGALUM FIMBRIATUM

738.570 : ORNITHOGALUM GUSSONEI Moldova, near Sakharna.

738.600 : ORNITHOGALUM LANCEOLATUM

738.650 : ORNITHOGALUM MONTANUM

738.660 : ORNITHOGALUM MONTANUM No data. A very variable species from SE Europe & SW Asia. About 20cm. tall with racemes of white flowers in late spring. Hardy & easily grown outside in the UK but never a nuisance.

738.709 : ORNITHOGALUM NARBONENSE Spain, Burgos, Orbaneja del Castillo. 1000m. R.D.Dominguez coll.

738.710 : ORNITHOGALUM NARBONENSE

738.750 : ORNITHOGALUM NIVALE

738.800 : ORNITHOGALUM NUTANS

738.850 : ORNITHOGALUM OLIGOPHYLLUM

738.880 : ORNITHOGALUM OREOIDES Russia, Krasnodar district (N Caucasus) (Check name)

738.900 : ORNITHOGALUM ORTHOPHYLLUM

738.909 : ORNITHOGALUM ORTHOPHYLLUM Moldova, near Sakharna.

739.100 : ORNITHOGALUM PERSICUM

739.150 : ORNITHOGALUM PLATYPHYLLUM

739.158 : ORNITHOGALUM PLATYPHYLLUM Armenia, Daralagez, near Vardaovit. (A handsome species of seasonally wet sites from Turkey to N Iran. About 30cm. tall with compact racemes of large white & green flowers.)

739.159 : ORNITHOGALUM PLATYPHYLLUM Azerbaijan, Talish, near Gosmoljan. Ex RSZ 87-24.

739.169 : ORNITHOGALUM PONTICUM Georgia, near Sochi. Woodland. (A handsome, showy species about 60cm. tall. Quite recently described and related to the central European *O. pyramidale*. Its natural habitat & dense heads of pure-white flowers should ensure it a future as a worthwhile garden-plant in the UK.) Archibald Archive www.srgc.net

739.170 : ORNITHOGALUM PONTICUM Ukraine, Krim (Crimea), near Yalta. (A handsome, showy species about 60cm. tall. Quite recently described and related to the central European *O. pyramidale*. Its natural habitat & dense heads of pure-white flowers should ensure it a future as a worthwhile garden-plant in the UK.)

739.200 : ORNITHOGALUM PRASINANTHERUM

739.250 : ORNITHOGALUM PYRAMIDALE

739.300 : ORNITHOGALUM PYRENAICUM

739.350 : ORNITHOGALUM REFRACTUM

739.400 : ORNITHOGALUM REVERCHONII

739.409 : ORNITHOGALUM REVERCHONII Spain, Cadiz, near Grazalema. Crevices in limestone cliffs. Ex an I. Barton coll..

739.430 : ORNITHOGALUM SCHMALHAUZENII Armenia, Zangezur range, Hustup.

739.450 : ORNITHOGALUM SIGMOIDEUM

739.470 : ORNITHOGALUM SENTENISII Azerbaijan, Talish, between Lerik & Gosmoljan. Ex RSZ 87-01.

739.500 : ORNITHOGALUM SPHAEROCARPUM

739.530 : ORNITHOGALUM TENUIFOLIUM Armenia, Spitak district.

739.550 : ORNITHOGALUM ULOPHYLLUM

739.600 : ORNITHOGALUM UMBELLATUM

739.650 : ORNITHOGALUM UNIFOLIUM

739.700 : ORNITHOGALUM WIEDEMANNII

741.500 : OSTROWSKIA MAGNIFICA Tajikistan, Hissar range, Karatag valley. ("Unique among perennials it is worthy of any care to make it a success" wrote William Robinson in 1883. "An unbelievable plant until seen" commented Graham Stuart Thomas in 1973. Unfortunately few of us have ever had the chance to see it. We were one of the few nurseries ever to list it regularly in the 1970's. Our original source was seed from Tashkent Botanic Garden. This seed is from a recent collection. This is

a monotypic genus in Campanulaceae, locally endemic to Central Asia, perhaps best described as a giant *Platycodon*, growing between 50cm. and 1m. tall, with stems whorled with glaucous leaves carrying enormous, floppy bells in chalk-white, tinged and veined with lilac-blue, in early summer. Its growth-cycle is that of the sympatric genus *Eremurus* and it retires to a fat tuber after flowering. It is a long-lived perennial & slow to build-up from seed but we grew it successfully in Dorset in a raised bed against a South-facing wall. A good, rich, deep but well-drained soil in a warm sunny site are the essentials in the UK.)

745.800 : PAEONIA ANOMALA Russia. No further data.

745.801 : PAEONIA ANOMALA Russia, Kemerovo district, Tisul, foothills of Kuznetsk Altai. 450m. Forest meadow. (From just N of Mongolia, a wild coll. of this fine species, widespread in the cold areas of N Asia. Foliage cut into narrow segments, beautiful even without the flat flowers, up to 9cm. across, in deepest rose-pink. Well depicted in Rix & Phillips, Vol. 1.)

745.802 : PAEONIA ANOMALA Russia, Khakassia, Shirinsky district. (A central Siberian coll. of this fine species, widespread in the colder areas of N Asia. Foliage cut into narrow segments, beautiful even without the flat flowers, up to 9cm. across, in deepest rose-pink. Well depicted in the wild in Rix & Phillips, Vol. 1.) Archibald Archive www.srgc.net

745.803 : PAEONIA ANOMALA Kazakhstan, "Burkhat Pass".

745.804 : PAEONIA ANOMALA Kazakhstan, "Markakor".

745.805 : PAEONIA ANOMALA Russia, Krasnojarsk.

745.850 : PAEONIA ANOMALA Russia, Siberia. (From a tall, 1m. high form, originally from a wild Siberian coll. of this fine species, widespread in the colder areas of N Asia. Foliage cut into narrow segments, beautiful even without the flat flowers, up to 9cm. across, in deepest rose-pink. Well depicted in the wild in Rix & Phillips, Vol. 1.)

745.900 : PAEONIA ARIETINA Turkey, Gumushane, Soganli Daglari above Bayburt. 1800m. Steep slopes, in igneous scree.

745.949 : PAEONIA ARIETINA No data. The more eastern race, extending from the Balkans into Turkey. Woolly follicles & much more divided foliage, cut into narrower segments & downy on the undersides.

745.950 : PAEONIA BIEBERSTEINIANA (*P. tenuifolia* complex) Russia, Stavropol, Beketovaya. (Possibly from the open grassland-habitat illustrated as that of "*P. tenuissima*" on p.93 of Rix & Phillips 'Perennials' Vol. 2. Much dissected leaves but less finely cut than *P. lithophila* foliage & bright red flowers. Distinct from the others in this geographically disjunct complex in its greyish, hairy foliage. Like the Georgian populations, this seems to be a rather local plant : collected in the type-locality.)..

745.975 : PAEONIA BODURII (*P. mascula* subsp. *bodurii*) Turkey, Çanakkale. No further data.

746.000 : PAEONIA BROTEROI Spain, Granada, Sierra Nevada.

746.001 : PAEONIA BROTEROI Spain, Jaen, Sierra de Cazorla.

746.002 : PAEONIA BROTEROI Spain, Jaen, Sierra de Pozo.

746.020 : PAEONIA BROTEROI No data. A fine species, confined to the Iberian peninsula. Smooth, much cut foliage, glaucous beneath & deep-pink bowls with a mass of yellow stamens around densely woolly follicles.

746.100 : PAEONIA CAMBESSEDESII The dwarfest species, endemic to the limestones of the Balearic Islands and best with some protection, in cyclamen-conditions, in the UK, though most of this seed is from a plant grown outside in Hampshire. About 30cm. high with beautiful, smooth, grey-green foliage, crimson beneath, & big, rosy flowers, up to 10cm. across in spring.

746.130 : PAEONIA CARTHALINICA (*P. tenuifolia* complex) Georgia, Dampalo hills, Kartli. An obscure entity & a very local plant indeed, only known from the one colony this area. Apparently the most robust of the *P. tenuifolia* complex, described as over 1m. high with bright red flowers & foliage less finely cut than some of the others.

746.150 : PAEONIA CAUCASICA (*P. mascula* complex) SE Georgia, Daba area. (The fine Caucasian representative of the widespread & variable *P. mascula* complex, distributed through S Europe eastward to N Iran. About 50cm. high with dissected, flat, smooth foliage, glaucous beneath, & big rosy-red flowers with woolly follicles & purple filaments to the yellow anthers.)

746.200 : PAEONIA CLUSII

746.209 : PAEONIA CLUSII Greece, Crete, Spakhia, Samaria Gorge at Agios Nikolaos. ("The most elegant of Greek peonies", remark William Stearn & Peter Davis in their monograph. About 30cm. tall with "cerise-tinged stems, finely cut leaves and large white clove-scented flowers". Needs a sheltered, well-drained site if attempted outside in the UK)

746.300 : PAEONIA CORIACEA

746.305 : PAEONIA CORIACEA (*P. mascula* complex) Spain, Granada, near Alhama de Granada. (Only known in Europe from S Spain, though it extends into Morocco & Algeria. We do not know the peonies in this locality, only the *P. broteroi* colonies in the Sierra Nevada, about 60km. to the E. There should be no confusion as the two are utterly distinct in foliage & in fruit. *P. coriacea* has fewer, much broader, rather smooth, leathery leaflets & usually only 2 glabrous follicles with attenuate tips (whereas *P. broteroi* has up to 4 densely woolly follicles). It can be easily confirmed as soon as the first true leaves appear. A fine species with beautiful, rose-pink flowers set against distinct, lead-green foliage. Moroccan material we have cultivated was very slow-growing.)

746.400 : PAEONIA CORIACEA var. MAROCCANA (*P. mascula* complex)

746.409 : # PAEONIA CORIACEA var. MAROCCANA (*P.c.* var. *atlantica*) Morocco. No further data. Ex a M.Salmon coll. (A

spectacular feature of the cedar-forests of the Middle Atlas mountains. Smooth foliage & large rose-pink flowers. Not always easy outside in the UK. Absolutely temperature hardy but seems to miss the cold winters & warm, dry summers.)

746.500 : PAEONIA DAURICA (*P. mascula* subsp. *triternata*) Ukraine, Krim (Crimea). (Close to *P. mascula* but distinct in its few, rounded leaflets with undulate margins. This name has been applied to plants in SE Europe & Turkey which approach the Crimean ones but for the purist this is the only 'real thing'. The valid name is an unfortunate misspelling of "*P. taurica*".)

746.520 : PAEONIA FLAVESCENS (*P. mascula* subsp. *hellenica*, Sicilian population.) Italy, Sicily. Ex W. McLewin 01-08. (In spite of the considerable geographical disjunction, this is placed under *P. mascula* subsp. *hellenica* by Stearn & Davis in their monograph. Grown in cultivation, it is, however, perfectly distinct from the Greek plants. Fortunately Presl described it as a full species in 1822, so we have a name for it. A much taller plant than *P.m. hellenica* with more bowl-shaped, white flowers, which are sometimes rimmed with a pink suffusion giving a diffuse picottee effect.)

746.550 : PAEONIA HYBRIDA

746.600 : PAEONIA KESROUANENSIS

746.608 : PAEONIA KESROUANENSIS Syria, Alladiqiyah, Jabal an Nu_ayriyah. (An oak-scrub species of the Syrian & Lebanese coastal mountains, just entering Hatay in S Turkey. Its soft-pink flowers open very early as the large foliage unfolds, so it will need a sheltered, well-drained site if attempted in the open garden in the UK. Most distinct in its very large, thick-walled, smooth, glabrous seed-capsules, which usually contain only a few, large, fertile seeds). Archibald Archive www.srgc.net

746.609 : PAEONIA KESROUANENSIS (?) Lebanon, Chouf. 1500m. In leafsoil among *Quercus* on steep, N-facing slopes. R.& R.Wallis coll.

746.620 : PAEONIA LAGODECHIANA Georgia, Kakheti, Lagodekhi, near Shirati. (The wild pink *P. mlokosewitschii* : an obscure plant, conceivably of hybrid origin but equally *P. mlokosewitschii* may occur in two colour forms. This seed is from cultivated plants grown from wild-collected seed as *P. mlokosewitschii* : one of the only two known localities for *P. mlokosewitschii* is also the type-locality and the only site for *P. lagodechiana*.)

746.640 : PAEONIA LITHOPHILA (*P. tenuifolia* complex) Ukraine, Krim (Crimea). (The Crimean race, which probably constitutes most plants cultivated in the west as "*P. tenuifolia*", is distinct in its light-green, much dissected leaves finely cut into a mass of filiform segments. Glossy, brilliant red bowls hold bright yellow stamens in early summer on compact plants, about 50cm. high. Maybe the most striking of this complex and possibly the most numerous in the wild, this is the race we grew as "*P. tenuifolia*" in our Dorset nursery years ago from seed received from what was then the Nikita Botanic Garden in Yalta.)

746.680 : PAEONIA MACROPHYLLA (*P. wittmanniana* complex) Georgia, Bakhmaro area. Woodland. (A little cultivated seed of this rather distinct plant grown from wild-collected stock in the Bakuriani botanic garden. Creamy white flowers.)

746.700 : PAEONIA MASCULA (subsp. *mascula*)

746.705 : PAEONIA MASCULA (subsp. *mascula*) Cyprus, Mt. Olympus. Ex A. King 216.

746.706 : #PAEONIA MASCULA (subsp. *mascula*) Cyprus, Mt. Adhelfi. Ex A. King 224. (A big robust plant, which Mike Sinnott, currently working on a Kew Monograph of *Paeonia*, considers may have some affinities to *P. kesrouanensis* from the adjacent Syrian mainland, though, unlike it, this has tomentose carpels. Plants from this island have always been placed under *P. mascula*. Almost blue-tinged, hairless foliage, cut into few segments & magnificent rosy-pink flowers.)

746.707 : PAEONIA MASCULA (subsp. *mascula*) Greece, Samos. Ex a D.M. Hoskins coll.

746.708 : # PAEONIA MASCULA (subsp. *mascula*) 2 pictures Yugoslavia, Crna Gora (Montenegro). A widespread species, occurring sporadically through southern Europe. Hairless foliage, cut into very few segments & magnificent large, rosy-red flowers. [# 2nd picture](#)

746.709 : PAEONIA MASCULA (subsp. *mascula*) Italy, 30km. W of Parma. W.McLewin coll.

746.750 : PAEONIA MASCULA (subsp. *mascula*) No data. A widespread species, occurring sporadically through southern Europe. Hairless foliage, cut into very few segments & magnificent large, rosy-red flowers.

746.800 : PAEONIA MASCULA subsp. ARIETINA Turkey, Gümü_hane, So_anli Da_lari above Bayburt. 1800m. Steep slopes, in igneous scree. (We are able to list a splendid collection of 2005 wild seed from an outstanding colony of this magnificent plant, widespread but local in E Turkey. About 50cm. tall with foliage, downy beneath, cut into many segments. Great bowls of rosy-red petals, up to 15cm. across, hold the yellow anthers surrounding the woolly white follicles.)

746.850 : PAEONIA MASCULA subsp. ARIETINA No data. The more eastern race, extending from the Balkans into Turkey. Woolly follicles & much more divided foliage, cut into narrower segments & downy on the undersides.

746.880 : PAEONIA MASCULA subsp. BODURII A recently described race, narrowly endemic to the Canakkale region in the north-western corner of Asiatic Turkey. Archibald Archive www.srgc.net

746.900 : PAEONIA MASCULA subsp. HELLENICA

746.909 : PAEONIA MASCULA subsp. HELLENICA (var. *hellenica*) Greece, no further data but possibly the Evia population. ("The large flowers...with their spreading, lightly crinkled pure white petals and red and yellow stamens, arising out of bold foliage, place it among the most beautiful of wild peonies," comment Stearn & Davis in their monograph 'Peonies of Greece'. Quite recently described, in 1977, we should prefer to have seen it placed at specific level.)

746.950 : PAEONIA MASCULA subsp. HELLENICA var. ICARICA

746.951 : PAEONIA MASCULA subsp. HELLENICA var. ICARICA Greece, Ikaria, foothills of Atheras. 400-650m. On schist. (Endemic to the island of Ikaria, where it grows in mixed deciduous and *Abies* woodland, and distinguished from the type race by the very downy undersides to the more divided foliage. Otherwise similar.)

746.960 : PAEONIA MASCULA from SICILIAN WHITES see *P. flavescens*. Italy, Sicily. Ex W. McLewin 01-08.

747.000 : PAEONIA MASCULA subsp. RUSSI Italy, Sardinia. 1050m. T. Norman coll. (1995 seed collected in May, 1996, when it was in full flower - "breathtaking" writes Tom Norman. Distinctive, smooth, red-backed foliage is usually just expanding as the glorious purple-pink, bowl-shaped flowers open. At 20-45cm. high, the dwarfest race of the *P. mascula* group.)

747.001 : PAEONIA MASCULA subsp. RUSSI Italy, Sardinia, Monti del Gennargentu. 1580m. (A beautiful subspecies from the main mountain-massif of east-central Sardinia. Distinctive, smooth, red-backed foliage, which is usually just expanding as the glorious purple-pink, bowl-shaped flowers open. At 20-45cm. high, the dwarfest race of the *P. mascula* group. Like the other Mediterranean island species, this will need a sheltered site if attempted outside in the UK.)

747.002 : # PAEONIA MASCULA subsp. RUSSI Italy, Sardinia. Ex J. Persson 92-1. ([#A beautiful subspecies.](#) Distinctive, smooth, red-backed foliage, which is usually just expanding as the glorious pink, bowl-shaped flowers open. At 20-45cm. high, the dwarfest race of the *P. mascula* group. Like the other Mediterranean island species, this will need a sheltered site if attempted outside in the UK.)

747.008 : PAEONIA MASCULA subsp. RUSSI Italy, Sicily, Etna. Ex W. McLewin 01-01

747.009 : PAEONIA MASCULA subsp. RUSSI Italy, Sardinia. Archibald Archive www.srgc.net

747.100 : PAEONIA MLOKOSEWITSCHII (*P. wittmanniana* complex) Georgia, Kakheti, Lagodekhi, near Shirati. (We have again a small quantity of seed collected in the Lagodekhi Nature Reserve by a botanist from the Georgian Academy of Sciences. This is one of the world's classic rarities and there are certainly many more plants in cultivation than in the wild. Wild collections are of importance in increasing the genetic diversity of our cultivated stock & will be of interest to enthusiasts curious to see what, if any, variation there might be from the plants we have. If you just want this for general garden purposes, choose the next)

747.109 : PAEONIA MLOKOSEWITSCHII from SELECTED EARLY YELLOW Georgia, Kakheti, Lagodekhi, near Shirati. (Some years ago we obtained a small quantity of seed collected in the Lagodekhi Nature Reserve by a botanist from the Georgian Academy of Sciences. While foliage on all is typical of this species, as we know it, the flowers on the resulting plants have been disconcertingly variable with several pinks occurring. This is one of the only two known localities for *P. mlokosewitschii*. It is also the type-locality and the only site for *P. lagodechiana*, the "pink *P. mlokosewitschii*". Our tentative conclusion that in the wild the colour-forms are mixed and that what we grow in cultivation is a garden selection, has been substantiated by Dr. Michael Almond, who has visited this colony in flower (on steep, densely wooded slopes) and has sent us photographs showing the considerable colour variation from white and pink to yellow. This seed is from own selection : a very fine, robust, early-flowering yellow with crimson-tinged filaments.)

747.110 : # PAEONIA MLOKOSEWITSCHII No data. A restricted Georgian endemic & a "a sovereign among Paeonies" according to Farrer. Few would disagree. Large, pale lemon-yellow flowers with deeper yellow stamens above 60cm. clumps of rounded, greyish-green leaves. In the soft climate of the UK, the crimson-tinted, young foliage sometimes develops early and can be scorched by cold winds but that is the fault of our climate not the species. English-grown seed, open-pollinated but any colour variation would now appear to be an inherent characteristic of the 'species'.

747.111 : PAEONIA MLOKOSEWITSCHII No data. Hand-pollinated German-grown seed from Hermann Fuchs

747.112 : PAEONIA MLOKOSEWITSCHII from SELECTED FORMS Hand-pollinated by Hermann Fuchs

747.150 : PAEONIA OFFICINALIS (subsp. *officinalis*) Croatia, Istria. We are told this is a very fine pink form of this variable South European species. We have tentatively placed this under the type race until we can see the foliage & flowers.

747.150 : PAEONIA OFFICINALIS (subsp. *officinalis*) France, Drome valley

747.151 : PAEONIA OFFICINALIS (subsp. *officinalis*) France, Alpes-Maritimes, Caussols. (The type-race of this splendid species, which is distinct in its very deeply divided foliage. Big deep-pink to red, single flowers in late spring.)

747.160 : PAEONIA OFFICINALIS (subsp. *officinalis*) Italy, Trentino-Alto Adige, Monte Baldo. From a fine pink selection of this variable S European species, originally made in the wild. Seedlings will vary but should all be worthwhile.

747.210 : PAEONIA OFFICINALIS subsp. BANATICA No data. This eastern race, mainly from Romania but extending into E Hungary & E Serbia, is sufficiently distinct to be recognized at subspecific level in 'Flora Europaea', keyed out on the much less divided foliage. Deep red, bowl-shaped flowers hold the multitude of stamens with red filaments.

747.310 : PAEONIA OFFICINALIS subsp. HUMILIS No data. The peony of the Pyrenees & much of N Spain with smooth follicles & only slightly downy stems. Archibald Archive www.srgc.net

747.510 : PAEONIA OFFICINALIS subsp. VILLOSA No data. Predominantly a central Italian race distinct in its felty stems & petioles and downy follicles. All these races of *P. officinalis* tend to intergrade somewhat in nature but individual populations are usually distinct as garden-plants, varying in height & time of flowering as well as in their colour & general aspect. The species is a plant of continental climates & tends to be easier & more reliable in cold areas than the Mediterranean species.

747.659 : PAEONIA PARNASSICA Greece, Fokida, Oros Parnassos. 1300m.

747.701 : PAEONIA PEREGRINA Macedonia

747.702 : PAEONIA PEREGRINA Greece. Ex R.& R.Wallis 01-

747.720 : ###PAEONIA PEREGRINA from ROMANIAN FORM (*P. romanica*) No data. From the eastern end of the species distribution but it unlikely to differ substantially from other races of this magnificent plant, which does not vary greatly over its wide range, from Italy through the Balkans. One of the most distinct & spectacular in the genus with large, glossy flowers in eye-burning scarlet over deeply cut, shiny, bright-green foliage. Usually trouble-free in UK gardens.

747.800 : PAEONIA RHODIA

747.808 : PAEONIA RHODIA Greece, Rhodes. Ex a P.& P.Watt coll.

747.809 : PAEONIA RHODIA Greece, Rhodes.

747.819 : PAEONIA RUPRECHTIANA Georgia, Borjomi. Ex W.McLewin.

747.820 : PAEONIA RUPRECHTIANA No data. (Seed from M. Tucker ex P.J. Christian stock.) Local, Caucasian population in the *P. mascula* complex.

747.830 : PAEONIA RUSSI Italy, Sardinia. 1050m. T. Norman coll. (1995 seed collected in May, 1996, when it was in full flower - "breathtaking" writes Tom Norman. Distinctive, smooth, red-backed foliage is usually just expanding as the glorious purple-pink, bowl-shaped flowers open. At 20-45cm. high, the dwarfest race of the *P. mascula* group.)

747.831 : PAEONIA RUSSI Italy, Sardinia, Monti del Gennargentu. 1580m. (A beautiful subspecies from the main mountain-massif of east-central Sardinia. Distinctive, smooth, red-backed foliage, which is usually just expanding as the glorious purple-pink, bowl-shaped flowers open. At 20-45cm. high, the dwarfest race of the *P. mascula* group. Like the other Mediterranean island species, this will need a sheltered site if attempted outside in the UK.)

747.932 : PAEONIA RUSSI Italy, Sardinia. Ex J.Persson 92-1 (A beautiful subspecies. Distinctive, smooth, red-backed foliage, which is usually just expanding as the glorious pink, bowl-shaped flowers open. At 20-45cm. high, the dwarfest race of the *P. mascula* group. Like the other Mediterranean island species, this will need a sheltered site if attempted outside in the UK.)

747.838 : PAEONIA RUSSI Italy, Sicily, Etna. Ex W. McLewin 01-01

747.839 : PAEONIA RUSSI Italy, Sardinia.

747.845 : PAEONIA SINJIANGENSIS China, Xinjiang. (Described from the wooded valleys of the Tien Shan in N Xinjiang but placed under widespread *P. anomala* subsp. *anomala* in the recent account of this genus in 'Flora of China, in which rose to red *P. anomala* is considered to include a variable agglomeration of populations, including *P. veitchii*.)

747.850 : PAEONIA STEVENIANA (*P. wittmanniana* complex) (possibly the same as *P.w.* var. *nudicarpa*) Georgia, Bakuriani area. (Likely to be wholly different to *P. mlokoszewitschii*. Maybe with paler flowers, just tinged with citron-yellow, holding stamens with reddish filaments, over larger, more wrinkled foliage. Will McLewin thinks these may give deeper yellows than *P. mlokoszewitschii*. We still know little of the variation of these Caucasian populations & suspect that Russian 'splitting' is justified.)

747.851 : PAEONIA STEVENIANA A high altitude form coll. at 2000m. in the Caucasus of SE Georgia.

747.852 : PAEONIA STEVENIANA Selected forms with reddish stems & leaves from the same 2000m. locality.

747.900 : PAEONIA TENUIFOLIA Georgia, Igoeti area. Steppe. (The different populations segregated by Russian botanists as this, *P. carthalinica* & the more western *P. biebersteiniana* & *P. lithophila* are separated on foliage characteristics, height & colour, though we doubt if the latter two features are consistent. This type-race should have rich-green, glabrous foliage, less finely cut than *P. lithophila*, & crimson flowers. This collection is from a very small isolated colony at the SE extremity of the distribution of this group & it is described by the Georgian botanist as 'scarce', which probably means that there is only a handful of plants.)

747.900 : PAEONIA TENUIFOLIA Georgia, Igoeti area. Steppe. (The crimson-flowered type-race has darker green, glabrous foliage, less finely cut than *P. lithophila*. Less vigorous & not such a good grower here as *P. lithophila*.)

747.960 : PAEONIA TOMENTOSA (*P. wittmanniana* complex) Azerbaijan, Lerik, Sinabad, Talysh. (Very little-known. Plants from seed collected in the Iranian Talysh in the 1960's (as *P. wittmanniana*) were compact with white flowers & most distinct.)

747.961 : #PAEONIA TOMENTOSA Azerbaijan. (A very little-known species. Plants from seed collected in the Iranian Talysh range, which runs from SE Azerbaijan on into Iran, in the 1960's (as *P. wittmanniana*) were compact with white flowers & most distinct. We saw yellow-flowered ones in another Iranian Talysh locality recently. This seed is from up towards Armenia, in the main body of the Caucasus, in NE Azerbaijan. Our own seedlings are as yet unflowered.)

747.980 : PAEONIA TRITERNATA Ukraine, Krim (Crimea) : see *P. daurica*. Archibald Archive www.srgc.net

748.000 : PAEONIA TURCICA (Denizli, Boz Da. (Golgeli Daglari, SW of Acipayam) above Abbas. 1500-1800m. ; Antalya, Finike, Orhan Uzunkoy)

748.009 : PAEONIA TURCICA Turkey, no further data.

748.108 : PAEONIA WITTMANNIANA Ukraine, "Mt. Alek..." , 12km. NW of Sochi.

748.109 : PAEONIA WITTMANNIANA Georgia, Abkhazia.(A little cultivated seed of this splendid pale-yellow species, core of

the complex populations of yellow and cream Caucasian peonies, collected from stocks of wild origin, growing in the Tblisi & Bakuriani botanic gardens. The natural habitat is not currently accessible due to complete anarchy prevailing in Abkhazia.)

748.110 : PAEONIA WITTMANNIANA from PINKISH WHITE FORM Seed from plants grown in Bakuriani Botanic Garden. This sounds like a natural hybrid, most likely to be with *P. caucasica*. See the last section in this list for garden hybrids.

748.150 : PAEONIA WITTMANNIANA var. NUDICARPA Turkey.

17180 : PAEONIA SP. NOV. Iran, Mazandaran, ENE of Firuzkuh. 2000m. On steep slope near tree-line in rich diversity of dense, deciduous scrub. (A very beautiful white-flowered plant from the eastern end of the Elburz, morphologically easily distinguished from the geographically closest, Azerbaijani species, *P. tomentosa* & *P. steveniana*, which grow 600km. or more to the West. Its large, pure-white flowers with cream anthers on pale-pink filaments sometimes open almost at ground-level in spring. In this, as well as in its globular flowers with glabrous carpels, it bears a some resemblance to *P. obovata* but the more mature, thin-textured foliage recalls *P. tomentosa*, though it is quite hairless beneath. A few 2006 seeds.)

709.502 : PANCRATIUM ILLYRICUM France, Corsica, Venaco, SSE of Corte. c.500m. Ex an A. Edwards coll. (A splendid bulb in *Amaryllidaceae*, endemic to Corsica & Sardinia. Slow from seed but hardy in the UK : we grew it for many years outside in Dorset. Its spectacular umbels of exquisitely sweet-scented, white 'lilies' on 30cm. stems never fail to draw attention.)

709.503 : PANCRATIUM ILLYRICUM France, Corsica, below Speluncato (off D663). c.300m. In humus-filled rock-fissures along stream-bank. D.M.Hoskins 05-01.

709.504 : PANCRATIUM ILLYRICUM France, Corsica, near Navaccia. c.550m. Among grass beside stream. D.M.Hoskins 05-09

749.602 : PANCRATIUM MARITIMUM

751.109 : PAPAVER APOKRINOMENON Turkey, Aksehir, Sultan Dag. 2200m.

751.150 : PAPAVER ATLANTICUM

751.202 : PAPAVER BRACTEATUM Turkey, Hakkari, W of Semdinli. 1600m. Steep, stony slopes. (Sumptuous, big oriental poppies in crumpled scarlet silk with glossy black centres, on bristly 60cm. stems from stout, perennial clumps.)

752.000 : PAPAVER KERNERI Italy, Trentino-Alto Adige, Dolomiti, below Passo di Gardena. 1700m. Loose, limestone scree.

752.100 : PAPAVER LATERITIUM Turkey, Rize, above İkizdere to Ovit Dag. 2000m. Stony meadows & among rocks near stream. (A very local Turkish endemic, only known from the watershed at the headwaters of the Coruh, but an easily grown garden-plant. Stoloniferous, perennial clumps of cut, hairy leaves send up a translucent, soft-orange poppies on 50cm. stems)

752.119 : PAPAVER LISAE Russia, Caucasus, Kabardino-Balkaria. Archibald Archive www.srgc.net

752.250 : PAPAVER ORIENTALE Turkey, Kars, Aras valley between Karakurt & Kagizman. 1500m. Steep, loose, igneous slopes.

752.300 : PAPAVER PAUCIFOLIATUM Turkey, Kars. From an E. Pasche coll. (AHEP 83-65). (A slightly more slender version of *P. orientale* with unblotched, brick-red flowers. A Transcaucasian plant, just entering Turkey in the NE corner.)

752.301 : PAPAVER PAUCIFOLIATUM Turkey, Ardahan, Yalnizçam Da. lari. 2400m. Open, stony slope. (A dwarfer, slightly more slender version of *P. orientale* with unblotched, brick-red flowers on erect 60cm. tall stems from soundly, perennial clumps of greyish, bristly, cut foliage. A Transcaucasian plant, just entering Turkey in this NE corner.)

752.500 : PAPAVER RHAETICUM France, Vaucluse, Le Mont Ventoux. 1800m. Loose, limestone talus. (From both the coppery orange (f. *aurantiacum*) & lemon-yellow forms of this delightful, perennial alpine poppy, forming cushioned tufts, up to 30cm. across, with a succession of silky-petalled flowers on 10 cm. stems. Can be sown where it is to grow in a scree-bed.)

752.550 : PAPAVER RHOEAS Greece, Crete, Rapaniana near Platanias. Ex M. Jope 95-35 (Glorious scarlet annual.)

752.560 : PAPAVER RHOEAS - MOTHER OF PEARL A pale flowered strain developed by Cedric Morris - some lovely things in soft, silvery shades and pearly pinks. An easy hardy annual - sow it where you want it to grow (100+)

752.604 : PAPAVER SPICATUM (var. *spicatum*) (*P. heldreichii*) Turkey, Afyon, Sandikli, Ak Da. 1500m. Ex J. Persson 94-118.

752.605 : PAPAVER SPICATUM (var. *spicatum*) (*P. heldreichii*) No data. An aristocratic endemic of the SW Turkish limestones and a long-lived perennial - Jack Elliott still grows plants raised from a Paul Furse collection made in the 1960's. Clumps of grey-white, hairy foliage send up 1m. high racemes of delicate, soft-apricot flowers from silvery buds. Unlike many poppies it is very shy in producing seed in cultivation, which probably accounts for the fact it remains so little-known in gardens.

752.700 : PAPAVER SYRIACUM Turkey, Adana, Nur Da. above Hasanbeyli. 1150m. N. Stevens coll., June, 1997 (A most striking poppy which proved irresistible to Norman. Possibly a form of this 30cm., annual species native from the Amanus S into W Syria. The rich crimson flowers have spectacular peacock-feather blotches of black topped with a broad white band.)

754.010 : PARADISEA LILIASTRUM No data. A very beautiful, graceful native of the European Alps with tufts of linear, basal leaves & one-sided racemes of large, pure-white, lily-like, green-tipped trumpets carried on stems of about 50cm. in summer. A meadow-plant, which is no great trouble to grow in an open site in the garden in the UK but is very seldom seen.

754.210 : PARADISEA LUSITANICA No data. From the wet, mountain meadows & marshes of N Portugal & W central Spain, this is a much more robust version of the graceful inhabitant of alpine meadows, *P. liliastrium*. Stout stems can exceed 1m. in height & carry denser racemes of up to 25 white, campanulate flowers. An open site in decent soil will suit it in the UK.

758.000 : PELARGONIUM ENDLICHERIANUM Turkey, Artvin, E of Yusufeli, Coruh gorge. 600m. Loose, igneous scree on steep, open slope. (9959 : 22.7.88)

758.001 : #PELARGONIUM ENDLICHERIANUM Turkey, Erzincan, E of Refahiye. 1500m. Igneous scree. (This & the next are extraordinary, disjunct relicts stranded in Turkey, thousands of miles from their nearest relatives in Sect. *Jenkinsonia*, in the Cape. Local but widespread from Mugla in the SW to the Coruh valley on the Georgian border. Butterfly-like flowers with two large, upper petals are usually magenta. This is from a bright-pink form with crimson veins. Spectacular in the bulb-frame, creating a brilliant patch of colour in mid-summer, Absolutely temperature-hardy & possible outside in the UK in a very sunny, dry site.)

758.100 : #PELARGONIUM QUERCETORUM Turkey, Hakkari, S of Hakkari. 1300m. Limestone scree on steep E-facing slope with *Quercus*. (A much larger plant, about 60cm. high, with rounded, lobed, soft, green leaves & crown-like umbels of brilliant sugar-pink flowers. Discovered quite recently in N Iraq this just creeps into SE Turkey in the Zap gorge. Our stock grew well at the base of a S-facing wall in Dorset, UK, but we grow it here with protection. A local plant in nature & rare in cultivation.)

760.160 : PETROCOPTIS PSEUDOVISCOSE Spain, Huesca, Rio Esera (? Esca) valley. 800-1000m. Crevices on vertical, limestone cliffs. Ex a H. & W. Bevington coll. (Only described in the 1970's, this is an excellent alpine-house plant, typical of this small genus of local chasmophytes in *Caryophyllaceae*, distributed through the limestones of N Spain & the Pyrenees. A woody-based perennial forming loose mounds, up to 30cm. across, of glaucous basal rosettes. Stems, 10-15cm. high, carry cymes of white flowers over a long period in late spring. Still little-known in cultivation but, according to two specialists, "reliably floriferous" in scree or a trough in the UK.)

760.190 : PETROCOPTIS PYRENAICA France, Pyrenees-Atlantiques, E of Gourette. 1700m. Crevices & fissures on limestone cliffs.

761.000 : PETROMARULA PINNATA Greece, Crete, Hania, Platanias. Ex M Jope 95-50 (One of the strangest Cretan endemics, a monotypic genus of the *Campanulaceae*, perhaps nearest to *Asyneuma* or *Phyteuma*, only found on the island's limestone cliffs. Saxatile it may be but it is too tall for most rock-gardeners & is most likely to appeal to hardy-plant enthusiasts, growing it in a raised-bed or other well-drained site, where it seems hardy & accommodating. Robust rosettes of deeply cut, long-stalked, smooth, dark leaves produce a stem almost 1m. high with a few side-branches - "practically from top to bottom this is one mauve raceme of hundreds of small starry flowers - the effect is striking, as they all seem to open at once" wrote Peter Davis.)

764.800 : PHELYPAEA COCCINEA Iran, Kordestan, ESE of Sanandaj. 2000m. Steep, loose, rocky slopes with diverse steppe-vegetation. (The ultimate leafless parasite : the whole visible plant, mainly composed of a low cluster of huge, black-throated 'gloxinia'-like flowers on short, 10-20cm. fleshy stems, is intense scarlet. This species is parasitic only on *Centaurea*, so, if you do not have a host, rush out to buy a perennial one from a garden centre. Fritz Kummert told us he grew this successfully many years ago in Austria and, more recently, Norman Stevens grew it so successfully from our 2000 Iranian coll. that it set seed. Norman used big, robust *C. macrocephala* as a host. *C. bella* or *C. simplicicaulis* might be closest to its Iranian victim. The first time this is exhibited it will blow the RHS committee away but we don't think it will ever get an AGM.)

766.150 : PHLOMIS CRINITA Coll. Sierra Nevada, 1991

774.150 : PIMPINELLA BICKNELLII No data. A neat, small, Mallorcan endemic member of the *Umbelliferae*, rather distinct and can be placed in the monotypic genus *Spiroceratium*. Fascinating, deep-green foliage, divided & toothed, & umbels of pale-purple to white flowers on 30 cm. stems from a stout perennial rootstock. Archibald Archive www.srgc.net

774.950 : PIMPINELLA MAJOR from PINK FORM From a pink form, grown as 'Rosea', of this perennial member of the *Umbelliferae*, native from Britain across Europe to the Caucasus. We are unwilling to use the name *P.m.* var. *rubra*, other than for wild collected material from the central European ranges, but this may fit in to it as it is fairly dwarf at about 50cm. Dark green, pinnate foliage, with rounded, toothed segments, and raspberry pink umbels in summer. Easy in any good, moist soil.

780.850 : POLYGONATUM GLABERRIMUM

780.900 : POLYGONATUM HIRTUM

781.000 : POLYGONATUM JACQUINII

781.100 : POLYGONATUM MULTIFLORUM ROSEUM

781.200 : POLYGONATUM ODORATUM

781.300 : POLYGONATUM ORIENTALE

781.320 : POLYGONATUM ROSEUM No data. A Siberian Solomon's Seal, distributed from Central Asia into W. China. Stems about 50cm. tall with erect, tubular, usually paired, soft-pink flowers in the axils of the linear leaves, which can be alternate, opposite or whorled. A very hardy plant for rich soil in semi-shade.

781.340 : POLYGONATUM SEWERZOWII

781.400 : POLYGONATUM VERTICILLATUM

784.100 : POTENTILLA NITIDA Slovenia, Julijske Alpe, Mangrt. 2200m. Turfy pockets on limestone.

784.101 : POTENTILLA NITIDA Italy, Veneto, Dolomiti, SE of Tre Cime de Lavaredo. 2300m. Exposed gravelly slopes & dolomite crevices.

784.121 : POTENTILLA NITIDA No data. From the splendid selection 'Rubra' with rich, deep pink flowers, exquisitely studding

tight pads of silvered foliage. An endemic of the limestones of the E Alps & one of the loveliest European alpine.

- 784.950 : PRIMULA AFGHANICA** (Sect. *Sphondylia*) (Endemic to Afghanistan : Nuristan, Nishei & Vama (with *P. edelbergii* but at higher altitudes) on wet, N-facing cliffs, under limestone overhangs, 1400-2700m.)
- 785.000 : PRIMULA ALGIDA** (Sect. *Aleuritia*) Turkey, Van, Ispiriz Daglari, NNW of Baskale. 2800m. Short turf in moist alpine meadows.
- 785.001 : PRIMULA ALGIDA** (Sect. *Aleuritia*) Turkey.
- 785.002 : PRIMULA ALGIDA** (Sect. *Aleuritia*) China, Xinjiang, Borohoro Shan, Bayangol Kuytun He valley, 60km. N of Kuytun. T. Dickerson 94/52
- 785.100 : PRIMULA ALLIONII** (Sect. *Auricula*)
- 785.150 : PRIMULA AMOENA** (*P. elatior*. subsp. *meyeri*) (Sect. *Primula*) Turkey, Rize, Ovit Dag. 3000m. Cool slopes, on cliff- ledges, usually in turf among stones. (Classiest of its section, choice, beautiful and seldom offered commercially but not an easy plant to cultivate. Sufficiently growable, however, to deserve the attention of everyone who gardens in a cool, temperate climate & can provide the well-drained, rich, acid soil which it likes. Umbels of intense red-violet flowers in this locality. Reduced to a subsp. of *P. elatior* in 'Flora of Turkey' but gardeners would do better to forget this : it is not just an oxlip with purple flowers nor indeed can it be treated like one in gardens. Not to be missed if think you can grow it.)
- 785.152 : PRIMULA AMOENA** (*P. elatior*. subsp. *meyeri*) Turkey, Trabzon, Soganli Daglari, above Caykara. Turf-filled ledges on rocky outcrops, on steep, N-facing meadows.
- 785.200 : PRIMULA APPENINA** (Sect. *Auricula*)
- 785.301 : PRIMULA AURICULA var. ALBOCINCTA** (Sect. *Auricula*) Italy, Lombardia, Monte Tremalzo. 1800m. Fissures in N & W-facing limestone cliffs. P.& P.Watt coll. (White-edged, greyish leaves & big yellow flowers with round 'eyes' of white meal.)
- 785.600 : PRIMULA AURICULATA** (subsp. *auriculata*) (Sect. *Oreophlomis*) Turkey, Van, NNW of Baskale. 2800m. Wet gulleys.
- 785.601 : PRIMULA AURICULATA** (subsp. *auriculata*) (Sect. *Oreophlomis*) Turkey, Agri, Sac Gecidi, W of Eleskirt. 2300m. Moist hay meadow.
- 785.602 : PRIMULA AURICULATA** (subsp. *auriculata*) (Sect. *Oreophlomis*) Turkey, Van/Agri, NW of Ercis, above Kocapinar. 1800m. Wet meadow.
- 785.603 : PRIMULA AURICULATA** (subsp. *auriculata*) (Sect. *Oreophlomis*) Turkey, Rize, Kaçkar Da_lari SE of Çamlıhem_in. 2200m. Wet grassland. (A dainty, widespread & extremely variable species distributed from Turkey through Transcaucasia & N Iran. Heads of lilac-pink flowers on stems which reach 30cm. or more in seed.)
- 785.650 : PRIMULA AURICULATA subsp. OLGAE** (Sect. *Oreophlomis*) (Pamirs & Tien Shan)
- 785.660 : PRIMULA AURICULATA subsp. PYCNORHIZA** (Sect. *Oreophlomis*) (Caucasus)
- 785.680 : PRIMULA AURICULATA subsp. TOURNEFORTII** (Sect. *Oreophlomis*) (Transcaucasia & N Iran)
- 785.681 : PRIMULA AURICULATA subsp. TOURNEFORTII** (Sect. *Oreophlomis*) Iran, Mazandaran, Elburz Mts., Kandavan pass, north side. 2500m. Among grasses in wet-flush. (A dainty N Iranian & Transcaucasian race of this widespread & extremely variable species. Heads of lilac-pink flowers on stems which reached 30cm. in seed. This is from the opposite side of the Kandevan pass to the population which Schwarz described from our 1966 coll. as *P. archibaldii*, now merged into this subspecies.) Archibald Archive www.srgc.net
- 785.730 : PRIMULA BALDSCHUANICA** (Sect. *Aleuritia*) (Tadjikistan, Uzbekistan (E Bokhara, Zeravschan) & E Afghanistan.)
- 785.750 : PRIMULA BOVEANA** (Sect. *Sphondylia*) (Endemic to Egypt, Sinai, Jebel Katarina at 2600m.)
- 785.780 : PRIMULA CAPITELLATA** (Sect. *Aleuritia*) (Iran, from Elburz S & E to Afghanistan & Pakistan (Kurram & Chitral).)
- 785.800 : PRIMULA CARNIOLICA** (Sect. *Auricula*)
- 785.880 : PRIMULA CHRYSOSTOMA** (Sect. *Armerina*) (Endemic to Afghanistan, Wakhan corridor, E from Quazi-Deh, between 2900 & 3500m. in wet, grassy meadows.)
- 785.900 : PRIMULA CLUSIANA** (Sect. *Auricula*)
- 785.940 : PRIMULA CORTUSOIDES** (Sect. *Cortusoides*) (Extends from W slopes of the Urals through Irkutsk & Tomsk regions, Altai, Mongolia (Ala Shan), Manchuria, N Korea & N China (Gansu, Shanxi).)
- 785.980 : PRIMULA CRASSIFOLIA** (*P. bayernii*) (Sect. *Crystalllophlomis*) (Endemic to central Caucasus : Arkhot range ; Zei glacier & Salfidar valley ; Kasbek, Mt. Tschanchi. Moraines & glacier mlt areas at 2000-3000m.)
- 786.000 : PRIMULA DAONENSIS** (Sect. *Auricula*) Italy, Lombardia, Passo di Croce Domini. 1900m. Schistic debris between rocks. P& P.Watt coll. (A rare species, almost restricted to this small area NW of Lake Garda. Near *P. hirsuta* but with taller stems carrying the rose-pink flowers & red glands giving the leaves a rusty tinge.)
- 786.050 : PRIMULA DARIALICA** (Sect. *Aleuritia*) (Endemic to central & eastern Caucasus on moist shaded rocks, 300-900m.)

- 786.100 : PRIMULA DAVISII** (Sect. *Sphondylia*) Turkey, Zab gorge below Hakkari. 1300m. Fissures in shady, E & NE-facing limestone cliffs.
- 786.150 : PRIMULA DENTICULATA** (Sect. *Denticulata*) (Afghanistan, Hindu Kush, E to Yunnan.)
- 786.200 : PRIMULA DEORUM** (Sect. *Auricula*)
- 786.230 : PRIMULA DUECKELMANII** (Sect. *Cortusoides*) (Endemic to Afghanistan, Wakhan corridor.)
- 786.260 : PRIMULA EDELBERGII** (Sect. *Sphondylia*) (Afghanistan in two localities : Kabul, Tang-e-Gharu ; Nuristan, Vama. 600-2100m.)
- 786.280 : PRIMULA EGALIKSENSIS** (N Iceland, otherwise Greenland to Alaska, S to Colorado : see N American entries.)
- 786.300 : PRIMULA ELATIOR** (subsp. *elatior*) (Sect. *Primula*)
- 786.340 : PRIMULA ELATIOR subsp. CORDIFOLIA** (Sect. *Primula*) (Caucasus & Armenia.)
- 786.360 : PRIMULA ELATIOR subsp. INTRICATA** (Sect. *Primula*) (S European ranges.)
- 786.400 : PRIMULA ELATIOR subsp. LEUCOPHYLLA** (Sect. *Primula*) (Roumania, E Carpathians & Caucasus.)
- 786.450 : PRIMULA ELATIOR subsp. LOFTHOUSEI** (Sect. *Primula*) (Spain, Sierra Nevada.)
- 786.500 : PRIMULA ELATIOR subsp. PALLASII** (Sect. *Primula*) (Turkey, N Iran, Urals, Altai, E Siberia.)
- 786.500 : PRIMULA ELATIOR subsp. PALLASII** (Sect. *Primula*) Turkey, Artvin, Genya Dag above Artvin. 1700m. Open summit meadows & woodland margins. (The most eastern race of this widespread species, the oxlip. Generous with its umbels of drooping, pale-yellow flowers on 15cm stems, above smooth, toothed leaves in early spring.)
- 786.501 : PRIMULA ELATIOR subsp. PALLASII** (Sect. *Primula*) Iran, Gilan, Talesh, between Asalem & Khalkhal. 2000m. Grazed alpine turf. (The most eastern race of this widespread species, the oxlip. Umbels of drooping, pale-yellow flowers above smooth, toothed leaves.)
- 786.550 : PRIMULA ELATIOR subsp. PSEUDOELATIOR** (Sect. *Primula*) (NE Turkey, Caucasus.)
- 786.570 : PRIMULA EUGENIAE** (Sect. *Cortusoides*) (Endemic to Kirghizstan, Alai mts., Fergana range, Baubash-Ata at 3700-4000m. in marble rock crevices. Related to *P. kaufmanniana* but only member of the section with sulphur-yellow flowers.)
- 786.580 : PRIMULA EXIGUA** (Sect. *Aleuritia*) (Endemic to SW Bulgaria : Vitosha, Rila, Pirin & Rhodope.)
- 786.600 : PRIMULA FARINOSA** (Sect. *Aleuritia*)
- 786.650 : PRIMULA FEDTSCHENKOI** (Sect. *Fedtschenkoana*) (Summer-dormant. Endemic to Uzbekistan : Samarkand & Bokhara regions on mountain slopes, sometimes amongst junipers, and along the banks of streams, between 700m. & 2600m.)
- 786.680 : PRIMULA FLEXUOSA** (Sect. *Oreophlomis*) (Uzbekistan : near Bokhara : Gorno-Badakhshan, Shugnan, Pialandvun pass. Tadjikistan. Rock ledges & grassy mountain slopes at 3200m. Related to *P. elliptica* with rose flowers.)
- 786.710 : PRIMULA FRONDOSA** (Sect. *Aleuritia*) No data. Endemic to NE Bulgaria, Stara Planina, on shady cliffs near melting snow. Archibald Archive www.srgc.net
- 786.750 : PRIMULA GAUBANA** (Sect. *Sphondylia*) (Iran, Lorestan. Known from five sites. 600-1500m.)
- 786.780 : PRIMULA GERANOPHYLLA** (Sect. *Cortusoides*) (Endemic to dry, open woodland between 1000 & 2400m. in Tadjikistan & Uzbekistan. Purple-flowered, aestivating version of *P. lactiflora*.)
- 786.800 : PRIMULA GLAUDESCENS** (Sect. *Auricula*) Italy, Lombardia, Passo di Croce Domini. 1900m. Alpine turf on steep, limestone slopes, stepped by solifluction & grazing.
- 786.850 : PRIMULA GLAUDESCENS subsp. CALYCINA** (Sect. *Auricula*)
- 786.900 : PRIMULA GLAUDESCENS subsp. LONGOBARDA** (Sect. *Auricula*)
- 787.000 : PRIMULA GLUTINOSA** (Sect. *Auricula*)
- 787.200 : PRIMULA HALLERI** (Sect. *Aleuritia*)
- 787.300 : PRIMULA HIRSUTA** (Sect. *Auricula*)
- 787.400 : PRIMULA ILJINSKII** (Sect. *Armerina*) (Tadjikistan in the Pamir-Alai to adjacent W Tibet.)
- 787.500 : PRIMULA INTEGRIFOLIA** (Sect. *Auricula*)
- 787.580 : PRIMULA JULIAE** (Sect. *Primula*) (E Caucasus : Georgia (Lagodekh gorge), Ossetia, Dagestan (Pala-Kata gorge), Azerbaijan (Nukha district, Damir, Aporon -Chai gorge). Wet, mossy rocks in montane forest, 700-1800m.)
- 787.600 : PRIMULA KAUFMANNIANA** (Sect. *Cortusoides*) (Fairly widespred from the Pamirs, NW through the Ala-Tau in Tadjikistan to Bokhara in Uzbekistan, then NE through Kirghizstan in the Tass Alau & Altau to the E Tien Shan. Between 1000 & 3700m. in the subalpine and upper forest zones.)
- 787.700 : PRIMULA KITAIBELIANA** (Sect. *Auricula*)

- 787.730 : PRIMULA KNORRINGIANA** (Sect. *Armerina*) (Endemic to the Tien Shan & Ala-Tau, above Tekes valley, in wet alpine pastures. Close to *P. involucrata* with smaller, white, yellow-eyed flowers.)
- 787.760 : PRIMULA LACTIFLORA** (Sect. *Cortusoides*) (Endemic to Pamir-Alai of Tadjikistan & S Kirghizstan N to Fergana. More delicate & slender version of *P. kaufmanniana* with white flowers with violet tubes.)
- 787.800 : PRIMULA LATIFOLIA** (Sect. *Auricula*) France, Alpes-Maritimes, Vallon de Casterine. 1700m. N-facing siliceous rock-crevices
- 787.901 : PRIMULA LATIFOLIA** (Sect. *Auricula*) France, Savoie, Col du Petit Mt. Cenis. 2000m. Crevices in granitic rocks. P.& P.Watt coll. (This is the many-flowered race with small, rounded, barely toothed leaves (f. *cynoglossifolia*) of the western Alps, occurring here in especially fine violet-blue forms.)
- 788.000 : PRIMULA LATIFOLIA (f. GRAVEOLENS)** (Sect. *Auricula*)
- 788.101 : PRIMULA LATIFOLIA (f. PYRENAICA)** (Sect. *Auricula*)
- 788.200 : PRIMULA LONGIPES** (Sect. *Crystallophlomis*) Turkey, Rize, Ovit Dag. 3000m. Shady rock crevices, bases of N-facing cliffs & in turf on rocks in melt-water streams. (A very local, high-alpine, Turkish endemic & one of the most beautiful of the Nivalid primulas, a group renowned for its aristocratic bearing and intractable temperament. Heads of exquisite, white-eyed flowers in soft lavender-blue to lilac-pink. If you garden has snow-cover for 7 months and a good supply of glacier water in summer, this is definitely your sort of plant. Otherwise, try air-conditioning & ice-cubes.) Archibald Archive www.srgc.net
- 788.250 : PRIMULA LONGISCAPA** (Sect. *Aleuritia*) (E Transylvania, Siberia, Altai to NW Mongolia. Close to *P. algida*.)
- 788.300 : PRIMULA LUTEOLA** (Sect. *Oreophlomis*) (Endemic to Daghestan : NE Caucasus on the pass between Kidero & Kituri in wet meadows between 1400m. & 3000m. Robust, yellow-flowered version of *P. auriculata*.)
- 788.350 : PRIMULA MACROPHYLLA** (Sect. *Crystallophlomis*) (Tadjikistan & Pamirs to Chitral, Karakoram, Kashmir, Ladakh, Garhwal, Hazara, Simla, Kamaon, W Nepal, Sikkim, Bhutan & SE Tibet. Usually by streams or melting snow at 3550-5400m.)
- 788.370 : PRIMULA MACROPHYLLA var. PULVEREA** (Sect. *Crystallophlomis*) (Eastern Pamirs. Usually by streams or melting snow at 3550-5400m. Heavily cream-mealy.)
- 788.400 : PRIMULA MARGINATA** (Sect. *Auricula*)
- 788.800 : PRIMULA MEGASEIFOLIA** (Sect. *Primula*)
- 788.900 : PRIMULA MINIMA** (Sect. *Auricula*) Italy, Veneto, Dolomiti, SE of Tre Cime de Lavaredo. 2300m. In turf on open, W-facing slope.
- 788.960 : PRIMULA MINKWITZIAE** (Sect. *Cortusoides*) (Endemic to limestone crevices & screes above 3000m. in SW Kazakhstan & adjacent Kirghizstan)
- 789.000 : PRIMULA NIVALIS** (Sect. *Crystallophlomis*) (Scattered & disjunct W & N of the Tibetan Plateau : Tien Shan, Ala-Tau, Altai, Tomsk district, N Mongolia, Kamtschatka.)
- 789.000 : PRIMULA NIVALIS** (Sect. *Crystallophlomis*) Kazakhstan, Tien Shan, Alma-atinka valley, 20km. S of Almaty.
- 789.080 : PRIMULA NUTANS subsp. FINMARCHICA** (Sect. *Armerina*) (Type-race in N Asia & N America.)
- 789.090 : PRIMULA OSSETICA** (Sect. *Aleuritia*) (Endemic to Ossetia, Mt. Kariukhohk in alpine meadows. Near *P. darialica*.)
- 789.100 : PRIMULA PALINURI** (Sect. *Auricula*)
- 789.120 : PRIMULA PAMIRICA** (Sect. *Armerina*) (Tadjikistan & Kashgar in the Tien Shan & Pamir Alai to Chitral, N Pakistan. Wet alpine meadows & marshes up to 5200m. Pale violet flowers. Much stouter than *P. nutans*.)
- 789.200 : PRIMULA PEDEMONTANA** (Sect. *Auricula*)
- 789.250 : PRIMULA PEDEMONTANA subsp. IBERICA** (Sect. *Auricula*)
- 789.300 : PRIMULA RENIFOLIA** (Sect. *Primula*) (Endemic to NW Caucasus, Dombai Mts. around the Teberda valley in Cherkessk province, S of Stavropol, in wet, mossy, mixed beech & pine forest, 1200-2100m.)
- 789.320 : PRIMULA SCANDINAVICA** (Sect. *Aleuritia*) (Norway & adjacent Sweden.)
- 789.350 : PRIMULA SCOTICA** (Sect. *Aleuritia*) (Endemic to N Scotland.) Archibald Archive www.srgc.net
- 789.380 : PRIMULA SIMENSIS** (Sect. *Sphondylia*) (Ethiopian highlands with one locality in Somalia.)
- 789.400 : PRIMULA SPECTABILIS** (Sect. *Auricula*)
- 789.450 : PRIMULA STRICTA** (Sect. *Aleuritia*) Scandinavia E to Russia, Kola peninsula ; Greenland ; Canada.
- 789.500 : PRIMULA TYROLENSIS** (Sect. *Auricula*)
- 789.550 : PRIMULA VALENTINAE** (Sect. *Armerina*) (Endemic to shores of Lake Ranghul in the SE Pamir at 3790m. Near *P. pamirica* but white flowers.)
- 789.600 : PRIMULA VERIS** (subsp. *veris*) (Sect. *Primula*)

- 789.620 : PRIMULA VERIS** (subsp. *veris*) (Sect. *Primula*) Cultivated seeds of the wild English cowslip, originally derived from a Dorset population. Rosettes of wrinkled leaves & clusters of nodding, yellow flowers on 20cm. stems
- 789.650 : PRIMULA VERIS subsp. CANESCENS** (Sect. *Primula*) (Alps, Pyrenees, N Spain.)
- 789.700 : PRIMULA VERIS subsp. COLUMNAE** (Sect. *Primula*) (Central Spain, central Italy, N Greece, NE Turkey.)
- 789.750 : PRIMULA VERIS subsp. MACROCALYX** (Sect. *Primula*) (SE Russia, Caucasus, S Central Asia, extending E to Siberia.)
- 789.800 : PRIMULA VERTICILLATA** (Sect. *Sphondylia*) (Endemic to Yemen from Tanumah S to the Dhala Highlands & Saudi Arabia in the Asir mountains on wet, N-facing, limestone cliffs, 1700-4200m.)
- 789.900 : PRIMULA VILLOSA** (Sect. *Auricula*)
- 790.000 : PRIMULA VILLOSA subsp. JACQUINII** (Sect. *Auricula*)
- 790.100 : PRIMULA VILLOSA subsp. COMMUTATA** (Sect. *Auricula*)
- 790.204 : PRIMULA VULGARIS** (subsp. *vulgaris*) (Sect. *Primula*) Greece, Ioanina, E of Eptahori. Mixed woodland. (Populations of primroses in N Greece are often white-flowered rather than pale yellow but we have not seen these in flower.)
- 790.300 : PRIMULA VULGARIS subsp. ATLANTICA** (Sect. *Primula*)
- 790.330 : PRIMULA VULGARIS subsp. BALEARICA** (Sect. *Primula*)
- 790.350 : PRIMULA VULGARIS subsp. HETEROCHROMA** (Sect. *Primula*) Iran, Gilan, Talesh, above Astara. 1000m. Openings in moist deciduous woodland. (There "seems to be little news" of these Caspian primroses in cultivation, according to John Richards in his monograph of the genus. Who knows what became of the seed we collected in quantity in 1966, about 350km. east along the Caspian coast? There, lowdown near Chalus, the flowers were every shade from rich red to pink & yellow to white. We have not seen these plants from the northernmost hills of Iran in flower but they should be similarly variable & we hope this time can be established & maintained in cultivation. No reason why they should not prove reliable garden-plants in the UK.) Archibald Archive www.srgc.net
- 790.400 : PRIMULA VULGARIS subsp. SIBTHORPII** (Sect. *Primula*)
- 790.480 : PRIMULA WARSHENEWSKIANA** (Sect. *Oreophlomis*) (Endemic to Hindu Kush-Pamir massif : Tajikistan, NE Afghanistan, N Pakistan (Chitral) ; moist meadows & streamsides, 1500-2700m.)
- 790.500 : PRIMULA WULFENIANA** (Sect. *Auricula*)
- 796.910 : PTILOSTEMON AFER** (*Cirsium afrum*) The quintessence of 'thistleness'. A 1m. tall biennial from the Balkan limestones with cobwebby white stems, deeply cut spiny leaves & well-armed capitula of purple flowers.
- 797.100 : PTILOTRICHUM CYCLOCARPUM** (*Aurinia rupestris* subsp. *cyclocarpa*) Turkey, G_m_hane, Kop Da_. 2500m. Alpine steppe on open slopes. (A 10cm. tall crucifer with white flowers from neat, woody based rosettes of narrow grey leaves. When in fruit the flat, golden green seed-capsules are not the least of its attractions.)
- 800.000 : PULSATILLA ALBA** France, Hautes-Alpes, Col d'Izoard. 2400m. Stabilized scree & cliff-ledges.
- 800.001 : PULSATILLA ALBA** France, Alpes-Maritimes, above Vallon de la Gordolasque. 2000m. Ledges below N-facing granite cliffs. (In our experience, always calcifuge & extremely local, though recorded here & there from central France to Croatia. It most resembles a small, glabrous version of *P. alpina* but it is really a very distinct species indeed. Sadly this name can be found applied to a variety of white-flowered hybrids of dubious origin in gardens. The true species is choice & not at all easy in cultivation.)
- 800.100 : PULSATILLA ALBANA** (subsp. *albana*)
- 800.200 : PULSATILLA ALBANA subsp. ARMENA** (*Pulsatilla violacea*) Turkey, Gumushane, Kop Daglari. 2500m. Open, stony, Igneous slopes. Archibald Archive www.srgc.net
- 800.190 : PULSATILLA ALBANA** Iran, Gilan, Talesh, SW of Asalem. 2200m. Exposed, stony turf. (Our 2005 Iranian collection. We photographed a lilac-flowered one here in 2000 but Norman Stevens says those he has seen are yellow.)
- 800.210 : PULSATILLA ALBANA subsp. ARMENA** (*Pulsatilla violacea*) No data. Distributed in dryish, montane-steppe from NE Turkey, through Transcaucasia to NW Iran. Soft violet-blue, nodding bells on 15cm. stems. Sunny scree in UK.
- 800.300 : PULSATILLA ALPINA** Italy, Veneto, Dolomiti, Passo di Campolongo. 1800m. Meadow vegetation : open areas of short turf.
- 800.301 : PULSATILLA ALPINA** Italy, Trentino-Alto-Adige, Dolomiti, Passo di Gardena. 2000m. In meadow vegetation on steep slopes.
- 800.302 : PULSATILLA ALPINA** France, Hautes-Alpes, N of Col d'Izoard. 2200m. Open areas in coniferous forest : alkaline soil.
- 800.303 : PULSATILLA ALPINA** Italy, Lombardia, below Passo di Croce Domini. 1700m. Openings among *Larix* on steep, limestone slope.
- 800.500 : PULSATILLA ALPINA subsp. APIIFOLIA**

800.501 : PULSATILLA ALPINA subsp. APIIFOLIA France, Savoie, Col du Mont Cenis. 2000m. Among diverse meadow vegetation on open, moist slopes.

800.550 :#PULSATILLA ALPINA subsp. APIIFOLIA No data. The lovely, sulphur-yellow species of acid, peaty meadows in the Pyrenees & Alps. Finely cut foliage & large flowers open low down but by the time it is in seed, stems may be 60cm. or more. Takes time to establish & build up the long-lived clumps from seed. Be patient and leave it undisturbed.

800.570 : PULSATILLA AUREA

800.600 : PULSATILLA CAMPANELLA China, Xinjiang, Tien Shan, Urumqi valley. 2470m. Ex A. Dickerson 94-34. (A delightful Central Asian species with neat, very finely cut, basal foliage and little, drooping bells in deep violet.)

800.601 : PULSATILLA CAMPANELLA Kyrgyzstan, Talas Alatau, Kara Bura pass, S of Klyuchevka. 2350m. A. Dickerson 00-25 (A delightful, little Central Asian species with neat, very finely cut, basal foliage and drooping bells in deep violet.)

800.670 : PULSATILLA GEORGICA Russia, Upper Balkaria, Mt. Suukanskaya. 2400m. Ex J.& J.Halda 9208112. (From a collection made in the eastern Caucasus range.)

800.700 : PULSATILLA HALLERI (subsp. *halleri*)

800.730 : PULSATILLA HALLERI subsp. RHODOPAEA Greece, Drama, Falakro. *F. drenovskyi* meadow. (12023 : 9.6.90)

800.750 : PULSATILLA HALLERI subsp. SLAVICA No data. Basal leaves much woollier & much less finely cut than *P. vulgaris*. The violet-flowered, Carpathian race of this very local species with its widely isolated populations.

800.760 : PULSATILLA HALLERI subsp. SLAVICA from PALE-BLUE FORM From the exquisite & sought-after ice-blue form, which has circulated as 'Budapest'. Our current stock came from Harold McBride in N Ireland, where it has been maintained more assiduously than elsewhere. We have selected the finest pale-blue seedlings from this so that our 'strain' should be fairly well 'fixed'. Precisely what 'true' 'Budapest' was we shall never know : we have known plants grown by Jack Drake & Valerie Finnis under this name over the past 40 years & have tried to match our recollections of these..

800.780 : PULSATILLA HALLERI subsp. STYRIACA from PINK FORM No data. A pink-flowered form of the race from the Steiermark region of SE Austria. Foliage is usually somewhat larger than in *P.h.* subsp. *slavica*.

800.800 : PULSATILLA HALLERI subsp. TAURICA Ukraine, Krim. (Wild seed of the Crimean race, which opens its, usually dark violet, flowers on very short, 5cm. stems. Foliage more finely cut & woollier than other races of *P. halleri*.) . .

801.000 : PULSATILLA MONTANA Slovenia, NW of Permani. 500m. Exposed karst with diverse meadow-vegetation. (Grown in Dorset, UK, from our 1990 coll. A handsome thing with bells of intense black-violet & a cone of golden anthers.)

801.009 : PULSATILLA MONTANA No data. A handsome thing opening bells of intense black-violet with a cone of golden anthers on 15cm. stems. Distributed in steppe & dry meadow habitats from SW Switzerland across SE Europe to E Romania, this is a characteristic species of the plant-rich meadows on the exposed limestone-karsts of Slovenia.

801.200 : PULSATILLA PATENS (subsp. *patens*)

801.230 : PULSATILLA PATENS subsp. FLAVESCENS

801.250 : PULSATILLA PATENS subsp. MULTIFIDA

801.270 : PULSATILLA PATENS subsp. TEKLAE

801.410 : PULSATILLA PRATENSIS (subsp. *pratensis*) No data. Cylindrical, nodding flowers open on 10cm. tall stems, elongating to almost 50cm. in fruit above the clumps of downy, tripinnate, basal leaves. The central European type-race of this continental-climate meadow-plant is usually pale violet in colour. Archibald Archive www.srgc.net

801.450 : PULSATILLA PRATENSIS subsp. HUNGARICA No data. The variation in flower colours of this central to eastern European species is correlated with distribution & this eastern race is normally pale yellow to grey-violet.

801.480 : PULSATILLA PRATENSIS subsp. NIGRICANS

802.700 : PULSATILLA RUBRA (subsp. *rubra*)

802.709 : PULSATILLA RUBRA (subsp. *rubra*) France, Aubrac, Cascade do Deroc.

802.710 : PULSATILLA RUBRA (subsp. *rubra*) No data. A species distributed from central France to central Spain. Close to *P. montana* but with less finely cut cauline leaves and flowers in redder shades from brownish to blackish red.

802.740 :PULSATILLA RUBRA subsp. HISPANICA

802.800 :PULSATILLA SUKACZEWII (*P. tenuiloba* var. *sukaczewii*) No data. A 15cm. tall, hairy, E Siberian endemic, originally described from stony slopes in the Lake Baikal area. An eastern member of the widespread *P. albana* group with very finely cut foliage & drooping, creamy bells tinged with pale lilac externally.

801.850 : PULSATILLA TENUILOBA

802.900 :PULSATILLA VERNALIS

802.000 :PULSATILLA VULGARIS (subsp. *vulgaris*)

802.050 :PULSATILLA VULGARIS from ENGLISH FORM No data but from garden stock reputedly derived from the race

established on the downs of SE England. Dwarf & distinct with rather small, deep purple flowers.

802.060 : PULSATILLA VULGARIS subsp. GOTLANDICA Sweden, Gotland. (An isolated and disjunct population of this very variable species-complex, more closely resembling the Central European race, *P.v. subsp. grandis*, than the western type-race. Broader perianth segments to the big violet flowers, which appear before less finely cut leaves develop.)

802.100 : PULSATILLA VULGARIS subsp. GRANDIS

802.110 : PULSATILLA VULGARIS subsp. GRANDIS No data. The splendid eastern race, distributed from central Europe to the Ukraine. Its big, violet-purple goblets open before the cut leaves appear.

804.000 : PUSCHKINIA SCILLOIDES Turkey, Van, Cuh pass. 2800-3000m. Open slopes. Numerous in snow-melt.

804.001 : PUSCHKINIA SCILLOIDES Turkey, Van, Kavussahap Dag. 2900m. Steep, stony slopes below snow-patches.

804.002 : PUSCHKINIA SCILLOIDES Iran, Kordestan, S of Daraki. (17261 : 27.5.01)

804.100 : PUSCHKINIA SCILLOIDES from LARGE-FLOWERED FORM Armenia, Zangezur range, Hustup. (Utterly different to the widely cultivated stock of Lebanese origin. Like a small hyacinth with huge, widely opened flowers, each segment 2.3cm. long, on robust stems 15cm. or more high. Colour is a clean, pale blue. Seeds are derived from the largest flowered selections from an already large-flowered population, grown in isolation. They will come 'true'.)

808.000 : RAMONDA MYCONI Spain, Catalunya, Sierra de Montserrat. 900m. Cracks in part-shaded, conglomerate rocks. Ex a P. & P. Watt coll. (Hand-pollinated seeds from the 'true' *R. myconi* raised from a coll. in its isolated type-locality. It is a little different to the Pyrenean plants, which grow quite a distance away & were originally separated botanically as *R. pyrenaica*. From the gardeners viewpoint it is the most desirable form as the flowers are especially large and fine. Flat rosettes of wrinkled, hairy leaves & violet flowers with yellow anthers. This species is by far the easiest of this trio of relic members of the *Gesneriaceae* & the best for garden-purposes, unrivalled in a N-facing dry-stone wall. Though utterly hardy, these have not forgotten their tropical ancestry & are best raised from their very fine seeds sown uncovered on the surface of a sterile, peaty soil, in gentle warmth, watered from below, and covered with a pane of glass or kept in a plastic bag.)

808.020 : RAMONDA MYCONI No data. From several forms of this beautiful Pyrenean endemic, with its flat rosettes of wrinkled, hairy leaves, including whites & pinks, as well as the classic violet one. By far the easiest of this trio of relic members of the *Gesneriaceae* & the best for garden-purposes, unrivalled in a N-facing dry-stone wall. Though utterly hardy, these have not forgotten their tropical ancestry & are best raised from their very fine seeds sown, like *Rhododendron*, uncovered on the surface of a sterile, peaty soil, in gentle warmth, watered from below, and covered with a pane of glass or kept in a plastic bag.) (100+)

808.021 : RAMONDA MYCONI from WHITE FORM

808.022 : RAMONDA MYCONI from PINK FORM

808.200 : RAMONDA NATHALIAE Greece, Imathia, Oros Vermio above Naoussa. 1200m. N-facing limestone outcrop. (Usually rated as the best of this small genus - "it wipes out all the rest" writes Farrer. Comparisons are unjust but still a magnificent plant with wrinkled, glossy leaves & usually (not invariably) 4-lobed flowers in lilac with orange-yellow centres.)

808.210 : RAMONDA NATHALIAE No data. (Ex A. Edwards ex Tim Ingram) Archibald Archive www.srgc.net

808.401 : RAMONDA SERBICA Greece, Ioanina, Farangi Vikou. 800m. Limestone fissures. (Least well-known & reputedly the most temperamental of the three species in cultivation. Usually considered to be best grown in the alpine-house in shade though this seed is from plants, growing happily here in a trough outside in a NW-facing corner. Rosettes of rather greyish, hairy leaves & more bell-shaped, violet flowers, approaching those of *Jankaea* in form, with distinctive dark purple anthers.)

809.500 : RANUNCULUS ABNORMIS Spain, Avila, Sierra de Gredos, NE of Pico Almanzor. 1800m. Among rocks in melt-water gulleys. (A beautiful, tuberous-rooted species, which goes dormant as the ground dries in summer. Branching, 10cm. stems with many varnished, lemon-gold buttercups, each with up to 10 'petals', from tufts of grassy foliage. Choice & delicate but not difficult with some care. It fits in well with alpine-house 'bulbs', though it may resent complete dehydration in summer.)

810.000 : RANUNCULUS ACETOSELLIFOLIUS Spain, Granada, Sierra Nevada, towards Pico del Veleta. 2800m. Snow-melt gulleys on exposed schist slopes.

811.000 : RANUNCULUS ALPESTRIS Austria, Salzburg, Hohe Tauern, Hochtor. 2500m. Stony, turfy depressions on schist slopes.

811.500 : RANUNCULUS AMPLEXICAULIS

812.500 : RANUNCULUS ASIATICUS #####812.504 # [Second pic.](#) # [Third pic.](#) # [Fourth pic](#)

813.000 : RANUNCULUS BILOBUS

813.400 : RANUNCULUS CADMICUS Turkey, Denizli, Honaz Dag. 1700m. Exposed limestone ridge. (From a type-locality coll. of this diminutive, summer-dormant, snow-melt species. Neat, glossy, yellow buttercups on 5cm. stems.)

813.500 : RANUNCULUS CALANDRINOIDES Morocco, Middle Atlas Range, above Ifrane. 1700m. Sandy & gravelly ledges on stepped limestone. (Throughout winter, sumptuous, large, white, pink-flushed flowers open successively on 5-15cm., branching stems, rising from a basal rosette of pointed, glaucous, grey-green leaves. Never quite as compact & strikingly classy in cultivation as in nature but still among the finest winter-flowering alpine-house plants. Summer-dormant.)

814.000 : RANUNCULUS CRENATUS

814.010 : RANUNCULUS CRENATUS No data. A delightful little, white-flowered, alpine buttercup, distributed from the E Alps, S & E into the high ranges of Italy & the Balkans. Rounded, dark-green, scallop-edged leaves below a succession of flowers like tiny, pure-white roses on 10cm. stems in spring. Lime-free scree in a trough or on the rock garden.

813.500 : RANUNCULUS CALANDRINOIDES Morocco, Middle Atlas Range, above Ifrane. 1700m. Sandy & gravelly ledges on stepped limestone.

815.000 : RANUNCULUS FICARIOIDES

815.250 : RANUNCULUS GELIDUS Kazakhstan, Tien Shan. Ex an H. Fuchs coll. (A Central Asian snow-melt species, described by Sampson Clay as "a dwarf & delicate plant of alpine screes." Numerous broad, usually white petals.)

815.500 : RANUNCULUS GLACIALIS

RANUNCULUS GOUANII

816.010 : RANUNCULUS GRAMINEUS No data. Maybe the best garden-plant among the summer-dormant buttercups though a very local SW European species. Neat tufts of linear, greyish leaves & bright-yellow flowers. 30cm. Hot & dryish.)

816.011 : RANUNCULUS GRAMINEUS No data. Seeds from the splendid, large-flowered selection 'Pardal', presumably collected near Pardals in SE Portugal. This very local SW European species is surely the best garden-plant among the summer-dormant buttercups. Neat tufts of linear, greyish leaves & bright-yellow flowers. 30cm. Hot & dryish.)

817.710 : RANUNCULUS PYRENAEUS subsp. PLANTAGINEUS No data. Native to the European Alps.

817.910 : RANUNCULUS PYRENAEUS Wild collected seeds from the Pyrenees of this attractive, dwarf, alpine species with linear to lanceolate leaves and up to 10 white flowers on each, branched, 15cm. tall stem.

818.200 : RANUNCULUS SEGUIERI (subsp. *seguieri*)

818.800 : RANUNCULUS TRAUNFELLNERI Slovenia, Julijske Alpe, Mangrt. 2200m. Gravelly areas among grass tussocks. (Endemic to a the small area of the SE Alps, where Austria, Italy & Slovenia meet.)

820.200 : RHAPONTICUM HELENIIFOLIUM (*Centaurea heleniifolia*, *Leuzea rhapontica* var. *heleniifolia*) France, Hautes-Alpes, Pic de Gleize, NNW of Gap. 2000m. Limestone talus on S-facing side of summit-ridge. (Placed in *Leuzea* in 'Flora Europaea' (following a 1973 Czech revision) & belonging to a distinct, possibly ancient, group of *Compositae*, dotted here & there across Eurasia in widely separated and usually very limited habitats. Clumps of large, undivided, dentate leaves, white tomentose beneath, send up stalwart, 1.5m. stems with massive heads of pale rosy-purple flowers, appearing from an involucre of papery, silvery bracts. A slow-growing, big, bold, statuesque plant, needing really good drainage & probably resenting disturbance.)

820.450 : RHEUM MAXIMOWICZII Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. Open, gravelly slopes. (A handsome Central Asian rhubarb with hairy, red-tinged foliage, a little like a larger version of *R. ribes*. These species are plants of dry, stony slopes and go dormant in late summer : try them in a well-drained site in full sun in the UK.)

820.480 : RHEUM RETICULATUM Kyrgyzstan, Talas Alatau, S of Klyuchevka, Kara Bura pass. 2955m. A. Dickerson 00-28

820.500 : RHEUM RIBES Turkey, Hakkari, Zap gorge at Bagisli. 1500m. Among large *Compositae* & *Umbelliferae* on steep, loose slopes & in igneous screes.

820.501 : RHEUM RIBES Iran, Kordestan, WNW of Sanandaj. 2100m. Loose talus on steep slopes. (A splendid summer-dormant rhubarb. Illustrated in flower in Rix & Phillips 'Perennials' but it is really at its best when the rounded, bristly, reddish foliage unfolds in spring or when the erect, branched 50cm. stems are set with shiny, scarlet seeds.)

822.000 : RHODODENDRON CAUCASICUM Turkey, Trabzon, So_anli Da_lari. 2300m. Rocky outcrops among hay meadows. (A magnificent, compact shrub, always growing at alpine-levels, well above the tree-line, & always less than 1m. at maturity. The true wild species is very little known in gardens, where a variety of clones of doubtful origin, usually yellowish flowered, are grown under this name. Extremely hardy with leathery, dark-green foliage, rust-red tomentose beneath, & heads of creamy white flowers, usually from pink-flushed buds. Deserving of much more attention, especially in cold areas.)

822.501 : RHODODENDRON LUTEUM Turkey, Artvin, Yalnizcam Da_lari, ESE of _av_at. 1800m. Margins of *Picea* woodland. (The deciduous, Turkish azalea. Bright yellow flowers and splendid autumnal foliage-colour.) Archibald Archive www.srgc.net

823.000 : RHODODENDRON UNGERNII Turkey, Artvin, Genya Dag above Artvin. 1600m. *Picea* woodland with *R. ponticum* undergrowth. (Grown from seed we collected in 1986, this will be at least as 'pure' as wild seed, as there are no other species in flower here in late July & early August, when its big trusses of white bells appear - in nature a month after the other Turkish species are over. A most distinct species, up to 7m. high with large, spectacular foliage, felted beneath. Hardier than *R. ponticum*, which it replaces in frost-pockets & on colder slopes. Uncommon on this mountain but dominant around Tiryal Dag.)

826.600 : RINDERA LANATA Turkey, A_ri, Kiliç Geçidi between Tutak & Ele_kirt. 1800m. Open steppe. (A distinctive perennial member of the *Boraginaceae*. Stems, 20cm. tall, shower out a cascade of little reddish shooting stars with woolly calyces, followed by extraordinary, large, broad-winged seed-capsules tinged with blue.)

826.601 : RINDERA LANATA Turkey, A_ri, Tahir geçidi WNW of Ele_kirt. 2300m. Steep, open, stony slopes. (A tap-rooted perennial in *Boraginaceae*, distributed from central Turkey to W Iran. Clumps of downy basal leaves & 30cm. tall stems with

large terminal corymbs of many, tubular, red-pink flowers. Very showy in fruit with its large, rounded, winged nutlets, almost 3cm. across & often with blue margins. A worthwhile Irano-Turanian genus unfamiliar in cultivation.)

827.000 : ROMULEA BATTANDIERI

827.109 : ROMULEA BULBOCODIUM Morocco, High Atlas Range, Tizi-n-Test. Ex an R. & R. Wallis coll.

827.150 : #ROMULEA BULBOCODIUM No data. The form grown in the garden at Knightshayes in Devon. A very fine, vigorous, comparatively hardy form of this widespread, extremely variable, Mediterranean species. Grassy leaves & big rich-violet crocus-like flowers with yellow throats in spring. Good outside, in the S of Britain at any rate, it even does quite well here

827.151 : ROMULEA BULBOCODIUM No data. A excellent, late-flowering form, which, as far as we can ascertain, was originally passed round by that excellent plantsman Cedric Morris and continues to circulate among a few enthusiasts.

827.310 : ROMULEA CLUSIANA (*R. bulbocodium* complex) Gibraltar. Ex a J. Hulme coll. (The wide-ranging *R. bulbocodium* defies attempts to divide it up into races & the current botanical fashion is one of despair. Almost all are thrown together. Nevertheless some plants from SE Spain, which have been called *R. clusiana*, are particularly splendid & desirable horticulturally with large flowers in rich violet with extensive yellow-orange centres. This is from an extremely fine form of the best of these. Not likely to be so good in the garden as the preceding two but the one for the alpine-house.)

827.350 : ROMULEA COLUMNAE (subsp. *columnae*)

827.380 : ROMULEA COLUMNAE subsp. ROLLII

827.410 : ROMULEA CROCEA (*R. bulbocodium* var. *crocea*) Turkey, Antalya. 1100m. Among scrub in damp meadow. Ex a R. & R. Wallis coll. (From Bob & Rannveig's award winning form of this spectacular race, usually from below 900m. on sandy soils in small areas of SW Turkey & W Syria. Exceptional among the northern hemisphere representatives of this genus in its wholly yellow flowers and in this respect more like some of the S Africans.) Archibald Archive www.srgc.net

827.500 : ROMULEA GADITANA

827.510 : ROMULEA GADITANA Ex R. & R. Wallis

827.609 : ROMULEA LEICHTLINIANA (*R. bulbocodium* var. *leichtliniana*) Greece, Epirus, Paramithia. Ex a D.M. Hoskins coll.. (A race of sporadic distribution in the E Mediterranean region, usually below 600m. in oak scrub. Most frequent in Greece and the Aegean islands but extending E to Hatay in Turkey. White flowers, usually marked externally with purplish shading and with yellow throats.)

827.610 : ROMULEA LEICHTLINIANA (*R. bulbocodium* var. *leichtliniana*) No data. A race of sporadic distribution in the E Mediterranean region, usually below 600m. in oak scrub. Most frequent in Greece and the Aegean islands but extending E to Hatay in Turkey. White flowers, usually marked externally with purplish shading and with yellow throats.

829.000 : ROMULEA LIGUSTICA

829.400 : ROMULEA LINARESII (subsp. *linaresii*)

829.505 : ROMULEA LINARESII subsp. GRAECA Greece, Evia. Ex Christian, Elliott & Hoog 620. (Aegean race with pointed segments to the tiny, jewel-like, concolourous, violet, crocus-like flowers. The type-race is endemic to Sicily.)

829.800 : ROMULEA MALENCONIANA

829.900 : ROMULEA MELITENSIS

830.009 : ROMULEA NIVALIS Lebanon. Ex a R. & R. Wallis coll.

830.100 : ROMULEA NUMIDICA

830.500 : ROMULEA RAMIFLORA (subsp. *ramiflora*)

830.600 : ROMULEA RAMIFLORA subsp. GADITANA

830.800 : ROMULEA REQUIENII France, Corsica, W of Calvi, Pointe de Revellata. 10m. Hard, dry, gravelly areas among low, coastal maquis. Ex an A. Edwards coll. (The first species in this genus we saw flowering (a very long time ago in early April, 1962, in this very site) and one of the most attractive Europeans. Short prostrate leaves & almost stemless flowers wholly in a most intense violet, except for the bright yellow anthers. "A super little plant, much admired", writes Rannveig Wallis.)

831.000 : ROMULEA REVELIERI

831.200 : ROMULEA SUBPALUSTRIS (*R. bulbocodium* group)

831.400 : ROMULEA TEMPSKYANA

831.500 : ROMULEA ULIGINOSA (*R. bulbocodium* group)

833.000 : ROSA PENDULINA Spain, Lerida, S of Puerto de Viella. 2000m. Meadow with granite outcrops. (A Pyrenean coll. of this S European species with deep-pink flowers & elongated, red fruits. It endears itself to us as it is thornless. Suckers among associated herbaceous plants with us. Widely spaced mahogany stems, 60-80cm. high here, under 30cm. in the wild.)

836.100 : RUPICAPNOS AFRICANA subsp. DECIPIENS Spain, Cadiz, Zahara de los Atunes. Limestone cliffs. Ex an I. Barton coll. (A choice, saxatile member of the *Fumariaceae*, widespread & variable in Morocco, from one of its few European localities.

Racemes of spurred, pale-pink, ruby-tipped flowers beautifully set against cut, filigree foliage in grey-blue. Easy & long-lived in the alpine-house in the UK, if grown hard. If overfed & overwatered, it grows out of character & is short-lived.)

836.110 : RUPICAPNOS AFRICANA No data. A choice, saxatile member of the *Fumariaceae*, widespread & variable in Morocco, though our cultivated stock is probably, *R.a.* subsp. *decipiens*, the local European race from limestone cliffs near Cadiz in S Spain. Racemes of spurred, pale-pink, ruby-tipped flowers beautifully set against cut, filigree foliage in grey-blue. Easy & long-lived in the alpine-house in the UK, if grown hard. If overfed & overwatered, it grows out of character & is short-lived.)

836.200 : RUPICAPNOS AFRICANA from WHITE FORM Morocco, no further data. This probably represents one of the 10 or more North African taxa of this polymorphic species, which Maire separates mainly at subspecific level, but we do not have enough information available to express an opinion. Should prove to be a very beautiful new alpine-house plant, for which we are grateful to the German alpine-plant enthusiast George Brückner

842.052 : SALVIA ALBIMACULATA

842.210 : SALVIA ARGENTEA No data. Archibald Archive www.srgc.net

843.000 : SALVIA BLEPHAROCHLAENA Turkey, Konya, S of Karaman. 1100m. Open steppe with diverse steppe-vegetation.

843.001 : SALVIA BLEPHAROCHLAENA Turkey, Sivas, SW of Kangal. 1500m. In loose gypsum dust on low hills. Sparse vegetation : *Arnebia*, *Berberis*, *Salvia multicaulis*, etc.

843.200 : SALVIA CADMICA Turkey, Konya, Sultan Daglari, SW of Aksehir. 1750m. Open sites in stony clay over limestone. (First found on Sultan Dag by Bornmueller in 1899, we saw this fine plant in flower here in 1994. Norman Stevens established it from cuttings & this seed is from in his Cambridge garden. A W Turkish endemic, which might belong with such as *S. caespitosa* in the woody-based, pinnate-leaved group, except that the hairy, wrinkled basal leaves are entire. The 30cm. stems are ringed with pure-white flowers, each surrounded by a large, campanulate greenish-yellow calyx, which persists & expands in fruit.)

843.300 : SALVIA CAESPITOSA

843.380 : SALVIA CANARIENSIS No data. A handsome, 2m. high, shrubby species endemic to the Canary Islands, where it quite widely in the lower, drier areas. Narrow, sagittate, grey leaves, woolly white below, and branched stems of small, pink flowers among showy, papery, purple bracts. Unlikely to be hardy in the UK but worth overwintering with protection.

843.400 : SALVIA CANDELABRUM

843.500 : SALVIA CANDIDISSIMA subsp. OCCIDENTALIS

844.201 : SALVIA CYANESCENS Turkey, Bolu, W of Goynuk. 800m. Loose, exposed shale slopes. (A delightfully airy perennial with flat rosettes of felted leaves and diffuse, branching stems, about 50cm. high, of lovely pale-violet flowers. One of several species now well-established in Colorado gardens from collections we made in the early 1980's. Hot, dry site in the UK.)

844.300 : SALVIA DAGHESTANICA Russia, North Ossetia, Dzavgiss. 1000m. Ex H. Zetterlund 82-49 (The Caucasian representative of the disjunct species-group, which includes Turkish *S. hypargeia* & Moroccan *S. phlomoides*. Very much dwarfer than these : only 10-15cm. high in flower with rich lavender-blue whorls from rosettes of superlative, white-felted foliage. Successful in Kent but strongly resents the damp atmosphere of our Welsh winters. An outstanding new plant.)

844.700 : SALVIA FRIGIDA

844.900 : SALVIA GLUTINOSA Yugoslavia, Serbia, Kosovo, above Vratnica between Tetovo & Urosevac. 800m. *Fagus* woodland. (14.8.85) Archibald Archive www.srgc.net

844.900 : SALVIA GLUTINOSA Italy, Friuli-Venezia Giulia, below Passo di Predil, SSE of Tarvisio. 1100m. Open areas in mixed *Picea* & *Fagus* woodland, over limestone. (10298 : 16.9.88)

845.100 : SALVIA HUBERI Turkey, Erzurum, W of Narman. 1500m. Steep, loose, stony slopes. (One of the neat, dwarf, woody-based species with pinnatisect, greyish leaves. Close to *S. rosifolia* & the western *S. pisidica* but endemic to a very small area of NE Turkey. Erect, 30cm. tall stems whorled with flowers which can vary from lilac-pink to violet.)

845.151 : SALVIA HYDRANGEA Iran, Ardabil, NE of Hashtjin. 1150m. Steep, loose, igneous slope. (This is a spectacular species, which we introduced from Iran in 1966 and grew successfully for some years but which is now lost to cultivation. In habit, it resembles the widespread group of dwarf, shrubby species with neat, greyish, pinnate leaves but its erect, 30-50cm. tall flower-stems are packed with verticillasters of flowers surrounded by large, campanulate calyces, up to 1.5cm. across. Though the magenta-pink flowers are not at all insignificant, the rose-purple, membranous calyces persist long after the flowers are over, gradually drying months later to brownish, parchment shades. Though this superlative species might always remain a challenge in the UK, where it must have a really hot, dry, very well-drained site, we hope that some growers in the drier areas of the western USA or continental Europe might now be able to establish and maintain it in cultivation.)

845.201 : SALVIA HYPARGEIA Turkey, Adana, N of Saimbeyli. 1200m. Open rocky areas. (Neat clumps of narrow, grey-green, wool-backed leaves & 50cm. tall, herbaceous stems whorled with lilac-blue flowers. Stocks derived from our collections, made in the 1980's, have now become standard plants in Denver garden-centres but it can be quite accommodating in the UK with good drainage in full sun. It used to do well on the RBG Edinburgh rock-garden.)

845.800 : SALVIA LAVANDULIFOLIA

846.000 : SALVIA MACROCHLAMYS Turkey, Hakkari, Zab gorge near Bagisli. 1500m. Loose igneous scree on steep slope.

(“A very handsome and distinctive species...without any close allies” comments Ian Hedge in his account of this genus in Turkey. A Kurdish plant from the area where the borders of Iraq, Iran & Turkey meet, its large, greenish white, papery bracts almost enclose the pink or white flowers with lower lips marked with violet. The large flower-heads are carried on shrubby, procumbent, leafy stems rising to 50cm. or less. Seeds from plants maintained in the USA from our 1986 introduction.)

846.100 : SALVIA MICROSTEGIA

846.410 : SALVIA PACHYSTACHYS No data. A shrubby, pinnate-leaved species from E Turkey, Transcaucasia & NW Iran, like a larger version of *S. caespitosa*. Stems about 30cm. tall whorled with large white flowers.

846.505 : SALVIA PHLOMIOIDES Morocco. Ex EAC 90-126. (Native to S Spain as well as NW Africa. Dwarf, about 15cm. high with blue flowers from purple-striped bracts : this seed was incorrectly named & the resulting plants were discarded.)

847.051 : SALVIA RECOGNITA Turkey, Nevsehir, W of Urgup. 1200m. Base of cliffs in light shade. (A most distinct, woody-based perennial, up to 1m. high & sticky with glandular hairs. Pinnate leaves & large, widely spaced, rose-pink flowers on elegant, sparsely branched stems. Seed from Richard Riedy in New Mexico but successful with many growers in the UK & Australia.) Archibald Archive www.srgc.net

847.251 : SALVIA ROSIFOLIA Turkey, A_ri, Tahir geçidi WNW of Ele_kirt. 2300m. Among steppe vegetation on exposed slope. (Endemic to NE Turkey, this is a fine member of the pinnate-leaved, shrubby group only 20-30cm. tall. It is probably closest to the western *S. pisidica* & can vary in flower-colour from bright rose-pink to deep violet.)

847.400 : SALVIA SCLAREA

847.900 : SALVIA TOMENTOSA Turkey, Icel, NNE of Gulnar to Mut. 1200m. Stony areas among large limestone boulders (25.6.85)

847.901 : SALVIA TOMENTOSA Turkey, Bolu, W of Goynuk. 800m. Loose, exposed shale slopes with sparse *Quercus* and *Cistus*. (16.7.85)

847.905 : SALVIA TOMENTOSA Turkey, Amasya, Amasya Ak Dag. 1100m. Ex J. Persson 94-25

852.002 : SARCOCAPNOS BAETICA Spain, Albacete, below Riopar Viejo. 1100m. Fissures on N-facing limestone cliffs. (Not so splendid as *S. crassifolia* var. *speciosa*, which we have not yet induced to set enough seed. Nevertheless, a fine form of this *Corydalis*-like chasmophyte, forming long-lived tufts of thick, blue-grey foliage with racemes of spurless, white, yellow-centred flowers. Definitely alpine-house only in N Europe, avoiding too much shade, food & water to keep it compact.)

856.109 : SAXIFRAGA ARETIOIDES France, Hautes-Pyrenees, Cirque de Troumouse. 2200m. Cracks in limestone boulders. P.& P. Watt coll. (A kabschia saxifrage, endemic to the Pyrenees and Cordillera Cantabrica, forming extremely tight, hard cushions of grey-green needle-leaves with bright yellow flowers on glandular stems.)

857.000 : SAXIFRAGA CALLOSA subsp. CATALAUNICA Spain, Catalunya, Sierra de Montserrat. 1000m. Cracks in conglomerate rocks. P.& P. Watt coll. (A very interesting silver saxifrage, a geographical disjunction, long thought to be endemic to Montserrat but intermediates are known from “hills near Marseilles”, still a long way from their relatives in the Alpes-Maritimes and the Apennines. Panicles of numerous white flowers on reddish stems with glandular hairs from lime-encrusted, grey rosettes.)

861.400 : SAXIFRAGA KOTSCHYI Turkey, Van, base of Kavussahap Dag, E of Yukari Narlica. 2200m. Shady, N & NW-facing agglomerate cliffs. (A yellow-flowered kabschia forming very tight, prickly cushions. This is a widespread but extremely local plant in Turkey and N Iran, occurring in isolated and disjunct habitats.) Archibald Archive www.srgc.net

861.401 : SAXIFRAGA KOTSCHYI Turkey, Nigde, SW of Ciftehan, foothills of Bolkar Daglari. 1700m. Conglomerate cliff. (A yellow-flowered kabschia forming very tight, prickly cushions. This is a widespread but extremely local plant in Turkey and N Iran, occurring in isolated and disjunct habitats. This collection might well be from Kotschy's 1859 type locality “in Tauro Cilicico.”)

866.600 : SCABIOSA CAUCASICA Turkey, Trabzon, So_anli Da. 2300m. Hay meadows. (The most gorgeous in the genus with its huge heads of soft lavender-blue flowers. Rated as “the finest perennial in my garden” by William Robinson, flowering “from early summer to late autumn.” Clumps of bright-green, entire basal leaves with 50cm. tall flower-stems clad in deeply cut stem-leaves. Contrary to the “received wisdom” that it likes a limey soil in full sun, here in the wild it grows with rhododendrons on acid, N-facing slopes drenched in the soaking mists & rain rising from the Black Sea.)

866.601 : SCABIOSA CAUCASICA Turkey, Ardahan, Yalnizcam Da_lari, Cam Geçidi. 2500m. Open, grassy meadow. (A collection from the cold, NE corner of Turkey almost on the Georgian border.)

867.300 : SCABIOSA CRINITA Turkey, Artvin, Yalnizcam Da_lari. 2000m. Open, stony grassland. (Not so spectacular as *S. caucasica* but a pleasant herbaceous perennial distributed from here across Georgia to Iran. Downy, greyish, pinnatisect leaves & 50cm. tall, branching stems, carrying a succession of pink heads, about 3cm. across.)

872.000 : SCILLA ALBANICA

872.100 : SCILLA AMOENA No data. A mysterious plant, always stated to be of “unknown origin” but reputedly “naturalized” in SE Europe, as well as France. While the ‘Flora Europaea’ states it is “widely cultivated”, it is actually seldom seen in gardens! The leaves are developed before the upward-facing, bright-blue flowers, about 5 on 15cm., open in spring.

- 872.300 : SCILLA ARMENA** Turkey, Erzurum, Palandoken Daglari between Erzurum & Cat. 2500m. Steep, open slopes.
- 872.305 : SCILLA ARMENA** Turkey, Erzurum, S of Ispir, Golyurt Gecidi. 2360m. Sandy clay slopes. N. Stephens coll. (Not seen in flower but possibly more likely to be this than *S. monanthos*, which has similar seeds. The two are close, both dwarf, snow-melt species. We shall be growing this and will confirm or otherwise in due course. We have kept a small stock of *S. armena* going for well over a decade but it is not an easy plant and we have never had enough cultivated seed to list. It is a very much smaller more delicate plant than *S. sibirica*, under which it is included as a subsp. by Mordak, often with only a single flower, in quite a pale, penetrating, electric blue (not "deep blue" as stated by Mordak) more intense towards the dark blue midribs. This is a choice, seldom-grown little plant, worth cossetting in cultivation, where it wants cool summer conditions. A very little seed still available.)
- 872.602 : SCILLA AUTUMNALIS** Turkey, Balikesir, NE of Ayvalik. 100m. Among *Cistus* on igneous rock. (Conical racemes of bluish lilac flowers on 15cm. stems appear before the leaves in early autumn & continue over a long period.)
- 872.603 : SCILLA AUTUMNALIS** UK, Devon, near Plymouth. (Local British, coastal native form.)
- 872.900 : SCILLA BEIRANA**
- 873.000 : SCILLA BIFOLIA**
- 873.005 : SCILLA BIFOLIA** Bosnia & Hercegovina, S of Bosanski Brod, Dugo Polje. W. McLewin 98-13
- 873.020 : SCILLA BIFOLIA** Greece, Fokida, Oros Parnassos. 2100m. Open. stony, limestone slopes. (The high altitude, Greek, race of this widespread, variable 'species-group'. Difficult to sort into clear-cut taxa but this has been distinguished as *S. nivalis* and *S. b.* var. *subnivalis*. It follows the melting snows with a wash of ultramarine-blue, starry flowers.)
- 873.099 : SCILLA aff. BIFOLIA** Turkey, Bitlis, SW of Van Golu. c. 1900m. In clay among deciduous *Quercus*.
- 873.210 : SCILLA BITHYNICA** No data. An attractive plant for the open garden, which sows itself here in our heavy, acid clay. Native to low altitudes along the wet, Black Sea coasts of Bulgaria & NW Turkey, with 20cm. racemes of starry, blue flowers in spring. Seed from both pale-blues & whites with navy-blue anthers. They look well intermingled.)
- 873.408 : SCILLA CAUCASICA** Azerbaijan, Talish. (Like *S. armena*, this probably merits specific status. From a horticultural viewpoint, it is taller with a larger number of intense blue flowers than familiar forms of *S. sibirica*.)
- 873.409 : SCILLA CAUCASICA from SELECTED FORMS** Armenia, Zangezur range, Hustup. (Seeds from isolated selections from a colony with a fairly intense purple suffusion on the upperside of the foliage, which is addressed to the ground at the time the flowers open. Seedlings so far are reliably purple-leaved. Very striking.)
- 873.509 : SCILLA CILICICA** Turkey, Adana, Duzice. 700m. Woodland margins. Ex R. & R. Wallis 86-01. (The *Scilla* species at the E end of the Cilician Taurus in S Turkey are confusing in the wild, sometimes growing in apparently mixed colonies. They can be sorted out in seed but this also tends to differ from the others in having about twice as many paler, lavender-blue flowers in the 20cm. high racemes.) Archibald Archive www.srgc.net
- 873.510 : SCILLA CILICICA** No data. The *Scilla* species at the eastern end of the Cilician Taurus range in southern Turkey are confusing in the wild, sometimes growing in apparently mixed colonies. They can be sorted out in seed but this also tends to differ from *S. melaina* in having about twice as many paler, lavender-blue flowers in the 20cm. high racemes.
- 873.580 : SCILLA CUPANII**
- 873.590 : SCILLA ELONGATA**
- 873.620 : SCILLA GORGANENSIS** Iran : Mazandaran, Gorgan, Khorrasan.
- 873.629 : SCILLA GORGANENSIS** Iran : Mazandaran. Ex PW 10940. (ex Gothenburg)
- 873.650 : SCILLA GREILHEUBERI** Iran, Mazandaran, S of Chalus. (Previously listed as the allied *S. hohenackeri*, research by Brian Mathew indicates that the name was misapplied to the 1960's collections from the Chalus gorge. This is Paul Furse's 'Caspian Bluebell'. Early-flowering with delightful, soft violet-blue flowers with reflexed segments. It grows locally in quantity in the crevices of large, limestone boulders in the central Caspian woodlands. Hardy in the UK but the flowers are better protected from the winter-weather.)
- 873.660 : SCILLA GRIFFITHII**
- 873.680 : SCILLA HANBURYI** Jordan, Mafrq to Ramtha. 660m. C. Lovell & P. Bird 302 Archibald Archive www.srgc.net
- 873.709 : SCILLA HOHENACKERI** Iran, Gilan, Talesh inland from Astara. 1000m. In light woodland of *Corylus*, etc. Ex BSBE 559. (The true plant from the Azerbaijan border hills, virtually unknown in gardens. Its name was misapplied to the more eastern *S. greilheuberi*. Foliage does not appear until spring and is still in good condition at flowering time. Brian Mathew has maintained this from his 1963 coll. & considers this to be a choicer, neater plant : "the whole appearance is more delicate.")
- 873.750 : SCILLA HUGHII**
- 873.800 : SCILLA HYACINTHOIDES** Turkey, Siirt, between Kurtalan & Besiri. 500m. Wet meadows & streamsides. Ex a N. Stevens coll. (Seldom seen in gardens but a tall handsome species, occurring locally & sporadically through southern Europe to N Iraq. Stout stems up to 1m. high carry cylindrical racemes of about 100, starry, pale-margined, violet-blue flowers..)
- 874.010 : SCILLA INGRIDAE** An attractive species with soft violet-blue flowers. Possibly distributed S into Syria from around the highest mountains at the E end of the Toros range in S Turkey, where populations are especially confused and maybe involve

several species. Easily separated in seed from the sympatric *S. melaina* & *S. cilicica* of similar stature (both these have black strophiolate seeds) by its pale exarillate seeds. [# 874.009 Scilla ingridae](#)

874.100 : SCILLA INTERMEDIA

874.150 : SCILLA KOELZII Iran, Bakhtiari.

874.209 : SCILLA KHORASSANICA Iran, Khorrasan, Mashad to Kalat, (c. 50km. NE of Mashad). 1900m. Ex T4Z 1123)

874.250 : SCILLA LEEPII Turkey, SE of Kahramanmaras. Ex a N. Stevens coll. (A seldom-collected, little species endemic to the upper drainage of the Tigris. Up to 6, usually single-flowered, slender, 5cm. scapes rise from each bulb to carry flowers with pale lilac-blue segments with darker midribs. A much slower & less enthusiastic grower here than *S. melaina*.)

[874.309 : ## SCILLA LIBANOTICA](#) Lebanon, E of Beirut, Tarchich. Damp, shady, rock crevices. Ex R. & R. Wallis 99-04. (A fine species, little, if at all, known in cultivation until this introduction. Very large, pale-blue flowers.) [#2nd photo](#)

874.400 : SCILLA LILIO-HYACINTHUS France, Hautes-Pyrenees, N of Col du Pourtalet. 1500m. Deciduous woodland. (A distinct plant, especially in its loosely scaled bulbs, distributed from SE France into N Spain. Easy in the garden in the cool climate of the UK. Its lush, glossy leaves always attract attention, even without the 30cm. racemes of soft-blue starss.)

874.700 : SCILLA LINGULATA

874.705 : SCILLA LINGULATA Morocco, near Tangier. Ex a J.W. Blanchard coll. (From a particularly fine dark blue form of this species, which flowers in autumn or early winter under glass here.)

874.706 : SCILLA LINGULATA Morocco, Mohammedia. Ex M. Salmon & M. Fillan 281

874.707 : SCILLA LINGULATA Tunisia, Enfidaville. Ex M. Salmon & C. Lovell 253 Archibald Archive www.srgc.net

874.711 : SCILLA LINGULATA var. CILIOLATA

874.800 : SCILLA LITARDIERI Bosnia & Hercegovina, above Dubrovnik to Trebinje. 500m. Fragmented limestone. (Heads of starry, pale-blue flowers on 20cm. stems. A lovely plant, local in nature but hardy in a sunny site in the UK.)

875.000 : SCILLA MELAINA Turkey, Hatay, E of Belen. 1300m. Fissures on & at base of limestone cliffs. (More or less endemic to the Amanus Mts. Little known but excellent & trouble-free under glass here. Seems quite hardy in the UK & may even prove a fine garden-plant. Possibly closest to *S. mischtschenkoana* (*S. tubergeniana*) but with prussian-blue flowers.)

875.100 : SCILLA MESOPOTAMICA

875.200 : SCILLA MESSENIACA Greece, Messinia, S of Kardamili. 30m. In shade, among limestone rocks. (Very local & confined to the southern, tail-end of the Taigetos but easily grown & seems totally temperature-hardy here. Racemes of pale-blue, starry flowers. 20cm.)

875.300 : SCILLA MISCHTSCHENKOANA

875.400 : SCILLA MONANTHOS

875.500 : SCILLA MONOPHYLLOS

875.509 : SCILLA MONOPHYLLOS Spain, Cadiz, between Alcala & Ubrique. Cork oak woodland. Ex R. & R. Wallis 91-06 (A little, 10cm. tall species with a solitary, lanceolate leaf & racemes of up to 20, starry, mid-blue flowers.)

[875.605 : ## SCILLA MORRISII](#) Cyprus, Paphos district. 700m. Moist, shaded crevices & banks, under *Quercus*. Ex D. Meikle 4015. (A very local Cyprus endemic, being successfully maintained in cultivation. About 10 cm. high, erect racemes of 3-5, campanulate flowers in milky-white tinged with lilac & with pale-blue anthers. Attractive & no great problem to grow.)

875.900 : SCILLA OBTUSIFOLIA (subsp. *obtusifolia*) The N African type-race from Morocco & Algeria.

875.950 : SCILLA OBTUSIFOLIA subsp. INTERMEDIA

876.200 : SCILLA ODORATA

876.501 : SCILLA PERSICA Turkey, Batman, between Catakopru & Sason. Sandy clay. Ex a N. Stevens coll. (A fine plant, little known but which should be growable outside in the UK. It usually inhabits subalpine meadows which are very wet in spring &, in Turkey, only occurs around here into Siirt. In NW Iran, it can contribute to a magnificent spectacle, growing in huge numbers in marshy meadows with the purple-red *Gladiolus persicus*. Up to 50cm. high with racemes of up to 50 blue flowers.)

876.502 : SCILLA PERSICA Iran, Kordestan, ESE of Sanandaj. 1800m. Among long grass in wet hay-meadow. (A fine plant, little known in gardens but which should be very hardy & growable outside in the UK, as it usually inhabits subalpine meadows which are very wet in spring. It contributes to a magnificent spectacle, growing in huge numbers in marshy areas with other hay-meadow species like blue-black *Bellevalia pycnantha* & purple *Gladiolus* & *Dactylorrhiza* species. Up to 50cm. high with racemes of up to 50 soft-blue flowers.) Archibald Archive www.srgc.net

876.810 : SCILLA PERUVIANA No data. A very handsome, variable, low-altitude W Mediterranean species, usually quite hardy & easily grown in any good soil in a warm, sunny border in the UK. Big, wide racemes of rich violet-blue flowers carried on stout, 50cm. stems in late spring from basal rosettes of broadly lanceolate leaves.

877.200 : SCILLA PUSCHKINIODES Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. 1300m. In shade of shrubs. (Distinctive, floriferous, 10cm. tall species with many ice-blue, dark-striped flowers.)

- 877.201 : SCILLA PUSCHKINIOIDES** Uzbekistan, Tashkent, Chimgan. (17585)
- 877.207 : SCILLA PUSCHKINIOIDES** Kyrgyzstan, Fergana Range, Kugart. 2400-3250m. Ex ARJA 97-08
- 877.208 : SCILLA PUSCHKINIOIDES** Uzbekistan, Kuramin range.
- 877.209 : SCILLA PUSCHKINIOIDES** Tadjikistan. Ex a N. Stephens coll.
- 877.400 : SCILLA RAMBUREI**
- 877.409 : SCILLA RAMBUREI** Spain, Sierra de Cazorla. Ex M.Salmon 417
- 877.550 : SCILLA ROSENII**
- 877.559 : SCILLA ROSENII** Georgia, Bakuriani area, Tskhra-tskharo pass. 2300m. Alpine meadows. (A beautiful, high altitude, snow-melt species. Not the easiest to grow at low elevations, appearing very late with us and resenting high temperatures & summer drought. Very large pale-blue flowers with segments reflexing like an *Erythronium* flower.)
- 877.700 : SCILLA SIBERICA** (subsp. *siberica*)
- 877.709 : SCILLA SIBERICA** (subsp. *siberica*) Russia, Penza district. Archibald Archive www.srgc.net
- 877.730 : SCILLA SIBERICA** subsp. **CAUCASICA**
- 877.737 : SCILLA SIBERICA** subsp. **CAUCASICA** Azerbaijan, Talish. (Like *S. armena*, this probably merits specific status. From a horticultural viewpoint, it is taller with more intense blue flowers than familiar forms of *S. siberica*.)
- 877.738 : SCILLA SIBERICA** subsp. **CAUCASICA** from **SELECTED FORMS** Armenia, Zangezur range, Hustup. (Seeds from isolated selections from a colony with a fairly intense purple suffusion on the upperside of the foliage, which is addressed to the ground at the time the flowers open. Seedlings so far are reliably purple-leaved. Very striking.)
- 877.739 : SCILLA SIBERICA** subsp. **CAUCASICA** Azerbaijan, Talish. Ex RSZ 85-15
- 877.750 : SCILLA SIBERICA** subsp. **TAURICA** Turkey, Adana, N of Saimbeyli. 1300m. Ex R. & R. Wallis 93-33. (A beautiful, little plant which seems to fit into Speta's recently described taxon : listed last year under population ref. 874.030.)
- 877.800 : SCILLA SICULA**
- 878.000 : SCILLA VERNA** Spain, Avila, Sierra de Gredos, SW of Hoyos de Espino. 1700m. Moist turf on open slopes. (Racemes of starry, lilac-blue flowers with blue-purple anthers. A montane, snow-melt form of this W European species.).
- 878.009 : SCILLA VERNA** UK, Wales, Pembrokeshire. 50m. Coastal cliffs.
- 878.109 : SCILLA VVEDENSKYI** Tajikistan. c. 2500m. (A most distinct, alpine-meadow species. Wide, oblanceolate leaves & racemes of 6-10, dark-blue flowers. Slow to increase vegetatively and not always easy to grow.)
- 878.200 : SCILLA WINOGRADOWII**
- JJA 17780 : SCILLA SP.** Turkey. Archibald Archive www.srgc.net
- JJA 17788 : SCILLA SP.** Turkey, Bitlis, W of Hizan. 1900m. In clay in shade of deciduous *Quercus*.
- JJA 17949 : SCILLA SP.** Turkey, Kayseri, S of Pinarbasi. Under Berberis scrub on limestone slope. (A. Seisums coll. across stream, 18km. S of Pinarbasi.)
- R. & R. Wallis 96-28 : SCILLA SP.** Syria, NW of Misyaf. 890m. N-facing, rocky terraces near cultivated fields & on rocky outcrops. (A very handsome plant, which may well prove to be an undescribed species. Beautiful, deep blue flowers with reflexed segments (like *S. rosenii* or *S. greillhuberi*), a characteristic not noted on any species recorded from this area.)
- 879.005 : SCOPOLIA CARNIOLICA** Slovenia, SE of Ljubljana, near Grosuplje. c.400m. Woodland at bottom of doline. W. McLewin 98-11. (A fascinating woodland plant in the *Solanaceae*, recorded in very local, widely separated colonies through central Europe, from Lithuania to the Ukraine. Big horizontal rhizomes, like flattened potatoes, spread slowly on the surface of the earth and in early spring send up stout stems of cylindrical bells, hanging on thready pedicels, before the leaves expand. Though the flowers open near the ground, the stems elongate to about 50cm. to carry large potato-leaves in summer. Typically, the bells are a delicately veined, lurid violet-red-brown but in a handful of sites in the karst country of Slovenia, of which this is one, a beautiful, translucent yellow colour phase occurs with the dark reds. This has been called *S.c.* subsp. *hladnikiana*, a name sensibly disregarded by 'Flora Europaea', though useful for gardeners to distinguish it. Both colours occur here so expect both from the wild seed.)
- 879.015 : SCOPOLIA CARNIOLICA** subsp. **HLADNIKIANA** No data. A fascinating woodland plant in the *Solanaceae*, recorded in very local, widely separated colonies through central Europe, from Lithuania to the Ukraine. In a handful of sites in the karst country of Slovenia, this beautiful, translucent yellow colour phase occurs among the usual dark reds. This has been called *S.c.* subsp. *hladnikiana*, a name sensibly disregarded by 'Flora Europaea' but it remains useful for gardeners to distinguish it. Big horizontal rhizomes, like flattened potatoes, spread slowly on the surface of the earth and in early spring send up stout stems of cylindrical bells, hanging on thready pedicels, before the leaves expand. Though the flowers open near the ground, the stems elongate to about 50cm. to carry large potato-leaves in summer.)
- 899.600 : SEMPERVIVUM ARMENUM** (var. *armenum*) Turkey, Gümü_hane, Köse Da_. 1900m. Steep, open, gravelly slopes.

- 911.200 : SESELI ELATUM subsp. OSSEUM** No data. An E European member of the *Umbelliferae*, proving an excellent plant for a hot, dry situation with Tim Ingram in Kent, UK. He describes it as having "attractive silver-grey, finely cut foliage forming neat clumps to about 30cm., followed by myriads of white umbels in branching heads to about 1m."
- 911.300 : SESELI PALLASII** (*S. varium*) No data. Another species from E central Europe, very close to the preceding and described, by Tim Ingram, in this form, as like a compact version of it. Branching umbels of tiny white flowers.
- 923.310 : SOLDANELLA VILLOSA** No data. A very rare plant in the wild, confined to a few sites in the W Pyrenees, but the easiest of the genus to grow well. Mats of rounded, evergreen leaves with deep violet, pendant, fringed lampshade-flowers on 20cm. stems, covered in dense, red velvet, as they unfurl. A plant of damp, shady places, which loves our moist woodland.
- 929.711 : STACHYS MACRANTHA from WHITE FORM** No data. From the white-flowered form grown as *S.m.* 'Nivea' of this species from the Caucasus & adjacent NE Turkey & NW Iran. Excellent, ground-covering clumps of foliage & dense spikes. whorled with large, lipped, white flowers in summer. Archibald Archive www.srgc.net
- 931.500 : STAPHYLEA PINNATA** Turkey, Rize, above İkizdere. 1000m. Woodland margins. (A large, deciduous shrub with pinnate leaves & panicles of white flowers with pinkish sepals. Attractive & seldom seen in gardens.)
- 932.501 : STELLEROPSIS LESSERTII** Iran, Zanjan, NW of Zanjan, 1100m. Exposed, alluvial mud-hills. (This is a classy little shrublet. A woody-based relative of *Daphne* & the SE Asian genus *Stellera*, 20-30 tall with wiry branches, set with little, downy, grey-blue leaves & with elongating, terminal clusters of pale-yellow, daphne-flowers opening from red-tinted buds. How growable it might prove to be we do not yet know but its frequent companion *Rosa* (*Hulthemia*) *persica* is a notoriously recalcitrant plant in cultivation. It is very hot & dry in summer here but very cold & dry in winter.)
- 933.000 : #STERNBERGIA CANDIDA** Turkey, Mugla, SE of Fethiye. 1100m. Limestone crevices, ledges & talus on steep slopes with sparse *Cedrus*. (A unique plant in this otherwise yellow-flowered genus, discovered by Oleg Polunin in 1976 & described in 1979. Robust with narrowly, strap-shaped, grey-green leaves & large, scented, pure-white flowers on 10cm. stems in winter to early spring. Not difficult if protected by a bulb-frame or alpine-house in the UK, though fully temperature-hardy.)
- 933.100 : STERNBERGIA CLUSIANA** (*S. macrantha*) Turkey, Malatya, above Darica. 1800m. Deep volcanic soil on steep igneous slope. (Wide, twisting, grey-green leaves appear in spring after the autumn display of stemless, rich-yellow goblets, larger than *S. lutea*. This is a temperature-hardy species from continental climates, distributed very locally from Turkey & W Syria to Iran, but it needs hot dry conditions, when dormant in summer, to flower well, so bulb-frame in the UK.)
- 933.200 : STERNBERGIA COLCHICIFLORA** Greece, Parnassos.
- 933.300 : STERNBERGIA FISCHERIANA**
- 933.350 : STERNBERGIA GREUTERIANA** Greece, Karpathos. 50-100m. Ex M.Koenen 01-87
- 933.400 : STERNBERGIA LUTEA** Greece, Magnissia, Oros Pilio, above Milies. 300m. Leafsoil in deciduous woodland.
- 933.409 : STERNBERGIA LUTEA** Greece, Crete, Malaxia. Ex M. Jope 95-41.
- 933.410 : STERNBERGIA LUTEA** Greece, Crete. Ex M. Jope.
- 933.411 : STERNBERGIA LUTEA** Greece, Viotia, Parnassos. Ex a H.& I. Barton coll.
- 933.420 : STERNBERGIA LUTEA** No data.
- 933.600 : STERNBERGIA SICULA** Greece, Viotia, Stroviki by Melas river, N side of Kopaida. Eroded, heavily grazed limestone hills.
- 933.601 : STERNBERGIA SICULA** Greece, Magnissia, Oros Pilio. From a H.& I. Barton coll. (Autumnal golden goblets.)
- 933.603 : STERNBERGIA SICULA** Greece Archibald Archive www.srgc.net
- 933.620 : STERNBERGIA SICULA** No data. From a dwarf form collected by John Marr. Little, rich-yellow, crocus-like goblets rise in short stems in autumn, before or with the very narrow, dark green leaves. For a dry, sunny site in the UK
- 933.630 : STERNBERGIA SICULA** No data. One of the finest of all autumn-flowering bulbs. Great, rich-yellow, crocus-like goblets rising in short stems before or with the narrow, dark green leaves. For a dry, sunny site in the UK
- 933.800 : #STERNBERGIA CANDIDA** no data
- 933.900 : STIPA PULCHERRIMA** No data. In keeping with its Latin name, "the most beautiful", this is surely one of the the most striking & stately members of this genus. Distributed from Central Europe eastwards into Russia & NW Iran,
- 936.001 : STYRAX OFFICINALIS** Greece, Crete, Topolia. M. Jope 97-64 : 16.10.97 (An ancient species, the only European member of the genus, which crops up again in California. Less easy in the UK than some of the E Asian ones, as it likes a hot summer to ripen its wood. A rounded, deciduous shrub, up to 5m. high, with clusters of beautiful, scented, white flowers in summer.)
- 937.000 : SWERTIA IBERICA** Turkey, Trabzon, So_anli Da_lari above Çaykara. 2000m. Moist places on steep slopes & cliffs. (A fascinating gentian-relative with stiff, 60cm. tall stems packed with small, pale-blue stars, peppered with inky blue. This is a neglected & choice genus, slow-growing but absolutely hardy & soundly perennial in a moist situation.)
- 937.001 : SWERTIA IBERICA** Turkey, Rize, Kaçkar Da_lari SE of Çamlıhem_in. 2200m. Wet grassland. (A fascinating gentian-

relative with stiff, 60cm. tall stems packed with small, pale-blue stars, peppered with inky blue. This is a neglected & choice genus, slow-growing but absolutely hardy & soundly perennial in a moist situation.)

937.110 : SWERTIA PERENNIS No data. The only European member of the genus. An uncommon plant of wet places in mountain-ranges from France to the Urals. Angular stems, about 30cm. tall carry clusters of complex, starry flowers. Variable in colour but usually pale-blue, speckled with black & with hair-fringed, violet nectaries.

937.200 : SWERTIA LONGIFOLIA Turkey, Erzurum, Kop Da_ above A_kale. 2400m. Wet flush on SE side of pass in *Salix* & *Betula* scrub. (One of the tallest, most imposing species, reaching almost 1m. in height. Cream or pale yellow flowers cluster along its upright stems.)

939.400 : SYMPHYTUM ASPERUM Turkey, Artvin, Genya Da_. 1800m. Among scrub at margin of *Picea* forest. (A very large, bristly perennial with cymes of tubular flowers in pure sky-blue on stems 1.2m. tall. For rich, moist soil.)

940.900 : TANACETUM HARADJANII (*Chrysanthemum haradjanii*) Turkey, Adana, NNW of Saimbeyli. 1100m. Fissures on sandstone cliffs. (The true plant, virtually unknown in cultivation and rare in the wild, recorded from only two localities in the northern Amanus range, whose name was misapplied by Davis in the 1950's to *Tanacetum densum* subsp. *amani*. We introduced the genuine plant in 1986 and sowed some seed-bank, 15 year-old seed a couple of years ago to give us our present stock. A woody based perennial, about 20cm. tall, with superb, silvery white, tomentose, much cut foliage.)

941.400 : TANACETUM PRAETERITUM Turkey, Antalya, Bey Dag. 2000m. Limestone slopes. Ex a P.& P.Watt coll. (A woody, 20cm. tall, high-altitude, SW Turkish endemic, originally introduced by Peter Davis, but never so widespread in gardens as more eastern *T. densum* (long grown under the misapplied name *Chrysanthemum haradjanii*). The two are superficially similar, though the intricately cut leaves are harder & more silver in *T. praeteritum*, but immediately distinct in flower as this has white ligules, whereas *T. densum* has none. Totally hardy in full sun with good drainage in a scree-bed.)

943.000 : TCHIHATCHEWIA ISATIDEA Turkey, Erzurum, NW of A_kale. 2000m. Steep, loose, eroded shale slopes. (Of all the distinct Turkish endemics, this is perhaps the most extraordinary. A monocarpic, monotypic genus of the *Cruciferae*, not obviously allied to anything else anywhere. From the rosette of dark green leaves, bristly with white hairs, erupts a great pyramidal head of big, pink flowers, famous for the sweetness of their fragrance & as much as 30cm. high, though usually less.. Each flower is followed by a large, flat, indehiscent fruit, parchment coloured and sometimes purple-tinted. Maybe most like a giant, pink-flowered version of the New Zealand 'penwiper', *Notothlaspi*. "In cultivation it has never done any good" writes Farrer rather miserably & this may be true of attempts to grow it outside in the British climate but it was for long a feature of the now-demolished bulb-frame at Wisley, where it sowed itself and its roots had free range in the very gritty soil. It has also been successful in a deep pot in the alpine-house in the UK. Sow the big fruits uncleaned on their sides.)

945.001 : TELEKIA SPECIOSA Turkey, Artvin, NE of Borçka, Karagöl. 1600m. In woodland by lake. (Huge, shaggy, long-rayed, inula-like daisies in orange-yellow. A lovely 1.5cm. tall perennial for a wild, wet situation.)

950.010 : THALICTRUM AQUILEGIFOLIUM No data. A splendid, 1-2m. tall, herbaceous plant, spread from W Europe, E across Asia. Branching stems rise above the smooth, cut foliage to carry wide panicles of fluffy, pale to deep lilac-pink flowers, whose colour comes from the broad filaments & anthers, not petals. Hardy & easy in any good soil, which does not dry out.

950.011 : THALICTRUM AQUILEGIFOLIUM var. ALBUM From the beautiful, creamy-white version.

950.360 : THALICTRUM FLAVUM subsp. GLAUCUM (*T. speciosissimum*) No data. Another superlative, tall species for good, moisture-retentive soil, where its stems of fluffy, soft-yellow flowers, opening over a long period in summer, will reach 2m. This Iberian & N African race of this Euro-Siberian species is distinct in its dissected, blue-green foliage.

950.510 : THALICTRUM LUCIDUM No data. A hardy, robust species, over 1m. high, from wet meadows in E Europe & W Russia. Narrow, shiny green leaflets & long-branched inflorescences of slightly greenish yellow flowers.

950.603 : #THALICTRUM ORIENTALE Greece, Messinia, near Kardamili. 20-50m. Dense shade in leafsoil. (From the limited sites in the Kardamili area. The small, very restricted population in the S Peloponnese is far removed from the better-known S Turkish plants & is always white-flowered. This & *T. tuberosum* are the only two species in Europe with showy, petaloid perianth-segments, like some of the SE Asian ones. Both are summer-dormant & fit in with more conventional 'bulbs'. Grow this dainty, 30cm. high shade-lover with delicately cut foliage in *Cyclamen*-conditions.)

950.604 : THALICTRUM ORIENTALE Turkey, Mersin

950.620 : THALICTRUM ORIENTALE No data. Cultivated stock derived from the PD coll. Archibald Archive www.srgc.net

950.700 : THALICTRUM TUBEROSUM Spain, Huesca, W of Anzanigo. 600m. Steep, stony, limestone banks. (This coll. has proved to be taller & more spectacular than other examples of this Pyrenean endemic we have seen. Planted out under glass here, it is about 40cm. high with airy panicles of big, ivory flowers over a very long period. Ideal for the bulb-frame.)

951.050 : THAPSIA MAXIMA No data. "A remarkably dramatic umbel" endemic to southern central Spain and south-eastern Portugal. Seed from Tim Ingram who writes : "Large rosettes of broad-lobed pinnate leaves, glossy and deeply veined, very attractive in their own right. Like the fennels it takes several years to reach flowering size. The flowers are yellow and held in a large, almost football-sized head at about 1m. to 1.5m." The warm UK summer of 2003 resulted in the first seed-set here for some time. Closely related to *T. villosa* and mainly distinguished from it by being hairless.

961.260 : TRACHELIUM JACQUINII subsp. RUMELIANUM No data. A lovely summer-flowering species for a warm, dry, well-drained site on the rock-garden or in the alpine-house. Characteristic of Greek limestone cliffs, where little else is in flower

- in late summer, with its dense corymbs of soft bluish lilac flowers on 15cm. stems from rosettes of leathery, toothed leaves.
- 966.910 : TROLLIUS ASIATICUS** Russia, Altai near Toms. (A wild coll. of this spectacular, spring-flowering meadow-plant. Brilliant orange-yellow globe-flowers above clumps of dark, dissected foliage. Usually dwarfier than *T. europaeus*.)
- 967.950 : TROLLIUS DZHUNGARICUS** Kyrgyzstan, Kyrgyz Alatau, Ala Archa S of Bishkek. 2290m. A. Dickerson 00-40
- 967.000 : TROLLIUS EUROPAEUS** France, Savoie, Col du Mont Cenis. 2000m.
- 967.001 : TROLLIUS EUROPAEUS** Italy, Veneto, Dolomiti, Passo di Campolongo. 1800m.
- 967.002 : TROLLIUS EUROPAEUS** Italy, Trentino-Alto Adige, Pass di Gardena. 2000m.
- 967.009 : TROLLIUS EUROPAEUS** Andorra. (The pale yellow globe-flower, one of the loveliest of alpine-meadow plants & a reliable garden-plant in most UK gardens, given a rich moist soil and not allowed to become too hot & dry.)
- 967.200 : TROLLIUS RANUNCULINUS**
- 967.250 : TROLLIUS RANUNCULINUS f. TENUISECTUS**
- 968.110 : TUBERARIA LIGNOSA** No data. An attractive, woody-based, perennial in *Cistaceae*, native to scrub & woodland in the W Mediterranean area from Portugal to SE Italy. Plantain-like, basal rosettes of dark-green, 3-veined leaves, downy & grey beneath, send up 20cm. stems with terminal cymes of yellow flowers. Needs a hot, dryish site in the UK.
- 969.000 : TULIPA AGENENSIS**
- 969.020 : TULIPA "AITCHISONII CLUSIANOIDES"** A fine clone of the W Himalayan *T. aitchisonii*, now sunk under *T. clusiana*. White flowers, rosy red outside. We are uncertain where the stock and the name originated. 5+ offset bulbs :
- 969.050 : TULIPA ALBERTII**
- 969.100 : TULIPA ALEPPENSIS**
- 969.109 : TULIPA ALEPPENSIS** Lebanon. Ex R. & R. Wallis 96-42
- 969.120 : TULIPA ALTAICA**
- 969.150 : TULIPA ANADROMA** Ex M. Tucker.
- 969.204 : TULIPA ARMENA** (var. *armena*) Turkey, A_ri, Tahir geçidi WNW of Ele_kirt. 2300m. Stony slope.
- 969.205 : #TULIPA ARMENA** (var. *armena*) Turkey, Gumushane, Kose Dag. 1900m. Steep, open, gravelly slopes. (The eastern, NE Turkish, race of this magnificent scarlet tulip. Separated from the next & *T. julia* mainly on the characters of the hairs of the bulb-tunics, these are all highly variable in the external colours of their red flowers & the internal markings.)
- 969.209 : TULIPA ARMENA** (var. *armena*) Turkey, S of Ya_murdere.
- 969.252 : # TULIPA ARMENA var. LYCICA** Turkey, Antalya, N of Akseki. 1400m. Steep, limestone slopes with *Quercus* & *Pinus*. (The western race, separated from the the eastern type-race & *T. julia* mainly on the characters of the hairs of the bulb-tunics. These three are all highly variable in the external colours of their flowers & the internal markings. Expect this to have absolutely stunning red flowers with central black blotches & glaucous, undulate leaves. 15cm. Quite reliable with us under glass.)
- 969.253 : TULIPA ARMENA var. LYCICA** Turkey, Karahmanmaras, SSE of Goksun.
- 969.254 : TULIPA ARMENA var. LYCICA** Turkey, Içel, N of G_inar. 700m. Open, limestone slopes...
- 969.300 : TULIPA AUSTRALIS**
- 969.359 : TULIPA BAKERI** Greece, Crete, Theriso. Ex M. Salmon 781 Archibald Archive www.srgc.net
- 969.370 : TULIPA BIEBERSTEINIANA** Turkey, Antalya, SW of Elmali. 1600m. Ledges on limestone cliffs. (A very pretty, dwarf yellow species, which we have listed under *T. orphanidea* & *T. sylvestris*. We'll stick with this name, although it is ignored by the Marais account in 'Flora of Turkey'. Such are the problems of tulip-names. About 15cm. high & worthwhile, anyway.)
- 969.400 : TULIPA BIFLORA**
- 969.450 : TULIPA BIFLORIFORMIS** Uzbekistan, Tashkent, Chatkal range above Beldersai. 1400m. Gritty slope. (Distinct, dwarf & dainty with multi-flowered stems carrying starry, white, yellow-centred flowers with black anthers. The original collection of wild seed was listed under our field number 17568 in 2002.)
- 969.451 : TULIPA BIFLORIFORMIS** Kazakhstan, Karzhantau, SE of Chimkent, Burguluk. 1300m. Open slopes. (Distinct, dwarf & dainty with multi-flowered stems carrying starry, white, yellow-centred flowers with black anthers. The original collection of wild seed was listed under our field number 17601 in 2002.)
- 969.459 : TULIPA BIFLORIFORMIS** Uzbekistan, Tashkent, Pskem range, Bashkizilsai. Ex a J. Ruksans coll. (Distinct, dwarf & dainty with multi-flowered stems carrying starry, white, yellow-centred flowers with black anthers.)
- 969.460 : TULIPA BIFLORIFORMIS** No data. Originally from the Gothenburg Botanic Garden stock of this Central Asian species. Distinct, dwarf, dainty & attractive with multi-flowered stems carrying many, starry, white, yellow-centred flowers.
- 969.475 : TULIPA BINUTANS** Original stock from Duschanbe Botanic Garden in Tadjikistan.

969.500 : TULIPA BOEOTICA

969.510 : TULIPA BORSZCZOWII

969.529 : TULIPA CARINATA Uzbekistan, Sangardak River valley. (A spectacular, brilliant scarlet tulip from S Uzbekistan. Huge flowers with an internal, black central blotch, edged with yellow. Related to *T. fosteriana* but with keeled foliage and flowers of a more slender, elegant shape.)

969.540 : TULIPA CINNABARINA Turkey, Konya, Karahasan Geçidi, 50km. from Ermenek to Hadim.. 1800m. Ex KPPZ 90-037. (An attractive species described in 2000. Possibly closest to the *T. humilis* group or *T. bithynica* but differing from both of these in having only two, bright-green basal leaves & flowers, both inside and out, in a striking shade of cinnabar-red (rather like the interior of *T. sprengeri*) with an intense yellow centre. A few seeds from the type-collection.)

969.550 : TULIPA CELSIANA

969.570 : TULIPA CLUSIANA From a collection made in Nepal. The species in a broad sense extends from E Iran to Tibet. The white W Himalayan tulips with pink exteriors are confusing & some might place this in *T. stellata* or *T. aitchisonii*.

969.600 : TULIPA CRETICA Greece, Crete, Hania, Akrotiri NE of Hania. 100m. Terra rossa. Ex a P. & P. Watt coll. (A little tulip, endemic to Crete, best appreciated in an alpine-house pot. Its diminutive stature easily separates it from other Cretan tulips. Starry white flowers, tinged with pink & grey-green outside & with yellow bases, on stems about 10cm. high.)

969.601 :# TULIPA CRETICA Greece, Crete, Mt. Dikti, E face. (Norman Stevens' pale-pink, non-stoloniferous form, much coveted by those who have seen it. You have to grow this form from seed for a good increase.)

969.609 : TULIPA DASYSTEMON Kyrgyzstan, Fergana range, upper Kugart valley. (This is a very rare plant in cultivation. It is not synonymous with *T. neustruvae* & is perfectly distinct from commercial stocks sold under this name. Dwarf with bright yellow flowers, greenish brown with a narrow yellow margin outside. Distinctive grey foliage with undulate margins. From wild collected material, correctly named by Arnis Seisums. Don't overdry or overheat when dormant.)

969.610 : TULIPA DASYSTEMON Tadjikistan. No further data. Archibald Archive www.srgc.net

969.620 : TULIPA DASYSTEMONOIDES Uzbekistan, Tashkent, Ugam range. (A late-flowering, dwarf species with 3-9, comparatively large, starry flowers with yellow interiors, just tipped with white, on each stem. Allied to *T. bifloriformis* but with larger flowers, opening more widely & with bigger, brighter yellow basal blotches. It reaches altitudes well over 3000m. in the Tien Shan, as a scree-dwelling high-alpine. Rated highly by Janis Ruksans.)

969.630 : TULIPA DOERFLERI Greece, Crete, near Spilia. 800m. Edges of cultivated fields on plain. Ex D.M.Hoskins 02-09.

969.650 : TULIPA DUBIA Uzbekistan, NE of Tashkent, Beldersai ridge near Chimgan. Ex a J. Ruksans coll. (The true species with 2-3, broad, greyish leaves with wavy margins, sometimes purple-tinged. Yellow flowers, suffused with red on the backs of the segments, but it can vary to orange. In the confusing complex around *T. kaufmanniana*.)

969.651 : TULIPA DUBIA Uzbekistan, Kurama range. (Distinct from other material currently in cultivation : later-flowering with larger flowers with more tapered yellow perianth-segments banded with orange on the exterior.)

969.680 : TULIPA GOULIMYI

969.700 : TULIPA FERGANICA Ex M. Tucker

969.750 : TULIPA FOSTERIANA Uzbekistan, Seravschan range, Agalik valley. Ex a J. Ruksans coll.

969.751 : TULIPA aff. FOSTERIANA Tajikistan. No further data. A magnificent, large, scarlet tulip, originally from material received by Norman Stevens from Dushanbe Botanic Garden in bygone days as *T. victoris*.

969.760 : TULIPA FULGENS

969.780 : TULIPA GALATICA

969.800 : TULIPA GOULIMYI

969.820 : TULIPA GREIGII

969.829 : TULIPA GREIGII from YELLOW FORM Kazakhstan, Djambil, Karatau, WNW of Koktal. 800m. Rocky ridge. Ex a N. Stevens coll. (A magnificent plant collected out of flower by Norman during our 2002 journey to SE Kazakhstan. It would seem best placed under *T. greigii*. Huge bright yellow flowers with red central blotches.)

969.830 : TULIPA GREIGII Ex J. Ruksans

969.880 : TULIPA HAGERI Greece, Lesbos. H. & I. Barton coll. (Race of *T. orphanidea* with dusky orange-red flowers, shaded with olive-green externally.) Archibald Archive www.srgc.net

969.900 : TULIPA HETEROPHYLLA Kazakhstan, Tien Shan, S of Almaty. 2700m. Alpine turf. (A member of a group of Central Asian tulips with long, beaked capsules & untuliplike seeds, which have been separated into both *Orythia* & *Eduardoregelia*. Very dwarf. Yellow flowers with dark exteriors. Illustrated in this locality in Rix & Phillips p. 117. An alpine plant, which will strongly resent drying or high temperatures, it possibly needs a very long cold period for germination.)

969.901 : TULIPA HETEROPHYLLA Kazakhstan, Tien Shan. 2900m. H. Fuchs coll. (A 1999 coll. of this member of a group of Central Asian tulips with long, beaked capsules & untuliplike seeds, which have been separated into both *Orythia* &

- Eduardoregelia*. Very dwarf with yellow flowers with dark exteriors. Illustrated in this locality in Rix & Phillips p. 117.)
- 969.900 : TULIPA HETEROPHYLLA** Kyrgyzstan, Terskey Alatau, S of Barskoon. 2870m. A. Dickerson 00-42 (A member of a group of Central Asian tulips with long, beaked capsules & untuliplike seeds, which have been separated into both *Orythia* & *Eduardoregelia*. Very dwarf. Yellow flowers with dark exteriors. Illustrated in this locality in Rix & Phillips p. 117.)
- 969.960 : TULIPA HISSARICA** Tajikistan, N of Varzob, Hodji-obi-Garm. Rock crevices. Ex RM 82-59 (A delightful, dwarf species, flowering very early, with up to 4, starry, yellow flowers, tinted with bronze on the outside, on 10cm. stems.)
- 970.980 : TULIPA HOOGIANA**
- 970.000 : TULIPA HUMILIS** Turkey, Van, Kavussahap Dag. 2700m. Steep scree on open slope. (7631 : 2.7.86 ; 17807)
- 970.005 : TULIPA HUMILIS** Turkey, Ni_de, SW of Çiftehan, foothills of Bolkar Da_lari. 1700m. Unstable stone-slide on steep slope. (A delightful dwarf form from high in the Cilician Taurus range. Bright rose-pink flowers with blue centres on 10 cm. tall stems. Blue-centred forms seem restricted to the Taurus with yellow-centred ones in the distant SE.)
- 970.220 : TULIPA HUNGARICA** No data. Seed from a plant grown as the S Bulgarian *T. urumoffii* (which is probably the same as *T. rhodopea*) but which seems a little robust for this and may come nearer to *T. hungarica* (a name which some botanists consider should cover all these Balkan taxa anyway), so its seems best to include it here. These SE European tulips, like others in the *T. gesnerana* group, are a confusing lot. This is about 25cm high with fine yellow flowers, sometimes with a red fleck.
- 970.299 : TULIPA ILIENSIS** Kazakhstan, Ketmen range. (A neat, little tulip in the group around *T. kolpakowskiana*. Smaller even than *T. cretica*. Flowers with greenish-rimmed, rosy-carmine exteriors open to flat, yellow stars.)
- 970.300 : TULIPA ILIENSIS** No data. A neat, little tulip from Central Asia, in the group around *T. kolpakowskiana*. Smaller even than *T. cretica*. Flowers with greenish-rimmed, rosy-carmine exteriors open to flat, yellow stars. .
- 970.350 : TULIPA INGENS**
- 970.400 : TULIPA JULIA** Turkey, Hakkari, Zab gorge at Bagisli. 1500m. Loose, igneous scree. (Differs technically from *T. armena*, the other truly wild, E Anatolian red tulip, in the matted, woolly hairs inside the bulb-tunics but it usually also has more pointed outer segments. May or may not have the central, black blotch rimmed with yellow but usually eye-burning, orange-scarlet.) Archibald Archive www.srgc.net
- 970.401 : TULIPA aff. JULIA** Turkey, Hakkari, Zab gorge S of Hakkari. 1300m. Steep stony slope below NE-facing cliffs. (Raised from seed collected in 1986 under our field number 7673, this does not match the *T. julia* populations higher up the Zab at Bagisli. The scarlet tulips are such a taxonomic nightmare that it seems most appropriate to place it under this species, which differs technically from *T. armena*, the other truly wild, E Anatolian red tulip, in the matted, woolly hairs inside the bulb-tunics. It usually also has more pointed outer segments. May or may not have the central, black blotch rimmed with yellow.)
- 970.410 : TULIPA KARABACHENSIS** Armenia, Zangezur range, Hustup. (Primrose yellow flowers on a 30cm. high stems.)
- 970.420 : TULIPA KAUFMANNIANA** Ugam range. Ex a J. Ruksans coll. (White flowers with rosy-red, white edged exteriors.)
- 970.430 : TULIPA KAUFMANNIANA** Kazakhstan, Djambil, Karatau, Ber-Kara gorge. c. 1000 m. Ex a J. Ruksans coll. (The spectacular red-flowered forms in this area are possibly the result of introgression by *T. greigii*. Some have striped foliage and they tend to be later flowering than the typical race. One clone Janis has selected has flowers of an “unusual metallic violet-red.” Expect exciting variations among the seedlings.)
- 970.460 : TULIPA KOLPAKOWSKIANA** Kazakhstan, Almatinskaya, ENE of Kordai. 1800m. Igneous rock outcrop. (A charming, little, slender species about 15cm. tall with upright, greyish leaves and pointed, rich yellow flowers, suffused with red on the exterior. Originally listed as an unidentified species under our field-number 17642.)
- 970.480 : TULIPA KURDICA** No data. Essentially a colour variant of the very variable *T. humilis* group, which surely comprises some of the finest of all dwarf tulips. About 10cm. tall with narrow, greyish leaves clustering on the ground and solitary, brick-orange flowers with black-green central blotches. The cultivated material is possibly a selection from material collected by Oleg Polunin above As Sulaymaniyah in NE Iraq in the 1950's. Archibald Archive www.srgc.net
- 970.500 : TULIPA KUSCHKENSIS**
- 970.520 : TULIPA LANATA**
- 970.540 : TULIPA LEHMANNIANA**
- 970.560 : TULIPA LINIFOLIA**
- 970.580 : TULIPA LOWNEI** Syria, Bludan (Antilebanon). 1900m. R. & R. Wallis coll. 1996.
- 970.600 : TULIPA MICHELIANA** Iran, Khorasan, Bojnurd, E of Chaman Bid. 1300m. Limestone talus on open slope. (The stunning, short-stemmed, scarlet tulip of NE Iran & S Turkestan with glaucous, wavy-edged, maroon striped foliage.)
- 970.610 : TULIPA MICHELIANA** No data. The stunning, short-stemmed, scarlet tulip of NE Iran & S Turkestan with glaucous, wavy-edged, maroon striped foliage. Most desirable but not always the easiest species to grow.
- 970.640 : TULIPA MONTANA**
- 970.660 : TULIPA NEUSTRUEVAE** No data. A neat, easily grown, dwarf tulip with yellow flowers, tinged bronze outside.

Masquerades as the rare *T. dasystemon*, with which it is certainly not the synonymous, in commercial lists.

970.670 : TULIPA ORITHIOIDES Uzbekistan, Chulbair range, near Sina. (A type-locality coll. of this very dwarf relative of *T. dasystemonoides*. Usually with a single (occasionally two), long-styled, white, yellow-centred flower opening above the ground-hugging leaves with distinctive, much-crinkled margins.)

970.675 : TULIPA ORPHANIDEA

970.685 : TULIPA ORTHOPODA Kazakhstan, Djambil, Karatau, Uch-Uzen valley. (Starry, white, yellow-centred flowers like *T. bifloriformis* but these are fewer & larger. Stockier, 'plumper' & with wider, undulate foliage.)

970.700 : TULIPA OSTROWSKIANA

970.710 : TULIPA POLYCHROMA No data. From several forms of this dwarf species, 'lumped' under *T. biflora* by some. A finer plant than commercial *T. biflora* with big yellow-centred white flowers, usually pink-backed, on short stems.

970.727 : TULIPA POLYCHROMA Iran, Markazi, SW of Arak. 2300m. Shale slopes. (A dwarf species, considered conspecific with *T. biflora* by some. Most Iranian populations have big yellow-centred white flowers, usually pink-backed, carried singly on short stems.) Archibald Archive www.srgc.net

970.728 : TULIPA POLYCHROMA Iran, R. & R. Wallis 04-080 (Collected out of flower. A dwarf species, considered conspecific with *T. biflora* by some. A finer plant with larger flowers than commercial *T. biflora*. Some Iranian populations have big yellow-centred white flowers, usually pink-backed, sometimes carried singly on short stems.)

970.729 : TULIPA POLYCHROMA Jordan, hills SW of Ras an Nagb. (Collected out of flower. Stockier with more flowers and broader more undulate foliage than Iranian and Transcaucasian populations assigned to this group.)

970.800 : TULIPA PRAECOX

971.000 : TULIPA PRIMULINA

971.100 : TULIPA REGELII Kazakhstan. Ex a J. Ruksans coll. ("The weirdest tulip" writes Henrik Zetterlund. "One, grey, glaucous leaf, 3-4cm. wide, sharply corrugated. Flower like a miniature *T. kaufmanniana* on a 5cm. scape. Adorable!" In nature, it grows rather shallowly (10cm.) in very dry steppe at quite low altitudes. In cultivation it can take a lot of cold. Delay it by storing at room temperature till mid-December. It should be completely dry from June to December.")

971.150 : TULIPA RHODOPEA

971.200 : TULIPA SAXATILIS

971.208 : TULIPA SAXATILIS Greece, Crete, Falassarna. Limestone crevices near sea. P. & P. Watt coll. (Multiple heads of pink, yellow centred flowers. Distinct from the infertile commercial stocks.) Archibald Archive www.srgc.net

971.209 : TULIPA SAXATILIS Greece, Crete, Kastelli. Ex M. Salmon 769

971.250 : TULIPA SCARDICA No data. From the Göteborg Botanical Garden stock of this species from Macedonia and Albania. It is considered in 'Flora Europaea' to be synonymous with the more southern, Greek *T. boeotica*. Wavy edged basal foliage and stems up to 30cm. tall with scarlet flowers, with a yellow-edged, black blotch inside. A splendid thing.

971.300 : TULIPA SINTENESII

971.410 : TULIPA SPRENGERI No data. Found last century near Amasya in N Turkey & now thought to be extinct in the wild. The best garden-plant in the genus for the UK, often sowing itself freely. Likes a good, heavy, slightly alkaline soil but is accommodating. Elegant, scarlet-orange, olive-green-backed flowers in June, later than any other.

971.450 : TULIPA STAPFII

971.500 : TULIPA SUBPRAESTANS

971.609 : TULIPA SYLVESTRIS (subsp. *sylvestris*) Italy, Sicily. Ex an A. Edwards coll. (The authentic wild plant : the type-race is quite narrowly endemic to S Italy.)

971.700 : TULIPA SYLVESTRIS subsp. AUSTRALIS Greece, Oros Olimbos, above Vrontou. 1000m. Steep, limestone slopes.

971.701 : TULIPA SYLVESTRIS

971.750 : TULIPA SYLVESTRIS No data. From the stock growing splendidly in Peter Chappell's Hampshire garden. Apparently naturalised from Britain to NW Iran, this is usually shy-flowering & of limited fertility. This form flowers profusely & sets seed well. About 30 cm. with large, scented, clear yellow flowers, greenish outside. Good soil in a very sunny site.

971.760 : TULIPA SYSTOLA

971.775 : TULIPA aff. SYSTOLA Iran, Kordestan, ESE of Sanandaj to Hamadan. 2050m. Ex N. Stevens 1885. (Our coll. JJA 16911 made 1.6.00)

971.790 : TULIPA TETRAPHYLLA

971.800 : TULIPA TSCHIMGANICA Uzbekistan, Tashkent, Chimgan area. (A gorgeous thing, whose ancestry may have involved *T. kaufmanniana* & *T. dubia*, with which it sometimes grows alongside the melting snow-patches. Utterly distinct in its yellow flowers with central markings of cerise-red, which can vary from a fleck to a blotch almost covering each segment.)

971.850 : TULIPA TUBERGENIANA

971.900 : TULIPA TURKESTANICA Uzbekistan, Seravshan range, S of Amankutan. Ex a J. Ruksans coll.

971.901 : TULIPA TURKESTANICA Uzbekistan, Dzhizak, Nuratau, near Dzhizak. Ex ARJA 96-04. (An excellent, floriferous form of the true plant with its distinct, yellow anthers. Lots of little, white, yellow-centred flowers in spring.)

972.000 : TULIPA UNDULATIFOLIA

972.050 : TULIPA URUMOFFII

972.100 : TULIPA VVEDENSKYI Endemic to the southern slopes of the Chatkal & northern slopes of the Kuramin ranges surrounding the Angren valley along the border with Tadjikistan. Extremely undulate foliage & brilliant red flowers on short stems, only about 15cm. in height. Archibald Archive www.srgc.net

972.100 : TULIPA VVEDENSKYI Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. 1300m. Igneous slopes.

972.109 : TULIPA VVEDENSKYI Uzbekistan, Tashkent, Karanchitogai. Ex ARJA 00-38. (Endemic to the southern slopes of the Chatkal & northern slopes of the Kuramin ranges surrounding the Angren valley along the border with Tadjikistan. Extremely undulate foliage & brilliant red flowers on short stems, only about 15cm. in height.)

972.150 : TULIPA WILSONIANA Turkmenistan, Kopet Dag, near Arvaz. (Allied to the more eastern *T. linifolia* but with broader, undulate leaves and differently shaped flowers, which are large, brilliant red with small blue-black centres & carried on 15cm. tall stems.) Archibald Archive www.srgc.net

972.200 : TULIPA ZENAIDAE

16702 : TULIPA SP. Iran, Qazvin, S of Lowshan. 600m. Stony clay on open slopes.

16706 : TULIPA SP. Iran, Qazvin, W of Gilvan. 1230m. Steppe vegetation on open slopes.

16711 : TULIPA SP. Iran, Zanzan, NW of Zanzan. 1250m. Sandy clay & gravel hills in river valley.

16776 : TULIPA SP. Iran, East Azerbaijan, SW of Ahar. 1820m. Montane steppe.

16793 : TULIPA SP. Iran, East Azerbaijan, SE of Marand. 1750m. Open, stony slopes.

16801 : TULIPA SP. Iran, East Azerbaijan, S of Jolfa. 1400m. Low, gravel hills.

16848 : TULIPA SP. Iran, West Azerbaijan, between Agh Bolagh & Sangar. 1500m. Rocky slopes.

16868 : TULIPA SP. Iran, Kordestan, NW of Divandarreh. 2000m. Gravelly clay slopes.

16891 : TULIPA SP. Iran, Kordestan, SW of Negel (Sanandaj to Marivan). 1350m. *Quercus* scrub on shale.

17131 : TULIPA SP. Iran, Khorasan, Bojnurd, E of Tang Rah. 1200m. Limestone talus on steep slopes.

17142 : TULIPA SP. Iran, Khorasan, Bojnurd, E of Chaman Bid. 1300m. Loose, stony slopes.

17149 : TULIPA SP. Iran, Khorasan, Bojnurd, 75km W of Bojnurd. (Possibly *T. micheliana* : 970.600)

17193 : TULIPA SP. Iran, Markazi, SW of Arak. 2200-2300m.. Open, rocky slopes.

17200 : TULIPA SP. Iran, Markazi, SW of Arak. 2200-2300m.. Open, rocky slopes. (Taller. Possibly *T. stapfii*.)

[17284 : ## TULIPA SP.](#) Iran, W Azarbayejan, NNE of Hashtiyen. 1500m. Open stony slopes. (30.5.01) [#second photo.](#)

17503 : TULIPA SP. Uzbekistan, Tashkent, Chatkal range, SE of Parkent. 1200m. Open, rocky slope. (Large)

17507 : TULIPA SP. Uzbekistan, Tashkent, Chatkal range, SE of Parkent. 1200m. Open, rocky slope. (Small)

17518 : TULIPA SP. Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. 1300m.

17521 : TULIPA SP. Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. 1300m

17529 : TULIPA SP. Uzbekistan, Samarkand, Seravshan, S of Amankutan. 1800m. Open, grassy slope.

17567 : TULIPA SP. Uzbekistan, Tashkent, Chatkal range above Beldersai. 1400m. Gritty slope. (Large)

17568 : TULIPA SP. Uzbekistan, Tashkent, Chatkal range above Beldersai. 1400m. Gritty slope. (Small : *T. bifloriformis*.)

17577 : TULIPA SP. Uzbekistan, Tashkent, Chimgan. 1200m. Open, stony area below snow-patch. (Small)

17592 : TULIPA SP. Uzbekistan, Tashkent, Chimgan, 1300m. Open, stony slope above snow-patch. (Large)

17593 : TULIPA SP. Uzbekistan, Tashkent, Chimgan, 1300m. Open, stony slope above snow-patch. (Medium)

17600 : TULIPA SP. Kazakhstan, Karzhantau, SE of Chimkent, Burguluk. 1300m. Open slopes. (Large)

17601 : TULIPA SP. Kazakhstan, Karzhantau, SE of Chimkent, Burguluk. 1300m. Open slopes. (Small : *T. bifloriformis*.)

17608 : TULIPA SP. Kazakhstan, Karzhantau, SE of Chimkent, Burguluk. 1100m. Among boulders. (Large)

17621 : TULIPA SP. Kazakhstan, Djambil, Karatau, WSW of Taras. 900m. Slate & shale talus. (Small)

17627 : TULIPA SP. Kazakhstan, Djambil, Karatau, WNW of Koktal. 800m. Rocky slopes. (Large)

- 17630 : TULIPA SP.** Kazakhstan, Djambil, Karatau, WNW of Koktal. 800m. Rocky slopes. (Small)
- 17633 : TULIPA SP.** Kazakhstan, Djambil, Karatau, WSW of Karabastai. 1000m. Rocky slopes. (Large)
- 17636 : TULIPA SP.** Kazakhstan, Djambil, Karatau, WSW of Karabastai. 1000m. Rocky slopes. (Small)
- 17640 : TULIPA SP.** Kazakhstan, Djambil, Kirgiz Alatau, SSE of Merke. 1100m. Among sparse scrub. (Small)
- 17642 : TULIPA SP.** Kazakhstan, Almatinskaya, ENE of Kordai. 1800m. Igneous rock outcrop. (Medium)
- 17643 : TULIPA SP.** Kazakhstan, Almatinskaya, ENE of Kordai. 1800m. Igneous ridgetop. (Small)
- 17644 : TULIPA SP.** Kazakhstan, Almatinskaya, ENE of Kordai. 1900m. Granite detritus. (Small)
- 17647 : ##TULIPA SP.** Kazakhstan, Kurti. [#2nd photo](#).
- 19003 : TULIPA SP.** (Sect. *Eriostemon*) Iran, Markazi, SW of Arak. 2300m. Shale slopes.
- 19010 : TULIPA SP.** (Sect. *Tulipa*) Iran, Markazi, SW of Arak. 2300m. Shale slopes.
- 19027 : TULIPA SP.** (Sect. *Tulipa*) Iran, Esfahan, SE of Khonsar. 2700m. Steep, stony slopes.
- 19073 : TULIPA SP.** (Sect. *Eriostemon*) Iran, Esfahan, SE of Aligudarz. 2200m. Among steppe-vegetation on steep slopes.
- 19074 : TULIPA SP.** (Sect. *Tulipa*) Iran, Esfahan, SE of Aligudarz. 2200m. Among steppe-vegetation on steep slopes.
- 19082 : TULIPA SP.** (Sect. *Tulipa*) Iran, Lorestan, E of Shulabad. Steep, loose, NW-facing, igneous slope.
- 19088 : TULIPA SP.** (Sect. *Tulipa*) Iran, Lorestan, W of Azna. 1900m. Among steppe vegetation on open slopes. (Red. 10cm.)
- 19114 : TULIPA SP.** (Sect. *Tulipa*) Iran, Kordestan, ESE of Sanandaj. 2100m. Open, stony slope.
- 19128 : TULIPA SP.** (Sect. *Tulipa*) Iran, Kordestan, SE of Marivan. 1350m. Among oak scrub on shale.
- 19173 : TULIPA SP.** (Sect. *Tulipa*) Iran, West Azarbaijan, SE of Salmas. 1800m. Open, gravelly slopes.
- 19234 : TULIPA SP.** (Sect. *Tulipa*) Iran, Zanjan, NE of Zanjan. 2400m. Among stones along melt-water gulleys (now dry).
- R. & R. Wallis 96-46 : TULIPA SP.** Syria, between Qatana & Barqash. 1400m. Serpentine scree. (Red flowers.)
- A. Dickerson 00-41 : TULIPA SP.** Kyrgyzstan, Kyrgyz Alatau, S of Kara Balta, Too Ashuu pass. 2855m.
- A. Dickerson 00-43 : TULIPA SP.** Kyrgyzstan, Talas Alatau, S of Klyuchevka, Kara Bura pass. 3215m.
- A. Dickerson 00-44 : TULIPA SP.** Kyrgyzstan, Kyrgyz Alatau, S of Bishkek, Ala Archa. 2270m.
- 976.450 : UNGERNIA SEWERZOWII**
- 976.500 : UNGERNIA TRISPHAERA**
- 977.100 : URGINEA MARITIMA**
- 978.000 : VACCINIUM ARCTOSTAPHYLOS** Turkey, Trabzon, So_anli Da_lari above Çaykara. 2200m. Steep slopes with *Rhododendron* scrub.
- 978.001 : VACCINIUM ARCTOSTAPHYLOS** Turkey, Artvin, Genya Da_. 1600m. Steep, wooded slopes with *Rhododendron*. (A splendid ericaceous shrub 1-2m. tall. Fine white flowers, black fruits & outstanding autumn colour.)
- 979.040 : VERATRUM ALBUM** No data. This magnificent & variable species ranges from western Europe to Siberia in moist, montane grassland. It grows extremely slowly but seems immortal, forming great clumps of striking, pleated leaves, the most distinct & arresting foliage in the garden, above which the flower-spikes of green-white stars rise to around 2m.
- 979.060 : VERATRUM ALBUM** Spain, eastern Pyrenees. (From most imposing Pyrenean race (var. *parviflorum*) with 2m. to 2.5m. high branching spires massed with a multitude of small, starry, yellow-green flowers.) Archibald Archive www.srgc.net
- 979.250 : VERATRUM NIGRUM** No data. "One of the rarest & most striking of garden plants" comments Graham Stuart Thomas. Just as spectacular & desirable as *V. album*, with equally fine, pleated foliage but the starry flowers are maroon-black. Distributed from central & SE Europe into Russia. These both need a moist, rich soil & perhaps a little shade to prevent scorch.
- 980.020 : VERBASCUM ACAULE** (*Celsia acaulis*) (Endemic to the higher mountains of the Peloponnese.)
- 980.050 : ## VERBASCUM DUMULOSUM** Turkey, Antalya, Gullukdagi. 900-1000m. Crevices in ruins. (Only known from the ancient walls of Termessos, where it has been all but eliminated by herbicides. Unrivalled as the finest, dwarf, saxatile member of the genus. Outstanding as an alpine-house & dry-stone wall plant. Woody based mounds of grey-felt rosettes cover themselves with stubby 15cm. spikes of bright yellow flowers. From our 1984 coll. : quite variable in size & shape of the leaves)
- 980.200 : VERBASCUM ARCTURUS** (*Celsia arcturus*) Greece, Crete, Rethimno, near Selia. Ex an A. Edwards coll. (Long-flowering & long-lived, woody-based chasmophyte, endemic to Cretan limestone gorges. Downy, grey foliage & 30cm. stems of bright-yellow flowers with violet filaments. Easy if protected from wetness - sows itself in our unheated greenhouse.)
- 980.250 : VERBASCUM ATROVIOLACEUM** Russia, central Caucasus. 1600m.
- 981.300 : VERBASCUM LEVANTICUM** (*Celsia glandulosa*) North Cyprus, Kyrenia, castle walls. Ex an A Edwards coll. (Another chasmophyte, quite close to *V. arcturus* but distributed at low altitudes, often colonizing ruined walls, in the Lebanon &

Israel, though the type-locality is in Cyprus. Hairy, pinnatifid, basal leaves and dense inflorescences of many, yellow flowers, with hairy filaments which can be both cream or purple.)

981.500 : VERBASCUM MACRURUM Greece, Crete, above Laki towards Omalos. M. Jope 97-65 : 17.10.97 (A robust, 1m. high, E Mediterranean biennial, clothed in rough, yellowish hairs, with dense spires of yellow flowers.)

982.105 : VERBASCUM RORIPIFOLIUM (*Celsia roripifolia*) No data. A tall, airy biennial from NE Greece & adjacent Bulgaria. Around 1m. high with branched inflorescences of lots of little, yellow flowers.

982.551 : VERBASCUM SPODIOTRICHUM

982.800 : VERBASCUM UNDULATUM Greece, Fokida, N of Galaxidi. Sea-level. Gravelly areas on limestone. (A perennial with woody-based clumps & the most beautiful, wavy-edged foliage.) Archibald Archive www.srgc.net

982.950 : VERBASCUM WIEDEMANNIANUM Turkey, G_m_hane, WNW of Bayburt. 1600m. Stony clay in fallow-fields. (An outstanding purple-flowered exception among over 200 yellow-flowered Turkish *Verbascum* spp. A very local N Turkish endemic without any close relatives, still sadly confused in gardens with the widespread *V. phoeniceum*. Monocarpic or a short-lived perennial, with stout, narrow spires, up to 2m. high, packed with scented, violet-purple flowers with the filaments covered in purple hairs. Seed from Richard Riedy in New Mexico but successfully grown from Wales to Cambridge in the UK, though it can be temperamental and we suspect will always remain a connoisseurs' plant. It needs a long cold period to germinate well.)

982.951 : VERBASCUM WIEDEMANNIANUM Turkey, Erzurum, W of Horasan. 1550m. Alluvial hills. (An outstanding purple-flowered exception among over 200 yellow Turkish *Verbascum* spp. A very local N Turkish endemic without close relatives, sadly confused in gardens with the widespread *V. phoeniceum*. Monocarpic or a short-lived perennial, with stout, narrow spires, up to 2m. high, packed with scented, violet-purple flowers with the filaments covered in purple hairs. Our 1985 coll. was successfully grown from Wales to Cambridge, in the UK, and from New Mexico to Australia. It can be temperamental and we suspect will always remain a connoisseurs' plant. Seeds need a long cold period to germinate well.)

989.900 : VIOLA DOERFLERI Greece, Kajmakalan. (Only known from the alpine region, between 1750m. & 2500m., on this one mountain lying right on the border of Greece and Macedonia, where it grows with several other delectable violets. Unusually, this species appears to be always purple-flowered.)

990.000 : VIOLA DUBYANA Italy, Lombardia, Monte Tremalzo. 1600m. Crevices & debris at base of limestone cliffs. P.&P. Watt coll. (A beautiful alpine species, only known from this small area in N Italy & very seldom seen in cultivation. Rated more highly than *V. cenisia* by the collectors, Peter & Penny Watt. The flowers are always bright violet-purple.)

990.900 : VIOLA GRACILIS Turkey, Bursa, Ulu Dag. 1500-1900m. Clearings in *Abies* & *Pinus* woodland, stony sites in granite grit or in turf. (5443 : 6.7.84) (Almost all violet ; very few yellow.) Archibald Archive www.srgc.net

990.901 : VIOLA GRACILIS Turkey, Bursa, Ulu Dag. 2000m. Among *Vaccinium*, *Bruckenthalia* etc. in acid soil on open slopes. (6973 : 19.7.84)

991.580 : VIOLA MONOCHROA Russia, Altai. 2200m. "Snowfields". Ex J.&J. Halda 95-1078 (A fine, mat-forming alpine, distributed from the Altai east to the ranges near Lake Baikal, described by the collectors as having "huge, dark violet flowers". Indeed they are very big, rounded, short-spurred, pansy-flowers of solid, rich-violet produced on 5cm. stems over a long period in summer. A new introduction of worth, growing happily outside here so far in rich, peaty scree conditions.)

993.150 : VIOLA SCHARIENSIS Macedonia, Sar Planina, Popova Sapka above Tetovo. 2000m. Alpine turf & among *Vaccinium*. (An excellent alpine species, endemic to the Albanian border mountains above Tetovo, a battleground in 2001. We first collected it in 1964 &, in the absence of an acceptable name, has been distributed as both the allied *V. albanica* & *V. grisebachiana*. It has been described as a new species at last. Profuse lavender flowers. Not difficult in a very well-drained site in the UK.).

- 1.005.004 : ACHLYS CALIFORNICA** Cal., Humboldt Co., N of Weitchpec. 950m. Among *Gaultheria* & *Rhododendron* at edge of coniferous forest. (We have ever seen this small genus in *Berberidaceae*, (2 species in N America & 1 in Japan) grown in the UK. Rhizomatous, herbaceous perennials about 40cm. high. from moist places in coniferous forest whose dense spikes of flowers, composed only of creamy stamens, are hardly spectacular but whose large pale-green leaves, each with 3 fan-shaped leaflets, carried on long, 25cm., petioles will appeal to those who appreciate beautiful foliage. Should be easily grown in the UK.)
- 1.005.005 : ACHLYS CALIFORNICA** Oregon, Jackson Co., N of Prospect. 1130m. P. Gustafson 98-0831. (One of two N Americans (another is Japanese) in this small genus in *Berberidaceae*, neither of which we have ever seen grown in the UK. Rhizomatous, herbaceous perennials about 40cm. high. from moist, shady places in coniferous forest whose dense spikes of flowers, composed only of creamy stamens, are hardly spectacular but whose large pale-green leaves, each with 3 fan-shaped leaflets, carried on long, 25cm., petioles will certainly appeal to those who appreciate beautiful foliage. Should be easily grown in the UK.)
- 1.005.100 : ACHLYS TRIPHYLLA** (subsp. *triphylla*) Archibald Archive www.srgc.net
- 1.010.001 : ACONITUM COLUMBIANUM** (var. *columbianum*) Idaho, Nez Perce Co., Craig Mt., SE of Lewiston. 450m. Wet slope in coniferous woodland. 25.7.95 (A 2m., purple-blue & green-white monkshood. Should be easy in UK.)
- 1.010.002 : ACONITUM COLUMBIANUM** (var. *columbianum*) Cal., Sierra Co., NNW of Bassetts. 2000m. Among *Salix* & grasses in moist opening among conifers. 12.8.89
- 1.010.003 : ACONITUM COLUMBIANUM** (var. *columbianum*) Cal., Plumas Co., Homer Lake. 2000m. G. Greger coll. (A fine 2m. high, purple-blue & green-white monkshood. From moist sites in the coniferous zone so should be easy in UK.)
- 1.010.050 : ACONITUM COLUMBIANUM from YELLOW FORM** Cal., Plumas Co., Taylor Lake. 1980m. Moist, N-facing slope. G. Greger coll.
- 1.011.010 : ACTAEA ALBA** (*A. pachypoda*) No data. From eastern woodlands, this is surely the finest of fruiting herbaceous plants. The small, fluffy racemes of white flowers, rising to about 60cm. above elegantly cut foliage, are followed, in autumn, by a display of striking white fruits, 'doll's eye' fruits on thickened red pedicels. Slow-growing but permanent in a shady site.)
- 1.011.050 : ACTAEA ALBA f. RUBROCARPA**
- 1.011.110 : ACTAEA RUBRA** (subsp. *rubra*) No data.
- 1.011.150 : ACTAEA RUBRA subsp. ARGUTA** Cal., Humboldt Co., Friday Ridge, SSW of Willow Creek. 1430m. Steep slopes in coniferous woodland. 20.8.89
- 1.011.151 : ACTAEA RUBRA subsp. ARGUTA** Cal., Plumas Co., Homer Lake. 1980m. (The western race of this N American perennial. Stubby white racemes followed by shiny, deep red berries. A plant of deep, moist soils in woodland.)
- 1.011.190 : ACTAEA RUBRA f. NEGLECTA** The white-fruited form, quite distinct from *A. alba*.
- 1.020.000 : ADIANTUM**
- 1.025.050 : AGASTACHE RUPESTRIS** Colorado-grown seed of this attractive, 60cm. tall shrublet in *Labiatae*, ex a Sally Walker coll. made in Arizona. A subtle rather than spectacular species with aromatic, silvery, lavender-like foliage & heads of flowers, described by Panayoti Kelaidis as "a burnt brownish orange".
- 1.025.200 : AGASTACHE URTICIFOLIA** Cal., Plumas Co., Homer Lake. 1830m. Moist, N-facing slope. G. Greger coll.
- 1.030.000 : AGAVE** : 25 species in U.S.A.
- 1.035.000 : AGAVE PARRYI** Arizona, Yavapai Co. M.& P. Stone 99-202
- 1.030.003 : ALLIUM ACUMINATUM** Idaho, Butte Co., SW of Arco. 1400m. Among *Artemisia* on open, level steppe. 20.7.95 (One of the most showy of the more eastern species. Round, brilliant purple-pink umbels on 15-20cm. stems.)
- 1.030.004 : ALLIUM ACUMINATUM** Idaho, Custer Co., Sawtooth Valley S of Obsidian. 1980m. Among *Artemisia* in stony clay of valley bottom. 6.8.89 (One of the most showy of the more eastern species. Round, brilliant purple-pink umbels on 15-20cm. stems.)
- 1.030.300 : ALLIUM BISCEPTRUM** Cal., Plumas Co., N of Seneca. 1070m. Stony clay in clearing of coniferous forest. 29.6.89
- 1.030.301 : ALLIUM BISCEPTRUM** Cal., Alpine Co. 2520m. Granite sand in part-shade in aspen-grove. J. & G. Robinett coll. 2.9.95 (Open, 3cm. umbels of starry pink flowers. Occurs on the higher ranges across to Idaho & Utah.)
- ALLIUM BOLANDERI**
- 1.030.450 : ALLIUM CAMPANULATUM** Cal., Modoc Co., Warner Mts., E of Davis Creek. 1750m. Among *Artemisia* on gravelly clay slopes. Archibald Archive www.srgc.net
- 1.030.451 : ALLIUM CAMPANULATUM** Cal., Fresno Co. 1700m. Sandy, granitic soil in open woodland. J. & G. Robinett coll. 1.9.95 (Rose-pink, spreading, starry flowers in loose umbels, 4-5cm. across, on 15-20cm. stems.)
- 1.030.551 : ALLIUM CRATERICOLA** Cal., Lake-Colusa Co. line. 1090m. Serpentine scree in full sun. J. & G. Robinett coll.

- 26.5.95 (Dense umbels of white to pink flowers nestle, almost stemless, on the one or two, thick, channeled, falcate leaves. A desirable dwarf of exposed volcanic or serpentine habitats but a little difficult and needs patience.)
- 1.030.552 : ALLIUM CRATERICOLA** Cal., Napa Co., N of Calistoga, The Palisades. 840m. Serpentine scree. (Dense umbels of white to pink flowers nestle, almost stemless, on the one or two, thick, channeled, falcate leaves. A desirable dwarf of exposed volcanic or serpentine habitats but a little difficult and needs patience.)
- 1.030.580 : ALLIUM CRENULATUM** No data. A seldom-cultivated, dwarf, alpine species, rated by Mark McDonough as "a delightful small plant" to grow in a pot or a trough. Distributed locally in gravelly soils at high altitudes from British Columbia S into Oregon, it has a couple of narrow, prostrate leaves and an umbel of white or pink flowers on a very short, sturdy, winged stem.
- 1.030.600 : ALLIUM CRISPUM** Cal., San Benito Co. 450m. Chaparral on steep, NW-facing, serpentine slope. J. & G. Robinett coll. 28.5.95 (Large, dense umbels of deepest pink to maroon flowers with flaring segments, the three inner ones with crisped, white edges, on 10-15 cm. stems. Endemic to the central coast-ranges - "one of the most striking".)
- 1.030.601 : ALLIUM CRISPUM** Cal., Monterey Co. J. & G. Robinett coll. 7.5.98 (Large, dense umbels of deepest pink to maroon flowers with flaring segments, the three inner ones with crisped, white edges, on 10-15 cm. stems. Endemic to the central coast-ranges - "one of the most striking".)
- 1.030.602 : ALLIUM CRISPUM** Cal., San Benito Co. Ex an R. Ratko coll. (Large, dense umbels of deepest pink to maroon flowers with flaring segments, the three inner ones with crisped, white edges, on 15 cm. stems. Endemic to heavy serpentine-derived soils in the central coast-ranges & "one of the most striking" according to Jim Robinett. Seed from Robert Rolfe's Farrer Medal winning stock, which he describes as "almost bicoloured, with the inner segments notably darker than the lilac-pink outers.")
- 1.030.701 : ALLIUM DICHLAMYDEUM** Cal., Sonoma Co., Stewart's Point. 10m. Coastal rocks. (One of the best of the larger species with fine, bright-pink heads on 20-30cm. stems. Very satisfactory & trouble-free in a frame in UK.)
- 1.030.702 : ALLIUM DICHLAMYDEUM** Cal., Sonoma Co. 10m. Coastal bluff in fog-belt. (One of the best of the larger species with fine, bright-pink heads on 20-30cm. stems. Very satisfactory & trouble-free in a frame in UK.)
- 1.030.800 : ALLIUM FALCIFOLIUM** Cal., Humboldt Co., SSW of Willow Creek. 1580m. Stony openings among conifers on serpentine. 30.7.95 (Red-purple flower-heads on 5cm. stems between two little, thick, falcate leaves in early spring.)
- 1.030.804 : ALLIUM FALCIFOLIUM** Cal., Lake Co. 670m. Serpentine scree in full sun. J. & G. Robinett coll. (Umbels on flat, 1-5 cm. stems with falcate, blue-green leaves. A choice little plant ideal for scree.) Archibald Archive www.srgc.net
- 1.030.805 : ALLIUM FALCIFOLIUM** Oregon, Josephine Co. Serpentine scree in full sun. (Showy umbels of red-purple flowers carried on flat, 1-5 cm. stems above falcate, blue-green leaves. A choice, compact plant ideal for scree in full sun. This population is more robust and vigorous in cultivation than those from the Californian Coast Ranges.)
- 1.031.050 : ALLIUM FIMBRIATUM var. PURDYI** Cal., Lake Co. 635m. Gravelly serpentine clay in full sun. J. & G. Robinett coll. 14.7.95 (White to pale lavender, open, 3-4cm. umbels. Occurs in a few dense colonies in a very small area.)
- 1.031.100 : ALLIUM GEYERI** Colorado, Montrose Co., Uncompahgre Plateau. 2900m. Openings in *Populus* & *Abies* woodland. (Quite a dwarf, pale-pink form of this variable, widespread species of the more eastern mountains. 20cm.)
- 1.031.210 : ALLIUM GOODINGII** No data. "A lovely plant" : a rhizomatous, moisture-loving native of a few sites in Arizona & New Mexico with glaucous-grey foliage and 50cm. stems carrying umbels of pink to deep purple flowers.
- 1.031.500 : ALLIUM HYALINUM** California. No further data. Ex a J. & G. Robinett coll. (A characteristic species of the western foothills of the Sierra Nevada, at altitudes of up to 1500m. Stems of 15-30cm. carry open umbels of white to pale pink flowers, becoming membranous as they age.)
- 1.031.600 : ALLIUM JEPSONII** Cal., Butte Co. 455m. Moss layer above serpentine cliff in full sun on N-facing slope. (An extremely local plant of the N Sierran foothills. Dense, white, 3-4cm. umbels on 30-50cm. stems.)
- 1.031.700 : ALLIUM LACUNOSUM** (var. *lacunosum*) Cal., San Luis Obispo Co. 730 m. Gravelly serpentine clay in open woodland. J. & G. Robinett coll. 20.7.95 (Umbels of white stars on 10-15cm. stems. From lower elevation serpentines.)
- 1.031.800 : ALLIUM LEMMONII** Cal., Modoc Co., N of Canby. 1500m. Among volcanic debris on open, clay 'flats'. (Hardy, 20cm. high species in pink to white from the cold, dry uplands of the north all the way across to Idaho.)
- 1.031.900 : ALLIUM MEMBRANACEUM** Cal., Yuba Co., 700-800m. J. & G. Robinett coll. (An uncommon species, closest to *A. bisceptrum* & *A. campanulatum*, occurring sporadically up to about 1400m. in the foothill *Pinus ponderosa* woodland of N & central California. Stems of 15-30cm. carry rounded umbels of pale-pink flowers with spreading segments turning papery in fruit.)
- 1.032.250 : ALLIUM OBTUSUM var. CONSPICUUM** Cal., Fresno Co., E of Shaver Lake (Sierra Nevada E of Merced). 1680m. Farwig & Girard coll. 1995. (A very local plant with dense heads of pale pink flowers on short stems.)
- 1.032.251 : ALLIUM OBTUSUM var. CONSPICUUM** Cal., Plumas Co., Keddie Ridge. 1460m. SW-facing slope.
- 1.032.252 : ALLIUM OBTUSUM var. CONSPICUUM** Cal., Plumas Co., Greenville Saddle road. 1370m. W-facing slope. (A very choice, very local plant from the granitic grits of the northern Sierra Nevada. Dense heads of up to 60, pale pink flowers with purple midveins on stems of 15cm. or less above 1 or 2 channelled leaves, lying flat on the ground..)
- 1.032.499 : ALLIUM PENINSULARE** Cal., Butte Co., 500-900m. J. & G. Robinett coll. (A widespread, lower altitude Coast

Range plant with fine open umbels of red-purple flowers on 30cm. stems. Quite easy & very worthwhile in a bulb-frame in the UK.)

1.032.500 : ALLIUM PENINSULARE No data. Widespread, lower altitude Coast Range plant from a Wayne Roderick coll. Good heads of red-purple flowers on stems of up to 30cm. Quite easy in a bulb-frame in the UK.

1.032.600 : ALLIUM PLATYCAULE Cal., Modoc Co., Warner Mts. E of Davis Creek. 1750m. Open, gravelly areas. (Round umbels of deep rose with dark anthers on short flat stems between two thick, falcate leaves. A spectacular 'tumble- weed' species, resembling the SW Asian Sect. *Acanthoprasum*, flowering very early, just after the snow has melted. Not too easy to germinate and grow on, it needs cold winters & is all but impossible with Jim & Georgie in low-altitude, W California. This is seed from Norman Stevens (Cambridge, UK), who finds it fits in well with those from similar climates in E Turkey, Iran & Central Asia.)

1.032.601 :# ALLIUM PLATYCAULE Cal., Modoc Co., Warner Mts., Cedar Pass. 1600m. Steep, loose, gravelly slopes. (Round umbels of deep rose with dark anthers on short flat stems between two thick, falcate leaves. A spectacular 'tumble- weed' species, resembling the SW Asian Sect. *Acanthoprasum*, flowering very early, just after the snow has melted. Not too easy to germinate and grow on : it needs cold winters. Fits in well with those from similar climates in E Turkey, Iran & Central Asia.)

1.032.602 : ALLIUM PLATYCAULE Cal., Plumas Co., Greenville Saddle road. 1460m. W-facing slope.

ALLIUM PLUMMERAE

1.032.800 : ALLIUM SANBORNII (var. *sanbornii*) Cal., Yuba Co. 635m. Serpentine scree in full sun. J. & G. Robinett coll. 27.8.95 (Bright pink flowers in very dense, 3-6cm. umbels on 15-40cm. stems. About a month later than the next and usually the last of the Californian onions to flower. Both this and the following race are very local serpentine plants.)

1.032.850 : ALLIUM SANBORNII var. CONGDONII Cal., Nevada Co. 1060m. Serpentine scree in chaparral. J. & G. Robinett coll. 27.8.95 (Dense umbels of white to pink flowers on 20-40cm. stems in June & July.)

1.033.004 : ALLIUM SISKIYOUENSE Oregon, Jackson Co., Siskiyou Mts., Pilot Rock Road. 1220m. Vernal wet, rocky serpentine slopes. (Umbels of bright rose-pink flowers sit, almost stemless, between two flat falcate leaves. A desirable local endemic of the ranges along the California-state line, close to *A. falcifolium* but narrower leaved & larger.)

1.033.005 : ALLIUM SISKIYOUENSE Oregon, Jackson Co., Siskiyou Mts., S of Ashland. 1220m. Vernal wet, rocky serpentine slopes. P. Gustafson 98-0835. (Umbels of deep rose-pink flowers sit, almost stemless, between two flat falcate leaves. A desirable local endemic of the ranges along the state line, close to *A. falcifolium* but narrower leaved.)

1.033.602 : ALLIUM VALIDUM Cal., Placer Co. 1400m. Wet mountain-meadow. J. & G. Robinett coll. 23.9.95 (A big wet-grower, up to 75cm. high, with dense, pale-pink umbels in summer. Should be no trouble outside in the UK.)

1.033.603 : ALLIUM VALIDUM Cal., Plumas Co., W of Canyon Dam. 1370m. G. Greger coll. (A big wet-grower, up to 75cm. high, with dense, pale-pink umbels in summer. Should be no trouble outside in the UK.) Archibald Archive www.srgc.net

AMORPHA : 15 SPECIES

1.040.210 : AMORPHA CANESCENS A shrubby, perennial, prairie species in *Leguminosae* (*Fabaceae*), reaching about 1m. or more in height and sometimes running underground. It is widely distributed in the eastern parts of North America, though grazed out in many areas. Dense racemes of violet flowers cluster in the axils of the downy, pinnate leaves

1.047.000 : AMSONIA : 18 SPECIES

1.047.300 : AMSONIA ARENARIA

1.047.400 : AMSONIA BREVIFOLIA

1.047.460 : AMSONIA CILIATA (subsp. *ciliata*) Arkansas, Sharp Co. Ex a S. Marak coll.

1.047.500 : AMSONIA CILIATA

1.047.550 : AMSONIA EASTWOODIANA

1.047.600 : AMSONIA GRANDIFLORA

1.047.650 : AMSONIA HIRTELLA

1.047.700 : AMSONIA ILLUSTRIS

1.047.710 : AMSONIA ILLUSTRIS No data. One of the more widely distributed eastern members of this attractive genus in *Apocynaceae*, most diverse in the SW states. An erect, woody-based perennial up to 1m. tall with leathery, lanceolate, shiny, dark green leaves and cymes of light blue flowers carried on darker tubes. Distributed from the Great Plains S into Texas and growing in stream-beds and flood-plains, seasonally wet habitats similar to those of the rare Eurasian species, *A. orientalis*.

1.047.750 : AMSONIA JONESII

1.047.760 : AMSONIA JONESII No data. A local, dry-climate species from scrub and sagebrush up to 2150m. in E Utah, W Colorado and N Arizona. A glabrous perennial up to 50cm. tall with lanceolate leaves and cymes of blue flowers.

1.047.800 : AMSONIA KEARNEYANA

1.047.850 : AMSONIA LONGIFLORA

1.047.900 : AMSONIA LUDOVICIANA

1.047.950 : AMSONIA PALMERI

1.048.000 : AMSONIA PEEBLESII

1.048.050 : AMSONIA REPENS

1.048.100 : AMSONIA RIGIDA

1.048.150 : AMSONIA SALPIGNANTHA

1.048.210 : AMSONIA TABERNAEMONTANA var. SALICIFOLIA No data. Doubtfully sustainable, narrow-leaved variant of this species, widespread but local in wooded areas of SE North America, E to Kansas & S into Texas & Georgia. An elegant, woody-based, willow-leaved perennial up to 1m. high with cymes of starry, pale-blue flowers with darker blue tubes.

1.049.000 : ANDROSACE : 3 SPECIES

1.049.510 : ANDROSACE NIVALIS (*Douglasia nivalis*) No data. A distinctly coloured, choice, alpine, mat-forming species distributed from British Columbia & Alberta into Washington. Rosettes of narrow, fleshy, grey-green leaves. Its 5cm. tall umbels of wine-red flowers are like no other. Alpine-house or trough in the UK. Archibald Archive www.srgc.net

1.050.000 : ANDROSTEPHIUM BREVIFLORUM

1.050.050 : ANDROSTEPHIUM CAERULEUM

1.050.200 : ANEMONE : 20 SPECIES

1.050.200 : ANEMONE CANADENSIS

1.050.405 : ANEMONE DELTOIDEA Oregon, Jackson Co., S of Ashland. 1220m. P. Gustafson 98-0832 (A lovely rhizomatous perennial of W coast coniferous woodland at altitudes up to 2000m. Pristine white flowers face upwards on the 20cm. stems, ringed with a ruff of three hairy leaves, in early spring. Another western woodlander strangely absent from UK gardens)

1.052.000 : ANEMONELLA THALICTROIDES

1.052.500 : ANEMOPSIS CALIFORNICA

1.053.000 : ANGELICA : 20 SPECIES

1.055.000 : ANTENNARIA

1.055.800 : ANTENNARIA SOLICEPS Nevada, Clark Co., Spring Mts., Charleston Peak. 3350m. Limestone talus & fissures. J. Andrews coll. (A prostrate, mat-forming endemic of this range, to the NW of Las Vegas. Symmetrical, angular rosettes of grey leaves, with a black dot on each one, & felted, creamy flower-heads. Possibly not previously in cultivation.)

1.057.000 : ANTIRRHINUM

1.059.950 : AQUILEGIA AUSTRALIS

1.060.000 : AQUILEGIA BARNEBYI Colorado, Rio Blanco Co., above Piceance Creek NW of Rio Blanco. 1980m. Steep-sided gully in loose fragmented shale. (Endemic to the oil-shale barrens of the Uinta Basin & discovered by Ripley & Barneby in 1948. Glaucous leaves & sticky, 30cm. stems of pink & cream flowers. Grows easily under glass with us.)

1.060.020 : AQUILEGIA BREVISTYLA

1.060.040 : AQUILEGIA CAERULEA Wyoming, Albany Co., Medicine Bow Mts., Snow y Range. 3600m. Stony slopes in sparse coniferous forest. Archibald Archive www.srgc.net

1.060.070 : AQUILEGIA CAERULEA OCHROLEUCA

1.060.090 : AQUILEGIA CALIFORNICA

1.060.100 : AQUILEGIA CANADENSIS No data. Elegant scarlet & yellow eastern version of *A. formosa*. 50cm.

1.060.120 : AQUILEGIA CANADENSIS from DWARF FORM No data. A delightful, little, compact, 20cm. version of the elegant scarlet & yellow eastern version of *A. formosa*. Easily grown in a moist, gritty soil in part-shade.

1.060.210 : AQUILEGIA CHAPLINII New Mexico, Eddy Co. Ex a S. Walker coll. (A relative of *A. chrysantha*, endemic to the Guadalupe Mts., E of El Paso on the border of Texas & New Mexico, where its delicately cut, ferny foliage sheets the moist cliff-faces around Sitting Bull Falls. Very long-spurred, red-tinted, pale yellow flowers on stems of about 20cm.)

1.060.300 : AQUILEGIA CHRYSANTHA

1.060.310 : AQUILEGIA CHRYSANTHA No data but the true species from Mike & Polly Stone. From moist sites in the mountains of the southern states, mainly New Mexico & Arizona, into N Mexico. Tufted clumps of dissected, glaucous foliage & stems of about 50cm. with several long-spurred flowers with spreading sepals, wholly in clear golden-yellow.

1.060.400 : AQUILEGIA DESERTORUM

1.060.500 : AQUILEGIA ELEGANTULA Utah, Lasal Mts., below Geyser Pass. 3600m. Banks in coniferous woodland

1.060.600 : AQUILEGIA EXIMIA

1.060.700 : AQUILEGIA FLAVESCENS

1.060.801 : AQUILEGIA FORMOSA Nevada, Elko Co., Ruby Mts. between Dollar & Lamoille Lakes. 2600m. Moist places among *Salix* scrub.

1.060.802 : AQUILEGIA FORMOSA Cal., Trinity Co., NW of Mt. Eddy. 2300m. Open, wet meadow with occasional conifers.

1.060.803 : AQUILEGIA FORMOSA Cal., Alpine Co., S of Carson Pass to Winnemucca Lake. 2700m. Among grasses in moist meadow.

1.060.804 : AQUILEGIA FORMOSA Oregon, Josephine Co., E of Takilma. 900m. Loose talus on steep, N-facing slope. (Most widespread western columbine of moist habitats with scarlet flowers on branching 60cm. stems.)

1.060.805 : AQUILEGIA FORMOSA Nevada, White Pine Co., Snake Range. 3500m. Moist, humus-rich areas at margins of coniferous forest. Archibald Archive www.srgc.net

1.060.819 : AQUILEGIA FORMOSA Cal., Plumas Co., Eisenhimer Ridge. 2130m. G. Greger coll. (The most widespread western columbine. Variable but always eye-catching. A plant of moist habitats with many nodding, spurred scarlet flowers dancing on branched 60cm. stems.)

1.060.820 : AQUILEGIA FORMOSA Cal., Greenville. G. Greger coll. (The most widespread western columbine. Variable but always eye-catching. A plant of moist habitats with many nodding, spurred scarlet flowers dancing on branched 60cm. stems.)

1.061.000 : AQUILEGIA HICKLEYANA

1.061.100 : AQUILEGIA JONESII Wyoming, Sheridan Co., Bighorn Mts., Duncum Mt. to Sheep Mt. 3200m. Unstable limestone scree on steep slopes.

1.061.101 : AQUILEGIA JONESII Wyoming, Sheridan Co., Bighorn Mts., Duncum Mt. 3300m. Alpine steppe on open, stony, limestone slopes.

1.061.200 : AQUILEGIA LARAMIENSIS Wyoming, Albany Co., Laramie Mts. above Friend Creek. 2280m. Granite fissures and ledges. (Pure white flowers with short, incurved spurs. 10cm. Closest to the Rocky Mt. *A. saximontana*.)

1.061.230 : AQUILEGIA LONGISSIMA

1.061.300 : AQUILEGIA MICRANTHA Utah, San Juan Co., above Bluff. 1550m. Seepage lines on shady, sandstone cliffs. (Many, small, palest blue, cream or white flowers on sticky, 50cm. stems. A Colorado Plateau endemic.)

1.061.350 : AQUILEGIA aff. MICRANTHA Colorado, Montrose Co., Dolores River Canyon NW of Uravan. 1700m. Sandstone detritus on steep, shaded slope. (From a very beautiful colony we found in 1989. Perhaps the result of hybridization between *A. micrantha* and *A. elegantula* but maybe another is involved. Not very variable in the flowers - soft, creamy yellows with long spurs tinged with apricot - but leaves and the 30-50cm. stems vary greatly in their glandular pubescence.)

1.061.400 : AQUILEGIA PUBESCENS

1.061.500 : AQUILEGIA SAXIMONTANA Colorado, Teller Co., Pike's Peak, Elk Meadows. 3600m. In loose granite grit at base of granite boulders on steep slope.

1.061.800 : AQUILEGIA SCOPULORUM Utah, Garfield Co., above Butch Cassidy Draw. 2600m. Loose limestone talus on steep slopes. (Exquisite bluish foliage and flowers with very long spurs, wholly in a deep gentian-blue. A taller form, 20-30cm. here, easier to grow & more suitable for a very sunny site in a raised bed or the rock-garden than the next two tiny variants.)

1.061.849 : AQUILEGIA SCOPULORUM Nevada, Clark Co., Spring Mts., Charleston Peak. 3550m. Limestone talus. J. Andrews coll. (This & the next are the ones the alpine-plant specialist will demand. Reduced races occur near the summits of a few of the highest limestones of the Great Basin. Collecting seed from these is acutely difficult & it has very seldom been available in our lifetimes. We grew one many years ago from a Carl Worth coll. It remained compact in cultivation with imbricate, blue-grey foliage & long-spurred flowers on stems of a few cm. Worth tried unsuccessfully to collect this race, which has been called *A.s. var. perplexans*. John has also tried unsuccessfully several times before this, making a round-trip hike of over 25km. (16 miles) to find all the seed-heads have been eaten by deer. At last a little seed from a few capsules the deer have missed. Long-spurred flowers here vary in colour from blue, cream & purple to red & sit in on cushions, which can often be quite large & ancient.)

1.061.850 : AQUILEGIA SCOPULORUM Nevada, White Pine Co., Snake Range. 3440m. Exposed limestone talus up to the summits. Refrigerated seed from a J. Andrews 1995 coll. (Another reduced alpine variant from a range near the Utah border on the other side of the Great Basin. Flowers here, on stems of only a few cm., are entirely rich-blue and long-spurred.)

1.061.900 : AQUILEGIA SHOCKLEYI

1.061.955 : AQUILEGIA SKINNERI Mexico, Durango. Archibald Archive www.srgc.net

1.062.005 : AQUILEGIA TRITERNATA Arizona, Pima Co.

1.063.000 : ARABIS : 60 PLUS SPECIES

1.066.000 : ARALIA : 5 SPECIES

1.068.000 : ARCTOMECON CALIFORNICA Nevada, Clark Co., SE of Valley of Fire. 500m. Exposed ridgetops on eroded clay & gravel hills. (An extraordinary Nevadan poppy enthused over by Dwight Ripley in 1942 : "bluish leaves, clothed in long pale

hairs" and 25cm. "smooth stems, almost leafless, each branching into a corymb of fabulous gold poppies." Strictly for the sunniest, best ventilated alpine-house in cold, wet climates : may be ungrowable but worth every effort.)

1.068.050 : ARCTOMECON HUMILIS Utah, Washington Co., Bloomington Hills S of St. George. 920m. Tops & sides of ridges on eroded clay hills. J. Andrews coll. (To Dwight Ripley this was "one of the most startling plants in all Utah." Rosettes of lobed, blue leaves, clad in long, soft, white hairs ; up to 70 white poppies on branching stems to 20cm. but usually 10cm. "Threatened" here by a housing-development and 'off-road' vehicles. Unpredictable in germination and so far proving very "difficult".)

1.068.300 : ARCTOSTAPHYLOS

1.069.000 : ARCTOSTAPHYLOS NEVADENSIS Cal., Plumas Co., NW of Greenville. 1830m. G. Greger coll. (A mat-forming shrub in this diverse ericaceous genus, the manzanitas. Glossy bright-green leaves & racemes of white flowers.)

ARENARIA : 45 SPECIES

1.070.201 : ARENARIA HOOKERI Utah, Emery Co., Molen Reef E of Moore. 1930m. Sandstone detritus & rock-slabs. (Seldom seen in gardens but a classic, dense, cushion-plant, covered with fine, stemless, white flowers.)

1.075.100 : ARGEMONE CORYMBOSA A Mojave Desert species. Archibald Archive www.srgc.net

1.075.250 : ARGEMONE MUNITA (subsp. *munita*) Coast Ranges, S from San Luis Obispo Co.

1.075.301 : ARGEMONE MUNITA subsp. ARGENTEA al., Inyo Co., White Mts. 2000m. Stony, gravelly banks. (A Prickly Poppy best sown direct in a hot, dry site. Masses of diaphanous, white Romneya-flowers. 60cm.)

1.075.350 : ARGEMONE MUNITA subsp. ROBUSTA Cal., Orange Co., Santa Ana Mts.

1.075.400 : ARGEMONE MUNITA subsp. ROTUNDATA Cal., Plumas Co., E of Chilicoot. 1520m. Open, SW-facing slope. (A very prickly Prickly Poppy from a coll. made at the northern limit of the species distribution. Masses of diaphanous, white Romneya flowers on purple-tinged stems of about 60cm.. A short-lived perennial best sown direct in a hot, dry site.)

1.076.500 : ARISAEMA DRACONTIUM

1.076.550 : ARISAEMA TRIPHYLLUM

1.076.600 : ARISAEMA TRIPHYLLUM subsp. PUSILLUM

1.076.650 : ARISAEMA TRIPHYLLUM subsp. QUINATUM

1.076.710 : ARISAEMA TRIPHYLLUM subsp. STEWARDSONII Canada. No further data. One of two species in this largely E Asian genus, which grow in eastern North America & one of the hardest & most satisfactory in European gardens. This subspecies is a plant of acid, humus-rich soils in distinctly wet, deciduous woodland. Light green, tripartite leaves and green spathes, striped with purple in the throat, above the strongly fluted spathe tube. Clusters of scarlet fruits in autumn

1.077.200 : ARISTOLOCHIA : 5 SPECIES

1.078.500 : ARNICA : 25 SPECIES

1.078.700 : ARNICA CORDIFOLIA Idaho, Custer Co., Salmon River Mts. M.& P. Stone 98-7 (A handsome daisy, widespread from Alaska to Nebraska, usually in coniferous woodland, to over 3000m. elevation. Distinct, cordate leaves on long petioles and 1 to 3 heads with yellow rays on stems of around 30cm. in height. Should do well in part-shade in the UK.)

1.080.000 : ARTEMISIA : 20 SPECIES

1.082.000 : ARUNCUS DIOICUS

1.083.000 : ASARUM : 16 SPECIES

1.084.200 : ASARUM HARTWEGII Cal., Plumas Co., between Caribou & Seneca. 1220m. Mixed woodland. (Weird, shade-loving member of the *Aristolochiaceae*, all but confined to the Sierra Nevada. Brown-purple calyx with 3 long-attenuate lobes.)

1.084.201 : ASARUM HARTWEGII Cal., Plumas Co., E of Greenville, along Lights Creek. 1280m. G. Greger coll. (A weird, shade-loving member of the *Aristolochiaceae*, forming low clumps from a deep rhizome. Decorative cordate leaves, marbled with white along the veins, below which lurk the flowers surrounded by large, brown-purple calyces with 3 long-attenuate lobes. Inside these are white, striped with maroon and with bands of copious white hairs. Not difficult in dryish part-shade in the UK.).

1.085.000 : ASCLEPIAS : 60 PLUS SPECIES

1.085.202 : ASCLEPIAS CRYPTOCERAS Colorado, Mesa Co., Gateway. 1600m. Loose, clay slope. 9.7.95 (Bluish leaves on short, prostrate stems. Heads of weird greenish-yellow and rose-purple flowers. It has been flowered in UK.)

1.090.000 : ASTER: 120 PLUS SPECIES

1.100.000 : ASTRAGALUS : APPROX 400 SPECIES

1.100.401 : ASTRAGALUS AMPHIOXYIS (Sect. *Argophylli*) Utah, Kane Co., E of Kanab. 1500m. Sandy clay. (Silvery tufts with bright purple-pink flowers followed by large, reddish silky pods. Mainly of Colorado Plateau distribution.)

1.100.650 : ASTRAGALUS ARETIOIDES Wyoming, Fremont Co., SE of Lander. 2100m. Bare, eroded, clay slope. (A solid silver mound covered with stemless carmine-purple flowers - the ultimate challenge but very recalcitrant. Few.)

- 1.100.800 : ASTRAGALUS ASCLEPIADOIDES** (Sect. *Pachyphyllus*) Utah, Emery Co., Molen Reef SE of Moore. 2130m. Stony clay on low, eroded clay slopes. (Erect stems about 30cm. high with simple, rounded leaves seem to be trying to mimic *Asclepias cryptoceras*, with which it grows. A localised specialist endemic to selenium-rich soils of the Colorado Basin ; the most singular of a genus of eccentrics.)
- 1.101.500 : ASTRAGALUS CALYCOSUS** (Sect. *Scaposi*) Cal., Inyo Co., White Mts., N of Schulman Grove. 3160m. Exposed, stony slopes. 28.8.89 (A widespread, variable species, always difficult to collect as ants remove the seed quickly. Here in quite a dwarf, alpine form : tufts of tiny, grey-white leaves with 3 leaflets, about 5cm. high ; often blue-purple with white tips but not seen in flower here.)
- 1.101.501 : ASTRAGALUS CALYCOSUS** (Sect. *Scaposi*) Nevada, Eureka Co., W of Eureka. 2100m. Exposed, bare alkaline 'flats' with sparse *Juniperus*. (A widespread, variable species, always difficult to collect as ants remove seed quickly. Here in a very compact form. Pads of tiny, grey-white trifoliate leaves. Often blue-purple with white tips but not seen in flower here.)
- 1.101.800 : ASTRAGALUS CHAMAELEUCE** Utah, Uintah Co., WSW of Maeser. 2000m. Open, sandstone slopes. (Tiny grey tufts with huge, spongy, purple-mottled pods, following the loose racemes of pale lavender flowers.)
- 1.101.801 : ASTRAGALUS CHAMAELEUCE** Colorado, Rio Blanco Co. 2000m. Fragmented shale.
- 1.102.100 : ASTRAGALUS COCCINEUS** (Sect. *Argophylli*) Cal., Inyo Co., White Mts., near Toll House Springs. 1980m. Loose, stony, clay slope. (An incredible species, unsurpassed in the brilliance of its elongated, glowing scarlet flowers against the low tufts of woolly white foliage. Amazing, horned, white-velvet pods. It has been grown, flowered and exhibited in the UK.)
- 1.105.500 : ASTRAGALUS LOANUS** Utah, Sevier Co., E of Glenwood. 1950m. Loose, igneous gravel. (An elegant, condensed narrow-endemic of the Sevier Valley. Silky silver leaves ; white, lavender-tipped flowers and beaked pods, red-tinted and shiny with long hairs.)
- 1.105.600 : ASTRAGALUS LUTOSUS** (Sect. *Lutosi*) Colorado, Rio Blanco Co., NW of Rio Blanco. 2000m. Exposed slopes of loose, fragmented shale. (The famous, extremely local Dragon Milkvetch, narrowly endemic to these oil-shale 'barrens', a habitat owned by the 'oil-giants', its fate destined to be decided by the price of oil. Tight mats of little, fascinatingly pleated, greyish leaves & large, shiny, papery, red-blushed pods. A most distinct plant, the only member of its very own section.)
- 1.105.750 : ASTRAGALUS MEGACARPUS** Utah, Garfield Co., Red Canyon. 2600m. Limestone. M.&P.Stone 99-014. (One of the most striking & distinct species. Clumps of leafy, 5cm. high stems carry ascending pinkish purple flowers followed by incredible, inflated, mottled bladderly pods, declined on the ground around the base.)
- 1.106.050 : ASTRAGALUS MOLLISSIMUS var. THOMPSONIAE** Colorado, Mesa Co., SW of Whitewater. 1800m. Stony, sandstone slope with sparse junipers. 9.7.95 (A lovely plant, almost confined to the Colorado Plateau sandstones. Woolly white tufts send up many-flowered racemes of purple-pink flowers followed by densely white-hairy pods.)
- 1.106.700 : ASTRAGALUS MUSINIENSIS** (Sect. *Argophylli*) Utah, Emery Co., E of Moore. 2100m. Heavy, stony clay on eroded shale hills. (Tiny tufts of grey, trifoliate leaves produce racemes of pink and purple flowers on short, 3cm., stems, followed by the exquisite, inflated, papery, pink-velvet pods. A most distinct endemic of the Canyonlands area of central Utah.)
- 1.106.800 : ASTRAGALUS NEWBERRYI** (var. *newberryi*) (Sect. *Argophylli*) New Mexico, San Juan Co., NW of Aztec. 1900m. Eroded clay hills. (An extremely compact, pulvinate form here. Vivid purple-pink flowers on silver-white mounds.)
- 1.106.900 : ASTRAGALUS NEWBERRYI var. CASTOREUS** (Sect. *Argophylli*) Utah, Millard Co., E of Garrison. 1500m. Steep, loose, stony slope. (Showy Great Basin race of this fine, wide-ranging species with larger flowers and leaves.)
- 1.106.900 : ASTRAGALUS NEWBERRYI var. WATSONIANUS** (Sect. *Argophylli*) Nevada, Nye Co., NE of Warm Springs. 1550m. Gravelly & sandy clays. (A Nevadan race of this rather widely distributed, early-flowering plant with purple-pink flowers on pads white-felted leaves, followed by exquisite pods, all clothed in silver-white velvet.) Archibald Archive www.srgc.net
- 1.108.500 : ASTRAGALUS PURSHII** (var. *purshii*) (Sect. *Argophylli*) Wyoming, Sweetwater Co., SW of Farson. 2010 m. Openings among *Artemisia*. (The northern type-race, usually white or cream flowers on grey mats. White-felted pods.)
- 1.108.550 : ASTRAGALUS PURSHII var. GLAREOSUS** (Sect. *Argophylli*) Idaho, Butte Co., NE of Carey. 1520m. SE-facing slope of stony ridge. (Snake & Columbia Basin race with rather larger, usually pink flowers before the woolly pods.)
- 1.108.650 : ASTRAGALUS PURSHII var. TINCTUS** (Sect. *Argophylli*) Cal., Kern Co., E of Mt. Pinos. 2530m. Open granite-gravel slope. (The Western race, usually in vivid purple-pink, with the same marvellous woolly pods as the others.)
- 1.109.100 : ASTRAGALUS SIMPLICIFOLIUS** Wyoming, Carbon Co., above Muddy Gap. 2200m. Shaley, limestone slope. (Silver buns with stemless, purple-pink flowers. A reduced *A. spatulatus* endemic to the upper Platte Valley.)
- 1.109.200 : ASTRAGALUS SPATULATUS** Wyoming, Albany Co., NE of Laramie. 2600m. Exposed upland steppe. 15.7.95 (Like the preceding in Sect. *Drabellae*. Tight little tufts of silver, linear leaves. Rich purple-pink forms here.)
- 1.109.201 : ASTRAGALUS SPATULATUS** Wyoming, Sweetwater Co., Mackinnon. 1900m. With sparse *Juniperus* on steep sides of shale 'barrens' (In dainty Sect. *Drabellae*. Tightest of little tufts of silver, linear leaves & rich purple-pink flowers.)
- 1.110.100 : ASTRAGALUS UNCIALIS** Utah, Millard Co., N of Sevier Lake (dry). 1460m. (Rupert Barneby describes this as "one of the most ornamental dwarf astragali" - "silvery 3-5 foliolate leaves" and "narrow, long and showy purple flowers which seem quite disproportionately large".)

- 1.110.200 : ASTRAGALUS UTAHENSIS** (Sect. *Argophylli*) Utah, Salt Lake Co., Parley's Canyon E of Salt Lake City. 1400m. Open, gravelly areas. (Marcus Jones, pioneer of Utah botany, thought this the most beautiful flower in the state. Mats of white-felted leaves, brilliant carmine-purple racemes and pods clad in long, shaggy silver-white hairs. One of the least difficult in the UK & now well-established & being maintained by quite a few growers. Alpine-house or a very well-drained raised bed, dry in winter.)
- 1.110.201 : ASTRAGALUS UTAHENSIS** (Sect. *Argophylli*) Utah, Sevier Co., SE of Salina to Fishlake Plateau. 2000m. Openings among *Juniperus* & *Quercus* in stony clay. (Marcus Jones, pioneer of Utah botany, thought this the most beautiful flower in the state. Mats of white-felted leaves, brilliant carmine-purple racemes and pods clad in long, shaggy silver-white hairs. One of the least difficult in the UK & now being grown well there. Alpine-house or a very well-drained raised bed, dry in winter.)
- 1.115.450 : BALSAMORRHIZA MACROLEPIS var. PLATYLEPIS** Cal., Plumas Co., Lone Rock Valley. 1680m. G. Greger coll. (Imposing yellow daisies on 60cm. stems from stout, fleshy, long-lived perennial rootstocks. The leaves, pinnately divided into lobes, are grey with fine hairs in this race from the drier slopes of NE California & adjacent Nevada.)
- 1.119.000 : BAPTISIA : 30 SPECIES**
- 1.120.000 : BAPTISIA AUSTRALIS** No data. About 1.5m. tall, somewhat lupin-like, herbaceous perennial from moist sites in the eastern States. Blue-green leaves on greyish stems and spikes of a "unique, soft, blue-tinted indigo" in summer.
- 1.122.000 : BERLANDIERA : 5 SPECIES**
- 1.123.010 : BESCHORNERIA YUCCOIDES** No data. Native to Mexico. Archibald Archive www.srgc.net.
- 1.124.200 : BESSEYA ALPINA**
- 1.124.220 : BESSEYA RUBRA**
- 1.124.250 : BESSEYA WYOMINGENSIS** Montana, Madison Co., Gravelly Range. 2830m. M. & P. Stone 98-29 (An odd genus in *Scrophulariaceae*, close to *Synthyris* & once included in it. A plant of exposed but moist sites on ridges & high meadows in the northern Rockies. Crenate basal leaves & dense bottlebrushes of violet-purple filaments on stems of around 15cm.)
- 1.125.000 : BIDENS : 25 SPECIES**
- 1.130.100 : BLOOMERIA CROCEA** Cal., San Diego Co. 1030m. Gravelly clay meadow in open woodland. J. & G. Robinett coll. 22.7.95 (Wide umbels of delicate, golden stars on 20-40cm. stems. Seldom-seen corms near *Brodiaea*.)
- 1.130.150 : BLOOMERIA CROCEA var. AUREA** Cal., San Luis Obispo Co. 170m. Among grass on open, heavy clay slope. 21.6.95 (The race from the central Coast Ranges - these infraspecific taxa are no longer recognized in "Jepson" but they correlate with habitat and distribution and may have some significance to gardeners.)
- 1.130.200 : BLOOMERIA CROCEA var. MONTANA** Cal., Ventura Co., Wagon Road Canyon. 1450m. Openings among scrub. 2.8.95 (The montane chaparral race. These are really pretty things, well worth growing in the bulb-frame.)
- 1.130.300 : BLOOMERIA HUMILIS**
- 1.131.000 : BOERHAVIA : 20 SPECIES**
- 1.133.000 : BOLTONIA : 6 SPECIES**
- 1.135.00 : BOYKINIA : 5 SPECIES**
- 1.135.010 : BOYKINIA ACONITIFOLIA** No data. An East Coast, herbaceous woodlander in *Saxifragaceae*. Deeply cut foliage and airy sprays of a multitude of little white flowers. Sows itself in our moist woodland.
- 1.135.500 : BOYKINIA JAMESII** Colorado, Pike's Peak.
- 1.135.510 : BOYKINIA JAMESII** (*Telesonix jamesii*) Nevada, Clark Co., Spring Mountains, Charleston Peak. J. Andrews coll.
- 1.140.000 : BRODIAEA : 30 SPECIES**
- 1.140.009 : BRODIAEA APPENDICULATA** Cal., Yuba Co., N of Marysville. J. & G. Robinett coll. (A handsome plant from heavy clays below 600m. in the Californian Central Valley grasslands. Now, like many species from this densely populated, heavily cultivated habitat, very restricted & uncommon. About 30cm. high with umbels of rich violet-purple flowers.)
- 1.140.100 : BRODIAEA CALIFORNICA** Cal., Yuba Co. 630m. Serpentine scree in chaparral. J. & G. Robinett coll. 27.8.95 (Largest of the genus, about 50cm. here, with loose umbels of violet flowers with contrasting white staminodes.)
- 1.140.109 : BRODIAEA CALIFORNICA** Cal., Butte Co., Hurlton. 560m. Ex R.Ratko 00-108. (From the foothills of the Sierra Nevada. Largest of the genus, about 50cm. here, with loose umbels of violet-pink flowers with contrasting white staminodes.)
- 1.140.150 : BRODIAEA CALIFORNICA from WHITE FORM**
- 1.140.300 : BRODIAEA CORONARIA**
- 1.140.400 : BRODIAEA ELEGANS** Cal., Shasta Co., S of Shingletown. 1000m. Among grasses in open areas. (Northern species with blue-violet flowers on stems of about 30cm. Rather *Triteleia*-like but a true *Brodiaea*.) Archibald Archive www.srgc.net
- 1.140.500 : BRODIAEA FILIFOLIA**
- 1.140.600 : BRODIAEA INSIGNIS**

1.140.700 : BRODIAEA JOLONENSIS

1.140.800 : BRODIAEA KINKIENSIS

1.140.900 : BRODIAEA MINOR

1.141.000 : BRODIAEA ORCUTTH

1.141.100 : BRODIAEA PALLIDA

1.141.200 : BRODIAEA PURDYI Cal., Butte Co., E of Chico, Skyway to Paradise. 450m. Ex a W. Roderick coll.

1.141.300 : BRODIAEA STELLARIS

1.141.400 : BRODIAEA TERRESTRIS**1.141.450 : BRODIAEA TERRESTRIS subsp. KERNENSIS** Cal., Kern Co., Greenhorn Mts., Evans Flat. 1840m. Ex R.Ratko 98-88. (Umbels of many deep blue-purple flowers on 15cm. stems.)

1.148.000 : CALLIRHOE : 6 SPECIES

1.150.001 : CALOCHORTUS ALBUS Cal., Tuolumne Co., NE of Columbia, Italian Bar. 750m. Steep scrub-covered slopes. (The Sierran foothill race of this Fairy Lantern with pendant, globular, pearly-white flowers on 20cm. stems. A widespread, variable Californian endemic, extending S in the Coast Ranges from near San Francisco almost to the Mexican border, and, in the N, entering the Sierran foothills. Usually a plant of shaded woodland habitats & consequently an easy plant to grow in the UK.)

1.150.002 : CALOCHORTUS ALBUS Cal., San Luis Obispo Co., W of Paso Robles. 550m. Steep banks in deciduous woodland. (Very variable here from ruby to opalescent pinks and whites. This population grades into the York Mt. reds.)

1.150.003 : CALOCHORTUS ALBUS Julian

1.150.004 : CALOCHORTUS ALBUS Railroad Flat. Ex a S. Farwig & V. Girard coll. Archibald Archive www.srgc.net

1.150.005 : CALOCHORTUS ALBUS Cal., San Mateo Co., W of San Jose, Portola valley. J. & G. Robinett coll. (A coll. from much further N on the Coast Range than we have listed before.)

1.150.006 : CALOCHORTUS ALBUS Cal., Butte Co., Jarbo Gap. 550m. SW-facing slope. G. Greger coll.

1.150.050 : CALOCHORTUS ALBUS : DWARF COASTAL FORM Cal., San Luis Obispo Co. 660m. Steep, windswept, N-facing serpentine slope. Stored seed from J. & G. Robinett 1995 colls. (A reduced, apparently stable, ecotype from a few sites exposed to the Pacific gales. We have all tried to collect seed of this but those with drooping capsules are very difficult to gather. Mounds of nodding pink-blushed, pearly globes, virtually on the ground, the whole plant only 5-10cm. high. A sensation.)

1.150.100 : CALOCHORTUS ALBUS var. RUBELLUS Cal., San Luis Obispo Co., W of Templeton. 400m. Steep, stony, shaded banks. (From a famous & outstanding population, on York Mt. in the Coast Range, with translucent, ruby-pink lanterns. The name is not sustainable botanically but is useful for gardeners for denoting this colour phase. Like the other forms, this fits in with Mediterranean species & is now being grown well in the UK. It was awarded a P.C., when shown there in 1995.)

1.150.500 : CALOCHORTUS AMABILIS Cal., Solano Co., NW of Vacaville, Mix Canyon. 550m. Steep, scrub-covered slopes. (Another Fairy Lantern. Branching, 20-30cm. stems with nodding flowers in clear, deep yellow with widespreading outer and incurved inner segments. A Coast Range species, certainly one of the easiest to grow under glass in the UK.)

1.150.501 : CALOCHORTUS AMABILIS Cal., Lake Co., Walker Ridge. 600m. Among scrub on stony, serpentine slope.

1.150.502 : CALOCHORTUS AMABILIS Cal., Lake Co., Butts Canyon. 350m. Among *Arctostaphylos* scrub on serpentine slopes.

1.150.504 : CALOCHORTUS AMABILIS Cal., Humboldt Co., Eel River Valley. 80m. Steep grassy slope at edge of redwood forest. J. & G. Robinett coll. 16.7.95 (From the wet NW towards its northern limits. May even suit the UK climate outside.)

1.150.505 : CALOCHORTUS AMABILIS Cal., near Garberville. On cliffs. Ex a N. Wilson coll. Archibald Archive www.srgc.net

1.150.700 : CALOCHORTUS AMBIGUUS

1.151.000 : CALOCHORTUS AMOENUS Cal., Tulare Co., NE of Springville. 1100m. Among scrub on steep granite slopes. (Like the preceding, in Subsect. *Pulchelli* but with purple-rose nodding flowers. Limited to the western foothills of the central & southern Sierra Nevada, this is not so easy as some of its close relatives but has been very well grown & exhibited in the UK.)

1.151.001 : CALOCHORTUS AMOENUS Cal., Tulare Co., NE of Three Rivers, Mineral King Road. 750m. Among scrub on steep slopes & ledges on granite outcrops. (Like the preceding, in Subsect. *Pulchelli* but with purple-rose nodding flowers. Limited to the western foothills of the central & southern Sierra Nevada, this is not so easy as some of its close relatives but has been very well grown & exhibited in the UK.)

1.151.003 : CALOCHORTUS AMOENUS Cal., Tulare Co., 600m. N-facing clay bank. J. & G. Robinett coll. 22.6.95

1.151.004 : CALOCHORTUS AMOENUS Cal., Fresno Co., near Pine Flat Reservoir (Sierra Nevada NE of Fresno). c.300m. J. & G. Robinett coll. (From much further north than the preceding.)

1.151.200 : CALOCHORTUS APICULATUS

1.151.500 : CALOCHORTUS ARGILLOSUS Cal., San Luis Obispo Co., NE of San Luis Obispo. 180m. Among grasses in heavy clay on open slope. (The Reservoir Canyon population listed in 1989 under "*C. simulans*". We now feel that it is more

correctly placed here, though it does not quite match the following more northern colony. Extremely 'growable' with us, setting seed well. A lovely, rather dwarf, white Mariposa, more or less flushed lilac, with variable dark basal stains & markings.)

1.151.501 : #CALOCHORTUS ARGILLOSUS Cal., San Mateo Co. 150m. Serpentine clay meadow in full sun. J. & G. Robinett coll. 31.7.95 (Possibly the northernmost colony. White flowers, flushed purple externally, with central red-brown 'eyes' in yellow zones on the inner segments, often pink or lavender basally. Don't think this is common because we have four collections.)

1.151.502 : CALOCHORTUS ARGILLOSUS Cal., San Benito Co., Arroyo Dos Picachos. 350m. Meadow in heavy clay. (Californian-grown seed from Hoover's type-locality for this very local, obscure and much misunderstood species. White flowers, flushed purple externally, with central red-brown 'eyes' in yellow zones on the inner segments, often pink or lavender basally.)

1.151.503 : CALOCHORTUS ARGILLOSUS Cal., San Benito Co., Panoche Road, SE of Hollister. 450m. Clay on serpentine slope. S. Farwig & V. Girard coll. 1995 (From pale to deep purple forms noted here by Stan and Vic, during flowering.)

1.152.000 : CALOCHORTUS AUREUS Arizona, Coconino Co., WSW of Kayenta. 1980m. Open areas among *Artemisia*. 7.7.95 (Superb yellow, clump-forming, tetraploid southern race of *C. nuttallii*. A Colorado Plateau endemic, distributed across N Arizona into NW New Mexico & just entering S Utah. Like the other Mariposas in Subsect. *Nuttalliani*, not likely to be easy in more temperate areas. Rich soft-yellow 'tulips' with maroon-purple crescents above the nectaries.)

1.152.300 : CALOCHORTUS BALSENSIS Mexico, Guerrero State. Archibald Archive www.srgc.net

1.152.400 : CALOCHORTUS BARBATUS Mexico, S Chihuahua to Oaxaca. 1500-2900m.

1.153.000 : CALOCHORTUS BRUNEAUNIS Cal., Inyo Co., White Mts., Westgard Pass. 2230m. Openings among *Artemisia*. 5.8.95 (Near the more eastern *C. nuttallii* but distinct in its green-striped segments. Pure solid-white with clean purple spots.)

1.154.000 : CALOCHORTUS CATALINAE Cal., Los Angeles Co., Santa Monica Mts. 540m. Coastal chaparral. J. & G. Robinett coll. (Erect, white flowers edged with lavender & with dark basal blotches. Once widespread in the seaward-facing canyons around Los Angeles, little of its habitat, some of the most valuable land on earth, remains. Fortunately, not too difficult.)

1.154.001 : CALOCHORTUS CATALINAE Cal., Ventura Co., below Triunfo Pass (Yerba Buena Road, Mishe Mokwa Trail). 625m. J. Andrews coll. (Erect, white flowers edged with lavender & with dark basal blotches. Once widespread in the seaward-facing canyons around Los Angeles, little of its habitat, some of the most valuable land on earth, remains. Fortunately, not too difficult.)

1.154.500 : CALOCHORTUS CERNUUS Mexico, Morelos, Sierra de Tepoxtlán, near Cuernavaca. 2000-2800m.

1.155.002 : CALOCHORTUS CLAVATUS (subsp. *clavatus*) Cal., Los Angeles Co., Santa Monica Mts. 520m. In clay among grasses in open woodland. J. & G. Robinett coll. (A big Mariposa, local on the coastal serpentines. Large, golden-yellow bowls, red-brown lined & hairy inside on zig-zag stems of 30-50cm. Variable but always sumptuous and not usually difficult to grow.)

1.155.003 : #CALOCHORTUS CLAVATUS (subsp. *clavatus*) Cal., San Luis Obispo Co., La Cuesta Ridge. 665m. J. Andrews coll. 1993

1.155.200 : CALOCHORTUS CLAVATUS var. AVIUS Cal., El Dorado Co., ENE of Pollock Pines. 1280m. Ex a S. Farwig & V. Girard coll. (So local on the granites of the Sierra Nevada as to be thought all but extinct, until it exploded into flower in 1993. Umbel-like inflorescences of huge, butter-yellow bowls on stems of up to 1m.)

1.155.220 : CALOCHORTUS CLAVATUS var. GRACILIS

1.155.240 : CALOCHORTUS CLAVATUS subsp. PALLIDUS

1.155.260 : CALOCHORTUS CLAVATUS subsp. RECURVIFOLIUS

1.155.500 : CALOCHORTUS COERULEUS Cal., Shasta Co., W of Viola. 1250m. In shade of sparse, coniferous woodland. (A beautiful, tiny species from cold inland areas of N California : a few cm. high, with hairy, pale lilac-blue flowers. Misunderstood by Ownbey, it was very poorly treated by Ness in 'Jepson'. It seems allied to the pale-seeded taxa of the Coast Ranges (some assigned to *C. elegans*) and the distant, isolated *C. westonii*. For careful cultivation, kept cool in summer.)

1.155.509 : CALOCHORTUS COERULEUS Cal., Plumas Co., W of Quincy. 1370m. W-facing slope. G. Greger coll. (A beautiful, tiny species from cold inland areas of N California : a few cm. high, with hairy, pale lilac-blue flowers. Misunderstood by Ownbey, it was very poorly treated by Ness in 'Jepson'. It seems allied to the pale-seeded taxa of the Coast Ranges (some assigned to *C. elegans*) and the distant, isolated *C. westonii*. For careful cultivation, kept cool in summer.)

1.156.001 : CALOCHORTUS CONCOLOR Cal., San Diego Co. 1060m. Sandy soil in chaparral. J. & G. Robinett coll. 21.7.95 (The huge Goldenbowl Mariposa from the far south. Big bright-yellow 'tulips' marked inside with dark red, up to 7 on 20-40cm. stems. These southerners have been little tried but will need full light and a warm rest in summer.)

1.156.002 : CALOCHORTUS CONCOLOR Cal., Riverside Co., Keen Camp Road. 700m. J. Andrews coll. (The huge Goldenbowl Mariposa from the far south. Big bright-yellow 'tulips' marked inside with dark red, up to 7 on 20-40cm. stems. These southerners have been little tried but will need full light and a warm rest in summer.)

1.156.500 : ## CALOCHORTUS COXII Oregon, Douglas Co., W of Myrtle Creek. 450m. Among grasses & sparse conifers on steep serpentine slopes. 6.7.92 (Narrow endemic described in 1988. About 15cm. high with up to 7, bowl-shaped flowers, white with red striae, densely covered & fringed with yellow to white hairs & with a broad lavender chevron above the green gland. A few.) [#2nd pic.](#)

- 1.157.000 : CALOCHORTUS DUNNII** Cal., San Diego Co., SE of Julian. 1350m. Open slopes. J. Andrews coll. (Local endemic of gabbro-derived clays here & in Mexico. A little white, red-brown-marked Mariposa for the skilled specialist.)
- 1.157.000 : CALOCHORTUS DUNNII** Cal., San Diego Co., Inspiration Point. 1430m. Open slopes. J. Andrews coll. (Local endemic of gabbro-derived clays here & in Mexico. A little white, red-brown-marked Mariposa for the skilled specialist.)
- 1.157.400 : CALOCHORTUS ELEGANS**
- 1.157.450 : CALOCHORTUS ELEGANS var. NANUS**
- 1.157.500 : CALOCHORTUS ELEGANS var. SELWAYENSIS**
- 1.158.000 : #CALOCHORTUS EURYCARPUS** Idaho, Butte Co., W of Craters of the Moon. 1520m. E & SE-facing slopes of stony ridge. (Wiry, 30-50cm. stems carry elegant, bowl-shaped flowers in white or lilac-pink, neatly blotched with maroon and striped with green. A steppe species, in Subsect. *Nitidi*, spread around the N rim of the Great Basin from E Oregon to Montana - covered with snow all winter and not very warm in summer. In its Nevadan type-locality it grows in alpine-meadows)
- 1.158.001 : CALOCHORTUS EURYCARPUS** Idaho, Sawtooth Valley. Archibald Archive www.srgc.net
- 1.158.009 : CALOCHORTUS EURYCARPUS** Nevada, Elko Co., Ruby Mts., SE of Lamoille, along Thomas Creek. 2380m. Among grasses in meadow. J. Andrews coll. (A type-locality coll., though it is a much less common plant here than further N in Idaho.)
- 1.158.500 : CALOCHORTUS EXCAVATUS** Cal., Inyo Co., Owens Valley S of Bishop. 1350m. Among *Rosa* & *Salix* scrub in clay (dry in summer). (An extremely local Mariposa from a few vernal damp sites in this cold area. In Subsect. *Nuttaliani* with up to six, widely bell-shaped flowers in pale lavender to white, dark purple at the base.)
- 1.158.600 : CALOCHORTUS EXILIS** Mexico, Hidalgo. 2500-3000m. *Abies* zone.
- 1.159.000 : CALOCHORTUS FLEXUOSUS** Cal., Inyo Co., Amargosa Range, Daylight Pass. 1315m. Along dry gullies. 25.6.95 (A very strange, desert Mariposa, local but widespread all the way across to SW Colorado. Sinuous stems, 30-40cm. long if straightened, twist and spiral. Up to 6 erect, white, lilac-tinged flowers, purple-spotted & yellow-banded inside.)
- 1.159.005 : CALOCHORTUS FLEXUOSUS** Utah, Millard Co., SSE of Garrison. 1900m. Calcareous gravel. J. Andrews coll. (An eastern coll. of this strange, desert Mariposa, local but widespread all the way across to here & S to SW Colorado. Sinuous stems twist and spiral. Up to 6 erect, white, lilac-tinged flowers, purple-spotted & yellow-banded inside.)
- 1.159.006 : CALOCHORTUS FLEXUOSUS** Utah, Garrison Co., Lime Point. 1900m. Calcareous gravel. J. Andrews coll. (An eastern coll. of this strange, desert Mariposa, local but widespread all the way across to here & S to SW Colorado. Here in a very dwarf form. Sinuous stems twist and spiral. Up to 6 erect, white, lilac-tinged flowers, purple-spotted & yellow-banded inside.)
- 1.159.500 : CALOCHORTUS FOLIOSUS** Mexico, Mexico state, Campanario near Morelia.
- 1.160.000 : CALOCHORTUS FUSCUS** Mexico, Mexico state, Temascaltepec district. 900-2300m. Oak & pine forest.
- 1.160.500 : CALOCHORTUS GHIESBREGHTII** Mexico : Hidalgo, Queretaro & Chiapas states ; Guatemala. 1200-2600m.
- 1.161.000 : CALOCHORTUS GREENEI** Cal., Siskiyou Co., N of Goosenest Mt. 1920m. J. Andrews coll. 1993 (A late-flowering, high altitude species from one or two sites in the Cascades on the Oregon-California line. Erect, purple bells on 10-30cm. stems. Should be possible to establish & maintain it in cool climates. A very few seeds left from this small 'one-off' coll.)
- 1.161.500 : CALOCHORTUS GUNNISONII** Colorado, Boulder Co., N of Boulder. 2000m. Among grasses in rock detritus on steep, shale ridge. (Usually white here, intricately purple-pencilled & hairy inside. The very late season made it difficult to update colls. of this. Not easy to germinate well & grow on - needs a cold, dry winter rest. A few.)
- 1.161.509 : CALOCHORTUS GUNNISONII** Utah, Uintah Co., E of Lapoint, Halfway Hollow. 1670m. J. Andrews coll. (The Utah forms of this predominantly Rocky Mt. species are usually especially fine with pale lavender flowers, intricately & heavily purple-pencilled & hairy inside, though John tells us pinks occur here as well. It is one of our favourite species but is not easy to germinate well & grow on. It definitely needs a cold, dry winter rest.)
- 1.162.000 : CALOCHORTUS HARTWEGII** Mexico, Zacatecas to Aguascalientes, Nayarit & Jalisco states. 2000-2500m.
- 1.163.001 : CALOCHORTUS HOWELLII** Oregon, Josephine Co., Eight Dollar Mt. SW of Selma. 500m. Among sparse *Arctostaphylos* scrub on open, S-facing slope. 28.7.95 (Utterly distinct until *C. umpquaensis* surfaced. Beautiful, erect flowers on 30-50cm. stems - white, covered with hairs and darkening centrally to smokey brown. C. Grey records that he found this "very satisfactory in cultivation" in the UK in the 1930's - it is growing well with us so far.)
- 1.163.500 : CALOCHORTUS INVENUSTUS** Cal., Ventura Co., Mt. Pinos. 2680m. Alpine steppe, in granite grit. 2.8.95 (15cm. high here, with 1-2, erect, pale lavender flowers, basally stained deep purple. A montane species in Subsect. *Nuttaliani*).
- 1.163.502 : CALOCHORTUS INVENUSTUS** Cal., San Diego Co. 1060m. Sandy clay bank in open woodland. J. & G. Robinett coll. (From one of the most southern localities - 2-3cm wide soft lavender flowers on 10-25cm. stems.)
- 1.163.502 : CALOCHORTUS INVENUSTUS** Cal., Los Angeles Co., Horse Flats. 1170m. J. Andrews coll. (2-3cm wide soft lavender flowers on 10-25cm. stems.) Archibald Archive www.srgc.net
- 1.164.000 : #CALOCHORTUS KENNEDYI** Cal., Inyo Co., SW of Gilbert Summit. 1620m. Open stony slope with sparse *Artemisia*. (Incomparable & quite unrivalled in the brilliance of its colour - here tending to luminous orange. In California, a plant

of high, cold steppe. Intolerant of superfluous water at any time but is has been flowered from seed in the UK.)

1.164.001 : CALOCHORTUS KENNEDYI Cal., Los Angeles Co. 1300m. Desert chaparral. J. & G. Robinett coll. 21.7.95

1.164.002 : CALOCHORTUS KENNEDYI Cal., Ventura Co., Lockwood Valley. 1540m. Among sparse *Artemisia*. 2.8.95

1.164.004 : CALOCHORTUS KENNEDYI Cal., Ventura Co., Mt. Pinos. 2530m. Opening among *Pinus*. 2.8.95 (The preceding colls. are from two of the most western populations which tend to rich, solid vermilion reds, usually with black anthers. This is seed is from a few plants growing, with white *C. venustus*, at a very high altitude for these reds.)

1.164.200 : #CALOCHORTUS KENNEDYI var. MUNZII Cal., Inyo Co., Panamint Range. 2130m. Among *Artemisia* in gravelly soil. 25.6.95 (The high altitude race from over 1850m. in the Clark, Providence & Panamint Mts. - intense yellow with black-purple basal markings and anthers. Possibly a great challenge but virtually untried in cultivation.)

1.164.504 : CALOCHORTUS LEICHTLINII Cal., Fresno Co. 1740m. Open woodland in granite sand. J. & G. Robinett coll. 1.9.95 (The Mariposa of the high Sierra Nevada granites. White with a striking black blotch above the yellow base.)

1.164.505 : CALOCHORTUS LEICHTLINII Cal., Fresno Co. 2180m. Exposed chaparral, in granite sand. J. & G. Robinett coll. 1.9.95 (The highest altitude 1995 Robinett coll. of this. About 30cm. here. This links Subsect. *Venusti* with Subsect. *Nuttalliani*.) Archibald Archive www.srgc.net

1.164.506 : CALOCHORTUS LEICHTLINII Cal., Plumas Co., N of Greenville. 1100m. G. Greger coll. (A cold-climate mariposa distributed locally on the granite gravels of coniferous forest-openings from the high Sierra Nevada N to Modoc Co. A beautiful plant with white flowers, sometimes tinged pink or smoky-blue & with a striking black blotch above the yellow base.)

1.164.507 : CALOCHORTUS LEICHTLINII Cal., Placer Co., Monumental Ridge. 2060m. Granite detritus. J. Andrews coll. (A cold-climate mariposa distributed locally on the granite gravels of coniferous forest-openings from the high Sierra Nevada N to Modoc Co. A beautiful plant with white flowers, sometimes tinged pink or smoky-blue & with a striking black blotch above the yellow base.)

1.165.000 : CALOCHORTUS LONGEBARBATUS

1.165.100 : CALOCHORTUS LONGEBARBATUS var. PECKII Endemic to S central Oregon. A sterile triploid, which does not set seed.

1.166.000 : CALOCHORTUS LUTEUS Cal., Lake Co., N of Clear Lake. 410m. Among grasses on open slope. 1.8.95 (Clear yellow, tinged green basally and with extremely variable brown internal markings. One of the most easily grown Mariposas.)

1.166.001 : CALOCHORTUS LUTEUS Cal., Sonoma Co., SE of Guerneville. 50m. Gravelly clay meadow in full sun. J. & G. Robinett coll. (Citron-yellow variously marked with red-brown, often with an eye-spot above the gland in this locality. 20-35cm. high.)

1.166.004 : CALOCHORTUS LUTEUS No data. From a very fine creamy-yellow form given to us by Wim de Goede. . A bigger plant than the others here . We guess it may be a hybrid between the Sierran race and *C. superbus*. Grows vigorously.)

1.166.005 : CALOCHORTUS LUTEUS Cal., San Luis Obispo Co., Arroyo de los Chinos. 10m. J. Andrews coll. (An extremely dwarf, floriferous form from Californian coast, windswept by Pacific gales.)

1.166.100 : CALOCHORTUS LUTEUS X SUPERBUS Cal., Lake Co., Walker Ridge. 600m. Open grassy area, in heavy clay. 1.8.95 (Some fine ivories, creams and soft yellows to deep yellow, very variably marked inside.)

1.166.500 : CALOCHORTUS LYALLII

1.167.000 : CALOCHORTUS MACROCARPUS

1.167.005 : CALOCHORTUS MACROCARPUS Canada, British Columbia, N Okanagan Valley. 625m. C. Bailey coll. (From a man fortunate enough to have this splendid plant growing on his land - and to appreciate it. We have never managed to collect seed from it ourselves although we know it in several more southern localities. In fact, it is one of the most widespread species, extending from NE California up across the interior of Oregon & Washington into Canada (it grows even further N in BC than this coll. - as far as Kamloops) & across Idaho into Montana. Very much a species of volcanic soils in extreme continental climates, it has no close relatives and is placed alone in Subsection *Macrocarpi*. About 50cm. high with large, elegant, erect, purple flowers with median green stripes on the segments. Boyd Kline in Medford, Oregon, grows it well but we have not seen it in the UK.)

1.167.100 : CALOCHORTUS MACROCARPUS var. MACULOSUS

1.167.300 : CALOCHORTUS MARCELLAE Mexico, Nuevo Leon to San Luis Potosi states. 1000-3000m.

1.167.500 : CALOCHORTUS MINIMUS Cal., Placer Co., Monumental Ridge W of Truckee. 2040m. J. Andrews coll. 1994 (The smallest of all. From the high Sierra Nevada coniferous woodlands. Bell-shaped, white flowers. Under 10cm. Grow it cool.)

1.168.000 : CALOCHORTUS MONOPHYLLUS Cal., Tuolumne Co. 750m. Open, N-facing clay bank. J. & G. Robinett coll. 22.6.95 (This is from one of the few 'pure' populations known to the Robinetts.)

1.168.001 : CALOCHORTUS MONOPHYLLUS Cal., Butte Co. 550m. J. & G. Robinett coll. 23.5.96 (The only yellow in Subsect. *Eleganti*. A plant of openings in coniferous woodland in the N Sierra Nevada & S Cascades, often with the allied *C. tolmiei*. A little 'sweetie', a few cm. high with bright yellow Cat's Ears. A 'must' for a pan in the alpine-house. Keep it cool.)

- 1.168.300 : CALOCHORTUS NIGRESCENS** Mexico, Oaxaca, Sierra de Tamazulapan. 2000m. Dry, rocky meadows.
- 1.168.600 : CALOCHORTUS NITIDUS**
- 1.169.500 : CALOCHORTUS NUDUS** Cal., Plumas Co., NNW of Quincy. 1100m. Among *Vaccinium* & *Salix* at margin of marshy meadow. 28.6.95 (Another dainty, little plant. Like *C. uniflorus* & *C. minimus*, in Subsect. *Nudi*. About 15cm. high with erect, pale lavender flowers, pencilled with purple basally. Always a moist grower, it should be very easy in the UK)
- 1.169.502 : CALOCHORTUS NUDUS** Cal., Trinity Co., Scott Mt. Summit. 1650m. Open, wet meadow among conifers. (A dainty, little plant. Like *C. uniflorus* & *C. minimus*, in Subsect. *Nudi*. About 15cm. high with erect, lavender flowers, pencilled with purple basally. Always a cold-climate, moist grower (growing here with *Darlingtonia* & *Dodecatheon jeffreyi*), it is proving very adaptable under glass in the UK & may even prove growable outside but it is still rare in cultivation.)
- 1.169.503 : CALOCHORTUS NUDUS** Cal., Trinity Co., W of Mt. Eddy. 2080m. Wet mountain-meadow. Ex a J. Andrews coll. (In a few moist alpine-meadows on the high serpentines of the N superlative rich blue-purple populations occur - some people think these are the only 'pure' *C. nudus* (see below). One hesitates to say grow them in a peat-bed in the UK as it may be too wet in winter but it will insist on a cool, moist summer - try growing it like *Iris winogradowii* or *Crocus scardicus*.)
- 1.169.504 : CALOCHORTUS NUDUS**
- 1.169.505 : CALOCHORTUS NUDUS** Cal., Plumas Co., Canyon Dam. 1370m. G. Greger coll. Archibald Archive www.srgc.net
- 1.169.599 : CALOCHORTUS NUDUS** Cal., Plumas Co., Long Valley. 1680m. G. Greger coll. (Since we have seen the more northern, high altitude, Trinity Co. populations of *C. nudus*, we have not been entirely comfortable about how "ethnically pure" these Plumas Co. populations are. Certainly there are hybrids with *C. minimus* in this area (see the next) but we do not know this particular colony. Super little dwarf plants, anyway, and ones we find easy to grow in cultivation in the UK.
- 1.169.600 : CALOCHORTUS NUDUS X MINIMUS** al., Plumas Co., N of Spanish Ranch. 1220m. Coniferous woodland. 28.6.95 (These are in effect pinkish versions of *C. minimus*. Ownbey writes at length on these intergrading populations, easily distinguished in seed as their capsules droop, whereas *C. nudus* has upright ones. Always grows in much drier places.)
- 1.170.003 : CALOCHORTUS NUTTALLII** Colorado, Mesa Co., SW of Whitewater. 1800m. Among *Artemisia* on stony, sandstone slopes. 9.7.95 (This & the next are our 1995 attempts to secure the amazing sugar-pink forms of this species, which flower early from this area into the Uintah Basin of Utah. We have never seen these in flower but the photographs of others inspire us.)
- 1.170.004 : CALOCHORTUS NUTTALLII** Utah, Uintah Co., WSW of Maeser to Lapoint. 2000m. Among *Artemisia* on open, sandstone slopes. 11.7.95 (We are told most populations around here are bright-pink. If not, they will be white & still beautiful.)
- 1.170.500 : CALOCHORTUS OBISPOENSIS** al., San Luis Obispo Co., NE of San Luis Obispo. 150m. Fissures on loose, serpentine cliffs. (In Sect. *Cyclobothra*, Subsect. *Weediani* but unlike anything else in the genus. Many small flowers on stiff, branching, 30cm. stems : hairy tufted, purple-tipped yellow segments, like a piece of miniature, feather millinery. Our own cultivated seed of this very local plant, raised from our 1989 coll. & now growing well under glass with no special treatment.)
- 1.170.700 : CALOCHORTUS OWNBEYI** Mexico, Chihuahua to Jalisco states. 500-2500m. Open pine & oak forest.
- 1.171.000 : CALOCHORTUS PALMERI** Cal., Los Angeles Co., San Gabriel Mts., Bandido Camp. 1770m. Open slopes with *Artemisia* & sparse *Pinus*. (A dainty, little Mariposa from the ranges E of Los Angeles, where its flowers look like grass pinks in a European meadow. Pink with occasional whites, brown-spotted & yellow-haired inside. About 30cm.)
- 1.171.000 : CALOCHORTUS PALMERI** Cal., Los Angeles Co., Horse Flats. 1700m. J. Andrews coll. (A dainty, little Mariposa from the ranges E of Los Angeles, where its flowers look like grass pinks in a European meadow. Pink with occasional whites, brown-spotted & yellow-haired inside. About 30cm.) Archibald Archive www.srgc.net
- 1.171.101 : CALOCHORTUS PALMERI var. MUNZII** Cal., Riverside Co., Idyllwild (Pinecrest at Alderwood Road). 1640m. J. Andrews coll. (Lacks the stem-bulbils of the type-race. Little-known and very local with bright lavender-pink flowers.)
- 1.171.101 : CALOCHORTUS PALMERI var. MUNZII** Cal., Riverside Co. 1300m. Sandy clay in open woodland. J. & G. Robinett coll. 22.7.95 (Lacks the stem-bulbils of the type-race. Little-known and very local with bright lavender-pink flowers.)
- 1.171.500 : CALOCHORTUS PANAMINTENSIS** Cal., Inyo Co., Panamint Mts. 2300m. Stony openings among *Pinus* & *Juniperus*. (The real thing, which we saw in flower here in 1995. An isolated endemic in Subsect. *Nuttaliani*, closest to *C. bruneaunis*, stranded on the top of this desert range. Immaculate, white flowers, green-striped externally. A challenge.)
- 1.171.510 : CALOCHORTUS aff. PANAMINTENSIS** Cal., Kern Co., W of Walker Pass. 1650m. Open stony areas among *Artemisia*. (A puzzling, restricted population from the SE limits of the Sierra Nevada, directly WSW of the Panamints but separated by about 120km. of desert. Unspotted, white, green-striped flowers key-out as *C. panamintensis* but a very few are gently flushed rose or lavender. Could equally be aff. *invenustus* or aff. *excavatus* - it needs study.)
- 1.173.200 : CALOCHORTUS PERSISTENS** Cal., Siskiyou Co., W of Yreka. 1750m. Loose serpentine talus.
- 1.173.500 : CALOCHORTUS PLUMMERAE** Cal., Los Angeles Co., ridge between Soledad Canyon & Indian Canyon. 800m. Dry chaparral. J. Andrews coll. (Superlative, large, late-flowerer in Subsect. *Weediani*, whose habitats around Los Angeles are diminishing. Great bowls, densely golden hairy inside, on branching 60cm. stems, vary from lavender pink to purple.)
- 1.173.501 : CALOCHORTUS PLUMMERAE** Cal., Ventura Co., Triunfo Pass, Mishe Mokwa Trail. 680m. J. Andrews coll.

(Superlative, large, late-flowerer in Subsect. *Weediani*, whose habitats around Los Angeles are diminishing. Great lavender-pink bowls, densely golden hairy inside, on branching 60cm. stems.)

1.173.504 : CALOCHORTUS PLUMMERAE Cal., Riverside Co. 580m. Dry chaparral. J. & G. Robinett coll. 22.7.95 (Superlative, large, late-flowerer in Subsect. *Weediani*, whose habitats around Los Angeles are diminishing. Great pink bowls, densely golden hairy inside, on branching 60cm. stems.)

1.174.000 : CALOCHORTUS PRINGLEI Mexico, Morelos & Puebla states. 2100-2400m.

1.174.500 : CALOCHORTUS PULCHELLUS Cal., Contra Costa Co., Mt. Diablo NE of Danville. 520m. Steep, wooded slopes. J. Andrews coll. (A charming, 20cm., bright lemon-yellow Fairy Lantern, only known from Mt. Diablo. Distinct from *C. amabilis* in its greener leaves and larger, spherical flowers but just as easy to grow in the bulb-frame or alpine-house in the UK.)

1.175.600 : CALOCHORTUS PURPUREUS Mexico in Chihuahua, Guanajuato, Jalisco & Oaxaca states. 2000-3000m.

1.175.700 : CALOCHORTUS RAICHEI Cal., Sonoma Co. Archibald Archive www.srgc.net

1.175.800 : CALOCHORTUS SIMULANS Cal., San Luis Obispo Co., La Panza Summit. 600m. J. Andrews coll. (The true plant this time - confused by us with *C. argillosus* (both taxa were described by Hoover in 1944), which grows on heavy clays. This inhabits, usually granitic, sands in a very limited, hot, dry zone of the inner S Coast Ranges. Flowers are superficially similar to *C. catalinae* with dark nectaries but can vary to pale yellow edged with rose-pink.)

1.175.800 : CALOCHORTUS SIMULANS Cal., San Luis Obispo Co. 660m. Among chaparral on gritty clay bank. J. & G. Robinett coll. (The true plant this time - confused by us with *C. argillosus* (both taxa were described by Hoover in 1944), which grows on heavy clays. This inhabits, usually granitic, sands in a very limited, hot, dry zone of the inner S Coast Ranges. Flowers are superficially similar to *C. catalinae* with dark nectaries but can vary to pale yellow edged with rose-pink.)

1.175.900 : CALOCHORTUS SPATULATUS Mexico : Sierra Madre Occidental from Chihuahua to Guerrero. 2000-3000m.

1.176.000 : CALOCHORTUS SPLENDENS Cal., Ventura Co., off Lockwood Valley Road. Openings among Artemisia in sandy clay. (Beautiful Mariposa, easily grown in our experience. Soft lavender with white, wispy hairs and dark anthers.)

1.176.001 : CALOCHORTUS SPLENDENS Cal., Lake Co., Walker Ridge. 600m. Openings in scrub over serpentine. 1.8.95 (From near the northern limit for this species, in a form marked basally with deep purple. 30-50cm. high.)

1.176.004 : CALOCHORTUS SPLENDENS Cal., San Diego Co. 1000m. Clay in open woodland. J. & G. Robinett coll. (Southern form separated as *C. davidsonianus* on account of its wholly basal white hairs. Lavender-pink.)

1.176.500 : CALOCHORTUS STRIATUS Cal., Los Angeles Co., N of Lancaster. 760m. Open, level sites among alkaline desert scrub. (A distinct Mariposa endemic to a few alkaline seeps in the Mojave. Many, pale-lavender flowers veined with maroon-purple, just like the petals of *Geranium* 'Ballerina'. Probably difficult but growing on here quite well so far.)

1.176.501 : CALOCHORTUS STRIATUS Cal., San Bernardino Co., Cushenberry Springs. 1850m. J. Andrews coll. (Distinct Mariposa endemic to a few seasonally moist alkaline desert-seeps in the Mojave. Many, pale-lavender flowers veined with maroon-purple, just like the petals of *Geranium* 'Ballerina'. Probably very difficult but growing on here slowly so far.)

1.176.700 : CALOCHORTUS SUBALPINUS

1.177.000 : CALOCHORTUS SUPERBUS Cal., Mariposa Co., NNW of Hell Hollow. 700m. Open, stony, serpentine slope. (From the type-locality of this classic Mariposa, distinct from *C. venustus* in its linear, inverted V-shaped gland. Almost invariably white here with purple-brown blotches & basal markings. Easy to grow with us and sets seed well.)

1.177.005 : CALOCHORTUS SUPERBUS Cal., Shasta Co. 780m. Clay meadow in full sun. J. & G. Robinett coll. (From a very fine population, growing up in the continental climate of the N, with many lavender & purple-flushed flowers.)

1.177.006 : CALOCHORTUS SUPERBUS Cal., El Dorado Co., N of Placerville. 720m. Openings among *Pinus*. J. & G. Robinett coll. (From a famously spectacular & infinitely variable colony with lilac, lavender & purple flowers, rich shades of faded antique fabrics, beautifully & intricately marked inside. A stand now sadly becoming depleted by 'ranchette development'.)

1.177.007 : CALOCHORTUS SUPERBUS Cal., Butte Co., Jarbo Gap. 550m. G. Greger coll. (A classic Mariposa, distinct from *C. venustus* in its linear, inverted V-shaped gland. Usually white with purple-brown blotches & basal markings but the ground colour can vary to pinks, lilacs, lavenders and purples. Easy to grow with us and sets seed well.)

1.177.020 : CALOCHORTUS aff. SUPERBUS Cal., Santa Clara Co., W of Morgan Hill. 270m. Among sparse scrub. S. Farwig & V. Girard coll. (White to purples with an infinity of markings and (nervous breakdown for taxonomists, who tend to ignore such problems) a vast variation in size and shape of the nectaries. When you think you are starting to understand the genus, it all falls apart.)

1.177.500 : CALOCHORTUS SYNTROPHUS Cal., Shasta Co., N of Montgomery Creek. 580m. Among sparse *Quercus* on open clay slope. (A small, isolated population given status as a species by Frank Callahan in 1993 (Herbertia Vol.49). In Subsect. *Venusti* & defined by Callahan by comparison to *C. superbus*. The superficial impression was of a splendid version of *C. leichtlinii*, a species of much higher altitudes to the E & S. Seeds are different to both but, whatever its ancient affinities, it seems distinct with large, solid-white flowers, yellow & hairy at the base & with neat chestnut-brown blotches. 60cm.)

1.177.800 : CALOCHORTUS TIBURONENSIS Cal., Marin Co., Tiburon Peninsula, Ring Mt. 140m. Rocky serpentine hillside. Ex a J. Andrews coll. (Unlike any other, this extraordinary species is known only from this single urban, locality above San

Fransico Bay. Currently placed in Subsect. *Weediani* but with features of Sect. *Calochortus*, it should be in a section on its own. About 20cm. tall with up to 8, erect bells, extremely hairy inside & with ciliate margins to the pale greenish yellow segments, densely peppered with purplish brown. It will not appreciate very low winter or very high summer temperatures.)

1.178.000 : #CALOCHORTUS TOLMIEI Oregon, Josephine Co., E of Takilma. 670m. Among conifers on open, turf, stony serpentine slopes.

1.178.002 : CALOCHORTUS TOLMIEI Oregon, Josephine Co., Eight Dollar Mt. SW of Selma. 450m. Open S-facing slope, among volcanic detritus. (The most widespread and arguably the most variable species in this genus. Impressively robust here, where Boyd Kline tells us he has found hybrids with *C. uniflorus*.)

1.178.005 : CALOCHORTUS TOLMIEI Cal., Shasta Co., S of Shingletown. 1000m. Openings in mixed woodland, often in deep shade. (Reputedly large-flowered. Both will have rose or purple-tinted white flowers, bearded on the inner segments.)

1.178.006 : CALOCHORTUS TOLMIEI Oregon, Boomer Hill.

1.178.007 : CALOCHORTUS TOLMIEI Oregon, Douglas Co., above Callahan Creek. 460m. Openings among *Pinus* on serpentine slope. (Very hairy lavender flowers. Quite easily grown in the UK.)

1.178.020 : CALOCHORTUS TOLMIEI Cal., Humboldt Co. 900m. Open, grassy meadow. J. & G. Robinett coll. (A beautiful violet centred form of this little Cat's Ear, most widespread and arguably the most variable species in this genus.)

1.178.500 : CALOCHORTUS UMBELLATUS

1.179.000 : CALOCHORTUS UMPQUAENSIS Oregon, Douglas Co. 300m. Steep serpentine scree in full sun. J. & G. Robinett coll. (From a different locality to our 1992 coll. but still in the upper drainage of the Umpqua. A very local serpentine-endemic, described in 1989. Closest to *C. howelli* and not unlike it in its very hairy flowers, creamy white with a large maroon-black centre, but substantially different in its large, drooping seed-capsules. Very striking and not too difficult so far in the UK.)

1.179.001 : CALOCHORTUS UMPQUAENSIS Oregon, Douglas Co. S of Tiller. 460m. Open, rocky, serpentine slope in coniferous forest zone. (A beautiful and very local serpentine-endemic, described in 1989. Possibly closest to *C. howelli* and not unlike it in its extremely hairy flowers, creamy white with a large maroon-black centre, but dwarfer at about 20cm. high & substantially different in its large, drooping seed-capsules. Very striking and not too difficult so far in the UK.)

1.179.500 : CALOCHORTUS UNIFLORUS Cal., Lake Co., NE of Middletown. 290m. Open meadow in heavy clay. (A dwarf, lilac flowered member of Subsect. *Nudi*, easily grown in Europe, where it fits in well with Mediterranean bulbs. In this site, it grows mixed with *C. vestae* but has dropped its seeds and gone dormant before the latter flowers : quite different growth-cycles.)

1.179.501 : CALOCHORTUS UNIFLORUS Oregon, Josephine Co., SW of O'Brien. 550m. Wet depressions among sparse conifers. (The first time we have collected one of the northern populations - the species has a very wide range well into Oregon, always in vernal wet places. This may be possible outside in the UK. Lilac with purple markings above the nectaries.)

1.180.000 : CALOCHORTUS VENUSTULUS Mexico, N Chihuahua to Federal District. 500-3500m.

1.180.500 : CALOCHORTUS VENUSTUS Cal., Tuolumne Co., NE of Columbia. 650m. Steep, open, stony slope. (From the classic white form, beautifully and variably patterned basally with dark red on a yellow ground. One of the easiest Mariposas.)

1.180.505 : CALOCHORTUS VENUSTUS Cal., Kern Co., Mt. Pinos. 2120m. Openings among *Pinus*. 2.8.95 (White or soft lilac with a ghostly thumbprint of pale blood-red towards the tip of each petal. Growing here with *Fremontodendron*.)

1.180.506 : CALOCHORTUS VENUSTUS Cal., Los Angeles Co. 500m. Gritty soil in full sun. J. & G. Robinett coll. 23.7.95 (High-desert population with pinks, roses & lavenders, some with second 'eye-spots'. Variably shaped nectaries.)

1.180.507 : CALOCHORTUS VENUSTUS Cal., Fresno Co., Stump Springs Road (Sierra Nevada NE of Fresno), 1740m. Sparsely wooded slope in sandy, granitic soil. J. & G. Robinett coll. (The species, distinguished by its rather square nectary, is the ultimate in variability of ground-colour and markings. This population exceeds imagination in shades of pink, purple, red and orange with every combination of these and of the complex blotches and basal markings. Add the next and you'll cover almost every permutation. A truly wonderful species.) (Stump Springs Road) Archibald Archive www.srgc.net

1.180.520 : CALOCHORTUS VENUSTUS 'AURORA STRAIN' No data. Derived from Stan Farwig & Vic Girard's coloured selections, built up over the years - "like the aurora borealis" - "these grow more spectacular each year."

1.180.550 : CALOCHORTUS VENUSTUS Cal., Kern Co., Cuddy Valley. 1840m. Openings among *Pinus*. J. Andrews coll. (*C. venustus sanguineus* : the famous very restricted & unique colony - a series of subtle red shades, like scarlet velvet, faded to varying degrees. Of course, the basal markings are lost but the golden hairs stand out strikingly. The limited habitat here is now heavily grazed by horses.)

1.181.500 : CALOCHORTUS VESTAE Cal., Mendocino Co., SW of Covelo. 390m. Among grasses on heavy clay slope. 1.8.95 (Double crescent nectaries & a different chromosome number distinguish this from *C. superbus* & *C. venustus*. Spectacular, solid-white flowers with big brown-purple blotches in yellow zones & purple-pencilled bases. A splendid northern mariposa.)

1.181.505 : CALOCHORTUS VESTAE Cal., Trinity Co. 1030m. Open, grassy, serpentine-clay slope. J. & G. Robinett coll. 19.8.95 (Mostly pink flowered plants here - these colour variations are much less frequent than with *C. venustus*)

1.181.506 : CALOCHORTUS VESTAE Cal., Trinity Co., 900m. Very open woodland on serpentine clay. J. & G. Robinett coll. 19.8.95 (From a population including many lavender to purple flowers & some very tall, robust plants.)

- 1.182.003 : CALOCHORTUS WEEDII** (var. *weedii*) Cal., San Diego Co. 750m. Chaparral, in rocky clay. J. & G. Robinett coll. 22.7.95 (Big, southern Cyclobothra in Subsect. *Weediani*, unlike any other here, except *C. plummerae*. Up to 6, erect, rich-yellow bowls, variably brown-tinted at the rim & intricately marked at the base, filled with long, yellow hairs. 40-80cm.)
- 1.182.004 : CALOCHORTUS WEEDII** (var. *weedii*) Cal., San Diego Co. 1350m. J. & G. Robinett coll.. (The previous coll. might just contain a few *C. splendens*, which grew with it, this is an altogether 'pure' coll. of this spectacular species.)
- 1.182.005 : CALOCHORTUS WEEDII** (var. *weedii*) Cal., San Diego Co., Inspiration Point. 1430m. J. Andrews coll. (Big, southern Cyclobothra in Subsect. *Weediani*, unlike any other here, except *C. plummerae*. Up to 6, erect, rich-yellow bowls, variably brown-tinted at the rim & intricately marked at the base, filled with long, yellow hairs. 40-80cm.)
- 1.182.100 : CALOCHORTUS WEEDII var. PENINSULARIS** Mexico, Baja California, Sierra San Pedro Martir.
- 1.182.150 : CALOCHORTUS WEEDII var. INTERMEDIUS** Cal., Orange Co.
- 1.182.200 : CALOCHORTUS WEEDII var. VESTUS** Cal., Monterey Co., Monterey Ra., Lottie Potrero Camp. 700m. Serpentine outcrops. J. Andrews coll. (An odd, little-known, northern disjunct race, thought to have some affinities to *C. obispoensis*. Squarish bowls in creamy, brownish or purplish shades with dark hairs instead of yellow ones. Seldom collected.)
- 1.182.500 : CALOCHORTUS WESTONII** Cal., Kern Co., S of Alta Sierra. 2050m. Coniferous woodland. (A little subalpine Cat's Ear stranded a long way from any relatives, on top of the Greenhorn Mts. at the S end of the Sierra Nevada. About 15cm. with hairy, lilac-tinged bells. We saw this grown very well by Mike Tucker (Somerset, UK) this year &, in spite of its restricted habitat, it is possibly easier than many in the UK, where it is less likely to be upset by hot, dry summers.)
- 1.184.100 : CALTHA BIFLORA** Idaho, Idaho Co., Clearwater Mts., Gospel Hump. M. & P. Stone 98-22A (A characteristic plant of wet, montane habitats from Alaska, S through the Rockies. The northern version of *C. leptosepala* : sometimes included under it. White flowers, 2 on each 15cm. stem, as the snow melts & before the rounded, 50cm. high leaves are fully developed.)
- 1.184.200 : CALTHA HOWELLII** Cal., Alpine Co., above Winnemucca Lake. 2750m. Moist areas in turf among granite boulders. (The Sierra Nevada representative of a species-group, characteristic of wet, montane habitats from Alaska, S through the Rockies. The western version of *C. leptosepala* & included under *C. l.* var. *biflora* in the "Jepson" account. White flowers, 2 on each 15cm. stem, as the snow melts & before the rounded, 50cm. high leaves are fully developed.)
- 1.184.300 : CALTHA LEPTOSEPALA var. BIFLORA** Idaho, Idaho Co., Clearwater Mts., Gospel Hump. M. & P. Stone 98-22A (A characteristic plant of wet, montane habitats from Alaska, S through the Rockies. The northern version of *C. leptosepala* : sometimes included under it. White flowers, 2 on each 15cm. stem, as the snow melts & before the rounded, 50cm. high leaves are fully developed.)
- 1.186.000 : CALYPTRIDIIUM**
- 1.191.010 : CAMASSIA LEICHTLINII from WHITE FORM** No data. From a striking, cream-white clone. 1m.
- 1.191.101 : CAMASSIA QUAMASH** Oregon, Douglas Co., S of Tiller. 460m. Along gully on serpentine slope. ("Jepson" throws the whole genus under this species - not a lot of help to gardeners with plants from 20cm to 1m. high in anything from white to deep blue. The 'Flora of the Pacific Northwest' maintains 3 species with 6 subspecific taxa. We have not seen these in flower so this name is the best we can provide. 30-50 cm. here. Recalling *Eremurus* in their spires of starry flowers (but in pale to deep violet-blues) all should be growable in the wetter climate of UK gardens, in a well-drained, sunny border.)
- 1.191.102 : CAMASSIA QUAMASH** Cal., El Dorado Co. 2000m. Open, wet meadow. J. & G. Robinett coll. 23.9.95 (Racemes of blue-violet flowers on 40-80cm. stems. These habitats are often flooded after snow-melt but dry-out later.)
- 1.191.103 : CAMASSIA QUAMASH** Idaho, Valley Co., NNE of Lowman. 2050m. Open, wet meadow in valley bottom. 21.7.95 (Only about 30cm. here and would probably fit into Hitchcock's northern type-race - var. *quamash*)
- 1.191.104 : CAMASSIA QUAMASH** Cal., Plumas Co., Long Valley. 1680m. G. Greger coll. (Imposing racemes packed with starry, blue-violet flowers on 40-80cm. stems. Its meadow-habitats are often flooded after snow-melt but dry-out later.)
- 1.192.500 : CAMPANULA SCABRELLA** Cal., Trinity-Siskiyou Co., Mt. Eddy. 2740m. Loose serpentine talus on summit slopes. J. Andrews coll., 1995 (Only Californian site for this local alpine, allied to *C. shetleri* & *C. piperi*. Upright, 3-10cm. tufts with a characteristic rough pubescence on the narrow leaves. Starry, pale-blue flowers. Possible in skilled hands.)
- 1.196.000 : CARDAMINE CONSTANCEI** Idaho, Shoshone Co., Big Creek, 6km. E of Kellogg. 750m. Ex J. Persson & H. Zetterlund 92-294. Archibald Archive www.srgc.net
- 1.198.000 : CASSIA**
- 1.199.500 : CASSIOPE MERTENSIANA** Cal., Alpine Co., S of Carson Pass, above Winnemucca Lake. 2750m. In turf & among granite boulders in moist areas.
- 1.200.050 : CASTILLEJA ANGUSTIFOLIA** Cal., Inyo Co., White Mts. W of Westgard Pass. 2230m Among *Artemisia* in gravelly soil. J. Andrews coll. 1995 (Brilliant Paintbrush in the superlative *C. chromosa* complex, one of which we have flowered well here. These can be grown with skill & luck. Liquid feeding in sterile composts can compensate for lack of partners. David Joyner in Salt Lake City sets up mini-ecosystems and grows an amazing & unique collection. Scarlet bracts. 20-30cm.)
- 1.200.051 : CASTILLEJA ANGUSTIFOLIA** Cal., Inyo Co., SW of Gilbert Summit. 1620m. Open, stony slope with sparse *Artemisia*. (Brilliant Paintbrush in the superlative *C. chromosa* complex, one of which we have flowered well here. These can be

grown with skill & luck. Liquid feeding in sterile composts can compensate for lack of partners. David Joyner in Salt Lake City sets up mini-ecosystems and grows an amazing & unique collection. Erect spikes with eye-burning, scarlet bracts. 20-30cm.)

- 1.200.200 : CASTILLEJA CONFUSA** New Mexico, Magdalena Mts. 3230m. Rocky, mesic, alpine meadow. M.& P.Stone 02-026.
- 1.200.201 : CASTILLEJA CONFUSA** New Mexico, San Mateo Mts. 3080m. Sparsely vegetated alpine meadow. M.& P.Stone 02-032.
- 1.200.501 : CASTILLEJA NANA** Cal., Siskiyou Co., Mt. Eddy. 2500m. Serpentine scree. J. Andrews coll. 1995. (Reduced alpine with purplish flowers, the whole plant purple-brown tinted. Often grows without obvious associates.)
- 1.200.750 : CASTILLEJA SCABRIDA** Utah, Emery Co., Molen Reef E of Moore. 1930m. Sandstone detritus & fissures on rock-slabs. (
- 1.203.000 : CAULANTHUS
- 1.204.000 : CAULOPHYLLUM
- 1.208.000 : CEANOTHUS : ABOUT 60 SPP. : ALL NORTH AMERICAN
- 1.210.250 : CEANOTHUS CUNEATUS** (var. *cuneatus*) Cal., Plumas Co., SE of Greenville. 1100m. (Variable in habit from prostrate to erect, reaching about 2m. Panicles of tiny flowers varying from white to pale-blue or lavender.)
- 1.211.050 : CEANOTHUS INTEGERRIMUS** var. **CALIFORNICUS** Cal., Plumas Co., Indian Falls. 1220m. (A variable, deciduous shrub, about 3m. high. "One of the most elegant" writes Bean, "producing its long, graceful panicles in great profusion" in mid-summer. Colour can grade from white through to blue or occasionally pink.)
- 1.211.330 : CEANOTHUS LEMMONII** Cal., Plumas Co., E of Quincy. 1160m. (An evergreen shrub, less than 1m. tall, with dull-green leaves, densely hairy below, & dense racemes of pale-blue flowers.) Archibald Archive www.srgc.net
- 1.213.005 : CEANOTHUS PROSTRATUS** Cal., Lassen Co., N of Westwood. 1580m. (A prostrate, evergreen shrub, forming wide mats, usually in open pine-forest. With its little, toothed holly-leaves & clusters of flowers in pale to deep blue, it has been described as "one of the most showy & desirable of alpine shrubs". Temperature-hardy but needs a hot, dry site.)
- 1.213.950 : CEANOTHUS VELUTINUS** (var. *velutinus*) Cal., Plumas Co., Babcock Peak. 1680m. (The cold-climate type-race of this 1.5m. shrub. Rounded, very glossy, evergreen leaves with silky undersides & panicles of white flowers.)
- 1.215.150 : CENTAUREA ROTHROCKII** Originally from a coll. in southern New Mexico. Seed from Richard Riedy, who tells us this is both gorgeous and impressive. With only two species in this genus in N America, this has remained surprisingly obscure. From 50cm. to about 1m. high, if in good soil in sun, with enormous, flattish heads, about 12cm. across, lavender round the edge grading to yellowish white in the centre. An annual, it will probably be best started under glass in spring.)
- 1.220.110 : CHELONE GLABRA** Native to eastern North America, from Newfoundland to Alabama, in wet woodland.
- 1.220.310 : CHELONE OBLIQUA** Native to SE USA from Tennessee to Florida, in wet woodland.
- 1.225.000 : CIMICIFUGA AMERICANA** E USA
- 1.225.100 : CIMICIFUGA ARIZONICA** Arizona, moist woods
- 1.225.105 : CIMICIFUGA ARIZONICA** (*Actaea arizonica*) Arizona. Ex a J. Compton coll. (A very local, relict species from moist woodland in a few shaded canyons at 1500-1800m altitude. Relatively new to cultivation in the UK, this has settled in fairly well in our Welsh moist woodland, though we have lost plants in wet winter conditions. Cut basal foliage & upright, branching stems, 1-1.5m. high, with erect spires of white flowers in late summer.)
- 1.225.200 : CIMICIFUGA ELATA** W USA (S BC to NW Oregon - W Cascades)
- 1.225.300 : CIMICIFUGA LACINIATA** Oregon (moist woods at base of Mount Hood) & Washington (Skamania Co.)
- 1.225.400 : CIMICIFUGA RACEMOSA** E Canada & E central USA
- 1.225.500 : CIMICIFUGA RUBIFOLIA** E USA
- 1.226.000 : CIRSIUM
- 1.227.000 : CLARKIA
- 1.228.000 : CLAYTONIA
- 1.229.310 : CLEMATIS ADDISONII** (*Viorna* Subsect. *Viorna*) No data. A slender, scrambling subshrub, endemic to the Blue Ridge Mts. & distributed down the range from SW Virginia to N Georgia, usually along wooded riverbanks. Thick-textured, nodding, urn-shaped flowers with pointed, recurving tips, rose-purple outside and creamy white within. C
- 1.229.335 : CLEMATIS ALBICOMA** (*Viorna* Subsect. *Integrifoliae*) No data. An erect, 50cm. tall, herbaceous species, narrowly endemic to the shale-barrens of the Allegheny Mts. in the Virginias. It is closest to the more widespread *C. ochroleuca* but the whole plant is covered in silky white hairs and the nodding, urn-shaped flowers, yellowish & purple-flushed, are carried on shorter stems. (Ex J. Jones, 1998.) Archibald Archive www.srgc.net
- 1.229.350 : CLEMATIS ARIZONICA**
- 1.229.400 : CLEMATIS BALDWINII** (SE USA)

- 1.229.500 : CLEMATIS BEADLEI** (SE USA)
- 1.229.600 : CLEMATIS BIGELOVII** (Arizona, New Mexico)
- 1.229.700 : CLEMATIS CATESBYANA** (SE USA)
- 1.229.750 : CLEMATIS COACTILIS** (*Viorna* Subsect. *Integrifoliae*) Virginia. Shale barrens. (A small, clump-forming, woody-based, herbaceous perennial, about 50cm. tall. Close to *C. albicoma* but with pale green, velvet-backed foliage and downy, nodding, urn-shaped flowers in white, sometimes with a green flush. Local in nature & rare in cultivation.)
- 1.229.800 : CLEMATIS COLUMBIANA**
- 1.229.810 : CLEMATIS COLUMBIANA** (var. *columbiana*) Utah, Garfield Co., Red Canyon. 2600m. Limestone. M.& P. Stone 99-013 (A woody climber with nodding violet-blue bells which fade to purplish shades. One of the two western American members of the circumpolar Section *Atrageneae* & long confused with the allied, ternate-leaved *C. occidentalis*.)
- 1.229.910 : CLEMATIS CRISPA** No data. A semi-woody climber from the SE States, reaching about 2m. with deciduous, pinnate leaves. Solitary, fragrant flowers with blue-purple, downy-backed sepals with wavy white margins.
- 1.230.000 : CLEMATIS DIOSCOREIFOLIA** (E USA) Archibald Archive www.srgc.net
- 1.230.100 : CLEMATIS DRUMMONDII** (Arizona to Texas)
- 1.230.200 : CLEMATIS FREMONTII** (Great Plains)
- 1.230.300 : CLEMATIS GATTINGERI** (SE USA)
- 1.230.400 : CLEMATIS GLAUCOPHYLLA** (SE USA)
- 1.230.500 : CLEMATIS HIRSUTISSIMA** Colorado, Front Range, Independence Mt. 2700m. Ex an A. Pierce coll. (Herbaceous, with thick-textured, urn-shaped, nodding flowers, downy outside & blue-purple within, on erect stems of 30cm. or more. The species ranges from Canada SE to Colorado & its sprawling relative, *C. scottii*, is sometimes grown in UK gardens.)
- 1.230.509 : CLEMATIS HIRSUTISSIMA** Montana, Lewis & Clark Range. M.& P. Stone coll. (Herbaceous, with thick-textured, urn-shaped, nodding flowers, downy outside & blue-purple within, on erect stems of 30cm. or more. The species ranges from Canada SE to Colorado & its sprawling relative, *C. scottii*, is sometimes grown in UK gardens.)
- 1.230.600 : CLEMATIS LASIANTHA**
- 1.230.700 : CLEMATIS LIGUSTICIFOLIA** (W USA)
- 1.230.800 : CLEMATIS OCHROLEUCA** (E USA)
- 1.230.809 : CLEMATIS OCHROLEUCA** N Carolina.
- 1.230.900 : CLEMATIS PALMERI** (Arizona, New Mexico)
- 1.231.000 : CLEMATIS PAUCIFLORA** (Arizona, New Mexico)
- 1.231.100 : CLEMATIS PITCHERI** (Central USA)
- 1.231.109 : CLEMATIS PITCHERI** Illinois, Tazewell Co.
- 1.231.110 : CLEMATIS PITCHERI** No data. A ally of *C. viorna* from the central states of the USA. A small, deciduous climber, under 3m. tall, with pinnate leaves and the urn-shaped flowers characteristic of this group borne over a long period in summer : Purple-blue tinged outside with the pointed tips reflexing to show the yellow-green interiors.
- 1.231.200 : CLEMATIS PSEUDOALPINA**
- 1.231.300 : CLEMATIS RETICULATA** (SE USA)
- 1.231.400 : CLEMATIS TENUILOBA**
- 1.231.410 : CLEMATIS TENUILOBA** ?? Utah, Bear River Range above Tony Grove Lake. Rock crevices. 11529.
- 1.231.500 : CLEMATIS TEXENSIS** (*Viorna* Subsect. *Viorna*) (Texas) Archibald Archive www.srgc.net
- 1.231.510 : CLEMATIS TEXENSIS** (Subsect. *Viorna*) No data. A small, slender climber with little, narrow bells, scarlet outside and flaring at their mouths to show the creamy insides. Endemic to eastern Texas, often on limestone, and not easily grown in UK gardens, where can be very slow to establish and prone to mildew in late summer.
- 1.231.605 : CLEMATIS VERSICOLOR** (*Viorna* Subsect. *Viorna*) No data. A slender climber, close to *C. texensis* and largely similar to this, except that the green-tipped, urn-shaped flowers are lavender-purple. It has a more northern distribution through the pine-barrens & woodlands of the south-central USA, from Oklahoma E to Tennessee (Ex J. Jones, 1998.)
- 1.231.700 : CLEMATIS VERTICILLARIS** (E N America)
- 1.231.810 : CLEMATIS VIORNA** (Subsect. *Viorna*) No data. A semi-woody, pinnate-leaved species, quite variable & widely distributed in the eastern USA. Climbing to 2-3m. with little, nodding, leathery, narrow-mouthed bells with recurved tips to the sepals, in red-purple, opening in late summer & followed by feathery, brown seed-heads.
- 1.231.900 : CLEMATIS VIRGINIANA**

- 1.240.000 : CLINTONIA ANDREWSIANA** Cal., Mendocino Co., W of Comptche. J. Andrews coll. 1995 (Surely the most beautiful in the genus. A plant of damp shade in redwood forests of NW California into SW Oregon. Perfect for a peat-bed in the UK, there were large stands in the RBG, Edinburgh. Umbels of pink to rose flowers followed by glossy, blue fruits. 50cm.)
- 1.240.010 : CLINTONIA ANDREWSIANA** No data. The most beautiful in the genus. A plant of damp shade in redwood forests of NW California into SW Oregon, where it slowly forms mats of broad, shiny leaves. There used to be large stands in the peat-beds of the RBG, Edinburgh. Umbels of pink to rose flowers followed by glossy, blue fruits. 50cm.)
- CLINTONIA BOREALIS**
- CLINTONIA UNIFLORA**
- 1.255.500 : COMMELINA DIANTHIFOLIA** Arizona, Cochise Co., Chiricahua Mts. Ex an S. Walker coll. (A dwarfer, more slender version of *C. coelestis* (*C. tuberosa*) with narrow, recurved leaves. A long succession of ephemeral flowers in the same intense, penetrating blue. Seems reliably hardy outside in most of the UK, in a well-drained, open site)
- 1.255.620 : COMMELINA COELESTIS 'ALBA'** (*C. tuberosa* group) White form of this lovely, 1m. high, tuberous-rooted perennial. Only survives mild winters outside in the UK but it can be lifted & stored dryish & frost-free, like dahlias.
- 1.256.500 : COMPTONIA PEREGRINA** Canada, Nova Scotia, Lunenburg Co. J. Weagle coll. (A monotypic genus related to the European *Myrica gale* with slender, erect, deciduous shrubby growth up to about 1m. high & beautifully cut, aromatic, ferny leaves. Easy & permanent in acid, peaty soil in full sun, it can be cut back annually like a herbaceous plant.)
- 1.257.500 : COPTIS GROENLANDICA** Canada, Nova Scotia, Lunenburg Co. J. Weagle coll. (A demure member of the *Ranunculaceae*, "of the utmost charm," writes Farrer, with "elfin white buttercups." A lovely but very seldom-seen, little carpeter for cool, woodland or peat-bed conditions & an ideal companion for such choice genera as *Shortia* & *Epigaea*.)
- CORDYLANTHUS : 30 PLUS SPP.**
- COREOPSIS : 40 PLUS SPP.**
- CORETHROGYNE : 3 SPP.**
- 1.259.550 : CORNUS NUTTALLII** Cal., Tehama Co., WSW of Lake Almanor. 1220m. G. Greger coll. (The Pacific dogwood, "noblest" of the genus & one of the most beautiful of small trees. It can reach more than 15m. in nature, though it is rarely more than a large shrub in the UK. Heads of tiny flowers surrounded by whorls of about 6, large, petal-like, creamy-white, pink-flushed bracts wreath the branches in early summer & in autumn the leaves flame to yellow & scarlet. Flowers when quite young.)
- 1.260.000 : CORYDALIS AUREA** Colorado, Rio Blanco Co., NW of Rio Blanco. 1980m. Steep slopes of fragmented shale. 10.7.95 (Compact form, about 10cm. high, of this dwarf perennial. Bluish leaves & bright yellow racemes.)
- 1.260.100 : CORYDALIS CASEANA**
- 1.260.100 : CORYDALIS CASEANA** (subsp. *caseana*) Cal., Plumas Co., Red Rock Spring. 2300m. G. Greger coll. (The type-race of this giant, wet-growing species, about 1m. high with racemes of many pale-pink or white flowers, tipped with purple-black, above clumps of dissected, glaucous foliage. We unsuccessfully tried to distribute seed from the more eastern *C. caseana* subsp. *brandegei* in the past. We try again with this freshly collected seed stored slightly moist at variable temperatures.)
- 1.264.000 : CRYPTANTHA ABATA** Nevada, Eureka Co., W of Eureka. 2100m. Gravelly 'flats' with sparse *Juniperus*. J. Andrews coll. (A caespitose, tap-rooted perennial, from gravelly soils in SW Utah & adjacent Nevada, with grey, hair leaves and clusters of white flowers on prostrate stems. This genus, in the *Boraginaceae* & closely allied to *Eritrichium*, includes many worthwhile species for the alpine-house but growing them well & in character in the UK still remains a challenge.)
- 1.265.800 : CRYPTANTHA PARADOXA** Colorado, Montrose Co., above Paradox Valley. 1800m. Among *Juniperus* on open, sandstone slopes. 9.7.95 (Fine & extremely local member of the *Boraginaceae*. Not as dwarf as some in this genus, at about 15cm., but splendid, woody-based silvery rosettes and especially large, white, yellow-centred flowers. One of the best.)
- 1.275.000 : CYMPTERUS**
- 1.285.000 : DAHLIA : c. 30 spp.**
- 1.285.510 : DAHLIA AUSTRALIS** No data. "A little-known species which deserves greater attention" writes Terry Hatch. Of compact habit with dark, leathery foliage, it reaches 60-90cm. in height when in flower in late summer. Ray florets, usually in luminous purple, surround the black central disc florets, especially striking when the outer rings of the latter produce their golden pollen. Variable but always worthwhile, this seed is from both violet & paler lilac forms. Archibald Archive www.srgc.net
- 1.285.710 : DAHLIA COCCINEA from YELLOW FORMS** No data. One of the more widely distributed Mexican species & a parent of the garden hybrids. The flowers of the elegant wild forms are only about 5cm across and possess a natural class absent from their overbred, obese children. About 1.5m or more high with small, attractively cut, dark-green leaves and a profusion of aristocratic, bright-yellow daisies all through the late summer. From selected yellows but orange forms may appear.
- 1.285.910 : DAHLIA DISSECTA** No data but originally from a wild coll. in Mexico. About 80cm. high with most distinct, finely dissected, dark glossy green leaves, this is rated by Terry as "bound to become popular when widely available...the flowers are exquisite, almost white with a blush of softest pink...on slender stems which sway in the slightest breeze."
- 1.286.100 : DAHLIA EXCELSA**

1.286.200 : DAHLIA IMPERIALIS

1.286.410 : DAHLIA MERCKII No data. The only species well-known in British gardens, a lovely plant of proven hardiness in the UK, if sited to avoid winter wetness. Lilac-pink flower-heads nod on long, graceful stems all through late summer.

1.286.411 : DAHLIA MERCKII from WHITE FORM No data. 15+)

1.286.600 : DAHLIA PINNATA

1.286.800 : DAHLIA ROSEA (*D. variabilis*)

1.287.000 : DAHLIA SCAPIGERA

1.287.200 : DAHLIA SHERFFII

1.287.400 : DAHLIA TENUICAILIS

1.287.600 : DAHLIA TUBULATA

1.295.000 : DALEA

1.299.000 : DARLINGTONIA CALIFORNICA Oregon, Josephine Co., SW of O'Brien. 500m. Wet depressions on open slopes. 28.7.95 (A monotypic genus of insectivorous plants, restricted to S Oregon & N California (see also *Sarracenia*). Great, winged translucent pitchers, about 50 cm. high, overtopped by bizarre yellow-green & dull purple flowers on stems of almost 1m. A montane plant & absolutely temperature-hardy but it does need specialised, wet conditions.)

1.299.001 : DARLINGTONIA CALIFORNICA Cal., Trinity Co., Scott Mountain summit. 1650m. Open, wet meadow in coniferous forest. (A monotypic genus of insectivorous plants, restricted to S Oregon & N California (see also *Sarracenia*). Great, winged translucent pitchers, about 50 cm. high, overtopped by bizarre yellow-green & dull purple flowers on stems of almost 1m. A montane plant & absolutely temperature-hardy but it does need specialised, wet conditions.)

1.299.500 : DASYNOTIS DAUBENMIREI Idaho, Idaho Co., Walde Mt. Lookout. Dry, open meadow among conifers. 1500m. H. Zetterlund coll. 12.6.94 (HZ 94-87) (In the *Boraginaceae* & only known from two sites. Described by Henrik as "a gorgeous plant, clump-forming with narrowly oblanceolate leaves. The flowers are large and of the purest white." 20cm.)

1.300.000 : DELPHINIUM ANDERSONII (var. *andersonii*) Nevada, White Pine Co., NW of Ely. 2200m. Openings among Juniperus in gravelly clay. 4.7.95 (From the winter- cold, interior steppes. Rich pure-blue flowers. 30-50cm.)

1.300.100 : DELPHINIUM ANDERSONII var. SCAPOSUM Colorado, Mesa Co., SW of Whitewater. 1800m. Stony, sandstone slopes. (More eastern race with more distinct cauline leaves and usually much darker blue flowers.)

1.300.700 : DELPHINIUM CARDINALE Cal., Ventura Co., NW of Ojai. 650m. Among scrub on steep slope above dry stream-bed. (Truly breathtaking when we saw it in flower for the first time in 1995. This has no affinities with *D. nudicaule*, in spite of its red flowers. A big plant, well over 2m. here, from a massive rootstock. A much branched stem carries a long succession of opulent flowers in brilliant, eye-burning scarlet-red. Starting in May in nature, there are still a few out in August. Unlike all the others, seed takes a long time to mature. Endemic to the S Coast Ranges just into Mexico, it is recorded up to 1500m. and seems reasonably hardy in the UK, though it is very liable to wind-damage here & if foliage appears early, it may need protection.)

1.300.701 : DELPHINIUM CARDINALE Cal., Los Angeles Co., Santa Monica Mts. 500m. N-facing clay bank in chaparral. J. & G. Robinett coll. 21.7.95 (Branching stems to 1m. and more. Considerable differences exist between populations.)

1.300.850 : DELPHINIUM DECORUM subsp. TRACEYI Cal., Siskiyou Co., SW of Castle Lake. 1580m. Openings among scrub on steep, stony slopes. (Dwarf, montane N Californian race with blue-purple flowers. 10-20cm. Cool summer rest.)

1.300.900 : DELPHINIUM DEPAUPERATUM Cal., Sierra Co., SE of Sierraville. 1870m. Open, gravelly areas among sparse *Pinus*. (Our 1989 coll. 10949 & 1992 coll. 12728, distributed as *D. nuttallianum* but it seems to fit in better with this. A very pretty, summer-dormant species with flights of rich purple flowers on branching 20cm. stems over a long period in spring.)

1.301.201 : DELPHINIUM GEYERI Wyoming, Lincoln Co., N of Opal. 2050m. Among grasses in gravelly soil. (Spread from NW Utah to E of the Rockies, often painting the grassland with rich blue purple. May merge into the *D. virescens* complex of the Great Plains. Used to extremely cold winters, this should be hardy almost anywhere. About 50cm. tall here.)

1.301.310 : DELPHINIUM GLAREOSUM No data. Stock ex Gothenburg. Archibald Archive www.srgc.net

1.301.505 : DELPHINIUM GLAUCUM Oregon, Jackson Co., W of Applegate Lake. 1370m. Streamside. P. Gustafson 98-10107 (A tall, robust wet-grower, distributed in western mountain meadows from Alaska south to the San Gabriels behind Los Angeles and likely to prove an excellent garden-plant in the UK. A massive, soundly perennial rootstock sends up large deeply cut leaves with pointed lobes & several, branching stems about 2m. high with packed with numerous, rich purple-blue flowers.)

1.302.500 :# ~DELPHINIUM LUTEUM Cal., Sonoma Co., SW of Bodega. Ex a W. Roderick coll. (A species hovering on the verge of extinction, known from two small populations on seasonally wet cliffs near the coast NW of San Francisco. It is essential that we maintain this unique species in cultivation. Not usually generous about setting seed in cultivation, even when several clones are grown. None matured under glass with us. This listing is from D. Hoskins (Hampshire, UK) & D. Batterham (Dorset, UK) gathered from plants grown in the open garden in what was a cold, wet early summer in the UK. Learn the lesson : like many plants from the chilly, misty Californian coast, it does not enjoy hot weather. How temperature-hardy it will be outside in a severe UK winter, however, is yet to be established. A truly beautiful plant when well grown - the only really yellow N American. Branching stems, of about 30 -50cm., packed with large, waxy, shining, [#clear-yellow flowers](#) in early summer. Dormant in late

summer.)

- 1.302.700 : DELPHINIUM NUDICAULE** Cal., Plumas Co., S of Greenville. 1370m. Among conifers on steep, gravelly, clay slope. (A high altitude inland form, about 30cm. high of this scarlet-orange species. Tony Chalkley raised some pinkish flowered plants, possible hybrids with *D. nuttallianum* or a similar species, from a coll. we made here. We saw only this in 1995.)
- 1.302.709 : DELPHINIUM NUDICAULE** Cal., Plumas Co., near Greenville. 1100m. Gravelly, S-facing clay slope. G.Greger coll. (A very hardy, perennial, high altitude inland form, about 30cm. high of this eye-catching, scarlet-orange species.)
- 1.302.750 : DELPHINIUM NUDICAULE** Cal., Mendocino Co., Etsel Ridge ESE of Covelo. 1980m. Among rocks on serpentine outcrop. (A similar form, growing in a precisely similar habitat to the next, which we collected in 1989 in the Lassics N of Zenia and have never been able to relocate. We wonder if there is a distinct, tall race endemic to these high, inaccessible serpentines of the inner N Coast Ranges. Up to 1m. high with the long-spurred, brilliant scarlet flowers held out on long pedicels.)
- 1.302.751 : DELPHINIUM NUDICAULE** Cal., Trinity Co., N of Zenia. 1660m. Serpentine outcrop. (From our 1989 coll., made about 80km. NW of the preceding, grown successfully as a border-plant outside by Dinah Batterham (Dorset, UK))
- 1.302.751 : DELPHINIUM NUDICAULE** Cal., Trinity Co., N of Zenia. 1660m. Serpentine outcrop. (From our 1989 coll. of a tall race from the high, inaccessible serpentines of the inner N Coast Ranges. Up to 1m. high with the long-spurred, brilliant scarlet flowers held out on long pedicels. grown successfully outside by Dinah Batterham (Dorset, UK))
- 1.302.902 : DELPHINIUM NUTTALLIANUM** Mal., Modoc Co., WNW of Canby. 1420m. Vernal wet, open, stony site. 15.6.95 (Possibly this very variable, widespread, deep-blue, dwarf species, 20-30cm. here, though plants in the area keyed-out as *D. depauperatum*. Warnock mentions they can occur together but that the latter flowers later & likes wetter places.)
- 1.303.100 : DELPHINIUM PARISHII** Cal., Inyo Co., SW of Gilbert Summit. 1620m. With sparse *Artemisia* on open, stony slope. 25.6.95 (Cold-desert species with 50cm. racemes of downy, white-eyed flowers in a beautiful pale azure-blue.)
- 1.303.102 : DELPHINIUM PARISHII** Cal., Inyo Co., Panamint Range, Wildrose Canyon. 2130m. Among *Juniperus*. 25.6.95
- 1.303.600 : DELPHINIUM PARRYI subsp. PURPUREUM** Mal., Kern Co., W of Frazier Park. 2250m. Among *Pinus* in granite grit. 23.6.95 (Type-locality coll. of this race endemic to the Transverse Range. Racemes of light-blue, often violet-tinted, flowers, 30-60cm. high. The species as a whole (not to be confused with *D. parishii*) is widespread in S. California.)
- 1.304.300 : DELPHINIUM TROLLIIFOLIUM** Cal., Humboldt Co., SSW of Willow Creek. 1070m. Steep, moist, part-shaded banks. (A magnificent wet-grower distributed in the N Coast Range from Humboldt Co. N into W Oregon, which we first saw in flower here in 1989 & have been trying to collect seed from ever since. Every year up till now, it has been grazed off by deer coming to drink at the nearby spring. About 2m. high with large, laciniately lobed leaves & spires of rich, deep blue flowers. This should be an important species for gardeners in the UK, where it should be easily grown in any good, rich moist soil.)
- 1.304.311 : DELPHINIUM TROLLIIFOLIUM from PINK FORM** Field-data as for 1.304.300 (From a single plant, tagged in bloom, with flowers in a soft lilac-pink. Pollinated by blues, so how 'true' seedlings will be remains to be seen.)
- 1.304.500 : DELPHINIUM VARIEGATUM** (subsp. *variegatum*) Cal., Mendocino Co., SW of Covelo. 390m. Heavy clay on open, grassy slope. (A spectacular species around 50cm. high with racemes of flowers in rich, deep royal-blue. This has grown very well with us, flowering for a long period & setting seed well. It should be easy in a bulb-frame anywhere in the UK or perhaps even in a well-drained sunny site outside, providing an unique colour in late spring & early summer.)
- 1.305.001 : DENDROMECON RIGIDA** Cal., Tulare Co., NE of Springville. 1150m. Among scrub on steep slopes. 2.8.95 (Woody poppy, about 2m. high with brilliant yellow, four-petalled flowers & narrow, bluish, leathery leaves. Usually a success in the UK in a dry, sunny site. Seed is difficult to germinate - try burning over it or put it in an oven for an hour or so.)
- 1.305.020 : DENDROMECON RIGIDA** Cal., Santa Barbara Co., Point Sal Ridge. 300m. Exposed, steep, seaward W-facing slope. 22.6.95 (Extremely compact, only 30cm. high here, with very thick, leathery leaves. The result of the Pacific gales and may not be fixed but most prostrate *Ceanothus* in cultivation come from similar sites & retain their character.)
- 1.305.909 : DICENTRA CANADENSIS** Michigan. R. & R.Wallis coll. (A fresh, 2002 coll. of this delightful summer-dormant woodlander. Smooth, dissected foliage & racemes of white, yellow-tipped flowers. Quite like the better-known *D. cucullaria* but differing in the spurs on the outer petals, as well as in the rhizomatous rootstock with rounded tubers.)
- 1.306.001 : DICENTRA CHRYSANTHA** Cal., Lake Co., SE of Hull Mt. 1800m. Steep open slope. 31.7.95 (Californian endemic & a classic fire-follower. Stiff, erect stems of about 1m. from a stout perennial root. Blue-grey, dissected leaves and panicles of upward-facing, bright-yellow bleeding-heart flowers. Treat like *Dendromecon* to germinate - burn it over !)
- 1.306.100 : DICENTRA CUCULLARIA**
- 1.306.200 : DICENTRA FORMOSA** Cal., Mendocino Co., Etsel Ridge. 1980m. Among scrub in openings among conifers. (Good deepest pink form from the high serpentines here. Usually an easy 30cm. perennial in UK gardens.)
- 1.306.250 : DICENTRA FORMOSA : CREAM FORM** Cal., Humboldt Co., N of Weitchpec, Bee Mt. 900m. Steep, loose bank in coniferous forest zone. (This is a very striking plant, as distinct in its own way, as *D.f.* subsp. *oregana* & from a similar habitat, quite a long way S from Oregon line. Rather coarsely cut foliage in deep bluish green, rather than grey-green, and masses of creamy ivory flowers..) Archibald Archive www.srgc.net
- 1.306.300 : DICENTRA FORMOSA subsp. OREGANA** Oregon, Josephine Co., E of Takilma. 900m. Loose serpentine talus on steep slope. (Merged under the above, in current floras, but most distinct in its 'pure' form, narrowly endemic to serpentine scree

in this area. Dwarfier (15-20cm.) with much cut blue-grey leaves and shallowly cordate cream, rose-tipped flowers.)

1.306.305 : DICENTRA FORMOSA subsp. OREGANA Cal., Del Norte Co., Little Jones Creek Road. P. Gustafson 98-0858 (Merged under the above, in current floras, but most distinct in its 'pure' form, narrowly endemic to serpentine scree in this area along the California-Oregon line. Dwarfier (15-20cm.) with much cut blue-grey leaves and shallowly cordate cream, rose-tipped flowers.)

1.306.350 : DICENTRA NEVADENSIS Cal., Tuolumne Co., Pilot Ridge (Sierra Nevada E of Oakdale). 1340m. Steep, NE-facing metamorphic rock outcrops in conifer-oak forest. J. Andrews coll. (A very narrow Sierra Nevada endemic more or less confined to a few 'gravel bars' to the S in Tulare Co. between 2200 & 3000m. It has been included under *D. formosa*)

1.306.400 : DICENTRA OCHROLEUCA

1.306.500 : DICENTRA PAUCIFLORA

1.306.600 : DICENTRA UNIFLORA

1.308.000 : DICHELOSTEMMA CAPITATUM Cal., Tehama Co., NE of Red Bluff. 380m. Among long grass in open area. 30.7.95 (Very widespread & variable corm with dense heads of showy, blue-purple flowers on 30cm. stems.)

1.308.200 : DICHELOSTEMMA CONGESTUM

1.308.300 : #DICHELOSTEMMA IDA-MAIA Cal., Humboldt Co., NNE of Orleans. 180m. Stony slope at woodland margin. (Hand-pollinated seed of this amazing plant, over 1m. when well grown, with pendant, tubular flowers in pure glowing red with greenish-cream segments surrounding the white staminodes. Easy here under glass but will grow outside in UK.)

1.308.302 : DICHELOSTEMMA IDA-MAIA Cal., Mendocino Co. 450m. Steep, NW-facing slope. J. & G. Robinett coll. (We have two other wild colls. by the Robinetts available from this startling endemic of the N Coast Ranges.)

1.308.303 : DICHELOSTEMMA IDA-MAIA Cal., Shasta Co. 400-800m. J. & G. Robinett coll. Archibald Archive www.srgc.net

1.308.409 : DICHELOSTEMMA MULTIFLORUM Cal., Plumas Co., near Greenville. 1100m. G. Greger coll. (Dense, rounded umbels of pinkish to bluish purple flowers on 60cm. stems above clumps of glaucous leaves in summer.)

1.308.501 : DICHELOSTEMMA VOLUBILE Cal., Fresno Co. 1550m. Open woodland on granite-sand slope. J. & G. Robinett coll. (While *D. ida-maia* can twine a little, this is a real climber with contorted stems to 2m. twisting among scrub. Umbel-like heads of bright pink flowers with cream staminodes. Flowering by the thousand here after a fire & a wet winter.)

1.308.502 : DICHELOSTEMMA VOLUBILE Cal., Butte Co., near Durham. 150m. (While *D. ida-maia* can twine, this is a real climber with contorted stems to 2m. twisting among scrub. Umbel-like heads of bright pink flowers with cream staminodes. Increases little vegetatively so growing from seed is the way to enjoy this fascinating & beautiful plant.)

1.308.809 : DIPHYLLEIA CYMOSA

1.309.100 : DISPORUM HOOKERI var. OREGANUM Idaho, Benewah Co., SW of Sanders. 820m. Mixed coniferous woodland. (Demure woodlander with pendant, creamy bells followed by bright orange fruits. 50cm.)

1.309.101 : DISPORUM HOOKERI var. OREGANUM Wash., Whitman Co., Kamiak Butte, SW of Palouse. 1000m. Coniferous woodland on N-facing slope. (Demure woodlander with pendant, creamy bells followed by bright orange fruits. 50cm.)

1.309.160 : DISPORUM LANUGINOSUM No data. Native to the eastern states of North America,

1.309.200 : DISPORUM MACULATUM

1.309.250 : DISPORUM PARVIFOLIUM

1.309.299 : DISPORUM SMITHII Oregon, Jackson Co., S of Galice. P. Gustafson 98-0848 (A refined plant of moist W Coast woodlands from California N into British Columbia. Drooping, cream, tubular flowers & orange fruits on 30cm. stems.)

1.309.300 : DISPORUM SMITHII No data. A refined relative of *Polygonatum*, from moist, West Coast woodlands from California north into British Columbia. Drooping, cream, tubular flowers, followed by orange fruits, on 30cm. stems.

1.309.510 : DISPORUM TRACHYCARPUM

1.310.300 : DODECATHEON ALPINUM

1.310.400 : DODECATHEON AMETHYSTINUM

1.310.500 : DODECATHEON CLEVELANDII (subsp. *clevelandii*) Cal., Santa Barbara Co. 1150m. Serpentine meadow in full sun. J. & G. Robinett coll. 17.6.95 (Splendid summer-dormant plant for the bulb-frame or alpine-house. Showy pink flowers with yellow noses. Do take careful note of the habitats - there are species for both the bulb-frame & peat-bed here.)

1.310.600 : DODECATHEON CLEVELANDII subsp. INSULARE Robust race from the Channel Islands off the Californian coast. Distinguished from the type-race by its maroon-black anther connective & from the other subspecies by the absence of the yellow-blotch on the filament-tube. A splendid thing for the bulb-grower but the *D. clevelandii* group is not so easy in the UK)

1.310.625 : DODECATHEON CLEVELANDII subsp. PATULUM Cal., Tehama Co., W of Red Bluff. 200m. Vernal wet areas. P. Gustafson 98-0401 (A splendid little, summer-dormant shooting-star, about 15 cm. high, with white flowers accentuated by the maroon-black anther-cone. This area has an extreme continental climate with very high summer temperatures and cold winters, so the species is ideally suited to year-round alpine-house cultivation in the UK. Dry in summer but keep it wet in spring.)

- 1.310.705 : DODECATHEON CONJUGENS** Montana, Madison Co., Gravelly Range. 2620m. M.& P. Stone 98-25 (A species of seasonally wet sites in the drier, colder interior ranges from BC to Alberta in the N & NE California to Wyoming in the S. Smooth, rounded basal leaves & 20cm. stems with umbels of up to 7, magenta flowers, usually with black pollen-sacs.)
- 1.310.710 : DODECATHEON CONJUGENS** A cold-climate species of seasonally wet sites in the drier, colder interior ranges from British Columbia to Alberta in the North & NE California to Wyoming in the South. Smooth, rounded basal leaves & 20cm. stems with umbels of up to 7, magenta flowers, usually with black pollen-sacs.)
- 1.310.800 : DODECATHEON DENTATUM**
- 1.310.900 : DODECATHEON ELLISIAE**
- 1.310.950 : DODECATHEON HANSENI**
- 1.311.000 : DODECATHEON HENDERSONII** Cal., Plumas Co., S of Greenville. 1370m. Among conifers on steep, stony slope. (Characteristic species of northern woodlands. Summer-dormant. Magenta to deep lavender.)
- 1.311.001 : DODECATHEON HENDERSONII** Cal., Shasta Co., S of Shingletown. 1000m. Woodland. 29.6.95
- 1.311.009 : DODECATHEON HENDERSONII** Cal., Plumas Co., S of Greenville. 1100m. G. Greger coll. (Characteristic species of northern woodlands. Summer-dormant. Magenta to deep lavender.)
- 1.311.100 : DODECATHEON HUGERI**
- 1.311.200 : DODECATHEON JEFFREYI** Cal., Trinity Co., Scott Mt. Summit. 1650m. Open, wet meadow in coniferous forest. (Always in marshy meadows & along streams in the mountains. Varying shades of lavender pink.)
- 1.311.209 : DODECATHEON JEFFREYI** No data. Ex R.Ratko 98-207 (An alpine species, always growing in marshy meadows & along streams in the mountains. A dainty summer-dormant species in varying shades of lavender pink.)
- 1.311.250 : DODECATHEON MEADIA**
- 1.311.260 : DODECATHEON MEADIA** No data.
- 1.311.261 : DODECATHEON MEADIA f. ALBUM** No data.
- 1.311.280 : DODECATHEON POETICUM**
- 1.311.300 : DODECATHEON PULCHELLUM** Wyoming, Laramie Co., Horse Creek. 2300m. Among long grass in wet meadow 15.7.95 (Extremely tall, robust form here with richly coloured flowers in deep pinks & reds.)
- 1.311.400 : DODECATHEON REDOLENS**
- 1.311.500 : DODECATHEON SUBALPINUM**
- 1.311.700 : DODECATHEON SP.** Oregon, Josephine Co., SW of O'Brien. 500m. P. Gustafson 98-068. Clay pockets on level serpentine slabs, briefly wet in spring. (A distinct, bright, little plant, known to Boyd Kline & other local plant-people as 'Illinois Valley Dwarf'. We should not hazard a guess as to its affinities. Narrow-leaved and only 10cm. in seed.)
- 1.311.950 : DOUGLASIA NIVALIS**
- 1.312.500 : DRABA QUADRICOSTATA** Cal., Mono Co., N of Conway Summit. 2300m. Rock fissures on volcanic ridge. J. Andrews coll., 1995 (Narrow Sierra Nevada endemic, separated into *Cusickiella quadricostata* in 'Jepson'. One of the most densely caespitose of Californian cushions with pale yellow flowers. Enthusiastically recommended by John.)
- 1.313.509 : ECHINACEA ANGUSTIFOLIA** NW Texas. Ex an S. Marak coll. Archibald Archive www.srgc.net
- 1.313.550 : ECHINACEA ATRORUBENS**
- 1.313.600 : ECHINACEA LAEVIGATA**
- 1.313.659 : ECHINACEA PALLIDA** Arkansas, Benton Co. Ex an S. Marak coll.
- 1.313.660 : ECHINACEA PALLIDA** No data. The pale purple coneflower of the SE Great Plains. Longer, narrower leaves than *E. purpurea* & with a woody taproot. Big purple-pink heads with drooping rays carried singly on stems of about 1m.
- 1.313.700 : ECHINACEA PARADOXA**
- 1.313.750 : ECHINACEA PURPUREA**
- 1.314.900 : EPIGAEA REPENS** Canada, Nova Scotia, near Lunenburg, SW of Halifax. S-facing bank in heavy, sandy soil & broken shale at edge of pine-forest - sun & part-shade. J. Weagle coll., 1996. (Freshly collected seed, received promptly & kept refrigerated should give good germination but this is not an easy plant in the UK, where the climate is too soft for it & premature growth can be damaged by late frosts. The representative in eastern N America, from Canada S to Georgia, of a trio of widely disjunct relics in the *Ericaceae*. Its relatives are in Japan & NE Turkey. A beautiful, creeping, evergreen shrub, strictly for lime-free soils. About 10cm. high, with large, bristly, dark-green leaves & dense heads of tubular, white or rose-tinted flowers in spring.)
- 1.315.450 : EPILOBIUM RIGIDUM** Oregon, Josephine Co., SW of O'Brien. 700m. Open, stony areas on serpentine. P. Gustafson 98-09102. (An outstanding species, the finest in the genus, & choicest of the trio centred on *E. obcordatum*. Like so many other fine plants, this is confined to a few sites on the serpentines along the California-Oregon line. A tiny, woody-based perennial with

extremely large, rich-pink flowers, borne for a long period in late summer, over neat, fleshy, blue-green leaves. Not at all impossible to grow in an alpine-house pan, or even a sunny trough, in the UK but difficult to propagate, though it has set a few seeds with us in cultivation. Very difficult indeed to collect in any quantity but fortunately it usually germinates quickly & well.)

- 1.315.500 : EPILOBIUM SISKIYOUENSE** Cal., Siskiyou Co., Mt. Eddy. 2600m. Exposed, serpentine slope. (Now sensibly separated from *E. obcordatum* in 'Jepson', this is very local on the high serpentines in this area and is more or less intermediate between *E. obcordatum* & *E. rigidum* - a superlative trio of alpinists for the specialist. Caespitose, woody-based & compact, about 10cm. high, it covers itself with comparatively huge flowers of intense rose-purple.)
- 1.320.200 : ERIGERON ARGENTATUS** Cal., Inyo Co., Westgard Pass. 2230m. Openings among *Artemisia* in gravelly soil. (One of the best medium-sized species. Generous, lilac-blue daisies from narrow-leaved, silvery-grey clumps. 20cm.)
- 1.320.120 : ERIGERON BREWERI var. PORPHYRETICUS** Nevada, Humboldt Co., Santa Rosa Range.
- 1.320.400 : ERIGERON COMPACTUS** Nevada, Eureka Co., W of Eureka. 2100m. Exposed, bare alkaline 'flats' with sparse *Juniperus*. (Firmly compacted, round hummocks cover themselves with daisies on 5cm. stems - usually white, sometimes lilac-pink and red on the reverse of the rays. Described by Dwight Ripley as "one of the choicest of its race.")
- 1.321.600 : ERIGERON INORNATUS** (var. *inornatus*) Oregon, Josephine Co., SW of Applegate. 1800m. Scree. P. Gustafson 98-0869 (Name wrong : should be a 5cm. high, hairy leaved, decumbent perennial with flat-topped inflorescences of discoid heads. Phyllis writes "Stems 8-10 in. with oblong leaves, topped with heads of flat lavender daisies of good size." Cannot be *E. inornatus* - try *E. bloomeri* var. *bloomeri*, *E. eatonii* var. *plantagineus*....)
- 1.322.300 : ERIGERON NANUS** Idaho, Cassia Co., Albion Range, Mt. Harrison. 2800m. Exposed, gritty, rocky, S-facing summit slopes. B.J. Lowry coll. (Several years ago Ned & Betty Lowry, exploring the southern Idaho ranges, came on this superlative alpine in flower. They were at last able to return for seed in 2000. Betty (one of the most skilled & discriminating alpine-growers in N America, so we'll certainly take her word for this) rates this as "a marvellous plant...compact...very dwarf habit (about 5cm.) and fine color (a good lavender-blue - no pallid daisy here)." The species appears to be endemic to windswept ridges at elevations between about 2100m. & 3300m. in the mountains around the borders of N Utah, SE Idaho & SW Wyoming. The name, applied nowadays to some cultivated material in the UK, was first published by Nuttall in 1841 & might lead to more than a little confusion. It was subsequently used for a horticulturally unimportant E European species in the *E. alpinus* complex by Schur in 1866 & appears in 'Flora Europaea' under the guise of validity. To compound the confusion, the British 'Index Hortensis' lists *E. nanus* Nuttall as a synonym of the entirely different *E. radicans* Hooker 1834. Do not let all this blind you to the fact that this distinct, little, Mt. Harrison *Erigeron* has almost certainly never been in cultivation and is something very special indeed.)
- 1.323.720 : ERIGERON UNCIOLIS var. CONJUGANS** Nevada, Clark Co., Spring Mts., Charleston Peak. 3600m. Limestone fissures. J. Andrews coll. (A dwarf, compact, tap-rooted, alpine cushion-plant with hairy basal leaves and little daisies on stems less than 5cm. high. The purplish discs are surrounded by many rays in rose, pale lavender or white. The species is confined to the desert ranges of E California with this even downier race endemic to the high limestones of Clark & Nye Counties in Nevada.)
- 1.330.200 : ERIOGONUM REEDLOVEI** (var. *breedlovei*) Cal., Kern Co., Piute Mt. 2400m. J. Andrews coll. 1993 (Only known from the limestone of this one mountain in the southern Sierra Nevada. A bit like *E. kennedyi* with woolly grey mats to 20cm. across. Whitish to reddish flowers. The first & only coll. of this desirable plant.) Archibald Archive www.srgc.net
- 1.330.250 : ERIOGONUM CAESPITOSUM** Cal., Mono Co., White Mts. 2300m. Open, stony, limestone slope. (One of the best & also one of the easiest to grow among the tightly pulvinate ones. A widely distributed species forming compact mats of tiny, spatulate, white-felted leaves. Clustered yellow heads, opening almost stemless, flush to red as they mature.)
- 1.330.500 : ERIOGONUM DOUGLASHII** Cal., Modoc Co., Warner Mts. 2670m. J. Andrews coll. 1991 (Close to the preceding. Hard, white mats to 30cm. across with yellow heads, flushing to red. The true plant - impostors are often grown as this.)
- 1.330.850 : ERIOGONUM HOLMGRENII** Nevada, White Pine Co., Snake Range. 3400m. Exposed limestone talus. J. Andrews coll. (Endemic to this range, above the bristlecone pines with *Aquilegia scopulorum* & *Primula nevadensis*. Introduced to cultivation by John in 1995. In Sect. *Capitata* with local rarities like *E. gracilipes* & *E. kingii*. Raspberry-pink heads.)
- 1.330.890 : ERIOGONUM JAMESII var. FLAVESCENS** (*E. arcuatum* var. *flavescens*) No data. In a diverse species-group spread throughout the West. A woody-based perennial forming wide mats with rosettes of woolly, white foliage, singled out for mention in 'A Utah Flora' as "a remarkably beautiful species, with its bright sulfur yellow flowers."
- 1.330.900 : ERIOGONUM KELLOGGII** Cal., Mendocino Co., Red Mt. 1180m. Rocky slopes & scree. J. Andrews coll. 1991 (Only known from the Red Mt. serpentine. Dense, flat, woolly mats. Heads of pink flowers flush to orange. 5cm.)
- 1.330.950 : ERIOGONUM KENNEDYI var. ALPIGENUM** Cal., Ventura Co., Mt. Pinos. 2600m. Granite grit of exposed summit area. (Wide hard, silvery white mats with stemless heads of rosy flowers, maturing to rust-red. Stays tight with us.)
- 1.331.000 : ERIOGONUM KINGII** Nevada, Elko Co., Ruby Mts., Thomas Creek Canyon. 2880m. J. Andrews coll. (Another desirable, narrow endemic in Sect. *Capitata*, isolated here with *Primula capillaris*.)
- 1.331.500 : ERIOGONUM OVALIFOLIUM** Cal., Mono Co., White Mts., Westgard Pass. 2230m. Level, gravelly steppe. (A widespread, variable group of local taxa, defying all attempts to split it into 'species' - all are beautiful. Woody mats of oval, grey-white leaves send up many 10cm. stems with round heads of flowers, creamy-white maturing to pink here.)
- 1.331.810 : ERIOGONUM PHARNACEOIDES** No data. A very attractive annual species with an intermountain distribution. Narrow, greyish leaves & downy inflorescences of yellow flowers on wiry, 20cm. tall stems.

- 1.332.450 : ERIOGONUM SHOCKLEYI** Nevada, Nye Co., W of Cherry Creek Summit, Ox Spring Wash. 1700m. J. Andrews coll.
- 1.332.500 : ERIOGONUM SISKIYOUENSE** Cal., Trinity Co., Mt. Eddy. 2070m. J. Andrews coll. 1995 (Narrowly endemic to the Mt. Eddy serpentines. Tight, woody-based mats of woolly-backed leaves, rather like a compressed version of *E. umbellatum*. Slender stems of about 5 cm. with a whorl of bracts below the heads, which open yellow & age to red.)
- 1.332.600 : ERIOGONUM SOREDIUM** Utah, Beaver Co., Frisco (WNW of Milford). 2010m. Limestone slopes. (Densely pulvinate, firm, woolly, grey-white mounds, up to 50cm. across, with almost stemless heads of white, sometimes pink-flushed, flowers. Only ever found above the ghost-town of Frisco, on the E side of the Wah Wah Valley. Try in full sun in the alpine-house)
- 1.335.000 : ERIOGONUM UMBELLATUM** : About 20 vars. in Ca. : 20 spacing : say 500 numbers.
- 1.335.000 : ERIOGONUM UMBELLATUM** (var. *umbellatum*) No data. The core species of this vast assemblage of buckwheats, distributed over much of western North America. They are all, more or less, woody based perennials which can form wide mats, up to 1m. across. The showy flowerheads rise on stems from evergreen leaf rosettes, which in this case are greener than most, taking on wine-purple shades in winter. Bright yellow flowers. Archibald Archive www.srgc.net
- 1.335.020 : ERIOGONUM UMBELLATUM** var. **ARGUS**
- 1.335.040 : ERIOGONUM UMBELLATUM** var. **AUREUM** No data. Seeds from a really excellent, selected form of this variant, included under the type-race of *E. umbellatum* by some botanists.
- 1.335.060 : ERIOGONUM UMBELLATUM** var. **BAHIIFORME**
- 1.335.080 : ERIOGONUM UMBELLATUM** var. **CHLOROTHAMNUS**
- 1.335.100 : ERIOGONUM UMBELLATUM** var. **COVILLEI**
- 1.335.120 : ERIOGONUM UMBELLATUM** var. **DICHROCEPHALUM**
- 1.335.140 : ERIOGONUM UMBELLATUM** var. **FURCOSUM**
- 1.335.160 : ERIOGONUM UMBELLATUM** var. **GLABERRIMUM**
- 1.335.180 : ERIOGONUM UMBELLATUM** var. **HUMISTRATUM** No data. An uncommon, compact race of very limited distribution between 1700m. and 2800m., on the serpentine mountains, like Mt. Eddy, along the California-Oregon line. Bright yellow flower-heads on dense, ground-hugging mats. A plant for the alpine-house or trough.
- 1.335.200 : ERIOGONUM UMBELLATUM** var. **JUNIPORINUM**
- 1.335.220 : ERIOGONUM UMBELLATUM** var. **MAJUS**
- 1.335.240 : ERIOGONUM UMBELLATUM** var. **MINUS**
- 1.335.260 : ERIOGONUM UMBELLATUM** var. **MUNZII**
- 1.335.280 : ERIOGONUM UMBELLATUM** var. **NEVADENSE**
- 1.335.300 : ERIOGONUM UMBELLATUM** var. **POLYANTHUM** No data. The characteristic race of the mountains of North California & southern Oregon. Spreading, shrubby mats with rounded foliage and bright yellow flowers.
- 1.335.320 : ERIOGONUM UMBELLATUM** var. **PORTERI**
- 1.335.350 : ERIOGONUM UMBELLATUM** var. **SPECIOSUM** Oregon, Jackson Co., Carberry Creek, W of Applegate Lake. 1220m. Dry, rocky, S-facing serpentine slope. Ex P. Gustafson 98-0859 (A local race from N California & adjacent Oregon. One of the most spectacular variants. A robust, dwarf shrub, about 30cm. high with big, rich-green leaves, massed with compound inflorescences of brilliant yellow flowers which mature in intense scarlet to rust-red shades.)
- 1.335.380 : ERIOGONUM UMBELLATUM** var. **SUBARIDUM**
- 1.335.400 : ERIOGONUM UMBELLATUM** var. **TORREYANUM**
- 1.335.420 : ERIOGONUM UMBELLATUM** var. **VERSICOLOR**
- 1.335.600 : ERIOGONUM URSINUM** var. **NERVULOSUM** Cal., Napa Co., Knoxville-Devilshead Road. 440m. J. Andrews coll.
- 1.345.000 : ERYNGIUM** : 25 species in USA. Archibald Archive www.srgc.net
- 1.346.009 : ERYNGIUM HETEROPHYLLUM** Arizona, Santa Cruz. Ex a S. Walker coll. (A dwarf, monocarpic species from Arizona, New Mexico & Texas. Little cones of bluish flowers surrounded by platinum-white, spiky bracts.)
- 1.348.010 : ERYNGIUM VENUSTUM** No data. Another Mexican species new to us but Tim Ingram recommends the "very attractive" rosettes, about 30cm. across & of glossy green, spiky, pinnate foliage. The heads of greeny yellow thimbles on branching, 45cm. stems in late summer are more modest. "A good, hardy perennial for a hot dry spot" in Tim's experience.
- 1.348.110 : ERYNGIUM YUCCIFOLIUM** No data.
- 1.350.000 : ERYTHRONIUM ALBIDUM**
- 1.350.100 : ERYTHRONIUM AMERICANUM** (subsp. *americanum*)

1.350.150 : ERYTHRONIUM AMERICANUM subsp. HARPERI

1.350.200 : ERYTHRONIUM CALIFORNICUM Cal., Humboldt Co., SSW of Willow Creek. 1580m. Stony serpentine areas in openings among conifers. (The lovely species of the N Californian Coast Ranges distributed S from here almost to the Bay area. A plant of foothill woodland & pine forest. Beautifully mottled leaves. Creamy white flowers with yellow throats.)

1.350.202 : ERYTHRONIUM CALIFORNICUM Cal., Trinity Co., above Zenia. 1200m. In shade of coniferous woodland on stony, serpentine slopes. (A population intermediate to *E. multiscapoideum*. From seed collected in 1989 (our 11005))

1.350.203 : ERYTHRONIUM CALIFORNICUM Cal., Mendocino Co., ESE of Covelo. 1600m. Oak woodland in clay. 31.7.95

1.350.204 : ERYTHRONIUM CALIFORNICUM Cal., Humboldt Co., N of Weitchpec, SE of Fish Lake. 400m. Steep, part-shaded, grassy bank among conifers.

1.350.209 : ERYTHRONIUM CALIFORNICUM Cal., Mendocino Co., near Boonville. c. 200m. Ex an R. & R. Wallis coll. (From the low-altitude Anderson Valley colony, down in the redwood zone SW of the type-locality near Ukiah. It has been suggested that the southern populations in this area might actually represent creamy-white flowered populations of *E. revolutum*.)

1.350.400 : ERYTHRONIUM CITRINUM Oregon, Josephine Co., SW of Selma. 550m. Steep slopes with sparse conifers. (Mottled leaves & white to cream flowers with lemon bases. Restricted to the Coast Ranges on the California-Oregon line.)

1.350.401 : ERYTHRONIUM CITRINUM Cal., Del Norte Co., ENE of Gasquet. 450m. In coniferous woodland on steep, rocky slopes. Archibald Archive www.srgc.net

1.350.410 : ERYTHRONIUM CITRINUM Cal., Del Norte Co. 500-600m. J. & G. Robinett coll. 3.6.96 (Mottled leaves & white to cream flowers with lemon bases. Restricted to the Coast Ranges on the California-Oregon line.)

1.350.500 : ERYTHRONIUM CITRINUM var. RODERICKII Cal., Trinity Co., Scott Mts., between Tangle Blue Creek & Bear Creek. 1250m. Openings in coniferous forest. (Round the mountain from the type locality, where it is shy-flowering. Listed in 1989 as a form of *E. californicum* with purple filaments (11018). Nearest recorded populations of *E. citrinum*, *E. hendersonii* & *E. californicum* are all about 35km. distant. This may have something to do with all or any of them. It is not recognized as a valid taxon in "Jepson" but the name covers quite a large population and is definitely worth retaining by gardeners.)

1.350.501 : ERYTHRONIUM CITRINUM var. RODERICKII Cal., Trinity Co., Scott Mts., above Scott Mountain Creek, N of junction with Tangle Blue Creek. 1200m. Shaded slopes in mixed coniferous forest. (Type-locality collection.)

1.350.600 : ERYTHRONIUM ELEGANS Oregon, Tillamook Co., Mt. Hebo escarpment. 950m. Exposed, grassy, rocky cliff-top.

1.351.000 : ERYTHRONIUM GRANDIFLORUM (var. *grandiflorum*) Utah, Cache Co., above Tony Grove Lake. 2400m. Open slopes with *Artemisia*. (Montane, snow-melt plant with a northern & eastern distribution. Outstanding bright yellow flowers and plain green leaves. Here with red-brown anthers - so far S, it usually has yellow-anthers (subsp. *chrysandrum*)).

1.351.002 : ERYTHRONIUM GRANDIFLORUM (var. *grandiflorum*) Idaho, Nez Perce Co., N of Lake Waha. 300m. Steep slopes, among conifers. (Applegate assigns an 1892 coll. here to this type-race. Red, white & yellow anthers occur in N Idaho.)

1.351.047 : ERYTHRONIUM GRANDIFLORUM (var. *grandiflorum*) Wyoming, Albany Co., Medicine Bow Mts. 3500m Stony alpine turf. M. & P. Stone 98-051. (A montane, snow-melt plant with a northern & eastern distribution. It provides an outstanding spectacle in the Snowy Range here, pushing up in drifts below the snow to rapidly expand its large bright yellow flowers with plain green leaves on slopes running with melt-water.)

1.351.048 : ERYTHRONIUM GRANDIFLORUM (var. *grandiflorum*) Montana, Madison Co., Tobacco Root Mts. M. & P. Stone 98-023.

1.351.049 : ERYTHRONIUM GRANDIFLORUM (var. *grandiflorum*) Montana, Madison Co., Gravelly Ra., Black Butte. 2860m. M. & P. Stone 98-034

1.351.100 : ERYTHRONIUM GRANDIFLORUM var. CANDIDUM Washington, Whitman Co., Steptoe Butte. 1020m. N-facing slope with sparse *Pinus*. (From the 1906 type-locality of this white-flowered plant. May or may not be the same as *E. idahoense* (q.v.). Isolated here on top of a quartzite butte rising above intensively cultivated palouse country on the Idaho line.)

1.351.101 : ERYTHRONIUM GRANDIFLORUM var. CANDIDUM Washington, Whitman Co., Kamiak Butte. 1020m. In mixed coniferous woodland on N-facing slope. (No early records from here but a twin, quartzite butte habitat.)

1.351.200 : ERYTHRONIUM HELENAE Cal., Lake Co., NW slope of Mt. St. Helena. 700m. Among *Pinus* & *Arctostaphylos* on steep, serpentine slope. (Very limited distribution in this area. A beautiful plant with mottled leaves, quite near *E. californicum* but with yellow anthers and a definite capacity to increase vegetatively. Not difficult but best with a summer rest.)

1.351.201 : ERYTHRONIUM HELENAE Cal., Lake Co., SE of Middletown, Butt's Canyon. 450m. Among *Arctostaphylos* chaparral on serpentine slope. J. Andrews coll. (A beautiful, very local species only known from around Mt. St. Helena, in Napa, Lake & Sonoma Cos., quite a densely populated and cultivated area, where few colonies are accessible. With mottled leaves, it is quite near *E. californicum* but has yellow anthers and a definite capacity to increase vegetatively. This has settled down well from our 1989 coll. in this site with pot-cultivation under glass & seems to enjoy a drier summer rest than others.)

1.351.202 : ERYTHRONIUM HELENAE Cal., Napa Co., Aetna Springs. 300m. Chaparral on serpentine. N. Gielegheem coll. (Limited to the Mt. St. Helena area. Mottled leaves & quite near *E. californicum* but with yellow anthers and a definite capacity to increase vegetatively. Beautiful & not difficult but best with a summer rest.)

- 1.351.300 : ERYTHRONIUM HENDERSONII** Oregon, Jackson Co., N of Medford. 400m. Openings among scrub in *Quercus* woodland. (Limited to the Oregon-California border. A superlative, robust species with dark-mottled leaves. Lavender-pink flowers with dark anthers & a purple base, surrounded by a white or yellow zone. Quite easy in a well-drained site in the UK.)
- 1.351.301 : ERYTHRONIUM HENDERSONII** Oregon, Jackson Co., Siskiyou Mts., 1030m.. Wooded, NW-facing slope, in serpentine-clay. (From the high altitude, Siskiyou Mts. population, growing among the oaks along the California line.)
- 1.352.302 : ERYTHRONIUM HENDERSONII** Oregon, Jackson Co., Jacksonville. 500m. Among scrub in deciduous *Quercus* woodland
- 1.352.303 : ERYTHRONIUM HENDERSONII** Oregon, Josephine Co., Applegate River valley, SE of Murphy. 350m. Stony clay beneath deciduous *Quercus*.
- 1.351.304 : ERYTHRONIUM HENDERSONII** Oregon, Jackson Co., Siskiyou Mts., SSE of Ashland. 1340m.. In deep humus over clay among deciduous *Quercus*. (A high altitude population, growing among the oaks along the California line.)
- 1.351.305 : ERYTHRONIUM HENDERSONII** Oregon, Jackson Co., Siskiyou Mts., W of Pilot Rock. 1500m. Among sparse scrub.
- 1.351.500 : ERYTHRONIUM HOWELLII** Oregon, Josephine Co., E of Takilma. 670m. Among conifers on open, turfy, stony slopes. (Nearest to *E. citrinum* but with no basal appendages. White flowers turn pink as they age. Mottled leaves.)
- 1.351.501 : ERYTHRONIUM HOWELLII** Oregon, Josephine Co., above Waldo. 650m Among *Arctostaphylos* scrub & in shade of deciduous *Quercus*. (A type locality of this local plant, only known where the Illinois valley meets the Klamath Ranges. Nearest to *E. citrinum* but with no basal appendages to the anthers. White flowers turning pink as they age. Mottled leaves.)
- 1.351.600 : ERYTHRONIUM IDAHOENSE** Idaho, Kootenai Co., NW of Worley. 800m. Among scrub in *Pinus* woods on sandy clay. (Limited to a narrow strip along the Idaho-Washington line, N & S of Coeur d'Alene. White flowers with a greenish centre, white anthers and unmarked leaves. From Applegate's 1926 type-locality, a very different habitat to the Washington ones listed above under *E. grandiflorum* var. *candidum*, currently considered synonymous.) Archibald Archive www.srgc.net
- 1.351.601 : ERYTHRONIUM IDAHOENSE** Idaho, Benewah Co., E of Plummer. 750m. In sandy soil among scrub in *Pinus* woodland.
- 1.351.700 : ERYTHRONIUM KLAMATHENSE** Cal. Siskiyou Co., SW of Castle Lake. 1580m. Openings among scrub on steep, stony slopes. (High altitude species, rarely extending below 1500m., & closest to *E. purpurascens*, whose relatives tend to be the more difficult ones to grow and germinate. We have insufficient experience of this to express an opinion or advice. Yellow-centred, milk-white flowers with creamy anthers. Plain bright-green leaves. A local, mountain-plant, mainly of S central Oregon)
- 1.351.700 : ERYTHRONIUM KLAMATHENSE** Cal. Siskiyou Co., SW of Castle Lake. 1750m. Among scrub & grasses on steep, stony slopes. (High altitude species, rarely extending below 1500m., & closest to *E. purpurascens*, whose relatives tend to be the more difficult ones to grow and germinate. We have insufficient experience of this to express an opinion or advice. Yellow-centred, milk-white flowers with creamy anthers. Plain bright-green leaves. A local, mountain-plant, mainly of S central Oregon)
- 1.351.701 : ERYTHRONIUM KLAMATHENSE** Cal., Shasta Co. 1200m. Edge of vernal wet meadow in open woodland. J. & G. Robinett coll. 30.6.95 (The preceding was long thought to be the only Californian colony. This is also at quite a low altitude.)
- 1.351.702 : ERYTHRONIUM KLAMATHENSE** Oregon, Jackson Co., Siskiyou Mts., W of Pilot Rock. 1550m. Open, stony serpentine slope.
- 1.351.900 : ERYTHRONIUM MONTANUM** Canada, British Columbia, Vancouver Is., San Juan Ridge. 800m. A. Guppy coll. 1995 (The famous & recalcitrant glacier lily of the high ranges in N Oregon, Washington & into Canada. From a comparatively low altitude coll., which may possibly be more accommodating. Great, yellow-centred, white flowers & distinctive, plain-green leaves.)
- 1.351.950 : ERYTHRONIUM MESOCHOREUM** Iowa & Nebraska S to Oklahoma.
- 1.352.000 : ERYTHRONIUM MULTISCAPOIDEUM** Cal., Butte Co., N of Magalia. 600m. Under *Cupressus* on serpentine. G. Greger coll. (Mottled leaves White flowers with pale, greenish yellow centres & white anthers. No close affinities among the westerners (though see comments under the 1.350.202 population of *E. californicum*) and the only species with stoloniferous corms. These are much dwarfer plants than the following. Maybe best dryish in summer.)
- 1.352.009 : ERYTHRONIUM MULTISCAPOIDEUM** Cal., Butte Co., N of Pulga. J. & G. Robinett coll.
- 1.352.100 : #ERYTHRONIUM MULTISCAPOIDEUM** (*E. "cliftonii"*) Cal., Butte Co., S of Pulga. 420m. Steep, open, serpentine scree. (More or less a giant form of the species only known from this one site. Never described botanically but grown in the UK as *E. "cliftonii"*. Proving a good grower. Adaptable and reputedly quite accommodating in the open garden.)
- 1.352.100 : ERYTHRONIUM MULTISCAPOIDEUM** (*E. "cliftonii"*) Cal., Butte Co., S of Pulga. 420m. Steep, open, serpentine scree. G. Greger coll. (We have a little 1999 wild seed from this locality. If you prefer this, please state 'wild collected')
- 1.352.200 : ERYTHRONIUM NUDOPETALUM** Idaho, Valley Co., NNE of Lowman, along Cache Creek. 2050m. Margin of coniferous woodland. 21.7.95 ('One-off' type-locality coll. of this obscure plant, collected here by Applegate in 1930 but later reduced to a var. of *E. grandiflorum* by Hitchcock. Golden-yellow flowers with dark-red or maroon anthers.)
- 1.352.300 : ERYTHRONIUM OREGONUM** (subsp. *oregonum*) Washington, near Ridgefield, along Columbia River. 60m. In

mixed woodland. G. Burrell coll., 1995 (From an exceptionally robust form of the type-race with yellow anthers, the one usually grown in the UK. Big white flowers and large, mottled leaves. This & the next should be successful outside in Europe.)

1.352.400 : ERYTHRONIUM OREGONUM subsp. LEUCANDRUM Oregon, Douglas Co., S of Tiller. 460m. Among *Pinus* on steep serpentine slopes. (Race with white anthers, of more limited distribution towards the SE of the range. The white flowers, often maturing to pink, have markings in orange, dark-red or brown around the yellow bases. Superlative.)

1.352.489 : ERYTHRONIUM OREGONUM No data. From a fine cultivated English garden-form, originally from 'Nymans' in Sussex, where it is well established and appears to be the only species established in any quantity. It keys out as 'pure' *E. oregonum*, not *E. californicum*, as might have been expected, so we have listed the seed separately from the garden hybrids in our final section.

1.352.490 : ERYTHRONIUM OREGONUM from PALE YELLOW FORM : as 'Sulphureum' from P. Chappell. Check!

1.352.500 : ERYTHRONIUM PROPULLANS Minnesota

1.352.700 : ERYTHRONIUM PLURIFLORUM Cal., Madera Co., Shuteye Peak (Sierra Nevada E of Merced). 2310m. NW-facing granite ledges. J. Andrews coll. (Described in 1990, though the first coll. was made in 1907 & misidentified by Applegate & others as *E. purpurascens*. It is allied to this with plain green leaves but the 30cm. stems carry up to 10 - exceptionally to 20 - nodding, bright yellow flowers, maturing to bronze or pinkish. Isolated high on Chiquito Ridge between Shuteye & Little Shuteye Peaks, it flowers as late as July. John has made a fresh, 1999 coll. - it *must* be grown. It seems to need prolonged cold to germinate but, since we mentioned the problems encountered by some with germination, many others have written telling us of their successes and it was listed in the trade as young plants raised from John's original coll. for the first time in 1999.)

1.352.800 : ERYTHRONIUM PURPURASCENS Cal., Plumas Co., S of Greenville. 1370 m. Among conifers on steep granite-grit slopes. (Plain green leaves & yellow-centred white flowers, purple-tinged with age. The most widespread of this trio, most numerous around the upper drainage of the Feather River, reaching to almost 2500m. A collection made more or less in the type-locality, at a comparatively low altitude for the species, where colonies are more sparse but may be more growable.)

1.352.801 : ERYTHRONIUM PURPURASCENS Cal., Nevada Co., Monument Ridge. 2030m. (Sierra Nevada W of Truckee). 2060m. J. Andrews coll. (Robust plants here with up to 11 flowers per stem noted by John. Still very little tried in cultivation.)

1.352.802 : ERYTHRONIUM PURPURASCENS Cal., Plumas Co., N of Greenville. 1100 m. G. Greger coll. (Plain green leaves & yellow-centred white flowers, purple-tinged with age. The most widespread of this trio, most numerous around the upper drainage of the Feather River, reaching to almost 2500m. A collection made more or less in the type-locality, at a comparatively low altitude for the species, where colonies are more sparse but may be more growable.) Archibald Archive www.srgc.net

1.353.000 : ERYTHRONIUM PUSATERII Cal., Tulare Co., Jordan Peak (Sierra Nevada ENE of Porterville). 2774m. Granite rock-falls. J. Andrews coll. (Again described in 1990 - the Purpus coll. of 1895 was placed under *E. purpurascens* & Pusateri's later colls. in *E. grandiflorum*. Like a large *E. purpurascens* with well developed appendages on the segments & a larger yellow centre. The most southern of the westerners, confined to a small area at the sources of the Tule & Kaweah Rivers.)

1.353.100 : ERYTHRONIUM REVOLUTUM Canada, British Columbia, Vancouver Is., near Duncan, Cowichan River flood-plain above Skutz Falls. A. Guppy coll., 1995 (Spread S from here all the way to NW California but essentially a coastal plant, seldom above 1000m., of high rainfall areas. Mottled leaves and sumptuous rose-pink flowers make this one of the most desirable & by far the best in moist UK gardens.)

1.353.105 : ERYTHRONIUM REVOLUTUM Cal., Del Norte Co., near Gasquet. c.400m. P. Gustafson 98-06233 (An extremely interesting coll. from one of the few Californian colonies of this splendid species, growing here in the same area as *E. citrinum* with several other species not too far distant. The more southern, earlyflowering colonies near Ukiah appear to have been largely eliminated & we are told are less attractive forms. Mottled leaves and sumptuous rose-pink flowers.)

1.353.120 : ##ERYTHRONIUM REVOLUTUM 2 pictures. No data. Fresh 1999 seed from the vigorous stock in Peter Chappell's Hampshire garden at 'Spinners'. These will be in varying shades of pink & may show some hybrid influence. A species of the wet Pacific NW with beautiful, brown-marbled, lush, green foliage. If you just want some good garden-plants for the UK, where this will usually sow itself in shady conditions, this is what you should have. [# Second picture](#)

1.353.200 : ERYTHRONIUM ROSTRATUM Native from central Alabama into N Tennessee

1.353.250 : ERYTHRONIUM TAYLORI Cal., Tuolumne Co., Pilot Ridge (Sierra Nevada E of Oakdale). 1340m. Steep, NE-facing metamorphic rock outcrops in conifer-oak forest. (The most recently described (in 1997) among the new species from the Sierra Nevada. These are all allied to *E. purpurascens* and will need similar treatment in cultivation. Locally numerous but so far only known from the type-locality, this can have up to 8, nodding, fragrant, bicoloured flowers, white at the tips and yellow at the bases, on stems of about 30cm. It is distinguished from bicoloured *E. purpurascens* by its much larger flowers with appendages at the bases of the inner segments and from the closely related *E. pusaterii* by its white anthers. It is a lower altitude plant than the latter and apparently shares with the plain yellow *E. tuolumnense*, a capacity to increase vegetatively, forming clumps.)

1.353.300 : ERYTHRONIUM TUOLUMNENSE Cal., Tuolumne Co., NE of Columbia. 750m. Steep slopes in deciduous woodland. (Plain green leaves & up to 5, bright-yellow flowers. A low altitude relic, amazingly hardy & easy in European gardens. It is also of limited distribution in the wild, though much more locally abundant than was once thought.)

1.353.400 : ERYTHRONIUM UMBILICATUM (subsp. *umbilicatum*) Native to W Virginia & N Carolina

- 1.353.450 : ERYTHRONIUM UMBILICATUM subsp. MONOSTOLUM** Western N Carolina & E Tennessee. Stoloniferous race.
- 1.369.000 : FREMONTODENDRON CALIFORNICUM** Cal., Shasta Co., S of Shingletown. 1100m. Among scrub in open sites.
- 1.370.000 : FRITILLARIA AFFINIS** (*F. lanceolata*) Cal., Solano Co., NW of Vacaville. 550m. Steep scrub-covered slopes. 17.6.95 (Coast Range form of this immensely variable group distributed in a great arc from around here N to Canada and E to Idaho. Nodding bells mottled in brown-purple & pale yellow. Up to 50cm. here. One of the easier ones in cultivation.)
- 1.370.001 : FRITILLARIA AFFINIS** Cal., Tuolumne Co., W of Chinese Camp. 360m. Chaparral. (Sierra foothill form, somewhat approaching *F. micrantha* in its large green nectary. Cultivated, hand-pollinated, 1998 seed from a small 1989 coll. .)
- 1.370.002 : FRITILLARIA AFFINIS** Cal., Stanislaus Co., above Adobe Creek. 490m. Among *Arctostaphylos* in stony clay over serpentine. (10505) Archibald Archive www.srgc.net
- 1.370.003 : FRITILLARIA AFFINIS** Cal., Lake Co., Butts Canyon. 350m. Among *Arctostaphylos* on serpentine.
- 1.370.040 : FRITILLARIA AFFINIS var. TRISTULIS** Cal., Marin Co., NW of Nicasio. 10m. Grassland. Ex D. Haselgrove & S. Martinelli 349. (Distinct & the only race maintained in "Jepson". Tall with extremely broad foliage and large, wide-open bells with broad segments, darkly mottled in browns. A low altitude plant, which appears happiest given lots of water in spring. Perhaps less tolerant of low winter temperatures and high summer ones than others. It increases well vegetatively but was thought to be sterile. Hand-pollinated, it set massive capsules in 1998 for the first time here. Seed looks good. An unique opportunity?)
- 1.370.050 : FRITILLARIA AFFINIS** Oregon, Josephine Co., SW of Selma. 450m. Among volcanic debris on open, S-facing slopes. 13.6.95 (Illinois Valley form, 15-20cm. high, often single-flowered & usually yellowish green with just a few brown lines.)
- 1.370.051 : FRITILLARIA AFFINIS** Cal., Del Norte Co., ENE of Gasquet. 400-450m. Steep, rocky slopes in coniferous woodland. (From the other side of the Klamath Ranges to the preceding coll.)
- 1.370.100 : FRITILLARIA AFFINIS** Washington, Clark Co., near Ridgefield along Columbia River. 60m. Among *Symphoricarpos* scrub. G.Burrell coll. 1995 (Northern, coastal form with yellow-green flowers, dotted with purple. 30-50cm. high.)
- 1.370.120 : FRITILLARIA AFFINIS** An exceptionally dark form, deep brown-purple, appearing black, from Charles Bailey in the upper Okanagan valley, British Columbia, Canada.
- 1.370.200 : FRITILLARIA AFFINIS** (*F. lanceolata*) Idaho, Kootenai Co., ESE of Worley. 750m. *Pinus* woodland on sandy clay. (A giant from the NE extremity of the group distribution. Not the sort of thing expected so far E and just S of the Canadian border. Stout stems, 60cm. or more high, whorled with broadly lanceolate leaves carry up to 8 flowers. It is associated with *Erythronium idahoense* in all the three localities we know, SW of Coeur d'Alene Lake, in pine woods with *Physocarpus* & *Symphoricarpos* on the distinctive sandy clays of this area. May well prove to be one of the few Americans to grow outside in the UK.)
- 1.370.201 : FRITILLARIA AFFINIS** Idaho, Benewah Co., E of Plummer. 750m. *Pinus* woodland.
- 1.370.202 : FRITILLARIA AFFINIS** Idaho, Kootenai Co., NW of Worley. 800m. *Pinus* woodland. 23.7.95
- 1.370.300 :# FRITILLARIA AGRESTIS** California, Alameda Co., Green Springs Road, E of Livermore. 170m. Among grass on clay. (An adobe-clay plant, the valley-grassland version of *F. biflora*. Once widespread in the Central Valley but now very localised as most of its habitat has been destroyed by agriculture & development. Seed from a coll. we made in 1989 from a fine colony now under a gas station. Green-cream bells, purple-brown inside, on stems up to 50 cm. tall.)
- 1.370.301 : FRITILLARIA AGRESTIS** Cal., Alameda Co., ESE of Livermore. 450m. Among grass on clay slopes. (An adobe-clay plant, the valley-grassland version of *F. biflora*. Once widespread in the Central Valley but now very localised as most of its habitat has been destroyed by agriculture & development. Green-cream bells, purple-brown inside. Up to 50 cm.)
- 1.370.402 : FRITILLARIA ATROPURPUREA** Cal., Siskiyou Co., SW of Castle Lake. 1580m. Openings among scrub on steep, stony slope. 29.7.95 (A dainty, dwarf form here with wide, creamy bells mottled in purple-brown. 20cm. More or less an alpine or steppe version of *F. affinis*, distributed in an interior parallel arc E to S. Dakota. Always narrower-leaved with open bells.)(15+)
- 1.370.403 : FRITILLARIA ATROPURPUREA** Cal., Plumas Co., N of Greenville. 1100m. G. Greger coll. (Creamy bells mottled in purple-brown on stems of about 20cm. More or less an alpine or steppe version of *F. affinis*, distributed in an interior parallel arc E to S. Dakota : here temperatures can go down to -20 F. Narrower-leaved than *F. affinis* with more open bells.)
- 1.370.404 : FRITILLARIA ATROPURPUREA** Cal., Modoc Co., Warner Mts., Cedar Pass. 1930m. Among scrub.
- 1.370.500 : FRITILLARIA BIFLORA** Cal., San Luis Obispo Co., above San Simeon Bay. 10m. Coastal grassland in sandy clay. (In fine form here, 20-30cm. high with darkest, brown-purple, green-striped bells but the species as a whole is quite variable. Always a coastal plant extending S to around the Mexican border - maybe best grown frost-free but remember the coast is cool in summer so do not bake it when dormant. A bulb, which we inadvertently discarded with old potting-compost in 1997 grew robustly and flowered better outside, than those in containers, so remember it is used to wet, chilly winters, if not extreme cold.)
- 1.370.501 : FRITILLARIA BIFLORA** Cal., Santa Barbara Co. 1150m. NE-sloping, open, serpentine-clay meadow. J. & G. Robinett coll. 17.6.95 (From well above the published maximum altitude, this should be hardier than any other population. 10-

30cm.)

1.370.600 : FRITILLARIA CAMTSCHATCENSIS Alaska. A marvellous plant with stems of 30cm. or more, whorled with rich-green leaves, carrying nodding, thick-textured bells in darkest brown-purple. Distributed from Japan in a N Pacific arc through Sakhalin & Kamchatka into Alaska & Canada. Utterly hardy & quite easy outside in the UK in a cool situation.

1.370.620 : FRITILLARIA CAMTSCHATCENSIS - YELLOW FORM Alaska. A sought-after variant.

1.370.650 : FRITILLARIA EASTWOODIAE (*F. phaeanthera*) Cal., Shasta Co., S of Shingletown. 1000m. Openings in mixed woodland. (A dubious 'species', apparently a stable but fairly recent hybrid between *F. recurva* & *F. micrantha*. Dr. Martinelli describes the elegant bells here as from all red or all apricot to brown-orange edged with yellow and orange with yellow inside. About 50cm. high in the wild but less than 30cm. with us in cultivation, where it is proving quite easily grown)

1.370.651 : FRITILLARIA EASTWOODIAE Cal., Butte Co. To come from Robinetts, 1996

1.370.800 : FRITILLARIA GLAUCA Cal., Humboldt Co., SSW of Willow Creek. 1580m. Unstable, serpentine talus on steep, N-facing slope. (Very dwarf, serpentine-endemic of the NW Coast Ranges, not unlike the Turkish scree-forms of *F. crassifolia*. Thick, glaucous leaves & nodding bells in yellow through to red-browns in this site. Not difficult to grow with us.)

The above is 1998 wild-collected seed We can also offer cultivated, hand-pollinated 1999 seed from selected seedlings in either yellow or brown. The browns are rare in cultivation and the yellows are daintier plants than the Mendocino Pass yellow with heavier brown speckles. If you want these, please specify 1.370.800 BROWN or 1.370.800 YELLOW. Both at

1.370.801 : FRITILLARIA GLAUCA Cal., Mendocino Co., Etsel Ridge ESE of Covelo. 1980m. Steep slope, in loose serpentine scree. 31.7.95 (Not seen in flower here - both predominantly yellow and brown populations occur in this area.)

1.370.802 : FRITILLARIA GLAUCA Cal., Mendocino Co., Mendocino Pass. 1500m. Serpentine scree. (Only from selected bright yellows with just a slight peppering of darker speckles, similar to the clones usually seen in cultivation (as in the plant illustrated on p.182 of the June, A.G.S. Bulletin (Vol.65, No.2)

1.371.100 : #FRITILLARIA LILIACEA Cal., Marin Co., NW of Nicasio. 15m. Among scrub on low, grassy, coastal hills. J.& G. Robinett coll. (A beautiful species, closest to *F. biflora* & *F. roderickii*, with a very limited distribution in the coastal mist-belt, N & S of San Francisco. Perhaps best kept frost-free in winter & cool in summer : we lost stock under glass in the heat of 1995. Bright-green leaves, mostly clustered close to the ground, & up to 5, pendant, creamy white bells on 30cm. stems.)

1.371.101 : FRITILLARIA LILIACEA Cal., Sonoma Co. 240m. J.& G. Robinett coll. (A beautiful species, closest to *F. biflora* & *F. roderickii* with a very limited distribution N & S of San Francisco. It can be quite easy in the UK but we have not found seedlings from the sea-level population (1.371.100) from near Nicasio, (which is all we have listed up till now), at all willing to progress. Jim Robinett confirms this population is also recalcitrant with him in California & recommends material from this site, at possibly the highest altitude reached by the species, normally a coastal fog-belt plant. Few growers seem to appreciate that there is often not only immense variability in the appearance of many species between localities but also in their adaptability to cultivation. Perhaps best kept frost-free in winter & cool in summer - we lost stock under glass in the heat of 1995 . Bright-green leaves, mostly clustered close to the ground, & up to 5, pendant, creamy white bells on 30cm. stems.)

1.371.110 : FRITILLARIA LILIACEA No data.

1.371.200 : FRITILLARIA MICRANTHA Cal., Mariposa Co., NE of Coulterville. 1050m. Grassy slope in thin coniferous forest. 19.6.95 (Robust species of the west-central Sierra Nevada foothills. Recorded to 90cm high but 30-50cm here. Up to 10 nodding bells, usually purplish but varying to paler, greener tones & sometimes faintly mottled.)

1.371.201 : FRITILLARIA MICRANTHA Cal., Tuolumne Co., ESE of Groveland. 950m. Mixed woodland. 19.6.95

1.371.202 : FRITILLARIA MICRANTHA Cal., Tuolumne Co., NE of Columbia. 750m. Deciduous woodland. 19.6.95

1.371.350 : FRITILLARIA OJAIENSIS Cal., Ventura Co., NNW of Ojai, Wheeler Springs. 553m. J. Andrews coll. (Untried in cultivation before this coll. - growing on well with us now. Disjunct southern member of the *F. affinis* group with 50cm. stems of widely bell-shaped flowers in dull greenish yellow with sparse to profuse dark dots. The broad, diamond-shaped nectary is diagnostic.)

1.371.500 : FRITILLARIA PINETORUM Cal., Kern Co., Mt. Pinos. 2650m. In granite grit, among scrub at margin of *Pinus* woods. (It was one of the great excitements of 1995 to see this flowering here, soon after snow-melt in late June. In no way could this population be confused with *F. atropurpurea*, as stated by Ness - one wonders if he has ever seen a good herbarium specimen far less the living plant. Absolutely distinct here, it resembles *F. falcata* in its wide-open, flat, thick-textured, upward-tilted flowers and fleshy, glaucous foliage but the latter is narrow & channelled. Its shallow bowls are basically lime-yellow but thickly peppered all over with purple-brown dots, densest towards the margin where there is a narrow, clear picotee-edge. The brilliant orange anthers add to the lurid fascination. Less than 15cm. high here, this may be distinct from the Sierran plants.)

1.371.520 : FRITILLARIA PINETORUM Cal., Tulare Co., Jordan Peak. 2770m. J. Andrews coll. 1995 (These local, very high altitude plants from the granites of the Sierra Nevada are particularly obscure & have never been grown. John thinks these may be different to the above (from the highest mountain in the Transverse Range) but they have the curious horned capsule, considered unique to this species. We may be dealing with several taxa or intergrades - this is recorded from the White Mts. & Nevada also.)

1.371.600 : FRITILLARIA PLURIFLORA Cal., Lake Co., Walker Ridge. 600m. Open, grassy areas in heavy clay. (One of the most distinct & beautiful in the genus, 10-30cm. tall with up to 7, conical bells in a rich, pure unmarked pink. A classic adobe-clay plant from soil that is wet & glutinous in spring but dries like concrete later. A challenge but it has been grown well.)

- 1.371.601 : FRITILLARIA PLURIFLORA** Cal., Colusa Co., Bear Valley. 530m. J. Andrews coll.
- 1.371.602 : FRITILLARIA PLURIFLORA** Cal., Colusa Co. 400m. Heavy clay of grassy meadow in full sun. J. & G. Robinett coll. (The populations differ to some extent and our friends Bob & Rannveig Wallis, who grow this as well as anyone in the UK, tell us that they also vary in 'growability' - some are much easier with them than others. The preceding colony has produced white forms and in this one Jim & Georgie tell us they once found a plant with 20 flowers. Intensity of pink can vary also.)
- 1.371.700 : FRITILLARIA PUDICA** Idaho, Butte Co., NE of Carey. 1520m. E & SE-facing slopes of stony ridge. (Unlike any other N American. Except in its bulb, like the SE Turkish endemic *F. minima*. Nodding, clear-yellow bells, sometimes maturing to orange-red shades, on stems of 20cm. or less. Usually a plant of stony areas in montane steppe, from the NE corner of California up into Canada & SE across to Colorado. Often well-grown in cultivation but not always easy - likes a cold winter.)
- 1.371.701 : FRITILLARIA PUDICA** Washington, Whitman Co., Kamiak Butte. 1020m. Open, SE-facing slope.
- 1.371.702 : FRITILLARIA PUDICA** Washington, Whitman Co., Steptoe Butte. 1020m. N-facing slope with *Pinus*
- 1.371.750 : FRITILLARIA PUDICA** No data. Scented form from Wim de Goede.
- 1.371.800 : FRITILLARIA PURDYI** Cal., Trinity Co., S of Bear Creek Trailhead. 960m. Open, stony, serpentine slope. (Local on the N Coast Ranges (here at its NE limit). Now being very successfully grown in Europe. Leaves crowd on the ground with stems of 10cm. or less carrying a few wide, waxy, nodding bells, described by Martinelli as "voluptuously curved", "the shiniest, most delectable fritillaria flowers." Extremely variable in the brown veining & tinting on a green-white ground.)
- 1.371.801 : FRITILLARIA PURDYI** Cal., Mendocino Co., ESE of Covelo. 1980m. Thin soil on serpentine slope.
- 1.371.802 : FRITILLARIA PURDYI** Cal., Trinity Co. 880m. Serpentine scree in full sun. J. & G. Robinett coll. (From an area with 140-180cm. of rain a year. Maybe worth attempting in scree outside in the UK. "A darling" write Jim & Georgie.)
- 1.371.903 : FRITILLARIA RECURVA** Cal., Butte Co. 800m. J. & G. Robinett coll.
- 1.371.905 : FRITILLARIA RECURVA** Cal., Trinity Co., NNW of Zenia. 1630m. Openings among conifers on serpentine. (Hand-pollinated seed of a particularly intense red raised by D. Hoskins from our 1989 coll. here.)
- 1.371.906 : FRITILLARIA RECURVA** Cal., Trinity Co., above Canyon Creek N of Junction City. 500m. Serpentine
- 1.371.907 : ##FRITILLARIA RECURVA** 2 pictures. Oregon, Jackson Co., Siskiyou Mts., [N of Yreka](#). 1030m. Among deciduous *Quercus* scrub in deep leafsoil over serpentine.
- 1.371.908 : FRITILLARIA RECURVA** Cal., Trinity Co., SSW of Scott Mt. summit. 1600m. Among conifers on steep, loose, serpentine slope.
- 1.371.919 : #FRITILLARIA RECURVA** Cal., Plumas Co., near Belden. 670m. G. Greger coll. (One of the the most striking in the entire genus. Incomparable & unique with pendant, orange-scarlet trumpets on stems up to 50cm. high, whorled with narrow leaves. We do not find this species a problem if it is not kept too hot & dry in summer.)
- 1.372.000 : FRITILLARIA RECURVA var. COCCINEA** Cal., Lake Co., NW slope of Mt. St. Helena. 700m. Among *Arctostaphylos* on steep, serpentine slope. (Very uncommon, low altitude & probably difficult race, not recognized by Ness, from a small area on the inner Coast Ranges in Lake & Napa Cos. Segments of the flowers do not recurve at the tips and the colour is said to be a more brilliant scarlet, mottled with yellow. It flowers early & we have not seen it. For warm dry treatment. A few.)
- 1.372.001 : FRITILLARIA RECURVA var. COCCINEA** Cal., Napa Co., Aetna Springs. c. 300m. N. Gielegheem coll. (Very uncommon, low altitude serpentine-chaparral race, not recognized by Ness, from a small area on the inner Coast Ranges in Lake & Napa Cos. Segments of the flowers reputedly do not recurve at the tips and the colour is said to be a more brilliant scarlet, mottled with yellow. It flowers early & we have not seen it. Probably difficult & certainly for warm dry treatment.)
- 1.372.050 : FRITILLARIA RODERICKII** (possibly *F. grayana*, lost under *F. biflora* in "Jepson") Cal., Mendocino Co. Among grass in open woodland on clay. From the original colls. by Wayne Roderick. (Quite dwarf & known from one or two vanishing sites away up on the NW Pacific coast, a very long way from (other) *F. biflora*, from which it is distinguished by its obtuse segments in brown tipped with white. The mass-marketed clone, 'Martha Roderick', is a form of this with an unusual amount of white. We find the latter difficult to keep but the original, grown from seed, is one of the easiest for UK growers.)
- 1.372.100 : #FRITILLARIA STRIATA** Cal., Kern Co., Greenhorn Mts., NE of Bakersfield. 760m. J. Andrews coll. (Closest to *F. pluriflora*, which grows about 400km. to the N, but utterly distinct in its pendant bells with recurved tips. Described by Alan Galloway, the discoverer, as "white to creamy with purplish dotted striae" - appearing pink - and "with the most delicious fragrance". An adobe-clay species, extremely difficult but definitely not impossible in the UK : skilled growers like Alan Edwards & Joy Bishop have not only flowered it but induced it to set seed occasionally. We do try ...unsuccessfully.)
- 1.372.150 : FRITILLARIA VIRIDEA** Cal., San Benito Co., above Clear Creek W of San Benito Mt. 970m. J. Andrews coll. 1995 (A narrow endemic of serpentine-barrens, almost unknown in cultivation until John's 1992 coll. which is growing on well. In the *F. affinis* group but lacking rice-grain bulblets & with the nodding bells only on one side of the 30-50cm. stem. According to Martinelli, variable in green, brown & yellow tones. Ness in 'Jepson' says it is "pale green to almost black, not mottled.")
- 1.372.700 : GAILLARDIA PINNATIFIDA** Colorado, Mesa Co., Gateway. 1600m. Exposed, steep, loose clay slope. 9.7.95 (Perennial but probably not long-lived, about 30cm.. Daisies with soft-yellow rays & purple discs. Hot & dry.)

- 1.372.800 : GAILLARDIA SPATHULATA** Utah, Emery Co., SE of Moore. 1980m. Loose, stony clay in saline desert scrub. (The sweetest, little plant, probably the dwarfest in the genus, but unlikely to be easy to grow in wetter, more temperate climates. Endemic to E central Utah, around the San Rafael Swell, and only 10-15cm. high. Rather thick, grey-green basal leaves and comparatively huge, short-stemmed daisies with a few (7-10), notched, pale-yellow rays surrounding the big, domed, yellow disc.)
- 1.373.605 : GENTIANA ANDREWSII** UK seed from Dinah Batterham, grown from the population naturalised in Fred Case's Michigan garden & listed by us in 1987. Pinched-in blue flowers from the leaf-axils up the 60cm. stems.)
- 1.373.850 : GENTIANA SCEPTRUM** One of the finest N American species. A plant of moist sites in the Pacific NW, flowering in late summer with axillary clusters of deep-blue flowers on erect, 50cm. tall stems. Not difficult in the UK.
- 1.373.900 : GENTIANA SETIGERA** (*G. bisetata* Howell) Oregon, Josephine Co., W of Cave Junction. 400m. Bogs & streamsides. P. Gustafson 98-0885
- 1.373.901 : GENTIANA SETIGERA** Oregon, Josephine Co., SW of O'Brien. 550m. Among grass tussocks in wet flushes with *Darlingtonia* on serpentine slopes. (A beautiful, late-flowering gentian of squelching wet habitats in SW Oregon with one locality in NW California. Up to 4, big, uniformly pure-blue flowers with fringed throats, on decumbent 20-30cm. stems from perennial rosettes of spoon-shaped basal leaves. Possibly best grown in sun in wet peat-garden conditions outside in the UK)
- 1.374.209 : GERANIUM ERIANTHUM** Alaska, Mt. Roberts near Juneau. (Spread from E Siberia & Japan through Alaska into NW Canada. About 50cm. tall with cut, downy foliage, & darkly veined violet-blue flowers in early summer.)
- 1.374.700 : GERANIUM VISCOSISSIMUM** Washington, Whitman Co., Steptoe Butte. 1020m. Among grasses, *Rosa*, *Vaccinium*, *Holodiscus*, etc. on N-facing slope with sparse *Pinus*. (Deep pink form)
- 1.374.900 : GEUM**
- 1.375.100 : GILIA AGGREGATA** (*Ipomopsis aggregata*) Colorado, Mesa Co., SW of Whitewater. 1800m. Among *Artemisia* on stony sandstone slope. 9.7.95 (Always a spectacular species. Monocarpic with flat rosettes of exquisitely cut rich-green leaves. Branching, 50cm. stems massed with starry trumpets in scarlet-red. Much enjoyed the 1995 UK summer.)
- 1.375.250 : GILIA AGGREGATA subsp. FORMOSISSIMA** (*Ipomopsis aggregata* subsp. *formosissima*) P. Gustafson 98-0876 (Cannot trace this name in Jepson or Hitchcock & Cronquist ; see Cronquist's account in Intermountain Flora page 123 - described from S New Mexico but misapplied by Wherry to the phase of *G. aggregata* var. *aggregata* with exserted stamens. If flowers red, Oregon plants should fit under var. *aggregata*.)
- 1.375.700 : GILIA CAESPITOSA** Utah, Wayne Co., SE of Teasdale. 2450m. fissures on sloping, white sandstone outcrops. (A very little 1998 seed of one of the few N American chasmophytes. Only known from this area, it is a bit like a mound of *Saxifraga cochlearis* with long-tubed, *Dionysia*-flowers in a distinctive, soft orange-scarlet, on thready, 5cm. stems. Earlier 1993 & 1995 colls. have seen it tenuously established & propagated vegetatively in the UK. For experienced alpine-house growers only.)
- 1.376.500 : GILIA FORMOSA** New Mexico, San Juan Co., NW of Aztec. 1900m. Ridgetops of eroded clay hills. (Close, woody-based tufts of tiny, hair-thin, bright-green leaves send up wiry-stemmed panicles of long-tubed flowers in clear pink shot with violet-blue. "The special glory of Aztec...known only from here and as beautiful as it is rare" wrote Dwight Ripley in 1943. Being successfully grown under glass from our 1993 & 1995 colls. & we hope we can now maintain this very local species.)
- 1.378.500 : GILIA SPICATA** Wyoming, Sweetwater Co., Mackinnon. 1900m. Among sparse *Juniperus* on steep sides of shale 'barrens'. (A dwarf, tap-rooted perennial with rosettes of hairy, linear or segmented basal leaves and erect inflorescences, about 15-20cm. tall, close-packed with little, white flowers. Local but widespread across to Kansas & down to New Mexico.)
- 1.378.900 : GILIA STENOTHYRSA** Utah, Emery Co., Molen Reef, E of Moore. 1930m. Sandstone detritus & fissures on rock-slabs. (A local species distributed from the Uintah Basin S into the San Rafael Swell. If he had travelled through Utah, Farrer might have enthused about this instead of *Saxifraga florulenta*. Monocarpic with an exquisitely cut, flat, basal rosette of overlapping, pinnatifid, grey-felt leaves exploding into an erect, 30cm. cylindrical spire of white to lavender-blue flowers. Possibly difficult.)
- 1.400.050 : HAPLOPAPPUS ACAULIS var GLABRATUS** Nevada, Eureka Co., W of Eureka. 2100m. Gravelly bare-patches among sparse *Juniperus*. (A classic cushion of the drier, interior areas of the American West, growing here with other hummocks, like *Lepidium nanum*, *Erigeron compactus* & *Leptodactylon caespitosum*. Hard, woody-based mounds of compacted rosettes with prickly, rich-green leaves & almost stemless orange-yellow 'daisies'. Doubtless difficult to cultivate 'in character'.)
- 1.404.000 : HASTINGSIA ALBA** Cal., Plumas Co., NE of Greenville. 1220m.. G. Greger coll. (A tall-growing, N Californian, liliaceous bulb, allied to *Schoenolirion* from the SE States. Narrow basal leaves & spires of densely packed, yellow-white flowers on stems of about 60cm. A plant of wet meadows and seeps, which should do well outside in the UK.)
- 1.404.001 : HASTINGSIA ALBA** Cal., Trinity Co., Scott Mountain summit. 1650m. Open, wet meadow in coniferous forest. (A N Californian, liliaceous bulb, allied to *Schoenolirion* from the SE States. Narrow basal leaves & spires of densely packed, yellow-white flowers on stems of about 60cm. A plant of wet meadows and seeps, which should do well outside in the UK.) C
- 1.418.010 : HELONIAS BULLATA** No data. A monotypic genus in *Melanthiaceae* with one choice, perennial species, distributed in wet sites in eastern North America from New Jersey to North Carolina. A stout, 30cm. tall stem rises from a neat, flat rosette of pointed, evergreen leaves to carry a dense spike of purple-pink flowers. Does well in our moist garden.
- 1.421.950 : HESPEROCALLIS UNDULATA**

1.422.000 : HESPEROCHIRON

1.422.000 : HESPEROCHIRON CALIFORNICUS

1.422.009 : HESPEROCHIRON CALIFORNICUS Cal., Plumas Co., Dry Flat. 1680m. Open, seasonally wet flat. G. Greger coll. A beautiful, little, summer-dormant member of the *Hydrophyllaceae*. In all, about 5cm. high with tiny, narrowly spoon-shaped leaves and flat, rounded, wide-open flowers, usually in white, more or less tinged with lavender and veined with purple. A plant of wet meadows & flats, inundated after snow-melt in spring but drying out later. A delightful pan-plant for the alpine-house, where it can spend most of the year sleeping under the bench. It is all but impossible to find the small, dormant roots, so sow thinly &, if you have to repot, spread most of the contents of the seed-pot over a larger pan. Then you are set for the next decade. They deserve every effort to cultivate successfully but actually need very little. Rather less in fact than locating & collecting the seed in the wild.)

1.422.109 : HESPEROCHIRON PUMILUS Cal., Plumas Co., Bellas Flat. 1370m. G. Greger coll. (A beautiful, little, summer-dormant member of the *Hydrophyllaceae*. In all, about 5cm. high with tiny, narrowly spoon-shaped leaves and flat, rounded, wide-open flowers, usually in white, more or less tinged with lavender and veined with purple. A plant of wet meadows & flats, inundated after snow-melt in spring but drying out later. A delightful pan-plant for the alpine-house, where it can spend most of the year sleeping under the bench. It is all but impossible to find the small, dormant roots, so sow thinly &, if you have to repot, spread most of the contents of the seed-pot over a larger pan. Then you are set for the next decade. They deserve every effort to cultivate successfully but actually need very little. Rather less in fact than locating & collecting the seed in the wild.)

1.423.000 : HEUCHERA

1.423.160 : HEUCHERA AMERICANA No data.

1.423.410 : HEUCHERA CYLINDRICA (var. *cylindrica*) No data. From the selection, 'Greenfinch', of this species from the Pacific NW, eastward to Montana, where it usually grows on shady rocks. Easy in rich, well-drained soil in part-shade in the UK with erect, 60cm. high stems of creamy green flowers from splendid clumps of rounded, metallic, lead-green, pale-veined leaves.

1.423.750 : HEUCHERA HALLII

1.424.150 : HEUCHERA MICRANTHA

1.424.250 : HEUCHERA PULCHELLA New Mexico, Sandoval Co., Sandia Mts. above Albuquerque. 3600m. Shady fissures on summit cliffs. (One of the best, dwarf members of this genus, a tiny endemic of the Sandias with tufts of little, lobed leaves & dense, 10cm. tall spikes of pink bells. An excellent little plant for an alpine-house pan or a trough.) [#Heuchera pulchella JCA 9508](#)

1.424.300 : HEUCHERA RUBESCENS

1.425.900 : HORKELIA HENDERSONII Oregon, Jackson Co., Siskiyou Mts., S of Ashland. 2130m. P. Gustafson 98-0879 (A very local, high alpine member of the *Rosaceae*, endemic to exposed granite flats on a few summits in the Siskiyou on both sides of the California-Oregon line. Tight mats of grey, silky foliage and dense heads of small pinkish flowers on 5cm. stems. Should be well worth the attention of the alpine-house enthusiast and deserves some effort to maintain it in cultivation.)

1.427.000 : HOUSTONIA

1.428.100 : HULSEA NANA al., Siskiyou Co., Mt. Eddy - S side. 2600m. Loose serpentine talus. J. Andrews coll. 1995. (High alpine of distinction with mounds of fascinating, pinnately lobed, woolly foliage and huge, many-rayed, yellow 'daisies' on stems of under 15cm. Not easy but we have grown & flowered it in the past. Maybe best outside in scree.)

1.435.000 : HYMENOXYS ACAULIS

1.435.800 : HYMENOXYS GRANDIFLORA

1.436.100 : HYMENOXYS LAPIDICOLA Utah, Uintah Co., southern base of Blue Mountain Plateau. 1890m. J. Andrews coll. (A remarkable saxatile species, "largely inaccessible except by helicopter", quite recently described and only known from a few sandstone cliffs at the eastern end of the Uinta Mts. Dense, rounded mounds of crowded, dark green, saxifrage-like rosettes with golden-yellow heads. It has been grown and exhibited by one or two British alpine-plant enthusiasts but will always remain a classic challenge for the skilled grower of alpine-house cushion-plants.

1.460.000 : IRIS BRACTEATA Oregon, Josephine Co., Waldo Hill. 650m. Open, stony, serpentine areas, among scrub. (From Howell's 1884 type-locality for this very local & distinct species, rather like a giant yellow *I. innominata*. Thick, broad, leathery, red-based leaves & very large, showy flowers, always in pale yellow, veined with maroon or brown, in the 'true' species. Hand-pollinated seeds from our own coll. We doubt if much, if any, other cultivated stock is 'pure'.)

1.460.009 : IRIS aff. BRACTEATA Cal., Del Norte Co., Little Jones Creek Road SW of Oregon state line. P. Gustafson 98-0853 (From an outstanding colony of dwarf irises apparently derived from the larger *I. bracteata*, described by Phyllis as "really beautiful small plants, usually with 2 flowers on each 10-15cm. stem, in cream and white with red, purple or violet-blue markings." Phyllis enthuses over these and tells us "even Roy Davidson" agreed they are among the very finest.)

1.460.050 : IRIS BREVICAULIS

1.460.100 : IRIS CHRYSOPHYLLA Oregon, Douglas Co., Calapooya Divide. 1120m. Among scrub at margins of coniferous forest. (Cream, gold-veined flowers & narrow, glaucous leaves. From a high, cold locality : should suit the UK.)

- 1.460.109 : IRIS CHRYSOPHYLLA** Oregon, Lane Co., Cascade Range, Steamboat Creek. 530m. Ex R. Ratko 00-430. (Hand-pollinated seeds of this attractive, dwarf species with cream, gold-veined flowers & narrow, glaucous leaves. The most northern of the Pacific Coast irises, this should be suited to UK gardens.)
- 1.460.150 : IRIS CRISTATA** N. Carolina.
- 1.460.161 : IRIS CRISTATA from WHITE FORM**
- 1.460.202 : IRIS DOUGLASIANA** Cal., Sonoma Co., Irish Hill. 150m. grassy slopes with coastal exposure. 18.6.92 (Tough & vigorous, although a low-altitude, coastal plant. Rich purples here. Easy with no particular soil preferences in gardens.)
- 1.460.305 : IRIS FERNALDII** Cal., Santa Clara Co., W of Morgan Hill. 270m. Among sparse scrub. S.Farwig & V.Girard coll. 1995 (We think this is *I. fernaldii*, though at the S limit of records. Seed is distinct - what else can it be?)
- 1.460.310 : IRIS FERNALDII** No data. 1995 seed from Alan Edwards - we had no wild coll. Restricted to the Coast Ranges around San Francisco Bay with unique, narrow, grey leaves and creamy yellow flowers. Good here under glass.)
- 1.460.330 : IRIS FOLIOSA**
- 1.460.360 : IRIS FULVA**
- 1.460.400 : IRIS HARTWEGII** (subsp. *hartwegii*) Cal., Fresno Co., Stump Springs Road. 1800m. S.Farwig & V.Girard coll. 1994 (The most widespread race, occurring down the Sierra Nevada. Flowers in both pale yellow & lavender. 30cm.)
- 1.460.600 : #IRIS HARTWEGII subsp. COLUMBIANA** Cal., Tuolumne Co., NE of Columbia. 650m. Steep, stony slope. (Only known from around the type-locality and "much more attractive" than the type-race according to Victor Cohen. Virtually, a pale-yellow version of splendid *I. munzii*, which grows 225km. to the S. Well established with us under cover.)
- 1.460.700 : IRIS HARTWEGII subsp. PINETORUM** Cal., Plumas Co., N of Quincy. 1070m. Openings in coniferous forest. 30.7.95 (A Plumas Co. endemic - the only taxon creeping over to the E slope of the Sierra Nevada. Much dwarfer than the long-stemmed type-race, it often opens two of its creamy yellow flowers simultaneously. A very cold area here.)
- 1.460.701 : IRIS HARTWEGII subsp. PINETORUM** Cal., Plumas Co., near Greenville, 1100m. Openings in coniferous forest. G. Greger coll. (A Plumas Co. endemic, according to Lenz, the only taxon creeping over to the E slope of the Sierra Nevada, though others record the type-race in this area as well, so there is obviously some intergradation. Usually much dwarfer than the long-stemmed type-race, it often opens two of its creamy yellow flowers simultaneously. A very cold area here.)
- 1.460.750 : IRIS HEXAGONA**
- 1.460.790 : IRIS INNOMINATA** Oregon, Curry Co., Rogue River valley. J.& G. Robinett coll. 29.6.96 (The jewel of the group, as far as rock-gardeners are concerned. Little tufts of very narrow, glossy leaves & 20cm. stems. Pure stands of the classic butter-yellow form (the colour is diagnostic as far as the "Jepson" account is concerned) have proved elusive, so this season Jim & Georgie travelled N to check these out in flower (we have seen their photograph of a superb, rich yellow with brown veins) & return later for seed. This coll. & that from the 1.461.790 *I. thompsonii* population are the result.
- 1.460.800 : # IRIS INNOMINATA** Oregon, Curry Co., N of Agness. 400m. Steep, stony slopes, facing E & SE, in coniferous zone. (Victor Cohen described this population on the divide of the Rogue & Coquille Rivers, in 1965, as "rich golden-yellow & orange" to "pale apricot or light creamy buff." Galen Burrell visiting here in 1993 tells us these are "a beautiful orchid color" with a few creamy ones. Most of this seed is from a peach-coloured clone with rose-veins (ex 13225), grown by John Dixon. Fully hardy in the UK - grow in lime-free scree.)
- 1.460.900 : IRIS LACUSTRIS**
- 1.460.950 : IRIS LONGIPETALA**
- 1.461.000 : IRIS MACROSIPHON** Cal.,
- 1.461.007 : IRIS MACROSIPHON** Cal., Lake Co., NW slope of Mt. St. Helena. 700m. Grassy opening among *Pinus* & *Arctostaphylos* on serpentine. (A delightful, floriferous, little species from the foothills to the North of the Central Valley. It as dwarf as *I. innominata* and as variable in colour. The beautifully veined & marked, long-tubed flowers can be in creams and yellows but our parent plants are all in shades of lavender-blue to purple. Tuffets of very narrow, grassy, grey-green leaves send up stems of about 20cm. in height.)
- 1.461.008 : IRIS MACROSIPHON** Cal., Lake Co
- 1.461.009 : IRIS MACROSIPHON** Cal., Butte Co., Jarbo Gap. 550m. G.Greger coll.
- 1.461.105 : IRIS MISSOURIENSIS** Cal., Alpine Co., S of Carson Pass. 2700m. Among grasses in moist meadow. (The only one not from Series *Californicae* : in Ser. *Longipetalae* and very widespread. Pale-blue to lavender-blue.)
- 1.461.149 : IRIS MISSOURIENSIS** Arizona, Escudilla Mts. 3200m. Open, S-facing meadows. M.& P. Stone 97-008 (A fairly dwarf form of this widespread Rocky Mt. species in Series *Longipetalae*. Should be pale blue to lavender-blue.)
- 1.461.150 : IRIS MISSOURIENSIS** Washington, Whitman Co., Steptoe Butte. 1020m. N-facing slope with sparse *Pinus*. (The only one not from Series *Californicae* : in *Longipetalae* and very widespread. From an unusual habitat, growing with *Erythronium* through low scrub, & in an extremely dwarf form, not more than 30cm. high. Should be pale-blue to lavender-blue.)
- 1.461.300 : IRIS MUNZII** Cal., Tulare Co., E of Springville. 520m. Among boulders on sides of scrub-filled gully. (Largest

flowered & most spectacular of the group, limited to a few colonies above the Tule & Kaweah Rivers in the S Sierra Nevada. Broad, evergreen leaves & stout 60cm. stems with up to 4 flowers, described by Cohen as "from pale powder-blue through lavender to purple... delicately veined in violet or turquoise-blue." Worth trying against a S wall in the UK.)

1.461.301 : IRIS MUNZII Cal., Tulare Co., Kaweah River gorge, Mineral King Road. 2001coll.

1.461.320 : IRIS PRISMATICA No data. A dainty little eastern species, distributed in moist sites, S from Nova Scotia to the Appalachians,

1.461.380 : IRIS PURDYI Cal. Humboldt Co., S of Bridgeville. 350m. Steep, part-shaded banks at margins of deciduous woodland. 24.7.98

1.461.400 : IRIS SETOSA

1.461.450 : IRIS SETOSA subsp. CANADENSIS

1.461.455 : IRIS SETOSA Dwarf form from Bob & Rannveig

1.461.520 : IRIS TENAX No data. Seed from a very fine, rich purple-blue form grown by Alan Edwards - "the ideal blue species for the peat-garden" he says. In nature, distributed widely from Oregon up into Washington.

1.461.580 : IRIS TENUIS

1.461.600 : IRIS TENUISSIMA Cal., Trinity Co., NNW of Zenia. 1600m. Openings among conifers. 3.7.92 (The species of the N Californian serpentines. Creamy white flowers with horizontal falls. Growable in the UK. About 20cm.)

1.461.650 : IRIS TENUISSIMA Cal., Humboldt Co., SSW of Willow Creek. 1580m. Stony areas in openings among conifers. (The species of the N Californian serpentines usually with creamy white flowers with horizontal falls. The plants here may show influence of *I. purdyi* : very fine large, flat flowers with much broader falls than normal, in rich, creamy shades variably veined with purple. The hybrid of this parentage, cited by Lenz, was collected in this area but 1000m. lower down.)

1.461.701 : IRIS TENUISSIMA subsp. PURDYIFORMIS Cal., Butte Co., Butte Meadows. 1220m. G. Greger coll. (A local and obscure race from the yellow pine woodland in the N Sierra Nevada. We have never managed to collect more than a few seeds of this. Pale yellow flowers with few or no dark veins on stems clasped by pink-flushed, bract-like leaves.)

1.461.790 : IRIS THOMPSONII Oregon, Curry Co., near Agness. J. & G. Robinett coll. (Ignored by "Jepson" and Munz but reinstated as a 'good' species in a recent paper. Localities given for the 'true' plant are mainly quite low down, near the coast on either side of the Oregon-California line. Taller than the next - photographs show flowers in plum to violet shades.)

1.461.800 : IRIS THOMPSONII Cal., Del Norte Co., SW of Gasquet. 530m. Stony openings among *Arctostaphylos* & sparse conifers. P. Gustafson 98-0850 (From one of two places where Boyd Kline considers the 'true' plant grows. We're not worried if you call this *I. innominata* 'Dwarf Purple Form'. The smallest iris we have seen in this series - tight tufts of leathery, grassy leaves & short stems. Not seen in flower but Boyd & Phyllis say it ranges through rich, deep blues & purples.)

1.461.801 : IRIS THOMPSONII Oregon, Josephine Co., SW of Selma. 550m. Stony openings among *Arctostaphylos* on serpentine. (You could call this *I. innominata* 'Dwarf Purple Form'. One of the smallest in this series : characteristic *I. innominata* grassy tufts of narrow leathery leaves & short stems. Not seen in flower but others here vary in blues & purple tones.)

1.461.900 : IRIS VERNA

1.462.000 : IRIS VERSICOLOR

1.462.100 : IRIS VIRGINICA

1.465.010 : JEFFERSONIA DIPHYLLA No data. A choice, little, herbaceous woodlander in *Berberidaceae*, distributed in eastern N America from Ontario S to Alabama. Intriguing, double-fanned leaves & white flowers.

1.469.000 : KALMIA HIRSUTA

1.469.050 : KALMIA LATIFOLIA

1.469.100 : KALMIA POLIFOLIA Cal., Alpine Co., S of Carson Pass. 2750m. In turf & among granite boulders in moist areas. (A delightful twiggy, alpine shrublet distributed both in N America & NE Asia.)

1.470.150 : KALMIOPSIS FRAGRANS (*K. leachiana* Umpqua form or LePiniec form) Oregon, Douglas Co., W of Diamond Lake, N Umpqua River valley. 450m. Fissures in rock-outcrops in dense woodland. P. Gustafson 98-09100. (Recently elevated to specific status, the Umpqua River valley race of *K. leachiana* is a much scarcer plant in nature and possibly more desirable horticulturally than the type-race from Curry Co. As with many other very local endemics, there are now probably many more plants in cultivation than in nature. Not difficult to grow in the UK in peaty soil in a pot or trough and no problem from seed for those experienced in handling tiny ericaceous seedlings. Masses of little pink kalmia-flowers on twiggy, compact, 15cm. shrubs.)

1.470.200 : KALMIOPSIS LEACHIANA

1.470.400 : KELSEYA UNIFLORA

1.470.601 : KUMLIENIA HYSTRICULA Cal., Plumas Co., North Fork Feather River Canyon, near Storrie Bridge. 600m. Wet moss-sheets on west-facing granite cliffs. G. Greger coll. (Munz went along with Gray's original description of this delightful little buttercup as *Ranunculus hystriculus* but the latest Californian flora, 'The Jepson Manual', follows Greene and splits it into a separate genus. Suit yourselves but it does differ from other buttercups in several features of the flower & seed structures. The

species is endemic to vernal wet granites in the coniferous forest zone of the Sierra Nevada, where, according to Dwight Ripley, "it is so local that collectors have been known to spend a lifetime in that range without ever setting eyes on it." It is currently just as seldom-seen in cultivation but it was once very successfully grown from a Wayne Roderick collection and exhibited (gaining a PC) in the UK by Joy Hulme. That was a long time ago but Joy tells us she would recommend a rich but very well-drained soil and she thinks she lost it through the plant becoming over-dried in summer. The rounded leaves are crenate or lobed and the buttercup-flowers are carried away from the basal rosettes on decumbent stems of about 15cm. The large white petaloid sepals are the prominent feature, surrounding the central cluster of stamens and small, yellow-green, gland-like petals or honey-leaves, as in *Helleborus*. As its habitat on the moss-sheets of wet rocks becomes drier in late spring, it goes dormant, dying back to a cluster of fleshy roots & leaving little trace behind. Timing a seed collection is not easy but Greg has made a special effort & sent some excellent seed, collected towards the end of May in two localities above the Feather River. We have not listed this since the winter of 1989-90 and we did not have much to distribute then. This is an unprecedented chance to acquire top-quality fresh seed promptly & in ample time for 1999 sowing. "Definitely in the category of Minor Treasures" says Dwight. "A little charmer" says Joy.)

- 1.470.602 : KUMLIENIA HYSTRICULA** Cal., Plumas Co., North Fork Feather River Canyon, W of Cresta Dam. 490m.
- 1.482.950 : LATHYRUS VESTITUS var. ALEFELDII** (*L. laetiflorus* subsp. *alefeldii*) Cal., San Diego Co., N of Campo. 1000m. J. Andrews coll. (The large-flowered, southern race of this variable Californian pea. A scandent perennial of chaparral with stems about 2m in length. Dense racemes of flowers can vary from wine-red to deep blue-purple.) (5+)
- 1.492.000 : LEPIDIUM NANUM** Nevada, Eureka Co., W of Eureka. 2100m. Gravelly bare-patches among sparse *Juniperus*. 4.7.95 (Classic Great Basin endemic. "Its hummocks look like those of some extra tight *Dionysia*, of a peculiarly intense shade of sap-green... this is the *Draba* to end all *Drabas*..." wrote Dwight Ripley in 1944. Now being successfully grown, it becomes more compact as it ages in cultivation and can produce its stemless, straw-yellow flowers quite generously.)
- 1.493.600 : LESQUERELLA TUMULOSA** Utah, Kane Co., SE of Cannonville. 1500m. Shale ridges. 6.7.95 (Another pulvinate-caespitose crucifer, perhaps the most condensed of the genus, forming dense hard mounds of downy leaves with yellow flowers on 1-4cm. stems. Extremely local on "white bare shale knolls" in this small area of Kane Co.)
- 1.495.000 : LEUCOCRINUM MONTANUM** Nevada, White Pine Co., SE of Little Antelope Summit. 1980m. Open areas among *Artemisia*, in loose, calcareous clay. (A very beautiful, dwarf member of the *Liliaceae*, in a genus on its own, which we have never seen cultivated. Distributed sporadically through the sagebrush-steppe of the cold deserts in the American West, from NE California & Oregon across to South Dakota and S to New Mexico. A bit like a thinner version of the Moroccan *Asphodelus acaulis* in its tufts of linear leaves rising from a clump of deep, fleshy, roots but the big, starry, fragrant, white flowers rise up from the centre on long tubes, originating well below the ground, where each may slowly mature one or two big, black seeds in a subterranean capsule, while the plant goes dormant. Not an easy subject from which to collect seed. Not only do you have to know exactly where a colony grows and be able to locate the sparse, dry wisps of foliage but the neck of each plant has to be gently excavated to find if it has set any seed and, if so, to gather a few capsules. All this in a temperature exceeding 100 F (40 C). Hardly surprising it is not on every seed list. It may be as difficult to grow as it is to collect but start by growing it like a choice Turkish tulip in a deep pot.)
- 1.495.009 : LEUCOCRINUM MONTANUM** Cal., Plumas Co., Dry Flat. 1680m. Seasonally moist open areas among *Artemisia*. G. Greger coll. (A very beautiful, dwarf member of the *Liliaceae*, in a genus on its own, which we have never seen cultivated. Distributed sporadically through the sagebrush-steppe of the cold deserts in the American West, from NE California & Oregon across to South Dakota and S to New Mexico. A bit like a thinner version of the Moroccan *Asphodelus acaulis* in its tufts of linear leaves rising from a clump of deep, fleshy, roots but the big, starry, fragrant, white flowers rise up from the centre on long tubes, originating well below the ground, where each may slowly mature one or two big, black seeds in a subterranean capsule, while the plant goes dormant. Not an easy subject from which to collect seed. Not only do you have to know exactly where a colony grows and be able to locate the sparse, dry wisps of foliage but the neck of each plant has to be gently excavated to find if it has set any seed and, if so, to gather a few capsules. All this in a temperature exceeding 100 F (40 C). Hardly surprising it is not on every seed list. It may be as difficult to grow as it is to collect but start by growing it like a choice Turkish tulip in a deep pot.)
- 1.496.000 : LEWISIA BRACHYCALYX**
- 1.496.100 : LEWISIA CANTELOVII** Cal., Plumas Co., above N Fork Feather River at Belden. 710m. Among moss on shaded serpentine cliff. (Only known from a few cliffs around here. Many-flowered panicles of small, pale-pink flowers.)
- 1.496.200 : LEWISIA COLUMBIANA** (var. *columbiana*)
- 1.496.250 : LEWISIA COLUMBIANA var. RUPICOLA**
- 1.496.300 : LEWISIA COLUMBIANA var. WALLOWENSIS**
- 1.496.350 : LEWISIA CONGDONII**
- 1.496.400 : LEWISIA COTYLEDON** (var. *cotyledon*) Cal., Siskiyou Co., Deadwood Lookout Road, W of Yreka. 1750m. Serpentine fissures along summit ridge.
- 1.496.480 : LEWISIA COTYLEDON var. HOWELLII**
- 1.496.500 : LEWISIA COTYLEDON var. HECKNERI** Cal., Trinity Co., N of Junction City. 1640m. Fissures on vertical, shaded, serpentine cliffs. (No wild seed at all here in 1995 but we have cultivated seed and it is just as authentic - we grow only this race of *L. cotyledon*, from our 1989 coll., and it thrives unprotected in our deep-scrub bed. A distinct, disjunct taxon limited to this

area. Toothed leaf-margins & wide panicles of the largest, most sumptuous flowers, twice the diameter of the type-race, in white richly striped pink. The race which has given size to the garden-hybrids but we'd rather grow the real thing.)

1.496.570 : LEWISIA DISEPALA Cal., Mariposa Co., Turtleback Dome. 1550m. J. Andrews coll.

1.496.620 : LEWISIA GLANDULOSA

1.496.700 : LEWISIA KELLOGGII Cal., Placer Co., Monumental Ridge above Yuba Gap. 2060m. J. Andrews coll. (John has returned to beat the local rodents, which dig-up the roots for food, scattering flowers & seed-capsules widely. A good coll. this year of this very local species (almost all are) mainly from the decomposed granites of the N Sierra Nevada above 2000m. Dense rosettes of leathery, spoon-shaped leaves, withering in summer, on which sit the pink or white flowers on 3cm. stems.)

1.496.701 : LEWISIA KELLOGGII Cal., Madera Co., Shuteye Peak (Sierra Nevada E of Merced). 2310m. Granite. J. Andrews coll. (A very desirable and very local species (almost all are), mainly from the decomposed granites of the N Sierra Nevada above 2000m., & also one of the least-known in cultivation. Dense rosettes of leathery, spoon-shaped leaves, withering in summer, on which sit the pink or white flowers on 3cm. stems. Seed collection of this species is always unpredictable and involves competing with the local rodents, which dig-up the roots for food, scattering flowers & seed-capsules widely)

1.496.702 : LEWISIA KELLOGGII Cal., Placer Co., Royal Gorge. 2030m. Granitic detritus. J. Andrews coll. (A very desirable and very local species (almost all are), mainly from the decomposed granites of the N Sierra Nevada above 2000m., & also one of the least-known in cultivation. Dense rosettes of leathery, spoon-shaped leaves, withering in summer, on which sit the pink or white flowers on 3cm. stems. Seed collection of this species is always unpredictable and involves competing with the local rodents, which dig-up the roots for food, scattering flowers & seed-capsules widely)

1.496.800 : LEWISIA LEANA Cal., Trinity Co., Mt. Eddy. 2400m. Stony serpentine alopes with sparse *Pinus*. (Rosettes of succulent, linear leaves, flat or cylindrical, send up many-flowered panicles. Here, about 15cm. high & mainly with bright magenta-pink flowers. A seldom-collected plant of high altitudes, up to 3300m., in N California & SW Oregon, usually on serpentine but with an outlier on the Sierra Nevada granite of Fresno Co. Treat as the *L. cotyledon* group. Mature seed is dark-brown, not black.)

1.496.801 : LEWISIA LEANA Cal., Shasta Co., Castle Crags, SW of Castle Lake. 1700m. Gravelly areas between serpentine outcrops on open slopes. (Rosettes of succulent, linear leaves, flat or cylindrical, send up many-flowered panicles. Here, about 15cm. high & mainly with bright magenta-pink flowers. A seldom-collected plant of high altitudes, up to 3300m., in N California & SW Oregon, usually on serpentine but with an outlier on the Sierra Nevada granite of Fresno Co. Treat as the *L. cotyledon* group. Mature seed is dark-brown, not black.)

1.496.850 : LEWISIA LONGIPETALA

1.496.880 : LEWISIA MAGUIREI

1.496.900 : LEWISIA NEVADENSIS Cal., Humboldt Co., SSW of Willow Creek. 1420m. Open area among sparse *Pinus*, in gravelly turf. (One of the easiest to grow. A summer-dormant plant of vernal wet sites. Usually white but some shell-pinks here)

1.497.000 : LEWISIA OPPOSITIFOLIA Oregon, Josephine Co., Waldo Hill. 600m. Among serpentine detritus along gulley. (A type locality coll. of this pretty, summer-dormant species. In its 'pure' form an Illinois Valley endemic. Narrow, blunt, succulent leaves and 15cm. umbels of up to 6, rounded, white flowers, occasionally pink in the bud, with red-fringed sepals. A plant of stony 'flats' and along the sides of gulleys, seasonal seeps, very wet in spring but completely dried-out in summer.)

1.497.100 : LEWISIA PYGMAEA

1.497.200 : # LEWISIA REDIVIVA 2 pictures. Wyoming, Albany Co., E of Centennial. 2700m. In granite grit of open, stony 'flats'. (We think this is perhaps [the most beautiful and thrilling](#) of all N American plants. The tiny clusters of fleshy, linear leaves are hardly noticeable under the huge, diaphanous, water-lily flowers, appearing successively on the shortest of stems. The Wyoming colonies, though wildly variable in flower-shape & colour, are generally of a richer pink than we have seen in gardens.)

1.497.201 : LEWISIA REDIVIVA Wyoming, Fremont Co., Wind River Mts. 3000m. Open alpine-steppe, in granite grit. (A little of our cultivated seed grown from our 1987 coll. of this high colony, still under snow in July, 1995)

1.497.202 : LEWISIA REDIVIVA Idaho, Butte Co., NE of Carey. 1520m. E & SE-facing slopes of stony ridge. (From a splendid site, which we found in 1989. We have never seen this colony flowering in the wild but all the seedlings which have so far flowered with us have been white. It is rather similar, in fact, to the Californian plants separated as var. *minor* and we suspect that there are at least two distinct taxa currently included under *L. rediviva*. Smaller, rounder flowers than the preceding.)

1.497.230 : LEWISIA REDIVIVA Cal., Napa Co., N of Calistoga, The Palisades. 840m. J. Andrews coll. (The first time we have listed seed from the Central Valley of California, west of the Sierra Nevada. Here *L. rediviva* is a lower altitude, early flowering plant and seems restricted to serpentine. These populations may represent another taxon. Expect especially large pink flowers.)

1.497.231 : LEWISIA REDIVIVA Cal., Napa Co., near Middletown. 300m. J. Andrews coll. (Extremely large pink flowers, typical of these early-flowering, low altitude races from the Californian serpentes.)

1.497.232 : LEWISIA REDIVIVA Cal., Butte Co, N of Oroville, Table Mountain. 400m. Ex a J. Whittlesey coll.

1.497.233 : LEWISIA REDIVIVA Cal., Lake Co., N of Middletown. 300m. J. Andrews coll. (Extremely large pink flowers, typical of these early-flowering, low altitude races from the Californian serpentes.)

1.497.240 : LEWISIA REDIVIVA Cal., Monterey Co., Jolon. Ex a W. Roderick coll.

1.497.300 : LEWISIA REDIVIVA var. MINOR Cal., Mono Co., N of Conway Summit. 2200m. J. Andrews coll. 1995 (A high altitude race, from 2000-2700m., most distinct where we have seen it, though ignored by "Jepson" and other botanists who only know their plants as herbarium sheets. Local on the drier interior ranges from the San Bernardinos through the Panamint & White Mts. into W Nevada. An exquisite little plant, altogether a reduced version with rounded, pearl-white flowers and bronze sepals. We cannot over-emphasise how difficult it is to collect seed from these summer-dormant *Lewisia* species - you have to know *exactly* where they grow and be there *exactly* at the right time. They vanish a few weeks after flowering. We tried for this, where we know it, on Mt. Pinos & the White Mts. This may be your only chance.)

1.497.301 : #LEWISIA REDIVIVA var. MINOR Cal., Kern Co., Mt. Pinos. 2680m. In granite grit on open slopes in summit area. (A high altitude race, worth at least subspecific rank, from 2000-2700m., most distinct where we have seen it, though ignored by "Jepson" and other botanists who only know their plants as herbarium sheets. Local on the drier interior ranges from the San Bernardinos through the Panamint & White Mts. into W Nevada. An exquisite little plant, altogether a reduced version with rounded, pearl-white flowers and bronze sepals.).

1.497.302 : LEWISIA REDIVIVA var. MINOR Cal., Inyo Co., White Mts. 2650m. Ridge of fragmented shale with sparse *Juniperus*.

1.497.400 : LEWISIA STEBBINSII California, Mendocino Co., ESE of Covelo, Etsel Ridge to Hull Mountain. 1600m. Open, gravelly slope. (Most recently discovered member of this genus only known from one or two sites around Hell's Half Acre. Most distinct in its leaf-shape and short, radiating, ground-hugging stems, each carrying up to 5, upward-facing, rose-pink flowers, veined with deeper rose. Summer-dormant, it should be treated like *L. rediviva*, though it does not appear until spring.)

1.497.401 : LEWISIA STEBBINSII California, Mendocino Co., ESE of Covelo, Hell's Half Acre. 1600m. Open, gravelly slope. J. Andrews coll. (The most recently discovered member of this genus only known from one or two sites around Hell's Half Acre. It is barely in cultivation & Philip Baulk who grows the National Collection at Ashwood (West Midlands, UK) considers it is definitely in the "new & rare" category. We have a few plants raised from a pinch of 1995, late-collected seed and would not consider it "difficult" so far but comparatively little seed is set here, even with hand-pollination. We need to maintain a larger number of clones in cultivation to ensure an annual supply to list. In 1998 roads were down & we could not even reach the habitat to attempt to make a worthwhile seed collection. John made it this year. His timing was perfect providing us with an unprecedented and significant collection which we hope will ensure that this attractive little plant becomes well-established in the hands of enthusiasts. Most distinct in its leaf-shape and short, radiating, ground-hugging stems, each carrying up to 5, upward-facing, rose-pink flowers, veined with deeper rose. Summer-dormant, it should be treated like *L. rediviva*, though it does not appear until spring.)

1.497.500 : LEWISIA TRIPHYLLA

1.497.610 : LEWISIA TWEEDYI No data. The famous endemic of the Wenatchee granites, in Washington. Acknowledged queen of the lewisias (though we get a bigger kick from *L. rediviva*) and unlike any other (in fact, removed from the genus *Lewisia* by some authorities on *Portulacaceae*). Rosettes of smooth, fleshy, obovate leaves and immense, silky flowers in palest tea-rose shades of salmon, apricot and cream. Not difficult with care in a very gritty, lime-free mix, dryish from late summer to spring.

1.497.611 : LEWISIA TWEEDYI - FROM PINK FORM No data. A distinct form which comes fairly evenly from seed. Altogether proportionately smaller than the preceding with darker green foliage & smaller flowers in rich, pastel pinks.

1.498.100 : LILIUM BOLANDERI Cal., Humboldt Co. 1200-1500m. In chaparral on serpentine. J. & G. Robinett coll. (Maybe the most beautiful & maybe the most difficult. We recently saw a photograph of a splendid plant grown from seed by Jack Brownless in the UK - so it can be done. A serpentine-endemic from the Coast Ranges near the California-Oregon line. It can reach 1m. with up to 7 flowers but is often dwarf - a single huge flower on a 15cm. stem is an incredible sight. Stems whorled with thickish, blue-grey leaves carry horizontal to half-nodding, funnel-shaped flowers in muted crimson (though it can vary to salmon & brick shades), glaucous outside & purple-dotted inside, with dark purple anthers & orange pollen.)

1.498.409 : LILIUM CANADENSE Canada, Quebec, N of Quebec City. (From one of the most northern populations of this elegant eastern lily, most widespread of the N Americans & distributed from Quebec S down the Appalachians to Alabama. Stems of about 1.5m., whorled with lanceolate leaves carry umbels up to 20, large, nodding, flaring bells on long pedicels. The colour is usually yellow to orange-yellow, speckled inside with black-purple, in the northern, typical race. A plant of woodland margins, not dense shade, hardy & easy in a moist, peaty or humus-rich soil in a semi-shaded site, it flowers quite quickly from seed.)

1.498.420 : LILIUM CANADENSE No data. From both the red (var. *editorum*) & typical yellow forms of this elegant eastern lily, most widespread of the N Americans. Stems of about 1.5m. with up to 20 nodding, flaring bells. A plant of woodland margins, not dense shade, hardy & easy in a semi-shaded site, it flowers quite quickly from seed.

1.498.421 : LILIUM CANADENSE var. EDITORUM

1.498.480 : LILIUM CATESBAEI

1.498.500 : LILIUM COLUMBIANUM Cal., Humboldt Co. 500 m. J. & G. Robinett coll. (The spectacular lily of the redwood glades, extending N from here up into Canada. Up to 30 or so golden orange turkscap flowers, speckled with maroon on stems as much as 2m. high. Segmented bulb-scales but not a plant of really wet sites, often out in the open on N slopes.)

1.498.501 : LILIUM COLUMBIANUM Cal., Del Norte Co. 350 m. (The spectacular lily of the redwood glades, extending N from here up into Canada. Up to 30 or so golden orange turkscap flowers, speckled with maroon on stems as much as 2m. high. Segmented bulb-scales but not a plant of really wet sites, often out in the open on N slopes in this high-rainfall area.)

- 1.498.550 : LILIUM COLUMBIANUM from DWARF FORM** No data. Seed sent to us by Mike & Polly Stone.
- 1.498.800 : LILIUM 'ELDORADO DITCH LILY'** Cal., Eldorado Co. 1000m. J. & G. Robinett coll. 8.9.95 (A mysterious, apparently natural hybrid from along a few man-made watercourses in the N Sierra Nevada. 20-30 upright, flaring bells, usually pink but also sometimes in orange or brick-red. Stems whorled with bright-green leaves can reach 1.5 m.)
- 1.498.850 : LILIUM GRAYI**
- 1.498.900 : LILIUM HUMBOLDTII** (subsp. *humboldtii*) Cal., Yuba Co. 550m. J. & G. Robinett coll. (Local northern race of this dry-grower from the N Sierra Nevada. Up to 40 strongly recurved, maroon-speckled flowers in orange-yellow. 2m.)
- 1.498.901 : # LILIUM HUMBOLDTII** (subsp. *humboldtii*) Cal., Nevada Co., Dutch Flat. 990m. Openings in oak-pine woodland on granitic clay. J. Andrews coll. (Local northern race of this dry-grower from the N Sierra Nevada. Up to 40 strongly recurved, maroon-speckled flowers in orange-yellow. 2m.)
- 1.499.000 : LILIUM HUMBOLDTII subsp. OCELLATUM** Cal., San Diego Co. 1300m. In chaparral & at woodland margins. J. & G. Robinett coll. (This "stands in the very first rank of lilies" according to Woodcock & Stearn, who record that it has been seen almost 3m. high with 85 blooms. Possibly from the most southern population of lilies in the West. Large, golden-orange flowers, recurving into globe-shapes, are usually heavily spotted with red-brown, each spot surrounded by a lighter red zone. Sturdy stems to 1.5m. whorled with crinkled, grey-green leaves. Dry-grower reputedly easier than the type-race.)
- 1.499.100 : LILIUM KELLEYANUM** Cal., Tulare Co., Middle North Fork Tulare River, E side of Moses Mt. 2070m. In wet meadows & along streams & gulleys in gravelly, granitic soils. J. Andrews coll. (An obscure, high altitude wet-grower from the S Sierra Nevada, collected where Wayne Roderick considers the 'true' species grows : further N it appears to intergrade with *L. parvum*. Up to 25 fragrant, uniformly yellow, pendant, wide bells with dull-red anthers. 1m.)
- 1.499.200 : LILIUM KELLOGGII** Cal., Humboldt Co. 800m. J. & G. Robinett coll. (A most distinct dry-grower from the NW Coast Ranges just S of the California-Oregon line, usually in openings among conifers. Stems, usually under 1m. can carry 15-20 fragrant, nodding, turkscap flowers in soft-pink, striped yellow on the basal third of each segment & speckled purple along the edges. Altogether similar to the SW Chinese *L. lankongense* in flower but not in its narrow, greyish, crinkled leaves.)
- 1.499.201 : LILIUM KELLOGGII** Cal., Humboldt Co. 1150m. J. & G. Robinett coll. Selected deep pink.
- 1.499.202 : LILIUM KELLOGGII** Cal., Del Norte Co., Little Jones Creek.
- 1.499.203 : LILIUM KELLOGGII** Cal., Humboldt Co.
- 1.499.204 : LILIUM KELLOGGII** Cal., Humboldt Co., Bald Hills Road
- 1.499.209 : LILIUM KELLOGGII** Cal., Humboldt Co., near Kneeland. 1150m. B. Kline coll.
- 1.499.211 : LILIUM KELLOGGII from WHITE FORM** Cal., Del Norte Co. Little Jones Creek Road. Ex a B. Kline coll.
- 1.499.230 : LILIUM KELLOGGII X COLUMBIANUM** Cal., Humboldt Co. 750m. J. & G. Robinett coll. (From a colony of natural hybrids discovered by Jim & Georgie.)
- 1.499.400 : LILIUM MARITIMUM** Cal., Sonoma Co. 30m. Open woodland. J. & G. Robinett coll. (An uncommon, little lily, reputed always to grow within the sound of the Pacific - almost frost-free in winter & cool in summer. Red-orange, funnel-shaped, slightly nodding flowers, spotted basally. Anything from 1-13 flowers on stems from 25cm. to 1m. or more.)
- 1.499.401 : LILIUM MARITIMUM** Cal., Sonoma Co., Salt Point. 80m. Openings in coastal woodland. J. Andrews coll. (A very uncommon, little lily, reputed always to grow within the sound of the Pacific : almost frost-free in winter & cool in summer. Brilliant red-orange, funnel-shaped, slightly nodding flowers, spotted basally. From 1-13 flowers on stems from 25cm. to 1m. or more.)
- 1.499.450 : LILIUM MICHAUXII**
- 1.499.500 : LILIUM MICHIGANENSE** UK grown seed from plants raised from our 1987 coll. from the colony naturalised in Fred Case's garden in Saginaw, Michigan. Current fashion is to 'sink' this under *L. canadense* (along with *L. superbum*). This is somewhat intermediate in appearance between these two with maroon-spotted, orange-red turkscap flowers. To 2m.)
- 1.499.600 : LILIUM OCCIDENTALE**
- 1.499.700 : LILIUM PARDALINUM** Cal., Placer Co. 1400m. Open, wet mountain meadow. J. & G. Robinett coll. (Most widespread wet-grower, extremely variable but distinct in its very long filaments & capacity to form wide clonal rhizomatous mats. Red-orange turkscap flowers with maroon spots margined with yellow towards the recurving segment-tips.)
- 1.499.701 : LILIUM PARDALINUM** Cal., Plumas Co., W of Canyon Dam. 1370m. Among *Salix* & grasses in wet meadow. G. Greger coll. (Most widespread wet-grower, very variable but distinct in its very long filaments & capacity to form wide clonal rhizomatous mats. Red-orange turkscap flowers with maroon spots margined with yellow towards the recurving segment-tips.)
- 1.499.702 : LILIUM PARDALINUM** Cal., Humboldt Co., SSW of Willow Creek. 1580m. Wet gulley at woodland margin.
- 1.499.750 : LILIUM PARDALINUM HYBRIDS** Cal., Placer Co. 1350m. J. & G. Robinett coll. 23.9.95 (Possibly hybrids here with yellow *L. parvum*, which grows in the area. Nodding flowers on some plants are flatter and golden-orange.)
- 1.499.900 : LILIUM PARRYI** Cal., Los Angeles Co., San Gabriel Mts., along Little Rock Creek. 1990m. Ex a J. Andrews coll. (Except for *L. humboldtii ocellatum*, the most southern species and a distinct one - like no other in its strongly fragrant, bright

yellow, trumpet-shaped flowers, with a few tiny, sparse maroon dots, held horizontally or slightly nodding - up to 30 on stems of about 2m. A local plant of wet meadows & streamsides in coniferous forest in SW California & S Arizona.)

1.499.901 : LILIUM PARRYI Cal., Los Angeles Co., San Gabriel Mts., Kratka Ridge, Buckhorn Camp. 1980m. Wet meadow slopes on granitic gravel. J. Andrews coll. (Except for *L. humboldtii ocellatum*, the most southern species : like no other in its strongly fragrant, bright yellow, trumpet-shaped flowers, with a few tiny, sparse maroon dots, held horizontally or slightly nodding up to 30 on stems of about 2m. A local plant of wet sites in coniferous forest in SW California & S Arizona.)

1.499.920 : LILIUM PARRYI Arizona, Santa Cruz Co., Huachuca Mts., S of Tucson. Ex an S. Walker coll..

1.500.000 : LILIUM PARVUM Cal., El Dorado Co. 1800m. Wet meadow. J. & G. Robinett coll. (The high altitude wet-grower of the N Sierra Nevada. Upward-facing, bell-shaped flowers, mostly in orange shades here - it tends to vary to yellows lower down and reds higher up. The stems, whorled with leaves can be 2m. high with 40 flowers but are usually a lot less.)

1.500.001 : LILIUM PARVUM Cal., Alpine Co., Hope Valley. 2100m. Among *Salix* scrub in moist area. (The spectacular high altitude wet-grower of the N Sierra Nevada. Upward-facing, bell-shaped flowers, mostly in orange shades here. The stems, whorled with leaves can be 2m. high with 40 flowers but are usually a lot less.)

1.500.009 : LILIUM PARVUM Cal., El Dorado Co., Fallen Leaf Lake. 2000m. Wet meadow. B. Kline coll.

1.500.050 : LILIUM PARVUM Cal., Placer Co., Monumental Ridge. 2030m. J. Andrews coll. (John saw these in flower on his way to collect *Lewisia* seed & returned in September. This seems an even & distinct local race with much more open, flatter flowers in yellow to clear orange-yellow, fragrant & sometimes with a few crimson spots. A wet-grower, on granite here.)

1.500.050 : LILIUM aff. PARVUM Cal., Nevada Co., Sierra Nevada, Monument Ridge. 2010m. J. Andrews coll. (John saw these in flower some years ago & has now returned to collect seed. This seems a consistent, distinct local race with much wider flowers, opening out flat, in yellow to clear orange-yellow, fragrant & sometimes with a few crimson spots. John has applied Purdy's name *L. parvum* var. *luteum* to this. This name is not recognized by Mark Skinner in the current "Jepson" but is given as a synonym of *L. kelleyanum* by Munz, following Stearn, who published a new name, *L. parvum* f. *crocatum* to cover the yellow phase of *L. parvum*. Stearn states, however, that this has campanulate flowers, like typical *L. parvum*. John's plant may well deserve recognition as a distinct taxon : a really good thing, horticulturally, anyway : a wet-grower, on granite here.)

1.500.200 : LILIUM PHILADELPHICUM Wyoming, Laramie Peak. (This has remained a dwarf plant in cultivation, around 30cm. high with 10cm. wide, upward-facing, scarlet-orange flowers.)

1.500.300 : LILIUM PITKINENSE

1.500.400 : LILIUM RUBESCENS Cal., Humboldt Co. 500m. N edge of woodland. J. & G. Robinett coll. (A dry-grower with stems of up to 2m. carrying 20 or more upward-facing, extremely fragrant, white trumpets, maturing to pink-purple.)

1.500.401 : LILIUM RUBESCENS Cal., Humboldt Co., N of Weitchpec, Bee Mt. 950m. Among *Gaultheria* & *Rhododendron* scrub at edge of coniferous forest. (A beautiful Coast Range endemic, closest to *L. washingtonianum*, though they can grow together & remain distinct. Apparently it "has unique chromosomes for the genus." The wide trumpets open white with minute purple dots, which suffuse over the surface until it is wine-coloured. Whorls of grey-green leaves with crinkled edges.)

1.500.402 : LILIUM RUBESCENS Cal., Humboldt Co. 80m. Edge of redwood forest in moderate shade. J. & G. Robinett coll. (Quite a low altitude for this beautiful Coast Range endemic, closest to *L. washingtonianum*, though they can grow together & remain distinct. Apparently it "has unique chromosomes for the genus." The wide trumpets open white with minute purple dots, which suffuse over the surface until it is wine-coloured. Whorls of grey-green leaves with crinkled edges.)

1.500.402 : LILIUM RUBESCENS Cal., Humboldt Co. Bald Hills Road to French Camp Ridge. 850m.

1.500.500 : LILIUM SHASTENSE Cal., Shasta Co. 1400m. Wet meadow, along a creek across old lava-flow. J. & G. Robinett coll. (Wet-grower, currently placed as a subsp. of *L. pardalinum* but does not increase clonally to the same extent. Nearest to *L. vollmeri* with similar two-toned, red-orange flowers but has yellow to orange pollen. Up to 1.8m. with 30 flowers.)

1.500.600 : LILIUM SUPERBUM

1.500.900 : LILIUM VOLLMERI Oregon, Josephine Co. 500m. Along wet ditch. J. & G. Robinett coll. (Wet-grower near the preceding but has purple anthers with red pollen. A really splendid, 2m. high population here. The yellow lily, from this area, which we listed in 1989 as *L. vollmeri* was *L. wigginsii* or an intergrade. Both are local serpentine-species.)

1.501.000 : LILIUM WASHINGTONIANUM (subsp. *washingtonianum*) Cal., Shasta Co. 1000m. Open, level woodland. J. & G. Robinett coll. 29.9.95 (Marvellously fragrant, great flaring white trumpets, up to 12cm. across, face out or nod slightly on stems of 40-120cm., whorled with crinkled, grey-green leaves. A dry-grower and reputedly very difficult to grow well.)

1.501.001 : LILIUM WASHINGTONIANUM (subsp. *washingtonianum*) Cal., Butte Co. 1100m. J. & G. Robinett coll. (Marvellously fragrant, great flaring white trumpets, up to 12cm. across, face out or nod slightly on stems of 40-120cm., whorled with crinkled, grey-green leaves. A dry-grower, usually in open scrub or woods, and reputedly difficult to grow well.)

1.501.002 : LILIUM WASHINGTONIANUM (subsp. *washingtonianum*) Cal., Plumas Co., N of Greenville. 1220m. G. Greger coll. (Marvellously fragrant, great flaring white trumpets, up to 12cm. across, face out or nod slightly on stems of 40-120cm., whorled with crinkled, grey-green leaves. A dry-grower, usually in open scrub or woods, and reputedly difficult to grow well.)

1.501.003 : LILIUM WASHINGTONIANUM (subsp. *washingtonianum*) Cal., Shasta Co., N of Montgomery Creek. 580m. Woodland margins. J. & G. Robinett coll. (Marvellously fragrant, great flaring white trumpets, up to 12cm. across, face out or

nod slightly on stems of 40-120cm., whorled with crinkled, grey-green leaves. A dry-grower and reputedly very difficult to grow well.)

1.501.004 : LILIUM WASHINGTONIANUM (subsp. *washingtonianum*) Cal., Nevada Co., Sierra Nevada, Monument Ridge. 1890m. J. Andrews coll. (Marvellously fragrant, great flaring white trumpets, up to 12cm. across, face out or nod slightly on stems of 40-120cm., whorled with crinkled, grey-green leaves. A dry-grower, usually in open scrub or woods, and reputedly difficult to grow well.)

1.501.100 : LILIUM WASHINGTONIANUM subsp. PURPURASCENS Cal., Humboldt Co. 1200m. Among scrub on steep slope. J. & G. Robinett coll. (The type-race is restricted to N California but this extends to Mt. Hood in Oregon. The bulb-scales are rather different and the flowers slightly smaller but, most obviously, they flush to pink-purple with age.)

1.501.101 : LILIUM WASHINGTONIANUM subsp. PURPURASCENS Cal., Humboldt Co. SSW of Willow Creek. 1580m. Among *Arctostaphylos* scrub & sparse conifers on steep, E-facing side of ridge. (The type-race is restricted to N California but this extends to Mt. Hood in Oregon. The bulb-scales are rather different and the flowers slightly smaller but, most obviously, they flush to pink-purple with age.)

1.501.200 : LILIUM WIGGINSII Cal., Del Norte Co., ENE of Gasquet. Wet flush on open serpentine slope. (15+)

1.501.201 : LILIUM WIGGINSII Oregon, Jackson Co. B. Kline coll.

1.502.020 : LINANTHASTRUM NUTTALLII Arizona, Apache Co., Mogollon Rim. 2750m. Clay scree beside forest road. M.& P. Stone 97-003

1.531.009 : LITHOPHRAGMA TENELLUM Nevada, Nye Co., Toyabe Range. Ex M.& P. Stone 99-054. (A summer-dormant member of the *Saxifragaceae*, relying on snow-melt for its brief spring appearance. Small, rounded, divided, basal leaves & racemes of fringed, pale pink flowers on erect 20cm. tall stems, downy with purplish hairs.)

1.550.209 : LOBELIA CARDINALIS Canada, Ontario, Georgian Bay. Wet acidic soil. B. Wilkins coll. (An utterly & indestructibly hardy species, confused by UK gardeners with the tender Mexican *L. fulgens* & its hybrids. Spires of many, lipped, brilliant scarlet flowers open in summer on stems reaching 1m. in height. Moist, rich soil.) (100+)

1.550.210 : LOBELIA CARDINALIS No data. Canadian seed of this utterly & indestructibly hardy species, confused by UK gardeners with the tender Mexican *L. fulgens* & its hybrids. Spires of lipped, brilliant scarlet flowers reach 1m. (100+)

1.515.300 : LUPINUS ALBIFRONS (var. *albifrons*) Cal., Contra Costa Co., above Orinda. 450m. (A fine shrubby perennial, about 1m. high. Silky, silvery foliage & 30cm. racemes of pale to deep lavender-blue flowers with yellow to white banner-patches, maturing to purple. Has proved a successful garden-plant from the UK to Australia. Tim Ingram (Kent, UK) considers this the most reliable silver-leaved lupin, hardy to -10 C or less - remarkable considering its comparatively low altitude origin.)

1.516.150 : LUPINUS ARGENTEUS var. MEIONANTHUS (*Lupinus meionanthus*) Cal., Plumas Co., E of Chilicoot. 1520m. Open ridge-top. G. Greger coll. (A sub-shrubby perennial, the continental climate race of this variable species, from the drier, N Sierra Nevada E into Nevada. Leaves appressed with silver-grey hairs & racemes, anything from 20cm. to 90cm. high, of dull-blue to lilac flowers with yellow banner-patches. Adapted to extremely low temperatures but likely to be intolerant of wetness.)

LUPINUS CAUDATUS

1.517.010 : LUPINUS BICOLOR Cal., Butte Co, N of Oroville, Table Mountain. 400m. (An extremely variable dwarf, annual species, about 20cm. high. Petals are usually blue with a white banner spot, maturing to magenta, & the keel is white. Several growers have found this form a first-rate garden-plant. Germination can be irregular but it sows itself where suited.)

LUPINUS GRAYII

1.533.350 : LUPINUS LEPIDUS var. SELLULUS Cal., Mendocino Co., ESE of Covelo. 1980m. Steep slope in loose serpentine scree. 31.8.95 (Dwarf, 20cm., & woolly with grey-white leaves and close-packed racemes of pale violet flowers. The white or yellow banner-patches turn red. This keys-out in Munz as *L. sellulus* subsp. *ursinus* & approaches *L. constancei*.)

1.533.800 : LUPINUS MONTANUS Mexico. 3500m. Ex a S. Walker coll. (Collected in an exposed habitat with frequent, heavy frosts, this imposing, 2m. high herbaceous perennial, is proving hardy with Tim Ingram in Kent, UK, & Andrew Jagoe in Dublin, Ireland, where it survived the coldest winter for 47 years. Large, palmate leaves & narrow spires of deep-blue flowers. Judicious pinching-back of spring re-growth will produce bushier plants less vulnerable to wind-damage.)

LUPINUS NOOTKATENSIS

1.534.350 : LUPINUS POLYPHYLLUS (var. *polyphyllus*) Canada, BC, Vancouver Is., S of Port Renfrew. Sea-level. Ex a N. Macer coll. (A fine large herbaceous perennial from moist sites and marshy areas, distributed S into California & E into Idaho. Lush, palmately compound foliage & densely whorled racemes of purple-blue flowers can rise to as much as 1.5m. high. An excellent wild-garden plant, absolutely hardy in the UK & much less formal than its sophisticated children.)

1.534.700 : LUPINUS STIVERSII Cal., Plumas Co., near Tobin. 600m. G. Greger coll. (A spectacular, 40cm. tall, colourful annual species from the northern Sierra Nevada. Flowers with yellow banners and pink wings.)

1.535.000 : LUPINUS VARIICOLOR Cal., Sonoma Co., above Shell Beach. 20m. Ledges on coastal cliffs. (A woody based perennial about 60cm. high, with downy, greyish leaves & short racemes of beautiful, blue & creamy-white flowers (in this form - colour can vary from yellow to pinks & purples). A coastal plant, proving remarkably hardy with Tim Ingram (Kent, UK), who writes "one of the best shrubby lupins in the garden, hardy to at least -10 C.")

1.538.010 :# LYSICHTON AMERICANUS No data. One of the most spectacular hardy members of the *Araceae*. Huge, brilliant yellow spathes appear in early spring, followed by enormous, paddle-shaped leaves. A plant of the lakesides and swamps of western North America from Alaska southward to California and eastward to Montana & Idaho. Our own, freshly collected, damp-stored seed for immediate sowing in very wet conditions.)

1.540.000 : MACHAERANTHERA

1.550.000 : MAIANTHEMUM

1.560.000 : MALVASTRUM

1.570.310 : MARSHALLIA GRANDIFLORA No data. Rated by Panayoti Kelaidis as “one of America’s best dwarf perennials”, this species is perhaps the finest in a genus in *Compositae* (*Asteraceae*), which has been ignored both in European gardens and garden literature. Close clumps of foliage and large pink flower-heads, rather like something between a *Centaurea* and a scabious, on stems about 30cm. tall. It has a very limited, specialized distribution in the Appalachians and Cumberland Plateau in wet sites along riverbanks scoured by flooding. It should be successful in open garden conditions in northern Europe.

1.586.210 : MAURANDYA ANTIRRHINIFLORA (*Maurandella antirrhiniflora*) S USA & N Mexico.

1.586.310 : MAURANDYA BARCLAYANA No data. A Mexican climber in an attractive, showy genus in *Scrophulariaceae*, close to *Antirrhinum* & *Asarina* (under which some have been included) but with open, funnel-shaped flowers. All these will flower the first year from seed if sown early in warmth. These are tender perennials, which enjoy the summer climate outside in the UK but must be overwintered dryish & frost-free if you want to keep them. Big, downy, rose-purple flowers in summer.

1.586.410 : MAURANDYA ERUBESCENS (*Lophospermum erubescens*) No data. Another fine, woody-based, Mexican climber for similar treatment. Glandular-hairy, rose-pink flowers, mottled within, on whitish tubes in summer & autumn.

1.586.610 : MAURANDYA PURPUSII (*Lophospermum purpusii*) A tender, tuberous-rooted, Mexican perennial, which can easily be overwintered in a dormant state, if stored dry & frost-free. Non-climbing with slender, 40cm. long, prostrate stems & lots of long-stalked, carmine-purple flowers, with lined & bearded throats, from the leaf-axils in summer.

1.595.000 to 1.596.999 : MENTZELIA

1.596.009 : MENTZELIA LAEVICAULIS Cal., Plumas Co., E of Quincy. 1100m. (

1.600.000 : MERTENSIA

1.620.000 : MILLA BIFLORA Arizona, Cochise Co., Dragoon Mts., Cochise Stronghold. 1770m. Open, gravelly areas between granite rocks. M. & P. Stone 97-021. (A predominantly Mexican, monotypic bulbous genus, near *Brodiaea*, from one of its more northern localities. Umbels of large, scented, white flowers on slender tubes, sometimes lilac tinted as they open, on stems of around 30cm. high. Possibly best treated as summer-growing & kept dry in winter, when it should be temperature-hardy in the UK, but it can be induced to flower in both spring & early autumn. Sally Walker says it rarely sets much seed in Arizona.)

1.622.000 : MIMULUS CARDINALIS Cal., El Dorado Co. 1300m. Streamside in open woodland. J. & G. Robinett coll. 3.9.95 (A glandular-hairy, rhizomatous perennial with a multitude of striking orange-scarlet flowers streaked with dark red. An eye-catching, hardy (it grows up to 2400m.) wet-grower, surprisingly seldom seen in Europe. 50-90cm. high here.) (100+)

1.622.001 : MIMULUS CARDINALIS Oregon, Josephine Co., near Galice. 270m. Moist sites. P. Gustafson 98-0849 (A glandular-hairy, rhizomatous perennial with a multitude of striking, long-tubed, orange-scarlet flowers streaked with darker red. An eye-catching, hardy (it grows up to 2400m.) wet-grower, surprisingly seldom seen in Europe. 50-90cm. high here.) (100+)

1.624.000 : MIMULUS LEWISII Idaho, Custer Co., Galena Summit. 2450m. Streamside. 21.7.95 (Rich, luminous carmine-pink here. Another showy, N American, wet-growing perennial, extending up into Alaska & the Yukon. About 60cm.) (100+)

1.624.009 : MIMULUS LEWISII Cal., Placer Co., Monumental Ridge above Yuba Gap. 2000m. Streamside on granite. J. Andrews coll. (A long succession of rich, luminous carmine-pink flowers on erect, leafy stems about 60 cm. high in summer. A showy, very hardy, wet-growing perennial, extending up into Alaska & the Yukon. Does well in the UK in any good, moist soil.) (100+)

1.625.000 : MIMULUS TILINGII Cal., Alpine Co., S of Carson Pass. 2750m. Moist, shaded granite crevices. (Big yellow flowers emerge from baggy calyces strongly speckled with crimson. (100+)

1.640.300 : NAMA LOBBII Cal., Placer Co., Monumental Ridge. 1970m. J. Andrews coll. 1994 (Dwarf, rhizomatous, mat-forming perennial in the Hydrophyllaceae with brilliant, blue-purple borage-like flowers. Worth trying in scree.)

1.645.000 : NEMOPANTHUS MUCRONATUS Canada, Nova Scotia, Halifax Co., Ferguson's Cove. J. Weagle coll. (A deciduous shrub 1-3m high in a monotypic genus in *Aquifoliaceae*, close to *Ilex*. Very little-seen in UK gardens, perhaps because the forms grown here seldom bear their crimson fruits as freely as in N America. This wild coll. is from a northern locality & gathered from a selected, particularly heavily fruited, large berried clone, which may bring its good qualities across the Atlantic.)

1.649.000 : NOTOCHELONE NEMOROSA Oregon, Jackson Co., W of Applegate Lake. 1500m. Humus-rich soil in shade. P. Gustafson 98-0863. (A handsome, 50cm. high, herbaceous perennial. A monospecific segregate from *Penstemon*, near *Keckia* but not shrubby & with woolly anthers. Panicles of *Penstemon*-shaped flowers, in lavender-pink in this colony.)

1.649.900 : ODONTOSTOMUM HARTWEGII Cal., Butte Co., E of Paradise, Concow Road. 1060m. Dry creek bed & surrounding flood area. Ex a S. Farwig & V. Girard coll. (A strange, monotypic genus in *Tecophilaeaceae* (if you want to split this from *Liliaceae*), local in N California on serpentine-derived clays. Corms produce 30cm. high racemes of many, tubular, yellow-

white flowers. Surprisingly easy to grow in cultivation.)

1.650.500 : OENOTHERA CAESPITOSA (var. *caespitosa*) Nevada, Eureka Co., SSE of Eureka, Pinto Summit. 2250m. Open, stony slope. (Tufts of deeply notched leaves, tending towards *O.c.var. marginata* (division into infraspecific taxa is rather arbitrary) and profuse stemless, white flowers on long tubes, flushing to wine as they age. All variants of this species are superlative.)

1.650.600 : OENOTHERA CAESPITOSA var. CRINITA Utah, Millard Co., SSE of Garrison. 1600m. Steep, loose, stony slope. (The most important race of this spectacular & variable species for the alpine-house grower. The dry climate development with downy, grey leaves, this remained in character with us, whereas other races can be more exuberant. A succession of long-tubed, white flowers mature to rosy shades. Will take all the warmth & sun going under glass in the UK.)

1.650.800 : OENOTHERA CAESPITOSA var. MARGINATA Cal., Inyo Co., White Mts. 1980m. Stony clay on loose slope. (A better one to try outside in sunny scree - some prove quite easy. Similar, huge, white, pink-flushed bowls.)

1.651.679 : OENOTHERA ELATA subsp. HIRSUTISSIMA (*O. hookeri* subsp. *angustifolia*) Cal., Plumas Co., N of Greenville. 1130m. Moist, S-facing site. (The cold-climate, inland race of a variable, colourful biennial. Erect 1m. tall stems with spikes of many pale-yellow flowers maturing to orange-red. Stems, sepals & flower-tubes are usually red-tinted.)

OENOTHERA LAVANDULIFOLIUS

1.653.500 : OENOTHERA ORGANENSIS New Mexico, Dona Ana Co., Organ Mts. c. 1800m. Around pools & seeps in canyon bottoms. M. & P. Stone 97-013 (An extremely local endemic from this range on the Mexican border, just N of El Paso. Untried in cultivation in the UK, as far as we know. This seed was given to Mike & Polly by BLM staff at the the Dripping Springs Visitor Center, where it grew in a bog by the side of a small pool. May well prove quite easily grown in normal garden conditions in the wetter UK, though its temperature-hardiness is untested. A - high herbaceous perennial with -

1.660.000 : OPUNTIA

1.670.000 : OREOXIS

1.680.000 : ORTHOCARPUS

1.692.000 : OXYTROPIS

1.692.600 : OXYTROPIS LAGOPUS (var. *lagopus*) Wyoming, Park Co., NW of Cody, Dead Indian Hill. 2800m. Open, stony slopes. M. & P. Stone 98-41 (A neat, very hairy, dwarf species with globular, woolly heads of red-purple flowers on 8cm stems from felt-leaved mats. We collected seed of this here in 1987 and the name is our 1987 guess but we are open to correction.)

1.692.720 : OXYTROPIS LAMBERTII No data. A handsome & striking plant of the Rocky Mt. region, distributed from Saskatchewan & Manitoba, South to Arizona & New Mexico. Neat clumps of silver-grey pinnate leaves and stiffly erect racemes, about 30cm. tall, of brilliant carmine-purple pea-flowers. Perhaps the showiest species in the genus

1.692.800 : OXYTROPIS MULTICEPS

1.692.900 : OXYTROPIS NANA

1.693.020 : OXYTROPIS OREOPHILA var. JUNIPERINA Nevada, Eureka Co., W of Eureka. 2100m. Eroded banks of calcareous clay. J. Andrews coll. (The two pulvinate forms of this species are among the most desirable of cushion-plants. Solid, woolly hummocks described by Dwight Ripley, as "densely caespitose & clothed all over in shaggy silver hair, each plant covered with hundreds of violet pea-flowers..." followed by inflated, beaked capsules, which are usually eaten by local rodents.)

1.693.420 : OXYTROPIS SERICEA No data. A look-alike of *O. lambertii*, with which it sometimes crosses, distributed from Yukon South to New Mexico & Oklahoma. Less spectacular than this but perhaps more tasteful with its stout, 30cm. tall stems of white flowers rising from the silver-leaved clumps. Both need well-drained sites in full sun.

1.693.510 : OXYTROPIS SPLENDENS No data. A spectacular species, distributed, mainly on the E slope of the Rockies, from Alaska to New Mexico. Densely silky, greyish foliage and racemes of red-purple pea-flowers.

1.694.500 : PACHYSANDRA PROCUMBENS

1.695.001 : PAEONIA BROWNII Cal., Plumas Co., ESE of Beckwourth. 1520m. Stony slopes with sparse *Artemisia*. (A summer-dormant plant of cold, inland steppe & not at all easy to grow. About 40cm. high with cut, glaucous leaves & globular, nodding flowers. Thick petals in bronze-maroon, thinly margined with yellow.)

1.695.015 : PAEONIA BROWNII Oregon, Wallowa Co., N of Wallowa. 1000-1200m. G. Burrell coll., 1997 (A summer-dormant species adapted to the extreme climate of cold, inland steppe & not at all easy to grow in areas with softer, wetter weather, such as the UK. About 40cm. high with beautiful, cut, glaucous leaves & globular, nodding flowers with thick petals in bronze-maroon, thinly margined with yellow. From a colony of distinct plants with a suckering habit, red stems & red-tinged foliage.)

1.700.000 : PENSTEMON ABIETINUS (Sect. *Caespitosi*) Utah, Sevier Co. 2200m. (Heath-like. 15cm. Rich blue.)

1.700.100 : PENSTEMON ACAULIS (Sect. *Caespitosi*) Wyoming, Sweetwater Co., Lone Pine. 1900 m. J. Andrews coll., 1992. Few

1.700.200 : PENSTEMON ALBIDUS (Sect. *Cristati*) Wyoming, Converse Co. 1980m. 22.7.89 (Plains plant. 20cm. White.)

1.700.300 : PENSTEMON ALPINUS (Sect. *Glabri*) Colorado, Clear Creek Co. 3100m. 30.8.87 (Scree. 20cm. Brilliant clear-blue.)

- 1.700.400 : PENSTEMON AMBIGUUS** (Sect. *Ambigui*) New Mexico, San Miguel Co. 2300m. 19.8.87 (60cm. Phlox-like. Pink)
- 1.700.750 : PENSTEMON ANGUSTIFOLIUS** (Sect. *Coerulei*) Wyoming, Platte Co. 1830m. 21.7.89 (Pure pale azure. 20cm.)
- 1.700.810: PENSTEMON ANGUSTIFOLIUS var. CAUDATUS** (Sect. *Coerulei*) No data. The variant, from S Utah, Arizona and New Mexico, of this 30cm. high, narrow-leaved species. "Another queen in the race...spikes of ample blossoms...not even in Omphalodes is there any matching the tenderyet assured magnificence of the pale azures..." wrote Farrer.
- 1.700.850 : PENSTEMON ANGUSTIFOLIUS var. VENOSUS** Utah, San Juan Co. 1600m. 24.6.93 (Soft lavender. 40cm.)
- 1.700.980 : PENSTEMON AURIBERBIS** (Sect. *Cristati*) No data. A dwarf species endemic to the Arkansas River valley in S Colorado. Lavender flowers with gold-bearded staminodes on 15cm., narrow-leaved stems.
- 1.701.110 : PENSTEMON BARBATUS** (Sect. *Elmigera*) No data. Many brilliant red flowers with the swept-back lower lips, characteristic of humming-bird pollinated species. About 1m. tall and native southwards from Colorado and Utah into Texas and northern Mexico but "hardy in Surrey" (UK), according to Graham Stuart Thomas..
- 1.701.200 : PENSTEMON BARNEBYI** (Sect. *Cristati*) Nevada, White Pine Co., Ward Mt. 2060m. J. Andrews coll. (Endemic to limestone-derived soils in central Nevada. About 20cm. tall with violet flowers. A very few seeds.)
- 1.701.201 : PENSTEMON BARNEBYI** (Sect. *Cristati*) Nevada, White Pine Co., (Hwy 6, 3.8 miles) S of Murray Summit. 2070m. J. Andrews coll. (Endemic to limestone-derived soils in central Nevada. About 20cm. tall with violet flowers. A very few seeds.)
- 1.701.250 : PENSTEMON BARRETTIAE**
- 1.701.300 : PENSTEMON BICOLOR**
- 1.701.350 : PENSTEMON BRACTEATUS** (Sect. *Caerulei*) Utah, Garfield Co., Red Canyon. 2600m. Loose limestone talus on steep slopes. (A specialized scree-plant, narrowly endemic to this area & rated as possibly the best of all the dwarf species by Dwight Ripley but a real challenge to cultivate. Heads of blue flowers on 5cm. stems from rosettes of fleshy, blue-grey leaves, which rise from subterranean stems, threading among the screes of pink Wasatch limestone.)
- 1.701.600 : PENSTEMON CAESPITOSUS var. DESERTI-PICTI** (Sect. *Caespitosi*) Utah, Garfield Co. 2260m. J. Andrews, 1992
- 1.702.000 : PENSTEMON CALCAREUS** (Sect. *Cristati*) Cal., San Bernardino Co., Providence Mts., Bonanza King Mine. 1400m. NE-facing, limestone screes. Ex a J. Andrews coll. (Only known from here & limestone fissures in the Grapevine Mts. above Death Valley, 100 miles to the N. Leaves grey with ashy hairs & 15cm. stems of brilliant pink to rose-purple, funnel-shaped flowers with densely hairy, yellow staminodes. The first & maybe the last collection. A challenge for the alpine-house grower.)
- 1.702.300 : PENSTEMON CARNOSUS** (Sect. *Coerulei*) Colorado, Rio Blanco Co. 2000m. Exposed slopes in loose, fragmented shale. (Rosettes of fleshy, blue-grey leaves with lavender-pink to blue-violet flowers on 15cm. stems. Supposedly endemic to Utah but a lot of species cross the line on the oil-shales here. A neat plant for really hot, dry conditions.)
- 1.702.400 : PENSTEMON CENTRANTHIFOLIUS** (Sect. *Gentianoides*) Cal., Ventura Co., Wagon Road Canyon. 1450m. Among scrub & sparse *Pinus* on stony slopes. (Western cousin of *P. utahensis* from the southern Californian Coast ranges. Luminous scarlet, tubular flowers on 60cm. stems above blue-grey basal leaves. Will need cool, dry winters & hot, dry summers.)
- 1.702.810 : PENSTEMON COBAEA** (Sect. *Cristati*) No data. One of the parents of the hybrids grown in British gardens and "surely one of the most showy species" (Robert Nold). From calcareous loams in E Nebraska, Missouri and Arkansas, it is temperature-hardy and enjoys plenty summer rain. Huge, bloated lilac to purple flowers on leafy, 60cm. stems.
- 1.702.900 : PENSTEMON COMARRHENUS** (Sect. *Glabri*) Utah, Garfield Co. 2600m. (Soft lavender-blue. 60cm.)
- 1.702.960 : PENSTEMON COMPACTUS** (Sect. *Glabri*) Utah, Cache Co., Bear River Range, Mt. Naomi. 2500m. Open, stony, E-facing, limestone slopes. (An extremely desirable dwarf plant, about 15cm. tall with compact verticillasters of flowers in deep, pure sky-blue. Endemic to a small area of these mountains bordering Utah and Idaho, it is maintained as a separate species by Holmgren in 'Intermountain Flora' but reduced to a var. of *P. cyananthus* by Neese in 'A Utah Flora'. Having seen this in nature, we side with Holmgren. It grows with the more widespread *P. cyananthus* and *P. leonardii* but the population remains distinct and even. The three species all have the same chromosome number.)
- 1.703.010 : PENSTEMON CONFERTUS** (Sect. *Penstemon*) No data. A long-lived, 40cm. tall species widely distributed in the Pacific NW, extending into Alberta and British Columbia. Dense clusters of pale-yellow flowers.
- PENSTEMON CONFUSUS** Utah, Garrison Co. 1900m. J. Andrews coll.
- PENSTEMON CONCINNUS** Utah, Garrison Co., Cedar Pass. 1860m. J. Andrews coll.
- 1.703.200 : PENSTEMON CRANDALLII** (Sect. *Caespitosi*) Colorado, Montrose Co. 2900m. (Thyme-like. Lavender-blue.)
- 1.703.250 : PENSTEMON CRANDALLII var. ATRATUS** Utah, Grand Co. 2590m. (Prostrate mats. La Sal Mts. endemic.)
- 1.703.300 : PENSTEMON CYANANTHUS** (Sect. *Glabri*) Utah, Weber Co. 3100m. (Gentian-blue flowers. 80cm.)
- 1.703.301 : PENSTEMON CYANANTHUS** (Sect. *Glabri*) Utah, Rich Co., Wasatch Mts., Wasatch Ridge to Squaw Flat. 3200m. Meadows with sparse *Artemisia* (Gentian-blue flowers. 80cm.)
- 1.703.302 : PENSTEMON CYANANTHUS** (Sect. *Glabri*) Utah, Cache Co., Bear River Range. 3100m. (The glory of the Wasatch Mts., E of Salt Lake City. Stout 80cm. tall stems with dense-flowered, cylindrical spires of rich gentian-blue flowers. "A

beautiful, showy plant...it creates a stunning show when in full flower” writes Robert Nold.)

- 1.703.500 : PENSTEMON CYANEUS** (Sect. *Glabri*) Idaho, Custer Co. 2440m. Gravelly banks. (Showy bright blue. 60cm.)
- 1.703.600 : PENSTEMON CYANOCAULIS** (Sect. *Glabri*) Colorado, Montrose Co., NW of Bedrock. 1800m. Among *Pinus* & *Juniperus* on open, sandstone slopes. (A seldom-collected & extremely local species only known from this uranium-mining area. Most distinct, leathery, basal leaves with crisped edges & 30cm. high stems of violet-blue flowers.)
- 1.703.700 : PENSTEMON DAVIDSONII** (Sect. *Erianthera*) Nevada, Washoe Co. 3050m. (Mat-forming. Violet-blue.)
- 1.703.705 : PENSTEMON DAVIDSONII** (var. *davidsonii*) (Sect. *Erianthera*) Oregon, Jackson Co., Siskiyou Mts., S of Ashland. 2150m. Fissures on granite outcrops above tree-line. Ex P. Gustafson 98-0874 (A soft pinkish lavender form (here it may have absorbed some genes from *P. rupicola*) of this superlative, normally blue, alpine, growable in a trough or raised bed in the UK. Shrubby, grey-leaved mats massed with big flowers, packed with shaggy white hairs inside & with yellow-hairy staminodes.)
- 1.703.720 : PENSTEMON DAVIDSONII** var. **PRAETERITUS** (Sect. *Erianthera*) An outstanding variant endemic to the isolated Steens Mts. of SE Oregon and adjacent Santa Rosa range in N Nevada. “One of the most spectacularly beautiful wildflowers of the Intermountain Region” comments Noel Holmgren. The shrubby, greyish mats have smaller leaves but the huge blue-lavender to violet flowers, packed with shaggy white hairs inside & with yellow-hairy staminodes, are almost twice as large as the type-race, itself a superlative alpine, usually growable in a trough or raised bed in the UK.
- 1.704.000 : PENSTEMON DUCHESNENSIS** (Sect. *Cristati*) Utah, Duchesne Co. 1900m. (Dwarf. Blue-purple.)
- 1.704.100 : PENSTEMON EATONII** (Sect. *Elmigera*) Utah, San Juan Co. 1550m. (Eye-burning scarlet tubes. 1m.)
- 1.704.120 : PENSTEMON EATONII** (Sect. *Elmigera*) No data. The spectacular firecracker penstemon of the south-western States with 1m. tall wands of tubular flowers in eye-burning scarlet. Will need a very hot, dry site in the UK.)
- 1.704.300 : PENSTEMON ERIANTHERUS** (Sect. *Cristati*) Wyoming, Platte Co. 1830m. (Pale-violet prairie-plant. 20cm.)
- 1.704.550 : PENSTEMON FLORIDUS** (Sect. *Spectabiles*) Cal., Inyo Co. 2070m. (Pouting, rose-pink flowers. 1.2m)
- 1.704.650 : PENSTEMON FLOWERSII** (Sect. *Coerulei*) Utah, Uintah Co. 1600m. (Rose-pink. 20cm.)
- 1.704.750 : PENSTEMON FRANCISCI-PENNELLII** (Sect. *Glabri*) Nevada, White Pine Co. 3400m. (Blue-violet. 15cm.)
- 1.704.800 : PENSTEMON FREMONTII** (Sect. *Glabri*) Colorado, Rio Blanco Co. 1980m. (Deep blue. 15cm. Scree-form.)
- 1.704.900 : PENSTEMON FRUTICIFORMIS** (Sect. *Spectabiles*) Cal., Inyo Co. 1830m. (Purple-streaked lavender. 50cm.)
- 1.704.950 : PENSTEMON FRUTICOSUS** (Sect. *Erianthera*) Idaho, Custer Co. 1890m. (Lavender-blue. Shrubby. 30cm.)
- 1.705.100 : PENSTEMON GLABER** (Sect. *Glabri*) Wyoming, Converse Co. 1980m. (Richest blue. Decumbent stems.)
- 1.705.200 : PENSTEMON GOODRICHII** (Sect. *Cristati*) Utah, Uintah Co. 2000m. (Pale-blue regular flowers. 30cm.)
- 1.705.300 : PENSTEMON GRACILENTUS** (Sect. *Saccanthera*) Cal., Sierra Co. 2050m. (Blue-purple. Wiry 60cm. stems)
- 1.705.400 : PENSTEMON GRAHAMII** (Sect. *Cristati*) Utah, Uintah Co. 1600m. Ex a J. Andrews coll. (Pink. 10cm.)
- 1.705.460 : PENSTEMON GRANDIFLORUS** No data. The most eastern and the most moisture tolerant member of its section, this is a sturdy, 60cm. tall Great Plains species, which, though once distributed from NE Wyoming to Minnesota and S into Texas, has now lost most of its habitat. Big purple-pink bells with darkly lined throats.
- 1.705.500 : PENSTEMON GRINELLII** (Sect. *Spectabiles*) Cal., Los Angeles Co. 750m. (White to lavender-pink. 60cm.)
- 1.705.520 : PENSTEMON GRINELLII** var. **SCROPHULARIOIDES** (Sect. *Spectabiles*) Cal., Ventura Co. 1400m. (More or less violet.)
- 1.705.600 : PENSTEMON HALLII** (Sect. *Glabri*) Colorado, Park Co. 3800m. (Luminous red-violet. 15cm.)
- 1.705.620 : PENSTEMON HALLII** (Sect. *Glabri*) No data. A marvellous species endemic to the Colorado Rockies at the higher altitudes around the Continental Divide. Mats of close-clumped rosettes of narrow, smooth leaves and 15cm. tall stems of bell-shaped flowers in an unusual shade of luminous, reddish violet with projecting bearded staminodes.
- 1.705.760 : PENSTEMON HAVARDII** (Subsect. *Havardiana*) No data. A big, showy plant endemic to the Big Bend of Texas, where the Gulf of Mexico curves South to Mexico. Large leaves clasp the 1.5m. tall stem carrying hairy, scarlet flowers with projecting upper lips. It should enjoy moist British summers but, though temperature hardy, not the wet winters.
- 1.705.850 : PENSTEMON HETEROPHYLLUS** (Sect. *Saccanthera*) Cal., Butte Co. 1060m. (Royal-blue to burgundy. 60cm.)
- 1.705.960 : PENSTEMON HIRSUTUS** (Sect. *Penstemon*) No data. An eastern species, distributed from Ontario southward to Tennessee & easily grown in British gardens. About 40cm tall with pale-purple, white-lobed flowers
- 1.706.000 : PENSTEMON HUMILIS** (Sect. *Penstemon*) Idaho, Butte Co., NE of Carey. 1520m. (Woody-based mats send up erect, wiry 20cm. stems with whorls of little, very deep blue, tubular flowers. One of the best of this less spectacular section.)
- 1.706.100 : PENSTEMON IDAHOENSIS** (Sect. *Glabri*) Idaho, Cassia Co., Goose Creek drainage. 1480m. J. Andrews coll. (A very local species restricted to the Idaho/Utah line & quite recently described. About 20cm. tall with narrow, sticky leaves & blue-purple flowers, described by John as a “fantastic looking plant in white tuff soil.”

- 1.706.200 : PENSTEMON IMMANIFESTUS** (Sect. *Coerulei*) Nev., White Pine Co., Snake Range. 2130m. (About 30cm. tall with blue-grey leaves and many lavender-pink flowers. A plant of clay soils in the eastern Great Basin.)
- 1.706.300 : PENSTEMON JAMESII** (Sect. *Cristati*) New Mexico, San Miguel Co. 2300m. (Blue-violet. 30cm.)
- 1.706.400 : PENSTEMON JANISHIAE** (Sect. *Cristati*) Nevada, Eureka Co. 2100m. (Near *P. grahamii*. Pink. 15cm.)
- 1.706.500 : PENSTEMON LABROSUS** (Sect. *Elmigeri*) Cal., Kern Co. 2250m. (Elegant orange-scarlet. 50cm)
- 1.706.600 : PENSTEMON LAETUS** (Sect. *Saccanthera*) Cal. Nevada Co. 1370m. 19.8.89 (Blue-violet. 60cm.)
- 1.706.800 : PENSTEMON LARICIFOLIUS** (Sect. *Laricifolii*) Wyoming, Hot Springs Co. 1500m. (Salmon-pink. 15cm.)
- 1.706.900 : PENSTEMON LARICIFOLIUS var. EXILIFOLIUS** Wyoming, Albany Co. (Tiny white race.)
- 1.707.100 : PENSTEMON LENTUS** (Sect. *Coerulei*) Colorado, San Miguel Co. 2150m. (Blue. Glaucous leaves. 30cm.)
- 1.707.150 : PENSTEMON LENTUS var. ALBIFLORUS** (Sect. *Coerulei*) Utah, San Juan Co. 2100m. (White flushed pink or bluish. 40cm.)
- 1.707.200 : PENSTEMON LEONARDII** (Sect. *Saccanthera*) Utah, Weber Co. 3100m. (Gentian-blue. Low, shrubby. 15cm.)
- 1.707.201 : PENSTEMON LEONARDII** (var. *leonardii*) (Sect. *Saccanthera*) Utah, Cache Co., Bear River Range. 3100m. (A dwarf, compact species, forming low, 20cm. high shrubs with narrow, thickish leaves and masses of deep gentian-blue flowers. A superlative plant but "unfortunately very difficult to germinate" according to Robert Nold.)
- 1.707.500 : PENSTEMON LINARIOIDES** (Sect. *Caespitosi*) Colorado, San Miguel Co. SW of Slick Rock. 2150m. Open, gravelly 'flats' with *Pinus*. (Neat, heath-like shrublets with numerous, erect, 15-20cm. stems, each with up to 30, soft lilac-blue flowers with white throats. The members of this section have proved quite amenable to UK alpine-house cultivation.)
- 1.707.550 : PENSTEMON LINARIOIDES var. COLORADOENSIS** (Sect. *Caespitosi*) The race of this complex species from SW Colorado and NW New Mexico. A neat, heath-like shrublet with numerous, erect, 15-20cm. stems, each with up to 30, soft lilac-blue flowers with white throats. This section has proved quite amenable to UK alpine-house cultivation.)
- 1.707.700 : PENSTEMON MENSARUM** (Sect. *Glabri*) A beautiful endemic of the great flat-topped mountain, Grand Mesa in Delta Co., Colorado, by no means a dry habitat. Whorls of deepest royal-blue flowers on 50cm. stems.
- 1.707.900 : PENSTEMON MOFFATII** (Sect. *Cristati*) Colorado, Mesa Co., Gateway. 1600m. Steep, open, loose clay slopes. (A little-known & local, Colorado Plateau endemic. Early-flowering with blue-purple flowers & sticky foliage. 20cm.)
- 1.708.000 : PENSTEMON MUCRONATUS** (Sect. *Coerulei*) Utah, Daggett Co. 2250m. (Opalescent lavender-blue. 20cm.)
- 1.708.101 : PENSTEMON MONTANUS** (Sect. *Erianthera*) Idaho, Lemhi Co., Beaverhead Mts. c.2750m. Loose talus on steep slope. Ex M. & P. Stone 98-9 (Decumbent stems with toothed, greyish leaves & large, lavender flowers, bearded inside.)
- 1.708.150 : PENSTEMON MORIAHENSIS** (Sect. *Glabri*) Nevada, White Pine Co., Snake Range, Mt. Moriah. 2670m. In pinyon-juniper-sagebrush associations. J. Andrews coll. (A local species, only discovered in 1977 & limited to this county. Erect stems of about 30cm. carry cymes of large flowers, in a rich penetrating blue, with white-hairy anthers in their throats.)
- 1.708.200 : PENSTEMON NANUS** (Sect. *Cristati*) Utah, Millard Co., SSE of Garrison. 1980m. Open slope in calcareous gravel. J. Andrews coll. (A restricted Utah endemic, here in its type-locality. Maybe nearest *P. duchesnensis* with ashy foliage & rose-purple flowers. Orange-bearded staminodes. 7cm. or less.)
- 1.708.201 : PENSTEMON NANUS** (Sect. *Cristati*) Utah, Beaver Co., Lime Point. 1890m. Calcareous gravel. J. Andrews coll. (A restricted Utah endemic, only 7cm. or less tall. Maybe nearest *P. duchesnensis* with ashy foliage & rose-purple flowers with orange-bearded staminodes. Alpine-house in UK with as much sun as possible throughout the year.)
- 1.708.450 : PENSTEMON NEOTERICUS** (Sect. *Saccanthera*) Cal., Plumas Co. G. Greger coll. (A local species limited to volcanic soils in this very cold area of N California. Woody-based and about 50cm. tall with narrow, glaucous cauline leaves and racemes of many, pink-tinged, violet-blue flowers on wiry stems in summer.)
- 1.708.500 : PENSTEMON NEWBERRYI** (var. *newberryi*) (Sect. *Erianthera*) Cal., Madera Co. 1900m. Granite. J. Andrews coll., 1995 (Woody mats of little, toothed, leathery leaves with 15cm. stems of vivid rose-red flowers - "baggy bugles of a ferocious aniline red-mauve most terrible and breathtaking" wrote Farrer. The type-race from the Sierra Nevada. An excellent, hardy, rock-garden plant.)
- 1.708.501 : PENSTEMON NEWBERRYI** (var. *newberryi*) (Sect. *Erianthera*) Cal., Plumas Co. 1370m. E-facing, granite slope. G. Greger coll. (Woody mats of little, toothed, leathery leaves with 15cm. stems of tubular, vivid rose-red flowers : "baggy bugles of a ferocious aniline red-mauve most terrible and breathtaking" wrote Farrer. The type-race from the Sierra Nevada. An excellent, hardy, rock-garden plant, more vulnerable to excess water in than cold in winter.)
- 1.708.600 : PENSTEMON NEWBERRYI var. SONOMENSIS** Cal., Mendocino Co. 2040m. (Carmine-purple NW race.)
- 1.708.760 : PENSTEMON OPHIANTHUS** (Sect. *Cristati*) No data. A 30cm. tall endemic of the Four Corners area, where Utah, Colorado, Arizona and New Mexico meet. Lavender to blue-violet flowers with yellow-bearded staminodes.
- 1.708.900 : PENSTEMON PACHYPHYLLUS var. CONGESTUS** (Sect. *Coerulei*) Nevada, White Pine Co., Snake Range. 2450m. Ex a J. Andrews coll. (The Great Basin race of this showy species with thick, glaucous basal foliage & 30-50cm. stems of

many, lavender-blue flowers with yellow-bearded staminodes. A plant of gravelly or sandy soils.)

1.708.901 : PENSTEMON PACHYPHYLLUS var. CONGESTUS (Sect. *Coerulei*) Nevada, White Pine Co., S of Murray Summit. 2070m. Ex a J. Andrews coll. (The Great Basin race of this showy species with thick, glaucous basal foliage & 30-50cm. stems of many, lavender-blue flowers with yellow-bearded staminodes. A plant of gravelly or sandy soils.)

1.709.100 :# PENSTEMON PALMERI (Sect. *Spectabiles*) Nevada, White Pine Co. 2200m. (Huge pink flowers. 2m.)

1.709.150 : PENSTEMON PALMERI (Sect. *Spectabiles*) No data. A native of southern Utah, Nevada & adjacent California & Arizona, which is hard to surpass for sheer size and impact. Woody-based clumps of blue-grey, toothed leaves and great, 2m. tall wands of huge, pink flowers, marked inside with wine-red & with yellow-bearded staminodes.)

1.709.200 : PENSTEMON PALMERI var. EGLANDULOSUS Utah, Kane Co. 1900m. (Shell-pink. 60cm.)

1.709.450 : PENSTEMON PAYSONIORUM (Sect. *Glabri*) Wyoming, Lincoln Co., N of Opal. 2050m. Bare areas in open grassland, in sandy clay. (Endemic to the 'barrens' of SW Wyoming with showy, rich blue flowers on 20cm. stems.)

1.709.500 : PENSTEMON PERPULCHER (Sect. *Glabri*) Idaho, Butte Co., NE of Carey. 1520m. E & SE-facing slopes of stony ridge. (Deep blue-flowered, 50cm. high endemic of the area around the Snake River Plains in Idaho)

1.709.600 : PENSTEMON PETIOLATUS (Sect. *Petioliati*) Nevada, Clark Co., Charleston Mts., Indian Ridge. 1615m. E-facing limestone cliffs. Ex a J. Andrews coll. (A very local, dwarf, gnarled, saxatile shrub with "flowers of intense turquoise and small leaves sharply toothed", according to Dwight Ripley & John. All other 'authorities' say "magenta", which we guess applies only to the Utah population. Collected after many attempts & much effort by John, it should be treasured in the alpine-house.)

1.709.660 : PENSTEMON PINIFOLIUS (Sect. *Leptostemon*) No data. Spreading mats of needle-leaved, shrubby stems with tubular scarlet flowers. Well-known to European alpine-growers but a very local plant in nature, confined to northern Mexico and just across the border into Arizona and New Mexico. Without hummingbirds little seed is set in the UK.

1.709.661 : PENSTEMON PINIFOLIUS from YELLOW FORM Seeds from the yellow-flowered form, named 'Mersea Yellow', which occurred in cultivation in England. A proportion of seedlings should be yellow-flowered.

1.710.100 : PENSTEMON PSEUDOPARVUS New Mexico, Socorro Co., Magdalena Mts. 3170m. Moist alpine meadow. M.& P.Stone 02-028. (A little-known, high altitude endemic of the summits of the adjacent Magdalena & San Mateo ranges, W of Socorro in W New Mexico. A dwarf, 15cm. version of the more widespread *P. oliganthus*. Rich blue flowers.)

1.710.101 : PENSTEMON PSEUDOPARVUS New Mexico, Socorro Co., San Mateo Mts. 3080m. Moist alpine meadows, forest edges & openings. M.& P.Stone 02-033,

1.710.160 : PENSTEMON PSEUDOSPECTABILIS (Sect. *Spectabiles*) No data. "Superb!" comments Panayoti Kelaidis. "Incomparable" writes Robert Nold. Pouting rose-pink flowers on 1.5m. stems, clasped by blue-green leaves. Distributed SE from Nevada through Arizona and New Mexico it occurs up to about 2000m altitude and is temperature-hardy.

1.710.300 : PENSTEMON PURPUSII (Sect. *Saccanthera*) Cal., Mendocino Co., below Hull Mountain. 2040m. Ex a J. Andrews coll. (Choice alpine from the N Coast Range serpentines. Mats of little round, ash-grey leaves & baggy, luminous imperial-purple flowers. Grows well with us.)

1.710.600 : PENSTEMON ROSTRIFLORUS (Sect. *Bridgesiani*) Cal., Mono Co., S of Bridgeport. 2750m. Exposed, steep, loose, gravelly slope. (Spectacular scarlet tubes. 50cm.)

1.710.620 : PENSTEMON ROSTRIFLORUS (Sect. *Bridgesiani*) No data. A spectacular, 50cm., scarlet-flowered species from the mountain-ranges of the south-western States of the USA. Its tubular, hooded orange-red flowers appear late in summer. Temperature-hardy and tolerant of very dry conditions, it will need the hottest, driest site available in the UK.)

1.710.704 : PENSTEMON RUPICOLA (Sect. *Erianthera*) Cal., Siskiyou Co., SW of Castle Lake. 1750m. Granite crevices on open slopes. (The classic, saxatile, alpine species of the Cascades, southward from Washington to N California. Shrubby mats with small, rounded, glaucous-grey leaves and large, woolly-anthered flowers, here in shades from pale to deep pinks.)

1.710.705 : PENSTEMON RUPICOLA (Sect. *Erianthera*) Oregon, Jackson Co., W of Applegate Lake. 1800m. Ex P. Gustafson 98-0865. (The classic, saxatile, alpine species of the Cascades, southward from Washington to N California. Shrubby mats with small, rounded, glaucous-grey leaves and large, woolly-anthered flowers, here in an outstanding deep-pink form.)

1.710.760 : PENSTEMON RYDBERGII No data.

1.710.800 : PENSTEMON SCAPOIDES (Sect. *Saccanthera*) Cal., Inyo Co., White Mts., SW of Westgard Pass. 2100m. Gravelly, slope. (White Mts. endemic. Lilac-blue flowers on 15cm. stems from grey-leaved, woody-based mats. 15cm.)

1.710.950 : PENSTEMON SCARIOSUS var. GARRETTII (Sect. *Glabri*) Utah, Daggett Co. 2300m. (Superb blue. 40cm.)

1.711.000 : PENSTEMON SECUNDIFLORUS (Sect. *Coerulei*) Wyoming, Albany Co. 2800m. (Soft lilac-pink. 15cm.)

1.711.310 : PENSTEMON SMALLII (Subsect. *Penstemon*) No data. Endemic to a small area in the western Carolinas and adjacent Tennessee, this is "possibly the showiest species" in its subsection according to Robert Nold. About 60cm. tall with big purple flowers appearing among large, leafy bracts in midsummer. This should be a good plant for the UK

1.711.350 : PENSTEMON SPECIOSUS (Sect. *Glabri*) Nev., Washoe Co., SW of Mt. Rose. 3080m. Stony slopes & exposed summit-ridges. (Deep blue shaded violet. Prostrate form)

- 1.711.351 : PENSTEMON SPECIOSUS** (Sect. *Glabri*) Cal., . G. Greger coll. (A spectacular 30cm. species, aptly named "showy", with large, white-throated flowers in deep-blue, shading to violet basally. This is by far the most widespread of Sect. *Glabri*, distributed from Utah & Idaho across Nevada to the Pacific Coast states, & is accordingly variable.)
- 1.711.450 : PENSTEMON SPECTABILIS** (Sect. *Spectabiles*) Cal., Riverside Co. 1600m. (Showy blue-purple. 1m.)
- 1.711.700 : PENSTEMON STRICTUS** (Sect. *Glabri*) Wyoming, Fremont Co. 2800m. (Rich blue. Woolly white anthers.)
- 1.711.720 : PENSTEMON STRICTUS** (Sect. *Glabri*) No data. Flat basal rosettes of narrow leaves send up erect, 60cm. stems carrying many, rich-blue with woolly white anthers. An outstanding species of the Rocky Mountain States, from Wyoming to New Mexico. Seed from the selection, 'Bandera', slightly darker blue but otherwise typical of the species)
- 1.711.900 : PENSTEMON SUBGLABER** (Sect. *Glabri*) Utah, Sevier Co. 2200m. (Deep blue. Robust. 60cm.)
- 1.712.050 : PENSTEMON TEUCRIOIDES** (Sect. *Caespitosi*) Colorado, Park Co. 3000m. (Lavender-blue. 9cm. shrublet.)
- 1.712.100 : PENSTEMON THOMPSONIAE** (subsp. *thompsoniae*) (Sect. *Caespitosi*) Nevada, White Pine Co., Hamilton Road. 2050m. In calcareous clay on open 'flats'. Ex a J. Andrews coll. (A shrubby, caespitose mat-former, the Great Basin cousin of *P. caespitosus*, under which it has been included in the past. Prostrate stems set with tiny, ashy-white leaves carry violet-blue flowers with orange-gold bearded staminodes. Adjured to extreme summer-heat & sunlight, so alpine-house only in the UK.)
- 1.712.150 : PENSTEMON THOMPSONIAE subsp. JAEGERI** (Sect. *Caespitosi*) Nevada, Clark Co. 2500m. J. Andrews
- 1.712.500 : PENSTEMON TRACYI** Cal., Trinity Co. 2090m. Ex a J. Andrews coll. (Narrowly endemic to igneous rock crevices in the Trinity Alps. Like nothing else in the genus. Round, leathery leaves & white to pink flowers on 10cm. shrubs.)
- PENSTEMON TUSHARENSIS** (*P. caespitosus suffruticosus*) Utah, Beaver Co., Merchant Meadow. 2640m. J. Andrews coll.
- 1.712.700 : PENSTEMON UTAHENSIS** (Sect. *Gentianoides*) Colorado, Mesa Co., Gateway. 1600m. Steep clay slope in full sun. (Spectacular wands of brilliant carmine-red, funnel-shaped flowers. Leathery, blue-grey leaves. 50cm.)
- 1.712.900 : PENSTEMON VIRENS** (Sect. *Penstemon*) Wyoming, Albany Co. 2250m. (Violet-blue. 15cm.)
- 1.712.920 : PENSTEMON VIRENS** (Sect. *Penstemon*) No data. Inflorescences of many bright deep-blue flowers on 20cm. tall stems from rosettes of glossy green leaves. A characteristic species of the eastern slope of the Rocky Mts. in S Wyoming and Colorado & one of the most satisfactory in the rock-garden or a raised bed, even in the UK.
- 1.713.100 : PENSTEMON VIRGATUS subsp. ASA-GRAYI** (Sect. *Glabri*) Colorado, Park Co. 3100m. (Rich-blue. 30cm.)
- 1.713.120 : PENSTEMON VIRGATUS subsp. ASA-GRAYI** (Sect. *Glabri*) No data. A beautiful, 60cm. tall meadow-plant of the Rocky Mts. in Colorado & S Wyoming. Erect wands of white-bearded flowers in rich light-blue.)
- 1.713.400 : PENSTEMON WATSONII** (Sect. *Penstemon*) Utah, Piute Co. 2700m. (Clustered, deep-blue heads. 40cm.)
- 1.713.500 : PENSTEMON WHIPPLEANUS** (Sect. *Penstemon*) New Mexico, Bernalillo Co. 3500m. (Wine-purple. 50cm.)
- PHACELIA SERICEA**
- 1.743.400 : PHLOX ACULEATA**
- 1.743.500 : PHLOX ADSURGENS** Oregon, ("One of the most beautiful members of the genus" comments Edgar Wherry in his monograph on *Phlox*. Mats of stems clad with glossy, leathery leaves send up 20cm, high inflorescences of up to 12, very large, soft-pink flowers. Separated by the width of the North American continent from the violet-flowered, eastern woodlander, *P. stolonifera*, its closest relative and the only other species in Subsection *Stoloniferae*. For acid humus in light shade.)
- 1.743.600 : PHLOX ALBOMARGINATA**
- 1.743.700 : PHLOX ALYSSIFOLIA**
- 1.743.800 : PHLOX AMABILIS**
- 1.743.900 : PHLOX AMOENA**
- 1.744.000 : PHLOX AMPLIFOLIA**
- 1.744.100 : PHLOX ANDICOLA**
- 1.744.200 : PHLOX AUSTROMONATA**
- 1.744.300 : PHLOX BIFIDA**
- 1.744.400 : PHLOX BOREALIS**
- 1.744.500 : PHLOX BRYOIDES**
- 1.744.609 : PHLOX BUCKLEYI** West Virginia. No further data. (A stoloniferous woodlander spreading into colonies of narrow-leaved rosettes, which send up erect 20cm. stems carrying downy inflorescences of up to 25, bright purple to pink flowers in early summer. Endemic to open woodland on the shales of a small area of the Appalachians, its closest relative & the only other member of Subsection *Cluteanae*, *P. cluteana*, grows in an even smaller area along the Utah-Arizona line, in the pine-woods of the Lukachukai Mts. of Navajo Land, where we searched unsuccessfully in 1989.)
- 1.744.700 : PHLOX CAESPITOSA**

- 1.745.009 : PHLOX CAROLINA** Alabama. No further data. (From a southern collection of this highly variable species from the open woodlands of the SE States. It can reach 1m. in height with cymes of up to 60 purple flowers.)
- 1.751.000 : PHLOX SPECIOSA** Washington, Klickitat Co., summit of Dalles Mt. 700m. G. Burrell coll. (Handsome, shrubby-based species. In this form with loose cymes of blush-white to light-pink flowers. About 20cm.)
- 1.751.100 : PHLOX STANSBURYI** (*P. longifolia* var. *stansburyi*) Cal., Mono Co., N of Conway Summit. 2200m. J. Andrews coll., 1995 (From the pinyon-juniper zone of the Sierra Nevada. Usually very large & full, pink to white flowers here. Woody based to 15cm.)
- 1.751.101 : PHLOX STANSBURYI** (*P. longifolia* var. *stansburyi*) Cal., Inyo Co., White Mts. 2500m. Among *Juniperus* in fragmented shale. (An attractive plant of dry, montane pinyon-juniper & sagebrush associations from the E slopes of the Sierra Nevada across to Utah. Stems of about 15cm. with narrow leaves carry large, long-tubed, pink to white flowers.)
- 1.751.200 : PHLOX TUMULOSA** Nevada, White Pine Co., NE of Ruth. Type locality.
- 1.751.201 : PHLOX TUMULOSA** Nevada, White Pine Co., NW of Ely. 2200m. Openings among *Juniperus* in gravelly clay. (The most densely pulvinate-caespitose development in the genus, from a few intermontane valleys in E Nevada, just into W Utah. Tiny rosettes compressed into the hardest of mats or mounds up to 50cm. across with stemless flowers in white to pale violet. Needs year-round cultivation in the alpine-house in the UK, where it cannot have enough sunshine. Summer daytime temperatures here often exceed 40C, well over 100F, with the soil surface temperature greatly in excess of that. Seed-collecting is not pleasant.)
- 1.752.000 : PHOENICULIS CHEIRANTHOIDES**
- 1.752.500 : PHYLLODOCE**
- 1.753.000 : PHYSARIA**
- 1.753.209 : PHYSARIA CHAMBERSII** (var. *chambersii*) Nevada, Eureka Co., W of Eureka. 1870m. (A very neat, small form of this attractive member of *Cruciferae*. Rosettes of ashy white foliage. Masses of pearly bubbles follow the yellow flowers.)
- 1.760.200 : POLEMONIUM CARNEUM** Oregon, Jackson Co., Siskiyou Mts., S of Ashland. 1400m. P. Gustafson 99-0751 (An unusual & handsome, taller species, up to 50cm. high, with clusters of rather flat, bell-shaped flowers in apricot-pink, opening early in spring & continuing into summer. Adaptable in UK gardens, making slow-spreading, basal mats in a sunny site.)
- 1.760.300 : POLEMONIUM CHARTACEUM** Cal., Trinity Co., Mt. Eddy. 2740m. Exposed summit area. J. Andrews coll. 1995 (A remarkable disjunct population here. Otherwise known only from above 4000m. in the White Mts. In effect, a miniature *P. viscosum* but distinguished from this & *P. eximium* by its exerted stamens & the papery (chartaceous) base of the petioles. Little tufts of glandular foliage and heads of blue flowers, usually with yellow throats. Should be growable in skilled hands.)
- 1.760.660 : POLEMONIUM PAUCIFLORUM** No data. An elegant, 30cm. high perennial from streamsides in the mountains of southern Arizona & New Mexico at altitudes up to 3000m. Cut-leaved clumps with clusters of pendant, long-tubed flowers in soft yellow, flushed with pink externally, in late summer. Quite easy & hardy in the UK in sun or part-shade.
- 1.760.755 : POLEMONIUM PULCHERRIMUM** Oregon, Jackson Co., Siskiyou Mts., S of Ashland. 2150m. Moist, shaded areas at tree-line. (A dwarf, caespitose, alpine perennial with tufts of compound foliage & erect, 15cm. stems carrying crowded heads of open bells. Phyllis tells us the colour here varies from blue to white & we may have a population intergrading towards the dwarfer, hairier, white-flowered *P.p.* var. *pilosum*, local on volcanic talus from around here N to Washington.)
- 1.760.800 : POLEMONIUM REPTANS**
- 1.760.950 : POLEMONIUM VISCOSUM** Nevada, White Pine Co., Snake Range, Mt. Moriah Table. 3475m. J. Andrews coll. (From a disjunct population of this classic Rocky Mt. alpine, isolated on top of this Great Basin range, where its flowers approach those of Californian *P. chartaceum*. Tufts of sticky, dissected basal leaves with 15cm. stems carrying dense heads of flowers in an intense violet-blue. Not usually difficult to keep alive in the UK but a challenge to grow to perfection.)
- 1.764.100 : POLYSTICHUM LEMMONII** Cal., Trinity Co., Mt. Eddy. 2630m. Open, rocky sites. J. Andrews coll. 1995 (An extremely choice, local serpentine fern. Stiff, upright leaf-blades, 15-30cm. high. Slow-growing & ideal for a trough or pan.)
- 1.766.950 : POTENTILLA THURBERI** New Mexico. No further data. (A most distinct and intriguing species from moist, montane habitats in southern New Mexico & Arizona into northern Mexico. Many erect stems with pinnate, toothed foliage can reach about 70cm. to carry lots of deep, dusky red, dark-eyed flowers over a long period in late summer.)
- 1.768.000 : PRIMULA CAPILLARIS** Nevada, Elko Co., Ruby Mts., Thomas Creek Canyon. 2835m. J. Andrews coll. (The most local and certainly the most difficult to grow of the relict, western primroses. A pinch of seed only.)
- 1.768.050 : PRIMULA CUSICKIANA** Idaho, Custer Co., Salmon River Mts., Railroad Ridge. 3140m. M.& P. Stone 98-8 (One of the most exquisite & intractable of primroses, barely if at all in cultivation at present, from a comparatively recently discovered locality at a much higher elevation than the more western populations in the Wallowas & Snake River area. A snow-melt species, flowering when the ground is saturated but going dormant rapidly as it dries out. Possibly very intolerant of high temperatures & extreme drying in summer. Luminous, deep violet flowers with starry yellow eyes, on stems less than 10cm. high.)
- 1.768.100 : PRIMULA DOMENSIS** Utah, Millard Co., House Range, Notch Peak. 2450m. Ledges on & at base of limestone cliffs in part-shade. J. Andrews coll. (Recently discovered & described, the largest flowered of the *P. cusickiana* group with rose to lavender flowers. Difficult but possible under *Dionysia*-conditions in the UK, it tends to summer dormancy.)

- 1.768.400 : PRIMULA NEVADENSIS** Nevada, White Pine Co., Snake Range. 3440m. Limestone fell-field. (Endemic to the summit of this Great Basin Range but now being cultivated from John's 1991 coll. Large, violet-purple, yellow-eyed flowers on short stems. It can make quite large clumps in this site. Probably nearer the Rocky Mt. *P. angustifolia* than to *P. cusickiana*. For careful cultivation by the alpine-plant specialist. Possibly best plunged outside in summer in the UK.)
- 1.768.459 : ##PRIMULA PARRYI** 2 pictures. Nevada, White Pine Co., Snake Range, Mt. Moriah Table. 3500m. J. Andrews coll. (A large, magnificent plant, mainly based on the Rockies & usually with its feet in snow-melt streams or seeps. Robust rosettes send up stout, 50cm. stems carrying [large, rich red-purple flowers](#). Though widespread in the Rockies, seldom seen in cultivation.)
- 1.768.550 : PRIMULA RUSBYI** New Mexico, Sierra Co., Black Range. 2680-2800m. Moist, rocky openings in spruce & fir forest. M. & P. Stone 02-043. (A superb coll. by Mike & Polly from the top of the Black Range, W of Truth or Consequences, not far N of the Mexican border in SW New Mexico. The most southern of the relict N American primroses & close to the more northern *P. ellisiae*, which has sometimes masqueraded for it in cultivation. When we grew them both in the alpine-house, we found this the more difficult : its habitats in SW New Mexico & SE Arizona are more affected by the summer rainfall of the Mexican weather system so it may tend less to summer dormancy than its relatives. Though Mike tells us this is vigorous population, it is usually a dwarfer, more slender plant than *P. ellisiae* with deep rose-red to wine coloured flowers emerging from mealy-white calyces.)
- 1.768.600 : PRIMULA SPECUICOLA** Utah, San Juan Co., above Bluff. 1550m. Seepage lines below overhangs on shady sandstone cliffs. (A very beautiful relic, endemic to the 'hanging gardens' of the Colorado River canyons. Like a giant *P. farinosa* with clumps of dark-green leaves, backed with dense, white farina. Umbels of up to 40 flowers in lavender, pink or white on 15cm. stems. It has been grown magnificently in some UK alpine-houses but is not easy - rich *Dionysia*-treatment.)
- 1.768.650 : PRIMULA SUFFRUTESCENS** Cal., Alpine Co., S of Carson Pass, above Winnemucca Lake. 2750m. In granite talus & among boulders on N-facing slope. (A superlative, high altitude endemic of the Sierra Nevada. In Section *Cuneifolia* & unlike any other N American species. Shrubby mats of toothed leathery leaves in neat rosettes with generous heads of bright rose to red-purple flowers. Growable in cool conditions in a scree-bed or the alpine-house (outside in summer) in the UK.)
- 1.770.000 : PRUNUS ANDERSONII** Cal., San Bernardino Co., Providence Mts. 1400m. Exposed, limestone slope. J. Andrews coll. 1994 (The desert peach - a splendid small shrub. Can reach 2m. but is usually dwarf & of stiff, spiny habit. Deep-pink to red flowers followed by orange-red, downy fruits. Probably not in cultivation in Europe but merits the alpine-house.)
- 1.770.001 : PRUNUS ANDERSONII** Cal., Lassen Co., near Milford. 1340m. G. Greger coll. (The desert peach - a splendid small shrub not in general cultivation in Europe. It can reach 2m. but is usually much dwarfer with a stiff, spiny habit. Deep-pink to red flowers followed by orange-red, downy fruits. Very much a plant of the dry southern ranges (we last listed this from the Providence Mts. at the edge of the Mojave), this seed is from a northern colony (we did not even know it grew away up in Lassen Co.) and may be much more growable in Europe, though remember this is a cold-desert area and give it optimum drainage & sunshine.)
- 1.775.105 : PULSATILLA OCCIDENTALIS** (*Anemone occidentalis*) Oregon, Jackson Co., above Applegate Lake. 1800m. Summit screes. P. Gustafson 98-10109 (The western pasque flower, distributed from Canada south to California. Large, creamy white, downy, cup-shaped flowers, usually purple-blue tinged externally, open on 10cm. stems in early spring from close clumps of hairy foliage, much cut into linear lobes. Beautiful but not usually so growable as the European ones - treat as *P. vernalis*.) (15+)
- 1.775.205 : PULSATILLA PATENS** (*Anemone patens*) Montana, Madison Co., Gravelly Range. 2900m. M. & P. Stone 98-35 (This has a much wider distribution than the preceding, down the interior ranges from Alaska to Colorado, with disjunctions in Illinois & Texas, & is accordingly variable. Clumps of finely cut, silky, hairy, greyish leaves with large, blue to purple flowers, hairy outside, open on stems of about 10cm. & elongate to as much as 50cm., as it matures its showy head of plumed seeds.)
- 1.775.206 : PULSATILLA PATENS** Wyoming, Park Co., NW of Cody, Dead Indian Hill. 2800m. M. & P. Stone 98-41.
- 1.775.207 : PULSATILLA PATENS** (*Anemone patens*) Montana, Lewis & Clark Range. M. & P. Stone coll. (Distributed down the interior ranges from Alaska to Colorado, with disjunctions in Illinois & Texas, & accordingly variable. Clumps of finely cut, silky, hairy, greyish leaves with large, blue to purple flowers, hairy outside, open on stems of about 10cm.)
- 1.776.400 : PYROLA PICTA** Oregon, Jackson Co., W of Applegate Lake. 1400m. Deep woodland. P. Gustafson 98-10117 (Dark leathery foliage, purplish below & exquisitely veined with white above. Racemes of creamy white flowers with red sepals on 20-30cm. stems. Very difficult but worth attempting by those experienced in raising *Ericaceae* or *Shortia* from seed.) (100+)
- 1.800.000 : RANUNCULUS : SPACING AT APPROX 20**
- 1.800.120 : RANUNCULUS ALISMIFOLIUS var. LEMMONII** Cal., Plumas Co., Light Creek. 1370m. (Clumps of entire, narrow foliage & branching 30cm. decumbent stems carrying big, yellow buttercups. This race of a variable species, extending E to Montana, is a plant of wet meadows in the sage-brush or juniper scrub of NE California.)
- 1.800.600 : RANUNCULUS ESCHSCHOLTZII** (var. *eschscholtzii*)
- 1.800.625 : RANUNCULUS ESCHSCHOLTZII var. EXIMIUS** Wyoming, Park Co., ESE of Cooke City, Clay Butte. c.3000m. M. & P. Stone 98-35 (A variable, brilliant, little, alpine buttercup widely distributed from Alaska & the Yukon S into the higher ranges of California & Colorado. Flowering rapidly as the snows melt, close to the ground with varnished shrill-yellow cups, as the bright-green, 3-lobed leaves unfold. Taller later in the season then going more or less dormant as the ground dries out.)
- 1.800.645 : RANUNCULUS ESCHSCHOLTZII var. TRISECTUS** Montana, Madison Co., Gravelly Range. 2830m. M. & P.

Stone 98-31 (Leaves more deeply cut into more slender lobes than the type but the division into subspecific taxa on the basis of foliage characters seems arbitrary. For the gardener it is more important to find local variants more amenable to cultivation.)

1.801.005 : RANUNCULUS HYSTRICULUS : see *Kumlienia hystricula*

1.805.000 : RATIBIDA

1.808.100 : RHODODENDRON CANADENSE (*Rhodora canadensis*) Canada, Nova Scotia, Lunenburg Co. J. Weagle coll. (From an outstanding colour form (marked in the wild but open-pollinated) of this deciduous azalea, in its own subsection & with a distinct, two-lipped corolla. Bright rose, purple-anthered flowers cluster on the naked twigs of erect shrubs about 1m. high. Often growing in swampy areas in nature, this is one of the hardiest & most colourful of early shrubs for a moist site.)

1.808.300 : RHODODENDRON MACROPHYLLUM

1.808.400 : RHODODENDRON OCCIDENTALE

1.810.500 : ROMANZOFFIA SITCHENSIS

1.810.600 : ROMANZOFFIA SUKSDORFII

1.810.700 : ROMANZOFFIA TRACEYI

1.811.000 : ROMNEYA COULTERI

1.811.100 : ROMNEYA TRICHOCALYX Cal., Ventura Co., NW of Ojai. 1000m. Loose, stony slopes. (The genus is split into two species in "Jepson" - who are we to disagree. This is the race with hairy sepals. Divided, glaucous foliage & profuse, huge, crinkled white poppies on branching stems up to 2m. high. One of the most famous Californian natives. Seed can be very reluctant to germinate - try burning it over as for *Dendromecon* & *Dicentra chrysantha*. These are all chaparral plants.)

1.813.500 : RUBUS NEOMEXICANUS Arizona, Cochise Co., Huachuca Mts. Below Moist seep. M.& P. Stone 99-226

1.813.600 : RUBUS PARVIFLORUS (A variable deciduous shrub, 1-2m. high)

1.829.510 : SALVIA APIANA No data. A SW Californian endemic, mainly a plant of coastal scrub from near Los Angeles south into Mexico. A grey-white, shrubby perennial about 2m. tall with lanceolate basal leaves & clusters of lavender-white flowers. Reasonably hardy with Tim Ingram (Kent, UK), it will certainly tolerate as much sun & drought as the UK can offer.

1.830.410 : SALVIA DORRII No data. A fine, dwarf shrubby sage forming spreading clumps, about 40cm. high, with stems & leaves all densely white-scaly and whorls of deep purple-blue flowers among rounded bracts. This species of the arid, winter-cold, continental climates of the Great Basin and Colorado Plateau will need a very hot, dry site in wetter areas)

1.830.450 : SALVIA DORRII subsp. GILMANNII Cal., Inyo Co., Panamint Range. 2130m. Openings among *Artemisia* in gravelly soil. (A Great Basin race, included under *S.d.* var. *dorrii* in "Jepson", of this fine, shrubby sage. Spreading clumps, about 40cm. here, with stems & leaves all densely white-scaly, carry whorls of deep purple-blue flowers among rounded bracts.)

1.831.560 : SALVIA PACHYPHYLLA No data. Native to S California, Nevada & Arizona. 1400-2500m.

1.832.050 : SALVIA SONOMENSIS

1.832.100 : SALVIA SPATHACEA Cal., Solano Co., NW of Vacaville, Mix Canyon. 300m. Openings in scrub & on wooded slopes. (A stout, aromatic herbaceous perennial with large, green, woolly-backed, wrinkled, hastate leaves & sticky, 60cm. stems, whorled with dusky red flowers from sticky calyces. Can be grown in a sheltered, very well-drained site in the UK.)

1.832.101 : SALVIA SPATHACEA Cal., San Luis Obispo Co., NE of San Luis Obispo. 150m. Steep stony, wooded slopes above stream in canyon bottom.

1.834.010 : SANGUINARIA CANADENSIS No data. The bloodroot from the rich, rocky woodlands of eastern N America, extending locally as far W as Manitoba & N Dakota & S to Oklahoma & Florida. Sturdy, subterranean, red-juiced rhizomes send up exquisite, evanescent white poppy-flowers on 10cm. stems above unfolding glaucous leaves in spring

1.836.000 : SARRACENIA PURPUREA (subsp. *purpurea*) Canada, Nova Scotia, Chebucto Head. Sea-level. J. Weagle coll. 13.9.95 (A special-request coll. from the northern type-race of this fascinating carnivorous plant at about its NE limit. Clumps of beautifully veined traps and weirdly wonderful flowers. This is totally hardy in N Europe in seriously wet, nutrient-free sphagnum-peat in full sun. *Darlingtonia californica* needs similar treatment. These are cool-growers, frozen in winter.)

1.836.001 : SARRACENIA PURPUREA (subsp. *purpurea*) Canada, Nova Scotia, Halifax Co., near Ferguson's Cove. Sea-level. J. Weagle coll. (This fascinating carnivorous plant at about its NE limit. Clumps of beautifully veined traps and weirdly wonderful flowers. This is totally hardy in N Europe in seriously wet, nutrient-free sphagnum-peat in full sun.)

1.839.000 : SCOLIOPUS BIGELOVII Cal., Mendocino Co., W of Boonville. 330m. Ex a J. Andrews coll. (Strange *Trillium*-relative, local in moist, shady sites in the redwood-forests N from the Bay area. It goes dormant in summer & it is none too easy to time a seed coll. - we have tried ourselves. Two, big, basal, veined & mottled, sheathing leaves. Complex greenish white or yellowish flowers, intricately marked & lined with purple-brown. Will grow in the peat-garden in the UK but best appreciated in a pan. Slow from seed - treat like *Trillium*. May not germinate the first season but should after a second winter.)

1.839.001 : SCOLIOPUS BIGELOVII Cal., Marin Co., near Nicasio Reservoir. 30m. Woodland. Ex an R.& R. Wallis coll. (Strange, summer-dormant *Trillium*-relative, local in moist, shady sites in the redwood-forests N from here, in the Bay Area. Two, big, basal, veined & mottled, sheathing leaves. Complex greenish white or yellowish flowers, intricately marked & lined with

purple-brown. Will grow in the peat-garden in the UK but best appreciated in a pan. Slow from seed : treat like *Trillium*.)

1.839.060 : SCOLIOPUS HALLII No data. The more northern of the two species, endemic to Oregon in the damp woods of the W Cascades & coastal mountains. Slightly smaller, shorter-stemmed, greyish yellow flowers marked with red-purple. These diminutive woodlanders with their large leaves flat on the ground are among the most fascinating plants.

1.840.000 : SCUTELLARIA ANTIRRHINOIDES Cal., Mendocino Co., ESE of Covelo. 1600m. Fissures on open, serpentine outcrop. (Wiry, rhizomatous perennial about 20cm. high. Branching stems of blue-violet flowers with white-mottled lips. Attractive and not at all 'leafy' in the wild - worth trying in the scree-bed or a sunny rock-garden site.)

1.840. 650 : SCUTELLARIA NANA var. SAPPHIRINA Nevada, White Pine Co., SE of Little Antelope Summit. 1980 m. Calcareous clay. (Tufts of rounded, grey-green leaves & gentian-blue skullcap flowers, only 5 cm. high, pop up from wide-growing subterranean rhizomes. Not difficult under glass but becomes rather leafy with the soft life there - we are told this is growable and more worthwhile outside in scree, in full sun of course.)

1.855.000 : SILENE CALIFORNICA

1.855.001 : SILENE CALIFORNICA Cal., Trinity Co., S of Hayfork. 750m. Openings among conifers. (The more northern & hardier of the two red-flowered Californian *Silene* spp. More or less prostrate stems carry flowers with deeply cut petals in eye-burning scarlet. Smaller-flowered & less 'classy' than *S. hookeri* (from the same area) but very striking nonetheless.)

1.855.100 : SILENE CLOKEYI Nevada, Clark Co., Spring Mts., Charleston Peak.

1.855.400 : #SILENE HOOKERI Oregon, Josephine Co., E of Takilma. 850m. Openings among conifers, in stony turf. (We have our cultivated stock rolling now under glass - one of our favourite plants. Decumbent stems with downy, greyish leaves & a very long succession of flowers with deeply cut petals, soft salmon-pink in this form. Eventually summer-dormant.)

1.855.500 : SILENE HOOKERI subsp. BOLANDERI Cal., Trinity Co., S of Hayfork. 750m. Openings among conifers on W-facing slope. (Seed from our own cultivated stock of this very local plant, limited to this area. Utterly distinct both horticulturally & botanically and possibly worthy of specific status (though all subspecific divisions are currently disregarded in modern 'standard' floras - possibly more through ignorance than by good judgement). Large, pure-white flowers with the petal blades deeply cut into linear segments. A plant raised from our 1993 coll. was awarded a PC, when exhibited in the UK in 1995 - full write-up in the Dec., 1995, AGS Bulletin. A little more difficult to grow & maintain than the type-race listed above)

1.855.501 : SILENE HOOKERI subsp. BOLANDERI Cal., Trinity Co., W of Weaverville, Munger Gulch. 760m. J. Andrews coll. 1995. (From N of Hayfork Divide but still in the drainage of the Trinity River. Will vary from site to site.) (Limited to this area & utterly distinct horticulturally, though all subspecific divisions are currently disregarded. Large, pure-white flowers with the petal blades deeply cut into linear segments. A plant raised from our 1993 coll. was awarded a PC, when exhibited in the UK in 1995 - full write-up in the Dec., 1995, AGS Bulletin. Reputedly more difficult to maintain than the type-race listed above, we had not enough seed left to try ourselves in 1993. Not easy to collect - a few.)

1.855.550 : SILENE HOOKERI var. INGRAMII Oregon, Douglas Co., S of Tiller. 460m. Openings among *Pinus* on steep serpentine slopes. (A splendid race & a very local plant indeed, only known from the Roseburg area, along the Umpqua River drainage of SW Oregon. Notably large flowers with each of the 5 petals notched into 4 lobes and richly coloured in a beautiful deep cherry-pink. It no longer grows in several sites once known to Boyd Kline. It should be maintained in cultivation.)

1.855.600 : SILENE LACINIATA Cal., San Luis Obispo Co., Cuesta Ridge.

1.860.300 : SISYRINCHIUM DOUGLASII (*Olsynium grandiflorum*, if you wish to 'split' it) Oregon, Jackson Co., Siskiyou Mts. SSE of Ashland. 1370m. Open meadow on SW-facing slope. 3.7.95 (Surely the finest of the genus with "a succession of noble hanging bells in a deep and flashing imperial violet." Early-flowering, 20cm. high and summer-dormant. Growable in the alpine-house or scree-bed in the UK.)

1.860.302 : SISYRINCHIUM DOUGLASII Oregon, Jackson Co., Siskiyou Mts. 1100m. J.& G. Robinett coll. 286.96 (This species of open, montane meadows is surely the finest of the genus with "a succession of noble hanging bells in a deep and flashing imperial violet." Early-flowering, 20cm. high and summer-dormant. Growable in the alpine-house or scree-bed in the UK.)

1.860.310 : SISYRINCHIUM DOUGLASII Oregon, Jackson Co., Siskiyou Mts. 1500m. P. Gustafson 98-0617. (From an exceptional population of this outstanding, 20cm. high plant of open, montane meadows, surely the finest in the genus. Grassy stems & leaves & "noble hanging bells", in this case, in shades of rose, pink & white, instead of the usual violet. It flowers early and goes dormant later in summer. Growable in the alpine-house (do not over dry) or in a trough or scree-bed outside in the UK.)

1.860.500 : SISYRINCHIUM DOUGLASII var. INFLATUM Washington, Whitman Co., SW of Oakesdale, Steptoe Butte. 1020m. Among grasses, *Rosa*, *Vaccinium*, *Holodiscus*, etc., on open, N-facing slope with sparse *Pinus*. (The version of *S. douglasii* from the colder, interior areas of the American West, distributed from SE British Columbia in Canada into Idaho & N Utah. Technically distinguished by the filament tube being inflated above the base but, generally, the lighter purple flowers, open widely & face outwards, in contrast to the nodding, deep red-purple, conical bells of *S. douglasii*.)

1.860.501 : SISYRINCHIUM DOUGLASII var. INFLATUM Washington, Whitman Co., SW of Palouse, Kamiak Butte. 1020m. Among grasses on open, SE-facing slope with *Artemisia*, *Balsamorhiza*, etc.

1.860.520 : SISYRINCHIUM DOUGLASII var. INFLATUM (*Olsynium inflatum*, *Olsynium grandiflorum* var. *inflatum*) Oregon, Jackson Co., Siskiyou Mts. 1500m. (We have previously listed seed from this population under 1.860.310 as *S. douglasii* but

local collector, Phyllis Gustaffson, feels it should be more correctly placed under this more south-eastern variety, which extends across to Idaho. The two races do intergrade. A 20cm. high plant of open, montane meadows with grassy stems & leaves. "Noble hanging bells", in this case, are in satin-textured shades of rose, pink & white. It flowers early and goes dormant later in summer. Growable in the alpine-house (do not over dry) or in a trough or scree-bed outside in the UK.)

1.863.309 : SMILACINA RACEMOSA Cal., Plumas Co., near Greenville. 1130m. G. Greger coll.

1.870.245 : SPHAERALCEA CAESPITOSA Utah, Millard Co., SSE of Garrison. 1900m. Open slopes in calcareous gravel. J. Andrews coll. (Variable & probably grading into *S. ambigua* around here, though this area is virtually next-door to the type-locality. John tells us that this coll. has been selective. Woody-based, dwarf perennials, 5-10cm. high with tightly clustered orange flowers on pads of felted foliage, which, typically, should be thick, grey-white & crenate, barely if at all lobed. Our own 1993 & 1995 colls., though variable, produced some good compact plants which have appeared on the British show-benches.)

1.870.246 : SPHAERALCEA CAESPITOSA Utah, Beaver Co., Lime Point. 1890m. Open slopes in calcareous gravel. J. Andrews coll. (More or less a type-locality collection of this very local & highly desirable, woody-based, dwarf perennial in *Malvaceae*. Only 5-10cm. high with tightly clustered orange flowers on pads of felted foliage, which, typically, should be thick, grey-white & crenate, barely if at all lobed. Our own 1993 & 1995 colls., from Millard Co. though probably grading into *S. ambigua*, produced some good compact plants which have appeared on the British show-benches. This is a very hot, dry area in summer and it will need full exposure to sun throughout the year in a British alpine-house.)

1.870.250 : SPHAERALCEA aff. CAESPITOSA Utah, Millard Co., SSE of Garrison. 1900m. Open slope in calcareous gravel. 5.7.95 (Very variable & probably grading into *S. ambigua* here, though this must be virtually next-door to the type-locality. Woody-based dwarf perennials, 5-25cm. high with tightly clustered orange flowers but foliage is often deeply cut. Typically it should be thick, grey-white & crenate, barely if at all lobed. Our 1993 coll. has produced some good compact plants.)

1.873.000 : SPHAEROMERIA

1.873.200 : SPAEROMERIA COMPACTA Nevada, Clark Co., Spring Mts., Charleston Peak. J. Andrews coll.

1.874.400 : STACHYS

1.874.510 : STACHYS COCCINEA No data. An attractive & unusual species with whorls of lipped flowers in a distinctive muted scarlet, carried on erect 40cm. stems above spreading mats of deeply veined, cordate leaves. Just hardy in the UK in a sunny, well-drained site :from moist sites up to 2500m. in N Mexico, W Texas and southern New Mexico & Arizona.

1.875.000 : STANLEYA

1.877.010 : STENANTHIUM GRAMINEUM (*S. robustum*) No data. A spectacular, choice, slow-growing relative of *Veratrum*, distributed in open woodland & scrub down eastern N America from Virginia southward to N Florida & E Texas. Above clumps of *Hemerocallis*-like foliage, great, erect, feathery spires with drooping side-branches rise up to almost 2m. in height in late summer to carry the myriad, starry flowers in white, sometimes tinged with green or bronze.

1.879.000 : STREPTANTHUS

1.881.000 : STREPTOPUS

1.881.009 : STREPTOPUS AMPLEXICAULIS Ex M. & P. Stone 98-022. (Little, pendant, creamy-yellow bells precede scarlet fruits.)

1.883.000 : SUKSDORFIA

1.885.100 : SWERTIA ALBOMARGINATA (*Frasera albomarginata*) Utah, Millard Co., Wah Wah Mts.

1.885.800 : SWERTIA RADIATA (*Frasera speciosa*) Cal., Alpine Co., S of Carson Pass. 2700m. Among grasses & *Salix* in moist meadow.

1.890.405 : SYNTHYRIS PINNATIFIDA Montana, Madison Co., Gravelly Range. 2860m. M. & P. Stone 98-30. (A classic alpine-tundra species of the high ranges of the N central Rocky Mts., extending from E Washington into W Montana, Idaho, W Wyoming & N Utah. Ground-hugging, deeply cut, pinnatifid leaves, grey-green above & usually grey-felted beneath, with dense terminal racemes of little, deep lavender-blue bells with projecting anthers, on stems of about 15cm. or less.)

1.890.406 : SYNTHYRIS PINNATIFIDA Montana, Madison Co., Black Butte. c.3000m. M. & P. Stone 98-33

1.890.500 : SYNTHYRIS PLATYCARPA Idaho, Idaho Co., Selway Falls. 600m. H. Zetterlund coll. 1994 (HZ94-84) (Another very local Idaho endemic sought out by Henrik. Only known from the Selway River area & quite large for the genus - about 30-40cm. in fruit. Semi-deciduous, soft, rounded, reniform leaves, about 10cm. across, & dense racemes of lavender flowers with incised petals. This woodlander should be possible outside in the UK in a humus-rich, semi-shaded bed.)

1.913.000 : THLASPI MONTANUM var. SISKIYOUENSE Oregon, Josephine Co., W of O'Brien. 450m. P. Gustafson 98-0629 (A rather nice 10cm. tall, local variant from the Klamath serpentines, belonging to a diverse, circumpolar species-group. Dense heads of white flowers followed by seed-capsules which mature to deep reddish purple above glaucous leaves.)

1.913.500 : TIGRIDIA

1.915.409 : TOWNSENDIA INCANA Nevada, Lincoln Co., near Panaca. 1700m. Gravelly clay. J. Andrews coll. (A caespitose perennial, the most widely distributed *Townsendia* of the Colorado drainage, extending across Utah into Wyoming & New Mexico. Virtually stemless daisies, usually with white, pink-backed rays, on 2-5cm. high pads of little, spatulate, hairy leaves.)

- 1.915.500 : TOWNSENDIA JONESII** (var. *jonesii*) Utah, Millard Co., SSE of Garrison. 1980m. Open slopes, in calcareous gravel. (Another almost stemless, caespitose daisy, the Great Basin counterpart of *T. incana*. Clumps, about 3cm. tall & up to 10cm. across, of narrow grey-green leaves, & heads with white or cream rays, pink to purple on the reverse, around yellow discs.)
- 1.915.905 : TOWNSENDIA PARRYI** Montana, Beaverhead Co., Beaverhead Mts. M.& P. Stone 98-5 (A sumptuous, larger species, usually monocarpic, characteristic of the northern Rockies, extending into E Oregon. Usually a plant of open, stony slopes, about 15cm. high with huge, many-rayed, lavender-blue, yellow-centered 'asters'. Worthwhile in a sunny scree-bed in the UK.)
- 1.915.906 : TOWNSENDIA PARRYI** Wyoming, Park Co., Absaroka Range, SW of Meeteetse. c.3000m. M.& P. Stone 98-49 (Described as a "short-stemmed form", this must be spectacular as the heads normally seem disproportionately large.)
- 1.916.200 : TOWNSENDIA SPATHULATA** Wyoming, Fremont Co., Wind River Range, Limestone Mt. 2750m. M.& P. Stone 98-3 (An extremely hairy, dwarf species, covered with long, tangled wool and with virtually stemless heads. Centered on the stony ridges of NW Wyoming & at one time confused with *T. condensata* from the same area.)
- 1.919.500 : TRILLIUM ALBIDUM** Oregon, Josephine Co., Waldo Hill. 650m. In shade of deciduous *Quercus* over serpentine. (Described by Case as "one of the showiest of the western sessile trilliums ... a very distinct and splendid species" and distributed through NW California & SW Oregon, this is included under *T. chloropetalum* in older accounts. Freeman's 1975 revision, now generally adopted, established it as a species, though it reputedly intergrades with *T. chloropetalum* at the southern extremity of its distribution and perhaps *T. parviflorum* in the north. Plants in this area differ in some respects, according to Jacobs' monograph (page 127) but we cannot comment from our own knowledge. A robust plant whose stems, about 50cm. tall, carry broad leaves, blotched with dark grey-green, surrounding the sessile flower with upright or slightly spreading creamy white petals.)
- 1.919.501 : TRILLIUM ALBIDUM** Cal., Humboldt Co., ESE of Orick. 400m. In deep moist leafsoil pockets among boulders in dense shade of deciduous *Quercus*. (From a locality where we were told that *T. ovatum*, *T. albidum* and *T. kurabayashii* occurred together and that hybrids occurred. We saw no evidence of the first but the capsules were purple-tinged which Freeman states should not be the case with 'pure' *T. albidum*, though Case writes that they can be "purplish green.")
- 1.919.520 : TRILLIUM ALBIDUM** No data. Described by Case as "one of the showiest of the western sessile trilliums ... a very distinct and splendid species" and distributed through NW California & SW Oregon, this is included under *T. chloropetalum* in older accounts. Freeman's 1975 revision, now generally adopted, established it as a species, though it reputedly intergrades with *T. chloropetalum* at the southern extremity of its distribution and perhaps *T. parviflorum* in the north. A robust plant whose stems, about 50cm. tall, carry broad leaves, blotched with dark grey-green, surrounding the sessile flower with upright or slightly spreading creamy white petals.)
- 1.919.600 : TRILLIUM ANGUSTIPETALUM** (Sierra Nevada & near San Luis Obispo)
- 1.919.700 : TRILLIUM CATESBAEI** (SE USA)
- 1.919.800 : TRILLIUM CERNUUM** (NE USA to Newfoundland, the most northern of all trilliums)
- 1.919.820 : TRILLIUM CERNUUM** var. **MACRANTHUM** No. data. The larger more robust race of the eastern nodding trillium with recurving white petals, considered to grow in the Midwest, to the S & W of its distribution
- 1.919.830 : TRILLIUM CERNUUM X ERECTUM** No data. Hybrids between these two species are recorded in the wild in Michigan by Case & no doubt occur elsewhere. As the *T. erectum* parent is the red form, expect "all possible combinations of form, structure and color", varying from white to violet but with an emphasis on reds & pinks rather than the white of typical *T. cernuum*. Both species are plants of acid, humus-rich soils in wet woodlands, in the NE of the USA & in adjacent Canada.
- 1.919.900 : TRILLIUM CHLOROPETALUM** (San Francisco Bay area)
- 1.920.010 : TRILLIUM CHLOROPETALUM from RED FORM** From the deep crimson form of this 30cm. high species from moist, W Coast woodlands, sometimes grown in the UK as "*T. sessile rubrum*" & recently illustrated, growing in the RBG, Edinburgh, on the cover of 'The New Plantsman' as such. Confusion is not confined to the UK : the same Edinburgh plants are illustrated in one of the two new monographs on this genus as "*T. chloropetalum giganteum*" and in the other as "*T. kurabayashii*". The last name is probably the correct one for our stock but we shall be happier to use it after reviewing the plant in flower next spring. Large leaves, beautifully mottled with grey, & sessile, dark red, erect-petalled flowers. Our own, freshly collected seed.
- 1.920.100 : TRILLIUM CUNEATUM** (SE USA)
- 1.920.120 : TRILLIUM CUNEATUM** No data. One of the largest & most vigorous of the sessile eastern species. A plant of wooded hills from Kentucky & Tennessee into Alabama & N Carolina, especially on limestone. Mottled leaves & green, purple-tinged sepals surround the upright petals in a wide range of shades of maroon, yellow, green or brown.
- 1.920.200 : TRILLIUM DECIPIENS** (Alabama & Georgia)
- 1.920.300 : TRILLIUM DECUMBENS** (Tennessee & Georgia)
- 1.920.400 : TRILLIUM DISCOLOR** (S Carolina & Georgia)
- 1.920.500 : TRILLIUM ERECTUM** (NE USA to Quebec)
- 1.920.520 : TRILLIUM ERECTUM** No data. An exceptionally variable species widespread through NE America from Quebec to

Georgia moist woodlands on acid soils. Elegant, outward-facing or slightly declined flowers with pointed segments in stems about 30cm. high. From a wide range of colour forms, some of which may have resulted from natural hybridization.

- 1.920.521: TRILLIUM ERECTUM var. ALBUM** No data. White flowers with dark maroon ovaries
- 1.920.525 : TRILLIUM ERECTUM from BICOLOURED FORM** No data. Yellowish white with a violet edge.
- 1.920.530 : TRILLIUM ERECTUM from PINK FORM** No data. Delicately pink-flushed form.
- 1.920.532 : TRILLIUM ERECTUM from RED FORM** No data. The 'typical' velvety dark-red.
- 1.920.535 : TRILLIUM ERECTUM from YELLOW FORM** No data. The most frequent variant in soft-yellow.
- 1.920.600 : TRILLIUM FLEXIPES** (NE USA) Archibald Archive www.srgc.net
- 1.920.620 : TRILLIUM FLEXIPES** No data. The white flowered species of the wooded, E central lowlands, S of the Great Lakes. Outward-facing, creamy white flowers on stout stems 30cm. or more tall. It hybridizes readily with the closely allied *T. erectum*, producing gybrids with an enormous colour variation. Horticulturally "an outstanding species" writes Case.
- 1.920.700 : TRILLIUM FOETIDISSIMUM** (Louisiana & Mississippi)
- 1.920.800 : TRILLIUM GRACILE** (Texas & Louisiana)
- 1.920.920 : TRILLIUM GRANDIFLORUM** The best-known species and a superlative plant with large, full-petalled, snow-white flowers on 30cm. stems. Widespread in the wooded areas of NE North America.
- 1.920.921 : TRILLIUM GRANDIFLORUM : SELECTED FORM** From a Don Jacobs selection of this superlative plant. Large, full-petalled, snow-white flowers on 30cm. stems. Widespread in the woodlands of NE North America.
- 1.920.950 : TRILLIUM GRANDIFLORUM f. ROSEUM** From the exquisite pink form of this superlative, well-known species with large, full-petalled flowers on 30cm. stems. These open pale pink and deepen as they age. This variation is apparently not infrequent in the Blue Ridge Mts. of Virginia but we have no idea how reliably it reproduces from seed.
- 1.920.990 : TRILLIUM HIBBERSONII** Canada, British Columbia, Vancouver Island. (Though currently not recognized as botanically separable from *T. ovatum*, merely an extreme miniature version of it, this is a most distinct & desirable plant horticulturally. In nature limited to a very few remote localities on the inaccessible W coast of Vancouver Is., where very few people have ever seen it, but now well established in the UK, where it thrives in peat-bed conditions or a trough & the stock is very even. This is a stable, genetically fixed taxon and we are pleased to see the Jacobs maintain it, though it may not merit specific level. One of the dwarfest, about 10cm. high, with clear pink flowers, becoming paler as they age (the opposite to *T. ovatum*).)
- 1.921.010 : TRILLIUM KURABAYASHII** No data. German-grown seed received under this name, which we are still not altogether happy, in the absence of cytological evidence, to apply to cultivated material without provenance. This taxon, recorded from NW California, Curry Co. Oregon & the N Sierra Nevada, is merged under the more southern *T. angustipetalum* (syn. *T. chloropetalum* var. *angustipetalum*) in the most recent Californian flora (1993). This is "certainly not" correct according to the Cases' monograph, which along with the Jacobs' book, follows Freeman's 1975 classification. It may be the same as the plant as we grow as a red form of *T. chloropetalum*. Distinguishing such garden material of unknown origin is neither simple nor easy.
- 1.921.100 : TRILLIUM LANCIFOLIUM** (Disjunct in SE USA) Archibald Archive www.srgc.net
- 1.921.200 : TRILLIUM LUDOVICIANUM** (Mississippi & Louisiana)
- 1.921.300 : TRILLIUM LUTEUM**
- 1.921.320 : TRILLIUM LUTEUM** No data. An eastern sessile species from deciduous forest, often over limestone, on the hills of N Carolina, Georgia & Tennessee. Mottled leaves surround the greenish-yellow to lemon-yellow flower
- 1.921.400 : TRILLIUM MACULATUM** (Disjunct in SE USA)
- 1.921.500 : TRILLIUM NIVALE** (N central USA)
- 1.921.600 : TRILLIUM OVATUM** (var. *ovatum*) Cal., Mendocino Co., NW of Boonville. 100m. Moist areas in shade of *Sequoia* forest. (The variable western cousin of eastern *T. grandiflorum*, flowering earlier than this when the two are grown together in cultivation. The large white flowers, on stems of about 30cm. in this case, usually mature to pink shades.)
- 1.921.601 : TRILLIUM OVATUM**
- 1.921.602 : TRILLIUM OVATUM** Canada, British Columbia, Vancouver Is.
- 1.921.603 : TRILLIUM OVATUM** Cal., Humboldt Co., N of Weitchpec, Bee Mt. 950m. Among *Gaultheria* & *Rhododendron* scrub at edge of coniferous forest. (A large, robust plant from the ranges on the opposite side of the Trinity River from the Salmon & Marble Mts., home of *T. ovatum* subsp. *oettingeri*, distinguished by its distinctly petiolate leaves and more or less nodding flowers with linear-lanceolate petals. We felt unsure about assigning this to a particular race when in fruit.)
- 1.921.650 : TRILLIUM OVATUM f. MACULOSUM** Cal., Mendocino Co., N of Gualala. 20m. Among undergrowth in shade of coastal *Sequoia* forest. (A type-locality coll. from this colony, some members of which constitute the form *maculosum*, described by F. & R. Case. in 1997. We have actually listed seed collected here previously : a Wayne Roderick coll. listed under 11808 in our December, 1989, list. The form with dark purple-green blotches on the foliage is unique among the pedicellate trilliums,

though many of the sessile ones show this characteristic, but these markings are neither evident nor consistent in all plants. Leaves vary from plain green through an entire gradation of markings to completely purplish ones in one or two cases. The flowers here, somewhat smaller than in most colonies, are reputedly all the normal white. Expect a lot of variation among seedlings.)

1.921.660 : TRILLIUM OVATUM subsp. OETTINGERI Cal., Humboldt Co., (The race from the Salmon & Siskiyou Mts. with distinctly petiolate leaves and more or less nodding flowers with linear-lanceolate petals. "One could make a good case for recognizing this form as a distinct species" writes Fred Case.) Archibald Archive www.srgc.net

1.921.700 : TRILLIUM PARVIFLORUM (SW Washington & NW Oregon)

1.921.800 : TRILLIUM PERSISTENS (Georgia & S Carolina)

1.921.900 : TRILLIUM PETIOLATUM (E Washington, NE Oregon & W Idaho)

1.922.000 : TRILLIUM PUSILLUM (Disjunct in SE USA)

1.922.100 : TRILLIUM RECURVATUM (E Central USA)

1.922.200 : TRILLIUM RELIQUUM (Georgia & S Carolina)

1.922.300 : TRILLIUM RIVALE Cal., Del Norte Co., N of Gasquet. 390m. In dense undergrowth on steep wooded slopes.

1.922.301 : TRILLIUM RIVALE Oregon, Josephine Co., SW of O'Brien. 550m. Among moss on level, stony areas under *Pinus*. (An exquisite little endemic from both sides of the serpentine ranges dividing Josephine Co., Oregon, & Del Norte Co., California. One of the most distinct in the genus & extremely successful in peat-bed conditions in UK gardens, where it can form much larger clumps than are ever seen in the wild. No more than 15cm. high with white or palest pink flowers, more or less variably speckled with purple. Easier & quicker to flower from seed than most, dried seed should give no problems with germination.)

1.922.302 : TRILLIUM RIVALE Oregon, Josephine Co., SW of Selma, Fiddler Mt. Road. 550m. Steep, rocky slopes with sparse conifers.

1.922.303 : TRILLIUM RIVALE Cal., Del Norte Co., SW of Gasquet., French Hill Road. c. 500m. Moist, shaded banks in coniferous woodland. Archibald Archive www.srgc.net

1.922.320 : TRILLIUM RIVALE Cultivated seed from Boyd Kline's garden in Medford, Oregon, including pinks & his 'Purple Heart'. Very local on the serpentines of the Klamath ranges along the California-Oregon line & one of the dwarfest, it is grown to perfection by some UK enthusiasts. No trouble from dried seed but may need two cool periods before germination.

1.922.400 : TRILLIUM RUGELII (SE USA)

1.922.420 : TRILLIUM RUGELII No data. A large, robust, pedicellate species with a wide, sporadic distribution through the wooded mountains of the Carolinas, Tennessee, Georgia & Alabama. Up to 40cm. tall with nodding flowers, usually with strongly recurving, white petals and deep purple anthers surrounding the reddish ovary but it can vary rose shades.

1.922.500 : TRILLIUM SESSILE (NE central USA)

1.922.520 : TRILLIUM SESSILE Widespread through the old woodlands of central, eastern USA from the Great Lake S to Alabama & from Ohio E to the Atlantic. A comparatively dwarf plant, rarely more than 25cm. in height with mottled leaves surrounding the spicily scented flower, usually maroon but sometimes varying to greener & browner tones.

1.922.600 : TRILLIUM SIMILE (Tennessee, N Georgia & N Carolina)

1.922.610 : TRILLIUM SIMILE No data. "A grand species, with huge, showy, textured, creamy-white flowers set off by the dark purple-black ovary", according to F. & R. Case, who add "unusually attractive" and "one of the finest." A species of very limited distribution around the Great Smoky Mts. in Tennessee, N Georgia & N Carolina.

1.922.700 : TRILLIUM STAMINEUM (Tennessee, Mississippi & Alabama)

1.922.800 : TRILLIUM SULCATUM (SE USA)

1.922.820 : TRILLIUM SULCATUM No data. A "robust and splendid plant" according to Case. Of comparatively limited distribution in the wild, along the Cumberland Plateau from SW Virginia to NE Alabama. Allied to *T. erectum* & *T. flexipes*, this is one of the largest leaved pedicellate species with stems up to 70cm. carrying rich maroon-red flowers.

1.922.821 : TRILLIUM SULCATUM from YELLOW FORM From a superb butter-yellow clone.

1.922.900 : TRILLIUM UNDERWOODII (Alabama & Georgia)

1.923.005 : TRILLIUM UNDULATUM Canada, Ontario, near Whitney. A. McMurtrie coll. (The unique & beautiful Painted Trillium, a local plant of cool, very acidic, humus-rich soils in woodland or ericaceous scrub from Nova Scotia S to Georgia & W to Michigan. About 30cm. tall with white flowers marked on each wavy-edged segment with an inverted rich red V, whose colour seeps along the main veins. A famously beautiful plant but also one of the more difficult ones to establish & maintain in gardens.)

1.923.100 : TRILLIUM VASEYI (SE USA)

1.923.120 : TRILLIUM VASEYI No data. Another pedicellate species of fairly restricted distribution in nature. Mainly a plant of steep, sheltered, wooded slopes on the western mountains of the Carolinas, progressing south into the neighbouring states. Flowers with thick-textured, crimson petals, with impressed veins, on stems about 50cm. high.

- 1.923.121 : TRILLIUM VASEYI from GREY-BACKED FORM** No data. From a form with a pale, silver-grey reverse to the wide, fleshy petals, which are the normal maroon-red on the inside. A striking colour combination.
- 1.923.200 : TRILLIUM VIRIDE** (NE Missouri & S Illinois)
- 1.923.300 : TRILLIUM VIRIDESCENS** (Kansas to E Texas)
- 1.925.100 : TRITELEIA BRIDGESII** Cal., Shasta Co., N of Montgomery Creek. 580m. Among sparse scrub. 30.7.95 (Wide umbels of big, translucent, purple-blue flowers on stems up to 50cm. high. A N Californian plant.)
- 1.925.119 : TRITELEIA BRIDGESII** Cal., Butte Co., SE of Chico. 150m. G. Greger coll. (A spectacular N Californian species with wide umbels of big, translucent, purple-blue flowers on stems up to 50cm. high.)
- 1.925.120 : TRITELEIA BRIDGESII from 'ROBINETT SELECTIONS'** Loose, 12cm. umbels of starry flowers, 2cm. wide, in shades of pink, rose & lavender, lighter in the centres & with a glassy appearance. Selected in various N Californian locations.
- 1.925.250 : TRITELEIA CLEMENTINA**
- 1.925.300 : TRITELEIA CROCEA** (var. *crocea*) Cal., Siskiyou Co., W of Yreka. 1750m. Exposed, loose serpentine talus on N & W-facing slopes. (A little-known local plant, confined to the Klamath Ranges on the Oregon line. About 20cm. high with bright yellow flowers in early summer.) Archibald Archive www.srgc.net
- 1.925.500 : TRITELEIA DUDLEYI**
- 1.925.800 : TRITELEIA GRANDIFLORA** (var. *grandiflora*)
- 1.925.900 : TRITELEIA GRANDIFLORA subsp. HOWELLII** (*Brodiaea douglasii* var. *howellii*)
- 1.926.000 : TRITELEIA GUADALUPENSIS** Mexico, Guadalupe Island.
- 1.926.300 : TRITELEIA HENDERSONII** Oregon, Douglas Co., above Callahan Creek. 460m. Among *Pinus* on serpentine. (SW Oregon endemic, superficially not unlike *T. crocea* & probably allied to it but, in our experience, a plant of scrub & woodland clearings, never occurring in quantity. Yellow flowers with a central inky-blue stripe on each segment.)
- 1.926.409 : TRITELEIA HYACINTHINA** Cal., Butte Co., Butte Meadows. 1220m. G. Greger coll. (A big, hardy, handsome *Brodiaea*, up to 60cm. high with umbels of many, bowl-shaped, white flowers, sometimes flushed with purple externally. A plant of grassland & vernal wet meadows, distributed from British Columbia, S to central California & E to Idaho.)
- 1.926.550 : TRITELEIA IXIODES** (subsp. *ixioides*)
- 1.926.600 : TRITELEIA IXIODES subsp. ANILINA** Cal., Fresno Co. 2450m. Alpine meadow in open woodland. J. & G. Robinett coll. (Usually under 15cm. high with 6-10cm. umbels of brown-striped, yellow flowers with blue anthers.)
- 1.926.650 : TRITELEIA IXIODES subsp. COOKII**
- 1.926.700 : TRITELEIA IXIODES subsp. SCABRA** Cal., Fresno Co. 1740m. Steep granite-sand slope in open woodland. J. & G. Robinett coll. (The 'Foothill Pretty Face' with light yellow flowers striped grey on the reverse on 25cm. stems. From an outstanding colony with much larger flowers than normal, carried in wide umbels, over 15cm. across, of about 50 flowers.)
- 1.926.800 : TRITELEIA LAXA**
- 1.926.815 : TRITELEIA LAXA from 'DEXTER'**
- 1.926.815 : TRITELEIA LAXA from 'DEXTER'** Outstanding dwarf form, originally from Wayne Roderick. A.M. when shown by Bob & Rannveig Wallis. Large heads of luminous, deep violet-blue flowers on long stipes. 3+ small bulbs :
- 1.926.820 : TRITELEIA LAXA from 'GIANT LAVENDER'** al., Tulare Co. 600m. (Robinett selection from the southern Sierra Nevada. The lavender flowers are very large, 4-5cm. across in umbels up to 35cm. wide on stems up to 75cm. high.)
- 1.926.850 : TRITELEIA LAXA from 'HUMBOLDT STAR'** Originally selected in Humboldt Co. at 700m. on an open, grassy, S-facing clay bank. Densely packed, 20cm. wide umbels of 50 or more, extremely dark purple flowers. Up to 40cm. high.)
- 1.926.860 : TRITELEIA LAXA var. NIMEA** Cal., Marin Co., SSW of Tomales. 15m. Fissures & ledges on W-facing coastal cliffs. (A local race from the Marin Co. coast with large heads of luminous, deep violet-blue flowers on long stipes.)
- 1.926.900 : TRITELEIA LEMMONAE** Endemic to Arizona : Apache, Coconino & Gila Co. Archibald Archive www.srgc.net
- 1.926.950 : TRITELEIA LILACINA**
- 1.927.050 : TRITELEIA LUGENS**
- 1.927.100 : TRITELEIA MODESTA** (*T. crocea* var. *modesta*) Cal., Siskiyou Co., SW of Castle Lake. 1700m. Gravelly areas between rocks on open slopes.
- 1.927.200 : TRITELEIA MONTANA** (*Brodiaea gracilis*)
- 1.927.300 : TRITELEIA PEDUNCULARIS** Cal., Napa Co., Snell Valley. 330m. Vernal wet, open grassland. 17.6.95 (Tall, elegant species with airy umbels of white flowers, sometimes flushed violet outside, on very long pedicels. Up to 80cm tall.)
- 1.974.000 : VANCOUVERIA CHRYSANTHA**
- 1.974.205 : VANCOUVERIA HEXANDRA** Oregon, Jackson Co. P. Gustafson 98-0838 (Most frequent & growable of a trio of

ground-covering, *Epimedium* cousins. A rhizomatous perennial, about 20cm. high, with elegant, divided foliage & racemes of little, white flowers, which runs about below the scrubby undergrowth of mixed woodland below 1700m. Easy in the UK)

1.974.300 : VANCOUVERIA PLANIPETALA

1.975.000 : VERATRUM CALIFORNICUM (var. *californicum*) Cal., Placer Co. 1400m. Wet mountain meadow. J. & G. Robinett coll. (Magnificent herbaceous perennial. Huge, pleated, bright-green leaves. Dense panicles of white stars. 1.5m.)

1.975.001 : VERATRUM CALIFORNICUM (var. *californicum*) Cal., Plumas Co., Horton Ridge. 2010m. Moist, SW-facing slope. (Magnificent herbaceous perennial. Huge, pleated, bright-green leaves. Dense panicles of white stars. 1.5m.)

1.975.010 : VERATRUM CALIFORNICUM (var. *californicum*) No data. A splendid, herbaceous perennial distributed in moist, montane habitats from Washington to Mexico & east to Montana. Clumps of huge, pleated, bright-green leaves. Dense compound panicles with ascending branches crowded with white starry flowers with rich-green bases. 1.5m.)

1.975.060 : VERATRUM CALIFORNICUM var. CAUDATUM No data. A race distributed mainly in Washington & Oregon., W of the Cascades. The upper parts of the panicles are unbranched, forming erect, dense racemes.)

1.975.100 : VERATRUM FIMBRIATUM Native to Mendocino & Sonoma Cos. among coastal scrub in wet meadows.

1.975.150 : VERATRUM INSOLITUM Native from Klamath Ranges, below 900m., N to Washington, in thickets & mixed-evergreen forest on red clay.

1.975.190 : VERATRUM VIRIDE (var. *viride*) Appalachians. (The eastern type-race, spread locally from Quebec S to North Carolina, is a plant of wet thickets and moist montane meadows. Closest to *V. californicum* but with yellow-green to deep green, instead of greenish white, flowers carried in immense, 1.5m. high panicles with drooping branches, rather than the erect ones of *V. californicum*. "The entire plant is a symphony of pure fresh green" writes Graham Stuart Thomas.)

1.975.209 : VERATRUM VIRIDE var. ESCHSCHOLTZII Alaska, near Valdez. (The western race of this fine species, distributed from Alaska down to the Cascades with one odd, disjunct record from the Salmon Mts. of California.. A magnificent, slow-growing herbaceous perennial with huge, pleated, bright-green leaves. For rich, moist soil.)

1.976.000 : VERBENA

1.979.000 : VERNONIA

1.980.000 : VIBURNUM

1.980.200 : VIBURNUM CASSINOIDES Canada, Nova Scotia, Lunenburg Co. J. Weagle coll. ("One of the finest American viburnums" says 'Bean'. "Grossly underrated" writes John Weagle : "bright, perky foliage ; smooth bark ; bright pink berries change to blue then black ; magnificent fall colour ; tolerates very dry or acid conditions". A shapely, rounded, deciduous shrub, about 2m. high, with thick-textured, oval leaves, "chocolate or bronze-tinted when young...bright red before they fall." Cymes of yellow-white flowers followed by fruits passing from "green to pink or red and finally to dark blue," according to 'Bean'. It sounds as if it should be in every garden & garden centre. We don't have it in our garden (yet). Do you?

1.981.150 : VIOLA BAKERI Cal., Plumas Co., near Greenville. 1100m. G. Greger coll. (A dwarf, more or less summer-dormant, tap-rooted perennial from openings in the coniferous forests of N California up to Washington. Tufts of entire, lanceolate basal leaves and bright yellow flowers, often backed with purple and veined with brown on the lower three petals. Probably difficult.)

1.981.205 : VIOLA BECKWITHII Cal., Plumas Co., N of Lake Davis. 1830m. G. Greger coll. (A summer-dormant species from the northern rim of the Great Basin. A very lovely thing with greyish leaves palmately cut into linear segments & two-toned flowers : the 2 upper petals deep red-purple ; the 3 lower ones pale lilac, yellow at the base. We maintained this for many years without any great trouble in an alpine-house in the UK. While the fleshy roots survive drought in nature, a well-drained mixture can result in overdrying in cultivation. We had no problem with a clay pot plunged in damp sand. There is a lot underground & a deep pot is necessary. We always potted very low & topped up with grit, building this up to a depth of about 8cm. over a few years.)

1.981.300 : VIOLA CUNEATA Oregon, Josephine Co., SW of O'Brien. 460m. Openings among conifers. (Little, round, white-faced flowers with purple eyespots & violet backs, on branching stems about 10cm. high with small, somewhat triangular, purple-veined leaves. A summer-dormant serpentine-plant from the open coniferous woodlands of S Oregon & N California.)

1.981.370 : VIOLA DOUGLASII Cal., Plumas Co., N of Greenville. 1100m. G. Greger coll. (A plant of vernal moist grassland, often on serpentine, & one of the more widespread, summer-dormant Californians but, like them all, very difficult to locate in seed and to time a seed collection if you can. Erect stems around 10cm. high with dissected, bipinnate leaves carry dark-veined, golden-yellow violets, with the upper two petals, usually stained brown-purple on the backs.)

1.981.450 : VIOLA GLABELLA Cal., Plumas Co., along Light's Creek. 1220m. G. Greger coll. (A 20cm. tall, rhizomatous species, which grows N to Alaska & E to the Rockies. From moist, shady habitats so doubtless much easier to grow outside in the UK than the dry-growers. Heart-shaped basal leaves and rich yellow violets, veined with purple on the lower petals.)

1.981.500 : VIOLA HALLII Cal., Humboldt Co., SSW of Willow Creek. 1420m. Stony turf in opening of coniferous woodland over serpentine. (Very close to *V. beckwithii* but the cut leaves are more glabrous & the flowers usually less elongated & more rounded. They have darker, velvety purple upper petals & cream lower ones. Some think this is even 'classier' than *V. beckwithii*. Restricted to the Coast Ranges on the California-Oregon line, cooler & perhaps moister in summer than the *V. beckwithii* habitat.)

1.981.501 : VIOLA HALLII Oregon, Josephine Co., SW of O'Brien. 460m.

1.981.502 : VIOLA HALLII J. Andrews coll.

1.981.550 : VIOLA LANCEOLATA (subsp. *lanceolata*) Canada, Ontario, Georgian Bay. Mossy crevices. (A neat little, stoloniferous eastern species (with a rare, disjunct subsp. in N California & S Oregon). Rounded, heart-shaped leaves and white flowers with purple veins on the lower petals, carried on 10cm. tall reddish stems.)

1.981.605 : VIOLA LOBATA (subsp. *lobata*) (*V.l.* subsp. *psychodes*) Oregon, Josephine Co., Illinois River valley. 450m. P. Gustafson 98-0611 (A plant of dry, usually coniferous, woodland, widespread S from here into N Mexico but always occurring sparsely in ones & twos and extremely difficult to collect much seed from. "These drive me nuts," writes Phyllis ; we reciprocate. This is the glaucous-leaved, serpentine form from N California & adjacent Oregon, ascribed by Munz to *V.l.* subsp. *psychodes*. Palmately lobed leaves rise to about 8cm. from running rhizomes, overtopped by the deep yellow flowers, purple-brown outside & veined with purple on the lower petals. Possibly very difficult but there has not been much, if any, chance to try this in cultivation.)

1.981.606 : VIOLA LOBATA (subsp. *lobata*) Cal. Plumas Co., above Round Valley Lake. 1370m. Sandy soil under *Pinus*. (A plant of dry, usually coniferous, woodland, widespread S from S Oregon into N Mexico but always occurring sparsely in ones & twos and extremely difficult to collect much seed from. Palmately lobed, glaucous leaves rise to about 8cm. from running rhizomes, overtopped by the deep yellow flowers, purple-brown outside & veined with purple on the lower petals. Possibly very difficult but there has not been much, if any, chance to try this in cultivation.)

1.981.800 : VIOLA PEDUNCULATA

1.981.900 : VIOLA PINETORUM (subsp. *pinetorum*) Cal., Plumas Co., Dixie Canyon. 1370m. G. Greger coll. (In a complex group of tap-rooted, Californian endemics occurring sporadically from here S to the San Jacinto Mts. near Mexico. A plant of rather dry habitats, usually under pines, with tufts of narrow, more or less linear, wavy-edged leaves and lemon-yellow flowers with purple-brown veining & backs to the petals. We have no experience of this in cultivation : it is probably difficult to grow.)

1.982.109 : VIOLA PURPUREA

1.982.809 : VIOLA SHELTONII

1.990.109 : XEROPHYLLUM TENAX Cal., Plumas Co., near Greenville. 1100m. Archibald Archive www.srgc.net

1.993.500 : YUCCA TOFTIAE Utah, San Juan Co., White Canyon. 1400m. Open sandstone slope. 7.7.95 (A very local member of the *Y. angustissima* group confined to the Glen Canyon area. Clumps of stiff, leathery, white-margined, filiferous leaves, about 70cm. long, send up branching inflorescences of globose, creamy white bells. Can reach over 3m. in height.)

1.993.600 : YUCCA WHIPPLEI subsp. CAESPITOSA Cal., Tulare Co., NE of Springville. 1150m. Steep, scrub-covered slope. 2.8.95 (Perennial northern race with 3m. high spires of hundreds of cream bells from beautiful rosettes of stiff, spine-tipped leaves. We have flowered this from seed in the UK. Sow in summer - poor germination results from cold-sowing.)

1.993.650 : YUCCA WHIPPLEI subsp. INTERMEDIA Cal., Ventura Co., Wagon Road Canyon. 1450m. Stony slopes. 2.8.95 (Another perennial race, forming side-rosettes after flowering. These races are not recognized in "Jepson".)

1.995.000 : ZAUSCHNERIA

1.995.220 : ZAUSCHNERIA CALIFORNICA (*Epilobium canum*) No data. Seeds from an especially large-flowered form of this startling orange-red, hummingbird-pollinated complex of shrubby perennials with races spread from California and southern Oregon through to Wyoming, New Mexico and northern Mexico. These have been sunk by Raven into *Epilobium* but we hope gardeners will continue to recognize this most distinct group of plants as a separate genus, which includes some of the most spectacular of late-flowering plants for the rock-garden or raised bed in full sun, even in the UK.

1.996.000 : ZEPHYRANTHES ATAMASCO

1.998.000 : ZIGADENUS

1.998.000 : ZIGADENUS ANGUSTIFOLIUS

1.998.100 : ZIGADENUS BREVIBRACTEATUS

1.998.209 : ZIGADENUS ELEGANS Nevada, White Pine Co., Mt. Moriah Table. 3410m. J. Andrews coll. (A handsome liliaceous bulb with stems of large, greenish white to cream flowers from rosettes of rather broad, basal leaves. Good in UK.)

1.998.300 : ZIGADENUS EXALTATUS

1.998.350 : ZIGADENUS FONTANUS

1.998.400 : ZIGADENUS FREMONTII

1.998.450 : ZIGADENUS GLABERRIMUS

1.998.500 : ZIGADENUS GLAUCUS (*Z. elegans* subsp. *glaucus*) Archibald Archive www.srgc.net

1.998.550 : ZIGADENUS GRAMINEUS

1.998.600 : ZIGADENUS LEIMANTHOIDES

1.998.650 : ZIGADENUS MICRANTHUS

1.998.700 : ZIGADENUS NUTTALLII

1.998.759 : ZIGADENUS PANICULATUS Cal., Plumas Co., NE of Greenville. 1100m. (A species from drier, interior areas of the West. Open panicles, about 50cm. tall, carry many small, greenish-cream flowers above tufts of narrow leaves.)

1.998.809 : ZIGADENUS VENENOSUS Nevada, S of Winnemucca. 1500m. G.Greger coll.. Archibald Archive www.srgc.net

1.998.850 : ZIGADENUS VIRESCENS

1.998.900 : ZIGADENUS VOLCANICUS

1.999.000 : ZINNIA

2.002.000 : ABUTILON (including *Corynabutilon*)

2.002.910 : ABUTILON VITIFOLIUM No data. A lovely, fast-growing, Chilean shrub, reaching 4m. or more high & quite hardy in the S & W of the UK. Downy, grey, maple-like leaves & massed pale to deep purple-blue, hollyhock-flowers.

2.005.000 : ACAENA

2.005.400 : ACAENA LUCIDA Falkland Is., Yorke Bay, edge of minefield. In sand between rocks. R. Reid coll. (An attractive foliage-plant with mats of finely cut, pinnate leaves, topped with globose, purple-anthered inflorescences. A characteristic species of the S Patagonian and Falkland coasts, here forming compact cushions in extreme conditions, exposed to severe wind and sand blast.) Archibald Archive www.srgc.net

2.005.500 : ACAENA MAGELLANICA Falkland Islands, E of Stanley, Whalebone Bay. 5m. Gravel. R. Reid coll. (Mats of glaucous, downy, pinnate leaves covered with round, red-tinged, burred heads. A plant of S Argentina & the Antarctic islands.)

2.005.501 : ACAENA MAGELLANICA Falkland Islands, Cape Pembroke. Sandy peat bank. R. Reid coll. (Mats of glaucous, downy, pinnate leaves covered with round, red-tinged, burred heads. A plant of S Argentina & the Antarctic islands.)

2.010.000 : ADESMIA

2.020.000 : ADIANTUM

2.025.000 : ALONSOA

2.025.500 : ALONSOA MERIDIONALIS

2.026.000 : ALSTROEMERIA ANGUSTIFOLIA (subsp. *angustifolia*)

2.026.100 : ALSTROEMERIA ANGUSTIFOLIA subsp. VELUTINA

2.026.200 : ALSTROEMERIA ANDINA (subsp. *andina*) Chile, IV, Coquimbo. 3000m. Shallow scree. A. Flores & J. Watson 10821. (A very desirable, dwarf, alpine species but doubtless a considerable challenge. From the dry border-ranges above the southern end of the Atacama, where it grows in scree-beds bereft of much accompanying vegetation & experiences regular but short-lived snow-cover. Little, fleshy, obovate leaves & elegant, little pink flowers on 5cm. stems.)

2.026.250 : ALSTROEMERIA ANDINA subsp. VENUSTULA

2.026.400 :## ALSTROEMERIA AUREA 2 pictures Chile, VIII, Nuble, SW of Termas de Chillan. 1500m. Open banks in *Nothofagus* woods. (From an outstanding population, singled out for mention by Bayer, at one of the most northern stations for the species. Its coppery reds & orange-scarlets approach *A. ligtu* subsp. *simsii*, to which we have seen it attributed, though the latter does not grow further S than Region VI. Jane McGary (Oregon, USA) tells us this has produced seedlings with her that are just as intensely coloured as those she has seen in the wild here. About 60 cm. high & maybe the easiest, most reliable species outside in the UK.) [#2nd pic.](#)

2.026.401 : ALSTROEMERIA AUREA Chile, Nuble, NE of Termas de Chillan. 2100m. Steep, stony, W-facing slope. 4.3.94 (From a very variable, high altitude population. Orange-scarlet to straw-yellow, inner segments streaked with red. From a truly alpine elevation & well worth trying in areas too cold for the *A. ligtu* hybrids. This covers a similar colour range.)

2.026.401 : ALSTROEMERIA AUREA Chile, Nuble, below Termas de Chillan. Cliff ledge. (14391 : 3.3.94 ; not seen in flower) possibly *A. presliana* but needs to be checked in flower in 2002. Flowered 2003 : this is *A. presliana presliana*

2.026.410 : ALSTROEMERIA AUREA Chile, IX, Cautin, W of Vilcun. 200m. Among scrub at woodland margins. (The more widespread brilliant yellow race from higher altitudes & into the colder, wetter South. A hardy & easy garden-plant in our cool, wet climate & no doubt elsewhere in the UK. From wild seedlings & quite variable in rich, egg-yolk yellow shades)

2.026.600 : ALSTROEMERIA CRISPATA Chile. Ex A. Flores & J. Watson 9507 & 9551.

2.026.650 : ALSTROEMERIA CUMMINGIANA (*A. hookeri* subsp. *cummingiana*) Chile, Reg. Metro., Angostura de Paine (between Santiago & Rancagua). Ex an A. Brinck coll. (A slightly taller plant than *A. hookeri*, under which Bayer included it, with a much more northern, disjunct distribution. It also has quite differently proportioned paler pink flowers with the upper, inner segments only very sparsely speckled with red-brown. The most southern site for this species.)

2.026.651 : ALSTROEMERIA CUMMINGIANA (*A. hookeri* subsp. *cummingiana*) Chile, IV, Coquimbo, N of Los Vilos. A. Flores & J. Watson 11228. (A slightly taller plant than *A. hookeri*, under which Bayer included it, with a much more northern, disjunct distribution. It also has quite differently proportioned paler pink flowers with the upper, inner segments only very sparsely speckled with red-brown. The most northern site for this elegant, little species, which, in spite of originating from the southern edge of the Atacama, grows well with us under glass without frost protection.)

2.026.700 : #ALSTROEMERIA DILUTA (subsp. *diluta*) Chile, VII, Talca, near San Rafael. 300m. Ex an A. Brinck coll. (An intriguing, little species, 10-25cm. high, only described in 1986 & limited to a small area around the type-locality between Talca & Curico. Distinct but may be closest to *A. pulchra*. White to pink segments with attenuated, darker tips, the upper, inner ones very heavily marked with dull red streaks, which sometimes fuse together.)

2.026.800 : ALSTROEMERIA DILUTA subsp. CHRYSANTHA Chile, IV, Limari, Mantos de Hornillos (between Coquimbo &

Los Vilos). Ex an A. Brinck coll. (The northern race combining a yellow ground-colour with the red-streaked upper segments. Endemic to the coastal cordillera of the Coquimbo region between 60m. & 400m., it can vary to yellowish pinks & pale oranges but is otherwise similar in height & habit to the type-race.)

2.026.801 : ALSTROEMERIA DILUTA subsp. CHRYSANTHA Chile, III, Atacama, Huasco. 200m. In stony ground among low, coastal mist-belt vegetation. Ex A. Flores & J. Watson 8686. (The northern race of this dainty species, about 20cm. high with narrow, grassy foliage, combining a yellow ground-colour with the red-streaked upper segments. John & Anita indicate that there is considerable variability in this taxon, which appears to intergrade towards *A. kingii* as it extends N. This is a dwarfer, deeper yellow form than the next with much reduced markings & is from further N than recorded by Bayer, who limits it to the coastal cordillera of the Coquimbo region between 60m. & 400m., it can vary to yellowish pinks & pale oranges but is otherwise similar to the type-race.)

2.026.802 : ALSTROEMERIA DILUTA subsp. CHRYSANTHA Chile, IV, Coquimbo, Guanaqueros. 30m. In sandy soil among coastal mist-belt scrub & in grassland. Ex A. Flores & J. Watson 8700. (The northern race of this dainty species, about 20cm. high with narrow, grassy foliage, combining a yellow ground-colour with the red-streaked upper segments. John & Anita indicate that there is considerable variability in this taxon, which appears to intergrade towards *A. kingii* as it extends N. This is a taller, paler yellow form than the preceding, usually more heavily streaked & marked with purple maroon. It can vary to yellowish pinks & pale oranges but is otherwise generally similar to the type-race.)

2.026.820 : ALSTROEMERIA DILUTA subsp. CHRYSANTHA from PINK FORM Chile. Ex A.Flores & J.Watson 9558 & 9587. (The northern race can vary to yellowish pinks & pale oranges : this is from a form described by John.)

2.026.900 : ALSTROEMERIA EXSERENS Chile, Reg. Metro., La Parva to Valle Nevado. 2800-3100m. Steep, loose, stony slopes. (A high altitude species with about the largest flowers in the genus on the dwarfest of plants. Flat-faced flowers with broad, overlapping segments in rich pink with darker tips & crimson flecking on the yellow ground of the upper, inner ones. Growing outside quite well in the UK but seldom sets seeds & summer-heat can lead to premature dormancy - may be easier in the N than the S.)

2.026.901 : ALSTROEMERIA EXSERENS Chile, Reg. Metro., Lagunillas. (14349 : 1.3.94) Archibald Archive www.srgc.net

2.026.902 : ALSTROEMERIA EXSERENS from DWARF RACE Chile, VII, Rio Teno valley E of Curico. c. 2500m. A.Flores & J.Watson 11240. (A high altitude taxon with about the largest flowers in the genus on the dwarfest of plants. Flat-faced flowers with broad, overlapping segments in rich pink with darker tips & crimson flecking on the yellow ground of the upper, inner ones. Our collection from further N at over 3000m. has been grown outside quite well in the UK but seldom set seeds & summer-heat can lead to premature dormancy. It may be easier in the cooler N than the S of the UK. A superlative alpine not listed by us for many years.)

2.026.950 : ALSTROEMERIA aff. EXSERENS Chile, VI, Cachapoal, NE of Coya. Ex an A. Brinck coll. (as *A. exserens*) (Much taller, about 60cm., than the alpine type-race. Long, narrow leaves & big heads of rose-pink flowers, neatly banded bright yellow above the white, crimson-speckled zone of the upper, inner segments. Though different in character, a bit like a very large *A. pallida*, we cannot assign this to another species & the locality is within the distribution of *A. exserens*. Worthwhile & hardy.)(10+)

2.027.000 : #ALSTROEMERIA GARAVENTAE 2pictures/colourforms Chile, V, Cerro Vizcacha. Ex J. Watson. A very local & obscure species with stems of about 30cm. bearing large flowers heavily speckled on the inner ones segments with broken lines of crimson dots on the salmon-pink ground, which ages to ruby shades. [#white form](#)

2.027.010 : ALSTROEMERIA aff. GARAVENTAE Chile, V, Quillota, Cerro La Campana. Ex an A. Brinck coll. (From a coll. made a little to the N of the type-locality (at about 2000m. on the Cerro Vizcacha, on top of the coast range, W of Santiago), this does not match Bayer's description precisely & we wonder if *A. garaventae* & the equally obscure *A. zoellneri* (q.v.) intergrade or cross here. This striking & most distinct plant is certainly very close to *A. garaventae*, with large flowers on stems of about 30cm., but these are more open than in the type & heavily speckled on every segment (not just the inner ones) with broken lines of crimson dots on the salmon-pink ground, which ages to ruby shades. Should be perfectly hardy in most of the UK.)

2.027.109 : ALSTROEMERIA HOOKERI (subsp. *hookeri*) Chile, "llanos de Esquadron" (not traced). Ex an A. Brinck coll.

2.027.110 : ALSTROEMERIA HOOKERI (subsp. *hookeri*) No data. A beautiful dwarf species, 15-20cm high. Narrow, greyish leaves & medium-sized, green-tipped, pastel pink flowers, blotched with gold & lightly speckled with red-brown on the white ground of the inner segments. From low altitudes in Regions VII & VIII but temperature-hardy here under cold glass.

2.027.200 : ALSTROEMERIA HOOKERI subsp. CUMMINGIANA Chile, Reg. Metro., Angostura de Paine (between Santiago & Rancagua). Ex an A. Brinck coll. (Differently proportioned flowers with the upper, inner segments only very sparsely speckled with red-brown. The most southern site for this subspecies.)

2.027.201 : ALSTROEMERIA HOOKERI subsp. CUMMINGIANA Chile, A.Flores & J.Watson 11228

2.027.300 : ALSTROEMERIA HOOKERI subsp. MACULATA Chile, IV, Limari, Mantos de Hornillo (between Coquimbo & Los Vilos). Ex an A. Brinck coll. (Most distinct in the heavy, ruby red markings on all three inner segments. Limited to a few areas on the Coquimbo coast.)

2.027.301 : # ALSTROEMERIA HOOKERI subsp. MACULATA Chile, A.Flores & J.Watson 11231 [N.B. Jane McGary thinks this may be [A. hookeri subsp. hookeri. #1](#)]

2.027.400 :# ALSTROEMERIA HOOKERI subsp. RECUMBENS

2.027.500 : ALSTROEMERIA KINGII Chile, III, Atacama, S of Copiapo. 600m. Stony terrain in exposed gully of intermontane valley. A. Flores & J. Watson 8696. (A distinct, little desert species, no more than 20cm. high with very fine, narrow, grassy, grey-green foliage and unmarked flowers in pure, rich yellow. We grow this successfully in an unheated greenhouse but it needs careful watering under glass in the UK & is possibly safest kept frost-free, though some Atacama species are surprisingly hardy.)

2.027.520 : ALSTROEMERIA aff. KINGII Chile, III, Atacama. Ex an A. Brinck coll. (Received as an unidentified coll., this does not key-out satisfactorily but it is certainly closest to this little desert species. A dainty thing, no more than 20cm. high with very fine, narrow, grassy, grey-green foliage and long-lasting flowers in pure, rich yellow, streaked on the upper, inner segments with crimson. Typical *A. kingii* is unmarked but this resembles it much more closely than it does *A. diluta* subsp. *chrysantha*. Successful in our unheated greenhouse for many years. Overwintering sterile rosettes are sometimes frosted but it regenerates in spring and has never failed to flower well. Needs careful watering under glass in the UK & possibly safest kept frost-free.)(8)

2.027.600 : ALSTROEMERIA LEPORINA Chile, IV, Coquimbo, near Ovalle. 400m. Among low, xerophytic scrub in open sites. Ex A. Flores & J. Watson 8703. (A most spectacular plant, originally described by Philippi in 1857 as *A. hirtella*, a name already used. Renamed by Bayer & Grau in 1982. Mainly distributed between 1000m. & 2000m. in the dry Andean foothills E of Coquimbo. About 30cm. high with narrow, greyish leaves & large flowers, basically in soft-pink paling to white towards the centres, with the two upper, inner segments pulled out into long rabbit-ears, which are boldly & cleanly banded across with rich yellow, separating the white bases from the deeper pink tips. John describes this as a particularly fine population in "intense rose-pink.") Archibald Archive www.srgc.net

2.027.709 : ALSTROEMERIA LIGTU (subsp. *ligtu*) Chile, VI, O'Higgins (Rancagua), near the Termas de Cauquenes. 700-800m. Light woodland & on mossy boulder-banks. A. Flores & J. Watson 11253

2.027.800 : ALSTROEMERIA LIGTU subsp. INCARNATA Chile, VII, Cerro de los Cipreses (Rio Teno valley E of Curico). 1500m. Ex an A. Brinck coll. (Grown by Mike Tucker from Axel Brinck's coll. of *A. versicolor*. These both grow in this locality & Brinck also collected correctly named material here, where almost all colls. of this very local race have been made. Robust & about 1m. high, always with a pink ground-colour & distinct in its rather short, broad, upper segments. Glowingly described by Mike as "gorgeous...sumptuous...like no other...the largest flowered plant I have...the best one here" but not as satisfactory as some in the open garden & it does best protected from excess moisture from late summer through winter in his bulb-frame.)

2.027.801 :# ALSTROEMERIA LIGTU subsp. INCARNATA Chile, VII, Rio Teno valley E of Curico. c. 1500m. A. Flores & J. Watson 11123. (A new, 2006, wild collection of this spectacular, robust race, more or less restricted to the Rio Teno valley. About 1m. high, always with a pink ground-colour & distinct in its rather short, broad, upper segments. Glowingly described by Mike Tucker, growing it in Somerset, UK, as "gorgeous...sumptuous...like no other...the largest flowered plant I have...the best one here." Needs a very well-drained, sunny site if grown outdoors in the UK.)

2.027.900 : ALSTROEMERIA LIGTU subsp. SIMSII (*A. haemantha*) Chile, VI, Cachapoal, Rio Cachapoal valley W of Pungal. 950m. Openings among scrub in sandy soil. (Raised from our coll. of *A. revoluta* (12529). We assume both were growing intermingled. *A. versicolor* also grew here - the species do not actually cross at all readily. Long known as *A. haemantha*, a misapplied name, this is the tallest race of *A. ligtu*, reaching 1.6m. in nature, more in cultivation, with huge umbels of up to 50 flowers. Basically brilliant orange-red to tomato-red, darker on the outside & towards the tips, with the long, prominent, upper, inner segments streaked red-brown on a gold-orange ground. Distributed from about 250m. near the coast to about 2000m. in the foothills E of the central valley in Regions V & VI, this is successful & hardy in a well-drained, sunny site in the UK.)

2.028.000 : ALSTROEMERIA MACULATA (syn. *A. hookeri* subsp. *maculata*) Chile, IV, Coquimbo, Limari, Mantos de Hornillo (between Coquimbo & Los Vilos). Ex an A. Brinck coll. (Most distinct in the heavy, ruby red markings on all three inner segments. Limited to a few areas on the Coquimbo coast.)

2.028.001 : ALSTROEMERIA MACULATA (syn. *A. hookeri* subsp. *maculata*) Chile, IV, Coquimbo. 150m. In deep sand on hills facing sea with low, semi-xerophytic scrub. A. Flores & J. Watson 11231. (A choice, elegant, little plant, limited to a few areas on the Coquimbo coast : a Mediterranean climate with frequent sea-fogs in winter. John & Anita will shortly elevate this to specific level. It is widely separated from *A. hookeri*, which grows far to the S. About 20cm. tall with very narrow foliage, it is most distinct in the heavy, ruby red markings on all three inner segments. Hardy with us under unheated glass.)

2.028.100 : ALSTROEMERIA MAGENTA

2.028.109 : ALSTROEMERIA MAGENTA Chile, Region V, Coquimbo, Ovalle, Fray Jorge. 500m. Ex Beckett, Cheese & Watson 4683. (A spectacular species nearest to *A. pulchra* and *A. magnifica* but distinct in having all the inner segments, not just the upper 2, of the lilac flowers heavily streaked with maroon-red. We have maintained this stock from John's 1972 coll. but never before had enough seed to list. Historically, this may have been grown as "*A. violacea*".)

2.028.200 : ALSTROEMERIA MAGNIFICA (subsp. *magnifica*) Archibald Archive www.srgc.net

2.028.300 : #ALSTROEMERIA MAGNIFICA subsp. MAXIMA Chile, IV, Choapa, Pichidangui. Ex an A. Brinck coll. (Indeed magnificent with very large, flat, lilac flowers heavily marked on the two upper segments with dark red. Up to 50cm. high with most distinct, bright-green, rather fleshy foliage, glossy on the upper surface. Though a low altitude coastal race, centred on the Valparaíso area, the sterile, overwintering rosettes have never been harmed by frost in our unheated greenhouse.)

2.028.400 : ALSTROEMERIA MODESTA

2.028.500 : ##ALSTROEMERIA PALLIDA 2 pictures Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2200m. Steep,

open, stony slopes. (Few alpine plants can rival the spectacle of this in flower. [#Remaining 20cm.](#) or less high with us under glass here, its umbels of large flowers in palest pink to white have the upper, inner segments blotched with gold & streaked with crimson. Limited to the ranges S & W of Aconcagua between 1500m. & 2800m., it should be tried outside in sunny scree in the UK.)

2.028.501 : ALSTROEMERIA PALLIDA Chile, Reg. Metro., El Morado above Banos Morales. (12304 : 22.1.91)

[##Alstroemeria pallida 143555](#) 2pictures. [#Second pic](#)

2.028.608 : ALSTROEMERIA PATAGONICA Chile, XI, Aisen, near Coihaique. F. Cerda coll.

2.028.609 : ALSTROEMERIA PATAGONICA Argentina, Santa Cruz, Guer Aike. 30-50m. Among low scrub on steep, SW-facing banks of consolidated sand. Ex S. Pern & J. Watson 6226 (The dwarfest of all, with the most southern distribution, S from Santa Cruz & Chubut in Argentina to Tierra del Fuego. Narrow, twisted, blue-grey foliage & small, upward-facing, orange-yellow flowers on stems under 10cm. high. Absolutely hardy in the UK & possible in a trough or scree-bed but maybe easiest in the alpine-house, though it does not enjoy being too warm, when dormant in summer.)

2.028.610 : ALSTROEMERIA PATAGONICA Chile, XII, Magallanes, near Punta Arenas. Ex an O. Magen coll. This more southern coll. has been established in cultivation much longer than John's 1988 one & this may account for it being slightly easier to grow with us. The two are quite distinct in habit & this has somewhat broader foliage. The dwarfest of all, with the most southern distribution, S from Santa Cruz & Chubut in Argentina to Tierra del Fuego. Narrow, twisted, blue-grey foliage & small, upward-facing, orange-yellow flowers on stems under 10cm. high. Absolutely hardy in the UK & possible in a trough or scree-bed but maybe easiest in the alpine-house.

2.028.710 : ALSTROEMERIA PAUPERCULA Chile, II, Antofagasta, Quebrada de Taltal. 200-500m. Among coastal scrub & in bare stone-runs. Ex A. Flores & J. Watson 7313. (Both this & *A. philippii* were assigned to the now invalid entity *A. violacea* by Philippi last century, though we suspect many records of *A. violacea* in cultivation should be referred to *A. magenta*, which was not described at the time. A plant of the Pacific coastal fog-belt & one of the most northern of all, stretching all the way up the Atacama coast into Antofagasta. In theory, this should in theory be one of the least growable in cold, wet climates but this seed is from plants grown in a British bulb-frame by Mike Tucker (Somerset, UK). About 30cm. high with lilac to violet flowers, sparsely streaked with deep violet on the inner, upper segments, & with most distinct, broad, thick-textured, matt grey-green leaves with very undulate margins.) Archibald Archive www.srgc.net

[2.028.800 :# ALSTROEMERIA PELEGRINA](#) Chile, V, Petorca, Pichicuy. Ex an A. Brinck coll. (Type species for the genus & long-cultivated. A plant of coastal rocks & cliffs & definitely tender in the UK, though often mentioned as growable in "warm borders". Very large & beautiful pink or lilac flowers, more intensely coloured along the middles of the segments, with the upper, inner segments streaked purple on a yellow zone. About 30cm. in cultivation & safest kept frost-free in winter.)

2.028.811 : ALSTROEMERIA PELEGRINA from WHITE FORMS No data. *A. pelegrina* is the type species for the genus & long-cultivated. A plant of rocks & cliffs along the north Chilean coast & definitely tender in the UK, though often mentioned as growable in "warm borders". This is not from the white in cultivation in the UK but is from a white-flowered strain developed independently over several generations in New Zealand by Terry Hatch. Very large, beautiful, pure white flowers with the upper, inner segments retaining the yellow zones. About 30cm. in cultivation & safest kept frost-free in winter.

2.028.900 : ALSTROEMERIA PHILIPPII Chile, III, Atacama, Huasco. 15-25m. Open sites in sand among grass clumps on outcrops above shore, in mist-belt. Ex A. Flores & J. Watson 8689. (About 30cm. high with large, pale violet to lilac flowers, flecked on the upper segments with darker violet & cross-banded with yellow & white. The other *A. violacea* of Philippi, quite different to *A. paupercula* in foliage, as well as other characters. Has been grown in the UK but, like most Atacama species, needs fairly careful cultivation under glass and may be safest frost-free, though Mike's success with *A. paupercula* may prove us wrong.)

2.029.000 : ALSTROEMERIA POLYPHYLLA

2.029.080 : ALSTROEMERIA PRESLIANA (subsp. *presliana*) Chile, Nuble, below Termas de Chillan. Cliff ledge.

2.029.100 : ALSTROEMERIA PRESLIANA subsp. AUSTRALIS Chile, IX, Malleco, Cordillera de Nahuelbuta, W of Vegas Blancas. 1200m. Openings in woodland, often in shade. (One of the most southern, distinct from the type-race in its striking, red-brown anthers, more elongated upper segments, heavily streaked with crimson, & intense, deep-pink ground-colour. In autumn, it forms swathes of pink in the *Araucaria* cloud-forest at 1400m. but tends to flower about mid-summer in the UK, where it has proved hardy, tolerant of wetter summers & reliable, remaining compact both in its rootstock & height at around 30cm.)

2.029.200 : ALSTROEMERIA PSEUDOSPATHULATA

2.029.250 : ALSTROEMERIA PSITTACINA

[2.029.410 : #ALSTROEMERIA PULCHRA](#) (subsp. *pulchra*) Chile, V, Valparaiso, Con Con. 115m. In heavy, red soil on W-facing banks in cultivated, littoral area. Ex Beckett, Cheese & Watson 4762 (Quite widespread in the Valparaiso-Santiago area up to 1000m., this is of borderline hardiness in the UK but we have maintained this from John's 1972 coll. Our garden is just too wet for it but it is easy under unheated glass & can be grown outside in S England. In the same group as *A. magnifica*, about 40cm. high with white flowers (pale lilac under glass), the upper, inner segments streaked with crimson on a bright yellow ground

2.029.500 : ALSTROEMERIA PULCHRA subsp. LAVANDULACEA

2.029.600 : ALSTROEMERIA REVOLUTA

2.029.603 : ALSTROEMERIA REVOLUTA Chile, VI, O'Higgins (Rancagua), near the Termas de Cauquenes. 700-800m. Light woodland & on mossy boulder-banks. A.Flores & J.Watson 11254. (A most distinct plant, viewed from afar rather more like a ball-headed *Allium* species than a 'conventional' *Alstroemeria*. Stems, about 30cm. high here (but it can reach more than twice that), with little, narrow leaves carry rounded umbels of many, small, pink, red-freckled flowers with strongly reflexed segments. From the same site as the *A. ligtu* coll., where it flowers much later in summer.)

2.029.605 : ALSTROEMERIA REVOLUTA Chile, VIII, Bio Bio, Antuco, La Cantera. 350m. Among scrub in broken shade of pine plantation.. A. Flores & J. Watson 8722. (A most distinct plant, about 30cm. high here, with rounded umbels of many, small, pink, red-freckled flowers with strongly reflexed segments. This coll. from a cooler, southern site should be growable outside in the UK.)

2.029.800 : ALSTROEMERIA SCHIZANTHOIDES

2.029.900 : ALSTROEMERIA SPATHULATA

2.029.902 : ALSTROEMERIA SPATHULATA Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2200m. Steep, stony, igneous slope. (A fine, dwarf, alpine species, not dissimilar to *A. umbellata* in general appearance. Fleshy, grey-green foliage with bright-pink flowers, speckled with dark red on the 3 inner segments, on 15cm. tall stems.)

2.029.903 : ALSTROEMERIA SPATHULATA Lagunillas (12283 : 21.1.91) Archibald Archive www.srgc.net

2.029.904 : ALSTROEMERIA SPATHULATA Chile, V, Aconcagua, above Portillo. 3000m. Steep, bare, earth or scree slopes. A.Flores & J.Watson 11266. (A very fine & distinct, dwarf, high-alpine species of very limited distribution in the border-ranges to the S of Aconcagua, as far as we know only on the western, Chilean side. Tight sterile rosettes of fleshy, grey-green foliage with 5-15cm. tall stems carrying several, bright-pink flowers, speckled & streaked with dark red on the 3 inner segments. We find it easier to grow than *A. umbellata* but it can only be induced to set a very few seeds with us.)

2.030.001 : ALSTROEMERIA UMBELLATA Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2200m. Loose, igneous talus on steep slope. (An extraordinary alpine centred on the mountains above the Rio Maipo up to 3000m. Succulent rosettes of rounded, grey-green leaves & almost stemless umbels of dark-tipped, pink flowers, marked with gold & speckled with crimson, ride deep, mobile scree, often with *Tropaeolum polyphyllum*. It can be grown outside in the UK in a raised scree-bed.)

2.030.105 : ALSTROEMERIA VERSICOLOR Chile, VI, between Talca & Curico. 200m. Open sites among scrub & grass clumps in *Acacia*-savannah remnant. A. Flores & J. Watson 8721. (This is a delight, a most distinct species & no problem to cultivate. We grew this for several years in the 1970's from the Beckett, Cheese & Watson 5081 coll. but lost it, along with several others, when the tubers were frozen in pots. It will almost certainly be hardy outside in the UK, if grown in a raised, scree-bed, where it can find its own depth. Up to 30cm. high with narrow-leaved stems carrying several flowers, with all the segments similar in pale yellow to brownish yellow (John writes "greenish yellow to dark orange"), evenly speckled all over with purple.)

2.030.205 : ALSTROEMERIA WERDERMANNII (subsp. *werdermannii*) Chile, III, Atacama, Vallenar, Huasco. 15-30m. Open areas, in sand above shore. A. Flores & J. Watson 8690. (One of the most local species in the genus. A very dwarf plant of the Atacama coast, about 10cm. high with small, glaucous, lead-green, fleshy leaves & distinctive flowers with narrow segments in silvery pink to deep red-violet, peppered with purple-brown. Possibly difficult and safest kept frost-free in the UK but some of these Atacama plants have proved adaptable. Only known from two populations, this seed is from the more southern one at the type-locality, where it differs from the next in its narrower segments, paler ground-colour and the absence of a yellow cross-band on the upper, inner segments.)

2.030.206 : ALSTROEMERIA WERDERMANNII subsp. FLAVICANS Chile, III, Atacama, Vallenar, Huasco. 15m. Open areas, among sparse scrub on coastal sand-dunes & cliff-tops, in mist-belt. A. Flores & J. Watson 8694. (One of the most local species in the genus. A very dwarf plant of the Atacama coast, about 10cm. high with small, glaucous, lead-green, fleshy leaves & distinctive flowers with narrow segments in silvery pink to deep red-violet, peppered with purple-brown. Possibly difficult and safest kept frost-free in the UK but some of these Atacama plants have proved adaptable. This northern population, only separated from the preceding by the mouth of a river, is distinct in its broader segments, deeper ground-colour & yellow banding across the upper, inner segments.)

2.030.300 : ALSTROEMERIA ZOELLNERI

2.030.310 : ALSTROEMERIA aff. ZOELLNERI Chile, V, Quillota, Cerro La Campana. Ex an A. Brinck coll. (From the same wild coll. which yielded *A. aff. garaventae*. According to Bayer, these two very distinct species, described in 1986, are both known only from their type-localities, both in this area. Brinck claimed to collect both here, where there were no previous records, & we wonder if these are hybrids or intergrades. While it does not wholly match the type-race, this is nearer *A. zoellneri* than *A. garaventae*, with elegant, pointed, pale lilac segments, barely speckled & just smudged with yellow on the upper, inner ones. The anthers, on pink filaments, are not so excessively exerted as they are in typical *A. zoellneri*. 40cm. high.)

2.046.000 : ANAGALLIS

2.046.100 : ANAGALLIS ALTERNIFOLIA Native from about 29°S to Magallanes & Falklands

2.048.009 : ANARTHROPHYLLUM ANDICOLA Chile, VII, Rio Teno valley E of Curico. c. 2500m. A.Flores & J.Watson 11248. (This and the following species are rather similar dwarf, alpine species restricted to the highest Andean Cordillera, to the south of Aconcagua. They form dense, low, compact, spreading shrublets with tiny, ericoid leaves, smothered in dark, almost orangey, yellow, shapely pea flowers. John writes that they "are at least the equal of the finest, madly flowering, dwarf, shrubby adesmias, if not better (and are spineless)." Archibald Archive www.srgc.net

2.048.109 : ANARTHROPHYLLUM CUMMINGII Chile, Reg. Metro., ENE of San Jose de Maipo. 2200m. Open, S & SW-facing, stony slopes. A.Flores & J.Watson 11257. (Both have great potential as alpine-house or trough-plants.)

2.048.209 : ANARTHROPHYLLUM DESIDERATUM Chile, XI, Aisen, near Coihaique. F. Cerda coll. (This highly desirable spiny hummock from the steppes of Patagonia has been in and out of cultivation for almost 50 years. One day someone will put a well-flowered hummock of this on a show-bench. Don't ask us how to do it. We have grown it but never flowered it. Rather than gorse, imagine a more compact, softer, greyer cushion of *Erinacea anthyllis* covered with orange-scarlet pea-flowers. Producing such a plant is one of the ultimate challenges for the skilled alpine-house grower.)

2.050.000 : ANEMONE

2.050.100 : ANEMONE ANTUCENSIS

2.050.200 : ANEMONE DECAPETALA

2.050.500 : ANEMONE MULTIFIDA Argentina, Neuquen, W of San Martin de Los Andes to Passo Hua Hum. c.1000m. Grassy opening among scrub.

2.055.000 : ARENARIA

2.059.009 : ARGEMONE HUNNEMANNII Chile, IV, Coquimbo, E of Vallenar. 400-900m. Seasonally hot, dry sides of steep rocky river-valley. A.Flores & J.Watson 11232. (Maybe the most imposing in this genus of prickly poppies. It can reach 80cm. or more in height with upright branching stems, grey-leaved & carrying large, white poppies with many overlapping petals surrounding the golden anthers on crimson filaments. "A statuesque beast...rather calling to mind a suffruticose paeony." It will need a very hot, dry, sunny site in the UK. Monocarpic and maybe best treated as a spring-sown annual.)

2.060.000 : ARGYLIA

2.060.200 : ARGYLIA ADSCENDENS (var. *adscendens*)

2.060.250 : ARGYLIA ADSCENDENS var. VIRIDIS Chile, Reg. Metro., ENE of San Jose de Maipo. 2200m. Exposed ridgetops. A.Flores & J.Watson 11259. (A magnificent alpine-plant forming suckering mats of greyish, much cut leaves with 20cm. stems carrying huge trumpets, opening in purple-red shades & maturing to oranges & apricot-yellows. At its most robust with big flower-heads when growing in deep talus. These specious alpine must be grown one day.) Archibald Archive www.srgc.net

2.060.500 : ARGYLIA BUSTILLOSI (*A. australis*)

2.060.501 : ARGYLIA BUSTILLOSI

2.061.300 : ARGYLIA POTENTILLIFOLIA

2.061.500 : ARGYLIA ROBUSTA

2.061.700 : ARGYLIA TOMENTOSA

2.062.000 : ARGYLIA USPALLATENSIS Argentina, Mendoza, Valle de Uspallata, N of Uspallata. 2100m. Loose gravel in open areas of exposed steppe. A.Flores & J.Watson 11226. (Suckering mats with cut, greyish foliage & almost stemless, long-tubed trumpets with flattish, rounded faces in chrome-yellow, streaked with lines of crimson speckling inside. A spectacular, choice & local species used to extreme cold, usually with snow-cover, in winter but baked in summer.)

2.063.000 : ARISTOLOCHIA CHILENSIS

2.064.000 : ARISTOTELIA CHILENSIS

2.065.000 : ARJONA PATAGONICA

2.066.500 : ARMERIA MACLOVIANA (can be included under *A. maritima* subsp. *andina*) Falkland Is., E of Stanley, Cape Pembroke. 5m. Wet sand between rocks on low cliffs. R. Reid coll. (Falklands representative of this cosmopolitan montane & maritime genus - tightly mounded pink thrift inured to the Atlantic gales.)

2.066.520 : ARMERIA MARITIMA subsp. ANDINA

2.067.000 : ASTELIA PUMILA Falkland Islands, Mt. Kent. 100m. Wet peat on N-facing slope. R. Reid coll. (A much reduced member of an ancient liliaceous genus, centred on New Zealand & mainly represented in gardens by the larger species from there. This forms carpets or cushions of tiny, dark, glossy green rosettes, densely covered with silvery scales at the bases, with central clusters of small, white, stemless flowers, followed by berries on female plants.) Archibald Archive www.srgc.net

2.068.800 : ASTER SQUAMATUS

2.068.900 : ASTER VAHLII Falkland Islands, E Falkland, Cape Pembroke. 5m. Dune slack. R. Reid coll. (A rhizomatous perennial from moist to wet places in grass & heathland in southern Chile, Argentina & the Antarctic islands. Leafy stems, about 20cm. high carry heads with pale purple, very occasionally white, ray florets surrounding a yellow disc.)

2.069.000 : ASTERANTHERA OVATA

2.070.000 : ASTRAGALUS

2.070.509 : ASTRAGALUS ARNOTTIANUS Chile, V, Aconcagua, above Portillo. c. 3000m. A.Flores & J.Watson 11267. (A choice high-alpine species, known only from the highest Andes along the Argentinian border to the West of Santiago. In John's estimation "one of the world's great Astragali in flower" when its "restrained, prostrate mats become pools of blue-violet")

followed by “splendidly eccentric, varicose, bloodshot seed pods.” We collected seed from this excellent species on the Argentinian side of the Andes in 1994 but it has been little tried in cultivation.)

2.078.000 : AUSTROCACTUS

2.080.000 : AZORELLA

2.080.500 : AZORELLA MADREPORICA

2.085.500 : BACCHARIS MAGELLANICA Falkland Islands, Stanley Common. 30m. Deep peat (pH 4.2). R. Reid coll. (A ground-hugging shrub in the *Compositae*, forming mats about 1m. across but only a few cm. high.)

2.085.501 : BACCHARIS MAGELLANICA Falkland Islands, E of Estancia towards Stanley. 100m. Wet peaty soil along small stream. R. Reid coll. (In the *Compositae* & normally a ground-hugging shrub, this coll is from an unusual upright form, about 60cm. high.)

2.085.502 : BACCHARIS MAGELLANICA Falkland Islands, Green Patch. Thin peat over clay ; very dry in summer. R. Reid coll. (A totally prostrate form of this ground-hugging, evergreen shrub in the *Compositae*, forming mats about 1m. across but only a few cm. high. The yellowish male & female flowers occur on separate plants.) Archibald Archive www.srgc.net

2.090.000 : BARNADESIA

2.090.500 : BARNADESIA ARBOREA

2.093.000 : BARNEOUDIA BALLIANA Chile, Reg. IV & Arg., Jujuy & San Juan. 3500-3800m.

2.093.100 : BARNEOUDIA CHILENSIS Chile, Coquimbo to Linares.

2.093.200 : BARNEOUDIA MAJOR (var. *major*) Chile, Reg. Metro., & Arg., Mendoza.

2.095.000 : BEJARIA

2.100.000 : BEGONIA

2.110.000 : BERBERIS

2.110.100 : BERBERIS BIDENTATA (Chile, Valdivia, Cordillera del Ranco)

2.110.150 : BERBERIS BUXIFOLIA (Chile, Reg. Metro. to Tierra del Fuego ; Argentina)

2.111.000 : BERBERIS EMPETRIFOLIA (S to Magellan Straits ; to 2300m.)

2.111.500 : BEBERIS FLORIDA (Chile, Colchagua. 2000m.)

2.112.000 : BERBERIS GREVILLEANA (Reg. Metro to Colchagua ; adjacent Argentina. 1800-2800m.)

2.113.000 : BERBERIS MONTANA (Reg. Metro. to Llanquihue ; Argentina)

2.113.050 : BERBERIS PEARCEI (Chile, Valdivia, "montanas del Ranco". 1300-1600m.)

2.113.100 : BERBERIS POLYMORPHA (Chile, Chillan)

2.113.150 : BERBERIS ROTUNDIFOLIA (Chillan & Volcan Antuco areas)

2.113.200 : BERBERIS SERRATO-DENTATA (Chile, Valdivia, Cordillera Pelada)

2.113.250 : BERBERIS TRIGONA (Chile, Talca & Bio Bio, Volcan Antuco)

2.115.000 : BESSERA ELEGANS No data. A summer-growing species from S Mexico. Archibald Archive www.srgc.net

2.120.000 : BIDENS

2.122.000 : BIDENS TRIPLINERVIA var. **MACRANTHA** (*B. humilis* - according to Plant Finder)

2.125.000 : BOMAREA

2.127.000 : BOMAREA ISOPETALA Ecuador, Azuay, Rio Quinuas valley, WNW of Cuenca. 3250m. Vestigial stands of montane scrub. (Possibly safest grown frost-free. We have not tried it outside, though this a cold area & it should be as hardy as the next. A tuberous-rooted perennial climbing to about 2m. with dark, leathery leaves & heads of rose-pink, green-tipped flowers.)

2.128.101 : BOMAREA MULTIFLORA subsp. **CALDASII** Ecuador, Napo, Papallacta. 3100m. Margins of montane forest. (These magnificent, mainly climbing, tuberous-rooted perennials in *Alstroemeriaceae* with regular flowers (unlike *Alstroemeria*) are centred on the N Andes, where many grow at considerable altitudes. They grow easily in a greenhouse, unheated or barely frost-free, & are possible outside in sheltered sites in the UK. As well as under glass, we have this growing outside against a N-facing wall, where it is cut to the ground each winter & tends to be late in making new growth in spring, so that it does not flower until very late in the season. Seed usually germinates rather slowly & irregularly. This name appears to cover a disconcerting range of plants, varying in habit, proportions of perianth-segments & the amount of speckling inside the flowers. Plants in this area climbed to 2-3m. with heads of up to 50 bell-shaped flowers, usually unspotted, with scarlet outer segments & orange inner ones.

2.128.103 : BOMAREA MULTIFLORA subsp. **CALDASII** Ecuador, Pichincha, Cerro Pichincha above Quito. 3200m. Among scrub. (Much more slender, to 2m., with about 12 pendant flowers, speckled on the orange inner segments.)

2.129.000 : BOMAREA PATAOCENSIS

13761 BOMAREA SP. (Carchi. 3200m.)

2.130.000 : BRACHYOTUM

2.131.000 : BRACHYOTUM JAMESONII

2.131.500 : BRACHYOTUM LEDIFOLIUM Ecuador, Carchi, NW of El Carmelo. 3300m. Montane scrub on steep slope. (Most widespread Ecuadorean member of this genus in *Melastomataceae*, mostly extremely local dwarf shrubs of the high altitude paramo. About 60cm. high here in an unheated greenhouse but can probably be kept more in character if grown outside in peat-bed conditions in summer in the UK - possibly best protected in winter unless you live in the mildest of western climates. Pendant, pale-yellow flowers with reddish calyces on stiff, narrow-leaved shrubs in nature - laxer & broader-leaved grown here.)..

2.140.100 : CAJOPHORA CORONATA

2.150.000 : CALANDRINIA

2.150.700 : CALANDRINIA ACUTISEPALA

2.150.800 : CALANDRINIA AFFINIS

2.151.000 : CALANDRINIA CAESPITOSA Argentina, Neuquen, Lacar, Cerro Chapelco above San Martin de los Andes. 1800m. Talus & rock-fissures on steep slopes. (A splendid alpine, now being quite successfully grown in both Europe & the USA. Rolf Fiedler describing it here (as "*C. portulacoides*" - it has possibly also been described as *C. skottsbergii*) states it "forms low armeria-like tufts of slightly succulent narrow leaves and has big yellowish-orange flowers up to 5cm. across." Others describe it as "yellow suffused with orange" and "deep gold" - the *Lewisia tweedyi* of the S Andes but not so easy to grow & flower as it.)

2.151.050 : CALANDRINIA CAESPITOSA (*C. rupestris*) Argentina, Mendoza, Malargue, Valle de las Lenas. 2660m. Along snow-melt gulleys & stony areas occupied by late snow-patches. (A brilliant, jewel-like, little plant, deserving of recognition at some level to separate it from the preceding. Altogether smaller with many little bright orange-scarlet flowers with glossy yellow centres, both garish & charming. It grew well in the 1970's from a B.C. & W. coll. (as *C. rupestris*) both in an alpine-house pan and outside in a trough or scree-bed. It even reached the stage of appearing for sale with the easier alpinists in the Wisley plant centre. Then it was suddenly not around any more. We have it again from our 1994 coll. - it should be possible to maintain it this time.)

2.151.059 : CALANDRINIA CAESPITOSA (*C. rupestris*) Chile, V, Aconcagua, above Portillo. 3500m. Gravel barrens & soil-pans on steep N & NW-facing slopes. A. Flores & J. Watson 11268. (A brilliant, jewel-like, little high-alpine, which, in John's opinion, is the true and only *C. caespitosa*, a name now applied to quite a diversity of taxa. Tufts of tiny, fleshy leaves & many little, bright orange-scarlet flowers with glossy yellow centres, both garish & charming. It grew well in the 1970's from a B.C. & W. coll. (as *C. rupestris*) both in an alpine-house pan and outside in a trough or scree-bed. It even reached the stage of appearing for sale with the easier alpinists in the Wisley plant centre. Then it was suddenly not around any more.)

2.151.100 : CALANDRINIA COLCHAGUENSIS Archibald Archive www.srgc.net

2.151.200 : CALANDRINIA COMPACTA

2.151.500 : CALANDRINIA FELTONII Falkland Islands, Roy Cove. Bases of stone runs & N sides of dry ridges. (Originally from stock maintained in cultivation by Sonia Felton on the Falkland Islands, where it has not been seen in the wild for almost a hundred years. Originally described from a coll. made in 1910 from a garden on West Point Island, where it was grown from material from the above locality, but even a century ago it was probably grazed out by sheep & extinct in nature. In Sect. *Axillares* with *C. ciliata* from western N America & N Argentina. An annual up to 30cm. high with narrowly spatulate basal leaves and racemes of many axillary, magenta or white flowers. It should be easy to keep this going in cultivation in the UK.)

14339 CALANDRINIA GRAMINIFOLIA

2.180.000 : CALCEOLARIA

2.180.200 : CALCEOLARIA ARACHNOIDEA Chile, Reg. Metro., NE of Valle Nevado (E of Farellones). 3200m. Among igneous rocks on steep slopes. (Tight basal rosettes of white-felted leaves send up 20cm. stems of black-maroon bubbles. Quite easy & absolutely temperature-hardy if protected from too much wetness from late summer through the winter.)

2.180.209 : CALCEOLARIA ARACHNOIDEA Chile, VII, Rio Teno valley E of Curico. c. 2500m. W-facing slopes. A. Flores & J. Watson 11243. (Tight basal rosettes of white-felted leaves send up 20cm. stems of black-maroon bubbles. Quite easy to grow & absolutely temperature-hardy if protected from too much wetness from late summer through the winter.)

2.180.500 : CALCEOLARIA BIFLORA Argentina, Mendoza, Lujan, Cordon del Plata W of Portrellillos. 2600m. Wet stone-slide on steep slope. (A representative of a variable complex (this would be *C. luxurians*, if "split") characteristic of wet-flushes and sides of snow-melt streams. Mats of flat, plantain-rosettes & masses of tiny, dancing, yellow bubbles on 20cm. stems.)

2.181.009 : CALCEOLARIA DARWINII (*C. uniflora*) Chile, Torres del Paine, Lago Verde. 400m.

2.181.010 : CALCEOLARIA DARWINII (*C. uniflora*) No data. Hand-pollinated from an outstanding selected form..

2.181.501 : CALCEOLARIA ERICOIDES Ecuador, Pichincha, Cerro Pichincha, E slope above Quito. 3600m. Montane scrub on steep slopes. (An extraordinary, erect shrub, up to 1m., with tiny linear leaves, altogether like *Erica arborea* but with the upper stems packed with little, upturned, sulphur-yellow bubble-flowers. This has grown & flowered well outside in the UK summers

- but just does not seem able to survive our winters in the open. Possible from cuttings & seed, though it does not set much.) (100+)
- 2.182.000 : CALCEOLARIA FOTHERGILLII** Falkland Is., W of Green Patch on low, E-facing cliff overlooking Berkley Sound. 10m. In an *Empetrum-Perezia* community on well-drained, shallow peat over clay & shale. R. Reid coll. (A fresh collection of this fascinating dwarf species, one of the most desirable in the genus for the alpine-plant enthusiast. In cultivation in the UK but seldom available nowadays. Mats of foliage, densely covered with down, send up erect stems of about 8cm. each carrying a single large, pouched flower, usually yellow streaked with red inside & with a broad, reddish band outside. The British Antarctic Survey Report No. 60 describes the flowers as "sometimes almost entirely red or entirely yellow with small red spots" so it is more variable than we have seen in cultivation. Always a plant of open, dryish coastal slopes, it resents stagnant moisture at any time but offers no insurmountable difficulty for the experienced grower of alpine-plants in a trough or alpine-house pan in the UK.)
- 2.182.001 : CALCEOLARIA FOTHERGILLII** Falkland Is., W of Goose Green, Brenton Loch. 2m. Fissures in shale of low cliff. Ex a R. Reid coll. (Established from Bob Reid's recent coll. of this Falklands endemic by the skilled grower John Dixon. One of the most desirable in the genus for the alpine-plant enthusiast. Mats of foliage, densely covered with down, send up erect stems of about 8cm. each carrying a single large, pouched flower, usually yellow streaked with red inside & with a broad, reddish band outside. The British Antarctic Survey Report No. 60 describes the flowers as "sometimes almost entirely red or entirely yellow with small red spots." Always a plant of open, dryish coastal slopes, it resents stagnant moisture at any time but offers no insurmountable difficulty for the experienced grower of alpine-plants in a trough or alpine-house pan in the UK.)
- 2.183.000 : CALCEOLARIA HELIANTHEMOIDES** (100+)
- 2.184.000 : CALCEOLARIA LAGUNAE-BLANCAE** (100+)
- 2.184.600 : CALCEOLARIA LANCEOLATA var. PUSILLA** (100+)
- 2.184.700 : CALCEOLARIA LANIGERA** Chile, VI, O'Higgins (Rancagua), near the Termas de Cauquenes. 700-800m. On steep S-facing, mossy boulder-banks in fine, dusty soil with surface humus, seasonally damp but bone dry by late summer. A. Flores & J. Watson 11252. (A superlative, pink-flowered species from low down in the hot, dry Cachapoal valley. John writes : "one of the unknown treasures of the genus : flat, felty, silvery, basal rosettes and cymose showers up to about 40-50cm. high, in the line of *C. cana* and *C. picta*. The same pink, and somewhat intermediate in flower size. It is exceedingly rare too, being known only from this type area at a couple of separate but close sites in the Mediterranean precordillera." Collected for the first time by John and possibly for the alpine-house only in the UK.) Archibald Archive www.srgc.net
- 2.186.000 : CALCEOLARIA PERFOLIATA** Ecuador, Carchi, NW of El Carmelo (SSE from Tulcan). 3100-3300m. Montane scrub on steep slopes. (Representative of several scandent, herbaceous perennials. Climbs to about 4m. with downy leaves & a multitude of bright yellow flowers. From a cold, very wet area and possible as an annual outside in the UK as well as under glass)
- 2.186.100 : CALCEOLARIA PINIFOLIA** Argentina, Mendoza, Lujan, Cordon del Plata W of Portrellillos. 2800m. Fissures & ledges on igneous cliffs. (Stored seed, collected 11.3.94 but germinating well last year. An extraordinary, saxatile species, like no other, distributed locally N from here into the drier ranges of San Juan & Coquimbo. Tufts of dark, leathery, narrow leaves, just like pine-needles stuffed into the fissures, with yellow flowers, their horizontal, cradle-shaped lips speckled crimson inside. A woody-based, very long-lived xerophyte quite easy to grow (but not so easy to flower) in year-round alpine-house conditions.) (100+)
- 2.188.501 : CALCEOLARIA TENELLA** Argentina, Rio Negro, Bariloche, Cerro Tronador E side. 1300m. Fissures on shaded, igneous cliffs. (Creeping pads of minute rosettes with crimson-speckled, lemon-yellow fairy-flowers on thread-like stems. A collection of this sweet, tiny plant made not much below the glaciers on Tronador & proving fairly tough so far.)
- 2.189.000 : CALCEOLARIA UNIFLORA** (Check nomenclature for *C. darwinii* & *C. fothergillii*.)
- 2.198.000 : CALTHA APPENDICULATA**
- 2.198.200 : CALTHA SAGITTATA** Falkland Islands, E of Stanley, Whalebone Bay. 10m. Wet, shallow peat over clay. R. Reid coll. (This is a neat, dwarf *Caltha*, possibly the most horticulturally worthy of the S Americans. It is widely distributed from the central Andes down to Tierra del Fuego in wet, montane sites. Pads a few cm. high with lots of little white flowers.)
- 2.200.000 : CALYDOREA**
- 2.202.000 : CAMASSIA BIFOLIA** Chile, Reg. Metro., Polpaico. 650m. Grassland & among scrub on open, foothill slopes. Ex A. Flores & J. Watson 8669. (About 40cm. high with showy, pyramidal inflorescences of many, white, starry flowers.)
- 2.210.000 : CASSIA**
- 2.230.000 : CENTROPOGON**
- 2.240.000 : CESTRUM**
- CHAMAELUM FRIGIDUM** Ex Flores & Watson 9645. as *Olsynium frigidum*.
- 2.247.000 : CHILIOTRICHUM DIFFUSUM** Falkland Islands, E of Stanley, Gypsy Cove. 10m. Poorly drained, shallow sand over clay. R. Reid coll. (Dense, tidy shrub up to 1m. high but usually less with white tomentose stems & dark, leathery, revolute leaves, white below. White daisy-heads with a few broad rays. Also grows in the far S of Argentina - "muy ornamental".)
- 2.247.001 : CHILIOTRICHUM DIFFUSUM** Falkland Islands, E of Estancia towards Stanley. 100m. Wet peaty soil along small stream. R. Reid coll. (A dense, tidy shrub about 60cm. high in this site. White tomentose stems & dark, leathery, revolute leaves, white below. White daisy-heads with a few broad rays. This also grows in the far S of Argentina - "muy ornamental" comments

2.247.001 : CHILIOTRICHUM DIFFUSUM Chile, Region XII, Torres del Paine. J. Shipton coll.

2.249.000 : CLEMATIS

2.249.209 : CLEMATIS HAENKEANA Argentina, Catamarca, Nevados de Aconquija. 3000m. Mountain shrubberies. A.Flores & J.Watson 11204. (A N Andean species, here at the southern extremity of its distribution. In Subsection *Dioicae* but actually monoecious with large cymes of small, cream or greenish-white flowers. Climbs vigorously to about 5m.)

2.250.000 : COMMELINA

2.255.000 : CONANTHERA BIFOLIA

2.255.050 : CONANTHERA CAMPANULATA

2.255.059 : CONANTHERA CAMPANULATA Chile, IV, Coquimbo, N of Los Vilos. 150m. Hills in coastal mist-belt with low, semi-xerophytic scrub. A.Flores & J.Watson 11229. (A dainty summer-dormant species in a delightfully graceful genus of the *Tecophileaceae*. Wiry, branching stems, 50cm. or more tall, form wide inflorescences with successions of many hanging bells in rich violet-blue. Not at all difficult to cultivate but possibly best kept frost-free in winter.) Archibald Archive www.srgc.net

2.255.100 : CONANTHERA JOHOWII

2.255.150 : CONANTHERA MINIMA

2.255.200 : CONANTHERA SABULOSA Chile, IV, Coquimbo, Guanaqueros. 30m. In sandy soil among coastal mist-belt scrub & in grassland. Ex A. Flores & J. Watson 8702. (A dainty 30cm. high, summer-dormant, sand-dune species in a delightfully graceful genus of the *Tecophileaceae*. Tidy, basal leaves & wiry, branching stems forming wide inflorescences with successions of many hanging bells in pale lilac-blue with darker purple markings. A plant of the coastal mist-belt, probably best kept frost-free.)

2.257.000 : CORDIA DECANDRA

2.260.000 : CRUCKSHANKSIA

2.260.000 : CRUCKSHANKSIA HYMENODON (var. *hymenodon*) Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2300m. Exposed, stony area on steep NW-facing slope. A. Flores & J. Watson 11274. (A very local and utterly distinct alpine member of the *Rubiaceae*. Quite unobtrusive out of flower, like a choice, little alyssum with rather fleshy, grey-green leaves on prostrate stems spreading among the stones, but, when in flower, it puts on a display unparalleled in exotic, extrovert flamboyance. Each clustered head of long-tubed flowers in bright orange-yellow surrounded by a widely flaring skirt of violet-pink sepals : the sort of daring colour combination to be seen in an early Hollywood musical. A French customer told us that he flowered this to his satisfaction, growing it outdoors in a scree-bed, from our 1994 collection but, as far as we know, it has not yet danced on to the British show-bench.

2.270.000 : CYPELLA

2.271.120 : CYPELLA HAUTHALLI subsp. OPALINA Argentina, Corrientes, N bank of Rio Uruguay opposite Garruchos (in Brazil). Full sun, in acid, red clay. Ex a J.A. Castillo coll. (An extremely local race, now eliminated here by flood-erosion caused by deforestation upstream. A spectacular succession of large, tigridia-like flowers in opaline-white, marked yellow inside, on short, branching stems of about 15cm. over 2-3 months in spring & early summer. Summer-dormant & winter-growing, this tolerates frosts with Stan Farwig & Vic Girard in Concord, California but will be safest frost-free in the damper UK.)

2.271.300 : CYPELLA HERBERTII

2.275.009 : DEUTEROCOHNIA LONGIPETALA Argentina, Catamarca. Hot, dry, rocky slopes. A.Flores & J.Watson 11197. (A distinct, xerophytic member of the *Bromeliaceae* forming hummocks of grey-green, *Puya*-like rosettes, which send up branching stems of bright yellow, green-tipped, tubular flowers. An inflorescence can produce flowers for about 3 years. This will need very dry growing conditions but is probably tolerant of frost if the atmosphere is dry.)

2.280.000 : DRABA

2.282.009 : DRIMYS WINTERI Chile, Region XII, Tierra del Fuego between Yendegaia & Lapataia valleys. J. Shipton coll. (An extremely variable, white-flowered, evergreen shrub, less than 1m. to 20m. high, characteristic of humid *Nothofagus* forest. Here, at the southern limit of its distribution, likely to be *D.w.* var. *winteri* (or *D.w.* var. *punctata*) with solitary flowers.)

2.285.000 : ECCREMOCARPUS LONGIFLORUS

2.285.050 : ECCREMOCARPUS SCABER No data.

2.285.051 : ECCREMOCARPUS SCABER from DEEP RED FORM No data

2.290.000 : EMBOTHRUM

2.290.005 : EMBOTHRUM COCCINEUM Chile, Region X, Llanquihue, W of Ensenada. 200m. In scrub & at margins of woodland. (The famous fire-bush from our 1991 coll. - not grown by us, as we do not seem very clever at keeping it here in what many would think an ideal climate. Dense racemes of tubular, orange-scarlet flowers on more or less evergreen shrubs, which can reach 10m. in height but are usually less. Best in low-nutrient acid soil in cool, moist climates but we cannot give you the secret, except to stress that fertilizers will kill it.) Archibald Archive www.srgc.net

2.290.006 : EMBOTHRUM COCCINEUM Chile, Region XII, Torres del Paine. J. Shipton coll. (The famous fire-bush from one

of its most southerly localities, hundreds of kilometres nearer the Antarctic than the "hardy form" from the Norquingo Valley. We doubt if seed from such a cold area has been tried before in cultivation. Dense racemes of tubular, orange-scarlet flowers on more or less evergreen shrubs, which can reach 10m. in height but are usually less, especially in an extreme climate such as this seed came from. Best in low-nutrient acid soil in cool, moist climates but we cannot give you the secret, as we are not clever at keeping it here in what many would think an ideal climate. We do stress, however, that fertilizers will kill it.)

2.291.500 : EMPETRUM RUBRUM Falkland Islands, E of Stanley, Cape Pembroke. 10m. Well-drained, sandy peat. R. Reid coll. (A mat-forming, heath-like shrub, up to 15cm. high but 1m. across, clad in tiny needle-leaves & sprinkled with red crowberries in autumn. One of those ancient genera, which occur in the cold, inhospitable areas of both hemispheres.)

2.291.501 : EMPETRUM RUBRUM Falkland Islands, Mt. Kent. 150m. N-facing slope. R. Reid coll. (A mat-forming, heath-like shrub, up to 15cm. high but 1m. across, clad in tiny needle-leaves & sprinkled with red crowberries in autumn. Some forms are spectacular in fruit. One of those ancient genera, which occur in the cold, inhospitable areas of both hemispheres.)

2.295.000 : EPHEDRA

2.297.000 : ERYNGIUM

2.297.010 : ERYNGIUM AGAVIFOLIUM No data. Of quite limited distribution in NW Argentina, this has larger green-white heads than the following species. These hug the stout, 2m. stems rising from the evergreen clumps of entire, glossy-green leaves, saw-edged with spine-tipped teeth. In our experience, hardy & trouble-free in a sunny, well-drained site in the UK.

2.297.610 : ERYNGIUM DECAISNEANUM (*E. pandanifolium*) No data. This & the following belong to a group of species distributed from S Brazil through Paraguay & Uruguay into N Argentina, essentially grassland plants, often from wet sites in the pampas. Their evergreen rosettes of leaves may look exotic but they are usually hardy in the UK in any good, rich soil in full sun. Branching stems of many purplish, thimble-heads can rise to 3m. above the basal, sword-shaped, spine-edged foliage.

2.297.810 : ERYNGIUM EBRACTEATUM No data. "An unique species...curiously attractive", writes Tim Ingram. Clumps of narrow, grey foliage, almost indistinguishable from *Yucca filamentosa*, send up 1.5m., ridged, branching stems with many small, plantain-like, purplish flower-heads. Little-known in cultivation but from N Argentina & should be quite hardy.

2.297.910 : ERYNGIUM EBURNEUM (*E. bromeliifolium*) No data. Bromeliad-like tufts of narrow, evergreen, spine-edged foliage & 2m. high candelabra of green-white heads. In our experience, the easiest, toughest & most reliable of these S American entire-leaved species. Reputedly from S Brazil into N Argentina but we have seen similar plants in Chile & W Argentina.

2.298.310 : ERYNGIUM HORRIDUM (Brazil & Argentina) No data. Elegant clumps of narrow leaves, up to 1m. long, send up 2m. stems with a multitude little, rounded, green-white heads in summer. Archibald Archive www.srgc.net **2.298.510 : ERYNGIUM LASSEAUXXII** (*E. pandanifolium* var. *lasseauxii*) (S Brazil, Uruguay, Paraguay) No data. Evergreen, *Yucca*-like clumps of channelled, spine-edged foliage & imposing, almost cylindrical, 2m. candelabra of green-white heads.

2.299.800 : ERYNGIUM VENUSTUM No data. We could not verify the name but seed is from *Umbelliferae* enthusiast Tim Ingram, who recommends it as a good hardy perennial for a hot, dry spot with "very attractive foliage forming 30cm. wide, glossy green rosettes of spiky, pinnate leaves" & 45cm. high stems of "modest green-yellow thimbles in late summer"

2.302.000 : ESCALLONIA

2.302.100 : ESCALLONIA ALPINA

2.302.500 : ESCALLONIA VIRGATA

2.303.000 : ESPELETIA

2.306.000 : FASCICULARIA BICOLOR Chile, Region X, Llanquihue, Rio Petrohue valley NW of Ralun. 150m. Epiphytic on *Nothofagus* trunks (with *Sarmienta*, *Mitraria*, *Luzuriaga*, etc.) in dense woodland.

2.309.000 : FRANCOA

2.310.000 : FUCHSIA

2.320.000 : GAULTHERIA

2.321.120 : GAULTHERIA MYRSINOIDES (*Pernettya pumila*) Falkland Islands, E of Stanley, Cape Pembroke. 10m. Well-drained. sandy peat. R. Reid coll. (A totally prostrate form of this widespread, highly variable ericaceous shrublet, ideal for the peat-garden or trough. Mats with tiny, shiny, imbricate, evergreen leaves & white fruits flushing to rosy purple as they mature. Hybrids with the sympatric *G. antarctica* are recorded from the Falklands.)

2.330.000 : GENTIANELLA

2.350.010 : GETHYUM ATROPURPUREUM No data. A strange, summer-dormant, bulbous member of the *Alliaceae*, endemic to Chile &, as far as we know, in a monotypic genus. The umbels of elegant, starry, brownish black flowers, about 2 cm. across, are produced on 20 cm. high stems in spring & last in good condition for about a month. Almost certainly satisfactory grown under glass without heat or with minimal frost-protection in the UK.

2.390.000 : GRINDELIA CHILOENSIS Argentina, Mendoza, Lujan, Cordon del Plata W of Portrellillos. 2000m. Among scrub on river gravels in valley bottom. (A showy member of the *Compositae*, about 1m. high & characteristic of the dry Patagonian steppes - not Chile. A woody perennial with thick, narrow, toothed leaves & erect stems carrying big buds, oozing with white latex, opening to large, bright-yellow heads with so many rays that they appear semi-double. Absolutely temperature-hardy but

can resent winter-wet in the UK, so give it full sun & good drainage. Grows with *Mutisia subspinososa* - if only both were equally easy.)

2.400.000 : GUNNERA

2.400.100 : GUNNERA MAGELLANICA Chile, X, Llanquihue, Volcan Osorno, N of Ensenada. 1200m. Margin of *Nothofagus* woodland. (A hermaphrodite form of a species which usually has the sexes separately. Mats of rounded, deciduous leaves, a few cm. high, with inconspicuous flowers, reliably followed by conspicuous, brilliant orange fruit-clusters in autumn.)

2.400.101 : GUNNERA MAGELLANICA Falkland Islands, Stanley Common. 30m. Eroding peat banks. R. Reid coll. (Running mats of rounded, deciduous leaves, a few cm. high. Inconspicuous flowers precede orange fruit-clusters on the females.)

2.420.000 : HABRANTHUS

2.421.000 : HABRANTHUS ESTENSIS Uruguay, Maldonado, Punta del Este. Ex an A. Castillo coll. (An elegant & striking species, treated as a summer-grower & hardy with Stan Farwig & Vic Girard in Concord, California. Keep it only just frost-free in the UK, if stored dry in winter. Rich pink, funnel-shaped flowers, 8cm. long on 30cm. stems in late summer.)

2.422.050 : HABRANTHUS TUBISPATHUS No data. Archibald Archive www.srgc.net

2.435.000 : HEBE ELLIPTICA Falkland Islands. R. Reid coll. (A glossy-leaved evergreen shrub, which occurs in both southern S America & New Zealand. Racemes of fragrant white or bluish flowers, which are “almost the largest in the genus”, according to Bean, who points out that “the true species is rare in gardens” in the UK, usually being represented by its hybrid, *H. x fransiscana*. In the Falklands, it is the only species *Hebe*, growing 1-3m. in high & Bob Reid tells us that it is not particular as to soil, “impervious to salt spray”, frequenting “the most windswept sites on the islands”.)

2.440.000 : HERBERTIA LAHUE (subsp. *lahue*) Argentina, Buenos Aires Prov. Ex an A. Castillo coll. (Hardy with us in an unheated greenhouse. A delightful little corm in *Iridaceae* with a long succession of violet flowers on 10cm. stems.)

2.450.000 : HESPEROXIPHION PERUVIANUM Peru, near Cuzco. c. 3500m. (A *Tigridia* relative in the *Iridaceae*, which should be temperature-hardy in the UK, though we have never seen it grown here. It will be best kept dryish in winter and treated as a summer-grower. Bright yellow, freesia-scented iris-flowers. NZ-grown seed from *Tigrideae*-specialist, ???)

2.460.009 : HIERONYMELLA ARGENTINA Argentina, Tucuman. 1800-2200m Among bushes in rocky, lower mountain valleys. A. Flores & J. Watson 11163. (An obscure member of the *Amaryllidaceae* from an area with a temperate climate where the main rainfall is in spring with dry late summers & autumns. It should be perfectly growable without frost-protection under glass in the UK. Stout stems rising from tufts of broadish leaves carry umbels of pendant, tubular flowers in “orangey brown blended with red & green”. Not collected previously by John & Anita, this is almost certainly new to cultivation.)

2.469.999 : IPHEION ‘ALBERT CASTILLO’ Argentina. Ex an A. Castillo coll. (Like a very large, 20cm. tall, pure-white version of *I. uniflorum*. Superb. As with the others here, hardy with us in an unheated glasshouse.)

2.470.000 : IPHEION

2.470.010 : IPHEION DIALYSTEMON Argentina. Ex an A. Castillo coll. (Like the excellent *Nothoscordum ostenii*, the British stock of this exquisite little bulb was sent to Brian Mathew by Alberto Castillo. Like it, this comes from from Rio de la Plata delta area of Uruguay & N Argentina and both have proved perfectly hardy with us in an unheated glasshouse. We have grown this for many years but had only one clone and could not induce it to set seeds until Norman Stevens acquired another for us from Australia. We list it for the first time. Prostrate, narrow, glossy-green foliage and a profusion of brilliant-yellow, upward facing flowers on stems only about 5cm. tall in spring. Much esteemed as an AGS show-plant, it is considered temperamental by some but we cannot say we have ever found it a problem-plant if not overdried in summer.)

2.471.050 : IPHEION HIRTELLUM

2.471.100 : IPHEION PATAGONICUM

2.471.150 : IPHEION PEDUNCULATA

2.471.200 : IPHEION SELLOWIANUM

2.471.250 : IPHEION SESSILE

2.471.300 : IPHEION SETACEUM

2.471.350 : IPHEION TWEEDIANUM

2.471.400 : IPHEION UNIFLORUM

2.471.412 : IPHEION UNIFLORUM 'CHARLOTTE BISHOP' Lilac-pink form.

2.471.420 :# IPHEION UNIFLORUM 'ROLF FIEDLER' May be a clone of *I. pedunculata*. Masses of well-formed flowers in pure sky-blue over a long period. Clean stock of the true clone : many commercial stocks now mixed.

2.471.500 : IPHEION UNIFLORUM subsp. TANDILIENSE Argentina, Buenos Aires, near Tandil. P. Ravenna coll.

2.472.450 : IPHEION VITTATUM

2.475.500 : IPOMAEA HIERONYMI var. CALCHAQUINA Argentina, Tucuman. 2000m. Among scrub on open boulder-flats. A. Flores & J. Watson 11165. (Described by John as a “gorgeous, long-lived, herbaceous perennial” with radiating prostrate stems

covered in silvery leaves, from the internodes of which appear spectacular clusters of convolvuloid flowers in soft-pink with purple central 'eyes'. The variety is a high-altitude ecotype of the species, which should be temperature-hardy. A very small collection of the large seeds, each clad "in a silky golden cape like that of colobus monkeys.")

2.480.000 : JABOROSA VOLCKMANNII Chile, Volcan Antuco. A. Flores & J. Watson coll.

2.485.000 : JUNELLIA

2.500.000 : KOHLERIA

13687 KOHLERIA SP. (Pululahua. 3000m.) (100+)

13706 KOHLERIA SP. (Calacali. 2000m.) (100+)

13626 LAMOUROUXIA VIRGATA

2.509.100 : LAPAGERIA ROSEA

2.510.000 : LATHYRUS

14303 LATHYRUS MAGELLANICUS

2.517.800 : LEPTINELLA SCARIOSIA Falkland Is., Cape Pembroke. 5m. Sandy peat, moist in summer. (A mat-forming perennial with finely cut, pinnatifid leaves and yellow capitula. Distributed quite widely in the wetter, colder areas of southern Chile & Argentina but not by no means common in the Falklands. The most recent revision has returned these southern hemisphere *Cotula* species to their older generic name of *Leptinella*.) Archibald Archive www.srgc.net

14168 LESQUERELLA MENDOCINA

2.520.000 : LEUCERIA (OR LEUCHERIA)

2.520.400 : LEUCERIA CANDIDISSIMA Argentina, Malargue, Valle de las Lenas. 2400m. Dry, stony areas below snow-patches. (This genus in *Compositae*, mainly Andean with many species in Patagonia, is almost unknown in cultivation. There are one or two outstanding dwarves, of which *L. candidissima* is one of the best. Pads of grey-felt leaves with the characteristic flower-heads, somewhat resembling little *Catananche* heads with rolled-back ray-florets, in a delicate pastel pinkish shade.)

2.521.900 : LEUCERIA SUAVEOLENS Falkland Is., East Falkland, E of Estancia. 120m. Dryish, well-drained peat at edge of 'stone-run' on S-facing slope. R. Reid coll. (A dwarf, rhizomatous perennial from the Falklands & the Magellan Straits, all wrapped up in a dense overcoat of wool to protect it from the Antarctic gales. Quite close to *L. candidissima* of the Argentinian Andes, its basal rosettes of small, pinnatisect leaves send up stems of about 15cm. each with a head of white flowers with a "beautiful perfume" according to Bob Reid, who tells us its local name is "vanilla daisy". Not previously in cultivation as far as we know.)

2.525.000 : LEUCOCORYNE ALLIACEA Chile, Reg. Metro., Chacabuco near Polpaico. 800m. Among scrub & in grassland on foothill slopes & meadows. A. Flores & J. Watson 8665 (A lovely, local species in this small genus of Chilean bulbs in *Alliaceae*. A neat plant, 15-20cm. high with umbels of elegant, white flowers with narrow, elongated, pointed segments.)

2.525.050 : LEUCOCORYNE ANGUSTIPETALA Chile, Reg. Metro., Valle Nevado. (A diminutive high-alpine species with narrow, white, scented flowers which open at dusk. In spite of our efforts, sets little seed.)

2.525.100 : LEUCOCORYNE APPENDICULATA

2.525.150 : LEUCOCORYNE APPENDICULATA

2.525.200 : LEUCOCORYNE CONFERTA

2.525.250 : LEUCOCORYNE COQUIMBENSIS Chile, IV, Coquimbo, Guanaqueros. 30m. In sandy soil among coastal mist-belt scrub & in grassland. Ex A. Flores & J. Watson 8699. (Tight umbels of showy flowers, with the segments striped longitudinally in violet-blue and white, on stems about 30cm. high.) Archibald Archive www.srgc.net

2.525.300 : LEUCOCORYNE IXIODES

2.525.350 : LEUCOCORYNE MACROPETALA

2.525.400 : LEUCOCORYNE ODORATA Chile, Reg. Metro., near Polpaico. 650m. Grassland & among scrub on open, foothill slopes. Ex A. Flores & J. Watson 8668. (Closest to *L. xiioides*, the only member of this genus of Chilean bulbs widely grown in cultivation, but with umbels of white flowers with broad segments on 20-30cm. stems. Intensely fragrant.).

2.525.450 : LEUCOCORYNE PAUCIFLORA

2.525.500 : LEUCOCORYNE PURPUREA

2.525.550 : LEUCOCORYNE VIOLASCENS

2.530.000 : LIBERTIA

2.530.010 : LIBERTIA CAERULESCENS No data. A blue flowered species from Chile : an exception in this white-flowered genus in the *Iridaceae*. Clumps of stiff, linear leaves, about 30cm. in height, send up stems packed with stemless umbels of pale-blue flowers with membranous bracts. Needs a very sheltered site or some protection in the UK.

2.530.100 : LIBERTIA FORMOSA (*L. chilensis*) (12608)

2.540.000 : LOASA

14247 LOASA NANA

14425 LOASA SIGMOIDEA

14137 LOASA SP. (Las Lenas. 2350m.)

2.550.000 : LOBELIA

2.555.000 : LOBELIA TUPA Chile, Reg. VI, Cachapoal, ESE of Machali. 900m. Openings among scrub in gravelly soil. (A regal Chilean endemic, towering to 2.5m. with spires packed with thick-textured, hooded, scarlet flowers, exquisitely adapted for humming-bird pollination, above the large, rough, grey-green foliage. Early collections were coastal but this is from the Andean foothills and may prove hardier in the UK, though it is too early to be sure. Will still need a well-drained, sunny site.)

2.563.000 : LUPINUS

2.563.509 : LUPINUS CHILENSIS Chile, II, Antofagasta, SE of Calama. A.Flores & J.Watson 11121. (Tentatively identified as this species by John, the other possibility is *L. ananeanus*. An annual but an excellent one, neat & low with "compact, dense spikes of very blue flowers sitting down, the tops level with the foliage." Definitely worth a trial.)

2.565.000 : LUPINUS OREOPHILUS Chile, II, Antofagasta, E of Calama. A.Flores & J.Watson 11114. (A subshrubby perennial, again with a tentative name : the other possibility is *L. tarapacensis*. Erect bushes, 1m. or less high, "with neat foliage & many shortish spikes of a good blue marked with gold." There are not many lupins in Chile with most of the 7 species confined to this farthest NE, high corner on the altiplano, where Chile, Bolivia & Argentina meet, a little-collected area & a very long way from Santiago. Absolutely temperature-hardy, of course, but the extreme climate is also very dry.)

2.570.000 : LUZURIAGA MARGINATA Falkland Islands, base of Mt. Kent. 100m. In shade of large rocks in 'stone run'. R. Reid coll. (A shrubby *Lapageria* & *Philesia* relative from these cold, windswept, Atlantic islands & the adjacent S tip of Chile & Argentina. Runs underground, like *Philesia*, & sends up 20cm. stems clad in little, narrow, alternate, leathery leaves & carrying pale-pink flowers followed by fleshy, purplish fruits. We grow *L. radicans* from the more northern Chilean forests but have never seen this southern, cold-climate relative mentioned as being in cultivation. May not be too easy to get established initially.)

2.570.001 : LUZURIAGA MARGINATA Falkland Islands, N of Estancia towards Port Louis. 75m. In shade of large rocks in 'stone run'. R. Reid coll. (A shrubby *Lapageria* & *Philesia* relative from these cold, windswept, Atlantic islands & the adjacent S tip of Chile & Argentina. Runs underground, like *Philesia*, & sends up 20cm. stems clad in little, narrow, alternate, leathery leaves & carrying pale-pink flowers followed by fleshy, purple fruits. We grow *L. radicans* from the more northern Chilean forests but have never seen this southern, cold-climate relative mentioned as being in cultivation. Freshly collected, moist-stored seed of a hardy species likely to be well-suited to the UK climate but its relatives hint that it may not be too easy to establish initially.)

2.570.200 : LUZURIAGA RADICANS Archibald Archive www.srgc.net

2.575.000 : MAIHUENIA

2.575.500 : MAIHUENIA PATAGONICA Argentina, Mendoza, Malargue, ESE of Los Molles. 2000m. Open, stony areas. (Large, rounded hummocks, spinier than the next. From the severe climate of the Patagonian steppe but used to a very dry atmosphere in both summer & winter, though it can experience snow & hail throughout the year. Spectacular yellow flowers.)

2.575.600 : MAIHUENIA POEPPIGII Chile, VIII, Nuble, W of Termas de Chillan. 1300m. Open areas, in loose, volcanic ash. (Wide mats, 1m. or more across but only a few cm. high, of branching stems with tiny, cylindrical leaves & white spines. Gorgeous large, stemless flowers in soft lemon-yellow. Easy in the alpine-house but reputed to flower best outside in scree. If protected from winter-wetness, it can survive very much lower temperatures than will occur in the UK.)

2.580.000 : MALESHERBIA

2.583.000 : MALESHERBIA LINEARIFOLIA Chile, Reg. Metro, below Farellones. 2100m. Open, rocky slopes & along ridgetops. (A superb, woody-based herbaceous perennial, sadly so far proving neither easy to grow in the UK nor, indeed, to germinate. Those who have succeeded in both respects have rated it "a beautiful plant". The genus is in its own family, *Malesherbiaceae*, vaguely akin to *Passifloraceae*, and is 'different' to anything familiar. About 60cm. high with stems & leaves covered in glandular hairs and panicles of flowers, about 2cm. across, somewhat *Delphinium*-like in effect, in rich, dusky blue-violets & red-violets, generously produced over a long period. Temperature hardy but needs rather dry conditions - try it in a well-drained sunny site.)

2.583.001 : MALESHERBIA LINEARIFOLIA Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2300m. Among low boulders & scrub. A.Flores & J. Watson 11275. (A superb, woody-based herbaceous perennial, which has sadly so far proved neither easy to grow in the UK nor, indeed, to germinate. Those who have succeeded in both respects have rated it "a beautiful plant" & John Watson considers it one of the Chileans with the greatest potential in cultivation. Robin White flowered this successfully from our 1994 collection but we have heard no more of its progress. The genus is in its own family, *Malesherbiaceae*, vaguely akin to *Passifloraceae*, and is 'different' to anything familiar. About 60cm. high with stems & leaves covered in glandular hairs and panicles of flowers, about 2cm. across, somewhat *Delphinium*-like in effect, in rich, dusky blue-violets & red-violets, generously produced over a long period. Temperature hardy but needs rather dry conditions - try it in a well-drained sunny site.)

2.583.100 : MALESHERBIA LIRANA

2.585.009 : MALVELLA LEPROSA A.Flores & J.Watson 11109 (Not listed. USDA “noxious weed”.)

2.588.000 : MAZUS

2.590.000 : MELOSPERMA

2.595.009 : MENONVILLEA CUNEATA Chile, V, Aconcagua, above Portillo. 3800m. WNW to W-facing, summit gravel slopes of Andean watershed. A.Flores & J.Watson 11272.

2.600.000 : MICONIA

13679 MICONIA SP. (Pululahua. 3000m.) (100+)

13981 MICONIA SP. (Tandapi. 2600m.) (100+)

2.615.000 : MONTIOPSIS

14138 MONTIOPSIS ANDICOLA

12311 MONTIOPSIS CISTIFLORA

14133 MONTIOPSIS GAYANA

2.615.500 : MONTIOPSIS SERICEA (*Calandrinia sericea*) Chile, Reg. Metro., ESE of San Jose de Maipo. 2300m. Exposed ridgetops & open, stony slopes. A.Flores & J.Watson 11258. (Certainly the finest of the group of hairy-leaved, crimson-flowered species for the alpine-house grower. If the unsatisfactory & unwieldy genus *Calandrinia* is 'split', as seems helpful & sensible, this is in Subgenus *Montiopsis* of *Montiopsis*. If it is not, it is in Subgenus *Hirsutae* of *Calandrinia*. An outstanding plant with compact hummocks of silvery-grey, downy foliage covered with generously produced brilliant magenta flowers on short stems. To keep its character in cultivation in the UK, it must have full sun & year-round alpine-house conditions.)

14330 MONTIOPSIS SP. (Las Lenas. 2160m.)

2.625.000 : MUTISIA

2.625.109 : MUTISIA ACEROSA Chile, Reg. Metro., ENE of San Jose de Maipo. 2300-2500m. Montane steppe & scrub patches on & around ridgecrests & highest major outcrops. A.Flores & J.Watson 11276.

2.626.000 : MUTISIA DECURRENS

2.628.009 : MUTISIA LINEARIFOLIA Chile, VII, Rio Teno valley E of Curico. 2100m. In steppe vegetation on precipitous, W-facing slope. A.Flores & J.Watson 11244. (We paraphrase John's account : “perhaps the best & certainly the most original of them all...a tidy little yellow-green shrublet no more than 15cm. high...between the pale yellow starry petals...& the sparse ring of brighter yellow bristles...sprouted an extraordinary whirling of scarlet tubes spiralling round the petals.”)

2.628.500 : MUTISIA OLIGODON Chile, Reg. VIII, Bio Bio, SE of Antuco to Volcan Antuco. 650m. Among scrub on steep slopes of volcanic ash. (A great success here in our cold greenhouse from our 1991 coll. Technically separated from *M. spinosa* (*M. retusa*) in that it is not a climber but forms wide-spreading, suckering mounds of stems, about 30cm. high. In cultivation, our plants are about 60cm. high and straggle through an adjacent *Correa*. All the plants we have seen under this name from other sources in the UK have been quite strong-growing climbers and incorrectly named. Most appeared to be the vigorous, rather mean-flowered *M. illicifolia* but the pink Chilean climbers are a very complex group. Bean mentions a plant (of the real thing) raised from Comber's seed flourishing for 40 years in a Sussex garden and it does seem to be one of the best for UK gardens. Certainly the classiest & most aristocratic of these pink Andean daisies with a summer-long succession of broad-rayed heads in what Bean describes as a “beautiful silky pink (almost salmon-pink).” Try it outside in scree or a raised bed and be assured that this is the true plant - it came from the locality where Poeppig collected the material he described as this in 1835 - “Andes de Antuco.”) Archibald Archive www.srgc.net

2.628.501 : MUTISIA OLIGODON

2.628.800 : MUTISIA RETRORSA

2.628.900 : MUTISIA ROSEA

2.629.100 : MUTISIA SINUATA

2.629.109 : MUTISIA SINUATA Chile, Reg. Metro., ENE of San Jose de Maipo. 1900-2500m. In montane steppe-scrub. A.Flores & J.Watson 11260. (A little alpine species, not a climber but with prostrate stems, to about 15cm., with stiff, toothed, grey leaves & cream-coloured daisies, usually tinged with pink or apricot. Sweet but not so easy to grow in our experience.)

2.629.200 : MUTISIA SPINOSA (*M. retusa*) Argentina, Neuquen, Lacar, E of Lago Lolog. 1100m. Among scrub in gravelly soil. (Can climb to 6m., though usually much less. Coarsely toothed, leathery, evergreen leaves & profuse, large pink flower heads. This & *M. oligodon* are possibly the best for UK gardens, though we have found this the more difficult. Superior flowers to those of *M. illicifolia*, which often now masquerades as this as well as the preceding, in the UK. It is still grown from the Comber 1925-27 collections & Norman Hadden used to have a fence covered with it from that source in his Somerset garden.)

2.629.400 : MUTISIA SUBSPINOSA

2.629.401 : MUTISIA SUBSPINOSA Argentina, Mendoza, S of Termas de Villavicencio. 2000m. Among scrub. (Nothing to do with pink *M. spinosa* & in Sect. *Guariruma* with *M. retrorsa* & *M. decurrens*, this is endemic to the extreme, dry climatic strip along the E Andean foothills, N from Mendoza, through San Juan into La Rioja provinces. Under cold-glass with us, this suckers

widely underground & forms new climbing stems annually, so has taken a long time to build-up 2m. stems & to flower with us from a 1991 coll. Large daisy-heads in a softer, yellower orange than those of fiery *M. decurrens* but nevertheless a brilliant climber. If attempted outside in the UK, it might succeed best in dry soil under a south wall but it should be just the plant for Colorado.)

2.629.402 : MUTISIA SUBSPINOSA Argentina, Mendoza, Lujan, W of Portrellillos. 2000m. Among scrub on old river-gravels.

2.629.500 : MUTISIA SUBULATA

2.629.559 : MUTISIA SUBULATA subsp. ROSMARINIFOLIA Chile, VII, Rio Teno valley E of Curico. 2000-2300m. A.Flores & J.Watson 11242

2.629.560 : MUTISIA SUBULATA subsp. ROSMARINIFOLIA Chile, Reg. Metro., ENE of San Jose de Maipo. 2300-2500m. Montane steppe & scrub patches on & around ridgecrests & highest major outcrops. A.Flores & J.Watson 11262

2.632.000 : MYRTUS NUMMULARIA (*Myrteola nummularia*) Falkland Islands, SW of Stanley. Wet peat. R. Reid coll (A tiny, prostrate, mat-forming, evergreen shrub with little white flowers followed by big, pink fruits.)

2.635.000 : NASSAUVIA

2.635.400 : NASSAUVIA ARGENTEA

2.635.900 : NASSAUVIA GAUDICHAUDII Falkland Is., above Yorke Bay minefield. Rock outcrops. R. Reid coll. (A Falkland Is. endemic in Sect. *Mastigophorus* & possibly closest to *N. hillii* & *N. ameghinoi* of the Argentinian steppe. In cultivation from a fairly recent coll. by Peter Erskine and has received an Award of Merit as an alpine-house plant. A tiny, dwarf shrub forming dense low cushions, up to 8cm. high with many stiff stems clad in imbricate, spine-tipped leaves, each carrying a single head of cream, honey-scented flowers.) Archibald Archive www.srgc.net

2.635.901 : NASSAUVIA GAUDICHAUDII Falkland Is., W of Goose Green, Brenton Loch. Well-drained sites. R. Reid coll. (A Falkland Is. endemic in Sect. *Mastigophorus* & possibly closest to *N. hillii* & *N. ameghinoi* of the Argentinian steppe. In cultivation from a fairly recent coll. by Peter Erskine and has received an Award of Merit as an alpine-house plant. A very dwarf shrub forming dense low cushions, up to 8cm. high with many stiff stems clad in imbricate, spine-tipped leaves, each carrying a single head of cream, honey-scented flowers. A slightly more prostrate form than the one from Yorke Bay.)

2.636.250 : NASSAUVIA LAGASCAE (var. *lagascae*) Chile, V, Aconcagua, above Portillo. 3800m. WNW to W-facing, summit gravel slopes of Andean watershed. A.Flores & J.Watson 11271. (A robust, very attractive form of this desirable, dwarf high-alpine, forming mats of tiny, firm rosettes of minute, imbricate leaves. Rounded, terminal heads of little flowers, white or lilac-tinged, are carried on the shortest of stems. Can be grown successfully in the UK in the alpine-house or trough.)

2.636.300 : NASSAUVIA LAGASCAE var. LANATA

2.636.500 : NASSAUVIA PINNIGERA

2.636.650 : NASSAUVIA REVOLUTA

2.636.800 : NASSAUVIA SERPENS Falkland Is., W of Stanley, Mt. Harriet. At base of a 'stone-run'. R. Reid coll. (Another Falkland Is. endemic, in Sect. *Nassauvia* & possibly closest to the Andean *N. pinnigera* and *N. revoluta*. Stems covered in little, stiff, scaly, pointed, overlapping leaves, with dense grey down on the undersides, rise to carry rounded heads, packed with hundreds of tiny white, scented flowers with blue-violet anthers. We cannot find any record of this having been in cultivation. Possibly best grown outside in summer in the UK.)

2.640.000 : NASTANTHUS

14432 NASTANTHUS AGGLOMERATUS

2.644.000 : NAVARRETIA

2.648.000 : NEOPORTERIA

2.652.000 : NICOTIANA

2.658.000 : NOTHOSCORDUM

2.659.000 : NOTHOSCORDUM OSTENII Uruguay. No further data. Ex a J.A. Castillo coll. (This is a choice, little 'sweetie' and apparently extremely scarce and local in nature. Alberto Castillo sent Brian Mathew a few wild-collected seeds in 1987. Brian grew these and gained a P.C. for the species in April, 1992. He kindly sent us seed the following year and we have now an adequate enough parent stock to see this widely distributed and, we hope, firmly established in cultivation. We have been growing it under unheated glass along with our other winter-growing bulbs and it has fitted in well, proving hardy and comparatively trouble-free (it is surprising just how hardy these bulbs of the Rio de la Plata delta area are). Delicate, thready leaves and wiry stems, about 10cm. high, with umbels of rich chrome-yellow, freesia-scented flowers, opening wide and striped green on the outside. It needs a few bulbs to make a worthwhile potful and, as it has not so far shown any enthusiasm to increase vegetatively, seed is the obvious way to achieve this. "An excellent little bulb" comments Brian. We agree and we are sure you will as well.)

14144 NOTHOSCORDUM SP. (Las Lenas. 2450m)

2.660.000 : NOTOTRICHE

2.661.000 : NOTOTRICHE COMPACTA Chile, V, Aconcagua, above Portillo. 3800m. WNW to W-facing, summit gravel slopes of Andean watershed. A.Flores & J.Watson 11270. (The most southern representative of the last of the great alpine genera to be tamed in cultivation. Alpine-plant specialists have had little opportunity to experiment with this amazing genus of the *Malvaceae*, centred on the high Andes of Peru & Bolivia. This Chilean is, however, by no means ungrowable and has been seen, pretty much in character, on the British showbench. Soft, velvety cushions of little rosettes, composed of tiny, woolly, grey, 3-fingered leaves, carry large, stemless, cup-shaped flowers, opening in white or ice-blue from violet-blue tinted buds.)

2670.000 : OENOTHERA ACAULIS

(2.675.000 : OLSYNIUM)

2.679.000 : ONIRA UNGUICULATA

2.680.300 : (13644) ONOSERIS HYSSOPIFOLIA

2.681.000 : (13940) ONOSERIS SALICIFOLIA

2.682.000 : OPUNTIA

2.690.000 : (14280) OREOPOLUS GLACIALIS

2.690.001 : (14324) OREOPOLUS GLACIALIS

2.693.000 : ORTHROSANTHUS

2.693.200 : ORTHROSANTHUS CHIMBORACENSIS Ecuador, Carchi, NW of El Carmelo (SSE of Tulcan). 3300m. Grass & *Espeletia* paramo, in wet, black, peaty soil. (A member of the *Iridaceae* characteristic of the N Andean moorland - the paramo. Clumps of tough, iris-leaves & erect, 60cm. stems, close-packed with rich-blue flowers, rather like a blue *Libertia*. This seems to be quite reliably hardy in most of the UK and certainly thrives in areas with cool, moist summers.)

2.698.000 : OURISIA

2.698.100 : OURISIA ALPINA Argentina, Neuquen, Lacar, Cerro Chapelco above San Martin de los Andes. 1680m. Moist sides of gulleys. Ex a J. Andrews coll. (Tidy, dark, mat-forming rosettes of basal leaves with long-tubed, pink flowers carried daintily on 10cm. stems in summer. A plant of damp, peaty patches, probably growable outside in a peat-bed in the UK but mostly so far nurtured under glass. Our friends Bob & Rannveig Wallis grow a fine pan in their shaded *Cyclamen*-house.)

2.698.250 : OURISIA ELEGANS

2.698.300 : OURISIA FRAGRANS

2.698.450 : OURISIA MAGELLANICA

2.698.501 : OURISIA MICROPHYLLA Chile, Region VIII, Nuble, SSW of Termas de Chillan. 1600m. Shaded, apparently dryish, crevices on igneous cliffs. (One of the loveliest saxatile plants of the S Andes. Mounds of thready stems with tiny, imbricate leaves carry profuse, soft-pink, primula-like flowers over a long period. Quite easy in the alpine-house in 'Dionysia conditions' - do not overwater or overfeed or it can collapse. Such advice seems to have gone unheeded by many as it seems scarce again.)

2.698.520 : OURISIA MICROPHYLLA from WHITE FORM Originally from two white-flowered plants, selected at Goteborg Botanic Garden by Henrik Zetterlund from plants grown from a David Hale seed-collection in Chile.

2.698.600 : OURISIA PALLENS

2.698.650 : OURISIA POEPPIGII

2.698.700 : OURISIA POLYANTHA

2.698.750 : OURISIA PYGMAEA

2.698.800 : OURISIA RUELLIOIDES

2.700.000 : OXALIS

2.700.200 : OXALIS ADENOPHYLLA

2.701.000 : OXALIS COMPACTA

2.702.000 : OXALIS ENNEAPHYLLA Falkland Islands, W end of Berkeley Sound. 3m. Dryish, well-drained, peaty loam. R. Reid coll. (A delightful species, more compact than *O. adenophylla* with little, glaucous, rounded, radially palmate leaves & big, white to pale-pink flowers on 2cm. stems. Quite easily grown in a trough or scree outside in the UK.)

2.705.510 : OXALIS LOBATA Choice, little autumn-flowering bright yellow. Alpine house. Archibald Archive www.srgc.net

2.709.000 : OXALIS SQUAMATA

2.709.009 : OXALIS SQUAMATA Chile, VII, Rio Teno valley E of Curico. 2000-2300m. Level, bare, gravelly patches. A.Flores & J.Watson 11247. (A truly alpine Chilean which has proved to be a trouble-free garden-plant in the UK. Tufts of little, grey-green, trifoliate leaves, a few cm. high, & lots of bright, rosy flowers. Neat & well-behaved enough for a trough

14364 PACHYLAENA ATRIPLICIFOLIA

2.729.005 : PASITHEA COERULEA Chile, Bio Bio, Antuco, La Cantera. 300m. In sandy soil among grasses & scrub in broken shade of pine plantation. A. Flores & J. Watson 8706. (One of the most southern populations (so perhaps the hardiest stock obtainable) of this beautiful, tuberous-rooted member of the *Liliaceae*. From basal tufts of foliage, 60-80cm. stems rise to carry pyramidal inflorescences of many, rich, pure blue stars with clustered yellow anthers. Described by G.S. Thomas as "a splendid *Anthericum liliago* with flowers of *Agapanthus*-blue", this has always remained little-known & seldom-seen in cultivation.)

2.730.000 : **PASSIFLORA** : allow for nominal 100 species at 50 spacing (*P. manicata* is half-way point : 50 either side)

2.732.500 : PASSIFLORA MANICATA Ecuador, Carchi, NE of Mira to El Angel. 2800m. Along banks & in scrub. (A spectacular plant, often trailing down banks & slopes rather than climbing, with small, dark, leathery, 3-lobed leaves & upward-facing flowers in eye-burning scarlet. From a cold area but it will not survive winter outside here. Much happier outside in summer, however, growing well in cool, moist weather. Usually on well-drained, sunny sites in nature & likes the same in the UK.)

2.741.500 : PEREZIA RECURVATA (subsp. *recurvata*) Falkland Islands, E Falkland, S of Green Patch. 25m. Shallow peat over clay on dry bank, with *Empetrum*. R. Reid coll. (1997 does not appear to contain any good seed)

2.741.501 : PEREZIA RECURVATA from WHITE FORM Falkland Islands, SW of Port Louis. Low cliff above sea ; dry site in summer. R. Reid coll. (A dwarf, evergreen, shrubby perennial, related to *Leuceria*, forming clumps of stems about 20cm. high, clothed in stiff, imbricate, linear, spiny, dark green leaves. White flower-heads emerge from long, involucre of papery bracts, on short, sticky stems. Material originating from Argentinian Patagonia in the 1950's made extremely attractive, compact plants in the alpine-house or troughs but was difficult to flower well. We hope this new material may be more extrovert.)

2.741.502 : PEREZIA RECURVATA from BLUE FORM Field data as above. (Plants with lilac-blue heads are very much less common in the Falklands than those of the white-flowered phase.) Archibald Archive www.srgc.net

2.745.500 : PHILIBERTIA GILLIESII Argentina, Mendoza, Valle de Uspallata, N of Uspallata. 2100m. Loose gravels in open areas. (A fascinating little climber in *Asclepiadaceae*, which we listed in 1995 under our field-number 14179 as an *Oxyptalum* sp. This has since flowered outside in the UK & been identified at Kew as this little-known plant. Certainly "something completely different." A woody-based perennial, twining to about 30cm. in the wild (rather more in cultivation) with thin, wiry stems & lots of little , complicatedly beautiful flowers, buff outside & crimson to rose within. It is absolutely temperature-hardy (this is a bleak valley at the base of Aconcagua, bitterly cold in winter) but intolerant of excess moisture in winter or summer.)

2.745.700 : **PHYCELLA**

2.745.750 : PHYCELLA HERBERTIANA Chile, VII, Rio Teno valley E of Curico. 2000-2400m. Forming small colonies among steppe-scrub or in the lee of large outcrops. A.Flores & J.Watson 11250 (A high altitude, inland representative of this small Chilean genus of bulbs in *Amaryllidaceae*, which is very close to *Rhodophiala*. Tubular red flowers in summer. Altogether a more slender plant than the better-known species of the Pacific coast and, of course, absolutely temperature-hardy. The area has an Andean 'mediterranean' climate with a heavy, persistent snowfall in winter..)

2.746.000 : **PITCAIRNEA**

13714 PITCAIRNEA SP. (Cuicocha. 3200m.)

13824 PITCAIRNEA SP. (Banos. 2000m.)

2.747.009 : PORTULACA PERENNIS Argentina, border of Salta & Tucuman provinces. c. 1100m. A.Flores & J.Watson 11158. (

2.748.200 : PRATIA REPENS Falkland Islands, Cape Pembroke. Sandy soil. R. Reid coll. (A prostrate *Lobelia*-relative, forming rooting, creeping mats in moist sites. Lilac and white flowers followed by green or purple fruits.)

2.749.900 : PRIMULA MAGELLANICA (subsp. *magellanica*) Chile, Tierra del Fuego, between Yendegaia & Lapataia valleys. Marshy ground. J. Shipton coll. (The only South American *Primula*, one of a group of 'bipolar disjuncts', separated by thousands of miles from their northern counterparts. A farinose species in Sect. *Aleuritia*, divided into three subspecies by John Richards, this is from the type-race, native to Tierra del Fuego, only extending to the area immediately adjacent to the Magellan Straits on the mainland. Usually a smaller, daintier plant than the next with purple or sometimes white flowers. Both of the subspecies listed are growable with care in the UK, in a cool site or trough, in a gritty, peaty mix.)

2.749.950 : PRIMULA MAGELLANICA subsp. COMBERI

2.750.000 : PRIMULA MAGELLANICA subsp. DECIPIENS Falkland Islands, Cape Pembroke. 10m. Moist swale among exposed, low dunes. R. Reid coll. (The most robust race, endemic to the Falklands, with a shorter corolla tube & usually with creamy white, occasionally purple, flowers in a rounded head. A handsome plant which it should be possible to maintain in the UK.) Archibald Archive www.srgc.net

2.760.000 : **PUYA**

2.760.900 : PUYA CAERULEA

2.761.000 : PUYA COQUIMBENSIS

2.770.000 : **RANUNCULUS**

2.770.500 : RANUNCULUS PEDUNCULARIS

2.770.700 : RANUNCULUS SEMIVERTICLLATUS Chile & Arg., Reg. de los Lagos to Patagonia. 1500-2300m.

- 2.779.800 : RHODOLIRION MONTANUM** (*Rhodophiala rhodolirion*, not *Rhodophiala montana*, a yellow species, if you do not wish to split it.) Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2300m. Steep, loose, stony, E-facing slope. 1.3.94 (Most sumptuous & spectacular of high-alpine bulbs, thought to be ungrowable, but we flowered this from our 1991 coll. here this year & Alan Edwards has flowered the white form. Mainly deep-pink to red in this area, variously striated with purple.)
- 2.779.820 : RHODOLIRION MONTANUM** Chile, Reg. Metro., NE of Valle Nevado. 3100m. Among igneous rocks in loose, sandy, soil on open slopes. 8.3.94 (In this site, big clumps of bulbs produce numerous 10cm. stems, each with a huge, pure-white trumpet, intricately & variably patterned with lines of crimson spots or dashes running along the veins, back into the yellow-green throat. Foliage has already died back as these appear & the habitat appears dry but strong roots penetrate deeply to moisture.) Archibald Archive www.srgc.net
- 2.780.000 : RHODOPHIALA ADVENA** Chile, VIII, Bio Bio, S of Canteras (E of Los Angeles). 400m. Open site in sandy soil. (No trouble to grow in the bulb-frame or cold-greenhouse in the UK. Red & yellow forms, with some in between, occur here but so far we have only flowered scarlet & apricot ones. Up to 5 flowers on each 20-30cm. stem in mid-summer.)
- 2.780.009 : RHODOPHIALA ADVENA** Chile, IV, Coquimbo, N of Los Vilos. 150m. Hills in coastal mist-belt with low, semi-xerophytic scrub. A. Flores & J. Watson 11230. (One of the better-known and most reliable species in cultivation : usually no trouble to grow in the bulb-frame or cold-greenhouse in the UK. Up to 5 elegant flowers, usually scarlet but it can vary to yellow or to intermediate apricot-tints, carried on each 20-30cm. stem in mid-summer.)
- 2.780.200 : RHODOPHIALA ANDICOLA** Argentina, Neuquen, Lacar, Cerro Chapelco above San Martin de los Andes. 1680m. Among igneous rocks on exposed, stony slopes. 17.2.94 (Rivals *Rhodolirion* in high altitude spectacle &, with its capitate stigma, might also be better separated into this genus. Luminous, rich violet-pink, dark-throated, upward-facing flowers on 15-20cm. stems. Growing on but, as far as we know, not yet flowered in cultivation. Treat like any other dry-climate high-alpine.)
- 2.780.201 : RHODOPHIALA ANDICOLA** Argentina, Neuquen, Norquin, between Caviahue & Copahue. 2160m.
- 2.780.300 : RHODOPHIALA ANDINA**
- 2.780.400 : RHODOPHIALA ARAUCANA** Argentina, Neuquen, Passo del Cordoba. 1220m. Gravelly & sandy areas among steppe-plants. 19.2.94 (Maybe nearest *R. elwesii* but more slender, up to 30cm. high with 2-5 flowers per stem. These appear to open pale yellow & blush to red through tiny crimson dots suffusing over the segments. Better grower than *R. elwesii* so far.)
- [## *Rhodophiala araucana* 14427](#) 2 pictures [#Second pic.](#)
- 2.780.455 : RHODOPHIALA BAGNOLDII** Chile, III, Atacama, Vallenar, Huasco. 15m. Open areas, among grasses & sparse scrub on coastal sand-dunes in mist-belt. A. Flores & J. Watson 8695. (The robust & spectacular *Hippeastrum* of the Atacama coast. Stout stems about 40cm. high with umbels of large, pure-yellow, funnel-shaped flowers. Possibly best grown frost-free.)
- 2.780.480 : RHODOPHIALA BERTEROANA**
- 2.780.510 : RHODOPHIALA BIFIDA** Argentina, Buenos Aires prov., Pipinas. (Seeds from the form which was given an RHS Award of Merit, when shown by Bob and Rannveig Wallis in September, 2002. The original coll. was from about 200km. S from Buenos Aires itself, about as far South as this species from N Argentina and Uruguay extends. It should be the hardiest form and it has grown well in an unheated greenhouse in Wales for the past decade. Spectacular umbels of up to 7, funnel-shaped flowers in brilliant red with yellow anthers cluster on 20cm. tall stems in early autumn.)
- 2.780.600 : RHODOPHIALA CONSOBRINA**
- 2.780.800 : RHODOPHIALA ELWESII** Argentina, Neuquen, Lacar, E of Lago Lolog. 1100m. Open areas, among grasses & scrub, in sandy soil. 19.2.94 (From near San Martin, where Elwes stayed in February, 1902, & presumably made the type coll. Very beautiful with upward-facing, soft-yellow flowers with wine-coloured throats. The name has been misapplied in gardens to earlier colls., probably yellow *R. advena*, from Chile. As far as we know *R. elwesii* grows only in Argentina. It should be one of the most growable, planted out in a bulb-frame or a raised bed.)
- 2.780.810 : RHODOPHIALA ELWESII** Argentina, Neuquen, Norquin, SSW of El Huecu. 1260m. Openings among scrub in sandy soil. 14.2.94 (Maybe far enough N for the allied *R. mendocina*, without the purple throat, but not seen in flower.)
- 2.780.900 : RHODOPHIALA FULGENS**
- 2.781.000 : RHODOPHIALA IGNEA**
- 2.781.110 : RHODOPHIALA MONTANA** Argentina, Neuquen, S of Las Lajas. 1500m. Among scrub & grass. Ex a J. McGary coll. (*R. montana* is reputedly endemic to the Andean cordillera near Maule in Chile between 1800-2000m. but this coll. from a little further S on the Argentinian side of the border-ranges seems to match it. It is either this or a new species. A beautiful, yellow-flowered plant, 15-20cm. tall & flowering for a long period.)
- 2.781.200 : RHODOPHIALA PHYCELLOIDES**
- 2.781.500 : RHODOPHIALA PRATENSIS** Chile, IX, Malleco, Cordillera de Nahuelbuta. 1200m. Openings among scrub. (Elegant, pale scarlet-flowered species, about 20cm. high, which Prof. Grau, who is working on the Chilean species, suggests may be the "often wrongly interpreted *R. pratensis*." No problem to grow here in an unheated bulb-house, flowering in summer.)
- 2.781.501 : RHODOPHIALA PRATENSIS** Chile, IX, Nuble, SW of Termas de Chillan. 1400m. Volcanic rocks.
- 2.781.700 : RHODOPHIALA PURPURATA**

2.781.800 : RHODOPHIALA RHODOLIRION

2.781.800 : RHODOPHIALA RHODOLIRION (*Rhodolirion montanum*, not *Rhodophiala montana*, a yellow species, if you wish to split it.) Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2300m. Steep, loose, stony, E-facing slope. (Most sumptuous & spectacular of high-alpine bulbs, once thought to be ungrowable, but we flower this regularly from our 1991 seed coll. It just takes a little longer to flower from seed than many bulbs & like most of this genus likes its fleshy, perennial roots to penetrate undisturbed as deeply as possible. Mainly deep-pink to red in this area, variously striated with purple.)

2.781.808 : RHODOPHIALA RHODOLIRION Chile, VII, Rio Teno valley E of Curico. 1900-2400m. W-facing slopes of precipitous mountain valley. A. Flores & J. Watson 11241

2.781.820 : RHODOPHIALA RHODOLIRION Chile, Reg. Metro., NE of Valle Nevado. 3100m. Among igneous rocks in loose, sandy, soil on open slopes. 8.3.94 (In this site, big clumps of bulbs produce numerous 10cm. stems, each with a huge, pure-white trumpet, intricately & variably patterned with lines of crimson spots or dashes running along the veins, back into the yellow-green throat. Foliage has already died back as these appear & the habitat appears dry but strong roots penetrate deeply to moisture.)(10+)

2.781.909 : RHODOPHIALA SEROTINA Chile, III, Atacama, between Ovalle & Huasco. A.Flores & J.Watson 11106. (An undescribed species to be published under this name by John & Anita in a forthcoming book on the Chilean desert flowers. An extremely late, few-flowered plant with quite short-stems carrying flowers with "pyjama-striped tepals in candy pink & silvery white." It occurs, but rarely, in a comparatively limited area of the southern Atacama.)

2.782.000 : RHODOPHIALA SPLENDENS Chile, VII, Talca, NE of Talca. 350m. Open, earthy bank. (Either this or an undescribed species. Flowering in the wild in mid-March, this is as near as you get to an autumn-flowering bulb in Chile. Brilliant scarlet flowers on naked 20cm. stems in late summer in the UK, after the leaves are dormant.)

14390 : RHODOPHIALA SP. Chile, VIII, Nuble, SW of Termas de Chillan. 1700m. In turf on broad, sloping cliff-ledge. 3.3.94 (Not seen in flower but flower remains red. Certainly temperature-hardy from this area.)

RHODOPHIALA SP. CMW 5154

2.790.000 : RUBUS GEOIDES Falkland Islands, Mt. Kent 100m. In peat along edge of stone-runs on N-facing slopes. R. Reid coll. (A slender, creeping, more or less shrubby species, usually a rooting ground-cover in moist, shady places but can be up to 70cm. high. Lobed leaves, hairy beneath, & small whitish flowers followed by orange-red fruits.)

2.810.000 : SALVIA

2.830.000 : SAXIFRAGA

2.840.000 : SCHIZANTHUS

2.840.100 : SCHIZANTHUS GRAHAMII Argentina, Mendoza, Malargue, Valle de las Lenas. 2200m. Loose, stony soils on steep slopes & along gulleys. (This & the next are the two species in a small genus of the *Solanaceae*, (all but confined to Chile), which have climbed to high elevations & acquired a perennial, even if short-lived, habit. Much-cut, rich-green, glandular foliage & branching stems to about 50cm., carrying successions of 'upside-down', butterfly-like flowers. An amazingly improbable & spectacular alpine - an alpine-plant it certainly is, an opportunistic colonist of disturbed slopes, revelling on the trashed ski-runs in summer. This, a species of many aliases, including *S. gilliesii*, just infiltrates the border with Argentina here in its most violent colour-form : shocking pink & luminous orange. Sadly, unlikely to end up in garden-centres but it can be grown with care in scree-bed conditions in the UK. It has provided a spectacular display, almost 1m. high, over about 3 months in our netting-sided polytunnel this year. Its image-problem is that no-one believes it is a temperature-hardy high-alpine!)

2.840.109 : SCHIZANTHUS GRAHAMII Chile, VII, Rio Teno valley E of Curico. c. 2500m. A.Flores & J.Watson 11246. (A 2006 wild collection to compliment our own cultivated seed. John comments that " They don't come any better than here at Teno. The largest flowers and reddest ground colours." Archibald Archive www.srgc.net

2.840.150 : SCHIZANTHUS HOOKERI Chile, Reg. Metro., NE of Valle Nevado. 3100m. Open slopes - among igneous rocks on sandy soil. (Hardly less spectacular, though more delicately coloured. Lilac flowers with attenuated, flame-shaped, upper lips in rich yellow, grading into white, topped & tailed with lilac. Both of these are opportunistic colonists of disturbed slopes.)

2.850.000 : SENECIO

2.851.500 : SENECIO CANDICANS Falkland Islands, E of Stanley, Surf Bay. 1m. Sandy peat just above high water mark. R. Reid coll. (A magnificent foliage-plant with big leaves cut out of white felt. We grew this well for many years from a Ruth Tweedie Argentinian coll. - it grows down the S Chilean coast to Tierra del Fuego then jumps to the Falklands. Leaves stand about 20-30cm. high & it can be grown in the alpine-house, though it likes more freedom to do well. Propagate by root-cuttings.)

2.852.000 : SENECIO CRITHMOIDES Chile, V, Aconcagua, above Portillo. 3800m. WNW to W-facing, summit gravel slopes of Andean watershed. A.Flores & J.Watson 11269. (A characteristic element of the scattered, specialised, high-alpine scree-flora of these border mountains with their heavy persistent winter snowfall & drier summers. A dwarf, glabrous subshrub about 10cm. tall with tiny, fleshy, toothed leaves & discoid heads of yellow flowers.)

2.855.000 : SENECIO LITTORALIS Falkland Islands, W of Stanley to Estancia. Stone Run. 100m. Very well drained, gravelly peat among boulders. R. Reid coll. (A neat Falkland Islands endemic, which, as far as we know, has not been in cultivation. It has a sub-shrubby habit, about 30cm. in nature but doubtless more in gardens, with narrow foliage & rather fine yellow daisies.)

2.855.001 : SENECHIO LITTORALIS Falkland Islands, East Falkland, E of Estancia. 150m. Well drained, rocky clay at base of 'stone run', sheltered from wind by large boulders. R. Reid coll. (A neat Falkland Islands endemic, which, as far as we know, has not been in cultivation prior to Bob Reid's recent collections. It has a sub-shrubby habit, about 30cm. high in nature but doubtless more in gardens, with narrow foliage & rather fine yellow daisies.)

2.865.000 : SIPHOCAMPYLUS

2.870.000 : SISYRINCHIUM

2.870.200 : SISYRINCHIUM ARENARIUM Argentina, Neuquen, Norquin, between Caviahue & Copahue. 2160m. Sandy soil, among rocks.

2.870.201 : SISYRINCHIUM ARENARIUM Argentina, Neuquen, Lacar, Cerro Chapelco. 1680m. Among igneous rocks on exposed slopes. (A member of a diverse complex, currently 'lumped' to include *S. cuspidatum*, *S. pearcei*, etc. About 30cm. high with spikes of pale-yellow flowers with purplish exteriors from clumps of greyish, iris-leaves. Pleasant & not difficult.)

2.870.600 : SISYRINCHIUM CHILENSE Falkland Is., near Goose Green. S. Felton coll. (A very rare plant on the Falklands. Apart from this coll., only recorded on West Falkland in grassland & heath at about 10m. Pale yellow, brown-veined flowers on slender pedicels. Stems about 10cm. high from among linear, sheathing leaves.)

2.871.450 : SISYRINCHIUM FILIFOLIUM (*Olsynium filifolium*) Falkland Is., W of Green Patch on low, E-facing cliff overlooking Berkley Sound. 10m. Well-drained, shallow peat over clay & shale. R. Reid coll. (A fine endemic of the Falkland Is., known locally by the charming name of 'pale maiden'. Currently separated at specific level from the variable mainland races (placed by some under *S. filifolium* subsp. *junceum*) by Peter Goldblatt, who moves these back to an old genus *Olsynium*, based on the N American *S. douglasii*. A dainty plant with stems up to about 30cm., usually less, sheathed with rather stiff, linear leaves, carrying up to 8 white flowers, veined with purple & nodding on thready pedicels. Not difficult in the UK in a trough or raised scree-bed.)

2.871.451 : SISYRINCHIUM FILIFOLIUM (*Olsynium filifolium*) Falkland Islands, E of Stanley, Whalebone Bay. 5m. Moderately drained, shallow peat over clay. R. Reid coll. Archibald Archive www.srgc.net

2.871.510 : SISYRINCHIUM FILIFOLIUM subsp. JUNCEUM (*Olsynium junceum*) Chile, Reg. Metro., Lagunillas. 2200m. Stony slopes. (A variable, pretty summer-dormant species from both the Chilean & Argentinian sides of the Andes, in the same section (sometimes 'split' into the genus *Olsynium*) as N American *S. douglasii*. Up to 8 pendant bells, in pale pink or white, often purple-veined, on stems of about 20cm. Quite easy under glass, in the bulb-frame & possible in a trough or scree.)

2.871.520 : SISYRINCHIUM FILIFOLIUM subsp. JUNCEUM (*Olsynium junceum*) Chile. Ex Beckett, Cheese & Watson.

2.875.510 : SISYRINCHIUM JUNCEUM (*Olsynium junceum*) Chile, Reg. Metro., Lagunillas. 2200m. Stony slopes. (A variable, pretty, summer-dormant species from both the Chilean & Argentinian sides of the Andes. The mainland version of *S. filifolium* & included under this by many. Up to 8 pendant bells, in pale pink or white, often purple-veined, on stems of about 20cm. Quite easy under glass in the UK & possible in a trough or scree-bed. More tolerant of hot, dry conditions than *S. filifolium*.)

2.875.520 : SISYRINCHIUM JUNCEUM (*Olsynium junceum*) Chile. Ex Beckett, Cheese & Watson.

2.880.010 : SISYRINCHIUM PALMIFOLIUM (*S. macrocephalum*) No data. Recently profiled & beautifully illustrated in the 'Kew Magazine', this is a remarkable plant, hitherto remarkably obscure in general cultivation. "Surely one of the largest and most robust...a seemingly endless display of large yellow saucer-shaped flowers...with bold tufts of broad grey-green leaves overtopped by stiff, widely-winged flower stems over a metre in height." Widely distributed in damp grassland up to 1200m. in Uruguay, SE Brazil & N Argentina, it has so far proved hardy both in the heavy acid clay of a Devon garden & with Brian Mathew in Surrey. The 1m. high, arching, branched inflorescences, each producing about 100 of the bright yellow flowers with orange anthers, can continue from June into December : "a very desirable species and...a spectacular sight." It is best sown in spring and, as it appears not to thrive in pots, it seems best to plant the seedlings out in the garden as soon as they are large enough.

2.890.000 : SOLANUM

2.909.500 : SOLARIA

2.910.500 : SOLENOMELUS PEDUNCULATUS Chile, VI, Cachapoal, Rio Cachapoal valley W of Pangal. 950m. Openings among scrub in sandy soil. (A fine, summer-dormant, rhizomatous *Sisyrrinchium*-relative for the alpine-house or bulb-frame. Broad, tapered, grassy foliage & big, rounded, rich-yellow flowers from prominent spathe-bracts on 20cm. stems.)

2.920.000 : SPHENOSTIGMA

2.928.000 : STENANDRIUM DULCE Chile, Los Molles. A. Flores & J. Watson coll. (A dwarf perennial member of the *Acanthaceae*.)

2.938.000 : TARASA

2.940.010 : TECOPHILAEA CYANOCROCUS No data. The famous blue Chilean crocus, supposedly extinct in the wild but well established in cultivation. Not difficult to grow in standard Mediterranean bulb conditions, though perhaps best not overheated in summer, & can be increased slowly but steadily from seed or offsets. Its crocus-like flowers in spring have no equal in the purity & intensity of their gentian-blue. We hand-pollinate between different clones of the colour forms and you can expect them to come fairly 'true' from selfed seed - any further colour variants are a bonus.

2.940.011 : #TECOPHILAEA CYANOCROCUS 'LEICHTLINII' A slightly paler blue form with a large white centre, considered

by many to be the most beautiful variant. It is also the most vigorous & fertile form with us.

2.940.012 : TECOPHILAEA CYANOCROCUS 'VIOLACEA' Hand-pollinated from the dusky, violet-blue form

2.940.105 : TECOPHILAEA VIOLIFLORA Chile, IV, Coquimbo, Guanaqueros. 30m. In sandy soil among coastal mist-belt scrub & in grassland. Ex A. Flores & J. Watson 8701 (Small, starry flowers in pure, piercing blue on 6cm. stems.).

2.950.000 : TIBOUCHINA (c. 200 spp.)

2.960.000 : TRECHONAETES

2.964.000 : TRICHOPETALUM PLUMOSUM Chile, Reg. Metro., Chacabuco near Polpaico. 800m. Among scrub & in grassland on foothill slopes & meadows. A. Flores & J. Watson 8664. (*Liliaceae*)

2.964.050 : TRICHOPETALUM STELLATUM

2.968.400 : TRISTAGMA LEICHTLINII Name given to John Blanchard by Peter Erskine as identity of out 14423 coll. from Valle Nevado, which we think is *T. sessile*. Have been unable to trace this name anywhere.

2.968.500 : TRISTAGMA NIVALE Argentina, Neuquen, Lacar, Cerro Chapelco. 1680m. Among igneous rocks on exposed, stony slopes. (Distinctively curled, fleshy leaves coil on the scree. Tubular flowers, with narrow, reflexed lobes, on 15cm. stems, vary from purple-black to green. A S American 'brodiaea', a fascinating bulb for the alpine-house or bulb-frame.)

2.968.600 : TRISTAGMA PATAGONICUM

2.968.700 : TRISTAGMA SESSILE (*Ipheion sessile*) Chile, Reg. Metro., NE of Valle Nevado. 3100m. Among igneous rocks on steep slopes. (One of the highest-growing of all alpine bulbs, well established under glass here from a few seeds we collected in 1991. Short, prostrate, linear leaves and vase-shaped white flowers, pink-tinged outside & with a dark stripe on each segment, carried on stems a few cm. high : very dwarf but not quite sessile in cultivation. Slow-growing but not difficult.)

2.970.200 : TROPAEOLUM AZUREUM Chile, Reg. Metro., Chacabuco near Polpaico. 500m. Hot, dry hillslopes. Ex S. Pern & J. Watson 6055. (1999 Tasmanian seed just received. In the UK, this is best kept frost-free in winter & dry when dormant in summer. A very beautiful, fragile, tuberous-rooted climber with many, flat-faced flowers in soft violet-blues with white centres.)

2.970.201 : TROPAEOLUM AZUREUM Chile, Reg. Metro., Los Andes. A. Flores & J. Watson coll.

2.970.250 : TROPAEOLUM BEUTHII Chile, II, Antofagasta. 200m. Banks of dry, boulder-strewn torrent-wash. A. Flores & J. Watson 11025A (Endemic to the Pajón area on the nitrate-coast of the Chilean Atacama, where rainfall is extremely irregular (sometimes absent for several years). There it grows in the coastal desert-oases shrubberies dependent on the regular sea-fog precipitation. Flowers described by John as 'like a blow-up version of *T. brachyceras* with a notably longer spur'. It has been grown successfully & flowered in the UK from John & Anita's one previous collection in 2000.

2.970.304 : TROPAEOLUM BRACHYCERAS Chile. Ex BCW 4182 (A dainty, tuberous-rooted, summer-dormant climber for the unheated greenhouse. Lobed leaves & lots of little bright-yellow flowers.)

2.970.305 : TROPAEOLUM BRACHYCERAS Chile, V, Los Molles. 15m. Among boulders in coastal scrub. Ex A. Flores & J. Watson 8626. (A pretty climber from the coastal mist-belt with delicate stems scrambling to about 1m., clad in small, whirlygig leaves, carrying a multitude of tiny 'nasturtium' flowers in bright yellow with short, green spurs. Generally satisfactory in an unheated glasshouse in the UK but may be safest frost-free.)

2.970.510 : TROPAEOLUM CILIATUM No data. A cousin of *T. speciosum* from further N on the Chilean coast. A similar, hardy, rhizomatous, summer-growing climber but with smaller, apricot-yellow flowers, purple-veined on the upper petals..

2.970.900 : TROPAEOLUM HOOKERIANUM (subsp. *hookerianum*) Chile, IV, Coquimbo, Fray Jorge. 200m. Among scrub in coast range valley. Ex A. Flores & J. Watson 8632. (Climbing to about 80cm. and similar in general aspect to *T. brachyceras* but most obviously different in its clustered flowers, which are also somewhat larger and of an even brighter yellow.)

2.970.920 : TROPAEOLUM HOOKERIANUM subsp. AUSTROPURPUREUM Chile, IV, Coquimbo. 40m. Among rocks & scrub on S-facing hillside. Ex A. Flores & J. Watson 8630. (A recently discovered, more southern race with rich-purple flowers, more or less tinged with redder or bluer shades. Otherwise similar to *T. h.* subsp. *hookerianum*.)

2.970.940 : TROPAEOLUM HOOKERIANUM subsp. PILOSUM Chile, IV, Coquimbo, near Ovalle. 400m. Among scrub in stony ground & scree on foothill slopes. Ex A. Flores & J. Watson 8633. (Another recently discovered variant, distinct in its hairy flower stalks, which grows far inland from the preceding coastal populations, on the Andean foothills. Likely to be the most temperature-hardy of the three and also used to much hotter, drier summers. Otherwise, generally similar to *T. h.* subsp. *hookerianum*.)

2.971.000 : TROPAEOLUM INCISUM

2.971.020 : TROPAEOLUM KINGII Chile. A. Flores & J. Watson coll.

2.971.050 : TROPAEOLUM LEPTOPHYLLUM Chile, VII, Curico, Rio Teno valley E of Curico. 2000-2400m. Among low scrub & boulders or in scree on W-facing slopes of precipitous valley. A. Flores & J. Watson 11238. (Described by John as "*T. polyphyllum* on slimming pills," this is a more dainty, graceful species with the smaller, long-spurred yellow flowers on longer pedicels from the axils of the grey-green leaves, cut into many, almost linear segments. From the cordillera along the Chilean and Argentinian border between 1200m. and 2200m. & almost as high-growing an alpine as *T. polyphyllum*. A small collection of this choice species, which has not, as far as we know, been established in cultivation.

2.971.200 : #TROPAEOLUM POLYPHYLLUM Argentina, Mendoza, Puente de Inca. 2720m. Steep, loose, clay slopes. (Flowers vary here from the usual bright yellow to orange & red tints, all along the 1m. long trails of deeply cut, blue-grey leaves. Growing to about 3300m. around Aconcagua, this high-alpine, often a coloniser of deep, mobile screes, can be trouble-free & embarrassingly vigorous when settled in UK gardens. It is not at all easy to establish in the first place, however.)

2.971.300 : TROPAEOLUM RHOMBOIDEUM Chile, Reg. Metro. 1800m. Loose soil on S-facing slopes. Ex A. Flores & J. Watson 8681. (A dwarf, montane species, threading among low scrub to no more than 30cm. in the wild. Large, prominently spurred flowers of bright, egg-yolk yellow, often age to white at the tips.)

2.971.400 : TROPAEOLUM SESSILIFOLIUM Chile, Reg. Metro., Lagunillas. 2200m. Steep, open rocky slopes. (Well established from our 1991 & 1994 colls. & not difficult in a scree-bed or the bulb-frame. One of the dwarfest in the genus with erect or flopping, 20-30cm., branching stems with tiny, lobed leaves & white or pale lavender flowers with orange-yellow centres.)

2.971.400 : TROPAEOLUM SESSILIFOLIUM Chile, Reg. Metro., Lagunillas. 2200m. Steep, open rocky slopes. A. Flores & J. Watson 11255.

2.971.610 : TROPAEOLUM SPECIOSUM No data. Summer-growing climber from wet S Central Chile down into Chiloe. Loves cool, moist British gardens, forming curtains of dainty, light-green foliage sheeted with scarlet flowers in late summer & autumn, when the steely blue fruits appear. Glorious in Scotland, the West & Ireland but not so easy in hot, dry gardens.

2.971.810 : TROPAEOLUM TRICOLOR No data. A summer-dormant, tuberous-rooted climber with fascinating, complex flowers in scarlet, black, yellow & green over a long period in spring & early summer. It grows up to middle altitudes in Chile but the winter growth is too vulnerable for cultivation outside here though others grow it well in sheltered spots in the UK. No trouble in a cold greenhouse, where it gives a long, arresting display in spring & early summer

2.974.010 : TWEEDIA CAERULEA (*Oxypetalum caeruleum*, *Amblyopetalum caeruleum*) No data. A beautiful, twining, semi-shrubby member of the *Asclepiadaceae* from Argentina with hairy, heart-shaped leaves and, in summer, axillary panicles of many, 5-lobed flowers, which start in turquoise-tinted blues flushing with purplish shades to mature to lilac. Needs to be frost-free to survive a UK winter but it grows quite quickly & easily from seed or cuttings so can spend its summers outside.

2.980.000 : VIOLA

2.980.100 : VIOLA

2.980.200 : VIOLA ATROPURPUREA

2.980.300 : VIOLA AURICULA

2.980.400 : VIOLA

2.980.500 : VIOLA

2.980.600 : VIOLA CANO BARBATA

2.980.700 : VIOLA

2.980.809 : VIOLA CONGESTA Chile, VII, Rio Teno valley E of Curico. c. 2000m. A. Flores & J. Watson 11249. (A superlative rosulate species of volcanic sands, endemic to central Chile & adjacent Argentina. "One of the glories of its race", writes John in his classic 1975 account of plant-hunting in Chile (AGS Bulletin Vol. 43(3): 244 (ic.) : the only instance since Gay's 1846 publication where the species is correctly identified and illustrated.). "Of all plant forms, the rosette is arguably the most formal and stylised...a skilful piece of appliqué embroidery...the precisely overlapped leaves were cut from fawn felt, trimmed at the edges...to an even margin of close-set lobes...at the bottom of each...glistened a tiny gland of red gum." Peeping from the flat, ground-hugging rosettes are upward-tilted violets, usually centrally "purplish-violet, with veins of that colour straying into the cream at the edge of the petals," though this Teno form has a tendency to all-violet corollas.)

2.980.900 : VIOLA COLUMNARIS

2.981.000 : VIOLA COTYLEDON

2.981.200 : VIOLA

2.981.400 : VIOLA DASYPHYLLA

2.981.600 : VIOLA FLUEHMANNII

2.981.800 : VIOLA GLACIALIS

2.981.900 : VIOLA MACULATA

2.981.950 : VIOLA MAGELLANICA

2.982.000 : VIOLA MONTAGNEI

2.982.200 : VIOLA OVALLEANA

2.982.400 : VIOLA PHILIPPII

2.982.500 : VIOLA PSEUDOVULCANICA

2.982.600 : VIOLA PULCHELLA

2.982.800 : VIOLA PUSILLA

2.983.000 : VIOLA REICHII

2.983.200 : VIOLA ROSULATA

2.983.400 : VIOLA SACCULUS

2.983.600 : VIOLA SKOTTSBERGIANA

2.983.800 : VIOLA SUBANDINA

2.984.000 : VIOLA TRIDENTATA

2.984.200 : VIOLA TRUNCATA

2.984.400 : VIOLA VULCANICA

2.986.000 : WERNERIA

2.990.000 : WORSLEYA RAYNERI (*W. procera*) Brazil, Serra dos Orgaos. c. 1000m. Crevices in sheer, granite cliffs. (The mythical "Blue Amaryllis" only known from the Organ Mts. about 120km. NE of Rio de Janeiro in S Brazil. The strongly falcate leaves emerge from the extraordinarily long-necked bulbs, over 1m. high at maturity (yes, the bulbs), curving down to the ground. The flowering stem appears from the centre of these & carries up to 8, huge, pale-blue amaryllis-flowers, edged with deeper-blue. Grown successfully in parts of the USA, Australia & New Zealand, obviously it needs to be more or less frost-free. The recorded recipe for success is to grow it hard with plenty air & sunlight. Underpotting in fibrous, orchid-type compost & liquid-feeding are recommended. Once again we have a very small quantity of seed just ready from Terry Hatch's 1997-98 flowering. It might give those optimistic & patient enthusiasts, who have missed out in previous seasons, another chance to acquire this. (3 seeds)

2.995.900 : ZEPHYRA ELEGANS Chile, III, Atacama, near Huasco. A. Flores & J. Watson 11107. (A very beautiful, summer-dormant, monotypic genus in *Tecophilaeaceae* endemic to the fog-vegetation communities of the Chilean Atacama. Umbels of about 12 flowers, with overlapping segments in pale blue, fading to white around the yellow anthers in the centres, each not unlike a small, wideopen version of the 'Leichtlinii' form of *Tecophilaea cyanocrocus*. We have not found this as accommodating and hardy as some of its compatriots in *Alstroemeria* or *Tropaeolum*, and suggest it is best grown frost-free.)(10+)

2.996.000 : ZEPHYRANTHES

ZOELLNERALLIUM ANDINUM

3.001.000 : AGAPANTHUS AFRICANUS

3.001.110 : AGAPANTHUS CAMPANULATUS (subsp. *campanulatus*) The dwarfest, usually about 50cm. high

3.001.150 : AGAPANTHUS CAMPANULATUS subsp. PATENS KwaZulu Natal, Drakensberg, SW of Njesuthi valley. 2200m. Moist, grassy slope. (Usually smaller than the type-race with spreading segments to the blue flowers flowers.)

3.001.151 : AGAPANTHUS CAMPANULATUS subsp. PATENS Orange Free State, Drakensberg, Mont-aux-Sources. 2900m. Open, stony & grassy slopes. (From above the habitat illustrated on page 180 of Phillips & Rix 'Perennials' Vol. 2.)

3.001.152 : AGAPANTHUS CAMPANULATUS subsp. PATENS KwaZulu-Natal, near Merrivale. 1500m. RRS. coll.

3.001.209 : AGAPANTHUS CAULESCENS (subsp. *caulescens*) KwaZulu-Natal, E of Vryheid, Ngome Forest. Distinct in its leek-like habit with glossy leaves from a basal stem. Dense umbels of rather drooping, rich-blue flowers with widely spreading lobes, on stems of about 1m.

3.001.210 : AGAPANTHUS CAULESCENS (subsp. *caulescens*) Distinct in its leek-like habit with glossy leaves from a basal stem. Dense umbels of rather drooping, rich-blue flowers with widely spreading lobes, on stems of about 1m.

3.001.260 : AGAPANTHUS CAULESCENS subsp. ANGUSTIFOLIUS Not so tall with narrower foliage.

3.001.310 : AGAPANTHUS COMPTONII (subsp. *comptonii*)

3.001.360 : AGAPANTHUS COMPTONII subsp. LONGITUBUS Open inflorescences of long-tubed, rich-blue bells.

3.001.509 : AGAPANTHUS INAPERTUS (subsp. *inapertus*) Eastern Transvaal, S of Barberton. (A distinct species with long, tubular, dark blue flowers on stems of over 1.5m. This wild coll. from near the Swaziland border, where the mountains rise to over 1800m., should prove reasonably hardy in most of the UK.)

3.001.510 : AGAPANTHUS INAPERTUS (subsp. *inapertus*) Long, tubular, dark blue flowers on stems of over 1.5m.

3.001.510 : AGAPANTHUS INAPERTUS (subsp. *inapertus*) Cultivated seed from New Zealand.

3.001.610 : AGAPANTHUS INAPERTUS subsp. HOLLANDII Somewhat more open flowers, usually mid-blue.

3.001.710 : AGAPANTHUS INAPERTUS subsp. INTERMEDIUS Segments spreading at the mouth.

3.001.810 : AGAPANTHUS INAPERTUS subsp. PENDULUS Extremely deep-blue or dark blue-violet flowers.

3.001.910 : AGAPANTHUS NUTANS Long, elegant, pale-blue flowers. About 80cm. high. Erect, glaucous leaves.

3.002.000 : AGAPANTHUS PRAECOX

3.005.000 : ALBUCA

3.005.550 : ALBUCA FASTIGIATA var. FLORIBUNDA Free State, Drakensberg, Mont-aux-Sources. 2900m. Stony slopes & fissures in sloping rock-slabs. (A robust plant with 50cm. tall stems carrying terminal racemes of upright white flowers, heavily banded with green on the spreading outer segments, as well as the erect inner ones. The general pattern of the flowers is of a *Galanthus*-shape & is characteristic of this genus in *Liliaceae* with about 70 species spread from Arabia down through Africa to the Cape, where most species occur. These are all hardy, high altitude summer-growers.)

3.005.700 : ALBUCA HUMILIS Lesotho, Drakensberg, Mont-aux-Sources. 3000m. Gravelly cliff-ledges. (5cm.)

3.005.900 : ALBUCA PACHYCHLAMYS

3.006.000 : ALBUCA POLYPHYLLA

3.006.200 : ALBUCA RUPESTRIS E Cape, Witteberge, E of Lady Grey. 2200m. Diorite fissures. (Yellow. 30cm.)

3.006.300 : ALBUCA SETOSA

3.006.410 : ALBUCA SHAWII No data. A species of many synonyms (*A. elliottii*, *A. minima*, *A. trichophylla*) from cliffs and rock-sheets, reaching between 1800m. & 2400m. in the Drakensberg. Hairy leaves and stems up to 40cm. high with bright yellow, distinctively scented, nodding flowers. In fact the whole plant smells exotically of liquorice

15600 : ALBUCA SP. E Cape, Drakensberg, NE of Rhodes. 2250m. Fissures on rock-slabs. 16.3.96 (Yellow. 30cm.)

15612 : ALBUCA SP. E Cape, Drakensberg, NE of Rhodes. 2300m. Stony slope. Stony slope. 16.3.96 (50cm.)

15680 : ALBUCA SP. E Cape, Witteberg, E of Lady Grey. 2200m. Diorite fissures. 18.3.96 (Yellow. 60cm.)

15686 : ALBUCA SP. E Cape, Witteberg, Joubert Pass. 2350m. Gravelly ledge on diorite cliff. 18.3.96 (Yellow. 3cm.)

15821 : ALBUCA SP. Orange Free State, Platberg E of Harrismith. 2350m. Among rocks. 24.3.96 (20cm.)

15845 : ALBUCA SP. Orange Free State, Drakensberg, Mont-aux-Sources. 2900m. Stony slope. 25.3.96 (50cm.)

15856 : ###ALBUCA SP. (3pictures) Lesotho, Drakensberg, Mont-aux-Sources. 3000m. Gravelly cliff-ledges. 25.3.96 (5cm.)

[#Second pic.](#) [#Third pic.](#)

3.007.000 : ALEPIDEA

3.007.050 : ALEPIDEA AMATYMBICA KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (This genus of summer-flowering, herbaceous perennials in the *Umbelliferae* mirrors *Astrantia*. One of the tallest of the 10 or so in the Drakensberg, from the lush vegetation up damp gullies to 2100m. Bristle-edged, basal leaves with branching stems to 2m. high, carrying many, starry greenish-white to pale yellow flower-heads, perhaps more like one of the S American *Eryngium* spp. than an *Astrantia*.) C

3.007.250 : ALEPIDEA NATALENSIS KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (A dwarf species, about 40cm. high, not uncommon on damp, grassy slopes, up to 2500m. in the Drakensberg & illustrated in Phillips & Rix Vol. 2, p. 77, though photographs of such diffuse, grassland plants are seldom complimentary. Hairy, basal rosettes send up stems with many *Astrantia*-like flower-heads, each surrounded by long-lasting, thick-textured, petal-like, white bracts, tinted with mauve.)

3.007.251 : ALEPIDEA NATALENSIS KwaZulu-Natal, Drakensberg, S of Sani Pass. 2750m. Moist, stony turf below E & SE-facing basalt cliffs. (A dwarf species in *Umbelliferae*, about 40cm. high, not uncommon on damp, grassy slopes in the Drakensberg. Hairy, basal rosettes send up stems with many *Astrantia*-like flower-heads, each surrounded by long-lasting, thick-textured, petal-like, white bracts, tinted with mauve, not altogether unlike *Astrantia minor*.)

3.007.320 : ALEPIDEA PUSILLA OFS, Drakensberg, Mont-aux-Sources. 2900m. Moist turf on open slopes. 25.3.96 (A little, dainty plant, 10-20cm. high, for all the world like *Astrantia minor* with stiff, white bracts. A high Drakensberg endemic.)

3.007.400 : ALEPIDEA THODEI KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Moist, stony turf below E & SE-facing basalt cliffs. 21.3.96 (One of the 2 or 3 high Drakensberg endemics, which ascend above 2500m. (A few, large, *Astrantia*-like heads with greenish white bracts tipped with carmine-pink, on stiffly branching, 20-30cm. stems.)

3.008.000 : ALOE

3.009.000 : ALOE SINUATA E Cape, N of Tarkastad & SW of Toorberg. 1400m. Among rocks on steep, grassy slope. 15.3.96 (One of the hardier members of this almost wholly African genus) PK's name dubious.

3.010.000 : ANDROCYMBIUM

3.010.100 : ANDROCYMBIUM CAPENSE W Cape, Tulbagh, near Gouda. 100m. R.& R. Saunders coll.

3.010.300 : ANDROCYMBIUM CILIOLATUM N Cape, Namaqualand. 1500m. R.& R. Saunders coll.

3.011.100 : ANDROCYMBIUM LONGIPES Lesotho, Drakensberg, NW of Sani Pass. 2900m. Gravel-filled depressions on rock-slabs. 20.3.96 (A summer-rainfall species from the high-alpine fell-fields on top of the Drakensberg. Prostrate rosettes.)

3.011.500 : ANDROCYMBIUM MELANTHOIDES E Cape, Ouberg NNW of Graaff-Reinet. 1700m. Wet-flush on sandstone slabs. 13.3.96 (A species from the mountain-ranges in the steppe-country of the Little Karoo - a summer-grower, when it gets the chance in this region of irregular rain. Up to 30cm. high with the flowers wrapped up in large, white, green-veined bracts.)

3.012.000 : ANDROCYMBIUM PULCHRUM N Cape, near Nieuwoudtville. 1300m. R. & R. Saunders coll.

3.012.500 : ANDROCYMBIUM STRIATUM E Cape, Drakensberg, NE of Rhodes to Naudesnek. 2200m. Loose, sandy clay. 16.3.96 (Another summer-grower in this genus of *Colchicum*-relatives, with about 30, mainly winter-growing, species distributed S from the Mediterranean, through E Africa to the Cape. Many, stemless flowers from leaf rosettes flat on the ground.)

3.015.000 : ANEMONE

3.015.100 : ANEMONE FANNINII KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (The highest grower among the 3 S Africans in this cosmopolitan genus but does not ascend above 2000m., along streams or in wet depressions on grassy slopes. A big plant with large, lobed leaves & stems up to 1m. high carrying several floppy, white or cream flowers.)

3.015.200 : ANEMONE TENUIFOLIA R.& R. Saunders coll. (Another wet-grower, so well worth trying in the UK. About 50cm. high with dissected, dark-green, basal foliage & large, hairy, pink-tinged, white flowers.)

3.016.000 : ANISODONTEA

3.016.200 : ANISODONTEA ELEGANS N Cape, N of Matjiesfontein to Sutherland. c. 1200m. R.& R. Saunders coll. (This small, mainly Cape, genus of shrubs or woody-based perennials in the *Malvaceae* includes many spectacular members but few, if any, are likely to tolerate moist climates. This 1m. high shrub with showy magenta flowers comes from the cold, interior mountains on the sothern rim of the Great Karoo & will be used to plenty winter-frosts but under dry atmospheric conditions.)

3.016.400 : ANISODONTEA JULII Cultivated seed of this, the only species of the Natal Drakensberg, growing among boulders & scrub up between 1800m. & 2300m. Another 1m. high shrub with beautiful, large, pink mallow-flowers. Certainly temperature-hardy in the UK but those we saw were in dry, exposed sites, so only likely to be possible in similar places in gardens.

3.017.000 : ANTHERICUM

3.017.500 : ANOMATHECA

3.017.561 : ANOMATHECA LAXA - WHITE FORM (*Lapeirousia cruenta*) A lovely little summer-growing corm with 30cm. spikes of flat-faced white flowers, strikingly blotched with crimson. Surprisingly hardy in the UK as it is a low altitude species, extending N along the E Cape coast through the summer-rainfall area into Mozambique, in sandy soils.)

3.017.650 : ANOMATHECA VIRIDIS W Cape, near Vanrhynsdorp. 200m. R.& R. Saunders coll. (A winter-grower, about 30cm. high, with spikes of long-tubed green flowers. Did well in our unheated (but virtually frost-free) lean-to greenhouse until

smothered out by an adjacent *Crinum*.)

3.018.000 : APTOSIMUM

3.018.500 : APTOSIMUM INDIVISUM W Cape, N of Beaufort West, S of Trapvoetkop. 1600m. Sandy clay on open 'flats'. (Only a few S African species might add to the range of cushion-plants suitable for year-round alpine-house cultivation in the UK. This is certainly one. The southern African genus *Aptosimum*, the 'Karoo Violets', is in the *Scrophulariaceae* & somewhat recalls *Penstemon*. If you crossed *P. purpusii* with *Gypsophila aretioides*, you might expect something like this. Rock-hard mounds of grey-green rosettes with stemless, white throated flowers in velvety, imperial-violet. The climate here, with its low, irregular rainfall, resembles that of the Great Basin, in Nevada & Utah, & this should need the same treatment as, say, *Lepidium nanum*. This has been successfully grown from this coll. & shown in June, 1999, so we have extracted a little more seed from the refrigerator for anyone who wants to try to emulate this success.)

3.018.500 : ARCTOTIS

3.019.500 : ARGYROLOBIUM

3.020.000 : ARISTEA

3.021.610 : ARISTEA ECKLONII No data. A low altitude summer-grower, very widely distributed N from E Cape to Zaire & Uganda. The one most likely to be encountered in the UK. Best grown frost-free, though it is of borderline hardiness & this seed came from John Blanchard (Dorset, UK), who does not have a heated greenhouse. Clumps of linear leaves & flat, 60cm. stems with many clusters of gentian-blue flowers set the pattern for the following, high altitude & much dwarfer collections.

3.022.200 : ARISTEA MAJOR W Cape, near Citrusdal. (NZ grown seed of this winter-grower raised from a coll. made in quite a cool, inland area of the W Cape, at the foot of the Cederberg. Likely to be best protected under glass in the UK but may be possible outside in a sheltered place.) C

3.022.309 : ARISTEA MONTANA KwaZulu-Natal. Wet grassland. 1800-2450m.

15632 : ARISTEA SP. E Cape, Drakensberg, Naudesnek. 2450m. Among grass on steep slope. 17.3.96 (15cm.)

15744 : ARISTEA SP. KwaZulu-Natal, Drakensberg, SE of Sani Pass. 2800m. Steep, grassy slope. 21.3.96 (30cm.)

15759 : ARISTEA SP. KwaZulu-Natal, N of Himeville. 1200m. Among grass in gravelly soil. 22.3.96 (20cm.)

15812 : ARISTEA SP. Orange Free State, Platberg E of Harrismith. 2350m. Open, stony grassland. 24.3.96 (20cm.)

3.025.000 : ASCLEPIAS

3.027.000 : BABIANA

3.027.990 : BEGONIA SUTHERLANDII No data. (100+)

3.028.200 : BERKHEYA MACROCEPHALA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (This & the next belong to quite a large, mainly S African, genus in the *Compositae* with about 12 species at high elevations in the Drakensberg. This is numerous at about 2000m., on grassy slopes, below the Sani Pass. Spiny leaves & very large, showy, yellow heads.)

3.028.800 : BERKHEYA SETIFERA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (A 1m., hairy perennial with great, shaggy, yellow heads. A plant of the open grasslands S from Zimbabwe, occurring up to 1900m.)

3.028.900 : BERKHEYA SPECIOSA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (A lush wet-grower about 60cm. high with showy, golden heads, from moist, grassy slopes & along streams, at up to 2100m. in the Natal Drakensberg.) (15+)

3.030.500 : BULBINE NARCISSIFOLIA E Cape, Witteberg, E of Lady Grey. 2200m. Fissures on diorite outcrops. 18.3.96 (One of the few summer rainfall, higher altitude plants in this genus of the *Liliaceae*, which is mainly African, mostly in the SW Cape & usually yellow-flowered. Fleshy glaucous leaves & racemes of flowers on erect stems of about 30cm.)

15540 : BULBINE SP. E Cape, NE of Pearston. 1500m. In sandy clay on open flats. 14.3.96 (A Karoo plant, 30cm. high. Dense, *Asphodeline*-like racemes of bright-yellow flowers with woolly filaments. May be temperature-hardy in a hot, dry site.)

15643 : BULBINE SP. E Cape, Drakensberg, Naudesnek. 2400m. Among grasses on steep, stony, moist, SE-facing slope. 17.3.96 (Certainly likely to be the hardest collected & should be easily grown outside in the UK. About 30cm. high.)

3.032.000 : CEPHALARIA

3.032.100 : CEPHALARIA NATALENSIS KwaZulu-Natal, Drakensberg, Cathedral Peak. c.2000m. R. & R. Saunders coll. (With about 14 species, S Africa is a secondary centre for these scabious-relatives in the *Dipsaceae*, mainly from the Mediterranean into central Asia. A 1-2m. high perennial from valley scrub in the Transvaal & Drakensberg between 1800m. & 2600m.)

3.032.200 : CEPHALARIA OBLONGIFOLIA E Cape, Amatole Mts., W of Stutterheim. c.1200m. R. & R. Saunders coll. (A 60cm. high, grassland perennial collected in the same area & at about the same altitude as *Dierama pulcherrimum*, which thrives in UK gardens. This species grows up to 2500m. in the Natal Drakensberg. White scabious-flowers in summer & autumn.)

3.033.000 : CHASMATOPHYLLUM

15560 : CHASMATOPHYLLUM SP. E Cape, N of Tarkastad. 1200m. Gravelly ledges & pockets on sandstone slabs. 15.3.96 (Panayoti insists on our listing at least a few cold-climate succulents. This member of the *Mesembryanthemaceae* from the edge of the

Karoo has tight pads of fleshy, greyish leaves & bright yellow 'daisies', opening in the evening.)

3.034.100 : CHIRONIA PEGLERAE KwaZulu-Natal, Drakensberg, Cathedral Peak. c. 2000m. R.& R. Saunders coll. (A pink, 30cm. herbaceous perennal in the *Gentianaceae* from damp, grassy slopes, to 2300m. in the Natal Drakensberg area.)

3.035.000 : CLEMATIS

3.035.000 : CLEMATIS BRACHIATA W Transvaal, near Wolmaransstad. c. 1200m. R.& R. Saunders coll. (One of the two S African species in this cosmopolitan genus. Widely distributed in both summer & winter rainfall regions, scrambling over boulder-slides or among scrub along streams at up to about 2000m. in the Drakensberg. Small, scented, cream, pink-tinted flowers.)

3.035.050 : CLEMATOPSIS SCABIOSIFOLIA E Transvaal, Johannesburg area. c. 1200m. R.& R. Saunders coll. (The small genus comprises elegant relatives of *Clematis*, with which it has been crossed in S Africa, & is mainly developed at high altitudes on Madagascar & on the tropical ranges of E Africa. A silver-haired, woody-based perennial with herbaceous stems of 60cm. or so, clad in pinnate leaves & carrying nodding, somewhat *Pulsatilla*-like, pink flowers in summer.)

3.036.000 : COTYLEDON

3.036.500 : COTYLEDON ORBICULATA W Cape, NNW of Beaufort West. 1550m. Ledges & crevices on igneous rock outcrops. (A member of a species-group of spectacular saxatile plants with large, fleshy, grey rosettes, widespread in the drier areas of S Africa. We cannot place this in a taxon below species-level but it is a splendid, scarlet-flowered representative from the winter-cold but dry mountains of the Karoo. Martyn Rix states the stems can be up to 1m. high but nearer 50cm. here.)

3.036.550 : COTYLEDON ORBICULATA var. OBLONGA KwaZulu-Natal, S of Sani Pass. 2850m. Ledges on E-facing basalt cliffs. 21.3.96 (The Natal Drakensberg race well-illustrated in Phillips & Rix 'Perennials' Vol. 2, p. 57. One the paradoxes which alpine-vegetation sometimes comes up with. Large rosettes of succulent, obovate, blue-white foliage produce 30cm. stems of elongated, pendant bells in soft apricot to red. One of the most exotic-looking species temperature-hardy in the UK but remember cliffs act as efficient storage-heaters & the winters here are dry, so only try it in a well-drained, sunny site.)

3.050.000 : CRASSULA

3.060.550 : CRASSULA SETULOSA var. CURTA E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Moist, gravelly area. 17.3.96 (One of the few true high-alpines in this mostly S African genus of about 300 species. Tight, *Saxifraga*-like mats of tiny, fleshy, bright-green leaves with small, flat panicles of pink-budded, white flowers on 5cm., downy, red stems.)

15810 : CRASSULA SP. OFS, Platberg E of Harrismith. 2350m. Among rocks on summit plateau. 24.3.96

3.095.000 : CRATEROCAPSA

3.096.000 : CRATEROSTIGMA

3.097.000 : CRATEROSTIGMA WILMSII

3.100.000 : CROCOSMIA AUREA KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (Though with an altitudinal limit of 1800m. in the Drakensberg, usually in the shade of forest remnants, this is considered the most tender. Maybe garden-stock came from a very low altitude. About 1m. high with spikes of large, outward-facing flowers, usually in soft orange-yellow. We have had several reports of Rachel & Rod's seed of this, listed in 1996, producing some outstanding forms)

3.100.210 : CROCOSMIA MASONORUM No data. From the richly coloured clone, 'Flamenco', selected over several generations, by Eric Smith. Pleated foliage & 1m. arching spikes of spectacular, upward-facing flowers in luminous orange-scarlet. Absolutely hardy in the UK, though from too low an altitude, 1370m., in KwaZulu-Natal to be included by Hilliard & Burtt.

3.100.300 : CROCOSMIA PANICULATA KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (Big, panicles of outward-facing flowers on stems of 1m. or more high. Spectacular sheaves of pleated foliage. Like *C. aurea*, this grows in wet, shady places in nature. Seems indestructable in UK gardens but we have never seen it set seed, so guess we have but a single clone)

3.100.500 : CROCOSMIA POTTSII KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (Crosses between this & *C. aurea* form the basis of the older garden hybrids, as well as the "montbretia", *C. x crocosmiiflora*, naturalised in the UK, especially along the W coast. Less than 1m. high with ribbed leaves & erectly branched spikes of orange to scarlet flowers.)

3.105.200 : CYRTANTHUS ATTENUATUS Lesotho & E OFS. Type-locality : Leribe. Yellow. 40-50cm.

3.105.500 : CYRTANTHUS BREVIFLORUS E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Among grass tussocks on island in fast-flowing stream. 17.3.96

3.105.510 : CYRTANTHUS BREVIFLORUS Lesotho. No further data. (From the stock introduced by Helen Milford & hardy in the UK. As the species goes, this is quite a dwarf form, about 30cm. high (it can be much taller). Though bulbous it is usually a plant of wet, peaty habitats. We have seen it on an island in a fast-flowing stream at almost 3000m., growing about 1m. high. Arching stems carry pendant, yellow, tubular flowers. Seed just harvested should give good germination.)

3.106.000 : CYRTANTHUS EPIPHYTICUS E Cape, Drakensberg, Naudesnek. 2400m. In cliff fissures & among grasses & boulders on steep, SE-facing slope. 17.3.96 (The specific name is not at all appropriate. An alpine chasmophyte from part-shaded cliffs between 1800m. & 2500m. in the Drakensberg. An unbelievable alpine-house plant for standard high-alpine treatment : cool & moist in summer ; dryish & cold in winter. But, this has a 30cm. stem hanging-out a bunch of about a dozen large, thick-

textured flowers, with 4cm. long, arching tubes, in eye-burning scarlet. Beautifully illustrated in Hilliard & Burt. Seed of *Cyrtanthus* is normally of short viability. We are keeping this refrigerated & we'll send it out until about February, 1997. We suggest sowing immediately & keep seedlings frost-free & growing. It will probably be perfectly growable outside in the UK.)

- 3.106.050 : CYRTANTHUS ERUBESCENS** KwaZulu-Natal, Drakensberg. Type locality : Cathedral Peak. Pink. 20-50cm.
- 3.106.150 : CYRTANTHUS FALCATUS** KwaZulu-Natal, Drakensberg, Loteni. Vertical cliff faces. (Broad, leathery leaves and umbels of pendulous, tubular, green to orange-yellow, red-margined flowers on 30cm. stems. Fresh, British-grown seed of this spectacular, saxatile species, almost certainly temperature-hardy in the UK, if kept dry when dormant in winter.)
- 3.106.300 : CYRTANTHUS FLAVUS** E Cape. Type Locality : Bathurst, Trappes Valley (only known here). Yellow. 20-25cm.
- 3.106.950 : CYRTANTHUS NUTANS** N Kwazulu-Natal & adjacent Swaziland. Type locality : Dundee, Vants Drift. Pale yellow. 15-20cm.
- 3.107.009 : CYRTANTHUS OBLIQUUS** No data. From stony grassland in the Eastern Cape & southern KwaZulu-Natal. The large bulbs grow half-exposed, producing imposing umbels of pendulous, yellow & red, green-tipped flowers on stems up to 60cm. high from between the distichous, strap-shaped leaves. Probably best kept dry & frost-free when dormant in winter.
- 3.107.059 : CYRTANTHUS OBRIENII** KwaZulu-Natal, Drakensberg. Umbels of nodding, scarlet flowers. About 30cm.
- 3.107.800 : CYRTANTHUS TUCKII**
- 3.109.000 : DAUBENYA AUREA from RED FORM** N Cape, Roggeveldberge, W of Middlepos. 1700m. R. & R. Saunders coll. (An unique Roggeveld endemic. Possibly closest to *Massonia* with a similar pair of ovate, fleshy, glossy green leaves flat on the ground. Between them sits a stemless, 'water-lily' head of brilliant scarlet. A pot on the show-bench will create a sensation one day. Though slow & a little temperamental, this has proved both growable & perfectly temperature-hardy alongside the Mediterranean & SW Asian bulbs in our unheated greenhouse. It has the same growth-cycle as these. We flowered it from cultivated Californian seed last spring & it even set some seed with us. It tolerates considerable frost in the more continental climate of the garden of Stan Farwig & Vic Girard in Concord, California. They believe they grow it successfully because of their colder winters. Attempts to grow it in the Bay area or at Kirstenbosch in Cape Town have failed. Seed sown by October germinates within a month with us. Sown later, it will wait till the following year but comes up reliably then in our experience. The Saunders point out that this wild coll. may include seed from a *Neobakeria*, which looks identical in seed. We doubt if many of you grow a *Neobakeria* from the Roggeveld, so this may not be a deterrent, but don't complain if you get one.)
- 3.109.009 : DAUBENYA AUREA from RED FORM** N Cape, Roggeveldberge. (Almost certainly the first time UK grown seed of this unique Roggeveld endemic has been listed. Possibly closest to *Massonia* with a similar pair of ovate, fleshy, glossy green leaves flat on the ground. Between them sits a stemless, 'water-lily' head of brilliant scarlet. Though slow & a little temperamental, this has proved both growable & perfectly temperature-hardy alongside the Mediterranean & SW Asian bulbs in our unheated greenhouse. It has the same growth-cycle as these. Our original stock was raised from seed cultivated in California by Stan Farwig & the late Vic Girard in Concord, where it tolerated considerable frost in the more continental climate of their garden. They believe they grew it successfully because of their colder winters. Attempts to grow it in the Bay area or at Kirstenbosch in Cape Town have failed. Seed sown by October germinates within a month with us. Sown later, it will wait till the following year but comes up reliably then in our experience. Wild collected seed, which we have not been able to list for several years, may include seed from a *Neobakeria*, which looks identical in seed. This is 100% guaranteed from our own UK grown seed.)
- 3.109.010 : DAUBENYA AUREA from YELLOW FORM** Cultivated Californian seed from Stan Farwig & Vic Girard. This is much rarer than the red form in cultivation & seemingly also in nature, though it was the one first described. Some think the two may be separable specifically, in which case only this would remain as *D. aurea*. Just as spectacular as the preceding.
- 3.110.000 : DELOSPERMA**
- 3.110.500 : DELOSPERMA ASHTONII** E Cape, Drakensberg, NE of Rhodes. 2300m. Fissures & ledges on diorite outcrop. 16.3.96 (The enthusiasm of Panayoti Kelaidis for cold-climate members of this & other genera in the *Mesembryanthemaceae* has transformed Rocky Mt. horticulture. This species, with its pads of succulent foliage & big, brilliant pink 'daisies', comes with his recommendation that it is larger flowered & more spectacular than the commoner *D. lavisiae*.)
- 3.128.000 : DIANTHUS**
- 3.130.000 : DIASCIA**
- 3.130.800 : DIASCIA INTEGERRIMA** E Cape, Drakensberg, NE of Rhodes. 1900m. Open, gravelly banks & among rocks. 16.3.96 (Comparatively few of this mainly annual, exclusively S African genus, currently in fashion in the UK, reach high elevations. This is one of the higher growers, attaining almost 3000m. in the Drakensberg & forming, spreading, stoloniferous clumps of 30cm. erect, wiry stems, clad in little, linear leaves & with racemes of twin-spurred, soft-pink, darker-throated flowers.)
- 3.140.400 : DIERAMA ARGYREUM** KwaZulu-Natal, near Underberg. 1700m. R. & R. Saunders coll. (About 1m. high with pure-white to ivory-white pendulous bells from among silvery-white bracts. Variable both in size & colour, it is occasionally pink-tinged & very rarely pink. At higher altitudes, it seems to intergrade with *D. robustum* (q.v.). From moist grassland between 420m & 1700m. in S KwaZulu-Natal, it should be hardy enough in most UK winters, if given a well-drained, sunny site.)
- 3.141.100 : DIERAMA DRACOMONTANUM** OFS, Drakensberg, Mont-aux-Sources. 2900m. Among grasses on open, moist, stony slopes. (The highest altitude species & an excellent, very hardy garden-plant in the UK, forming compact, grassy tufts, sometimes spreading by stolons with us, with pendant clusters of wide-open flowers, in beautiful coral-red & terracotta-pink

shades, between brown bracts, dancing on wiry stems of about 60cm. in late summer..)

- 3.141.101 : DIERAMA DRACOMONTANUM** KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Among grass tussocks on broad ledges of E-facing cliffs. 21.3.96 (Not seen in flower here. It can also be light to dark rose-pink or purple-pink.)
- 3.141.120 : DIERAMA DRACOMONTANUM** Our Welsh-grown seed from a CD & R coll. Loves our cool summers.
- 3.141.409 : DIERAMA ERECTUM** KwaZulu-Natal, E of Vryheid, Ngome. 1100m. Wet grassland. (Narrowly endemic to this area & closest to *D. insigne* with erect, 1.5m. high stems, with many side branches, from close clumps of broader leaves. Wide open, light magenta-pink flowers with distinct, darker eyes. A wet-grower which may adapt well to UK conditions.)
- 3.141.500 : DIERAMA FLORIFERUM** R. & R. Saunders coll. (Most similar to *D. dracomontanum* & of about the same height & habit but with smaller flowers carried more profusely. Usually in shades of violet but it can vary from almost white to purple-pink. A lower altitude plant, from between 800m. & 1700m. in the grasslands along the Natal Drakensberg foothills, just entering the Transvaal in the NE & E Cape in the SW. Unlikely to be so tough as *D. dracomontanum* but should be fairly hardy.)
- 3.141.709 : DIERAMA GALPINII** Eastern Transvaal, near Wakkerstroom. (A species of open grassland up to 1600m. altitude. Erect stems about 1m. high from small, tufted clumps. Pale to rich magenta-pink bells among translucent bracts.)
- 3.141.900 : DIERAMA GRANDIFLORUM** E Cape, Ouberg, NNW of Graaff-Reinet. 1700m. Among sandstone rocks around edge of summit plateau. (A little-known species, only recorded from here & the Bosberg to the SE. It is not common here & very little seed had been set. Tufts of tough, narrow foliage. Whippy, 1.5m. stems hang out pendulous clusters of rich pink flowers with blue-violet perianth-tubes, among the largest in the genus. This is a cold, interior area but it is on the edge of the Karoo & is much drier than the Drakensberg, so, while certainly temperature-hardy, it may succumb to winter-wetness in the UK.)
- 3.142.000 : DIERAMA IGNEUM** S African cultivated seed (A low to middle-altitude species, quite widespread from the central coastal region of KwaZulu-Natal S into E Cape at altitudes up to 1500m., so well worth trying in the UK in a sunny well-drained site. About 1m. high with bells varying from pale to deep lilacs & rose-pinks.)
- 3.142.110 : DIERAMA INSIGNE** S African cultivated seed. (Almost confined to rocky grassland on the Highveld of the SE Transvaal, just entering Swaziland and Natal. Arching 1.5m. stems of beautiful, pendulous pink flowers)
- 3.142.500 : DIERAMA LATIFOLIUM** KwaZulu-Natal, WSW of Nottingham Road, Soutar Hill. 1700m. Open, grassy slopes. 22.3.96 (A tall plant from the grasslands E of the Drakensberg, reaching 2100m. Large clumps of grassy leaves send up many tough stems to as much as 3m., with arching sprays of pale to deep-pink, or occasionally wine-red, flowers among papery, white bracts. A magnificent plant, used to drier winter conditions, so best tried in a well-drained, sunny site in winter-wet climates.)(10+)
- 3.142.800 : DIERAMA MEDIUM** S African cultivated seed of this fairly local species from the E Transvaal & neighbouring Swaziland. An extremely dainty plant of seasonally marshy grassland between 1300m & 2000m., it should be suited to UK gardens. About 70cm. high with clustered bells in pale-mauve to magenta-pink, among brown bracts, on the finest of stems.
- 3.143.300 : DIERAMA PALLIDUM** KwaZulu-Natal, Inchanga Hill. 600m. (A type-locality collection of this elegant plant with 1m. high, arching stems carrying pendulous inflorescences of creamy white to palest yellow bells among papery white bracts. Confined to sandy, stony, grassy slopes between 300m. & 900m. in a comparatively small area in KwaZulu-Natal.)
- 3.143.500 : DIERAMA PAUCIFLORUM** E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Among grasses on open slope, in moist, peaty soil. (An outstanding garden-plant in the UK. Tolerant of winter-wetness (it sometimes grows in standing water with sphagnum in the wild), this also survived the 1995 drought here unharmed & was untouched by the recent severe winter. Dwarfier than *D. dracomontanum*, it flowers earlier than any other we have at present with many, wiry, 40cm. stems from dense grassy tussocks, with wide-open, sometimes upward-facing, bright purple-pink flowers amid rust-brown bracts.)
- 3.143.501 : DIERAMA PAUCIFLORUM** E Cape, Drakensberg, Naudesnek. 2500m. Wet, peaty soil. Ex CD & R 192. (From our cultivated stock of the original Compton, D'Arcy & Rix introduction, coll. in the same area as our wild seed.)
- 3.143.909 : DIERAMA PULCHERRIMUM** Eastern Cape, Amatole Mts. (A familiar name in the UK, where most stock is now likely to have crossed with paler pink *D. pendulum* with more open bells and spreading segments. The true species is one of the most distinct & richly coloured with arching stems almost 2m. high dripping with long, conical flowers, often in deep purplish red. A species from open grassland at 900m. to 1700m. in the E Cape & of proven reliability in UK gardens.)
- 3.144.109 : DIERAMA REYNOLDSII** Eastern Cape, near Maclear. (According to Hilliard & Burt "a strikingly beautiful species, its wine-red flowers contrasting effectively with the pure white, silvery bracts" on solitary, 2m. high stems. A plant of grassland up to 1550m., almost confined to KwaZulu-Natal, collected here in its southernmost locality, just into the E Cape.)
- 3.144.200 : DIERAMA ROBUSTUM** E Cape, Drakensberg, NE of Rhodes. 2000m. Among grasses on open slopes. 16.3.96 (Reaching higher altitudes, between 1600m. & 2900m., than any other except *D. dracomontanum*, this is the commonest Lesotho species, extending into the Natal & Cape Drakensberg. A close clump of 1m. long leaves sends up a single, occasionally more, 2m. arching stem with many pendant clusters of large bells, usually pink but variable from cream to deeper shades. This is a plant of drier slopes & though temperature-hardy may be intolerant of winter-wetness so give it a well-drained, open site in the UK.)
- 3.144.201 : DIERAMA ROBUSTUM** E Cape, Witteberg, E of Lady Grey. 1900m. Among rocks & scrub. 18.3.96
- 3.144.202 : DIERAMA ROBUSTUM** E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Open, grassy slope. 17.3.96
- 3.144.400 : DIERAMA TRICHORHIZUM** KwaZulu-Natal. No further data. (A plant of moist, grassy places between 1200 &

2700m. altitude. Somewhat like *D. pauciflorum* but its bracts are white not red-brown & it is the only species to produce cormlets in the leaf-axils. Up to 60cm. high with pale-purple to pink flowers, this should prove amenable & hardy in the UK.)

3.144.500 : DIERAMA TYRIUM

3.144.600 : DIERAMA TYSONII

15555 : DIERAMA SP. E Cape, N of Tarkastad, SW of Toorberg. 1400m. Among rocks on steep, grassy slope. 15.3.96 (Collected on the farm, 'Glenlex', beyond the tail-end of the Drakensberg, where they grade into the Stormberg & Bamboesberg. This whole area is little collected & no *Dierama* spp. are recorded. The nearest species are *D. grandiflorum* to the W with *D. jucundum* & *D. robustum* in the Cape Drakensberg far to the NE. May be resentful of winter-wetness. About 2m. high.)

3.160.000 : DIETES

3.165.000 : DIMORPHOTHECA

3.165.500 : DIMORPHOTHECA JUCUNDA (*Osteospermum jucundum*, *Dimorphotheca barberiae*) Free State, Drakensberg, Mont aux Sources. 2900m. Open stony slopes. (Highest alpine in the genus, recorded up to 3200m., & only likely to be lost through winter-wetness, not cold, in the UK. Here in a very neat race with mat-forming clumps bearing a multitude of brilliant daisies, with rich purple-pink, copper-backed rays and yellow discs, on stems of about 20cm. More compact here than clones distributed in the UK as *Dimorphotheca barberiae* f. *compacta* but not quite so diminutive as the original one described by Vera Higgins in 1946 under this name from a Helen Milford collection & which we fear has now vanished from cultivation. Those prepared to interpret the name *Dimorphotheca* will appreciate seeds are of two different forms.)

3.170.000 : DIPCADI

3.171.500 : DISSOTIS CANESCENS Zimbabwe, Chimanimani Mts. c. 1500m. R. & R. Saunders coll. (A striking, erect, shrubby member of the *Melastomataceae*, about 50cm. high with deep mauve-pink flowers. A wet-grower, commended by Rod Saunders as comparatively hardy. Though these ranges along the Mozambique border are of a fair altitude, we could not expect material from them to be fully hardy in the UK. On the other hand, such species should be happy outside in a UK summer, needing only minimal frost-protection under glass in winter - no more than we afford to many Mexicans & low altitude S Africans already.)

3.180.000 : ERICA : Key to Drakensberg species in Hilliard & Burt p. 187

3.210.750 : ERICA MAESTA E Cape, Drakensberg, NE of Rhodes. 2300m. Fissures & ledges on diorite outcrop. 16.3.96 (With over 600 S African species, mostly congregated in the winter rainfall area of the SW Cape, it is hardly surprising that the comparatively few, hardier species from the summer-rainfall ranges have been totally neglected by gardeners. These 20 to 30 species should have potential for gardeners in wetter, cold to temperate climates. There was no seed for us on most that we saw, including such species from cold, wet cliffs & rock-sheets around 3000m., as *E. frigida* & *E. thodei*. These may be for the future. For the present we list a few introductory collections. This is an erect, pink-flowered species about 40cm. high - should be hardy in the UK.)

15702 : ERICA SP. KwaZulu-Natal, Drakensberg, N of Sani Pass. 2850m. Fissures in cold, S & SE-facing cliffs. 20.3.96 (With *Helichrysum milfordiae*. Like *Cassiope wardii* - insufficient.)

15839 : ERICA SP. (compact) (Mont aux Sources)- insufficient

3.212.500 : ERICA SCHLECHTERI OFS, Drakensberg, Mont aux Sources. 2900m. Diorite rock crevices. 25.3.96 (An upright, conifer-like shrub, about 50cm. high, with appressed, needle-like foliage & clusters of urn-shaped, pink flowers.)

3.230.050 : EUCOMIS AUTUMNALIS subsp. AMARYLLIDIFOLIA Orange Free State, Platberg E of Harrismith. 2350m. Moist, stony slope on summit plateau. (Whether or not this is correctly named, it is not one of the others listed here. It was identified for Panayoti by J.P. Roux, formerly director of the Harrismith Botanic Garden & now in charge of the Compton Herbarium at Kirstenbosch as *E. nana*. We cannot trace this name. Apart from *E. schiffii*, this is the dwarfest here at about 15cm. high. Its small, papery capsules would appear to place it in the above taxon, though we'd rather call it "*E. nana*".)

3.230.100 : EUCOMIS AUTUMNALIS subsp. CLAVATA Orange Free State, Drakensberg, Mont-aux-Sources. 2800m. Steep, moist, grassy, SW-facing slope. 25.3.96 (A dwarf, broader-leaved race of *E. autumnalis*, ascending to above 3000m. Its rosette of wide leaves lies flat on the ground, with the dense, cylindrical head packed with fleshy, yellow-green flowers & topped with the characteristic pineapple tuft rising to 30cm. here. Compton thinks this is probably not in cultivation in the UK.)

3.230.105 : EUCOMIS AUTUMNALIS subsp. CLAVATA E Cape, Drakensberg, NE of Rhodes to Naudesnek. Grassy areas on diorite outcrop. 16.3.96 (A 20cm. high, green-flowered pineapple lily. We're not too happy this is the same as the above.)

3.230.106 : EUCOMIS AUTUMNALIS subsp. CLAVATA E Cape, Amathole Range, W of Stutterheim. (A dwarf, broader-leaved race of *E. autumnalis*, ascending to above 3000m. Its rosette of wide leaves lies flat on the ground, with the dense, cylindrical head packed with fleshy, yellow-green flowers & topped with the characteristic pineapple tuft rising to around 30cm. in height. Our 1996 Drakensberg colls. are established and proving hardy so far in the UK.)

3.230.200 : EUCOMIS BICOLOR Orange Free State, Drakensberg, Mont-aux-Sources. 2900m. Open stony slopes. 25.3.96 (Long, wavy-edged leaves & purple-spotted stems, up to 60cm. high, with cylindrical racemes of creamy green flowers, each neatly edged with deep purple. Quite widespread along the E slope of the Natal Drakensberg at up to 2300m. according to Hilliard & Burt but we found it at almost 3000m., as high as *E. schiffii* & the preceding, in this locality on the Lesotho border.)

3.230.220 : EUCOMIS BICOLOR No data. 1999 cultivated seed from stock grown outside in Wales, UK.

3.230.300 : EUCOMIS COMOSA

3.230.400 : EUCOMIS HUMILIS

3.230.510 : EUCOMIS MONTANA Distributed in Mpumalanga & Swaziland on stony, grassy slopes at around 1500m. Semi-erect, wavy-edged foliage, purple-tinged & purple-speckled below. Stems of about 30cm. with short, dense racemes of green flowers with purple anther-filaments. Not a species we have seen in cultivation in the UK. S African seed.

3.230.610 : EUCOMIS POLE-EVANSII (= *E. pallidiflora*) No data. The tallest, most robust species, which can reach 2m. in height. Basal rosettes of undulate, strap-shaped leaves with white cartilaginous margins & long, dense racemes of spirally arranged, wideopen, creamy-green flowers topped by a coma of up to 30 bracts. A species from grassy marshes and wet gulleys in the higher, montane areas of E Mpumalanga and W Swaziland. Cultivated S African seed.

3.230.709 : EUCOMIS REGIA Northern Cape, Nieuwoudtville area.

3.230.800 : # [EUCOMIS SCHIJFFII](#) KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Ledges on E-facing basalt cliffs. 21.3.96 (Dwarfest in the genus & from the highest altitudes. One of those alpine which make you flip. A rosette of broad, glaucous leaves, purple tinged or speckled, lies flat on the ground with the fat, purple-spotted stem of 4-10cm. rising from the centre, packed with deep purple-red flowers & topped with the coma of purplish bracts. The inflated spongy stem, tapering to a thready base where it joins the bulb, dries & detaches to blow away like a tumbleweed with the ripe seed in autumn. We await its appearance on the show-bench, though we have no doubt it will be perfectly easy in a scree-bed outside in the UK & elsewhere.)

3.230.801 : EUCOMIS SCHIJFFII Lesotho, Drakensberg, Mont-aux-Sources. 3000m. Gravelly cliff-ledges. 25.3.96

3.230.900 : EUCOMIS VANDERMERWEI

3.231.000 : EUCOMIS ZAMBESIACA

3.231.010 : EUCOMIS ZAMBESIACA No data. Seeds from the most attractive, dwarf, summer-growing bulb cultivated in the UK under this name. The species is native to tropical East Africa but this has proved reliably hardy over many years in a well-drained, sunny site About 20cm. tall with dense, erect racemes of creamy-white flowers in late summer

3.235.000 : EURYOPS

3.235.100 : EURYOPS ACRAEUS KwaZulu-Natal, Drakensberg, N of Sani Pass. 2850m. Fissures in cold, S & SE-facing cliffs. 20.3.96. (Possibly the finest in the genus for UK rock-gardeners, its stiff, platinum-plated bushes with aristocratic, bright-yellow daisies are well-known from Helen Milford's 1939 introduction, long-grown incorrectly as *E. evansii*. A species of cold, moist, shaded, basalt cliffs to 3300m., not the sunny scree where UK gardeners put it because they think that is where S Africans should grow but where, nevertheless, it thrives, as long as the summer is not too dry, & is more compact than in nature.)

3.235.200 : EURYOPS CANDOLLEI E Cape, Drakensberg, NE of Rhodes. 2300m. Fissures & ledges on diorite outcrops. 16.3.96 (A 30cm. shrub with bright-green, somewhat *Santolina*-like, foliage and profuse, tiny, yellow heads.)

3.235.300 : EURYOPS DECUMBENS Lesotho, Drakensberg, Sani top. 2900m. Open stony areas & depressions on rock-slabs. 20.3.96. (A tiny species, ascending to 3400m. on the summit rock-sheets, where it forms hard, greyish pads.)

3.235.400 : EURYOPS EVANSII (Subsp. *evansii*) KwaZulu-Natal, Drakensberg, S of Sani Pass. 2700m. Stony gully on steep slope below basalt cliffs. (A very much larger, shrubby species than *E. acraeus* & from slightly lower altitudes. It can reach over 1m. in height with broad, leathery, grey leaves and terminal clusters of big yellow daisies.)

3.237.000 : FELICIA

3.237.100 : FELICIA FILIFOLIA N Cape, Namaqualand. R. & R. Saunders coll. (A dwarf, twiggy shrub, about 60cm. high, from altitudes up to 2400m., where it grows in cliff-crevices & colonises eroded areas. Seldom without its little, mauve-blue daisies & often massed with them. No Drakensberg material available & this coll. may be less hardy & accommodating.)

FREESIA CARYOPHYLLACEA : Check name

FREESIA REFRACTA : Possibly not this : try *F. lactea* if white.

3.238.000 : GALAXIA

3.239.000 : GALTONIA

3.239.010 : GALTONIA CANDICANS

3.239.060 : GALTONIA PRINCEPS No data. Erect stems, almost 1m. tall, with pale green to greenish white bells in late summer. Seed from Dinah Batterham (Dorset, UK) who has grown this handsome hyacinth-relative from KwaZulu-Natal outside for many years, originally from the stock we used to grow when we were in Dorset almost 20 years ago.

3.239.110 : GALTONIA VIRIDIFLORA No data. Much broader leaves than the other 2 species. Stems about 1m. high carry up to 30 pale yellowish green bells in late summer. Seems hardy in W Wales in a well-drained site.

3.240.000 : GARULEUM WOODII OFS, Platberg E of Harrismith. 2300m. Rock fissures & gravelly ledges. 24.3.96 (Another blue-flowered shrubby member of the *Compositae*, which could pass for a *Felicia*, with an intriguing distribution, seemingly following the Cave Sandstone right round the high Drakensberg from SE Lesotho to here on the Platberg but absent from the main range. Should certainly be temperature-hardy in the UK but may resent winter-wetness. A distinguished, stiffly compact, saxatile shrub, about 20cm high but more across, with fine, rich-blue, yellow-centred 'daisies'. Worth of the alpine-house.)

3.241.000 : GAZANIA

3.241.500 : GAZANIA KREBSIANA W Cape, Cederberg, near Clanwilliam. c. 1500m. R.& R. Saunders coll. (The only one in this small genus, concentrated in the W Cape, which climbs to great heights - up to about 3000m. - in the Drakensberg, where we saw it as a low-growing perennial with huge, yellow 'daisies' in stony turf. Sadly, we could collect no good seed & list Rod & Rachel's lower, western collection as compensation. Worth trying but unlikely to be of such potential in UK gardens as the high Drakensberg race. Distributed S from the tropical mountains of E Africa into the Cape, the species must involve many ecotypes.)

3.242.000 : GEISSORHIZA

3.243.000 : GERANIUM

3.243.100 : GERANIUM BRYCEI

3.243.200 : GERANIUM DRAKENSBERGENSE

3.243.300 : GERANIUM MAGNIFLORUM E Cape, Witteberge, SE of Lady Grey. 1500m. Among grass in marshy area. (Large pink flowers on plants about 30cm. high with finely cut green leaves. Panayoti Kelaidis & Jim collected this in 1996. "Superb" and "indestructibly hardy" at Denver says Panayoti. It is the highest growing S African in this genus, recorded up to 3200m., always in moist sites, so should prove every bit as worthwhile in European gardens.)

3.243.409 : GERANIUM PULCHRUM KwaZulu-Natal, Drakensberg, SE of Sani Pass. 2600m. (A handsome, sturdy, shrubby-based species, up to 1m. in height, with lobed, silky foliage and masses of large pink to purple flowers. From moist rock-slides & streamsides up to 2400m. in the Drakensberg, this is of proven reliability in many UK gardens.

3.243.410 : GERANIUM PULCHRUM No data. A tall, handsome, sturdy, subshrubby species, over 1m. in height, with lobed, silky foliage and masses of large pink to purple flowers. From marshy land and streamsides at altitudes up to 2400m. in the Drakensberg, this is of proven reliability in many UK gardens. English-grown seed from Tim Ingram in Kent.

3.243.460 : GERANIUM ROBUSTUM No data. Most British-grown stock probably originates from S.& S. Hannay 14 collected in the E Cape. We are told we have a particularly fine, compact form, which makes mounds about 50cm. high and 1m. or more across. Branching, stiff, sticky stems set with deeply cut soft-green leaves carry masses of flowers in a pleasing pinkish purple over a long period in summer. Excellent, trouble-free and hardy here over three winters in a sunny, well-drained bed.

GERANIUM SCHLECHTERI

GERANIUM WAKKERSTROOMIANUM

3.245.000 : GERBERA

3.245.000 : GERBERA AMBIGUA R.& R. Saunders coll. (A grassland perennial, about 30cm. high, with delightful pink 'daisies'. As widely distributed in the E African mountains as the preceding & ascending to 2500m. in the Drakensberg.)

3.250.000 : GLADIOLUS

3.250.850 : GLADIOLUS ALATUS Western Cape, Franschhoekberge.

3.250.900 : GLADIOLUS ALATUS var. PULCHERRIMUS (Winter grower. Likely to be the hardiest of the various races of *G. alatus*. Clanwilliam district, Picketberg, etc. 8-35cm.)

3.252.000 : GLADIOLUS AURANTIACUS KwaZulu-Natal, N of Pietermaritzburg, near Albert Falls dam. 1300m. R.& R. Saunders coll. (A summer-grower, flowering at the start of the rainy season in spring, before the leaves appear, with 60cm. spikes of up to 12, large, long-tubed, orange-yellow flowers, usually speckled with red. From quite low altitudes in Natal & SE Transvaal, it should be little trouble to overwinter it dry & frost-free, planting it outside in summer, but it may prove quite hardy.)

3.254.810 : GLADIOLUS CARDINALIS No data. A famous & glorious species, endemic to a small area in the mountains near Worcester & Paarl in W Cape, where it hangs out its large scarlet flowers, with white diamond-markings on the 3 lower segments, in midsummer, on moist cliffs near waterfalls or streams, at altitudes up to 1400m., . A clump in our unheated greenhouse was magnificent this year. Though a late-flowering, winter-grower, with new growth appearing in autumn, it grows outside with D. Hoskins (Hampshire, UK), replacing growth damaged in winter & flowering a month or so later than with us.)

3.254.900 : GLADIOLUS CARINATUS

3.255.400 : GLADIOLUS CARMINEUS Western Cape, near Hermanus. (A beautiful hysteranthous winter-grower known only from a few sandstone cliffs near the coast in the Caledon & Bredasdorp districts of W Cape. Up to 6 flowers on a 30cm. stem before the leaves in autumn. Rich carmine-pink with a cream median stripe, edged with purple-pink, on the lower segments. Safest grown frost-free though it tolerated frosts with our friends, Stan Farwig & Vic Girard in Concord, California, & may well be no trouble in an unheated greenhouse in the UK.)

3.255.510 : GLADIOLUS CARNEUS No data. A winter-grower, about 50cm. tall, quite widely distributed in the SW Cape. Long-tubed, pale to deep pink flowers in spring. Easily cultivated but safest grown frost-free in the UK.

3.256.409 : GLADIOLUS CERESIANUS Northern Cape, Roggeveldberge. ("One of the most diminutive species", 15cm. high or less, from clay soils in the arid mountain-ranges of the western Karoo, the Roggeveld, Komsberg, Cold Bokkeveld, etc. Allied to *G. uysiae* and *G. watermeyerii*, both of which are temperature-hardy with us, this will also almost certainly be growable under glass without heat in the UK. Proportionately large, fascinating, elegant, sweet-scented flowers with erect, narrow, upper segments, cryptically coloured in purple-brown to grey-green with complex veining & markings in dull purple and yellow)

- 3.256.600 : GLADIOLUS CITRINUS** Thought to be near extinction in nature, this beautiful plant had the misfortune to inhabit moist patches on sandy flats in the Paarl & Stellenbosch districts near Cape Town, just the place for urban development & agriculture. Singularly unlike other *Gladiolus* in its upward-facing, completely regular flowers, like crocuses, bright-yellow with maroon-purple throats., on 20cm. stems. A winter-grower, which will need protection from frost, but dwarf enough for pot-culture.
- 3.257.000 : GLADIOLUS COMPTONII** (Winter grower. Vanrhynsdorp area. 700m.)
- 3.257.200 : GLADIOLUS CRASSIFOLIUS** KwaZulu-Natal, near Underberg. 1600m. R. & R. Saunders coll. (A summer-growing, grassland species, widespread through the summer rainfall area from E Cape up through Lesotho into the Transvaal & climbing to about 2000m. in the Drakensberg. Spikes about 1m. high with up to 40, curved, bell-shaped flowers, usually in pink or mauve with long, dark blotches on the lower segments. Should be hardy & growable outside in most of the UK.)
- 3.257.201 : GLADIOLUS CRASSIFOLIUS** Eastern Cape, ENE of Rhodes, Naudesnek. c.2000m. (A summer-growing, grassland species, widespread through the summer rainfall area from E Cape up through Lesotho into the Transvaal & climbing to about 2000m. in the Drakensberg. Spikes about 1m. high with up to 40, curved, bell-shaped flowers, usually in pink or mauve with long, dark blotches on the lower segments. Should be hardy & growable outside in most of the UK.)
- 3.257.500 : GLADIOLUS CYLINDRACEUS** (Winter grower. Cold Bokkeveld, Tulbagh & Ceres areas to 2100m. 30-70cm. high.)
- 3.257.800 : GLADIOLUS DALENII** Eastern Cape, Witteberge, E of Lady Grey. 2000m. Among grasses & scrub in deep, moist soil. (A very showy member of a very variable group which extends N from the E Cape to Ethiopia & Arabia. Under Goldblatt's revision these are all absorbed into *G. dalenii* subsp. *dalenii*. Summer-growing, from altitudes up to 2500m. in the Drakensberg, many populations must be growable & totally hardy in most of the UK. About 60cm. high in this form with hooded, brilliant scarlet-orange flowers, large bright yellow blotches almost occupying their lower segments.)
- 3.257.847 : GLADIOLUS DALENII** Eastern Cape, NW of Maclear, Pot River Pass. c.1500m. (Rich red form)
- 3.257.848 : GLADIOLUS DALENII** Mpumalanga, near Wakkerstroom. (Described as an outstanding colour-form)
- 3.257.849 : GLADIOLUS DALENII** Northern Province, Tzaneen. (Lime-green form.)
- 3.257.850 : GLADIOLUS DALENII** KwaZulu-Natal, near Nottingham Road. 1500m. (The clear yellow form, once described as *G. primulinus*, which contributed much to some of the garden-hybrids. Not likely to be quite so hardy as the preceding but should succeed in most of the S & W of Britain.)
- 3.258.700 : GLADIOLUS ECKLONII** (subsp. *ecklonii*) KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (From foothill grassland along the summer rainfall, Drakensberg escarpment from E Cape to the Transvaal up to 2300m. & should be fairly hardy. Funnel-shaped flowers, among big, glaucous bracts, densely speckled with red or maroon on a whitish ground. 40cm.)
- 3.258.700 : GLADIOLUS ECKLONII** (subsp. *ecklonii*) KwaZulu-Natal, near Underberg. 1500m. R. & R. Saunders coll. (From foothill grassland along the summer rainfall, Drakensberg escarpment from E Cape to the Transvaal up to 2300m. & should be fairly hardy. Funnel-shaped flowers, among big, glaucous bracts, densely speckled with red or maroon on a whitish ground. 40cm.)
- 3.260.000 : GLADIOLUS EQUITANS** (Winter grower. Namaqualand, Vanrhynsdorp area. 15-45cm.)
- 3.261.000 : #GLADIOLUS FLANAGANII** KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Fissures on S & SE-facing, basalt cliffs. 21.3.96 (The 'Suicide Gladiolus', an alpine chasmophyte, almost always out of reach on inaccessible cliff-faces at the highest altitudes in the Lesotho & Natal Drakensberg, up to 3300m. Rounded, thick-textured, scarlet flowers with neat, narrow, white guide-lines on the lower segments. A priority for us to establish in cultivation. We spare a very few seeds for the adventurous.)
- 3.261.900 : GLADIOLUS GUEINZII** W Cape, near Nature's Valley. Sea-level. R. & R. Saunders coll. (An odd species from sea-side sands along the summer-rainfall Cape & Natal coasts. Thick, fleshy leaves & pink flowers, blotched with red & striped with white on the lower segments. 50cm. Definitely frost-free when dormant but may be possible outside in summer in the UK.)
- 3.262.400 : GLADIOLUS INFLATUS** (Winter grower. Clanwilliam area to 3000m. *G.i.* var. *louiseae* may be hardiest.)
- 3.262.800 : GLADIOLUS KAMIESBERGENSIS** (Winter grower. Endemic to Kamiesberg. To 1500m. 45-90cm. high.)
- 3.263.000 : GLADIOLUS LAPEIROUSIODES** (Winter grower. Nieuwoudtville area. About 15cm. high.)
- 3.264.008 : GLADIOLUS LONGICOLLIS** KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Steep, grassy slope below basalt cliffs. (DISTRIBUTED AS 3.279.500 : *G. SYMONSII* IN 1996)
- 3.264.009 : GLADIOLUS LONGICOLLIS** (subsp. *longicollis*) Eastern Cape, ENE of Rhodes, Naudesnek. c.2000m (An elegant, 50cm. high, grassland species with very long-tubed white or cream flowers, sometimes brown-speckled along the mid-veins and purple-flushed outside. Opens in the evenings with a heavy, spicy fragrance to attract its hawkmoth pollinators.)
- 3.267.200 : GLADIOLUS MACULATUS** subsp. **MERIDIONALIS** : see *G. meridionalis*
- 3.267.400 : GLADIOLUS MARLOTHII** (Winter grower. Endemic to Roggeveld, up to 1400m. 60-100cm. high.)
- 3.267.710 : GLADIOLUS MERIDIONALIS** No data. Previously listed as a subsp. of *G. maculatus*, this has now been reinstated at specific level in Goldblatt's revision. Of limited distribution in two disjunct, sandstone areas on the southern Cape coast, this is a winter-grower for frost-free conditions. An elegant, narrow-leaved, wiry-stemmed plant about 50cm. high. with large, clear salmon-pink flowers.

3.267.800 : GLADIOLUS MINIATUS

3.267.000 : GLADIOLUS MONTICOLA No data. A narrow endemic, restricted to the sandstones of the Cape Peninsula itself, where it flowers in late summer or early autumn before the new foliage appears with the winter rains. About 30cm. tall with spikes of cream flowers, flushed with pink & opening on curved tubes. Safest grown frost-free in the UK.

3.268.209 : GLADIOLUS MORTONIUS Eastern Cape, Amathole Mts., near Stutterheim. (A spectacular, 50cm. high plant of open, stony grassland in the mountains of the Eastern Cape. Up to 16, magnificent, long-tubed, pink flowers with red nectar-guides. Not unlike *G. oppositiflorus* but differs substantially in the floral bracts. Should be reasonably hardy in the UK)

3.268.600 : GLADIOLUS MOSTERTIAE (Winter grower. Nieuwoudtville area. 15-25cm.)

3.269.500 : GLADIOLUS NERINEOIDES An incredible, little species, like no other. In the small hysternanthous group, which flowers in late summer or autumn, before the new leaves appear. About 30cm. high with a compacted spike of flowers with recurved segments, somewhat resembling *Nerine sarniensis* in form but definitely so in colour : intense orange-crimson to salmon-pink with an iridescent dusting of gold. Only known from cliff-ledges at 700-1400m. in the mountains due E from Cape Town. A winter-grower which will best kept more or less frost-free but which should fit-in well with Mediterranean material.(15+)

3.269.800 : GLADIOLUS ODORATUS (Winter grower. Up to 1000m. along Vanrhynsdorp to Montagu escarpment. 30-80cm.)

3.270.100 : GLADIOLUS OPPOSITIFLORUS subsp. SALMONEUS E Cape, Drakensberg, Naudesnek. 2400m. Among grasses on steep, stony, SE-facing slope. (One of the loveliest of all. About 60cm. high with, one-sided spikes of big, salmon-pink flowers, sparsely marked with crimson in their throats. The high altitude, inland race of the species which has contributed much to the large hybrids. If breeders had used this subspecies, they could have produced the desired second spike without trouble & given us really hardy hybrids. A summer-grower, likely to prove a good, hardy garden-plant in a well-drained site in the UK.)(10+)

3.270.101 : GLADIOLUS OPPOSITIFLORUS subsp. SALMONEUS Eastern Cape, NW of Maclear, Pot River Pass. c. 1500m (One of the loveliest of all. About 60cm. high with, one-sided spikes of big, salmon-pink flowers, sparsely marked with crimson in their throats. The high altitude, inland race of the species which has contributed much to the large hybrids. If breeders had used this subspecies, they could have produced the desired second spike & given us really hardy hybrids. Our 1996 Naudesnek coll. of this summer-grower, is so far proving a good, hardy garden-plant in a well-drained site in the UK.)

3.270.200 : GLADIOLUS ORCHIDIFLORUS

3.270.210 : GLADIOLUS ORCHIDIFLORUS No data. A variable species, widespread, especially in the N & W of the Cape. "A particular favourite" comments Brian Mathew. Like its relatives in Series *Hebea* (*G. uysiae*, etc.) it is exquisitely scented & has complex "flowers to be looked at". In our parent stock, these are basically grey-green with bright-green & dull, dark purple marks & stripes, 10 or more carried on branching, 30cm. stems. Temperature-hardy with us.

3.270.300 : GLADIOLUS OREOCHARIS (Winter grower. Ceres, Clanwilliam areas, etc. up to 2200m. 30-70cm.)

3.270.509 : GLADIOLUS PAPILIO Mpumalanga, near Wakkerstroom. c.1500m. (A summer-growing, wetland species of proven hardiness throughout most of the UK, in a 1m. high, pale grey-purple form. A species of wide distribution (from the E Cape to N Province) & variable colour (from pale green & pink to yellow & purple, darkly blotched on two lower segments.)

3.270.850 : GLADIOLUS PERMEABILIS subsp. EDULIS E Cape, N of Tarkastad. 1200m. Among grasses on rock-slabs. 15.3.96 (A widespread but local race in the dry, continental climate of the interior, ascending to almost 3000m. & flowering when it has the chance (in summer or autumn here), according to the rainfall. Slender stems, about 50cm. high, with 12 or so flowers, with attenuate tips to the segments, in cream, usually tinged with muted pink or mauve-grey, blotched with yellow, edged with purple, on the lower, lateral lobes. Will be temperature-hardy but is unlikely to be tolerant of excess moisture at any time.)

3.272.400 : GLADIOLUS PRITZELLII (var. *pritzellii*) (Winter grower. Clanwilliam, Calvinia, Sutherland areas. to 2200m. 30-50cm.)

3.272.500 : GLADIOLUS PRITZELLII var. SUFFLAVUS (Winter grower. Nieuwoudtville area.)

3.276.500 : GLADIOLUS SAUNDERSII E Cape, Drakensberg, NE of Rhodes to Naudesnek. 2200m. Ledges on diorite outcrops & on steep, rocky slopes. (A startlingly spectacular species distributed from the Witteberge & Cape Drakensberg N through Lesotho at altitudes up to 2900m. but absent from almost all of the Natal Drakensberg. It has been confused with the very local, closely related *G. flanaganii*. Both are summer-growers with brilliant scarlet flowers marked with white on the lower segments but flower shape, habit & habitat are quite different. Almost certainly fully hardy in a well-drained site in the UK.)

3.276.501 : GLADIOLUS SAUNDERSII E Cape, Witteberge, E of Lady Grey. 2000m. Diorite outcrops. 18.3.96

3.276.502 : GLADIOLUS SAUNDERSII Eastern Cape. No further data. (A startlingly spectacular species distributed from the Witteberge & Cape Drakensberg N through Lesotho up to 2900m. but absent from almost all of the Natal Drakensberg. It has been confused with the very local *G. flanaganii*. Both are summer-growers with brilliant scarlet flowers marked with white on the lower segments but flower shape, habit & habitat are different. Almost certainly hardy in a well-drained site in the UK.)

3.276.700 : GLADIOLUS SCULLYI (Winter-grower. Widespread but reaches over 1000m. in Namaqualand. 20-50cm. high.)

3.276.712 : GLADIOLUS SCULLYI from PALE FORM

3.277.700 : GLADIOLUS SERICEO-VILLOSUS Ex KwaZulu-Natal, near Merrivale. 1500m. (A summer-grower, widespread in rich, moist, montane grassland up to 2100m. from the E Cape to S Mpumalanga. Distichous spikes, up to 1m. high, of up to 40

cream to pale lavender, funnel-shaped flowers with elongated, yellow, dark-edged markings on the lower lobes.)

3.278.105 : GLADIOLUS STEFANIAE An extraordinary winter-grower, flowering in autumn before the leaves. Described in 1972 & restricted to a tiny area in the Langeberg, SW of Montagu in W Cape. About 30cm. high with a few large flowers, scarlet with median white stripes on the lower segments, & almost identical to those of the evergreen, forest-dweller *G. sempervirens*, from which it may have evolved. Maybe safest frost-free but this is a mountain-plant.

3.279.500 : GLADIOLUS SYMONSII (This is *G. longicollis* according to D. Hoskins) KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Steep, grassy slope below basalt cliffs. 21.3.97 (A small, very slender summer-grower, 20-30cm. high, which, by elimination, appears to be this seldom-collected, alpine endemic from basalt outcrops at 2000-3000m. Pink, almost regular flowers with long anthers. A very few seeds.)

3.279.710 : GLADIOLUS TRISTIS The fact that this winter-grower is comparatively hardy in much of the UK raises expectations that there should be more. It made itself at home in Helen & Ivor Barton's Devon garden & we grow it without trouble in an unheated greenhouse. We grew its hybrid with *G. cardinalis*, *G. x colvillei*, outside but the foliage was always too damaged in winter with us & it is now too under, unheated glass, though it is a great success in several Devon gardens. The species is quite widespread in the winter-rainfall area of W Cape at up to 1800m. Large, fragrant creamy white flowers on stems of 50cm. or more.)

3.279.810 : GLADIOLUS UNDULATUS No data. A winter-grower from moist sites on the sandstones of the W Cape. About 60cm. tall with 6 or more cream, pink-tinted flowers.

3.280.110 : GLADIOLUS UYSIAE No data. A dwarf winter growing species, 7-20cm. tall, distributed through the W Karoo ranges from the Hantamsberg & Bokkeveld S through the Roggeveld. Complex flowers with erect upper segments in dull red-purple & yellow, intricately veined with purple, banded with dark green on the elongated lowest tepal & strongly freesia-scented. Hardy here under glass over several years & flowers about April grown cold with us. Our own UK grown seed.)

3.281.100 : GLADIOLUS VIOLACEO-LINEATUS (Winter grower. Clanwilliam & Vanrhynsdorp areas to 3000m. 35-65cm.)

3.281.500 : GLADIOLUS VIRIDIFLORUS (Winter grower. Nieuwoudtville area. 18-50cm.)

3.281.710 : GLADIOLUS WATERMEYERI No data. In the same group of winter-growing Series *Hebea* as *G. ceresianus* & *G. uysiae* & with similar large, intricately marked, brownish flowers. Distinct in its hooded, translucent dorsal segment & its broad, stiff, ridged leaves. A narrow endemic of the Cape Sandstone strip running from the Bokkeveld to the N Cedarberg. Temperature-hardy with us under glass over many years. Grown cold in the UK, it flowers about mid April. 10-30cm.

3.300.000 : GLUMICALYX

3.300.200 : GLUMICALYX GOSELOIDES KwaZulu-Natal, Drakensberg, N of Sani Pass. 2850m. In turf & among stones at base of SE-facing cliffs. 20.3.96 (In a small genus of 6 herbaceous perennial species in *Scrophulariaceae*, more or less endemic to the alpine region of the high Drakensberg, this has proved accommodating & hardy in cultivation in the UK & is illustrated growing in Kent in Rix & Phillips Vol. 2, page 110. Aromatic, leafy clumps of creeping stems rising to carry dense, nodding heads of long-tubed, pale-yellow flowers with bright orange interiors. In spite of the colour, demure rather than flamboyant.)

3.305.000 : GOMPHOSTIGMA VIRGATUM E Cape, Witteberge, SE of Lady Grey. 1900m. Among rocks at edge of fast-flowing stream. 18.3.96 (A suffrutescent perennial, immediately named by Panayoti "The White Wonder of the Witteberge", as we were both at a complete loss to identify it. In a genus of 2 species (the other is tropical) in the *Loganiaceae*, this appears to be endemic to the rocky beds of fast-flowing streams in the SE African mountains but we doubt if it will need such a specialized situation in cultivation. If growable, it should be perfectly hardy & certainly moisture-tolerant in the UK. Bushes of whippy, dark-green stems, about 2m. high, wreathed with white, crucifer-like flowers - try to imagine a cross between a *Cytisus* & a *Crambe*.)

3.306.000 : GUNNERA PERPENZA KwaZulu-Natal, Drakensberg, SW of Njesuthi valley. 2200m. Steep, wet, grassy slope. 23.3.96 (The single S African in this mainly southern hemisphere genus. Surely hardy in the UK. Like the rest, a rhizomatous perennial of marshy places. Intermediate in size between the giant & tiny ones, with rounded foliage on stems of about 50cm.)

3.348.000 : HEBENSTREITIA

3.348.000 : HEBENSTREITIA COMOSA Zimbabwe, Inyanga Mts. 1600m. R.& R. Saunders coll. (A 30cm. high, herbaceous perennial in the *Scrophulariaceae* (or the *Selaginaceae*, if you want to split). Narrow-leaved with dense heads of little, white, orange-throated flowers. Recommended as frost-tolerant by Rod Saunders but note our comments under *Dissotis*.)

3.348.100 : HEBENSTREITIA DURA

3.350.000 : HELICHRYSUM

3.350.300 : HELICHRYSUM ADENOCARPUM OFS, Platberg E of Harrismith. 2350m. Rocky places in open, stony grassland on summit plateau. 24.3.96 (A plant of stony grassland climbing to about 3000m. in the Drakensberg but nowhere there did we see such a splendid population as here on the Platberg, where almost all had the exterior of the shining, silvery phyllaries, painted with brilliant carmine-pink. Tidy & compact with neat, greyish basal foliage & big heads on erect, 10-15cm. stems.)

3.350.400 : HELICHRYSUM ALBUM Lesotho, Drakensberg, Sani top. 2900m. Fissures on rock-slabs. 20.3.96 (Rosettes of very woolly leaves & heads on stems a few cm. high. Papery, pure-white phyllaries with crimson-tinted backs.)

3.350.500 : HELICHRYSUM APPENDICULATUM KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (A plant of the Natal grasslands growing up to 2200m. in the Drakensberg. An herbaceous perennial, about 30cm. or more high with woolly

leaves & creamy, pink-flushed flower-heads in late summer & autumn.)

3.350.700 : HELICHRYSUM AUREO-NITENS KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (A widespread species of the high grasslands of SE Africa, extending N into Zimbabwe & reaching 2450m. in the Drakensberg. About 30 cm. high with narrow, silver-grey foliage & many, tiny, bright yellow, 'everlasting' flower-heads.)

3.350.800 : HELICHRYSUM AUREUM Lesotho. Ex a P. Kelaidis coll. (Colorado-grown seed from one of Panayoti's 1994 collections, now well established & totally hardy at Denver. A 50cm. high, herbaceous perennial. Showy heads with bright yellow, 'everlasting' bracts. Temperature-hardy in the UK, of course, but should be tried in a sunny, well-drained site.)

3.351.200 : HELICHRYSUM BELLUM E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Open, dryish, stony areas. 17.3.96 (A plant of grassy slopes up to 3300m. Large heads with long, pure-white, papery phyllaries on stems of under 10cm.)

3.351.800 : HELICHRYSUM CONFERTIFOLIUM OFS, Platberg E of Harrismith. 2350m. Open, stony grassland & rocky places on summit plateau. 24.3.96 (Mats of narrow, grey-felted foliage send up 10cm. stems, each with a large flower-head with white phyllaries. This coll. at a high altitude for the species should be fully hardy in a well-drained, sunny site in the UK.)

3.355.500 : HELICHRYSUM MARGINATUM E Cape, Drakensberg, Naudesnek. 2450m. In short turf & among rocks on steep slope. 17.3.96 (Usually cliff-dweller, recorded up to 2800m., its name was usurped for a long time by the following species. Both are extremely worthwhile in their own rights & are well-illustrated, side by side, on Plate 33 in Hilliard & Burt. A dwarf shrub with lead-green, white-felt edged foliage & large, rather tousled heads with shining, snow-white phyllaries on 5cm. stems.)

3.355.800 : HELICHRYSUM MILFORDIAE KwaZulu-Natal, Drakensberg, N of Sani Pass. 2850m. Fissures in shaded, S & SE-facing basalt cliffs. 20.3.96 (Also from cold cliff-fissures, up to 3100m., this was successfully established & persists in the UK from the 1939 Milford collection. Its mats of grey-white velvet rosettes produce the short-stemmed, silvery heads from crimson-tinted buds, more freely in an open, sunny scree in the UK but, as might be expected, it resents summer droughts.)

3.356.500 : HELICHRYSUM NITENS Zimbabwe, Vumba Mts. c. 1500m. R. & R. Saunders coll. (A 50cm. high shrub with leaves of silver-grey velvet & bright yellow, everlasting heads. Recommended by Rod Saunders as both worthwhile & frost-tolerant but note our comments on such montane species from these Mozambique border-ranges under *Dissotis*.)

3.358.500 : HELICHRYSUM SUTHERLANDII KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Rock-crevices on open E & NE-facing slopes. 21.3.96 : insufficient

15724 : HELICHRYSUM SP. KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Broad ledges on E-facing cliffs. 21.3.96 (A robust member of the complex *H. aureum* group, about 40cm. high with spectacular heads of papery, brilliant yellow, 'everlasting' flowers, each over 3cm. across. Should prove a showy, hardy perennial for a well-drained site.)

3.400.000 : HERMANNIA

15523 : HERMANNIA SP. E Cape, NNW of Graaff-Reinet, Ouberg. 1700m. Shallow pockets of flat sandstone of summit. 13.3.96 (This mainly tropical, southern hemisphere genus in the *Sterculiaceae* has about two-thirds of its species in S Africa. A few have climbed to higher altitudes. This is a tiny herbaceous perennial with intriguing violet-pink flowers. Alpine-house.)

3.410.000 - 3.416.000 : HESPERANTHA

3.410.250 : HESPERANTHA BACHMANNII A winter-growing, W Cape species, successful with our friends in California but will probably need to be grown frost-free in the UK. About 30cm. high with elegant white flowers with darker markings.

3.410.300 : HESPERANTHA BAURII No data. A lovely, rich-pink species from wet grassland, reaching 2450m. (subsp. *baurii*) and 3000m (subsp. *formosa*). Up to 75cm. high and flowering in late summer, this should be growable in a cool, moist site in most UK gardens.

3.410.320 : HESPERANTHA BAURII No data. A lovely, rich-pink species from wet grassland, reaching 3000m. in the Drakensberg. Up to 75cm. high and flowering in late summer, this should be growable in a cool, moist site in almost all UK gardens. This is Scottish-grown seed from Mike & Polly Stone's Inverness-shire garden, so don't say it's not hardy.)

3.415.500 : HESPERANTHA TYSONII E Cape, Drakensberg, Naudesnek. 2400m. Among grasses on steep, moist, SE-facing slope. 17.3.96 (A few late flowers here so we have a determination from Peter Goldblatt. One of the highest alpine in the genus, recorded up to 3300m. About 30cm. high with large, deep-pink flowers, vaguely like a wiry-stemmed *Schizostylis*, though first described by Baker in *Acidanthera*. This is likely to be tolerant of wet British winters & as well as very low temperatures.)

3.415.709 : HESPERANTHA WOODII KwaZulu-Natal. No further data. A beautiful Natal endemic from wet sites, so may be possible outside in the UK. Around 30cm. high with starry, deep-pink flowers & long, slender leaves.

15711 : HESPERANTHA SP. Lesotho, Drakensberg, NE of Sani Pass. 2900m. Shallow, gravel-filled depressions on rock-slabs. 20.3.96 (A tiny plant, a few cm. high, with minute, falcate leaves. Possibly *H. glareosa* or *H. hygrophila*.)

15737 : HESPERANTHA SP. KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Fissures on vertical, SE-facing, basalt cliff. 21.3.96 (About 15cm. high or less. There are several saxatile species adapted to this type of habitat.)

15741 : HESPERANTHA SP. KwaZulu-Natal, S of Sani Pass. 2850m. Steep, grassy slope. 21.3.96 (30cm. high)

15792 : HESPERANTHA SP. KwaZulu-Natal, Drakensberg, SW of Njesuthi valley. 2200m. Steep, moist, grassy slope. 23.3.96 (Flower remains pink on wiry stems 30-50cm. high. Similar habit & habitat to *H. tysonii* but seeds are very different.)

15838 : HESPERANTHA SP. Orange Free State, Drakensberg, Mont-aux-Sources. 2900m. Diorite rock crevices. 25.3.96

(About 3-10cm. high. Flower remains deep pink. Of similar habit & habitat to *H. scopulosa*, seen in flower elsewhere.)

15879 : HESPERANTHA SP. W Cape, Groot Swartberge, S of Prince Albert. 1500m. Gravelly soil on open slopes. 28.3.96 (About 30cm. Remains possibly of pale pink flowers, crimson outside. Unlikely to be as hardy as others in the UK)

3.420.000 : HIRPICIUM ARMERIOIDES E Cape, Drakensberg, NE of Rhodes. 2300m. Fissures & ledges on diorite outcrop. 16.3.96 (A alpine, saxatile cousin of *Gazania*, recorded up to 3200m. & of great potential in the rock-garden - or as an alpine-house plant, if it proves recalcitrant, as it well may do. Appropriately named, woody-based *Armeria*-like cushions of small, rich-green leaves & very large, short-stemmed, many-rayed daisies in pure-white. A plant of considerable quality - illustrated in Hilliard & Burt, p. 217. As with so many *Compositae*, it is incredibly difficult to collect more than a very few good seeds.)

3.422.000 : HOMERIA

3.430.000 : HYPOXIS

3.430.200 : HYPOXIS COSTATA E Cape, Drakensberg, NE of Rhodes. 2000m. Shallow soil on & around, steeply sloping rock-sheets. 16.3.96 (If not *H. costata*, something near it. This is a confusing genus with about 50 species in S Africa. Broad, greyish, downy leaves & big, yellow flowers on 20cm. stems. Should be fairly hardy in UK but may need to be dry in winter.)

3.439.500 : INDIGASTRUM ARGYREA E Cape, NNW of Graaff-Reinet, Ouberg. 1500m. Loose, gravelly soil on sandstone slopes. 13.3.96 (A pretty, little pea of the Karoo mountains. Prostrate with silvery leaves & lots of bright carmine-pink flowers)

3.440.000 : INDIGOFERA

3.440.300 : INDIGOFERA FOLIOSA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (This large, cosmopolitan genus of shrubs & woody-based perennials in the *Leguminosae* (*Fabaceae*) has almost one-third of its members in S Africa, where a few ascend to sufficient altitudes in the summer-rainfall areas to make them worth considering for sunny well-drained sites in the UK & similar climates. A 50cm., orange-flowered perennial of boulder beds & rocky slopes to about 2000m.)

3.440.500 : INDIGOFERA HEDYANTHA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (A 30cm. perennial with sweet-scented, red pea-flowers in summer. A plant of rocky sites up to 2100m. in the Natal Drakensberg.)

3.440.550 : INDIGOFERA HILARIS Widespread in the montane grasslands of E Africa & reaching 1900m. in the Drakensberg.

3.440.800 : INDIGOFERA RUGOSA W Cape, NNW of Beaufort West. 1550m. Gravelly ledges & crevices on rock outcrops. 12.3.96 (A prostrate, mat-forming perennial from the dry Karooranges of potential in the alpine-house, if it proves intolerant of wet UK winters. A brilliant, little plant with profuse heads of bright carmine pea-flowers on tight pads about 15cm. across.)

INDIGOFERA WOODII

3.443.000 : IXIA

3.445.101 : JAMESBRITTENIA BREVIFLORA (*Sutera breviflora*) KwaZulu-Natal, Drakensberg, SE of Sani Pass. 2500m. Open, rocky slopes. (This is a fine member of a fine African genus in the *Scrophulariaceae*, recently split from *Sutera* and distinguished by having the stamens concealed within the corolla tube, whereas in *Sutera* these are exerted. There are over 80 species, mainly S African, with quite a few montane plants. Masses of flat-faced, 2-lipped, brilliant orange-red, yellow-centred flowers flowers on 20cm. clumps. Our 1996 coll. from the E Cape was listed as *Sutera* under 3810200)

3.450.000 : KALANCHOE

3.460.030 : KNIPHOFIA ACRAEA E Cape, Swaershoek SW of Cradock. 1600m. Among grass on steep, rocky slope. 14.3.96 (Only known from a few rocky seeps in the Cradock area, at the edge of the Karoo. Dense inflorescences of short, pale yellow flowers from yellow-green buds on 60cm. stems. A late-flowering plant from which we could harvest only a pinch of mature seed.)

3.460.049 : KNIPHOFIA ALBESCENS

3.460.069 : KNIPHOFIA ANGUSTIFOLIA KwaZulu-Natal, Drakensberg, Cathedral Peak. (Formerly *K. rufa* but not likely to be the plant you might find in gardens as "*K. rufa*", a name which has been much misapplied. The genuine plant is illustrated in Phillips & Rix, Vol. 2, p.162. A species of wet grassland and streamsides, climbing to over 2000m. in the Drakensberg. Most distinct fine, bluish, grassy foliage and 60cm. high, rather open, spikes of pendulous flowers in creamy white, yellow or coral-red.)

3.460.109 : KNIPHOFIA BAURII Eastern Cape. No further data. (Distributed from the north of the E Cape up through KwaZulu-Natal on moist, grassy slopes & streamsides between 600m. & 1200m., this is a compact plant, about 50cm. high. Clumps of soft, rather glaucous leaves & dense, globose heads of dull red buds opening to pendant, greenish yellow flowers.)

3.460.209 : KNIPHOFIA BRACHYSTACHYA Lesotho, Drakensberg. No further data. (A strange, very dwarf plant of moist, high mountain grassland in the Lesotho, Cape & Natal Drakensberg, up to about 2400m. Only about 30cm. high with erect, stiff, narrow leaves & a dense, cylindrical inflorescence of stubby, dull yellow flowers opening from brownish buds.)

3.460.309 : KNIPHOFIA BREVIFLORA KwaZulu-Natal. No further data. (Another little plant, about 50cm. high, in a group of allied whitish-flowered species, including *K. buchananii* & *K. albescens*. Stubby spikes of cream flowers from yellow-green or red-tinged, buds. From damp mountain grasslands of the N Drakensberg & Harrismith area, up to 2000m.)

3.460.359 : KNIPHOFIA BRUCEAE

- 3.460.409 : KNIPHOFIA BUCHANANII** KwaZulu-Natal. No further data. (Closely allied to *K. breviflora* & generally similar but with shorter flowers & a more eastern distribution in the KwaZulu-Natal midlands up to 1200m.)
- 3.460.500 : KNIPHOFIA CAULESCENS** KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Ledges on E-facing cliffs. 21.3.96 (A splendid species of a proven indestructible nature & garden worth in the UK. It grows at up to 3000m. in the high mountains of the E Cape, the Stormberg & Winterberg, up through the Drakensberg of Lesotho & KwaZulu Natal, usually in rocky, seepage areas or on wet cliffs. Clumps of fine blue-grey foliage send up stout stems with dense inflorescences of pale greenish yellow to cream flowers from coral to flame buds. More variable in colour in nature than we have seen it in gardens but its caulescent habit tends to be more developed in cultivation, where it forms expanding *Yucca*-like clumps.).
- 3.460.501 : KNIPHOFIA CAULESCENS** E Cape, Naudesnek. 16..3.96 (Seed dubious)
- 3.461.502 : KNIPHOFIA CAULESCENS** OFS, Platberg. Among rocks by summit-lake. 23.4.96 (Seed seems immature)
- 3.460.503 : KNIPHOFIA CAULESCENS** E Cape, NW of Rhodes. (A splendid species of a proven indestructible nature & garden worth in the UK. It grows at up to 3000m. in the high mountains of the E Cape, the Stormberg & Winterberg, up through the Drakensberg of Lesotho & KwaZulu Natal, usually in rocky, seepage areas or on wet cliffs. Clumps of fine blue-grey foliage send up stout stems with dense inflorescences of pale greenish yellow to cream flowers from coral to flame buds. More variable in colour in nature than we have seen it in gardens but its caulescent habit tends to be more developed in cultivation, where it forms expanding *Yucca*-like clumps.).
- 3.461.509 : KNIPHOFIA CAULESCENS** Eastern Cape, NW of Maclear. c. 1500m. (A splendid species of a proven indestructible nature & garden worth in the UK. It grows at up to 3000m. in the high mountains of the E Cape, the Stormberg & Winterberg, up through the Drakensberg of Lesotho & KwaZulu Natal, usually in rocky, seepage areas or on wet cliffs. Clumps of fine blue-grey foliage send up stout stems with dense inflorescences of pale greenish yellow to cream flowers from coral to flame buds. More variable in colour in nature than we have seen it in gardens but its caulescent habit tends to be more developed in cultivation, where it forms expanding *Yucca*-like clumps.).
- 3.461.510 : KNIPHOFIA CAULESCENS** No data. Our own seed, just harvested, of this splendid species of great garden worth in the UK. Our original stock was raised over 30 years ago from a coll. made in Lesotho by Louise Koffler. It grows up to 3000m. in the high mountains of the E Cape up through the Drakensberg of Lesotho & KwaZulu Natal, usually in rocky, seepage areas or on wet cliffs. Fine blue-grey foliage & dense inflorescences of pale greenish yellow to cream flowers from coral to flame buds. Its caulescent habit tends to be more developed in cultivation, where it forms expanding *Yucca*-like clumps.).
- 3.460.600 : KNIPHOFIA CITRINA
- 3.460.659 : KNIPHOFIA CODDIANA**
- 3.460.700 : KNIPHOFIA CORALLIGEMMA
- 3.460.800 : KNIPHOFIA CRASSIFOLIA
- 3.460.909 : KNIPHOFIA DREPANOPHYLLA**
- 3.461.000 : KNIPHOFIA ELEGANS
- 3.461.109 : KNIPHOFIA ENSIFOLIA** (subsp. *ensifolia*) Eastern Cape. No further data. (A tall, robust, striking plant with long, glaucous leaves and stout stems up to 1.8m. high carrying dense heads of white to greenish-white flowers opening from pink-tinted buds. Distributed, usually in rich clay soils in wet areas, W of the Drakensberg from the E Cape into Mpumalanga.)
- 3.461.200 : KNIPHOFIA ENSIFOLIA subsp. AUTUMNALIS
- 3.461.300 : KNIPHOFIA EVANSII
- 3.461.409 : KNIPHOFIA FIBROSA** KwaZulu-Natal, Drakensberg. No further data. (Tentatively identified as this somewhat obscure species from the moist grasslands of the Drakensberg up to around 2000m. A grassy leaved species with stems of about 50cm., related to & resembling *K. breviflora* but with longer, pendant, pale yellow flowers.)
- 3.461.500 : KNIPHOFIA FLAMMULA
- 3.461.609 : KNIPHOFIA FLUVIATILIS**
- 3.461.700 : KNIPHOFIA GALPINII
- 3.461.800 : KNIPHOFIA GRACILIS
- 3.461.900 : KNIPHOFIA HIRSUTA** E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Among grasses on open, moist slope. (Virtually endemic to Lesotho but we're right on the border here. A wet-growing alpine, immediately identifiable by its solitary crowns of broad-based, dull-green foliage, distinctly hairy along the nerves on both sides. Dense heads of pendulous buds in shades of dull orange, coral or salmon open to greenish yellow flowers, a rather lurid combination. About 50cm. high.)
- 3.462.010 : KNIPHOFIA ICHOPENSIS** (var. *ichopensis*) KwaZulu-Natal, Carters Hill E of Mkhomazi. 1600m Among grasses & scrub on steep, moist slope. 22.3.96 (A grassland plant of central KwaZulu-Natal, running up to about 2000m. in the Drakensberg. Long, lax heads of widely spaced, arcuate, cylindrical flowers, variable in colour from cream & yellowish green to salmon, on stems of 1m. or less. In a group including *K. laxiflora* & (the true) *K. rufa*, unfamiliar in gardens. This can be distinguished from *K. laxiflora*, even in seed, by its lanceolate, acuminate bracts. Maybe safest from winter-wetness in a well-drained site.)

- 3.462.011 : KNIPHOFIA ICHOPENSIS** KwaZulu-Natal. 1500m. R.& R. Saunders coll. (Possibly green-flowered form.)
- 3.462.012 : KNIPHOFIA ICHOPENSIS** KwaZulu-Natal, Drakensberg, SW of Njesuthi valley. 2000m. Steep, grassy slope below sandstone cliffs. 23.3.96 (We are not altogether happy about this name. It may be the same as the possible *K. rufa* coll.)
- 3.462.013 : KNIPHOFIA ICHOPENSIS** KwaZulu-Natal. No further data. (A grassland plant of central KwaZulu-Natal, running up to about 2000m. in the Drakensberg. Long, lax heads of widely spaced, arcuate, cylindrical flowers, variable in colour from cream & yellowish green to salmon-orange, on stems of 1m. or less. In a group including *K. laxiflora*, from which it can be distinguished, even in seed, by its lanceolate, acuminate bracts. Maybe safest from winter-wetness in a well-drained site.)
- 3.462.014 : KNIPHOFIA ICHOPENSIS from YELLOW FORM** No data. A grassland plant of central KwaZulu-Natal reaching about 2000m. in the Drakensberg. Long, lax heads of widely spaced, arcuate, cylindrical flowers, varying from cream to salmon, on stems of 1m. or less. In a group including *K. laxiflora* & (the true) *K. rufa*, unfamiliar in gardens. From an outstanding form grown at Denver & given to us by Panayoti Kelaidis as having "superb, *Aloe*-like, yellow flowers."
- 3.462.050 : KNIPHOFIA ICHOPENSIS var. ACIFORMIS
- 3.462.100 : KNIPHOFIA LATIFOLIA
- 3.462.210 : KNIPHOFIA LAXIFLORA** KwaZulu-Natal, Soutar Hill, WSW of Nottingham Road. 1700m. Among grasses on open, rocky slope. 22.3.96 (Allied to *K. ichopensis*, *K. rufa*, etc., a variable species, quite widespread in the summer rainfall area from near Mt. Currie in the N of E Cape, through KwaZulu-Natal, just into Transvaal, from near sea-level to over 1500m. Higher colls. should give no trouble in a well-drained, sunny site in the UK. Erect buds become deflexed as the long, tubular, widely spaced flowers open in shades of pale-yellow, coral, salmon or orange. We have no idea what colour these colls. made out of flower will produce. This & the next would appear to be likely to correspond to what Codd designates as Form B of this species : "graceful inflorescences in various shades of colour make this one of the most attractive members of the genus.")
- 3.462.211 : KNIPHOFIA LAXIFLORA** KwaZulu-Natal, N of Himeville to Mkhomazi. 1200m. Among grasses on open, rocky slope. 22.3.96 (Narrow, greyish leaves with narrow spikes on 1m. stems. A greenish yellow form, photographed in this area, is illustrated in Rix & Phillips 'Perennials' Vol.2, p. 163, but colour can vary in adjacent plants within a single colony.)
- 3.462.212 : KNIPHOFIA LAXIFLORA** Cultivated South African seed. No data. (Allied to *K. ichopensis*, (the true) *K. rufa*, etc., a variable species, quite widespread in the summer rainfall area from near Mt. Currie in the N of E Cape, through KwaZulu-Natal, just into Transvaal, from near sea-level to over 1500m. Worth trying in a well-drained, sunny site in the UK. Erect buds become deflexed as the long, tubular, widely spaced flowers open in shades of pale-yellow, coral, salmon or orange.)
- 3.462.300 : KNIPHOFIA LINEARIFOLIA** E Cape, Witteberge, SE of Lady Grey. 1500m. Among long grasses in marshy area. 18.3.96 (A member of the *K. uvaria* group with a northern & eastern distribution. A robust plant with fairly broad & erect, green foliage. Large, dense, very showy heads of yellow flowers opening from orange-red buds, on 1.5m stems.)
- 3.462.301 : KNIPHOFIA LINEARIFOLIA KwaZulu-Natal, Himeville to Loteni. Wet grassland. 22.3.96 (Long, smooth, narrow, light-green leaves. Orange-scarlet buds open to yellow flowers. 1.5m. Seed possibly all immature.)
- 3.462.400 : KNIPHOFIA LITTORALIS
- 3.462.509 : KNIPHOFIA MULTIFLORA** Mpumalanga, near Wakkerstroom. Ex a R.& R. Saunders coll. (A strange, tall, northern species with short whitish flowers from greenish buds, carried in long, narrow spires, up to 80cm. in length on stems of 2m. or more. From wet sites, up to about 1800m. in eastern Free State, Mpumalanga & Swaziland.)
- 3.462.600 : KNIPHOFIA NORTHIAE** E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Open sites along margins of streams. 17.3.96 (Certainly the most arresting foliage-plant in the genus, distinct from all others in its very broad, grey-green, leathery, arching, shallowly channelled leaves without a distinct keel, forming a large, evergreen rosette. Rightly described by G.S. Thomas as "very rare" in cultivation, the name has been misapplied in UK gardens to *K. caulescens*, the other caulescent species, to which this is somewhat similar in flower. Stout stems, anything from 20cm to 1.5m. high, with very large dense inflorescences, likely to be of creamy-white flowers from pale red buds in this E Cape race. Distributed here & there in the Cape & Natal Drakensberg at up to 3000m., always in wet peaty places along fast-flowing mountain streams or down seepage lines.)
- 3.462.605 : KNIPHOFIA NORTHIAE** E Cape, Drakensberg, Bastervoetpad. 2000m. Wet, peaty slope. Ex CD & R 164.
- 3.462.700 : KNIPHOFIA PARVIFLORA** (*K. modesta* - not the hybrid *K. "modesta"* of gardens) E Cape, Drakensberg, Naudesnek. 2400m. Among grasses on steep, stony, SE-facing slope. 17.3.96 (An odd plant, unique in the genus in its one-sided racemes of short, tubular, green-cream flowers from greenish or brownish buds. Not much seed but not very exciting.)
- 3.462.709 : KNIPHOFIA PARVIFLORA** (syn. *K. modesta* - not the hybrid *K. "modesta"* of gardens) E Cape. No further data. (Unique in the genus in its one-sided racemes of sweet-scented, short, tubular, green-cream flowers from greenish or brownish buds on stems of about 50cm. A demure species of wet sites in the E Cape, N into KwaZulu-Natal, up to about 2400m.)
- 3.462.800 : KNIPHOFIA PAUCIFLORA
- 3.462.900 : KNIPHOFIA PORPHYRANTHA** Orange Free State, Drakensberg, Mont-aux-Sources. 2800m. Steep, moist, grassy, SW-facing slope. 25.3.96 (A superb, little, mid-summer flowering, high altitude species which must be hardy anywhere in the UK. Short, yellow-green leaves & 30-60cm. stems carrying stubby heads of pendulous, lemon-yellow flowers from buds often tipped with orange. Panayoti saw this in flower here in January, 1994, & enthuses over it. Illustrated in Rix & Phillips page 162.)
- 3.463.000 : KNIPHOFIA PRAECOX** (subsp. *praecox*) W. Cape, near Nature's Valley. Near sea-level. R.& R. Saunders coll.

(Almost certainly one of the greatest influences on the European garden hybrids. The name was long confused with *K. uvaria* & *K. alooides* & the plant with *K. linearifolia*. The true species is limited to a few wet sites & stream banks in the extreme SE of Western Cape. Robust with dark green leaves & dense heads of pale yellow flowers from orange or scarlet buds on 1-2m. stems.) (10+)

3.463.100 : KNIPHOFIA PRAECOX subsp. BRUCEAE

3.463.200 : KNIPHOFIA RIGIDIFOLIA

3.463.300 : KNIPHOFIA RITUALIS Lesotho, Drakensberg, Mont-aux-Sources. 3000m. Among rocks at base of cliffs. 25.3.96 (Possibly the highest alpine in the genus. From the Lesotho border-ranges, usually in sandstone crevices. Closest to the western *K. sarmentosa*. At 40-80cm., taller than *K. porphyrantha* with longer, glaucous leaves & ovoid heads of pendulous yellow-green flowers opening from coral to orange buds. Illustrated in this area in Rix & Phillips, page 162. Certainly as hardy as any S African but used to being dry & frozen all winter so may be vulnerable to wetness then & need a very well-drained site.)

3.463.400 : KNIPHOFIA ROOPERI E Cape. R. & R. Saunders coll. (Big, spectacular & flowering late in autumn. A classic Cornish plant but excellent in our colder climate & only minimally damaged, unprotected in our severe 1995-96 winter. Cultivated since the 1850's, when Capt. Rooper of the Rifle Brigade sent it to his dad, a gardening vicar in Brighton. It never sets seed here & there may be only one clone around. From marshes towards the coast in the E Cape & S Natal. Great, dense, globose heads of orange flowers from flame-red buds on stout, 1.5m. stems from clumps of arching, deeply keeled, dull-green leaves.)

3.463.500 : KNIPHOFIA RUFA

3.463.520 : KNIPHOFIA aff. RUFA KwaZulu-Natal, Drakensberg, SW of Njesuthi valley. 2200m. Steep, wet grassy slope. 23.3.96 (Having seen a photograph of this plant, taken during a visit here some months earlier by the Hales & O'Byrnes of Oregon, USA, Panayoti was determined to try to collect some seed. After quite a long & rushed hike, the plant was located but there was only a small amount of seed available. We hope it is indeed what we sought. If so, it will be a most striking thing with large, widely spaced white flowers opening from coral-red buds. The habit of the genuine *K. rufa* can be seen in the yellow form illustrated in Phillips & Rix, Vol.2, p. 162 & on the same page you can see a form of *K. thodei* showing this colour combination.) (Nothing to do with *K. rufa*. A big, late-flowering plant (October) with yellow-green flowers. Check against *K. baurii* and other N Drakensberg species.)

3.463.600 : KNIPHOFIA SARMENTOSA W Cape, SE of Sutherland, Komsberg. 1800-2000m. (A most distinct species which grows along mountain streams in the arid ranges of the W Karoo. Introduced to the UK in 1789 but not recorded again until it was found in the Roggeveldberge 130 years later. Jane Taylor considers it "worth growing for its good glaucous foliage & easy temperament alone...a thoroughly good garden plant." She writes that "a fairly lax spike of spreading, greenish cream to soft coral-pink flowers" opens "from a dense cone of green buds." Codd describes the flowers as "pendulous, salmon to creamy-buff" & the buds as "coral-scarlet with a greyish bloom." The flower stem of about 60cm. has the longest bracts in the genus.)

3.463.700 : KNIPHOFIA SPLENDIDA Zimbabwe, Nyanga Mountains. 1600m. R. & R. Saunders coll. (A very tall, robust, autumn-flowering species from the summer rainfall area in the ETransvaal, extending N into the high mountains of E Zimbabwe, along the Mozambique border, & Malawi. It should be fairly hardy in the UK in an open, well-drained site. Clumps of long, stiff, dull-green to glaucous leaves & stems, up to 2.5m. high, with extremely dense heads of pendulous, lemon-yellow flowers, opening from yellow-green buds, usually tipped with scarlet. A rare opportunity to acquire material from a seldom-collected area.)

3.463.800 : KNIPHOFIA STRICTA E Cape, Drakensberg, SW of Rhodes. 1700m. Among rocks. (A species from the little-collected ranges E of the Karoo, the Sneeuwberg, Stormberg & Witteberge, just reaching the Cape Drakensberg & SW Lesotho, at up to 2500m. Like no other in its narrow, rigid blue-grey foliage, U-shaped in cross-section. About 1m. or less high with dense pokers of pale yellow tubular flowers, opening from coral-red buds. Often growing among rocks, this needs a much drier site than most in UK gardens but these can be bleak mountains, so do not doubt its hardiness.)

3.463.900 : KNIPHOFIA TABULARIS

3.464.000 : KNIPHOFIA THODEI

3.464.060 : KNIPHOFIA THOMSONII var. SNOWDENII No data. South African cultivated seed of this elegant species from the highest mountains of Uganda & Kenya, up to 3900m. in wet grassland. Hardy in a sheltered site in most of the UK but we have never known it set seed. Distinct in its running, stoloniferous habit and 60cm. high stems of large, pendulous, curved, widely-spaced flowers in soft tangerine-orange (in the form we know) produced over a long period in late summer.

3.464.100 : KNIPHOFIA TRIANGULARIS (subsp. *triangularis*)

3.464.110 : KNIPHOFIA TRIANGULARIS (subsp. *triangularis*) No data. A widely distributed but very local, dwarf species, recorded northward from the E Cape to the eastern Free State, growing in moist, montane grassland in peaty soils up to 2000m. altitude. Clumps of soft, narrow, grassy leaves and 60cm. tall stems carrying dense heads of concolorous coral red to soft orange coloured flowers in late summer, too late to set good seed in the UK : cultivated Colorado-grown seeds

3.464.200 : KNIPHOFIA TRIANGULARIS subsp. OBTUSILOBA

3.464.300 : KNIPHOFIA TYPHOIDES

3.464.310 : KNIPHOFIA TYPHOIDES No data. New Zealand grown seed of this bizarre species from moist grassland on clay soils in N KwaZulu-Natal & Mpumalanga. Clumps of glaucous, distichous leaves, sometimes spirally twisted, produce tall stems, 1m. or more high, carrying dense, cylindrical pokers of many, short, purple-brown, scented flowers

3.464.409 : KNIPHOFIA TYSONII (subsp. *tysonii*) Eastern Cape, Amatole Mts., near Stutterheim. (Distributed from here up through KwaZulu-Natal at altitudes up to 1200m., this is a spectacular, robust species up to 2m. tall. Big clumps of distinctively folded, yellowish-green leaves and dense inflorescences of greenish-yellow flowers from spreading, red buds.)

3.464.500 : KNIPHOFIA TYSONII subsp. LEBOMBOENSIS

3.464.600 : KNIPHOFIA UMBRINA

3.464.700 : KNIPHOFIA UVARIA

15692 : KNIPHOFIA SP. KwaZulu-Natal, W of Kokstad, SW of Mount Currie. 1500m. Among grasses on open slopes. 19.3.96 (Possibly the variable *K. laxiflora* but there are other species in the Mount Currie area. About 1m. high.)

15636 : KNIPHOFIA SP. E Cape, Drakensberg, Naudesnek. 2400m. Steep, stony, SE-facing slope. 17.3.96 (Should have been named as it was one of the few we saw in flower but no herbarium specimen was pressed. Field-note says "acid yellow-green & harsh orange, 60cm.". *K. parviflora* & *K. caulescens* were also growing here. *K. hirsuta* is in the area & it may be this.)

3.485.000 : LACHENALIA

3.495.000 : LAPEIROUSIA

3.500.000 : LEDEBOURIA COOPERI KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (Several species in this confused & confusing, mainly S African genus of bulbs, most of which were described under *Scilla*, climb to high elevations in the mountains of the summer rainfall region. This occurs in the Natal Drakensberg on grassy hillsides up to 2100m. & should be temperature-hardy in the UK. Purple-spotted leaves flat on the ground & racemes of small, nodding, purplish flowers)

3.502.000 : LEDEBOURIA OVATIFOLIA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (Quite widespread in the mountains of the summer rainfall area, S from the Transvaal into the Natal Drakensberg at up to 1980m. on sunny, grassy slopes. This has a single, oval leaf, purple below, & 10cm. high raceme of purple-pink and white flowers in late summer.)

3.510.000 : LEONOTIS

3.510.000 : LEONOTIS DUBIA (*L. ocymifolia* var. *ocymifolia*) E Cape, NNW of Graaff-Reinet, Ouberg. 1500m. Loose gravelly soil on sandstone slope. 13.3.96 (This genus in the *Labiatae* appears to involve numerous races which have been 'lumped' or 'split' by different botanists. They are all on a general, somewhat *Phlomis*-like pattern with woody-based, stoloniferous stems & wrinkled leaves. Erect flower-stems, of about 1m. in this case, are whorled with elongated, velvet-covered, orange flowers.)

3.510.100 : LEONOTIS DYSOPHYLLA (*L. ocymifolia* var. *raineriana*) E Transvaal, Johannesburg area. R. & R. Saunders coll. (A 1.5m., grassland plant, illustrated in Rix & Phillips, Vol. 2, p.212, this & the preceding will be likely to withstand much lower temperatures than the better-known *L. leonurus* but all will need hot, dry, well-drained positions in the UK.)

3.510.200 : LEONOTIS LEONURUS W Cape, Lion's Head near Cape Town. R. & R. Saunders coll. (The least hardy but maybe the most spectacular, this can still be a great success in the UK against a S-facing wall - pictured thriving at Sissinghurst in Rix & Phillips, Vol. 2. About 2m. high with narrower leaves than the above & whorls of scarlet-orange velvet flowers.)

3.510.210 : LEONOTIS LEONURUS No data. A grassland plant distributed from the E Cape to Mpumalanga & the most spectacular species in this small genus in *Labiatae*. Often a success in the UK on a S-facing wall. Pictured at Sissinghurst in Rix & Phillips, Vol. 2. About 2m. high with narrow leaves & whorls of scarlet-orange velvet flowers.

3.512.500 : LESSERTIA PERENNANS KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (This exclusively African genus in the *Leguminosae* includes one or two summer-growers from higher altitudes. This is a beautiful species from grassy gulleys & boulder beds up to 2400m. in the Drakensberg. About 60cm. high with narrow leaves & a multitude of cerise flowers. Essentially shrubby, this would doubtless break satisfactorily from the base annually, if frosted in the UK.)

3.516.010 : LITTONIA MODESTA No data. A beautiful summer-growing, scandent member of the *Colchicaceae*, climbing by leaf-tendrils to almost 1m. and hanging out lots of nodding orange-yellow, lantern-shaped flowers. A plant of forest-margins up to 1450m., more widely distributed in the summer-rainfall area than its close relative *Sandersonia*. Both are increasingly rare due to habitat loss and collection for traditional medicine. Frost-hardy if stored dryish in winter.

3.520.000 : LOBELIA

3.520.500 : LOBELIA PRESLII E Cape, Witteberg, E of Lady Grey. 2200m. Among rocks at base of diorite cliffs. (Perennial, basal clumps or mats of little, toothed leaves send up many erect, wiry stems with 2-lipped flowers in deep gentian-blue with white, yellow-ridged throats. Distributed locally up to 2400m. in the E Cape & Natal Drakensberg.)

3.525.000 : LOTONONIS

15551 : LOTONONIS SP. E Cape, SW of Cradock, Swaershoek. 1500m. Fissures & gravelly ledges on rock outcrops. 14.3.96 (A delightful dwarf shrub, 20-30cm. high, somewhat *Helichrysum*-like in appearance, with narrow, silver leaves, but with violet pea-flowers. This genus of the *Leguminosae* is mainly S African & none too easy to name. Although we have herbarium sheets of both these collections at the Compton Herbarium at Kirstenbosch, identities were only confirmed to generic level.)

15581 : LOTONONIS SP. E Cape, Drakensberg, NE of Rhodes. 1900m. Gravelly banks & among rocks. 16.3.96. (An attractive, erect, silver-leaved shrub, about 30cm. high, with lots of lilac-blue pea-flowers. From a winter-cold area)

3.540.000 : MASSONIA

3.540.500 : MASSONIA DEPRESSA N Cape, Namaqualand, Kamiesberg. 1500m. (A winter-grower, like most in this small genus of liliaceous bulbs, with about 8 species recognized currently (though almost 40 have been described) mostly in the SW Cape. This is a sweet little plant with dense heads of white flowers sitting between the 2 flat, fleshy leaves. No trouble in a pan under glass, this high altitude coll. should be used to plenty frost but it will do no harm to keep it frost-free.)

3.540.620 : MASSONIA aff. ECHINATA Lesotho, Drakensberg, NE of Sani Pass. 2900m. Gravel-filled depressions on rock-slabs. (The only Drakensberg species in this small liliaceous genus (mainly winter-growers from the W & N Cape). Listed in Hilliard & Burt as an unidentified species, "perhaps a small form of *M. echinata*", growing in "seasonally wet silt patches over rock sheets...2800-3000m., summit plateau only." It appears in Elsa Pooley's recent field-guide simply as *M. echinata*. A tiny summer rainfall alpine bulb with sessile heads of white, starry flowers between 2 flat, ground-hugging, oval leaves. Certainly frost-hardy in the UK in a trough or alpine-house pan - exposed & kept wet outside in summer, dry & cold in winter. Our 1996 coll. was listed as *Massonia* sp. under our field-number 15710.)

3.541.300 : MASSONIA PUSTULATA N Cape, Kamiesberg. 1500m. R. & R. Saunders coll. (A larger version but still with subsessile, white heads. The rounded, strongly-veined leaves are rough & covered with pustules. Should be just as hardy.)

3.541.310 : MASSONIA PUSTULATA No data. (A winter-grower, like all the remaining species in this genus. A slightly larger version of the preceding but still with subsessile, white heads. The rounded, strongly-veined leaves are rough & covered with pustules. From comparatively high altitudes in the N Cape & Namaqualand ranges, this should be just as hardy.)

15710 : MASSONIA SP. Lesotho, Drakensberg, NE of Sani Pass. 2900m. Gravel-filled depressions on rock-slabs. 20.3.96 (Presumably the only one in this small genus of liliaceous bulbs (otherwise winter-growers from the W & N Cape) listed in Hilliard & Burt : as an unidentified species, "perhaps a small form of *M. echinata*", growing in "seasonally wet silt patches over rock sheets...2800-3000m., summit plateau only." A tiny summer rainfall plant with sessile heads (we assume of the usual white shaving-brush type) between 2 flat, ground-hugging, smooth, oval leaves. Certainly hardy in the UK & to be tried in a trough or alpine-house pan - fully exposed & kept wet outside in summer, dry & cold in winter, when it should withstand any British frosts.)

3.546.000 : MELASPHAERULA RAMOSA (A low altitude, coastal, winter-grower from the SW Cape.)

3.545.000 : MELIANTHUS

3.545.200 : MELIANTHUS MAJOR W Cape, near Porterville. 100m. R. & R. Saunders coll. (One of the most spectacular foliage-plants grown in British gardens collected in an inland locality at the foot of the Winterhoekberge. In mild areas of the UK this is a 2-3m. high, spreading shrub, as it is in nature. In colder gardens, such as ours, it will survive being cut to the ground by frost annually, making over 1m. of growth each summer.. Huge, deeply cut & serrated, grey leaves. Deep crimson flowers.)

3.545.201 : MELIANTHUS MAJOR W Cape, near Hermanus. 100m. R. & R. Saunders coll. (One of the most spectacular foliage-plants it is possible to grow in British gardens. In mild areas of the UK this is a 2-3m. high, spreading shrub, as it is in nature. In colder gardens, such as ours, it will generally survive being cut to the ground by frost annually, making over 1m. of growth each summer.. Huge, deeply cut & serrated, grey leaves. Deep crimson flowers.)

3.545.709 : MELIANTHUS VILLOSUS KwaZulu-Natal, Drakensberg, Cathedral Peak.. (A shrubby species, up to 2m. high, from streamsides and forest margins up to 2000m. in Natal & Lesotho. Arresting, grey, hairy, pinnate leaves overtopped by stems of purplish-black flowers followed by inflated, pale-green fruits. Unlike the preceding, a plant from the summer rainfall area which should, theoretically be harder in the UK : if cut to the ground in the winter, it will usually regenerate from the base.)

3.550.000 TO 3.560.300 : MORAEA

3.550.000 : MORAEA ALBICUSPA (Summer grower. S Drakensberg through Sani Pass & Bushmans Nek to 2525m.)

3.550.300 : MORAEA ALTICOLA (Subgen. *Grandiflora*) Lesotho, NW of Sani Pass. 2900m. Moist, grassy slope. (Characteristic of the alpine, summit plateau of the Drakensberg, between 2200m. & 3000m., & by far the largest, most robust species. Unique, netted cataphylls enclose the leaf & stem bases. Imposing, 1m. high clumps of broad, leathery leaves & stout erect stems of large, pale-yellow flowers with deeper yellow nectar-guides. Singularly iris-like, this is hardy & easily grown in UK gardens.)

3.550.301 : MORAEA ALTICOLA (Subgen. *Grandiflora*) E Cape, Drakensberg, NE of Rhodes. 2200m. Moist, grassy slope. (Characteristic of the alpine, summit plateau of the Drakensberg, between 2200m. & 3000m., & by far the largest & most robust species. Unique, netted cataphylls enclose the leaf & stem bases. Imposing, 1m. high clumps of broad, leathery leaves & stout erect stems of large, pale-yellow flowers with deeper yellow nectar-guides. Singularly iris-like, this is hardy & easily grown in UK gardens.)

3.550.305 : MORAEA ALTICOLA (Subgen. *Grandiflora*) E Cape, Drakensberg, Naudesnek. Ex CDR 181 (Characteristic of the alpine, summit plateau of the Drakensberg, between 2200m. & 3000m., & by far the largest & most robust species. Unique, netted cataphylls enclose the leaf & stem bases. Imposing, 1m. high clumps of broad, leathery leaves & stout erect stems of large, pale-yellow flowers with deeper yellow nectar-guides. Singularly iris-like, this is hardy & easily grown in UK gardens.)

3.550.700 : MORAEA ARDESIACA R. & R. Saunders coll. (In Subgenus *Grandiflora*, like the preceding, & just as imposing. Up to 70cm. high with big, slate-blue to purple irises, with narrow, yellow nectar-guides, in mid summer. A wet-grower from streamsides & seeps at up to 2350m. in the N Natal Drakensberg, this should prove just as accommodating & hardy in UK gardens as *M. alticola*.)

3.550.800 : MORAEA ARISTATA

3.551.500 : MORAEA BREVISTYLA KwaZulu-Natal, Drakensberg, SW of Njesuthi valley. 2200m. Steep, open, moist, slope,

among grass tussocks. 23.3.96 (Tentatively identified as this floriferous species : it may be *M. albicuspa* or *M. trifida*. These grassland members of Section *Vieusseuxia* cannot be satisfactorily identified out of flower & both seeds & seed capsules of the high altitude ones are often unknown. All 3 species have white to cream flowers, are 30-50cm. high & should be hardy in the UK.)

3.552.600 : MORAEA DRACOMONTANA Lesotho, Drakensberg, NW of Sani Pass. 2900m. Among grass tussocks along stream. (UK cultivated seed from our 1996 coll. of this little-known species. This could be another member of Sect. *Vieusseuxia* but habitat is right & few others reach this altitude. Fine stems about 30cm. high, with blue-purple flowers with yellow guides.)

3.553.009 : MORAEA FALCIFOLIA Northern Cape, Nieuwoudtville. Unlike any other and very dwarf, no more than 5cm. high, with a sessile rosette of falcate leaves, in the centre of which the cream-white flowers with intricate purple and yellow markings appear. More widespread than many, distributed sporadically across the Karoo, from Namaqualand into the W Transvaal, usually in steppe vegetation on stony clay flats.

3.553.610 : MORAEA GAWLERI No data. One of the most widely distributed, SW Cape winter-rainfall species, usually occurring on clay flats and slopes. About 30 cm. tall with branching stems carrying a succession of darkly-veined, yellow to cream flowers. Easily grown under glass in the UK and best kept frost-free.

3.554.310 : MORAEA HUTTONII (Subgen. *Grandiflora*) No data. A clump-forming relative of *M. alticola* and *M. robusta* with a wide distribution from the Amathole Mts. of the E Cape northward to SE Mpumalanga, usually growing in moist sites along upland streams and rivers. Up to 1m. in height with a succession of large, sweet-scented, bright yellow, iris-like flowers

3.554.400 : MORAEA INCLINATA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (A tall, slender, summer-growing plant, occurring among grasses & sedges on wet slopes up to 2500m. in KwaZulu-Natal & the adjacent Drakensberg. Branching stems, 50cm. or more high, with violet-blue flowers, blotched with yellow & white on the falls.)

3.554.409 : MORAEA INCLINATA KwaZulu-Natal, Drakensberg, Loteni. 1500m. (A slender, summer-growing plant, occurring among grasses & sedges on wet slopes up to 2500m. in the Drakensberg. Branching stems, 50cm. or more high, with violet-blue flowers, blotched with yellow & white on the falls. These montane, wet-growers seem hardy & growable in the UK.)

3.555.000 : MORAEA LINDERI Endemic to the Piketberg in the W Cape.

3.555.300 : #MORAEA LOUBSERI Western Cape, Langebaan, Olifants Kop. (One of the most striking and localized Cape species. First recorded only in 1973 on the granite outcrop of Olifants Kop, just before quarrying started. It has been found nowhere else, its only habitat is now partially destroyed &, though the remainder is temporarily reprieved, the survival of this species is likely to lie with gardeners. Appropriately, it was named by Peter Goldblatt for the amateur botanist and gardener who found it, Johan Loubser. Goldblatt writes in his monograph of the genus : "It now seems certain that although very rare and severely threatened in the wild, it may, through its beauty and relative ease of cultivation, become an established garden favourite." It is unlikely to thrive outside in UK gardens but we have grown it without artificial heat alongside our Eurasian bulbs for several years. It has been untouched by frosts, extraordinary for a fairly low altitude Cape species. Although individual flowers last but a few days, a succession lasts for weeks. Narrow leaves & wiry stems, about 20cm. high, with complex, flat 'iris' flowers in penetrating blue-violet with dense black beards on the outer tepals. Hand-pollinated, UK-grown seed.)

3.555.809 : MORAEA MACRONYX Northern Cape, Roggeveldberge. An amazing plant from high altitudes in a few of the interior ranges along the south-western edge of the Karoo. In appearance, as near as you can get to a Juno *Iris* in S Africa. Three, channelled, falcate leaves, often with undulate margins, hug the membranous cataphylls at the base of the inflorescence, where the fragrant, pale-yellow or white flowers, with deep yellow nectar-guides, rise to about 15cm., on long-tubes from the short, subterranean stem. Should be possible without heat, certainly only with bare frost-protection, under glass in the UK.

3.556.400 : MORAEA NAMAQUAMONTANA Winter-grower endemic to above 1000m. in the Stinkfontein Mountains, the highest range in the Richterveld, in N Namaqualand.

3.556.800 : MORAEA NEOPAVONIA

3.556.900 : MORAEA NUBIGENA A high altitude endemic of the Fonteinjiesberg area, part of the Brandwacht Range N of Worcester, growing at 1400m. on wet, moss-covered rocks. By far the smallest species in the genus, only 3-5cm. high with deep blue flowers.

3.557.010 : MORAEA PAPILIONACEA No data. A sweet little plant, widespread in the western mountains of the Western Cape, north to the Cedarberg. Only 10-15cm. high with branching stems, carrying a long succession of sweet-scented flowers, which can be either salmon-pink or pale-yellow. Probable best with minimal frost-protection under glass in the UK.)

3.557.200 : MORAEA POLYSTACHYA (A widespread, inland, dry-climate species, sporadically distributed through the Little Karoo, N into Namibia in the W & the Transvaal in the E. Usually flowering in autumn, when, in a wet year, it can colour stony flats & slopes with a haze of soft violet-blue. Just starting to flower when we were there. Hardy & does well with Panayoti Kelaidis in the rock garden at Denver. Possibly less easy in the UK, though it should be hardy in a hot, dry site outside.)

3.557.609 : MORAEA RETICULATA (Subgen. *Grandiflora*) Eastern Cape, Amathole Mts., W of Stutterheim. Steep, grassy slopes. (Near to the tall, Drakensberg *M. alticola* with similar netted cataphylls but this is not clump-forming, has narrower, channelled leaves & a very limited more southern distribution in this area. Bright yellow flowers with orange nectar-guides on stems around 50cm. high.)

3.557.800 : MORAEA ROBUSTA (Subgen. *Grandiflora*) Free State, Drakensberg, Mont-aux-Sources. 2700m. Among grasses on

open slope. (This occurs quite widely, if locally, in mountain-grassland, from SE Mpumalanga into KwaZulu-Natal & Lesotho. In the Subgenus *Grandiflora*, like *M. alticola*, & with similar large flowers, very pale-yellow to cream in this case, but a much dwarfer plant, about 30cm. high. This will be perfectly hardy & should prove a satisfactory plant in most UK gardens.)

3.558.100 : MORAEA SERPENTINA Winter-grower. A most distinct dwarf plant, predominantly a Namaqualand species, with narrow, spiralling, corkscrew basal foliage. Yellow to white 'irises', sometimes flushed with mauve on the 'standards' and with extremely large yellow nectar-guides on the 'falls', on branching stems 4-20cm. high. From gravelly soils & granite crevices in arid areas, Peter Goldblatt considers this needs a thorough drying-out and ripening when dormant in summer, to do well.

3.558.205 : MORAEA SPATHULATA (Subgen. *Grandiflora*) KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (Closely allied to *M. alticola* but widespread through the summer-rainfall area, usually at much lower altitudes, though it climbs high enough to make it hardy in many UK gardens. Fine yellow flowers, marked with deeper yellow on the falls, on stems of 60 cm. or more.)

3.558.210 : MORAEA SPATHULATA (Subgen. *Grandiflora*) UK seed from Norman Stevens' Cambridge garden, where it is fully hardy.

3.558.500 : MORAEA STRICTA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (With a range N from the E Cape & Lesotho all the way to N Ethiopia, this occurs in grassland in the Drakensberg up to 2400m., usually producing its lilac to violet-blue flowers, blotched with orange on the falls, in spring, before the first rains. Quite dwarf at about 20cm., it merits pot-cultivation, where it can be kept dryish in winter, flower under glass & be stood outside during its growing season in summer.)

3.558.509 : MORAEA STRICTA Mpumalanga. No further data. (With a range N from the E Cape & Lesotho all the way to N Ethiopia, this occurs in grassland in the Drakensberg up to 2400m., usually producing its lilac to violet-blue flowers, blotched with orange on the falls, in spring, before the first rains. Quite dwarf at about 20cm., it merits pot-cultivation, where it can be kept dryish in winter, flower under glass & be stood outside during its growing season in summer.)

3.558.800 : MORAEA TORTILIS A "beautiful species" from the quartzite gravels of a small area S of Steinkopf in Namaqualand. Flat, violet-blue flowers with yellow & white nectar-guides on stems of only 10-15cm., above coiled, corkscrew basal leaves.

3.559.100 : MORAEA TRIFIDA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (A grassland plant from moist sites in the Drakensberg to 2500m. Wiry, 30cm. stems with a thready leaf, carry creamy flowers, marked brown or green.)

MORAEA TULBAGHENSIS

3.559.510 : MORAEA UNIBRACTEATA No data. A comparatively little-known species of limited distribution in the wild in the eastern Drakensberg foothills of central KwaZulu-Natal. Smallest member of Subgenus *Grandiflora*, to which the more familiar *M. spathulata* & *M. alticola* belong, with a single leaf & pale-yellow flowers on 20-30cm. stems.

3.560.200 : MORAEA WORCESTERENSIS

15853 : MORAEA SP. OFS, Drakensberg, Mont-aux-Sources. 3001m. Fissures on cliffs. 25.3.96 (About 30cm. high with pale violet flowers. We can be excused for failing to identify this. We were able to confront Peter Goldblatt, sorting herbarium collections, at Kirstenbosch with a miserable specimen & an apologetic "We're afraid we could not name this from your monograph." After a moment he replied, "That's because it's not in it." and chucked it in a heap of pressed plants. More anon ?)

3.590.000 : NEMESIA

3.590.200 : NEMESIA CAERULEA OFS, Drakensberg, Mont aux Sources. 3000m. Gravelly ledges below sandstone cliffs. 25.3.96 (A fine form of this alpine perennial, collected at the altitudinal limit for the species. More compact, with larger flowers in deeper blue-violet than the one photographed on the Sani Pass in Rix & Phillips, Vol. 2, page 111, & better than anything we have seen in cultivation under this name, though, of course, it may not live up to our expectations in gardens. Stems about 20cm. high from creeping mats of toothed leaves with a succession of spurred, flat-faced flowers with white, red-rimmed throats.)

3.595.100 : NERINE BOWDENII Lesotho/Orange Free State, Drakensberg, Mont aux Sources. 3000m. Gravelly ledges & pockets on & below cliffs. (In March, 1996, we brought back a few seeds from exposed cliffs at one of the highest localities we visited : Mont aux Sources on the Lesotho border. These were sown immediately and flowered here in 2000 & 2001. The species only grows southwards from this locality, descending to much lower altitudes, well below 1800m., & extending south to the Amathole Mts. of the E Cape, near King Williamstown, the type locality where Cornish Bowden found it in 1903. The Mont aux Sources plants are wholly distinct from other forms of *N. bowdenii* we have grown. They flower well over a month earlier, they are a paler pink & the flower shape tends to that of *N. flexuosa*. Moreover, they have been very successful with us in an open border, whereas other stock of *N. bowdenii* has failed here even against a S-facing wall. Even if you can grow 'ordinary' *N. bowdenii*, this will flower weeks before it. For those in cooler areas, this is the most cold-tolerant *Nerine* in existence. Large, fleshy *Nerine* seeds germinate without moisture & make bulbs soon after they are mature. We have kept these cool but they will active on despatch.

3.600.000 : ORNITHOGALUM

3.600.600 : ORNITHOGALUM LONGIBRACTEATUM E Cape, Amathole Mts., SW of Cathcart. 1300m. A tall species with erect stems rising from large bulbs to more than 1m. in height & carrying a dense raceme of pale green flowers. Linear leaves in a basal rosette. Widely distributed in moist habitats from the E Cape northward into Mpumalanga.

3.602.000 : OSTEOSPERMUM

3.602.500 : OSTEOSPERMUM JUCUNDUM Free State, Drakensberg, Mont aux Sources. 2900m. Open stony & grassy slopes.

(Highest alpine in the genus, recorded up to 3200m., & only likely to be lost through winter-wetness, not cold, in the UK. Here in a neat race with mat-forming clumps bearing a multitude of brilliant deep-pink daisies on stems of about 20cm. More compact than the clone originally distributed by Ingwersen's as 'Compacta' but not so diminutive as the true owner of this name, described by Vera Higgins in 1946 as *Dimorphotheca barberiae* f. *compacta* from a Helen Milford collection & which we fear has now vanished from cultivation. Those prepared to interpret the name *Dimorphotheca* will appreciate seeds are of two different forms.)

3.604.000 : PACHYCARPUS

15522 : PACHYCARPUS SP. E Cape, NNW of Graaff-Reinet, Ouberg. 1700m. Shallow pockets on flat sandstone of summit. 13.3.96 (A member of the *Asclepiadaceae* with leafy decumbent stems. The genus usually has mottled, bell-shaped flowers, as fascinatingly complex as most members of this family but we have seen neither of these two colls. in flower.)

15557 : PACHYCARPUS SP. E Cape, N of Tarkastad. 1400m. Among rocks on steep, grassy slope. 15.3.96

3.605.000 : PAPAVER ACULEATUM E Cape, Drakensberg, NE of Rhodes to Naudesnek. 2200m. Disturbed areas in loose, sandy clay. (The only S African in this genus, this ascends to almost 3000m. Annual or monocarpic & rather like the Spanish & Moroccan taxa around *P. rupifragum*. A many-stemmed, bristly plant, usually about 50cm. high with lots of orange flowers, which, where suited in cultivation in the UK, has made "massive clumps" with stems rising to more than 1m. in height.) (100+)

3.610.000 : PELARGONIUM

3.610.500 : PELARGONIUM ABROTANIFOLIUM E Cape, NNW of Graaff-Reinet, Ouberg. 1700m. Shallow pockets on flat sandstone of summit. 13.3.96 (One of the most beautiful foliage-plants we have seen, forming compact, shrubby hummocks, about 20cm. high, with leaves like silver parsley. The white flowers blotched with purple are hardly spectacular but demurely compliment the exquisite filigree-foliage. This is not a plant of the Drakensberg but from the drier mountains of the Karoo, so is unlikely to tolerate full exposure to the wet British climate. We hope some alpine-house growers might admit a saxatile *Pelargonium*, which they should find tolerant of prolonged freezing as long as it is dry & will relish exposure to full sun at all times.)

3.610.660 : PELARGONIUM ALCHEMILLOIDES No data. Widely distributed in African mountains, this occurs on moist grassy sites up to about 2500m. in the Natal Drakensberg. About 30cm. high with airy umbels of small, pink-white, mauve-blotched flowers. One of about 12 species (out of about 250 in this mainly S African genus) from higher altitudes in the summer rainfall area, which might have some potential in sunny, well-drained sites in cool-temperate gardens.)

3.611.000 : PELARGONIUM BOWKERI

3.611.950 : PELARGONIUM MULTICAULE E Cape, Langkloofberge. 1200m. R. & R. Saunders coll. (Trailing stems with deeply cut, lacy foliage & many, little, magenta flowers with darker markings rising to 30cm. Distributed from the mountains of the E Transvaal to here at its southern limit on the borders of W Cape & attaining almost 2000m. in the Drakensberg.)

3.611.960 : PELARGONIUM MULTICAULE No data. Trailing stems with deeply cut, lacy foliage & many, little, magenta flowers with darker markings on stems rising to 30cm. Distributed from the mountains of eastern Mpumalanga to the borders of Western Cape, this attains almost 2000m. in the Drakensberg.

3.612.500 : PELARGONIUM SIDIFOLIUM E Cape, Drakensberg, NE of Rhodes. 2000m. Shallow pockets on & around sloping rock-slabs. 16.3.96 (Close tufts of rounded foliage with 20-30cm. stems carrying umbels of elegant, crimson-black flowers. A local plant, recorded up to 2600m., & rather striking, if you free your mind from association with large scarlet hybrids.)

3.612.500 : PELARGONIUM SIDOIDES (*P. sidaefolium*) E Cape, Drakensberg, NE of Rhodes. 2000m. Shallow pockets on & around sloping rock-slabs. (Close tufts of aromatic, rounded, velvety, grey foliage with 30cm. stems carrying umbels of small, elegant, crimson-black flowers. A local plant, recorded up to 2600m., & rather striking.)

3.620.200 : PEUCEDANUM THODEI E Cape, Drakensberg, Bastervoetpad. 2000m. R. & R. Saunders coll. (As we have several *Umbelliferae* in this list, we thought we should include this species from wet gulleys & streamsides, up to 2600m. Much-cut, glossy green foliage & 2m. tall, rounded umbels of a myriad, tiny lime-yellow flowers. Should be easy in the UK.)

3.630.010 : PHYGELIUS AEQUALIS No data. Distributed in wet, montane sites from central Natal N to E Transvaal, at 1200-2200m., this woody-based, 1.5m. high, perennial has inflorescences of many, curved, tubular flowers in a delightful shade of dusky strawberry-pink. Hardy almost anywhere in the UK in good, well-drained soil in sun, with plenty summer moisture.)

3.630.012 : PHYGELIUS AEQUALIS from YELLOW FORM KwaZulu-Natal, Mahwaqa hills, E of Underberg. c. 1500m. Ex a B.L. Burt coll. (From the distinct pale-yellow clone grown as 'Yellow Trumpet'. Reliably hardy in the UK.)

3.630.150 : PHYGELIUS CAPENSIS E Cape, Drakensberg, Naudesnek. 2400m. Among grasses on steep, wet, stony, SE-facing slope. (Absent from the Natal Drakensberg, this is native to the E Cape & Lesotho, attaining higher altitudes than *P. aequalis*, along mountain streams & on wet slopes up to 2900m. Beautifully illustrated, in the site where this collection originated, in Phillips & Rix, Vol. 2, page 114. Woody-based, 2m. stems with pyramidal inflorescences of scarlet, tubular flowers.)

3.630.151 : PHYGELIUS CAPENSIS E Cape, Witteberge, E of Lady Grey. 2000m. Among grasses on steep, wet, stony slope. (Absent from the Natal Drakensberg, this is native to the E Cape & Lesotho, attaining higher altitudes than *P. aequalis*, along mountain streams & on wet slopes up to 2900m. Beautifully illustrated in Phillips & Rix, Vol. 2, page 114. An excellent hardy plant for the UK with woody-based, 2m. tall, pyramidal inflorescences of scarlet, tubular flowers.)

3.635.000 : PLEXIPUS NAMAQUANUS E Cape, Swaershoek, SW of Cradock. 1500m. Fissures & gravelly ledges on rock

outcrops. 14.3.96 (A woody-based, clump-forming *Zaluzianskya*-like perennial, 20cm. high by 30-40cm. across, with profuse large, white flowers with deeply notched petals. From the inland, continental climate of the mountains SW of the Cape Drakensberg, this may be most relevant to gardeners in Colorado-type climates with cold, dry winters but is worthy of trial in the UK.)

3.640.000 : POLYGALA

3.645.000 : POLYXENA CORYMBOSA

3.645.110 : POLYXENA ENSIFOLIA

3.645.200 : POLYXENA LONGITUBA No data. Described only in 2001 but grown in UK alpine-houses for decades under the misapplied name, *P. ensifolia*. A little, winter-growing member of the *Hyacinthaceae*, endemic to the Roggeveldberge, in the N Cape, around 1600m. Reliably hardy under unheated glass in the UK. White flowers, variably tinged with lilac, on long perianth tubes nestle among linear leaves. An excellent alpine-house, autumn-flowering plant.

3.645.300 : POLYXENA PAUCICOLIA

3.645.400 : POLYXENA PYGMAEA

3.650.000 : PROTEA

3.650.500 : PROTEA DRACOMONTANA KwaZulu-Natal, Drakensberg, W of Oliviershoekpas. 1500m. *Themeda*-grassland on open NW & NE-facing slopes. 26.3.96 (The vast majority of this famous genus from subsaharan Africa, with over 100 species, is concentrated in the winter-rainfall area of the SW Cape. Although there have been attempts to cultivate some of the higher altitude, winter-rainfall species in the UK, these really need a Mediterranean-type climate to succeed. We list 3 of the half-dozen or so high altitude, summer-rainfall species, which realistically are the only ones which might be possible in the UK. This & the next are the dwarfest of these, low shrubs 30-60cm. high with large, leathery leaves & a fire-resistant, subterranean stock, which should also ensure regeneration if the top-growth is damaged by severe frost. Both have enormous, complex flower-heads. Panayoti saw this colony flowering in January, 1994, varying from pale pinks & lilacs to deeper, rosy shades. Recorded up to 2400m., always on thin, stony soils overlying Cave Sandstone, it could be tried in a very well-drained, low-nutrient, lime-free soil in full sun

3.658.000 : PROTEA SIMPLEX KwaZulu-Natal, N of Himeville to Mkhomazi. 1500m. Gravelly places & crevices on rock outcrops. 22.3.96 (Similarly dwarf at about 60cm., this is a local species of the Cave Sandstones up to about 1800m. in Natal.)

3.658.500 : PROTEA SUBVESTITA KwaZulu-Natal, Drakensberg, SE of Sani Pass. 2400m. Open, rocky slopes. 21.3.96 (The highest collection at about the altitudinal limit for the species but, like the remaining Drakensberg species, a large shrub or small tree. Distinct from the others in its more elongated not widely cup-shaped, white flower-heads with red anthers.)

3.670.000 : RANUNCULUS BAURII OFS, Drakensberg, Mont-aux-Sources. 2800m. Among rocks down steep, wet gully. 25.3.96 (A big, handsome buttercup, rather like a giant celandine, illustrated (in spring at an early stage of growth) in Phillips & Rix, Vol. 1, page 23. This grows in wet sites at up to 3000m. in the Drakensberg, from the E Cape into the Transvaal, so should be very hardy & easy outside in the UK. Eventually about 60cm. high with large, glossy, rounded leaves & bright-yellow flowers.)

3.680.000 : RHODOHYPOXIS

3.700.050 : ROMULEA ALBIFLORA

3.700.100 : ROMULEA ALBOMARGINATA

3.700.150 : ROMULEA ALPINA

3.700.200 : ROMULEA AMOENA N Cape, Bokkeveldberge, near Nieuwoudtville. 1300m. (One of the local species of the high stony plateaux of the Nieuwoudtville area, where it can carpet the ground in spring with its huge carmine to deep rose crocus-flowers, blotched purple-black in their throats. Should be as hardy & growable as most *Crocus* spp.)

3.700.300 : ROMULEA AQUATICA

3.700.400 : ROMULEA ATRANDRA (var. *atrandra*) N Cape, Roggeveldberge, W of Middlepos. 1800m. R. & R. Saunders coll. (Distributed more widely than most on the stony clays of the inland plateaux of the W. Large flowers in an intense magenta-rose, blotched with violet or blue-black above the yellow-cupped centres.)

3.700.420 : ROMULEA ATRANDRA var. **LEWISIAE**

3.700.450 : ROMULEA AUSTINII

3.700.480 : ROMULEA AUTUMNALIS

3.700.520 : ROMULEA BARKERAE

3.700.550 : ROMULEA BIFLORA

3.700.580 : ROMULEA CAMEROONIANA

3.700.610 : ROMULEA CAMPANULOIDES

3.700.640 : ROMULEA CEDARBERGENSIS

3.700.670 : ROMULEA CITRINA

3.700.700 : ROMULEA CRUCIATA

3.700.720 : ROMULEA CRUCIATA var. INTERMEDIA

3.700.740 : ROMULEA DICHOTOMA

3.700.770 : ROMULEA DISCIFERA New species. Yellow. 15cm.

3.701.800 : ROMULEA DIVERSIFORMIS N Cape, Komsberg, SE of Sutherland. 1800-2000m. R.& R. Saunders coll. (Very local in the desert-ranges of the Sutherland region, along the southern margin of the Great Karoo. Clean, bright, buttercup-yellow flowers, distinct in the absence of dark internal markings. Treat it like a bulb from S central Turkey or Nevada.)

3.702.000 : ROMULEA EXIMIA W Cape, near Darling. 60m. R.& R. Saunders coll. (A low altitude plant, confined to the Malmesbury area, inland & N of Cape Town. Dusky rose flowers, blotched with deep crimson in their throats, above a pale yellow cup. A superb thing & possibly needing only minimal protection, just frost-free, under glass in the UK.)

3.702.001 : ROMULEA EXIMIA Western Cape, near Wellington. (A beautiful low altitude plant, confined to the Malmesbury area, inland & N of Cape Town. Dusky rose flowers, blotched with deep crimson in their throats, above a pale yellow cup. A superb thing & possibly needing only minimal protection, just frost-free, under glass in the UK.)

3.703.400 : ROMULEA HIRTA N Cape, near Middlepos. 1800m. R.& R. Saunders coll. (Another almost certainly temperature-hardy species from the continental climate of the inland plateaux, S of the Great Karoo, SE from around Nieuwoudtville to the Klein Roggeveld. Distinct, winged, ciliate leaves & pale yellow flowers, marked internally with a transverse brown band.)

3.703.401 : ROMULEA HIRTA N Cape, near Nieuwoudtville. 1500m. (Another almost certainly temperature-hardy species from the continental climate of the inland plateaux, S of the Great Karoo, SE from around Nieuwoudtville to the Klein Roggeveld. Distinct, winged, ciliate leaves & pale yellow flowers, marked internally with a transverse brown band.)

3.703.600 : ROMULEA KAMISENSIS N Cape, Namaqualand, Kamiesberg. R.& R. Saunders coll. (Narrowly endemic to the Kamiesberg & distinct in its purple flowers with their, long, funnel-shaped tubes & long, green bracts.)

3.703.700 : ROMULEA KOMSBERGENSIS N Cape, Komsberg, SE of Sutherland. 1800-2000m. R.& R. Saunders coll. (Only recorded from sandy soils on the high Komsberg plateau & inured to low winter-temperatures. Near *R. atrandra* but the big, rosy flowers are usually tipped with violet-blue & the buttercup-yellow cup, below a bluish band, has a brown base.)

3.703.700 : ROMULEA KOMSBERGENSIS N Cape, Roggeveldberge. 1800-2000m. (Only recorded from sandy soils on the high Komsberg plateau at the southern end of the Roggeveld. Inured to low winter-temperatures. Near *R. atrandra* but the big, rosy flowers are usually tipped with violet-blue & the buttercup-yellow cup, below a bluish band, has a brown base.)

3.703.810 : ROMULEA LEIPOLDTII No data. A striking winter-grower with large bicoloured flowers, deep-yellow to orange on the lower half of the segments and cream to white on the upper. A fairly low altitude plant but distributed inland along the foothills of the Western Cape ranges so well worth trying under cold-glass in the UK.

3.704.000 : ROMULEA LUTEOFLORA N Cape, near Middlepos. 1800m. R.& R. Saunders coll. (More or less a yellow version of *R. atrandra* but distinct in its colour & chromosome number. Like it, a plant of high, cold habitats, mainly in the Cedarberg & Bokkeveld. Big, brilliant-yellow flowers, strikingly blotched internally with mahogany-brown.)

3.704.001 : ROMULEA LUTEOFLORA Northern Cape, near Nieuwoudtville. 1800m. (More or less a yellow version of *R. atrandra* but distinct in colour & chromosome number. A plant of high, cold habitats, mainly in the Cedarberg & Bokkeveldberge, W of Nieuwoudtville. Big, brilliant-yellow flowers, strikingly blotched internally with mahogany-brown.)

3.704.050 : ROMULEA LUTEOFLORA var. SANISENSIS Lesotho, Drakensberg, NW of Sani Pass. 2900m. Peaty turf along stream. (An odd disjunction, only known in this locality. A summer-grower but the type-race is winter-growing.)

3.704.150 : ROMULEA MACOWANII var. ALTICOLA (*R. longituba* var. *alticola*) Lesotho, no further data. (Ex the H. Milford type-collection, totally hardy outdoors in UK gardens. Long-tubed flowers (the longest in the genus) in yellow, shading to orange-yellow inside & tinged with brown or purple externally. Known only from this & one other coll.)

3.704.170 : ROMULEA MACOWANII var. OREOPHILA E Cape, Drakensberg, Naudesnek. 2450m. Exposed, gravelly areas on rock slabs of summit col. (Conveniently, this trio of tiny, alpine, yellow-flowered summer-growers all come together alphabetically. This has a much shorter tube than the preceding & the bases of the flower & bract are often below the ground. From the Cape Drakensberg & adjacent ranges, it is nearer the type-race, centred on the mountains of the Karoo.)

3.704.600 : ROMULEA MONADELPHA N Cape, near Nieuwoudtville. 1300m. R.& R. Saunders coll. (Another endemic of the Nieuwoudtville area, considered by De Vos to be "one of the rarest & most beautiful" species. Close to better-known *R. sabulosa* but with even more brilliant satin flowers in deep claret-red, with different black markings in their throats & distinct, shiny, black filament tubes. The Saunders think this may prove to be one of the hardiest. It will be sensational in the alpine-house.)

3.704.700 : ROMULEA MONTANA N Cape, S of Nieuwoudtville, near Moedverloor. 1300m. (Distributed at high altitudes S from the Bokkeveldberge to the Cedarberg. Shiny, buttercup-yellow flowers, usually blotched with dark brown & tinted or feathered red-brown outside. The name of the locality means 'lost hope' but we have high hopes for this.)

3.704.800 : ROMULEA MONTICOLA N Cape, S of Nieuwoudtville, near Moedverloor. 1300m. (Confined to the high plateaux of the Bokkeveld & Gifberg, this is sympatric with the preceding & remarkably similar in flower. The two are not closely allied,

however, & have quite different corms. Red-brown backed, golden yellow flowers, with deeper yellow centres.)

3.705.200 : ROMULEA NEGLECTA (*R. oliveri*) Northern Cape, Namaqualand, Kamiesberg. 1500m. (A 15cm. high Kamiesberg endemic, originally described from a “moist, W-facing, sandy slope” & distinct in its “large, bright rosy-magenta flowers”, marked inside with purple & orange & purple-feathered outside on a yellowish ground.)

3.705.500 : ROMULEA PEARSONII N Cape, Namaqualand, Kamiesberg. 1500m. R. & R. Saunders coll. (A Kamiesberg endemic, not unlike the more widespread *R. luteoflora* but distinct from this in its corm & fruiting habit. Lemon-yellow flowers, usually tinged or veined red-brown externally. Though from quite far N, it grows high enough for temperature-hardiness.)

3.706.010 : ROMULEA SABULOSA No data. Superlative & close to sympatric *R. monadelpha* but maybe not as hardy. Like it endemic to the Nieuwoudtville area. Large glossy scarlet flowers, beautifully marked with black & yellow inside.)

3.706.110 : ROMULEA SALDANHENSIS No data. From sandy clays near the Atlantic, N & S of Saldanha Bay. We have grown it unheated but it is safest frost-free. Big, bright-yellow flowers, darkly pencilled inside & marked brown outside.)

3.706.500 : ROMULEA SCHLECHTERI

3.706.800 : ROMULEA SLADENII W Cape, Gifberg S of Vanrhynsdorp. 1000m. (Endemic to the sandstone of the Gifberg plateau. Very crocus-like with its white, yellow-centred flowers, usually purple-stained externally.)

3.707.100 : ROMULEA SUBFISTULOSA

3.707.300 : ROMULEA SYRINGODEOFLORA N Cape, near Middlepos. 1800m. R. & R. Saunders coll. (Endemic to the high plateaux near Sutherland NW to the edge of the Roggeveld. The only member of the small Section *Lomurea*, with rather flattened leaves, listed here. Flowers with long tubes & spreading, magenta-pink segments, yellow-striped, dark-red externally.)

3.707.320 : ROMULEA SYRINGODEOFLORA from WHITE FORM Northern Cape, Roggeveldberge. (Endemic to the high plateaux near Sutherland NW to the edge of the Roggeveld. The only member of the small Section *Lomurea*, with rather flattened leaves, listed here. The showy, white-flowered form of this normally magenta-pink species. Long-tubed white flowers with spreading segments, striped with yellow on a dark-red ground externally.)

3.707.500 : ROMULEA TETRAGONA (var. *tetragona*) Northern Cape, Roggevelddberge, near Middlepos. 1800m. (A most distinct plant, possibly not close to any other, though placed in Section *Hirtae* with *R. hirta*. Like it in its winged, hairy leaves but quite unlike it, however, in its corms & violet-rose to lilac-pink flowers with dark anthers.)

3.707.600 : ROMULEA THODEI Lesotho, Drakensberg, NE of Sani Pass. 2900m. Gravel-filled depressions on rock-slabs. (Bright-pink, crocus-like flowers, striped with buff and purple outside & with white or yellow throats. One of only 3 summer-rainfall, Drakensberg species. Some seed of the remaining one, yellow-flowered *R. luteoflora* var. *sanisensis*, which only grows in this locality, may be included but we saw only pink flower-remains on our early visit.)

3.707.700 : ROMULEA TORTUOSA (subsp. *tortuosa*) N Cape, near Middlepos. 1800m. (A species from the cold, dry, western ranges, the Hantamberge, the Bokkeveldberge, the Komsberg & the Roggeveld. Fascinating, flexuose, spiralled leaves twist on the ground. Striking, big, yellow to orange flowers with spade-shaped black blotches on each segment.)

3.707.701 : ROMULEA TORTUOSA (subsp. *tortuosa*) Northern Cape, Roggeveldberge. (A species from the cold, dry, western ranges, the Hantamberge, the Bokkeveldberge, the Komsberg & the Roggeveld. Fascinating, flexuose, spiralled leaves twist on the ground. Striking, big, yellow to orange flowers with spade-shaped black blotches on each segment.)

3.707.750 : ROMULEA TORTUOSA subsp. AUREA N Cape, Komsberg, SE of Sutherland. 1800-2000m. R. & R. Saunders coll. (According to De Vos, distinguished from the type-race "by its slightly larger, crocus-like, fragrant, buttercup-yellow or almost orange -yellow flowers without dark markings, with the upper part of the perianth segments paler yellow" among other characters. The two races are usually separated geographically but apparently colonies of intergrades occasionally occur.)

3.707.751 : ROMULEA TORTUOSA subsp. AUREA Northern Cape, Nieuwoudtville area. 1500m. (According to De Vos, distinguished from the type-race "by its slightly larger, crocus-like, fragrant, buttercup-yellow or almost orange -yellow flowers without dark markings, with the upper part of the perianth segments paler yellow" among other characters. The two races are usually separated geographically but apparently colonies of intergrades occasionally occur.)

3.720.000 : RUSCHIA

3.720.500 : RUSCHIA PUTTERILLII E Cape, Drakensberg, ESE of Ben Macdhui. 2900m. Exposed rock-fissures. 17.3.96 (Certainly the highest alpine in this large S African genus & possibly in the entire *Mesembryanthemaceae*. Compacted, shrubby pads squeezed into crevices with hard, succulent, greyish leaves & stemless, carmine-pink flowers. A few seeds only.)

3.730.000 : SALVIA

3.738.010 : SANDERSONIA AURANTIACA No data. A monotypic genus related to *Colchicum*, twining to 75cm. tall with lots of pendant orange bells. A summer-grower from among scrub or grasses in damp sites up to about 2000m. in the hills of KwaZulu-Natal and Mpumalanga. Frost-hardy if kept dryish when dormant in winter.

3.739.000 : SANIELLA VERNA

3.740.000 : SCABIOSA

3.750.000 : SCILLA DRACOMONTANA E Cape, Witteberg, E of Lady Grey. 2200m. Fissures & pockets on diorite outcrops. 18.3.96 (This mainly Eurasian genus of bulbs has only a few species in S Africa. Many taxa once included in it have been

removed to *Ledebouria*. The ones here are summer-growing, Drakensberg representatives. They are all plants of rocky areas & will be best kept dry during their winter dormancy but all should be temperature-hardy in the UK & may be worth trying in well-drained, sunny sites outside. This was about 15cm. high in seed & its blue flowers are well illustrated in Hilliard & Burt, Plate 11.)

3.750.409 : SCILLA KRAUSSII KwaZulu-Natal, near Howick.. Ribbed leaves with purplish undersides expand after the racemes of purple flowers on 15cm. stems are over.

3.750.500 : SCILLA NATALENSIS Ex KwaZulu-Natal, near Merrivale. 1500m. (The tallest, up to 1m. high but usually nearer 50cm., with long racemes of starry, blue flowers. A plant of cliff-ledges, recorded up to about 2000m.)

3.750.600 : SCILLA NERVOSA KwaZulu-Natal, near Merrivale, 1500m. R.& R. Saunders coll. (A wide ranging species of the E African mountains. In shallow soil over rock-sheets at altitudes approaching 2000m in the Natal Drakensberg.)

3.750.609 : SCILLA NERVOSA An Eastern Cape coll. of this wide ranging species of the E African mountains. Erect leaves with raised veins and racemes of white flowers on long pedicels. Growing in shallow soil over rock-sheets, this climbs to altitudes approaching 2000m. in the Natal Drakensberg.

3.760.000 : SEBAEA

3.765.809 : SEBAEA REPENS This genus of African gentians is now becoming more familiar to UK alpine-plant specialists and being seen at shows. We list two colls. from the Lesotho Drakensberg by Rachel & Rod Saunders. This is a most desirable, high-alpine, mat-forming perennial with a profusion of large, bright yellow flowers on its cushions of bright-green, glossy leaves. A wet-grower recorded up to 3000m. from the marshy turf of the summit plateau and the vertical banks of streamlets.

3.766.000 : SEBAEA SEDOIDES (var. *sedoides*) KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (A variable species distributed down through the summer-rainfall ranges of E Africa, attaining about 2500m. on the Drakensberg grasslands. Here, about 30cm. high with the brilliant yellow flowers typical of this mainly African, herbaceous genus in the *Gentianaceae*.)

3.766.009 : SEBAEA SEDOIDES var. SCHOENLANDII This is the Lesotho race of a variable species distributed down through the summer-rainfall ranges of E Africa, attaining about 2500m. on these high Drakensberg grasslands. A very compact version about 15cm. high with the profuse, brilliant yellow flowers typical of this mainly African, herbaceous genus in the *Gentianaceae*.)

15608 : SEBAEA SP. E Cape, Drakensberg, NE of Rhodes. 2300m. In turf on ledges of diorite outcrop. 16.3.96 (About, 10cm. high, with heads of *Daphne*-like bright yellow flowers. We were surprised to find so little ripe seed of this genus.)

15713 : SEBAEA SP. (Sani Top)

3.770.000 : SENECIO

3.770.400 : SENECIO BARBATUS KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (An intriguing, blue-flowered member of this cosmopolitan genus, about 30cm. high & somewhat thistle-like in appearance. From the montane grasslands of E. Transvaal into the E Cape & recorded from well over 3000m. in the Drakensberg.)

3.772.009 : SENECIO MACROSPERMUS KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. (Two *Senecio* species with a future in gardens : this is rated as “a great border perennial” by Panayoti Kelaidis at Denver. It needs a cool, moist site in Colorado so should do well in full sun in the UK. Stems about 1m. tall carry heads of large yellow daisies above striking clumps of big, grey leaves. Endemic to the Drakensberg & adjacent ranges on steep scree or grass slopes between 2300 & 3000m.)

3.772.509 : SENECIO POLYODON var. SUBGLABER Lesotho. Ex a P. Kelaidis coll. (An excellent little daisy, about 30cm. tall, with branching stems carrying lots of small heads with bright purple rays (the type-race, *S.p.* var. *polyodon*, is rayless & of no garden-value). The outstanding Irish plantsman, Carl Dacus, rates this very highly & has been distributing it to his friends much to their delight. We saw this flowering well in several gardens in Ireland in November : like many Drakensberg plants this will keep flowering through late summer until frosted, as long as it is cool and moist. It grows up to 3000m. & is hardy in Denver. A plant of marshland and seasonally wet seeps, it should tolerate the wet winters of W Europe & the Pacific North-west.)

3.777.050 : SILENE BURCHELLII E Cape, Drakensberg, Bastervodpad. Ex CD & R 192. (A member of a species-group extending to 2400m. in the Drakensberg grasslands. An attractive & satisfactory 20cm. perennial with large pink flowers.)

3.777.500 : SILENE UNDULATA KwaZulu-Natal, near Merrivale. 1500m. R.& R. Saunders coll. (A tall, lush species, up to 1m. high, from steep, wet slopes up to about 2800m. in the Drakensberg. White flowers from spring to autumn.)

3.780.000 : SPARAXIS

3.783.000 : SPILOXENE

3.785.000 : STACHYS

3.785.500 : STACHYS TYSONII

STREPTOCARPUS : CAPE PRIMROSES FROM

3.790.000 : STREPTOCARPUS

3.790.200 : STREPTOCARPUS DUNNII Swaziland, Malolotja Reserve. 1400m. R.& R. Saunders coll. (From a seldom-collected locality in the Ngwenya & Silotwane ranges along the E Transvaal border, where the Saunders tell us it experiences frequent winter-frosts. A single, very long, silver-haired leaf & many-flowered, 20cm. stems of funnel-shaped, brick-red flowers.)

3.790.400 : STREPTOCARPUS GARDENII KwaZulu-Natal, Drakensberg, SW of Njesuthi valley. 1400m. In moss on boulders in deep shade. 23.3.96 (Endemic to wet, shaded rocks, sometimes epiphytic on mossy tree trunks, in the high Natal woodlands, going up to the limit of the forests at about 1800m. A beautiful, little plant with rosettes of narrowly ovate leaves & pale violet flowers, with pale-green tubes & purple-lined lobes, on 10cm. stems. One of the 3 species which ascend above 1500m. in the Natal Drakensberg, these are all well-suited to such alpine-house treatment as accorded to the hardy European & SE Asian *Gesneriaceae*. Moist & shaded in summer, cool & dryish in winter. For seed-sowing see comments under the European *Ramonda*.)

3.790.401 : STREPTOCARPUS GARDENII KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll.

3.790.410 : STREPTOCARPUS GARDENII Ex KwaZulu-Natal. No further data. (Endemic to wet, shaded rocks, sometimes epiphytic on mossy tree trunks, in the high Natal forests to their limit at about 1800m. A beautiful, little plant with rosettes of narrowly ovate leaves & pale violet flowers, with pale-green tubes & purple-lined lobes, on 10cm. stems. One of 3 species which ascend above 1500m. in the Natal Drakensberg, all suited to the alpine-house treatment given to the hardy European & SE Asian *Gesneriaceae* : moist & shaded in summer, cool & dryish in winter. Sow seed of these as for *Ramonda*.)

3.790.710 : STREPTOCARPUS PENTHERIANUS Ex KwaZulu-Natal. No further data. (While this is also a plant of mossy rocks & fissures on sandstone cliffs up to 2000m., from our limited experience of these two, this seems to prefer somewhat more open, drier sites. Extremely distinct flat rosettes of 2-3, large, almost square, ribbed, deeply veined leaves & elegant, little, butterfly-like white flowers, sometimes flushed lilac-pink, with yellow throats and long, curved tubes.)

3.790.800 : STREPTOCARPUS PUSILLUS

STREPTOCARPUS SP. (15780, Njesuthi)

3.810.000 : SUTERA

3.810.050 : SUTERA AURANTIACA R. & R. Saunders coll.

3.810.200 : SUTERA BREVIFLORA E Cape, Drakensberg, NE of Rhodes. 1900m. Open, gravelly banks. 16.3.96 (This is a fine member of a fine African genus in the *Scrophulariaceae*, currently somewhat eclipsed in UK gardens by *Diascia*, a much smaller less diverse genus. There are about 130, mainly S African, species in *Sutera* with quite a few montane plants. Masses of flat-faced, bright orange-red flowers on 20cm. clumps. Much better than the straggly, pallid thing in Phillips & Rix.)

3.810.200 : SUTERA BREVIFLORA E Cape, Drakensberg, NE of Rhodes. 1900m. Open, gravelly banks. 16.3.96 (This is a fine member of a fine African genus in the *Scrophulariaceae*, currently somewhat eclipsed in UK gardens by *Diascia*, a much smaller less diverse genus. There are about 130, mainly S African, species in *Sutera* with quite a few montane plants. Masses of flat-faced, bright orange-red flowers on 20cm. clumps. Much better than the straggly, pallid thing in Phillips & Rix.)

3.812.000 : SUTERA HALIMIFOLIA E Cape, NNW of Graaff-Reinet, Ouberg. 1500m. Loose, gravelly soil on open sandstone slopes. 13.3.96 (A pretty, diffuse, grey-leaved perennial of the Karoo mountains with 20cm. high clumps of upright, wiry stems bearing a profusion of dainty, little pink flowers over a long period. Maybe possible in a sunny scree or raised-bed.)

3.812.500 : SUTERA JURASSICA

3.813.300 : SUTERA PRISTISEPALA

SUTERA SP. (15580, Naudesnek)

3.820.000 : SUTHERLANDIA

3.820.010 : SUTHERLANDIA FRUTESCENS W Cape, N of Cape Town, near the coast. R. & R. Saunders coll. (The widespread, low-altitude core of a trio of seemingly intergrading "species" of showy, scarlet-flowered shrubby Bladder Peas. This coll. will not be hardy in the UK but can be easily grown in the cool-greenhouse. Striking & exotic planted out for the summer.)

3.820.510 : SUTHERLANDIA MICROPHYLLA UK grown seed ex S. Hannay 1991 colls. (SH56 made in Lesotho & SH61 at 2600m. in E Cape) (With erect stems of over 1m., this should differ in some foliage & pod characters but not in the scarlet pea-flowers. Should be as hardy as the next & indeed may be the same, identification problems being what they are.)

3.820.600 : SUTHERLANDIA MONTANA E Cape, Drakensberg, NE of Rhodes to Naudesnek. 2200m. Disturbed areas in loose, sandy clay. 16.3.96 (In 1994 we listed seed from the 1988 CD & R coll. from this same area. This had attracted considerable publicity in the UK : illustrated in 'The Plantsman' of September, 1992, & featured in the 'The Garden' of September, 1994. We have not heard much of it since & suspect that, like so many good things, it needs a little effort to keep it going. This is more than justified. Certainly the hardiest of this genus & temperature-hardy in the UK but doubtless resentful of winter-wetness. So, it will need a very well-drained sunny site to overwinter. It is not very long-lived but does set seed in cultivation, so there are no excuses! The soft, shrubby stems, clad in pinnate leaves, do not reach much more than 30cm. in the wild & the display of scarlet pea-flowers in summer is spectacular, as are the large, inflated, pale-green, red-tinged seed-capsules which follow them.)

3.820.601 : SUTHERLANDIA MONTANA E Cape, Witteberge, E of Lady Grey. 2200m. Diorite gravel-pockets. (Some years ago, this spectacular plant attracted considerable publicity in the UK : illustrated in 'The Plantsman' of September, 1992, & featured in the 'The Garden' of September, 1994. We have not heard much of it since & suspect that, like so many good things, it needs a little effort to keep it going. This is more than justified. Certainly the hardiest of this genus & temperature-hardy in the UK but it does need a very well-drained sunny site to overwinter. It is not very long-lived but does set seed in cultivation, so there are no excuses! The soft, shrubby stems, clad in pinnate leaves, reach about 30cm. in the wild & the display of scarlet pea-flowers

in summer is arresting, as are the large, inflated, pale-green, red-tinged seed-capsules which follow them.)

3.830.100 : THALICTRUM RHYNCHOCARPUM One of the two S African species in this genus. A plant of relic forests at up to 1800m. in the Drakensberg, so likely to need be of borderline hardiness in a sheltered shady site in the UK

3.832.000 : THEREIANTHUS

3.838.000 : TRACHYANDRA

TRACHYANDRA SP. Eastern Cape, Amathole Mts., W of Cathcart.

3.840.000 : TRITONIA

3.841.010 : TRITONIA DISTICHA subsp. RUBROLUCENS No data. Distributed through the summer-rainfall mountains S from the Transvaal into E Cape, up to 1900m. in the Natal Drakensberg, on grassy slopes or sometimes in sandstone crevices. We have grown this for many years - perfectly hardy both in W England & W Wales, in spite of our wet winters. A pink "Montbrieta" with late-summer flowers in a soft, warm shade, almost exactly the same salmon-pink as *Dierama dracomontanum*.

3.850.000 : TULBAGHIA : ref. Lilies 1978/9 p.78 : Brinsley Burbidge "The Genus Tulbaghia"

3.850.360 : TULBAGHIA CAPENSIS Unlike most of the genus, a winter rainfall, Western Cape species but worth trying with the same treatment as the others. Usually a rather robust plant, 15-30cm. high with brown to purple coronas.

3.850.410 : TULBAGHIA CODDII No data. Restricted to moist sites in a limited area at the NE end of the Drakensberg near Pilgrim's Rest. Little clumps of fine, grassy foliage and heads of flowers with white outer segments surrounding the bright yellow coronas, like a tiny *Narcissus poeticus*. Temperature hardy with us over many years, if kept dryish in winter.

3.850.660 : TULBAGHIA GALPINII No data. A little-known, very dwarf species from comparatively high altitudes in a small area on the southern edge of the Karoo, in the E Cape, S of Queenstown. Very fine, grassy leaves & rose-pink flowers with a distinct, 6-lobed corona on 15cm. stems. Temperature-hardy with us, if kept dryish in winter.

3.850.710 : TULBAGHIA LEUCANTHA No data. A handsome montane plant, distributed from the E Cape N into Zimbabwe, occurring in the Drakensberg between 1800m. & 2400m. on wet cliffs & steep, rocky sites. Grassy leaves & flowers with brilliant orange-yellow coronas, surrounded by green-white outer-segments, on stems about 25cm. high.

3.850.750 : TULBAGHIA LUDWIGIANA KwaZulu-Natal, near Merrivale. 1500m.. (A small, mainly S African, genus of about 20 species. This African version of *Allium* is currently rather trendy, so it is surprising that we have not seen this summer-rainfall species grown more widely in the UK. Surely one of the hardiest, recorded up to 1900m. Altogether *Allium*-like, with 30cm. stems of pendant flowers in which green-white segments surround a fleshy yellow corona.)

3.850.759 : TULBAGHIA LUDWIGIANA KwaZulu-Natal, Drakensberg. (Surely one of the hardiest, recorded up to 1900m. *Allium*-like, with 30cm. stems of pendant flowers in which green-white segments surround a fleshy yellow corona.)

3.851.010 : TULBAGHIA VIOLACEA

3.851.011 : TULBAGHIA VIOLACEA No data. The best-known in the UK & fairly reliably hardy in a well-drained site, though not a species from any great altitude. This seed is from a large form, originating from the RBG Edinburgh. Large both in stature with stems of about 60cm. & flower-size with heads of up to 20 big pale violet flowers, each with 3 white corona scales.)

3.861.000 : URGINEA MACROCENTRA KwaZulu-Natal, Drakensberg, S of Sani Pass. 2800m. Grassy slope below basalt cliffs. 21.3.96 (A weird member of this large but little-grown bulbous genus of *Scilla*-relatives with about 30 species in S Africa. A single, hollow, cylindrical leaf & a cylindrical stem up to 1m. high packed with small, white flowers.)

3.870.000 : URSINIA

3.870.900 : URSINIA TENULOBA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (One of 3 species in this genus of the *Compositae*, concentrated in the SW Cape, which grows in the stony turf of the summer-rainfall Drakensberg, up to 2200m. in this case. About 20cm. high with finely cut foliage & bright yellow 'daisies' with deeply-lined backs to the rays.)

3.879.000 : VELTHEIMIA

3.880.000 : VERNONIA

3.880.500 : VERNONIA HIRSUTA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (This large, mainly tropical genus of the *Compositae* only seems known to UK gardeners, if at all, through the two large, coarse, 2m. high species from eastern N America, *V. crinita* & *V. novaboracensis*. Of the 50 or so S Africans, about 5 climb high into the Drakensberg. This one on wet grassy slopes & in damp, shady places to about 2000m. About 1m. high with sessile, twisted, two-toned foliage & massed heads of tiny, bright crimson-purple flowers. Closely allied to *V. flanaganii* illustrated in Hilliard & Burt Plate 31 (p. 205).)

3.881.000 : VERNONIA OLIGOCEPHALA KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (A drier grower from montane grassland up to 2400m. Less than 20cm. high with silver-backed leaves & heads of rich purple flowers.)

VERNONIA SP. (Pearston to Cradock)

3.899.500 : WACHENDORFIA THYRSIFLORA W Cape, near Bredasdorp. 50m. R. & R. Saunders coll. (This species, a member of the *Haemodoraceae*, is something of a feature in Cornish & other mild, UK gardens. It comes from marshy areas at low altitudes in the winter-rainfall area of the W Cape. Several such low-elevation, W Cape species have settled in British gardens, when they originate from really wet habitats - wetter than needed in cultivation. Described by G.S. Thomas as "most handsome",

this is a 2m. perennial with arresting, ribbed foliage & tall, branching stems, packed with rich-yellow flowers in summer.)

3.899.501 : WACHENDORFIA THYRSIFLORA Western Cape, near Hermanus. (This species, a member of the *Haemodoraceae*, is something of a feature in Cornish & other mild, UK gardens. It comes from marshy areas at low altitudes in the W Cape. Several such low-elevation, W Cape winter-rainfall species have settled in British gardens, when they originate from really wet habitats (wetter than needed in cultivation) and can be treated as summer-growers. Described by G.S. Thomas as "most handsome", this is a 2m. perennial with arresting, ribbed foliage & tall, branching stems, packed with rich-yellow flowers in summer.)

3.900.000 : WAHLENBERGIA

3.950.400 : WATSONIA ANGUSTA W Cape, Cederberg. 1000m. R.& R. Saunders coll. (Unusual in that it grows in both winter & summer rainfall areas, extending N well into the E Cape. The paradox is explained by the fact that it grows in permanently wet habitats : marshes, seeps & along streams. Not a plant of any great altitudes, it should be tried in a sheltered site in the UK & may be well-suited to SW English & Irish gardens. Lax spikes of scarlet flowers with black-purple anthers on 1-2m. stems.)

3.950.409 : WATSONIA ANGUSTA Western Cape, Kouebokkeveldberge. (Unusual in that it grows in both winter & summer rainfall areas, extending N well into the E Cape. The paradox is explained by the fact that it grows in permanently wet habitats : marshes, seeps & along streams. It should be worth attempting in a sheltered site in the UK & may be well-suited to SW English & Irish gardens. Spectacular lax spikes of scarlet flowers with black-purple anthers on 1-2m. stems.)

3.951.200 : WATSONIA CONFUSA (Another wet-grower from moist sites in the N of E Cape & in Natal, though seldom much above 1000m., so similar treatment to the preceding is called for. Close to the following two species, it varies from 50 to 150cm. high with dense spikes of up to 30, purple-pink flowers.)

3.951.310 : WATSONIA DENSIFLORA KwaZulu Natal, near Merrivale. 1500m. R.& R. Saunders coll. (In no way allied to the SW Cape, winter-growing *W. borbonica* (*W. pyramidata*) as stated in Graham Stuart Thomas' 'Perennial Garden Plants' but the central species of a group of summer-growers from the grasslands of Natal with dense spikes of pink flowers appearing from between imbricate, brown bracts. Clump-forming & up to 1.5m. high, this is the low altitude member of the group, often below 1000m. but at similar elevations in the same area as *W. pillansii* of proven hardiness in the UK, so well worth trying.)

3.952.100 : WATSONIA GLADIOLOIDES KwaZulu-Natal, N of Himeville to Mkhomazi. 1200m. Among grasses on open, rocky slope. (A dwarf plant, 30-40cm. high here, apparently related to the pink-flowered *W. densiflora* group, in spite of its bright red, long-tubed flowers in spikes of up to 25, on unbranched, single stems. A species of the mountains of southern Lesotho & Natal, up to 2200m., maybe closest to the other dwarfer species, *W. lepida*, which has a range to the N of Lesotho. UK grown seed from plants raised from our 1996 coll., grown outside in Hampshire by Dave Hoskins.)

3.952.709 : WATSONIA LATIFOLIA KwaZulu-Natal, near Utrecht. (A most distinct summer-grower from a comparatively small area in the SE Mpumalanga, adjacent W Swaziland & N Natal, usually at altitudes above 1800m., in open grassland on thin, stony soils around the bases of granite outcrops. Like no other in its very broad foliage & its long-tubed, dark maroon-red flowers, up to 25 on stems to 1.5m. high. An exciting plant which should be hardy in a well-drained, sunny site in the UK.)

3.952.800 : WATSONIA LEPIDA KwaZulu-Natal, Drakensberg, W of Oliviershoekpas. 1700m. *Themeda*-grassland on open, NW & NE-facing, sandstone slopes. 26.3.96 (This should be in theory the hardiest species in the genus, from between 2000m. & 2500m. in the N Natal Drakensberg & Lesotho. In the *W. densiflora* complex & sometimes growing with another member, *W. confusa*, which tends to be a taller, clump-forming plant of wetter habitats. Usually with solitary 20-60cm. stems carrying dense spikes of pink flowers. Possibly best tried in a well-drained sunny site, in the rock-garden or in a scree-bed in the UK.)

3.952.809 : WATSONIA LEPIDA KwaZulu-Natal, Drakensberg. (This should be in theory the hardiest species, from between 2000m. & 2500m. in the N Natal Drakensberg & Lesotho. In the *W. densiflora* complex & sometimes growing with another member, *W. confusa*, which tends to be a taller, clump-forming plant of wetter habitats. Usually with solitary 20-60cm. stems carrying dense spikes of pink flowers. Possibly best grown in a well-drained sunny site, in the rock-garden or a scree-bed in the UK.)

3.952.850 : WATSONIA LONGIFOLIA Eastern Cape, near Grahamstown. (Considered by Goldblatt to have originated as a hybrid between *W. knysnana* and *W. pillansii*. Individual clones may have inherited the hardiness of *W. pillansii*, as well as its liking for damp sites. Varies in colour through oranges, pinks and reds. Between 1m. and 2m. in height.)

3.952.900 : WATSONIA MARGINATA

3.953.000 : WATSONIA MARLOTHII W Cape, Groot Swartberge, S of Prince Albert. 1700m. Gravelly soil on open slopes. 28.3.96 (Endemic to the Swartberg in the S of W Cape, above 1200m., this should be comparatively hardy in the UK in a well-drained site. These mountains catch a proportion of both winter & summer rain (it was raining when we were there in early autumn). Branching spikes of many, short-tubed crimson flowers, occasionally pink or purple, on stems up to 1m. high in summer.)

3.953.600 : WATSONIA PILLANSII (*W. beatricis*, *W. socium*, etc.) KwaZulu-Natal, N of Himeville to Mkhomazi. 1200m. Gravelly soil & crevices on rock outcrops. 22.3.96 (The growability & hardiness of this species in UK gardens gives us a criterion to judge the potential of others. The only summer-grower generally cultivated in the UK & also the only *Watsonia* of proven reliability in the UK, this is widely distributed through the E part of S Africa, usually in grassland, from the S Cape coastal area in a curve along the Natal coast into the Drakensberg, at low to middle elevations. Whether or not we have material from the higher altitudes in cultivation is irrelevant, as almost all others listed here occur in colder areas than this. For a species with such a wide

- range, it varies little. Spikes of 30 or so, bright orange-red, long-tubed flowers on 50-120cm. stems in late summer or autumn.)
- 3.953.601 : WATSONIA PILLANSII** KwaZulu-Natal, WSW of Nottingham Road. 1700m. Open grassy slopes. 22.3.96
- 3.953.609 : WATSONIA PILLANSII** (*W. beatricis*, *W. socium*, etc.) Eastern Cape. (The growability & hardiness of this species in UK gardens gives us a criterion to judge the potential of others. The only summer-grower generally cultivated in the UK & also the only *Watsonia* of proven reliability, this is distributed through the E part of S Africa, usually in moist grassland, from the S Cape in a curve through Natal into the Drakensberg, at low to middle elevations. For a species with such a wide range, it varies little. Spikes of 30 or so, bright orange-red, long-tubed flowers on 50-120cm. stems in late summer or autumn.)
- 3.953.620 : WATSONIA PILLANSII** No data. From the plant, we grew for years (and listed seed from) as 'Stanford's Scarlet'. This appears to be quite simply a selected form of this species. We grew it in Dorset, it formed a large clump in Helen & Ivor Barton's high, chilly Devon garden & this is from Trevor Crosby in W Wales. Its normally evergreen clumps of foliage may be smashed in a cold winter, such as our last one, but it has never failed to reappear from below ground-level.)
- 3.953.809 : WATSONIA PULCHRA** Mpumalanga, Saddleback Mts., near Barberton. (Distributed from NE KwaZulu-Natal northwards through the Swaziland border-ranges, usually in moist, montane grassland. Clumps of broad foliage with distinctive, thick, hyaline margins send up stems, 60-120cm. high, with up to 60, pink to purple flowers.)
- 3.955.109 : WATSONIA WATSONIODES** Mpumalanga, Saddleback Mts., S of Barberton. (A most distinct plant, unlike any other in the genus. Up to 1m. high with close spikes of as many as 50, narrow, somewhat bell-shaped flowers, usually in pale yellow but varying to cream or maroon. First described by Baker as a *Tritonia*, hence its odd specific name, this is limited to stony grassland between 1300m. & 1800m. in a comparatively small area in SE Mpumalanga & adjacent Swaziland.)
- 3.955.200 : WATSONIA WILMANIAE** W Cape, Groot Swartberge, S of Prince Albert. 1500m. Seeps on rocky slopes & along stream. (A tall wet-grower endemic to streamsides & marshes in the Swartberg & Kamanassie ranges of the S Cape. Flowering in late summer with spectacular spikes, up to 1.5m. high, of large flowers, unusually variable in colour. According to Goldblatt, the Swartberg populations range from deep red to orange, pink & cream. UK-grown seed from plants raised from our 1996 coll. & grown outside in Hampshire by Dave Hoskins. We see no reason why this should not be as hardy as *W. pillansii* and should be as successful in ordinary garden conditions in the UK as other S African wet-growers.)
- 3.980.000 : WURMBEA ANGUSTIFOLIA** E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Among grasses in wet-flush on open slope. 17.3.96 (A member of a small S African genus of about 12 species. Somewhat *Scilla*-like & in the *Liliaceae*, a corm, about 10cm. high with narrow, channelled leaves & starry, white flowers. A crimson-brown scale on each segment gives these a distinct appearance & it will be well worth alpine-house cultivation (kept dry in winter), though it will be totally hardy.)
- 3.980.050 : WURMBEA BURTTII** Lesotho, Drakensberg, NW of Sani Pass. 2900m. Seasonally flooded, shallow, gravel-filled depressions on rock-slabs. (A member of a small S African genus of about 12 species, somewhat *Scilla*-like & in *Liliaceae* (*Colchicaceae*). A corm, about 10cm. high with narrow leaves & starry, white flowers. Crimson-brown scales on each segment give these a most distinct appearance & it will be well worth alpine-house cultivation (kept dry in winter), though it will be totally hardy. Tentatively identified. *W. angustifolia* and *W. pusilla* inhabit similar habitats at this altitude.)
- 3.985.000 : XEROPHYTA VISCOSA** (*Vellozia viscosa*) Orange Free State, Mont-aux-Sources. 2900m. Diorite rock-slabs. 25.3.96 (A woody-based perennial in the *Velloziaceae*, if that helps you. One of the most stunning of alpine crevice-plants, usually on sandstone cliffs, forming mats of linear, sedge-like foliage which send up huge, pink, amaryllis-like flowers on sticky, 15cm. stems in late summer & autumn. Like nothing we know in cultivation in the UK. We should be even more effusive if we had more seed (early winter would be necessary for a good collection) and if we did not have the suspicion that it is going to be difficult to grow. To be tried in the UK in an alpine-house pan in gritty acid soil, stood outside all summer & kept dryish in winter.)
- 3.987.000 : XYSMALOBIMUM
- 3.988.000 : XYSMALOBIMUM STOCKENSTROMENSE** KwaZulu-Natal, near Merrivale. 1500m. R. & R. Saunders coll. (A weird, 60cm. high herbaceous perennial in the *Asclepiadaceae*, which produces a such a diversity of fascinating species in S Africa. From open grassland in E Transvaal down into E Cape, up to 2400m. in the Drakensberg, with large, wavy-edged, dull-green foliage & rounded heads of complex cream & red flowers. Illustrated in Hilliard & Burt Plate 24 (page 175).)
- 3.988.100 : XYSMALOBIMUM TYSONIANUM** Grassland to 2650m.
- 3.990.000 : ZALUZIANSKYA
- 3.991.000 : ZALUZIANSKYA PULVINATA** E Cape, Drakensberg, SW of Rhodes. 1700m. Among rocks in open site. (A cushion-plant of rock-sheets with tight clumps of ground-hugging rosettes. Erect, 5-8cm. stems with crowded inflorescences of large, white, red-backed flowers on long tubes, opening at dusk or in low light conditions and beautifully scented.)
- 15620 : ZALUZIANSKYA SP.** E Cape, Drakensberg, Naudesnek. 2450m. Shallow pockets of gravelly soil on exposed col. 17.3.96 (A tiny, pulvinate species with small, hard, pads of rosettes & almost stemless flowers. We saw none of this small, mainly S African, genus in *Scrophulariaceae* in full flower. Though flowers can be yellow it is to be expected that these collections will have long-tubed, white flowers, bright red in bud & on the reverse of the petals. These 3 are all suitable for the alpine-house.) (20+)
- 15758 : ZALUZIANSKYA SP.** KwaZulu-Natal, N of Himeville to Mkhomazi. c.1500m. Gravelly soil & crevices on rock outcrops. 22.3.96 (A caespitose perennial with a few large rosettes of stiff foliage. Flower stems to about 10cm.)
- 3.995.000 : ZANTEDESCHIA

EAST ASIA REFS. : 4.000.000 TO 4.999.999

4.002.000 : ACER

4.005.000 : ACONITUM

4.005.055 : ACONITUM ARCUATUM S Korea, Taebek, Hambaek-san. 1350-1400m. Ex M. Holmberg & U. Strindberg 92-143

4.005.190 : ACONITUM CARMICHAELII (*A. fischeri*) ('Arendsii') (*A. carmichaelii wilsonii* Barkers Variety & Kelmscott)

4.005.210 : ACONITUM CARMICHAELII var. WILSONII (*A. wilsonii*) No data. A magnificent, summer-flowering, Chinese perennial. Deeply cut foliage and erect, 2m. high branching stems, distinct with their many, 40cm. long, axillary branches, forming pyramids, massed with deep blue and violet, helmet-shaped flowers. Permanent in rich, moist soil in sun or part-shade.

4.005.510 : ACONITUM HEMSLEYANUM No data. A fine Chinese perennial with herbaceous stems twining to 3m. or more. Densely clad in deeply cut, rich-green foliage & massed with long racemes of spurred, violet helmet-shaped flowers in autumn. Splendid in a draughty, NE-facing corner here & more impressive than other climbers we have grown as *A. volubile*.

4.005.530 : ACONITUM HENRYI (Sparks Variety)

4.005.550 : ACONITUM JAPONICUM

4.005.650 : ACONITUM LAEVE Pakistan to W Nepal

4.005.850 : ACONITUM TANGUTICUM China, Yunnan, Dequn, Bei Ma Shan. 4700m. Ex ACE 1322.

4.005.950 : ACONITUM VOLUBILE (*A. volubile* of gardens = *A. hemsleyanum*, according to 'Plant Finder')

4.007.000 : ACTAEA ASIATICA (*A. spicata* var. *nigra*) S Korea, Taebek, Hambaek-san. 1350-1400m. Ex M. Holmberg & U. Strindberg 92-128

4.007.200 : ACTAEA ERYTHROCARPA (*A. spicata* var. *erythrocarpa*)

4.010.000 : ADENOPHORA

4.010.450 : ADENOPHORA COELESTIS From R. McBeath.

4.010.510 : ADENOPHORA CONFUSA No data. *Adenophora* is a delightful genus of about 50 species, very close to *Campanula* but distinguished from it by the thick, cupped disc surrounding the base of the style. They are all herbaceous perennials with their bells hanging in terminal racemes or panicles and, with the exception of European *A. liliifolia*, all are Asian. They are undeservedly neglected in gardens. The fact that, like those other *Campanula*-relatives, *Codonopsis*, their nomenclature is confused in cultivation and that the whole genus needs reviewing botanically, has not helped. The names of the two SE Asian species listed here are both valid but whether or not they are correctly applied to the plants concerned or are sustainable is another matter. We hope in time to increase our range of these worthwhile herbaceous plants and to start to try to sort out some of the confusion. In the meantime, if you do not know them, do try these two excellent summer-flowering ones, easily grown in any good soil in an open site or in part-shade and providing a long display of massed, pendulous, pale-blue bells on stems, about 1m. high in this case.

4.010.700 : ADENOPHORA DIVARICATA From R. McBeath : "blue flowers on stems up to 45cm. in summer."

4.011.009 : ADENOPHORA FORRESTII Ex R. McBeath : "pendulous blue bells on 45cm. stems in summer. From Yunnan."

4.011.010 : ADENOPHORA FORRESTII No data. In a variable group centered on SW China, this is on the same general pattern as the preceding but not so tall and also distinct in its foliage and the shade of the blue bells, as well as in its seeds.

4.011.020 : ADENOPHORA FORRESTII var. HANDELIANA China, Yunnan. Ex KGB 86.

4.011.410 : ADENOPHORA NANKINGENSIS Cultivated seed from China, received as *Adenophora* sp., "possibly *A. nankingensis*" from Robert Newman.

4.011.510 : ADENOPHORA POTANINII

4.011.660 : ADENOPHORA STRICTA (*A. axilliflora*) Cultivated seed from Robert Newman in Nanjing, China.

4.011.700 : ADENOPHORA TAQUETII Korea. Ex H & S 92-343

4.011.750 : ADENOPHORA TRIPHYLLA Korea. Ex H & S 92-138

4.011.800 : ADENOPHORA UEHATAE From R. McBeath : "a choice, dwarf species from Taiwan. Pale blue nodding bells in summer. One of the best."

4.013.010 : ADONIS BREVISTYLA No data.

4.020.000 : ALLIUM

4.020.500 : ALLIUM BEESIANUM Ex an E. Needham coll.

4.021.000 : ALLIUM CYATHOPHORUM var. FARRERI From R. McBeath.

4.022.500 : ALLIUM KANSUENSE (*A. sikkimense* of gardens)

4.022.511 : ALLIUM aff. KANSUENSE

4.022.710 : ALLIUM MACRANTHUM From R. McBeath : "lovely Himalayan species with nodding rose-pink flowers. Late summer. 30-45cm."

4.022.810 : ALLIUM MAIREI No data. A charming, small, late-flowering species from SW China. It is hardy and clumps up well in sunny scree in West Wales. Umbels of bright, deep-pink bells on stems about 20cm. high in summer.

4.022.989 : ALLIUM PRATTII China, Yunnan, Da Xue Shan. 4000m. A. Dickerson 01-01 (A tentative identification of a dwarf, high altitude, pinkish-flowered species, only 15cm. high with grey-green leaves. Da Xue Shan plants appear to be *A.p.* var. *vinicolor* with maroon flowers. The related *A. nanodes*, also in Sect. *Anguinum*, is also recorded from this mountain.)

4.023.000 : ALLIUM PRATTII var. LATIFOLIATUM China, Sichuan, Emei Shan. 2600m. Cliff ledges. Ex E. Needhan 981 (A recent, striking collection, unlike any other *Allium* we have in gardens, tentatively identified by Jill Cowley at Kew as this or perhaps *A. ovalifolium* - the names may be conspecific. Choice and slow-growing but proving hardy & trouble-free with Mike Tucker (Somerset, UK) in his shady, raised *Arisaema*-bed. It forms clumps of bulbs with reticulate tunics, their necks above the ground, like orchid pseudo-bulbs. These send up, in early spring, big, broad, shiny-green, aspidistra-like leaves, which look good well into the autumn. In midsummer, large, rounded umbels of purple-pink flowers rise above them on 30cm. stems.

4.024.605 : ALLIUM STRACHEYI To follow from NS : check name & provenance. "like a small *A. obliquum* flowering in August."

4.024.710 : ALLIUM THUNBERGII No data. A very late-flowering, hardy, little species from Korea and the mountains of central & S Japan. The umbels of many, rosy purple bells on 20cm. stems remain attractive until the first severe frost.

4.024.910 : ALLIUM VIRGUNCULAE No data. Endemic to Hirato Is., off the W coast of Kyushu in S Japan, this is another, late-flowering, pink species, about 15cm. high .

4.025.010 : ALLIUM WALLICHII China, Yunnan. Ex CLD 1500. A clump-forming species with 40 cm. tall stems carrying umbels of rich-purple flowers in late summer. A fine plant, easily grown outside in a well-drained site.

4.025.011 : ALLIUM WALLICHII Ex S & L 4766. From R. McBeath : "clump forming with stems up to 45cm., flowering in late summer." "Fruits often fleshy and purple."

4.025.012 : ALLIUM WALLICHII Nepal. Ex Len Beer 445. (Marvellous, glossy purple-black seed capsules.)

4.025.013 : ALLIUM WALLICHII China, Yunnan, Lijiang, Yulong Shan. 2800m. Ex CLD 1029. From M. Tucker.

4.030.000 : ANDROSACE

4.030.200 : ANDROSACE BULLEYANA China, Yunnan, Diqing, Tang Dun, N of Zhongdian. 3120m. Ex KGB 267 (The scarlet-flowered *Androsace*, a spectacular monocarpic species, very large for the genus and almost *Primula*-like with big, dense umbels of large flowers on erect, 15-20cm. stems from neat basal rosettes. Not particularly difficult under alpine-house conditions in the UK and well worth the small trouble of maintaining from seed - it really is striking in a rich, velvety vermilion.)

4.040.000 : ANEMONE

4.040.500 : ANEMONE DAVIDII

4.040.700 : ANEMONE DEMISSA

4.041.000 : ANEMONE FLACCIDA

4.041.200 : ANEMONE HUPEHENSIS Ex CDR

4.043.800 : ANEMONE NARCISSIFLORA

4.043.820 : ANEMONE NARCISSIFLORA var. VILLOSISSIMA No data. A hairy race of this variable circumpolar, mountain-meadow species from Russian Far East. Umbels of white, pink-flushed, apple-blossom flowers. Widespread in the wild & not difficult to grow in a good, moist soil but very seldom seen in cultivation as it resents division & is slow from seed.

4.044.010 : ANEMONE OBTUSILOBA from BLUE FORM No data. From a good, rich blue form of this very variable, buttercup-like perennial, widespread in meadow habitats through the Himalayas from Pakistan to Burma, between 2000 & 4300m. Like a bright-blue buttercup with decumbent flower stems rising to 15cm. from close clumps of leaves, in this case, hairless, deeply cut and bright shining green. With a little encouragement this has sown itself happily in our gravel-surfaced peat-bed

4.044.015 : ANEMONE OBTUSILOBA from WHITE FORM The species varies greatly in foliage, habit & flower colour, which can be yellow, white or blue. This is from a form very similar to the preceding but with pure-white 'buttercups'.

4.044.020 : ANEMONE OBTUSILOBA from YELLOW FORM From R. McBeath : "from the top of the Rhotang Pass."

4.045.007 : ANEMONE RIVULARIS China, Yunnan. Ex ACE 1698 (A lovely, 60cm. high meadow-plant, widespread from Kashmir to Yunnan. Long-stalked, cup-shaped flowers, white inside & heavily tinged with purplish-blue outside.)

4.045.008 : ANEMONE RIVULARIS Nepal. Ex MECC 49 (Both are easy in the UK in a good, moist soil in sun.)

4.045.009 : ANEMONE RIVULARIS China, Gansu, SE of Tianshui. 1350m. (A wild collection from the NE extremity of the distribution of this montane meadow-plant.)

- 4.045.010 : ANEMONE RIVULARIS** No data. A lovely, 60cm. high meadow-plant, widespread along the Himalaya, from Kashmir E into Tibet & Yunnan. Distinct from the umbel-flowered *A. narcissiflora*-group in its long-stalked flowers, individually cup-shaped, pure-white inside & usually slate-blue tinged outside. Easy & hardy in the UK in a good, moist soil in sun.
- 4.045.150 : ANEMONE RUPESTRIS** No data. From a R. McBeath coll. A charming little plant, like a miniature *A. obtusiloba*, with clumps of finely cut, bright green, parsley-like leaves and a succession of flowers on 15cm. decumbent, radiating stems appearing throughout the summer but peaking in late spring & early autumn. Like *A. obtusiloba* it can vary to yellow or purplish but this seed is from a form which is pure white inside & outside the flower. For a moist site in the peat garden or in peaty scree. Not to be confused with fellow-Himalayan *A. rupicola*, unrelated and with woolly seed-heads
- 4.045.209 : ANEMONE RUPICOLA** Nepal. Ex a C. Baker coll. About 30cm. high with a succession of large, white flowers. This has a stoloniferous habit and woolly seed-heads like the *A. hupehensis* group.
- 4.045.800 : ANEMONE TETRASEPALA**
- 4.046.010 : ANEMONE TRULLIFOLIA** China, Yunnan, Dali, Cang Shan. Ex SBEC 797 (A succession of ice-blue to white flowers from indigo stained buds on decumbent, branching 15-20cm. stems over a long period. A charming, recently introduced 'blue buttercup', most distinct from the *A. obtusiloba* group in its tight clumps of hairy spatulate, notched foliage.)
- 4.046.011 : ANEMONE TRULLIFOLIA** China, Qinghai. Ex SBQE. From R. McBeath.
- 4.046.020 : ANEMONE TRULLIFOLIA var. LINEARIS** China, Yunnan, Diqing, Bei Ma Shan, S of southernmost road-pass. 4100m. Ex KGB 657
- 4.050.000 : ANEMONOPSIS MACROPHYLLA**
- 4.050.010 : ANEMONOPSIS MACROPHYLLA** No data. A restricted monotypic genus endemic to Japan, in a few montane woodland of central Honshu. A choice, slow-growing perennial in *Ranunculaceae*, with long-pedicelled, nodding flowers, a little like columbines moulded in palest, amethyst-purple wax, rising in 50cm. high panicles above biternate basal foliage in late summer. Seldom seen but successful in humus-rich, semishaded conditions from the UK & eastern USA to New Zealand.
- 4.055.000 : ANISODUS LURIDUS** (*Scopolia lurida*, *S. stramonifolia*) No data. An intriguing, eastern relative of the European genus *Scopolia*, in *Solanaceae* and previously listed by us as *S. stramonifolia*. Distributed from Kashmir to SW China between 2700m. & 4300m., this is taller than the E European *S. carniolica*, reaching about 1m. in height. It often has downy, white undersides to the large leaves. The drooping, wide bells are much larger than those of *S. carniolica* in pastel-shades of pale apple-green tinged with brownish purple. Very hardy & trouble-free in a good, rich, well-drained soil in semi-shade.
- 4.060.000 : AQUILEGIA**
- 4.060.109 : AQUILEGIA ADOXIOIDES** (*Semiaquilegia adoxioides*) China, Qinghai. Ex SBQE 1157. (A dainty delight from the mountains of N Japan, S Korea & N China. Flights of spurless maroon flowers on 30cm. stems.)
- 4.060.160 : AQUILEGIA BUERGERIANA** The type-race is endemic to S Japan, from Honshu S into Shikoku & Kyushu.
- 4.060.210 : AQUILEGIA BUERGERIANA subsp. OXYSEPALA** No data. A NE Asian plant, spread from E Siberia, N China & Korea down into Japan. Purple sepals surround the creamy petals with incurved spurs. About 50cm. high.
- 4.060.390 : AQUILEGIA FLABELLATA** (*A. akitensis*) Originally described from cultivated stock, possibly selected from the following wild plant. More glaucous foliage & stems up to 50cm. high with cream & purple-blue columbines.
- 4.060.400 : AQUILEGIA FLABELLATA var. PUMILA** The wild phase, a smaller plant than the cultivated type-race, native to alpine elevations from N Japan, on Hokkaido, N to Sakhalin & N Korea.
- 4.060.411 : AQUILEGIA FLABELLATA var. PUMILA from WHITE FORM** This species was originally described from cultivated stock, selected from the wild phase, *A. flabellata* var. *pumila*, smaller than the 50cm. tall type-race & native to alpine elevations on the Japanese island of Hokkaido, extending N to Sakhalin and N Korea. This beautiful white form has possibly been further selected in cultivation, as *A. flabellata* 'Nana Alba', but its compact habit places it close to the wild *A. flabellata* var. *pumila*. Dissected, glaucous foliage and stems about 20cm. tall carrying fat, creamy white columbines.
- 4.060.500 : AQUILEGIA FRAGRANS**
- 4.060.510 : AQUILEGIA FRAGRANS** No data. A fine W Himalayan species, distributed from N Pakistan to Uttar Pradesh in subalpine scrub & meadows up to 2600m. Big, creamy columbines, sometimes tinged greeny blue, on 50cm. stems.
- 4.060.900 : AQUILEGIA NIVALIS**
- 4.061.100 : AQUILEGIA PUBIFLORA** India, Garhwal Himal, SW of Josimath. 3500m. Alpine meadow. D. Roberts coll. (Material we have had previously from this area has had flowers rather like those of the more western *A. nivalis* - bicoloured with paler violet sepals surrounding the purple-black, short-spurred petals - on taller, more robust plants of 30-50cm. but it can vary.)
- 4.062.000 : AQUILEGIA ROCKII** China, Yunnan. Ex KGB 176
- 4.063.009 : AQUILEGIA VIRIDIFLORA** China, Qinghai. Ex an SBQE coll. (Fascinating, sombre species with conical, spurred black-maroon flowers held in grey-green sepals on branching 30cm. stems. Some sun & good drainage.)
- 4.063.010 : AQUILEGIA VIRIDIFLORA**
- 4.080.000 : ARISAEMA AEQUINOCTIALE**

- 4.080.050 : ARISAEMA AKIENSE**
- 4.080.100 : ARISAEMA ALBUM** Khasia & Lushai Hills, 1300-1800m.
- 4.080.200 : ARISAEMA ALPESTRE**
- 4.080.490 : ARISAEMA AMURENSE** Russia, Siberia, Vladivostok, Kedrovaia Padj. Ex S & V 93-1 (GB)
- 4.080.491 : ARISAEMA aff. AMURENSE** Korea.
- 4.080.500 : ARISAEMA AMURENSE** No data. Appears to be the genuine species, an extremely hardy NE Asian plant, originally grown from seed received from the former USSR by Christoph Ruby. Impressively large, deeply veined foliage with broad leaflets of irregular size. Green spathes, striped with a paler shade, with elongated deflexed tips. Red autumnal fruits.
- 4.080.600 : ARISAEMA ANGUSTATUM**
- 4.080.650 : ARISAEMA ANGUSTIFOLIATUM**
- 4.080.700 : ARISAEMA ASPERATUM** China, Gansu
- 4.080.729 : ARISAEMA AURICULATUM** China, Yunnan (stock ex Kaichen, 1998)
- 4.080.749 : ARISAEMA BATHYCOLEUM** China, Yunnan (stock ex Kaichen, 1998)
- 4.080.780 : ARISAEMA BIAURICULATUM** China, Yunnan
- 4.080.800 : ARISAEMA BOREALE**
- 4.080.910 : ARISAEMA BREVIPES** China, Gansu (stock ex Kaichen, 1998)
- 4.081.109 : ARISAEMA CANDIDISSIMUM** (Chinese stock ex Kaichen, 1998)
- 4.081.110 : ARISAEMA CANDIDISSIMUM** This stock is derived from the one still grown at Ness Botanical Garden, former home of Forrest's backer, A.K. Bulley, from the original Forrest coll. made in.
- 4.081.111 : ARISAEMA CANDIDISSIMUM** No data. A superlative species from SW China, prerequisite for all who appreciate hardy plants of distinction, not just for "lovers of the curious". Appearing very late in spring, the unfolding trifoliate leaves rise up with the large spathes, elegantly peaked & ribbed arabesques, exquisitely sculptured in jade and rose-tinted alabaster. Not difficult if moist & well-fed in humus-rich soil in light shade, though it may resent too wet a site in winter, and maintained in UK gardens since the Forrest introduction from Yunnan early this century. Increases vegetatively but sets seed less frequently.
- 4.081.115 : ARISAEMA CANDIDISSIMUM from SELECTED PINK FORMS** (stock ex Kaichen, 1998)
- 4.081.299 : ARISAEMA CILIATUM** China. From R. McBeath : "green flushed brown. 50cm."
- 4.081.300 : ARISAEMA CILIATUM var. LIUBAENSE** China, Sichuan. 3600m. Ex C. Theune 369. (Recently described as a new var. after some years of oscillating between *A. ciliatum* & (improbably) *A. consanguineum*. An elegant, accommodating, hardy plant with parasols of many narrow leaflets and attenuated, hooded spathes striped in chestnut-brown and white.)
- 4.081.350 : ARISAEMA CLAVATUM** China, Yunnan. 1200m. (stock ex Kaichen, 2000)
- 4.081.400 : ARISAEMA CONCINNUM** Garhwal to S Tibet & N Burma, 1650-3600m.
- 4.081.500 : ARISAEMA CONSANGUINEUM** China, Yunnan, Dali, Cang Shan. 3050m. Ex E. Needham 2459. (From a high altitude wild coll. of this widespread species, distributed from the Himalaya into SW China. Cut leaves & hooded green spathes.)
- 4.081.510 : ARISAEMA CONSANGUINEUM** No data. About 1.5 m. tall with parasols of elegant, cut leaves & hooded green spathes, followed by nodding heads of scarlet fruits. One of the most widespread species growing through the Himalaya E into China. This is probably a race of Indian origin. A striking & very satisfactory plant outside in UK gardens.
- 4.081.550 : ARISAEMA aff. CONSANGUINEUM** China, Yunnan. Ex CLD 1519. (A distinct, dwarf (30cm. high) plant, grown in the UK as *A. fraternum* until it was identified as *A. consanguineum* at the RBG Edinburgh. Remember *A. ciliatum* var. *liubaense* was also attributed to *A. consanguineum*! This is a confusing group from which we are growing some striking plants, recently received from China. This has translucent, pale-yellow spathes rimmed with purple.)
- 4.081.551 : ARISAEMA aff. CONSANGUINEUM** China, Yunnan. (Received as a purple form of *A. brevipes*)
- 4.081.700 : ARISAEMA COSTATUM** Endemic to central & E Nepal between 2000 & 2700m. Ex an E. Needham coll.
- 4.081.701 : ARISAEMA COSTATUM** Nepal. From R. McBeath
- 4.081.800 : ARISAEMA DECIPIENS** Endemic to Meghalaya, 1500-2300m.
- 4.081.859 : ARISAEMA DILATATUM** China, Yunnan. 2800m. (The shiny, bright-green spadix curves in a S-shaped arabesque out of the glossy, translucent spathe striped with white & rich plummy brown. Large-leaved, arresting & distinct.)
- 4.081.889 : ARISAEMA DU-BOIS-REYMONDIAE** China, Yunnan (stock ex Kaichen, 1998)
- 4.081.900 : ARISAEMA ECHINATUM** Nepal, Sikkim & Bhutan, 2600-3800m.
- 4.082.100 : ARISAEMA ELEPHAS (*A. wilsonii*)** China, Yunnan, Cangshan. 3200m. Ex E. Needham 1024. (Illustrated in the recent AGS Bulletin on Chinese plants (Vol.64, No.2, p.186), where Ron McBeath writes "one of my favourites...striking &

handsome...reasonably easy to cultivate at Edinburgh." Mike Tucker (Somerset, UK) also finds it vigorous & hardy, though it appears early. Large, trifoliate, rugose leaves, often flushed purple & margined with red. Elongated black-purple spadices snake out from hooded spathes striped with parallel purple & translucent white lines. 40cm. Excellent seed-set in 1998.)

4.082.101 : ARISAEMA ELEPHAS From R. McBeath.

4.082.150 : ARISAEMA ERUBESCENS Nepal, Sikkim & Darjeeling Hills, 2000-2700m. (China, Yunnan)

4.082.170 : ARISAEMA ERUBESCENS f. LATISECTUM China, Gansu, SE of Tianshui. 1400m. (Wild collected seed of the Gansu race of this fine species. Generally accepted as Himalayan and mainly distributed in Nepal & Sikkim, the name may be misapplied here and this coll. may represent a different species but confirmation of such conjecture must await a review of the genus as a whole, a taxonomic nightmare. The Himalayan, type-race is characterized by its lovely foliage : parasols of many, pointed, lanceolate leaflets, dark, shining green above & greyish below. The hooded spathes, on rosy, red-streaked stems, are no less beautiful : white striped on a brown-pink to purplish ground and covered with a white bloom, justifying the specific name, 'blushing'. This race from the cold, continental climate of Gansu, will be temperature-hardy in most of Europe & N America.)(10)

4.082.174 : ARISAEMA ERUBESCENS : Form 4 : (stock ex Kaichen, 1998)

4.082.175 : ARISAEMA ERUBESCENS : Forms 5 : (stock ex Kaichen, 1998)

4.082.200 : ARISAEMA EXAPPENDICULATUM from BROWN FORM

4.082.210 : ARISAEMA EXAPPENDICULATUM from GREEN FORM Nepal, Sheopuri ridge. Ex an E. Needham coll. (Endemic to the forests of central & E Nepal between 2000m. & 3000m. Comparatively recently discovered & described in 1965. About 60cm. high with large divided leaves on chocolate-striped petioles. Somewhat more open spathes than the typical brown form.)

4.082.259 : ARISAEMA FARGESII China, Gansu. 1200m. (A fine species in the outstanding group with trifoliate leaves (like *A. candidissimum*). Shining green foliage & big, hooded spathes, striped in brown & white, around rich brown-purple spadices.) Hardy & adaptable with us so far, this should be as satisfactory in UK gardens as *A. candidissimum*.)

4.082.310: ARISAEMA FLAVUM No data. A widespread species, native to the Himalayan region from Afghanistan to W China, & quite easy in a sheltered, shaded site in the UK. About 50cm. high with pedately cut leaves & small, chubby, pale yellow spathes, sometimes purple-flushed, striped or netted & usually followed by tight clusters of scarlet fruits.

4.082.320: ARISAEMA FLAVUM ABBREVIATUM No data.

4.082.350 : ARISAEMA FORMOSANUM

4.082.379 : ARISAEMA FRANCHETIANUM China, Yunnan (stock ex Kaichen, 1998)

4.082.380 : ARISAEMA FRANCHETIANUM PURPUREOGALEATUM China, Yunnan, Zhongdian. 3600m. (PC 98)

4.082.400 : ARISAEMA FRATERNUM Khasia Hills at 2000m., N Burma & W China.

4.082.401 : ARISAEMA FRATERNUM China, Yunnan. Ex CLD 1519 (PC 98) (seed ex R. Hancock, 1998)

4.082.450 : ARISAEMA GALEATUM Sikkim, Bhutan, Mishmi Hills & N Burma, 2000-2500m.

4.082.500 : ARISAEMA GRIFFITHII Nepal, Sikkim, Darjeeling & Bhutan, 2400-3500m.

4.082.501 : ARISAEMA GRIFFITHII Nepal, Modi Khola valley towards Annapurna sanctuary. 2600m. Ex E. Needham 389. (A striking thing from the forests of central Nepal into Bhutan. Very large, broad spathes, curving over on themselves and with big, broad side-flaps, all netted with greeny white on a dark purple ground. The purple spadix-appendage narrows to a tail and extrudes. Two large, trifoliate leaves rise above all this. Quite hardy when established in humus-rich soil in shade in the UK.)(8)

4.082.550 : ARISAEMA GRIFFITHII var. PRADHANII No data. From a small area in Lachung, Lachen & Jeluk, in Sikkim, above 3000m, in *Rhododendron* scrub & in more open, rocky places, this is, in effect, the largest & most spectacular race of an extraordinary species. Two big leaves with 3 segments overtop the large spathe with broad, lateral lobes, up to 20cm. wide & purple-brown netted with creamy white. The purple spadix-appendage snakes out, tapering to a flagellate tail, 50cm. long.)

4.082.600 : ARISAEMA HACHIJOENSE

4.082.700 : ARISAEMA HAKONECOLA

4.082.800 : ARISAEMA HETEROCEPHALUM

4.082.900 : ARISAEMA HETEROPHYLLUM

4.083.000 : ARISAEMA INTERMEDIUM Distributed from Kashmir through Nepal to Sikkim, at up to 3800m. (China, Yunnan)

4.083.100 : ARISAEMA IYOANUM

4.083.200 : ARISAEMA IZUENSE

4.083.300 : ARISAEMA JACQUEMONTII Afghanistan to Bhutan & SE Tibet, 2800-4000m. Alpine & subalpine scrub in drier areas.

4.083.305 : ARISAEMA JACQUEMONTII Pakistan, Hazara, Kaghan valley, above Shogran Forest Resthouse. 2050-2670m. Ex SEP 263. (The most western & possibly the hardest of the Himalayan species, distributed between 2800-4000m., among the

subalpine scrub of drier areas from Afghanistan to Bhutan & SE Tibet. Leaves with 6 tapering leaflets and elegant, elongated spathes, striped longitudinally in green & white, with their extended, tortuous tips rising up well above the foliage.)

4.083.309 : ARISAEMA JACQUEMONTII Seed ex Stone's

4.083.310 : ARISAEMA JACQUEMONTII from NARROW-LEAVED FORM No data. The most western & possibly the hardest of the Himalayan species, distributed between 2800-4000m., among the alpine & subalpine scrub of drier areas from Afghanistan to Bhutan & SE Tibet. Most cultivated plants probably originate from Kashmir and this form with leaves with 6 tapering leaflets seems typical of these (received as var. *angustifolium*, a name for which we can find no authority). The elegant, elongated spathes, striped longitudinally in green & white, with their extended, tortuous tips rise up well above the foliage.

4.083.315 : ARISAEMA JACQUEMONTII from BROAD-LEAVED FORM No data. (var. *latifolium*)

4.083.320 : ARISAEMA aff. JACQUEMONTII Ex MECC 76

4.083.400 : ARISAEMA JAPONICUM

4.083.600 : ARISAEMAKISHIDAE

4.083.700 : ARISAEMA KIUSHIANUM

4.083.800 : ARISAEMA KOSHIKIENSE

4.084.000 : ARISAEMA LIMBATUM

4.084.109 : ARISAEMA LINGYUNENSE China, Yunnan (stock ex Kaichen, 1998)

4.084.200 : ARISAEMA LOBATUM China, Gansu

4.084.209 : ARISAEMA LOBATUM 1200m. (stock ex Kaichen, 2000)

4.084.300 : ARISAEMA LONGILAMINUM

4.084.600 : ARISAEMA MAXIMOWICZII

4.084.900 : ARISAEMA MAYEBARAE

4.085.000 : ARISAEMA MELEAGRIS China, Yunnan

4.085.200 : ARISAEMA MONOPHYLLUM

4.085.400 : ARISAEMA MULTISESTUM China, Yunnan. 1300m. (stock ex Kaichen, 2000)

4.085.500 : ARISAEMA NANUM

4.085.800 : ARISAEMA NEGISHII

4.086.200 : ARISAEMA NEPENTHOIDES Nepal, Modi Khola valley, near Sheopuri. 3050m. Ex E. Needham 410 (Widespread E from Nepal to W China, at altitudes up to 3300m., this is the only Himalayan member of Sect. *Arisaema* & unlike any other in its thick, digitate, glossy leaves on purple-blotched stalks. Handsome, irregularly brown-purple mottled, yellowish white, hooded spathes with distinctive, prominent side-lobes & a stubby, white spadix. Hardy in the UK & one of the first to flower.)

4.086.300 : ARISAEMA NIKKOENSE

4.086.400 : ARISAEMA NIVEUM

4.086.400 : ARISAEMA OCHRACEUM

4.086.450 : ARISAEMA OMEIENSIS (PC 98)

4.086.500 : ARISAEMA OSTIOLATUM Endemic to small part of the Phalut area of Singalila Ridge in Darjeeling District, 3300-3500m.

4.086.550 : ARISAEMA OVALE

4.086.650 : ARISAEMA PANGII China, Sichuan, Wolong. 3500m. (PC 98)

4.086.700 : ARISAEMA PENINSULAE

4.086.800 : ARISAEMA PETIOLULATUM Assam, Manipur to Kachin Hills, Burma. 2500-3000m.

4.086.830 : ARISAEMA POLYPHYLLUM Ex B.& S. Wynn-Jones 3904

4.086.850 : ARISAEMA PROLIFERUM

4.086.900 : ARISAEMA PROPINQUUM Distributed from Kashmir to Bhutan & SE Tibet, 2500-4000m.

4.086.910 : ARISAEMA PROPINQUUM (*A. wallichianum*) No data. A variable, hardy species, widely distributed through the Himalaya from Kashmir to Bhutan & SE Tibet between 2500 & 4000m. One or two trifoliate leaves emerge from brown-mottled cataphylls & deep purple, or occasionally green, hooded spathes, striped with white, surround the spadix, which tapers & extends at an angle from the mouth. The spadix-appendage is shorter than in the allied, rather similar, Nepalese *A. costatum*.

4.087.000 : ARISAEMA RHIZOMATUM Endemic to NE Assam, Delei Valley, 2300-3000m.

4.087.109 : ARISAEMA RHOMBIFORME China, Yunnan. 2500m. (This is settling down well in UK garden conditions from

material recently received from China, noticeably attractive and already increasing vegetatively. Large, trifoliate leaves with a broad, hooded, attenuated, rich brown spathe, strikingly striped with translucent white, surrounding a dark, purplish grey spadix.)

4.087.200 : ARISAEMA RINGENS.

4.096.210 : ARISAEMA ROBUSTUM No data

4.096.409 : ARISAEMA SAXATILE China, Hubei, near Shennongjia. 1500m. (PC 98) (Stock ex Kaichen, 2001.)

4.096.450 : ARISAEMA SAZENSOO

4.096.500 : ARISAEMA SEPPIKOENSE

4.096.600 : ARISAEMA SERRATUM (*A. japonicum* of gardens) Archibald Archive www.srgc.net

4.096.610 : ARISAEMA SERRATUM (subsp. *serratum*) Russia, Primorskiy Kray. (A form from the Russian Far East of this variable species distributed through Japan & adjacent NE Asia. About 80cm. high, with 2 leaves, each with about 10 leaflets, and green spathes, longitudinally striped with white, around a stout spadix. Very hardy & a good garden plant.)

4.096.750 : ARISAEMA SHIHMIENENSE China, Yunnan. 2600m. (stock ex Kaichen, 2001)

4.096.800 : ARISAEMA SHINANOENSE

4.097.010 : ARISAEMA SIKOKIANUM No data.

4.097.015 : ARISAEMA SIKOKIANUM var. (stock ex Kaichen, 1998)

4.097.020 : ARISAEMA SIKOKIANUM var. HENRYANUM 1200m. (stock ex Kaichen, 2000)

4.097.200 : ARISAEMA SIMENSE

4.097.300 : ARISAEMA SINII China, Yunnan

4.097.400 : ARISAEMA SOLENOCHLAMYS

4.097.610 : ARISAEMA SPECIOSUM No data. An eastern Himalayan, growing from Nepal into W China. A distinct, cylindrical tuber produces a single, large, trifoliate, red-margined leaf, rising to about 50cm. above the chocolate-purple & white, striped spathe, from whose elegantly attenuated hood the spadix appendage writhes out as a purple filament up to 50cm. long

4.097.800 : ARISAEMA SPEIROPHYLLUM

4.097.900 : ARISAEMA STENOPHYLLUM

4.098.000 : ARISAEMA SUWOENSE

4.098.050 : ARISAEMA TAIWANENSE Taiwan. Ex B.& S.Wynn-Jones 269 & 277

4.098.060 : ARISAEMA TAIWANENSE No. data. A spectacular species, described only in 1985 and endemic to the *Cryptomeria* & *Juniperus* forests of Taiwan, between 1000m. & 2500m. altitude. About 60cm. tall with pale purple spathes, mottled and striped with darker shades & drawn out to a purple thread up to 40cm. long. Superlative foliage, especially exciting as the stout, purple-mottled stem emerges with the numerous, down-turned leaflets showing their glaucous undersides, reddish, wavy margins & pendulous, thread-like tips. Proving hardy and growable in the UK.

4.098.100 : ARISAEMA TAKEDAE

4.098.300 : ARISAEMA TAKESIMENSE Korea. Archibald Archive www.srgc.net

4.098.600 : ARISAEMA TERNATIPARTITUM

4.098.800 : ARISAEMA THUNBERGII

4.099.007 : ARISAEMA TORTUOSUM Nepal, Khumbu Himal. 1800-3000m. Cloud-forest floor and open stony places. Ex C.Chadwell 3211. (One of the tallest in the genus, up to 1m. high or more, though this coll. has been 50-70cm tall. Stout, brown-mottled stems with 2 or 3, large, pedate leaves carry green spathes above the foliage. From these an extraordinary, tapering, S-shaped spadix-appendage, usually purple in this form, snakes outwards then upwards. Distributed through the Himalayan woodlands from the Punjab E into SW China at altitudes between 1400m & 2800m., this coll. from the shoulder of Everest seems to be reliably hardy in the UK.)

4.099.008 : ARISAEMA TORTUOSUM India, Garhwal Himal. Ex U. Pradhan 89-10. (An exceptionally tall, robust form of one of the tallest in the genus, up to 1m. high or more. Stout, purple-mottled stems with 2 or 3, large, pedate leaves carry green spathes above the foliage. From these an extraordinary, tapering, green or purple, S-shaped spadix-appendage snakes outwards then upwards. Distributed through the Himalayan woodlands from the Punjab E into SW China at altitudes between 1400m & 2800m., this seems to be a fairly reliably hardy species in the UK.)

4.099.009 : ARISAEMA TORTUOSUM Ex a J. Grimshaw coll. A particularly hardy, giant form established with Mike & Polly Stone (Inverness-shire, UK) & featured as an *Arisaema*-grove in an SRGC Journal a year or so ago.

4.099.010 : ARISAEMA TORTUOSUM No data. One of the tallest in the genus, up to 1m. high or more. Stout, purple-mottled stems with 2 or 3, large, pedate leaves carry green spathes above the foliage. From these an extraordinary, tapering, green or purple, S-shaped spadix-appendage snakes outwards then upwards. Distributed through the Himalayan woodlands from the Punjab E into SW China at altitudes between 1400m & 2800m., this seems to be a fairly reliably hardy species in the UK

4.099.100 : ARISAEMA TOSAENSE

4.099.200 : ARISAEMA UNDULATIFOLIUM

4.099.300 : ARISAEMA URASHIMA

4.099.310 : ARISAEMA URASHIMA (*A. thunbergii* var. *urashima*) A Japanese species, close to *A. thunbergii* but kept separate specifically by Ohwi. Usually with a single leaf with up to 15 leaflets. Spathe, greenish white flushing to red-purple & arching over the purple-brown spadix, which is drawn out into filiform appendage up to 60cm. long & dangling down to the ground

4.099.400 : ARISAEMA UTILE

4.099.500 : ARISAEMA VEXILLATUM Endemic to E Nepal, at Thudam, 3400m., & Inukhu, at 3833m.

4.099.600 : ARISAEMA VERRUCOSUM Punjab to Bhutan, 2500-4000m.

4.099.700 : ARISAEMA VERRUCOSUM var. UTILE (*A. utile*) Nepal, Langtang valley. 2750m. Ex an E. Needham coll. (Distinguished from the type by its dark, brown-purple spathe, shorter spadix appendage & shorter stem, though it grew 1m high in 1997. Part of a spectacular, variable group around *A. griffithii*, spread along the Himalaya from the Punjab to Bhutan.)

4.099.750 : ARISAEMA WARDII China, Gansu.

4.099.800 : ARISAEMA WATTII Naga Hills & Delei Valley, 2300-3000m. Archibald Archive www.srgc.net

4.099.829 : ARISAEMA WILSONII China, Yunnan. 2000m. (Close to *A. elephas* & sometimes considered synonymous but kept separate in recent publications : the central leaf-blade is much larger & the spadix is differently shaped.)

4.099.900 : ARISAEMA YAMATENSE var. SUGIMOTOI Don Elick's original, December, 1984, field-note : "s.l. to 500m. Dense *Cryptomeria* plantations and slopes among bamboo, cherry and azalea scrub. Full shade in deep, leafy soil. Copious water in summer ; dry in winter. 30-60cm. Should give a good percentage of fine, silver-leaved forms."

4.099.900 : ARISAEMA YAMATENSE var. SUGIMOTOI Japan, Honshu, Shizuoka Pref., Ogasa. Near sea-level. Ex a D. Elick 1994 coll. 13.11.94 (Raised from seeds gathered from selected forms with very prominent silver splashes on the 7-11 leaflets of the pedate leaves. A very local species, confined to the Tokaido district of Honshu, with long-acuminate, green spathes, yellowish inside. Flowers quite early, in late spring in the UK, at about 50cm. high but we expect it to grow taller when mature.)

4.099.901 : ARISAEMA YAMATENSE var. SUGIMOTOI Japan, Honshu, Shizuoka Pref., Tenryu River Gorge. D. Elick coll., November, 1996. (From selected forms with very prominent silver splashes on the 7-11 leaflets of the pedate leaves. A very local species, confined to the Tokaido district of Honshu, with long-acuminate, green spathes, yellowish inside. Flowers quite early, in late spring in the UK, at about 50cm. high but we expect it to grow much taller when mature.)

4.099.950 : ARISAEMA YOSHIOKAE

4.099.975 : ARISAEMA YUNNANENSE China, Yunnan, Gholigan Shan. 2400m. Rough grassland near stream. Ex I. Stokes 46.190 (A tall, elegant plant with one or two trifoliate leaves, greatly overtopped by stems of 50cm. or more, carrying a green & white striped spathe with a long, attenuate tip arching over the curved yellow-green spadix-appendage. Seems to be reasonably hardy in the UK.)

4.099.990 : ARISAEMA ZANLANSCIANENSE (PC 98)

ARISAEMA SP. China, Jimfo Shan. 1800m. E. Needham 4055

ARISAEMA SP. China, Jimfo Shan. 1700m. E. Needham 4076

4.102.000 : ASARUM

4.105.000 : ASTER

4.105.205 : ASTER ASPERULUS No data - "Himalayas". (Clumps of big, basal leaves produce large heads with mauve rays, surrounding a greenish yellow disc, on dark stems, from July until autumn frosts. Determined as this by Alan Leslie. Described by Robin White as "a super plant".)

4.105.500 : ASTER BATANGENSIS China, Yunnan, Xi Shan, W of Degen. 4200m. Ex KGB 504

4.105.609 : ASTER DELAVAYI China, Yunnan. Ex CLD 0494 (A superlative meadow-plant with compact basal leaf-rosettes & large heads carried singly on 30-40cm. stems. Many, long, narrow violet-blue rays, drooping at their tips. Especially striking before the disc florets open as their buds are purple-black. We have not found this too easy but we now have several plants established outside. Seeds are small so it is difficult to judge viability even with a lens but we shall be generous with them.)

4.105.709 : ASTER FLACCIDUS China, Qinghai. (A really excellent, neat, little daisy from a recent SBQE coll. Extremely early-flowering for an *Aster* this is a steppe-plant from a cold, dry area of western China, dependant on snow-melt rather than the monsoon for its growth-cycle. Lavender rays round yellow discs on 15cm. stems from neat basal rosettes.)

4.105.800 : ASTER GLEHNII S Korea, Ullung-do, Nam-yang. 200m. Ex M. Holmburg & U. Strindberg 92-259

4.106.900 : ASTER SOULIEI China, Yunnan, Mai La, NE of Shu La. 4060m. Ex KGB 337

4.107.110 : ASTER TONGOLENSIS From R. McBeath. Archibald Archive www.srgc.net

4.110.000 : ASTILBE

4.110.100 : ASTILBE CHINENSIS

4.110.120 : ASTILBE CHINENSIS var. DAVIDII South Korea. Ex M.S. Fillan 789 (A wild collection of this parent of many garden hybrids. Narrow, branched spires of fluffy raspberry-pink flowers above dark-green, divided leaves.)

4.110.500 : ASTILBE GRANDIS

4.110.700 : ASTILBE JAPONICA Japan, Honshu. Ex a H. Yoshioki coll.

4.111.100 : ASTILBE MACROFLORA From R. McBeath : "a rare species from Taiwan ; white flowers over dark leaves, to 30cm."

4.111.220 : ASTILBE MICROPHYLLA var. SAISUENSIS From R. McBeath (var. not in Ohwi).

4.111.500 : ASTILBE PLATYPHYLLA

4.111.700 : ASTILBE RIVULARIS Ex EMAK 0701.

4.111.720 : ASTILBE RIVULARIS var. MYRIANTHA China, Yunnan. Ex I.T. Stokes 163 (The splendid SW Chinese race of this imposing Himalayan perennial for a moist site. Worth growing for the large, beautifully textured, deeply veined, burnished bronze-green foliage alone. Immense branching heads of a myriad, tiny creamy flowers on 2m. stems very, very late in the season.) Archibald Archive www.srgc.net

4.112.000 : ASTILBE SIMPLICIFOLIA

4.112.200 : ASTILBE THUNBERGII

4.113.010 : ASTILBOIDES TABULARIS (*Rodgersia tabularis*) No data. Native to woodland in Korea & NE China, in Jilin & Liaoning, this is one of the finest herbaceous plants for a rich, moist site. Plume-like panicles of many, tiny, white flowers rise to about 1.5m above the huge, round, roughly hairy, parasol-like, apple-green leaves in summer.

4.120.010 : BELAMCANDA CHINENSIS No data.

4.130.000 : BERBERIS

BERGENIA EMEIENSIS from PINK FORM

4.134.505 : BERGENIA STRACHEYI Pakistan, Swat, Ushu Valley, Mahodan. 3580m. Ex SEP 362

4.135.000 : BERNEUXIA (A nonspecific genus in *Diapensiaceae* with the one species endemic to E Tibet.)

4.136.500 : BETULA ERMANNII Japan, Iwate, Mt. Iwate. 1500m

4.140.000 : BOENNINGHAUSENIA ALBIFLORA

4.145.210 : BRIGGSIA MUSCICOLA No data. The easiest to grow & best-established member of this cliff-dwelling, SW Chinese genus of *Gesneriaceae*. Flat rosettes of brilliant green, velvet leaves with tubular, pale-yellow flowers clustered on 10cm. stems. Temperature hardy in the UK but needs careful cultivation in high humidity & almost complete shade in the alpine-house: Treat seed as you would its relatives, *Jankaea* & *Ramonda*, or as for *Rhododendron*.

4.150.000 : BUDDLEIA

4.159.510 : CALOSCORDUM NERINIFLORUM No data. An attractive central Asian bulb, in a monotypic genus, related to *Allium*, spread from the Pamirs through S Russia & N China. Stems of about 20cm. bear umbels of up to 20, bright-pink flowers over a long period in late summer. Not at all difficult, though it resents wet conditions, especially in winter.

4.160.000 : CAMPANULA

4.161.010 : CAMPANULA CASHMERIANA Pakistan, Swat, Ushu valley. 3200-4100m. Ex SEP 386

4.161.010 : CAMPANULA CASHMERIANA No data.

4.162.550 : CAMPANULA PUNCTATA f. ALBIFLORA No data. The white-flowered form of this excellent 60cm. tall, rhizomatous perennial species from Japan. Lots of big, pendant bells over a very long period in summer. (100+)

4.168.000 : CARDAMINE

4.169.000 : CARDAMINE MACROPHYLLA China. Ex CDR 561.

4.169.910 : CARDIOCRINUM CATHAYANUM

4.169.960 : CARDIOCRINUM CORDATUM No data. The Japanese species with creamy white, trumpets. Distributed in moist woods on Honshu, Shikoku & Kyushu, at between 1m. & 2m. tall, this is dwarfer than Himalayan *C. giganteum*. Particularly notable for the crimson tints of the young, cordate foliage but is not usually so accommodating in the UK

4.169.970 : CARDIOCRINUM CORDATUM var. GLEHNII No data. The hardy northern race from N Honshu, Hokkaido & Sakhalin. A stouter plant with broader leaves and up to 20 flowers in a more elongated raceme..

4.170.010 : CARDIOCRINUM GIGANTEUM No data. The giant Himalayan woodlander with immense, white trumpet-lilies on stems 2-3m. high. Must have sheltered half-shade in cool, moist, very rich humus : "a most gluttonous feeder."

4.170.109 : CARDIOCRINUM GIGANTEUM from LIME-GREEN FORM China, Yunnan, Ciojjan. 2500m. Ex I. Stokes

- 46.009. (This would key-out in the latest 'Flora of China' as the Himalayan *C. giganteum* var. *giganteum* (only recorded there as just entering Tibet). The Chinese plants are usually described as dwarfer than the Indian forms but both this and the following reached over 3m. in height in our woodland. The parent of this seed carried 35, horizontally held flowers in a cylindrical raceme : great trumpet lilies in a incredible shade of creamy lime-green, exquisitely marked with vinous purple inside. It was hand-pollinated (with the aid of a stepladder) using another of similar colour so seed should have a high viability.)
- 4.170.110 : CARDIOCRINUM GIGANTEUM var. YUNNANENSE** China, Yunnan. From stock received from China but with no further data. (This form is much closer to the text-book description of *C. giganteum* var. *yunnanense*. Up to 20, white trumpet-lilies, very heavily marked inside with maroon, cluster atop the 3m. stem. Rich bronze tints on the large cordate leaves when they unfold in spring.)
- 4.180.000 : CARYOPTERIS
- 4.182.009 : CAULOPHYLLUM ROBUSTUM** (stock ex Kaichen, 1998)
- 4.190.000 : CIMICIFUGA BITERNATA** Japan & S Korea
- 4.190.100 : CIMICIFUGA DAHURICA** E Siberia, Korea & N China Archibald Archive www.srgc.net
- 4.190.200 : CIMICIFUGA FOETIDA** China, Yunnan. Ex an I. Stokes coll. (An elegant woodlander with an extraordinarily wide distribution - all the way from E Europe across into the Himalaya branching N into Siberia (where it has been called *C. ussuriensis*) & SE into China (where different races have been called *C.f.* var. *velutina* & *C. taquetii*). Good, biternate, dull-green foliage with 3-lobed leaflets above which rise, in late summer, arching, 2m. stems with long racemes of tiny white flowers with prominent egg-yolk yellow staminodes, followed by fine, upstanding fruiting follicles.
- 4.190.300 : CIMICIFUGA HERACLEIFOLIA** N China & E Siberia
- 4.190.400 : CIMICIFUGA JAPONICA** Japan, S Korea & China
- 4.190.470 : CIMICIFUGA MAIREI** From R. McBeath.
- 4.190.500 : CIMICIFUGA SIMPLEX** NE China, E Siberia, Japan, Kamchatka
- 4.190.550 : CIMICIFUGA SIMPLEX** Russia, Sakhalin. No further data.
- 4.190.600 : CIMICIFUGA SIMPLEX from 'BRAUNLAUB'** From a fairly small form, about 1m. high, with brown-tinted leaves, stems and calyces but white flowers, in late autumn
- 4.190.605 : CIMICIFUGA SIMPLEX from 'BRUNETTE'** ('Atropurpurea') A spectacular tall form, reaching 3m. or more, with deep, rich purple foliage and stems. It varies a little in intensity of colour from seed though this is derived from Robin White's selected stock, which now produces seedlings virtually 100% 'true'.
- 4.190.610 : CIMICIFUGA SIMPLEX from 'ELSTEAD'** About 1m. high, usually with the leaves & stems tinted purple. One of the latest of all to flower.
- 4.190.615 : CIMICIFUGA SIMPLEX from 'WHITE PEARL'** Another floriferous white selection of a shorter variant with pale-green leaves & calyces
- 4.192.500 : CIRSIUM PURPURATUM** Japan, Honshu, Shizuoka Pref., Fujisan, SW slope on lava-slides. 2600m. Ex a D. Elick coll. (Don wrote of his original 1996 coll. : "This is an immense alpine thing restricted to Mt. Fuji & some neighbouring volcanic slopes...easily reaches a yard by a yard or taller in size...it cannot be moved - ever - and is best put where it is to grow as soon as the seedlings have made 3-4 leaves...the flowers are virtually everlasting...I think it has a great future..." Wide clumps of huge, slashed, bright-green leaves & branched, 1m., cobwebby stems carrying big, nodding thistle-heads of bright crimson-purple flowers, emerging from purple-tinted involucre. Coarse but very classy indeed & of certain impact in bold but naturalistic perennial-plantings.)
- 4.192.805 : CIRSIUM SOULIEI** China, Gansu, Hexuo. 3000m.
- 4.200.110 : CLEMATIS AETHUSIFOLIA** (Sect. *Campanella*) No data. A very graceful, hardy, small climber, no more than 2m. high, distributed through N China, Mongolia and the Russian Far East. Very finely cut downy leaves & a profusion of little, narrow, nodding, pale yellow bells in late summer. Archibald Archive www.srgc.net
- 4.200.200 : CLEMATIS ARMANDII**
- 4.200.270 : CLEMATIS CHISANENSIS** (Subgen. *Atragene*) No data. A most distinct relative of *C. alpina*, endemic to the Chisan area of South Korea & to Cheju-do island, growing in mixed woodland between 1300m. & 1900m. Nodding, pale yellow, bell-shaped flowers with ribbed sepals, spurred and tinged with red at the base.
- 4.200.300 : CLEMATIS CHRYSOCOMA**
- 4.200.400 : CLEMATIS CONNATA**
- 4.200.500 : CLEMATIS FARGESII**
- 4.200.600 : CLEMATIS FINETIANA**
- 4.200.700 : CLEMATIS FLORIDA**
- 4.200.800 : CLEMATIS FUSCA**

- 4.200.810 : CLEMATIS FUSCA** No data. A more or less herbaceous climber, less than 3m. high, with urn-shaped flowers, characteristic of the N American *C. viorna* group, in dark purple, covered in red-brown wool & carried on short, densely hairy stalks. A fascinating but hardly spectacular species from the Russian Far East through N China to N Japan.
- 4.200.900 : CLEMATIS GLAUCA**
- 4.201.000 : CLEMATIS HERACLEIFOLIA**
- 4.201.055 : CLEMATIS KOREANA f. LUTEA** S Korea, Chejo-do, Halla-san, Yong-sil Valley. 1660m. Ex M.Holmberg & U. Strindberg 92-405. (A NE Asian representative of the circumpolar Sect. *Atragene*, allied to the European *C. alpina* &, most closely, to the N American *C. verticillaris*. A trailer or small climber, less than 3m. high, with coarsely toothed leaflets & pale yellow flowers in this form, in contrast to the dull violet of the type-race.) Archibald Archive www.srgc.net
- 4.201.060 : CLEMATIS KOREANA f. LUTEA** No data. A NE Asian representative of the circumpolar Sect. *Atragene*, allied to the European *C. alpina* &, most closely, to the N American *C. verticillaris*. A trailer or small climber, less than 3m. high, with coarsely toothed leaflets & pale yellow flowers in this form, in contrast to the dull violet of the type-race.
- 4.201.200 : CLEMATIS LANUGINOSA**
- 4.201.310 : CLEMATIS MACROPETALA** No data.
- 4.201.311 : CLEMATIS MACROPETALA - WHITE FORM**
- 4.201.500 : CLEMATIS MAXIMOWICZIANA**
- 4.201.600 : CLEMATIS MONTANA**
- 4.201.810 : CLEMATIS NAPAULENSIS** No data. A winter-flowering climber up to about 10m. high, occurring from N India into SW China and related to the Mediterranean *C. cirrhosa*. Clusters of flowers with cream-white sepals surrounding purple stamens, produced all winter under glass, where it is happiest in the UK. In growth in winter ; deciduous in late summer.
- 4.201.900 : CLEMATIS PATENS**
- 4.201.950 : CLEMATIS PETERAE** China, Gansu, SE of Tianshui. 1300m. (Wild seed of this climber with open panicles of many small, creamy white, fragrant flowers. Not in cultivation but quite close to *C. vitalba* & unlikely to be earth-shattering.)
- 4.202.000 : CLEMATIS PHLEBANTHA**
- 4.202.110 : CLEMATIS REHDERIANA** (Sect. *Campanella*) No data. A lovely & distinct, deciduous climber, which can reach 8m., from W China, with downy, pinnate leaves and panicles of nodding, sweetly scented, velvety, primrose-yellow bells in autumn.
- 4.202.200 : CLEMATIS SERRATIFOLIA** No data. A Korean climber, about 3m. high & close to *C. tangutica* but with ternate not pinnate leaves. Numerous, downy, soft-yellow flowers with purple stamens in late summer.
- 4.202.310 : CLEMATIS STANS** No data.
- 4.202.400 : CLEMATIS TANGUTICA** No data. Archibald Archive www.srgc.net
- 4.202.510 : CLEMATIS TIBETANA subsp. VERNAYI** No data. Climbs to about 4m. with greyish-green, ferny foliage & thick-textured, fleshy, yellow flowers. Most cultivated stock originates from the Ludlow, Sherriff & Elliot 13342 coll. made in 1947 in SE Tibet (long grown as "*C.orientalis*" or 'Orange Peel') but there have been more recent colls. from Nepal.
- 4.220100 : CODONOPSIS BENTHAMII**
- 4.220.200 : CODONOPSIS BHUTANICA**
- 4.220.300 : CODONOPSIS BICOLOR** China, Gansu
- 4.220.350 : CODONOPSIS BRAGAENSIS**
- 4.220.400 : CODONOPSIS BULLEYANA**
- 4.220.500 : CODONOPSIS CARDIOPHYLLA** From R. McBeath
- 4.220.620 : CODONOPSIS CLEMATIDEA** No data. The most frequently cultivated, often masquerading for others. Flopping stems rise to about 40cm. with many nodding, milky blue bells, exquisitely marked inside with purple & orange. Variable & widespread from the W Himalaya into Central Asia, at altitudes up to over 4000m. Usually easy & hardy if not too wet in winter.
- 4.220.710 : CODONOPSIS CONVULVACEA** No data. A twining perennial from E Burma & adjacent SW China. Up to 2m. high, it retires to a tuber when dormant in winter, when it can be stored cold & dry if pot-grown. Perfectly temperature-hardy but resents winter wetness & new growth is liable to slug-damage. Rather leathery, entire leaves & wideopen *Campanula*-flowers in clear, rich blue. Seed from Clive Brotherton who thinks this may be correctly named but note the following comments.
- 4.220.750 : CODONOPSIS DELTOIDEA** China, Gansu
- 4.220.800 : CODONOPSIS DICENTRIFOLIA** Ex EMAC 1008
- 4.220.801 : CODONOPSIS DICENTRIFOLIA** Ex EN 55
- 4.221.100 : CODONOPSIS FORRESTII** China, Yunnan, Dali, Tsang Shan, Huadianba. 2900m. Ex CLD1409. (Quite narrowly

distributed in Dali & Lijiang, SW Yunnan, between 1500 & 3600m. This is an extremely fine, climbing species allied to *C. convolvulacea* and the latest to flower in this group with a succession of large, clear-blue flowers continuing well into late autumn. These lack the crimson, central ring of *C. grey-wilsonii* but are at least as large and last longer.)

4.221.210 : CODONOPSIS GREY-WILSONII (*C. nepalensis* Grey-Wilson non Hara, most *C. convolvulacea* & *C. forrestii* of gardens) Widespread & maybe endemic in Nepal, this is superficially similar to *C. convolvulacea* but more vigorous, twining to over 3m., and with a striking crimson-ringed centre to the wideopen, lavender-blue flowers. According to Chris Grey-Wilson, most material grown as *C. convolvulacea* & *C. forrestii* belongs under this species, which he described in 1990 as *C. nepalensis*.

4.221.211 : CODONOPSIS GREY-WILSONII from WHITE FORM (*C. convolvulacea* 'Alba', *C. nepalensis* 'Himal Snow') From the superlative white form, originally selected out of a batch of seedlings from a 1954 Stainton, Sykes & Williams coll. in Nepal (possibly SSW 7765). Currently, advisedly, labelled 'Himal Snow' in the UK. A beautiful plant whatever its name.

4.221.300 : CODONOPSIS KAWAKAMII Taiwan, between Tayuling & Hohan Shan. 2580m. Ex B.& S. Wyn-Jones 1592

4.221.400 : CODONOPSIS LANCEOLATA Japan, Honshu, Nara pref., Omine Range. c. 400m. D. Elick coll. 12.11.91 (as *C. ussuriensis*. "Wide open bells reminiscent of a richly coloured *Fritillaria graeca* dangle in profusion from the leaf axils in late summer. Tough & tolerant...but will not stand disturbance. To 5m. Usually found in alluvial soil along streams ; not a plant of high elevations.")

4.221.419 : CODONOPSIS LANCEOLATA This stock was raised from seed collected in eastern Siberia and received as *C. silvestris*. A hardy climber (especially distinct in its winged seeds, unlike any other we know) from N China through E Russia & Korea to Japan. With such a wide geographical range it is variable. Archibald Archive www.srgc.net

4.221.420 : CODONOPSIS LANCEOLATA No data. A hardy climber (especially distinct in its winged seeds, unlike any other we know) from N China through E Russia & Korea to Japan. Though with such a wide geographical range it is variable, this seed is from specialist Paul Kneebone, who describes it as "one of the best...covered in largish green bells with purple markings", growing about 2.5m. high. Don Elick sent us seed from Japan some years ago & described it as reaching 5m., often in alluvial soil along streams, where "wide open bells reminiscent of a richly coloured *Fritillaria graeca* dangle in profusion."

4.221.500 : CODONOPSIS MACROCALYX China, Yunnan, Tsang-shan, Huadianba. 2900m. Ex CLD 1410

4.221.600 : CODONOPSIS MELEAGRIS

4.221.700 : CODONOPSIS MOLLIS

4.221.750 : CODONOPSIS NEPALENSIS

4.221.800 : CODONOPSIS NERVOSA

4.221.820 : CODONOPSIS NERVOSA var. MODESTA China, Gansu

4.221.850 : CODONOPSIS OBTUSA Afghanistan, Panjshir Valley. 2400m. Beside stream. Ex P. Furse 8643. (A dubious, obscure name, considered to be a synonym for *C. clematidea* or *C. ovata*. We acquired this long ago identified as *C. obtusa* & no other positive, alternative determination has been suggested. Certainly near *C. clematidea* but the big, ice-blue bells lack the internal markings and shade into glossy yellow-green instead. Hardy & reliable with us in a raised bed over many years.

4.221.905 : CODONOPSIS OVATA No data. A dainty perennial, 20-30 cm. tall, from the W Himalaya, up to 4200m. in Pakistan & Kashmir. Long, elegant, flaring, soft-blue bells, veined with purple-blue, rise from decumbent stems clad in small, downy leaves. A choicer plant than *C. clematidea*, which often masquerades as this in gardens, needing a well-drained situation.

4.221.906 : CODONOPSIS OVATA From R. McBeath.

4.222.010 : CODONOPSIS PILOSULA No data. A climber, close to *C. tangshen*, from montane scrub in N China. The true plant is allegedly in cultivation but, the confusion of names is such that we cannot give a total guarantee this is it. Seed from Dinah Batterham (Dorset, UK) who has grown it outside for many years & describes it as having shiny, yellow-green bells.

4.222.100 : CODONOPSIS PINIFOLIA Ex ACE 1625 Archibald Archive www.srgc.net

4.222.300 : CODONOPSIS ROTUNDIFOLIA India, Kumaon. Ex C. Chadwell 1770. (A tuberous perennial, vigorously twining to about 3m., with yellow-green bells, veined with vinous purple. A plant of montane scrub recorded up to 3800m.)

4.222.301 : CODONOPSIS ROTUNDIFOLIA Pakistan, Hazara, Kaghan Valley. Scrub. 2000-3000m. Ex C. Chadwell 2015. (A tuberous-rooted "rambling, herbaceous climber" with large, broad bells, green or purple outside, "greenish yellow mottled with red-purple on the inside.")

4.222.510 : CODONOPSIS TANGSHEN

4.222.510 : CODONOPSIS TANGSHEN No data. Another vigorous perennial climber reaching 3m. Big pale-green bells intricately marked with purple & often chequered inside. Native to SW China, in Sichuan & Hubei, up to 2500m.

4.222.600 : CODONOPSIS THALICTRIFOLIA Ex MECC93. From R. McBeath.

4.222.700 : CODONOPSIS TSINGLINGENSIS China, Gansu

4.222.750 : CODONOPSIS TUBULOSA China, Yunnan, Dali. 2400m. Ex Compton, D'Arcy & Rix 2025. (From stock grown by Harry Hay (Surrey, UK), who tells us the large, bright green flowers are much admired by visitors)

- 4.222.805 : CODONOPSIS VINCIFLORA** No data. A less vigorous member of the *C. convolvulacea* group from the E Himalaya & SW China with smaller, thinner-textured, toothed leaves & saucer-shaped, lilac-blue flowers. Twines delicately to no more than 1m. in height. Seedlings are best left to tangle the first season : sort out the dormant tubers & replant in winter..
- 4.222.900 : CODONOPSIS VIRIDIFLORA** China, Gansu
- 4.223.000 : CODONOPSIS VIRIDIS** Nepal, Langtang Valley. Ex C. Chadwell 1602.
- CODONOPSIS SP.** (Pseudocodonopsis group, i.e. *C. convolvulacea* type) China, Yunnan, Tsang-shan, Huadianba. 2900m. Ex CLD 1409. Unflowered as yet with Paul Kneebone.
- CODONOPSIS SP.** Ex ETE 406. From R. McBeath. Archibald Archive www.srgc.net
- 4.224.000 : CONANDRON RAMONDIODES**
- 4.225.000 : CORTUSA**
- 4.225.500 : CORTUSA MATTHIOLI var. YEZOENSIS** A race of this charming subarctic shade-lover endemic to the mountains of Hokkaido in N Japan. Particularly densely downy, lobed, rounded leaves & umbels of pendant rosy purple bells on 20cm. stems in summer. Like a little *Primula* in Sect. *Cortusoides* & thriving in a cool, peaty, part-shaded position.
- 4.226.000 : CORYDALIS : RENUMBER** from Henrik's book
- 4.227.000 : CORYDALIS ELATA** China, Sichuan, Emei Shan.
- 4.227.200 : CORYDALIS FLEXUOSA** China, Sichuan, Baoxing valley. Ex CDR 528
- 4.228.000 : CORYDALIS LATILOBA** China, Yunnan, Diqing Pref., Zhongdian. 3278m. Moist tufa. Ex KGB 732 (Masses of golden flowers on short stems from tufts of blue-green foliage. Recommended by Henrik Zetterlund, who stresses that from this altitude "it will certainly be much harder than *C. wilsonii*." Dry stored seed will give no problems in germination.)
- 4.228.210 : CORYDALIS LINSTOWIANA** No data. A delightful endemic of the mountains of Sichuan in SW China, described as "charming" and "a good garden-plant" by Liden & Zetterlund in their monograph. Usually biennial with a carrot-like root producing an overwintering rosette of bright green leaves & racemes of blue to purple-blue flowers in spring. This 2004 dry seed will germinate well next spring & it should sow itself where suited in light shade.
- 4.228.230 : CORYDALIS MAGADANICA** Russia, Primorskiy Kray, Magadan. ("A highly desirable plant" according to Liden & Zetterlund, narrowly endemic to the E Siberian province of Magadan, where it seems to be restricted to a few cliff-ledges filled with black, humus-rich soil. About 20cm. tall, the dense racemes of white flowers, sometimes tinted pink or greenish yellow, are complemented by the fleshy, glaucous, divided foliage. This will tolerate very low temperatures even when in flower but it needs cool summer conditions and has only a very short dormancy period then.)
- 4.228.500 : CORYDALIS ORNATA** Russia, Primorskiy Kray. (Very recently described & known only from the type collection. Along the same lines as *C. turtschaninovii* but a tetraploid with more divided, gaucoous leaves & an upward tilted spur to the flowers which can vary "from a pale lilac to clear blue" or "pure white with a crenulate lip lined thinly with blue...one of the most beautiful plants in existence." A woodland plant needing similar treatment to *C. turtschaninovii*.)
- 4.229.000 : CORYDALIS SMITHIANA**
- 4.229.608 : CORYDALIS TURTSCHANINOVII** (subsp. *turtschaninovii*) Russia, Khabarovskiy Kray, bank of Gorin river (tributary of the Amur). Archibald Archive www.srgc.net
- 4.229.609 : CORYDALIS TURTSCHANINOVII** (subsp. *turtschaninovii*) Russia, Primorskiy Kray, near Vladivostok. (A beautiful, tuberous-rooted species with clear-blue flowers, up to 30 carried in 15-20cm. tall racemes. Rated as "an outstanding plant" by Liden & Zetterlund. Grown in good, humus-rich soil in woodland conditions, it is successful outdoors in Scandinavia & the Baltic countries, where it appears too late in spring to be damaged by late frosts.)
- 4.229.950 : CORYDALIS WILSONII**
- 4.232.000 : COTONEASTER**
- 4.237.000 : CREMANTHODIUM**
- 4.237.500 : CREMANTHODIUM CAMPANULATUM** China, Yunnan, Da Xue Shan. 4040 m. A. Dickerson 01-06 (The normally laconic Sampson Clay rises to Farrerian rapture over this in 'The Present-Day Rock Garden' : "one of the glories of the race...small kidney-shaped leaves often coloured red underneath, and a disproportionately large head ...The deep maroon purple (rarely paler, or a less attractive dull crimson) rays are few and very broad, like big petals...so that the general effect is that of a single fragrant saucer-belled flower rather than a Composite head." These normally yellow-flowered, famously beautiful & famously recalcitrant Sino-Himalayan composites must be grown from fresh seed, which this certainly is. They resent disturbance & to quote Clay again : "Choice Cremanthodiums should have the same sort of treatment as is accorded to choice (Asiatic) Primulas."
- 4.238.000 : CREMANTHODIUM HELIANTHUS** China, Yunnan, Tian Chi, near lake W of Xiao Zhongdian. 3850m. Ex KGB 740
- 4.238.500 : CREMANTHODIUM PLEUROCAULE** China, Yunnan, Tian Chi, near lake W of Xiao Zhongdian. 3700m. Ex KGB 771

4.241.000 : CREPIS

4.245.000 : CYANANTHUS

4.248.000 : CYNOGLOSSUM

4.250.000 : DAPHNE

4.250.211 : DAPHNE BHOLUA from WHITE FORMS No data.

4.250.610 : #DAPHNE GIRALDII No data. A beautiful, deciduous shrub, about 60cm. high, from W China, in Shaanxi & Gansu. Terminal clusters of fragrant, rich yellow flowers in late spring. Can thrive on soils from limy clay to acid sand but can also be rather temperamental in our experience. When we were in Dorset we never grew it well ; we have not tried in Wales.

4.250.910 : DAPHNE RETUSA No data. Native to W China & SE Tibet.

4.251.010 : DAPHNE TANGUTICA No data. A fine, evergreen shrub from W China, about 1m. high, with clusters of fragrant flowers, rose-purple outside & lilac-tinged white inside. Almost always a good grower in UK gardens. Close to *D. retusa* but the two are distinct enough in cultivation.

4.264.010 : DEINANTHE CAERULEA No data. One of the most distinct & choicest of hardy plants. A herbaceous relative of *Hydrangea*, about 30cm. or a little more high. In late summer, downward-facing flowers, whose cup-shaped petals look as if they have been moulded out of lavender-blue wax around the central cluster of violet stamens, overtop the bristly, soft-green foliage. Known only from wet, shaded cliffs in Hubei, W China, it is certainly not impossible to please as it has been maintained in cultivation since Wilson's collection made almost 100 years ago but it is very particular in its needs. It must have almost complete shade and total shelter from cold or drying winds in a moist but well-drained, humus-rich compost.

4.265.000 : DELPHINIUM

4.265.100 : DELPHINIUM ALBOCOERULEUM China, Gansu

4.265.200 : DELPHINIUM ANTHRISCIFOLIUM var. CALLERYI China, Gansu. Archibald Archive www.srgc.net

4.265.310 : DELPHINIUM BRUNONIANUM No data. A variable species, widespread in nature above 4000m. from the Pamirs through the Himalaya to SE Xizang in China. This is from the form well-established in British gardens and close to *D. cashmerianum*. About 30cm. high with rounded, lobed foliage and chubby, downy black-eyed flowers of dusky purple with stubby spurs over a long period in summer. A good dwarf perennial for an open, well-drained site which is not dry in summer.

4.265.400 : DELPHINIUM BULLEYANUM China, Yunnan, Zhongdian, Nada. 3400m. Ex CLD 349

4.265.500 : DELPHINIUM CAERULEUM (Sikkim & Bhutan)

4.265.600 : DELPHINIUM CAERULEUM var. MAJUS China, Gansu

4.265.700 : DELPHINIUM CAMPYLOCENTRUM China, Gansu

4.265.800 : DELPHINIUM CANDELABRUM var. MONANTHUM China, Gansu

4.265.910 : DELPHINIUM CASHMERIANUM From R. McBeath. (Pakistan to N India)

4.266.000 : DELPHINIUM CERATOPHORUM China, Yunnan, Lijiang, Yulong Shan, between Bai Shui and Hei Shui. 2900m. Ex CLD 893.

4.266.100 : DELPHINIUM DELAVAYI China, Yunnan, Lijiang, Yulong Shan, between Bai Shui and Hei Shui. 2900m. Ex CLD 895. (Clumps of deeply divided basal leaves and branching stems about 60cm. high carrying a succession of long-spurred, deep blue-violet, white-eyed flowers from late summer into autumn. So far, seems a good, reliable garden plant.)

4.266.200 : DELPHINIUM DENSIFLORUM China, Gansu

4.266.300 : DELPHINIUM GIRALDII China, Gansu

4.266.400 : DELPHINIUM GRANDIFLORUM China, Gansu

4.266.409 : DELPHINIUM GRANDIFLORUM China, Yunnan, Bei Ma Shan to Dequn. 3400m. Rocky areas. Ex ACE 1324. (Proving an excellent perennial in the UK with stems about 1m. high carrying large, brilliant blue flowers.)

4.266.500 : DELPHINIUM KAMAONENSE var. GLABRESCENS China, Gansu

4.266.600 : DELPHINIUM KANSUENSE China, Gansu

4.266.650 : DELPHINIUM MAACKIANUM Russia, NE of Vladivostok. Ex a M. Wickenden coll.

4.266.700 : DELPHINIUM MALACOPHYLLUM China, Gansu

4.266.800 : DELPHINIUM MAXIMOWICZII China, Gansu

4.266.900 : DELPHINIUM MOLLIPILUM China, Gansu

4.267.000 : DELPHINIUM POTANINII China, Gansu

4.267.100 : DELPHINIUM PSEUDOCAERULEUM China, Gansu

4.267.210 : DELPHINIUM PYLZOWII No data. A more northern species than *D. tatsienense*, dwarfer and with larger, rich-blue

flowers. Seductively illustrated in 'The English Rock Garden' from a photograph taken by Bill Purdom in Gansu, where Farrer describes it as growing only about 15cm. tall but expect it to be about twice this in cultivation.

4.267.220 : DELPHINIUM PYLZOWII var. TRIGYNUM China, Gansu

4.267.300 : DELPHINIUM PYRAMIDALE (Pakistan to C Nepal, common in Kashmir)

4.267.400 : DELPHINIUM SIWANENSE var. LEPTOPOGON China, Gansu

4.267.500 : DELPHINIUM SOULIEI China, Gansu

4.267.600 : DELPHINIUM SPARSIFLORUM China, Gansu

4.267.700 : DELPHINIUM SUTCHUENENSE China, Gansu

4.267.800 : DELPHINIUM TATSIENENSE China, Gansu

4.267.810 : DELPHINIUM TATSIENENSE No data. Recorded up to 4000m. in S Sichuan & a delight in a raised bed, scree or other well-drained, sunny site with flights of azure-blue butterfly-flowers on widely branching, 30cm stems in summer.

4.267.900 : DELPHINIUM TRICHOPHORUM China, Gansu

4.275.000 : **DICENTRA**

4.275.410 : DICENTRA MACRANTHA No data.

4.275.450 : DICENTRA MACROCAPNOS No data. A slender Himalayan, herbaceous perennial, climbing to about 2m. by tendrils on its compound leaves and hanging out clusters of deep yellow, 2-lipped, heart-shaped flowers over a long period in summer. It scrambles among scrub between 1500m. and 3000m. in N India, from Uttar Pradesh into E Nepal.

4.275.500 : DICENTRA PEREGRINA

4.275.511 : DICENTRA PEREGRINA f. ALBA No data. From the rare white form of one of the world's most beautiful alpine-plants : exquisite blue-grey, fleshy, filigree-foliage topped by 10cm. stems with big, pendant, bleeding-heart flowers, pink in the usual form but, in this case, in crystalline, icy white. Best known in cultivation in the race (to which the name *D.p.* var. *pusilla* has been applied) from Japan, where it grows on the mountains of Hokkaido, Honshu & the Kuriles but the species extends NE to Sakhalin & E Siberia. In Japan it is said to inhabit "gravelly to sandy slopes mainly on volcanoes" which gives some clue as to its needs in cultivation. One Japanese grower recommends full sun in a compost of 1 part leaf-mould to 4 of grit with copious liquid fertilizer : "there being no fear of overfeeding." In the UK, similar treatment will suit provided that the clay-pot is plunged and it has a lot of water when in growth. In winter, it should be kept 'just moist', a counsel of perfection difficult to achieve in such a Spartan compost : too dry and the overwintering crown will shrivel & degenerate ; too wet and it will rot. This is a particular problem with tiny seedlings over their first winter. In the past, we grew this very well indeed in Dorset & remember having a particularly fine plant, when we were graced by a visit from E.B. Anderson, who kept exclaiming 'It's a triumph! It's a triumph.' We were never clever enough to persuade it to set much seed, however. In such matters, the non-pareil was Jack Crosland, who raised profuse seedlings in his Aberdeen-shire garden, whence they were generously disseminated, usually to their doom. It is not, nor will it ever be, an easily grown plant. Seed from the English non-pareil, John Dixon, carefully cold-stored since collection.

4.275.850 : DICENTRA SPECTABILIS Archibald Archive srgc.net

4.275.900 : DICENTRA TORULOSA No data. An annual climber with much cut foliage and, in late summer, golden-yellow, bleeding-heart flowers, followed by clusters of extraordinary, reddish, sinuous fruits opening to reveal black seeds. This can be grown successfully as a hardy annual, sown outside, in the UK, but it will flower earlier if seed is started under glass.

4.277.100 : DICRANOSTIGMA LACTUCOIDES (*Stylophorum lactucoides*) Ex C. Chadwell (as *Papaver nudicaule*) (Poppy-flowers with 4, clear yellow petals rise up on 15cm. stems around rosettes of glaucous, pinnately lobed leaves. Distributed on stony slopes & screes in the central Himalaya from N India through Nepal into Tibet.)

4.280.000 : **DISPOROPSIS**

4.280.000 : DISPOROPSIS ARISANENSIS Ex B. & S. Wynn-Jones 1864

4.280.100 : DISPOROPSIS ASPERA

4.280.209 : DISPOROPSIS FUSCO-PICTA (stock ex Kaichen, 1998)

4.280.500 : DISPOROPSIS PERNYI

4.281.500 : **DISPORUM**

4.281.609 : DISPORUM BODINIERI (stock ex Kaichen, 1998)

4.281.659 : DISPORUM BRACHYSTEMON (stock ex Kaichen, 1998) Archibald Archive www.srgc.net

4.281.700 : DISPORUM CANTONENSE Ex B. & S. Wynn-Jones 1424

4.281.800 : DISPORUM FLAVENS Ex B. & S. Wynn-Jones 872. An imposing, tall, Korean woodlander with bamboo-like stems up to 2.5m. high. Hanging, elongated, pale-yellow bells appear in the axils of the young leaves in spring.

4.282.400 : DISPORUM MACULATUM China (PC 98)

4.282.500 : DISPORUM NANTAUENSE Ex B. & S. Wynn-Jones 359

- 4.282.909 : DISPORUM SESSILE** (stock ex Kaichen, 1998)
- 4.283.000 : DISPORUM SMILACINUM** Ex B.& S.Wynn-Jones 713
- 4.283.100 : DISPORUM TAIWANENSE** Ex B.& S.Wynn-Jones 1513
- 4.283.200 : DISPORUM UNIFLORUM** Ex B.& S.Wynn-Jones 651
- 4.283.200 : DISPORUM VIRIDESCENS** China (PC 98)
- 4.285.000 : DRABA
- 4.285.500 : DRABA OREADES** No data. One of the most worthwhile E Asian species for the alpine-house enthusiast (not to be confused with the similarly named Moroccan *D. oreadum*). A high-alpine, widespread from Central Asia, through the Himalayas to SW China, in rocky places at altitudes between 3500m. & 5500m. Tiny, hairy rosettes compressed into pads or cushions with heads of yellow flowers on 2cm. stems. Not too difficult given careful cultivation by experienced growers.
- 4.290.000 : DRACOCEPHALUM
- 4.290.250 : DRACOCEPHALUM CALOPHYLLUM**
- 4.290.500 : DRACOCEPHALUM FORRESTII** China, Yunnan, Diqing, 5km. from Zhongdian, by the Lhasa road. 3220m. Ex KGB 728
- 4.299.000 : ELLISIOPHYLLUM PINNATUM** China, Sichuan, Emei Shan. Ex an E. Needham coll. (A little, downy, rhizomatous herbaceous perennial, which can form a dense ground-cover of cut foliage, where suited. A monotypic genus of the *Scrophulariaceae*, originally described in *Ourisia*, distributed here and there in mountain woodland from N India through China to Japan. White, funnel-shaped flowers from the leaf-axils in early summer.)
- 4.300.000 : ENKIANTHUS CAMPANULATUS** No data. A magnificent 2-3m., Japanese shrub from the mountains of Hokkaido & Honshu. Racemes of red-veined, cream bells. Scarlet & gold autumn colour. Rich, moist, acid soil.
- 4.320.000 : EPIMEDIUM
- 4.325.000 : ERANTHIS PINNATIFIDA**
- 4.335.005 : ERITRICHIMUM RUPESTRE var. PECTINATUM** (*E. strictum*) No data.
- 4.340.000 : ERYTHRONIUM JAPONICUM** Japan, N Honshu, near Kosaki.
- 4.340.001 : ERYTHRONIUM JAPONICUM** Japan, Honshu, Kiyose (near Tokyo). 40m.
- 4.340.002 : ERYTHRONIUM JAPONICUM** (*E. dens-canis* var. *japonicum*) Japan, Honshu, Fukushima Pref., near Shirakawa. (Sometimes included under *E. dens-canis* but a distinct enough plant, mainly distributed in the woodlands of the N & in Korea. The nodding, rich rose-purple flowers with deeper purple basal markings are at least twice the size of the European plant.)
- 4.340.050 : ERYTHRONIUM JAPONICUM** 500m. (stock ex Kaichen, 1998 & 2000)
- 4.350.000 : EUONYMUS
- 4.351.510 : EUONYMUS OXYPHYLLUS** (*E. yezoensis*) No data. A handsome native of Japan & Korea, this can form a small tree but is usually a vase-shaped, 2-3m. high shrub in cultivation in the UK. Dusky red-purple autumn foliage-colour & profusely borne bright carmine fruits, pendulous on slender stalks & opening to show the seeds clad in brilliant orange arils.
- 4.351.610 : EUONYMUS PHELLOMANUS** No data. A deciduous shrub, 2-3m. high, native to China in Gansu & Shensi, most plants in cultivation are probably derived from the Reginald Farrer collection made early last century. Square-shaped stems with conspicuous corky wings and angular, rosy-red, four-lobed fruits opening to show the seeds with rich-red arils.
- 4.360.000 : EUPHORBIA
- 4.360.505 : EUPHORBIA CORNIGERA** No data. One of a confused group of rather similar Himalayan species, this has gone around in cultivation as the allied *E. wallichii*, a name which has also been misapplied to *E. donii*. Much UK stock now grown under this name possibly originated from seed distributed as *E. wallichii* by the Kohli family, formerly collectors in war-torn Kashmir. An attractive hardy perennial, about 40cm. high with a mound-forming habit, apple-green foliage and yellow raylet leaves. Possibly best in the UK in a sunny, well-drained place as long as it does not become too starved or dry in summer.
- 4.361.005 : EUPHORBIA GRIFFITHII** No data. This superlative Bhutan endemic loves our moist, acid clay, growing 1m. or more high here with many, running stems, clad in lush, green or purple-tinged leaves, carrying wide heads of orange-red bracts over a long period in early summer. Accommodating but less luxuriant in drier soils. Seed from the clones 'Fireglow' & 'Dixter'.
- 4.361.100 : EUPHORBIA JACQUEMONTII**
- 4.361.110 : EUPHORBIA JACQUEMONTII** No data. A first-class Himalayan species forming a close, steadily expanding clump of bushy, 60cm. tall stems in a moist site with us. Fresh green foliage and heads of greenish gold.
- 4.361.200 : EUPHORBIA LONGIFOLIA**
- 4.361.410 : EUPHORBIA SCHILLINGII** No data. Perhaps the finest of the Himalayan herbaceous perennials split out of *E. wallichii*. Clumps of erect, 1m. tall stems with apple-green leaves & brilliant yellow heads in summer.
- 4.361.609 : EUPHORBIA SIKKIMENSIS** Sikkim. c.2400m. Ex C. Chadwell 2452

- 4.361.610 : EUPHORBIA SIKKIMENSIS** No data. Beautiful foliage, crimson-tinted as the shoots emerge in spring, with flat acid-yellow heads on 1.5m tall stems in late summer. An aristocrat for rich, moist soil.
- 4.361.800 : EUPHORBIA WALLICHII**
- 4.380.000 : FILIPENDULA KAMTSCHATICA** E Siberia into N Japan, on Hokkaido & N Honshu.
- 4.389.900 : FRITILLARIA ALBIDOFLORA** (Not recognized in 'Flora of China')
- 4.390.000 : FRITILLARIA AMABILIS**
- 4.390.050 : FRITILLARIA ANHUIENSIS** ('Flora of China' : Species No. 22)
- 4.390.108 : FRITILLARIA CAMTSCHATCENSIS** Russia, Sakhalin, near Tomari. (A tall, vigorous, markedly stoloniferous form from the southern part of this island between the Russian mainland & Japan. Up to 6, virtually black flowers on stems which can reach 60cm. in height. This grows well outside with us in our gravelly peat-bed.)
- 4.390.109 : FRITILLARIA CAMTSCHATCENSIS** Russia, Amur river valley. (A robust, more compact form, not exceeding 40cm., with up to 6 large, brown-black flowers.)
- 4.390.110 : FRITILLARIA CAMTSCHATCENSIS** No data. A marvellous plant with stems of 30cm. or more, whorled with rich-green leaves, carrying nodding, thick-textured bells in darkest brown-purple. Distributed from Japan in a N Pacific arc through Sakhalin & Kamchatka into Alaska & Canada. Utterly hardy & quite easy outside in the UK in a cool situation.
- 4.390.111 : FRITILLARIA CAMTSCHATCENSIS from YELLOW FORM** No data. A sought-after variant.
- 4.390.250 : FRITILLARIA CIRRHOSA** No data. Widely distributed from W Nepal to SW China between 3000m. and 4000m., this highly variable East Himalayan species is one of the least well-known in cultivation. It has long been the preserve of Scottish growers, whose cooler summers and colder winters seem to suit it, and this seed is from Mike and Polly Stone in Inverness-shire. A slender plant, between 15cm. and 50cm. tall with narrow foliage, often with the curled leaf-tips which give it its name, and pendant bells in varying shades of yellow-green, more or less chequered with brown. It flowers late and will be better kept drier in winter than in summer, when it might be best grown outside & kept as cool as possible.
- 4.390.251 : FRITILLARIA CIRRHOSA from SELECTED BROWN-CHEQUERED FORM**
- 4.390.300 : FRITILLARIA CIRRHOSA** China, Gansu ('Flora of China' : Species No. 4)
- 4.390.340 : FRITILLARIA CIRRHOSA var. PRZEWALSKII** : see *F. przewalskii* Archibald Archive www.srgc.net
- 4.390.350 : FRITILLARIA CIRRHOSA var. VIRIDIFLAVA** 3800m. (stock ex Kaichen, 2000)
- 4.390.400 : FRITILLARIA CRASSICAULIS** ('Flora of China' : Species No. 7)
- 4.390.420 : FRITILLARIA DAJINENSIS** ('Flora of China' : Species No. 18)
- 4.390.450 : FRITILLARIA DAVIDII** 1500m. ('Flora of China' : Species No. 24) (stock ex Kaichen, 2000)
- 4.390.500 : FRITILLARIA DELAVAYI** ('Flora of China' : Species No. 19)
- 4.390.550 : FRITILLARIA FUSCA** ('Flora of China' : Species No. 20)
- 4.390.600 : FRITILLARIA HALABULANICA** (Not recognized in 'Flora of China')
- 4.390.650 : FRITILLARIA HEBOKSARENSIS** (Not recognized in 'Flora of China')
- 4.390.709 : FRITILLARIA HUPEHENSIS** China, Hubei. 1500m. (stock ex Kaichen, 1998 & 2000) (Not recognized in 'Flora of China')
- 4.390.900 : FRITILLARIA JAPONICA** (var. *japonica*)
- 4.390.920 : FRITILLARIA JAPONICA var. KOIDZUMIANA**
- 4.390.940 : FRITILLARIA LIXIANENSIS** (Not recognized in 'Flora of China')
- 4.390.960 : FRITILLARIA MAXIMOWICZII** ('Flora of China' : Species No. 23) 800m. (stock ex Kaichen, 2000)
- 4.390.961 : FRITILLARIA MAXIMOWICZII** [#Frit.Icone link](#) Russia, Khabarovskiy Kray, E of Komsomolsk-na-Amure, by Gorin river (tributary of the Amur). Ex Seisums & Veerus 93-101. (From correctly identified stock of this species, mainly distributed in the Russian Far East but entering the northern provinces of China.. Stems about 30cm. tall with linear leaves in whorls carry 1-3, nodding, broadly campanulate flowers in brownish green, tessellated with darker shades. Absolutely hardy & may be possible outside in the UK but still a very uncommon plant. It needs cool conditions in humus-rich soil in part shade.)
- 4.390.980 : FRITILLARIA MELLAEA** (Not recognized in 'Flora of China') (stock ex Kaichen, 1998)
- 4.391.000 : FRITILLARIA MONANTHA** ('Flora of China' : Species No. 9)
- 4.391.050 : FRITILLARIA OMEIENSIS** (Not recognized in 'Flora of China')
- 4.391.100 : FRITILLARIA PINWUENSIS** China, Sichuan (Not recognized in 'Flora of China')
- 4.391.200 : FRITILLARIA PRZEWALSKII** ('Flora of China' : Species No. 16) China, Gansu (*F. cirrhosa* var. *przewalskii*)

4.391.300 : FRITILLARIA PUQIENSIS (Not recognized in 'Flora of China') (stock ex Kaichen, 1998 & 2000)

4.391.500 : FRITILLARIA ROYLEI

4.391.510 : FRITILLARIA ROYLEI No data. A western Himalayan species, distributed from Pakistan to Uttar Pradesh. Sturdier than *F. cirrhosa* with up to 4, nodding bells in yellowish green heavily shaded with brown & tessellated with dull purple. It can reach 60cm. in height & leaves can be both opposite & whorled. From correctly named parents, derived from stock grown in Oslo Botanic Garden. Most cultivated material originated in Kashmir. Needs cool summer conditions.)

4.391.550 : FRITILLARIA SICHUANICA ('Flora of China' : Species No. 3)

4.391.600 : FRITILLARIA SINICA ('Flora of China' : Species No. 8)

4.391.600 : FRITILLARIA TACHENGENSIS (Not recognized in 'Flora of China') Archibald Archive www.srgc.net

4.391.700 : FRITILLARIA TAIPAIENSIS China, Gansu ('Flora of China' : Species No. 5)

4.391.709 : FRITILLARIA TAIPAIENSIS China. 2500m. No further data. (Established by Peter & Penny Watt from material received from China. They describe it as a "grown-up version of *F. cirrhosa*" & find it much easier to grow in their warm, South Coast garden. Close to *F. cirrhosa* but it lacks the cirrhose tips to the bracts & the pendant yellow-green bells are heavily mottled with dense, irregular, purple spots. Distributed in Gansu, Hubei & Sichuan between 2000 & 3200m.)

4.391.800 : FRITILLARIA THUNBERGII ('Flora of China' : Species No. 12)

4.391.809 : FRITILLARIA THUNBERGII 800m. (stock ex Kaichen, 1998 & 2000) Long cultivated and now naturalized in Japan, this Chinese species has been much confused with *F. verticillata* & has been placed as a variety of it. The two are quite distinct. It seldom sets seed in the UK, but grows well outside in moist, humus-rich soil in light shade. Stems, carrying cream bells can reach 80cm. and are clothed in narrow leaves, the uppermost with tendril-like tips.

4.391.900 : FRITILLARIA TORTIFOLIA ('Flora of China' : Species No. 13)

4.392.000 : FRITILLARIA UNIBRACTEATA ('Flora of China' : Species No. 17) China, Gansu

4.392.009 : FRITILLARIA UNIBRACTEATA China. 3500m. No further data. (Established from material we received from China under the names *F. yunnanensis* & *F. lixianensis* (neither of which is recognized in the 'Flora of China' account of this genus) & tentatively identified as this species. Rather like a slender, drawn-up version of *F. caucasica*, about 20cm. tall with narrow-leaved stems carrying conical bells in bloomy, blackish purple in early summer. It is recorded from S Gansu, SE Qinghai & NW Sichuan in "thickets and meadows" between 3200m and 4700m.)

4.392.100 : FRITILLARIA USSURIENSIS ('Flora of China' : Species No. 14) (stock ex Kaichen, 1998)

4.392.107 : FRITILLARIA USSURIENSIS Russia, Primorskiy Kray, Kedrovaya Padj near Vladivostok. (Slender 50cm. tall stems with linear leaves, the uppermost with cirrhose tips, carry about 5, nodding bells. In this distinct form these are light pinkish brown. Do not dry out the dormant bulbs. A woodland plant still little-known in cultivation.)

4.392.108 : FRITILLARIA USSURIENSIS Russia, Primorskiy Kray, near Vladivostok. (From a different stock to the Chinese material included in our last list. Slender 50cm. tall stems with linear leaves, the uppermost with cirrhose tips, carry about 5, nodding bells in dark reddish-brown, dimly chequered with yellow. A species distributed in moist, shady places through the Russian Far East to Korea, just entering three of the northernmost provinces of China. Do not dry out the dormant bulbs. This woodland plant should certainly be growable outside in the UK but it is still little-known in cultivation.)

4.392.109 : FRITILLARIA USSURIENSIS China. No further data. (From material received as *F. maximowiczii*, this does not key-out satisfactorily in the 'Flora of China' account as either species. Martyn Rix, on seeing our stock in flower, feels it is closest to *F. ussuriensis* & its wingless capsule confirms this. Slender 50cm. tall stems with linear leaves, the uppermost with cirrhose tips, carry about 5, nodding bells in purple-brown, chequered with yellow. A species distributed in moist, shady places through the Russian Far East to Korea, just entering three of the northernmost provinces of China. Do not dry out the dormant bulbs. Should be growable outside in the UK but it is still little-known in cultivation.)

4.392.300 : FRITILLARIA VERTICILLATA ('Flora of China' : Species No. 11)

4.392.350 : FRITILLARIA VERTICILLATA var. THUNBERGII No data Archibald Archive www.srgc.net

4.392.400 : FRITILLARIA WABUENSIS 3000m. (Not recognized in 'Flora of China') (stock ex Kaichen, 2000)

4.392.500 : FRITILLARIA WALUJEWII 2000m. ('Flora of China' : Species No. 10)

4.392.550 : FRITILLARIA WALUJEWII var. SHAWANENSIS

4.392.600 : FRITILLARIA YUMINENSIS ('Flora of China' : Species No. 15)

4.392.609 : FRITILLARIA YUMINENSIS China, Xinjiang. (The famous 'blue frit.', endemic to NW Xinjiang at 1700-2800m. From a form in a delicate shade of pale slate-blue though it can vary to darker shades, pinks & more lilac-blue tints. Always very beautiful with 10 or more untessellated, nodding bells on stems of about 50cm. whorled with linear-lanceolate, cirrhose-tipped leaves. Possibly allied to the true, sympatric *F. verticillata*, this grows in the same area as *F. pallidiflora* & needs similar conditions in cultivation. Root growth starts early so do not dry it out in summer.)

4.392.650 : FRITILLARIA YUZHONGENSIS ('Flora of China' : Species No. 6)

4.415.000 : GENTIANA : c.150 spacing on c.100 species

4.418.810 : GENTIANA FARRERI No data but the parents of this seed are as near traceable as any to the material brought back in 1914 by Farrer & Purdom from the Gansu-Tibet border-ranges, where it "burns in the alpine turf like an electric jewel, an incandescent turquoise." Maintained at Edrom in SE Scotland by the Misses Logan-Home (who received their original stock from the great man himself), then Alex Duguid, who passed on some of the original stock to gentian enthusiast, Keith Lever in North Wales. From late summer into winter, its mats of "flopping, slender shoots...clad in very narrow foliage" produce upturned trumpets "of an indescribably fierce luminous Cambridge blue with a clear white throat." Not difficult for those who garden on acid soil in climates with cool moist summers. Be warned that Keith tells us even selfed seed produces a wide range of shades

4.425.610 : GENTIANA MAKINOI No data. A Japanese endemic from alpine bogs in Honshu. Erect stems, about 30cm. tall, with a cluster of slate-blue flowers in late summer. Confused in gardens with *G. triflora*, to which it is close but this is a dwarfer plant with narrower flowers. Sometimes has good autumn foliage-colour. No trouble in moist lime-free soil.

4.426.310 : GENTIANA PROLATA No data. A choice, neat, mat-forming, late summer flowering species from Sikkim & Bhutan, which has been around in cultivation irregularly over the past century, sometimes grown as *G. ornata*. Free with its rich-blue flowers, banded with purple & cream outside, which are smaller, narrower & earlier than those of its Chinese cousins.

4.428.510 : GENTIANA TRIFLORA A NE Asian meadow plant with deep-blue trumpets clustering, on upright stems, more than 30cm. tall. An attractive, reliable summer-flowering perennial with us. Moist, lime-free soil.

4.430.000 : GERANIUM

4.430.510 : GERANIUM CLARKEI from PURPLE FORMS No data. A beautiful relative of *G. pratense* from the mountain meadows of Kashmir between 2000 & 4000m. Mats of creeping rhizomes send up deeply cut leaves and 50cm. stems with large, veined flowers, blue-purple in these forms, usually grown in the UK as 'Kashmir Purple', over a long period in summer.

4.430.511 : GERANIUM CLARKEI from WHITE FORM India, Kashmir, Gadsar Valley. This pale phase, basically white, pencilled with pink veins & grown as 'Kashmir White', seems to be the geographical race dominant in this area. A lovely plant & not quite so vigorous as the blue-purple here. These different colour forms may have crossed and seedlings may vary.

4.430.512 : GERANIUM CLARKEI from PINK FORM From 'Kashmir Pink', which occurred in cultivation on Robin & Sue White's Hampshire nursery. The parent has large, clear-pink flowers. We have no idea what seedlings will be like.

4.430.600 : GERANIUM DAHURICUM NE Asia, S to Sichuan ; China, Gansu

4.430.700 : GERANIUM DONIANUM Himalaya, Tibet, Sichuan.

4.430.800 : GERANIUM ERIANTHUM E Siberia, Sakhalin, Japan, Alaska & N BC

4.430.810 : GERANIUM ERIANTHUM No data. A species about 50cm. tall with cut, downy foliage, spread from E Siberia & Japan through Alaska into NW Canada. Darkly veined flowers in early summer can be pale to deep violet-blue.

4.430.900 : GERANIUM ERIOSTEMON NE Asia, W China, Korea & Japan ; China, Gansu

4.430.919 : GERANIUM ERIOSTEMON A violet-blue flowered form of this NE Asian species, distributed through W China, Korea & Japan. Nodding flowers with flat or reflexing petals & downy, lobed soft-green leaves which colour well in autumn.(10+)

4.430.920 : GERANIUM ERIOSTEMON China, Qinghai. Ex SBQE. (A NE Asian species, distributed through W China, Korea & Japan. Nodding, muted violet flowers with flat or reflexing petals & downy, lobed soft-green leaves.)

4.431.000 : GERANIUM FARRERI China, Gansu, Min-Shan. 3600m. Apparently a very local plant in the wild & we believe all cultivated stock is from the Farrer & Purdom colls. made in this region around 1917. Archibald Archive www.srgc.net

4.431.050 : GERANIUM HIMALAYENSE No data. NE Afghanistan to Nepal.

4.431.060 : GERANIUM HIMALAYENSE No data. A ground-covering, western Himalayan plant, distributed from NE Afghanistan to Nepal. Easily grown in UK gardens with profuse, large, violet-blue flowers in summer.

4.431.061 : GERANIUM HIMALAYENSE No data. From 'Irish Blue'. NE Afghanistan to Nepal.

4.431.150 : GERANIUM KISHTVARIENSE India, Kashmir, Gulmarg above Srinagar. Ex R.Lancaster 159. (A distinct woodland plant about 50cm. tall, spreading by slender underground stolons. Wrinkled, cut, fresh-green foliage & rich crimson-purple flowers, marked centrally with white, in late summer. A fine colour but not so easy to establish & maintain in our experience, though we have at last induced it to grow well in a bed of rich soil in the shade of our moist woodland.)

4.431.200 : GERANIUM KRAMERI N. China, Korea, Japan.

4.431.300 : GERANIUM LAMBERTII C Nepal to Bhutan & Tibet.

4.431.200 : GERANIUM ORIENTALITIBETICUM China, Sichuan.

4.431.500 : GERANIUM POGONANTHUM Yunnan, Sichuan & N Burma.

4.431.510 : GERANIUM POGONANTHUM No data. A dainty plant with marbled basal leaves, from Yunnan, Sichuan & N Burma, where Frank Kingdon Ward collected it and compared its unique, nodding pink flowers with black anthers & "petals reflexed like a Martagon Lily's" to "a miniature *Nomocharis* at first sight." Not always easy & needs a little care.

- 4.431.580 : GERANIUM aff. PRATENSE** China, Quinghai. Ex SBQE 1153.
- 4.431.600 : GERANIUM PROCURRENS** E Nepal & Sikkim.
- 4.431.700 : GERANIUM PYLZOWIANUM** W China ; China, Gansu
- 4.431.760 : GERANIUM REGELII** No data. Large flowers in luminous, silvery violet-blue
- 4.431.800 : GERANIUM RUBIFOLIUM** India, Kashmir
- 4.431.900 : GERANIUM SHIKOKIANUM** S Japan, Quelpart Is.
- 4.432.010 : GERANIUM SINENSE** No data. A late-flowering, 60cm., woodland-plant of SW China, in Yunnan & Sichuan, long grown in gardens as the allied *G. delavayi* &, as such, extolled as a "connoisseur's plant" by such writers as A.T. Johnson & Will Ingwersen. Successions of many, small, inverted flowers with reflexed petals in ruby-black around a coral-pink base
- 4.432.100 : GERANIUM SOBOLIFERUM** Ussuri, Manchuria, Japan.
- 4.432.109 : GERANIUM SOBOLIFERUM** Russia, near Vladivostok. Ex a M. Wickenden coll. (A fine pink-flowered race of this species distributed through Ussuri, Manchuria & the mountains of central Japan. Branching stems about 40cm. high carry a many of small magenta-pink flowers over a long season. The deeply cut, ferny foliage is orange-tinted in spring & autumn.)(10+)
- 4.432.200 : GERANIUM STAPFIANUM** Yunnan, Sichuan, SE Tibet.
- 4.432.300 : GERANIUM THUNBERGII** N China, Japan, Taiwan. Archibald Archive www.srgc.net
- 4.432.500 : GERANIUM WALLICHIANUM** NE Afghanistan to Kashmir, according to Yeo.
- 4.432.500 : GERANIUM WALLICHIANUM** India, Garhwal Himal. Ex an Udai Pradhan coll. A vigorous, wide-spreading form of this variable species, which dies back annually to a stout, compact rootstock. Bright pink flowers with distinct white centres produced from midsummer until the first severe frosts on prostrate, trailing stems 60cm. or more long. Extremely enthusiastic here - plants moved to a new site among shrubs climbed to over 2m. up adjacent *Magnolia sieboldii*. New & excellent.
- 4.432.501 : GERANIUM WALLICHIANUM** Nepal, Trisuli Valley, near Syrabru. 2450m. Ex an E. Needham coll. (Rich pink flowers almost identical to the Garhwal coll. but much more compact with us than this or the following. Elizabeth Strangman, however, finds it "stronger growing & longer flowering than 'Buxton's Variety'". Fine autumn leaf-colours
- 4.432.550 : GERANIUM WALLICHIANUM 'BUXTONS VARIETY'** No data. Called after E.C. Buxton, who gardened in N Wales, this comes so evenly from seed that it may be a geographical race. More compact than the Garhwal form, the long succession of soft lavender-blue flowers with large white centres is unrivalled. "A pearl beyond price" wrote G.S. Thomas
- 4.432.610 : GERANIUM WLASSOWIANUM** No data. A 30cm. high species from the Russian Far East, Mongolia & N China. Downy, greyish leaves and deep purple flowers with darker violet veins. Hardy & trouble-free in the UK.
- 4.432.700 : GERANIUM YESOENSE** C & N Japan, Kuril Is.
- 4.432.800 : GERANIUM YUNNANENSE** Yunnan, N Burma.
- 4.440.010 : GLAUCIDIUM PALMATUM**
- 4.440.011 : GLAUCIDIUM PALMATUM var. LEUCANTHUM**
- 4.444.000 : HANABUSYA ASIATICA** *Campanula*-relative from Korea. Nodding, light blue bells. 30cm. Light shade.
- 4.445.000 : HEDYCHIUM**
- 4.445.550 : HEDYCHIUM DENSIFLORUM** India, Assam, Phutang-Balipara Frontier track. 2000m. Ex a 1938, F. Kingdon-Ward coll. (KW 13785). (A ginger lily, which is hardy in most of the UK, if planted out in rich soil in a warm, sheltered, part-shaded site. Of exotic aspect with lush foliage on stout, 1.5m. stems & small, dense spikes of deep-orange flowers in late summer.)
- 4.448.020 : HELLEBORUS THIBETANUS** No data. We have only a little seed of this, just enough to list, mainly from Will McLewin but some from Norman Stevens, who have both established this from the importation of cultivated plants last winter. We hope many British enthusiasts will also now have stock growing so this seed can help some of our overseas customers establish it. There is a possibility that some wild-collected seed from Gansu (type-locality of th synonymous *H. chinensis*) may yet materialise. We guess this stock originates from a Sichuan population. So far this seems growable with care. It flowered very early at about 15cm. with blush-white to pink flowers and showed some resentment of higher temperatures before going dormant later in summer. A cool, part-shaded site outside in the UK should suit it but for general garden purposes a pink hybrid will be a better bet.)
- 4.449.010 : HELONIOPSIS ORIENTALIS** No data. A diminutive relative of *Veratrum* from the montane scrub of N Japan into Korea & Sakhalin. Rosettes of shiny, evergreen, strap-shaped leaves, in close hummocks, send up, in early spring, racemes of starry, purplish-rose flowers, opening on stems of about 10cm. & later elongating to 50cm. in this typical form.
- 4.450.000 : HEMEROCALLIS**
- 4.460.000 : HOSTA**
- 4.461.010 : HOSTA MONTANA** No data. A handsome species from N Honshu & Hokkaido in Japan. with large, lustrous, cordate, green leaves & fine pale purple flowers on stems of 60cm. or more. Foliage appears earlier than any other here.

- 4.461.560 : HOSTA SIEBOLDIANA** No data. The classic, big, blue-leaved hosta from Honshu in Japan. Slowly forms great clumps of cordate leaves, deeply veined & wrinkled, in a characteristic blue-grey. Palest lavender flowers on 60cm. stems.
- 4.461.850 : HOSTA aff. VENTRICOSA** China, Jiang. 1100m. Ex E. Needham 6148. Archibald Archive www.srgc.net
- 4.461.910 : HOSTA VENUSTA** No data. One of the dwarfiest species, from central Honshu & Korea. Running mats of little, pointed, ovate leaves send up 20cm. stems with fine, large, purple flowers. Choice enough for a peaty bed.
- 4.470.000 : HYDRANGEA
- 4.470.805 : HYDRANGEA PANICULATA** No data. A fine 3m. high, deciduous shrub from Japan & SE China. Pyramidal panicles of creamy-white fertile flowers interspersed with showy sterile ones. Seed from the late-flowering cv. 'Tardiva'
- 4.471.210 : HYDRANGEA SERRATA** No data. A small, twiggy bush from Japan & S Korea. About 1m. high, with thin-textured, pale-green leaves & flat, lacecap corymbs of pink or pale-blue flowers. Seed from the cvs. 'Diadem' 'Tiara' & 'Miranda'.
- 4.475.000 : HYPERICUM
- 4.476.200 : HYPERICUM REPTANS** No data. Prostrate thready stems with large, rich-yellow flowers from scarlet buds in late summer. One of the best mat-formers, reputedly from over 3000m. in the Himalaya but vulnerable in a severe winter.
- 4.478.000 : INCARVILLEA** : Best easily accessible references : 'The Plantsman' (March, 1992), Vol.13, Part 4, p. 199 : 'Incarville emodi' ; 'The New Plantsman' Vol. 1, Part 1, page 36 : "A Survey of Incarvillea in Cultivation" ; 'The New Plantsman' Vol. 5, Part 2, page 76 : "A new Look at Incarvillea Subgenus Pteroscleris" (both by C. Grey-Wilson)
- 4.478.000 : INCARVILLEA ALTISSIMA** (Subgenus *Pteroscleris*)
- 4.478.030 : INCARVILLEA ARGUTA** China, Gansu
- 4.478.040 : INCARVILLEA ARGUTA** No data. In Subgenus *Amphicome* with *I. emodi*, this is a woody-based perennial, which can reach as much as 1m. in height.
- 4.478.080 : INCARVILLEA BERESOWSKII** (Subgenus *Pteroscleris*)
- 4.478.100 : INCARVILLEA COMPACTA** (Subgenus *Pteroscleris*) China, Gansu
- 4.478.120 : INCARVILLEA COMPACTA var. QINGHAIENSIS** (Subgenus *Pteroscleris*) Ex SBQE. Newly described from this material collected in 1997. From R. McBeath : "sumptuous reddish purple trumpets over grey-green leaves. 15-30cm. tall."
- 4.478.140 : INCARVILLEA DELAVAYI** (Subgenus *Pteroscleris*) No data.
- 4.478.149 : INCARVILLEA DELAVAYI from PINK FORM** (Subgenus *Pteroscleris*) From the lovely, old soft-pink form, 'Bee's Pink'. Possibly a wild variant or race, it comes evenly from seed. Archibald Archive www.srgc.net
- 4.478.150 : INCARVILLEA DELAVAYI from WHITE FORM** (Subgenus *Pteroscleris*) From a good white form (called 'Snowtop' by some in the UK) of this splendid, hardy, herbaceous perennial in *Bignoniaceae*. Beautiful, cut, basal foliage appears from stout, permanent tuberous roots & sturdy, 50cm. stems carry tropical-looking, trumpet-shaped flowers. Comes reasonably evenly from seed & will be a reliable perennial in good soil in a well-drained, sunny site in the most of Britain.
- 4.478.205 : INCARVILLEA EMODI** (Subgen. *Amphicome*) Pakistan, Rawalpindi, Margalla Hills. Crevices of limestone rocks. Ex an A. Paterson coll. (A woody based saxatile perennial from the drier western Himalayan regions, E from the Afghan border through Nepal. Pinnate basal foliage & spectacular one-sided clusters of brilliant pink, yellow-throated trumpets. A beautiful photograph of this, taken by Andrew Paterson in the site of his original seed coll., is in Phillips & Rix 'Perennials' Vol. 1. p. 178. Not difficult under alpine-house conditions with Alan King (Northants. UK) who maintains it from this 1987 coll.)
- 4.478.250 : INCARVILLEA FORRESTII** (Subgenus *Pteroscleris*) China, Yunnan, above Napa Hai. 3900m. Ex KGB 43
- 4.478.300 : INCARVILLEA GRANDIFLORA** (Subgenus *Pteroscleris*) (*I. mairei* var. *grandiflora*)
- 4.478.309 : INCARVILLEA GRANDIFLORA** (Subgenus *Pteroscleris*) China, Yunnan, Da Xue Shan. 4400m. Ex KGB 133
- 4.478.310 : INCARVILLEA GRANDIFLORA** (*I. mairei* var. *grandiflora*) No data.
- 4.478.400 : INCARVILLEA HIMALAYENSIS** (Subgenus *Pteroscleris*) (*I. mairei* 'Frank Ludlow' & 'Nyoto Sama')
- 4.478.500 : INCARVILLEA LUTEA** (subsp. *lutea*) (Subgenus *Pteroscleris*) China, SW Sichuan. Ex R. Lancaster 1986 (Primrose yellow trumpets on stems, almost 1m. tall. Said to be lime-tolerant, hardy and to like rich, well-drained soil in sun.)
- 4.478.550 : INCARVILLEA LUTEA subsp. LONGIRACEMOSA** (Subgenus *Pteroscleris*)
- 4.478.600 : INCARVILLEA MAIREI** (var. *mairei*) (Subgenus *Pteroscleris*) : see also *I. himalayensis*
- 4.478.601 : INCARVILLEA MAIREI** (var. *mairei*) (Subgenus *Pteroscleris*) Ex CLD 1214
- 4.478.602 : INCARVILLEA MAIREI** (var. *mairei*) (Subgenus *Pteroscleris*) China, Yunnan, Da Xue Shan. 4015m. A. Dickerson 01-10. (A fine species, about 30cm. high, which is usually successful in the a well-drained, sunny site in the open garden in the UK. Deeply veined leaves in dark, glossy green & up to 4, large, deep-pink, white-throated flowers on each stem.)
- 4.478.603 : INCARVILLEA MAIREI** (var. *mairei*) (Subgenus *Pteroscleris*) China, Yunnan, Da Xue Shan. 4015m. Ex ACE 1602. (A fine species, about 30cm. high, which is usually successful in the a well-drained, sunny site in the open garden in the UK. Deeply veined leaves in dark, glossy green & up to 4, large, deep-pink, white-throated flowers on each stem.)

- 4.478.612 : INCARVILLEA MAIREI from PINK FORM** (var. *mairei*) (Subgenus *Pteroscleris*) Stock ex Jim Jermyn.
- 4.478.650 : INCARVILLEA MAIREI var. GRANDIFLORA** (Subgenus *Pteroscleris*) : see *I. grandiflora*
- 4.478.700 : INCARVILLEA OLGAE** (Subgenus *Incarvillea*)
- 4.478.750 : INCARVILLEA POTANINII** (Subgenus *Incarvillea*)
- 4.478.800 : INCARVILLEA SINENSIS** (subsp. *sinensis*) (Subgenus *Incarvillea*)
- 4.478.825 : INCARVILLEA SINENSIS subsp. VARIABILIS** (Subgenus *Incarvillea*)
- 4.478.850 : INCARVILLEA SINENSIS var. PRZEWALSKII** (Subgenus *Incarvillea*) China, Gansu, S of Lanzhou. 1700m. ("This interesting plant does not appear to be in cultivation" comments Chris Grey-Wilson in a review of the genus. A local race from Gansu & Shensi, in a variable species-group. Quite unlike the familiar *incarvilleas* in subgenus *Pteroscleris*. A woody-based perennial, about 30cm. high, with erect, loose racemes of long-tubed, yellow bells. Farrer saw it here : "...set with finely feathered ferny foliage & bearing...a steady flight of lovely citron-yellow Allamandas...on the hottest & driest & barest exposures on the hot, bare, dry loess hills..." This has been a great success on the unfriendly clay on which Richard Riedy gardens in New Mexico and this is his American-grown seed derived from the wild collection we listed a few years ago.)
- 4.478.910 : INCARVILLEA YOUNGHUSBANDII** (Subgenus *Pteroscleris*) Tibet, no further data. (Received as living material from China, where the roots are gathered for medicinal use as a "general tonic". Smallest of the genus & endemic to the bleak steppe-country of the Tibetan Plateau above 4500m., it flowers stemless, as the ground-hugging, young leaves expand with the melting snows. It is closest to *I. compacta* & *I. himalayensis*. The purple-pink trumpets have not been entirely stemless in cultivation with us : we shall make a final judgement on the identity of our stock next year.)
- 4.478.950 : INCARVILLEA ZHONGDIANENSIS** (Subgenus *Pteroscleris*) China, Yunnan, Diqing, Zhongdian, Bai Ta Hai forest. Ex CLD 233 (A spectacular species described in 1998. Possibly allied to *I. mairei* but with numerous, smooth, thin-textured leaves and eventually forming clumps with many 20cm. flower-stems, each carrying about 3 huge bright magenta-crimson trumpets with white flares around their yellow throats. Flowering in earlier summer and proving to be an excellent garden plant in many parts of the UK.)
- 4.478.951 : INCARVILLEA ZHONGDIANENSIS** (Subgenus *Pteroscleris*) China, Yunnan, Diqing, S of Zhongdian. 3215m. Dry grassy banks on eroded hillsides. Ex ACE 1600. (A spectacular species described in 1998. Possibly allied to *I. mairei* but with numerous, smooth, thin-textured leaves and eventually forming clumps with many 20cm. flower-stems, each carrying about 3 huge bright magenta-crimson trumpets with white flares around their yellow throats. Flowering in early summer and proving to be an excellent garden plant in many parts of the UK.) Archibald Archive www.srgc.net
- 4.478.952 : INCARVILLEA ZHONGDIANENSIS** (Subgenus *Pteroscleris*) China, Yunnan, Diqing, Zhongdian. 3250m. A. Dickerson 01-11. (A fresh 2001 wild coll. of this spectacular species described in 1998.)
- 4.479.000 : *INULA*
- 4.479.310 : INULA HELIANTHUS-AQUATICUS** Ex CLD 658
- 4.479.410 : INULA HOOKERI** No data. An eastern Himalayan species, distributed at around 3000m. from Nepal into SW China. Spreading clumps with downy leaves send up, from late summer into autumn, many leafy stems, about 75cm. high, carrying huge, clear-yellow daisies with a multitude of long, thready rays, opening from shaggy buds.
- 4.479.610 : INULA RACEMOSA** No data. An imposing W Himalayan, spread from Afghanistan & W Nepal, N into NW China, at altitudes between 2000m. & 3000m. Tall stems, over 2m. high, rise from clumps of large, elliptic leaves & carry a long succession of yellow flower-heads, opening from dark-scaled buds, in leafy racemes through late summer.
- 4.479.660 : INULA ROYLEANA** No data. A W Himalayan plant, of quite restricted distribution in Pakistan & Kashmir, between 2000m. & 4000m. Close clumps of a few, very large, elliptic leaves and enormous flower-heads with very long, narrow rays, solitary on stiff, 60cm. stems. Not so easy but well worth trying in rich, moist but well-drained, soil in sun or partial shade.
- 4.480.000 : *IRIS* : Best accessible refs. : J. Waddick & Z Yu-tang 'Iris of China' & B. Mathew 'The Iris'. Nomenclature follows Waddick & Yu-tang.
- 4.480.000 : IRIS ANGUIFUGA**
- 4.480.050 : IRIS BARBATULA**
- 4.480.100 : IRIS BLOUOWII** (Sect. *Hexapogon*) (Sect. *Pseudoregelia*)
- 4.480.200 : IRIS BULLEYANA** (Ser. *Sibiricae*) China, Yunnan, SE of Zhongdian, Bi Ta Hai. 3400m. Semi-open positions from stream-edges to dry hillsides. Ex T. Smyth 96-209. (About 50cm. tall with rich violet-blue flowers, with the falls intricately streaked and dotted with violet on a white ground. Easily grown in a moist site in the UK, this was long thought to be a natural hybrid between *I. chrysographes* and *I. forrestii* but recent investigations show extensive, homogenous colonies.)
- 4.480.201 : IRIS BULLEYANA** (Ser. *Sibiricae*) China, Yunnan, Zhongdian. 3300m. A. Dickerson 01-12
- 4.480.250 : IRIS BUNGEI** (Ser. *Tenuifoliae*)
- 4.480.300 : IRIS CATHAYENSIS** (Ser. *Tenuifoliae*)
- 4.480.509 : IRIS CHRYSOGRAPHES** (Ser. *Sibiricae*) China, Yunnan, Da Xue Shan. 3950m. A. Dickerson 01-13

- 4.480.520 : IRIS CHRYSOGRAPHEs from DARK FORMS** (Ser. *Sibiricae*) No data. A fine wet-grower in Series *Sibiricae* from SW China. We doubt if many named stocks are indeed vegetatively propagated. A good range of velvety purple-blacks can be expected from seed, though hybrids can occur with other members of Ser. *Sibiricae* & even Ser. *Californicae*
- 4.480.530 : IRIS CHRYSOGRAPHEs var. RUBELLA** (Ser. *Sibiricae*) No data, though this variant would seem to stem from seed introduced under Kingdon Ward 4025. Rather dwarf, about 30cm. high, with redder purple flowers.
- 4.480.600 : IRIS CLARKEI** (Ser. *Sibiricae*) Archibald Archive www.srgc.net
- 4.480.650 : IRIS COLLETTII** (stock ex Kaichen, 1998 : with R. & R. Wallis)
- 4.480.670 : IRIS CONFUSA** (Sect. *Lophiris*)
- 4.480.700 : IRIS CUNICULIFORMIS**
- 4.480.720 : IRIS CURVIFOLIA** (Sect. *Hexapogon*) (Sect. *Pseudoregelia*)
- 4.480.730 : IRIS DECORA**
- 4.480.739 : IRIS DECORA** (*I. nepalensis*) (Subgen. *Nepalensis*) Nepal, SW of Amijilassa. 2500m. On grassy banks & rocky cliffs. Ex KEKE 256. (An attractive pale lavender-blue form of this most distinct Himalayan species. Grassy leaves and 20cm. tall stems of flat, orange-crested flowers. Recorded up to 4300m., this is temperature-hardy but needs a very dry winter rest when it dies back completely to its swollen rootstock. Cool, moist summer-growing conditions are best.)
- 4.480.750 : IRIS DELAVAYI** (Ser. *Sibiricae*) China, Yunnan. Ex an Ivor Stokes coll. (A tall, handsome plant from damp sites in Sichuan & neighbouring Yunnan. Clumps of erect sword-leaves about 1m. high, overtopped by the stout 1.5m. stems carrying several, large violet-purple flowers with white, dagger-like signals on the broad blades of the falls. Easy & vigorous in normal border-conditions in our wet clayey loam but can be grown as a marginal plant beside a pond in dry gardens.)
- 4.480.850 : IRIS DICHOTOMA** (Subgen. *Pardanthopsis*)
- 4.480.870 : IRIS DOLICHOSIPHON**
- 4.480.900 : IRIS ENSATA** (Ser. *Laevigatae*)
- 4.480.930 : IRIS FARRERI**
- 4.480.950 : IRIS FLAVISSIMA** (Sect. *Hexapogon*) (Sect. *Pseudoregelia*)
- 4.480.970 : IRIS FORMOSANA** (Sect. *Lophiris*)
- 4.481.000 : IRIS FORRESTII** (Ser. *Sibiricae*) No data. Tight clumps of grassy foliage with pale lemon-yellow flowers veined with brown. Sometimes crosses with other members of Ser. *Sibiricae*.
- 4.481.100 : IRIS GONIOCARPA** (Sect. *Hexapogon*) (Sect. *Pseudoregelia*) (stock ex Kaichen, 1998)
- 4.481.200 : IRIS GRACILIPES** (Sect. *Lophiris*)
- 4.481.300 : IRIS GRIJSII** (Ser. *Chinenses*)
- 4.481.350 : IRIS HALOPHILA** (including *I. sogdiana*)
- 4.481.400 : IRIS HENRYI** (Ser. *Chinenses*)
- 4.481.500 : IRIS HOOKERIANA** (Sect. *Hexapogon*) (Sect. *Pseudoregelia*) No data.
- 4.481.600 : IRIS JAPONICA** (Sect. *Lophiris*)
- 4.481.700 : IRIS KEMAONENSIS** (Sect. *Hexapogon*) (Sect. *Pseudoregelia*)
- 4.481.730 : IRIS KOBAYASHII** (Ser. *Tenuifoliae*)
- 4.481.750 : IRIS LACTEA**
- 4.481.770 : IRIS LACTEA var. CHINENSIS** (*I. biglumis*)
- 4.481.800 : IRIS LAEVIGATA** (Ser. *Laevigatae*)
- 4.481.830 : IRIS LATISTYLA** (Sect. *Lophiris*)
- 4.481.840 : IRIS LEPTOPHYLLA** (Sect. *Hexapogon*) (Sect. *Pseudoregelia*)
- 4.481.850 : IRIS LOCZYI** (Ser. *Tenuifoliae*)
- 4.481.870 : IRIS MAACKII**
- 4.481.880 : IRIS MANDSHURICA** (Sect. *Hexapogon*) (Sect. *Pseudoregelia*) Archibald Archive www.srgc.net
- 4.481.904 : IRIS MILESII** (Sect. *Lophiris*) India. Ex R. McBeath 1736. An 1m. tall 'Evansia' from the W Himalayan region, up to 2700m. Fans of pale-green foliage & branched stems of yellow-crested flowers in lilac-pink mottled with purple, from spreading, green rhizomes. "Beautiful but rarely seen" writes Martyn Rix. Hardy & trouble-free in an open, well-drained site.(10+)
- 4.481.905 : IRIS MILESII** (Sect. *Lophiris*) No data. An 1m. tall 'Evansia' from N India, in the W Himalayan region, up to 2700m. Fans of pale-green foliage & branched stems of yellow-crested flowers in lilac-pink mottled with purple rise from spreading,

green rhizomes. "Beautiful but rarely seen" writes Martyn Rix. Hardy in an open, well-drained site.

4.482.000 : IRIS MINUTOAUREA (Ser. *Chinenses*)

4.482.100 : IRIS NARCISSIFLORA (Sect. *Hexapogon*) (Sect. *Pseudoregelia*)

4.482.150 : IRIS ODAESANENSIS

4.482.200 : IRIS PANDURATA China, Gansu, S of Lanzhou. (One of several species in Sect. *Hexapogon* (Sect. *Pseudoregelia*) native to this drier part of W China, none of which is well-known in cultivation. This Gansu & Qinghai endemic has been confused with the more widespread allied *I. tigridia* from NE China & Mongolia. A very desirable dwarf plant from grassy steppe with tufts of linear, greyish foliage about 15cm. high rising from a small, tuber-like rhizome with thick, fleshy roots & covered with the yellowish fibrous bases of the old leaves. Big red-purple flowers with yellow beards carried in pairs on 3-12cm. stems in late spring. Unlikely to be easy to grow in wetter, softer climates and deserving of alpine-house cultivation in Europe.)

4.482.300 : IRIS POLYSTICTA (Ser. *Tenuifoliae*)

4.482.350 : IRIS POTANINII (Sect. *Hexapogon*) (Sect. *Pseudoregelia*)

4.482.400 : IRIS PROANTHA (*I. pseudorossii*) (Sect. *Lophiris*)

4.482.430 : IRIS PSAMMOCOLA

4.482.450 : IRIS QINGHAINICA (Ser. *Tenuifoliae*) Archibald Archive www.srgc.net

4.482.500 : IRIS ROSSII (Ser. *Chinenses*)

4.482.550 : IRIS RUTHENICA

4.482.550 : IRIS RUTHENICA f. LEUCANTHA 2700m. (stock ex Kaichen, 2001)

4.482.580 : IRIS RUTHENICA var. BREVITUBA

4.482.600 : IRIS RUTHENICA var. NANA

4.482.711 : IRIS SANGUINEA from WHITE FORM No data. A close, NE Asian relative of the more western *I. sibirica*, with which most cultivated stock is likely to have crossed About 50cm. high with white flowers, usually purple-veined.

4.482.720 : IRIS SANGUINEA var. YIXINGENSIS

4.482.750 : IRIS SCARIOSA (Sect. *Hexapogon*) (Sect. *Pseudoregelia*)

4.482.809 : IRIS SETOSA (Ser. *Tripetalae*) Japan. No further data. Ex an AGS expedition to Japan coll. A handsome species, spread from N China across into Alaska & E to Newfoundland. This & the next are very hardy & best in a rich, moist site.

4.482.820 : IRIS SETOSA subsp. HONDOENSIS

4.482.850 : IRIS SETOSA from WHITE FORM From a beautiful, white form. We guess this is of Asian not N American origin. About 50cm. high with broad, flat falls, yellow-tinged at the base, in summer. Almost all, seedlings will be white.

4.482.880 : IRIS SICHUANENSIS (Sect. *Hexapogon*) (Sect. *Pseudoregelia*)

4.482.900 : IRIS SONGARICA (Ser. *Tenuifoliae*)

4.482.930 : IRIS SPECULATRIX (Sect. *Lophiris*)

4.482.950 : IRIS SUBDICHOTOMA (Subgen *Pardanthopsis*)

4.483.010 : IRIS TECTORUM (Sect. *Lophiris*) No data. Ex Alan Edwards Archibald Archive www.srgc.net

4.483.011 : IRIS TECTORUM from WHITE FORM (Sect. *Lophiris*) No data.

4.483.050 : IRIS TENUIFOLIA (Ser. *Tenuifoliae*)

4.483.109 : IRIS TIGRIDIA (Sect. *Hexapogon*) (Sect. *Pseudoregelia*) Stock ex Kaichen, 2001.

4.483.150 : IRIS TYPHIFOLIA (Ser. *Laevigatae*) Split from *I. ensata*.

4.483.170 : IRIS UNIFLORA

4.483.200 : IRIS VENTRICOSA (Ser. *Tenuifoliae*)

4.483.250 : IRIS WATTII (Sect. *Lophiris*)

4.483.300 : IRIS WILSONII (Ser. *Sibiricae*)

4.490.010 : KIRENGESHOMA PALMATA No data. A most distinct, choice, slow-growing, hardy perennial in *Hydrangeaceae*, endemic to the mountain-woodlands of S Japan, where it occurs locally on Kyushu & Shikoku. About 1.5m. high here with erect, purple-black stems, clad in soft-green, palmately lobed, maple-like foliage & ending in branched cymes of waxy, pale-yellow bells in autumn. Flowers with us until cut down by the first severe frosts and loves our acid soil & cool, moist summers. Bob Brown (Worcestershire, UK) tells us that he has no problems growing it on his very alkaline soil (pH 8.5) as well.)

4.495.209 : LATHYRUS DAVIDII Russia, near Vladivostok.. Ex a M. Wickenden coll. (Stems reaching about 1m. in height, more or less cling with the apical tendrils on the large, pale-green leaves. Strangely colour pale brown flowers in summer.)

4.500.000 : LEONTOPODIUM

4.509.000 : LEYCESTERIA CROCOTHYRSOS

4.510.000 : LIGULARIA

4.510.005 : LIGULARIA ALATIPES China, Yunnan, Lijiang, Yulong Shan, Xie Ren Jie Valley, above Mu Shou Go. 3300m. Ex CLD 1189

4.510.100 : LIGULARIA DENTATA

4.510.150 : LIGULARIA FISCHERI Nepal. Ex MECC 59. From R. McBeath.

4.510.200 : LIGULARIA HODGSONII

4.510.300 : LIGULARIA MACROPHYLLA

4.510.350 : LIGULARIA PRZEWALSKII

4.510.400 : LIGULARIA SIBIRICA

4.510.450 : LIGULARIA STENOCEPHALA

4.510.475 : LIGULARIA TSANGCHANENSIS China. Ex CLD 219. From R. McBeath.

4.510.500 : LIGULARIA VEITCHIANA

4.510.510 : LIGULARIA VELLEREA China, Mai Li, NE of Shu La. 4330m. Ex KGB 397

4.510.525 : LIGULARIA VIRGAUREA hina. Ex CLD 218. From R. McBeath. Archibald Archive www.srgc.net

4.510.550 : LIGULARIA WILSONIANA

4.515.700 : LILIUM ALEXANDRAE

4.515.800 : LILIUM AMABILE

4.515.909 : LILIUM AMOENUM No data. Stock ex Kaichen

4.515.950 : LILIUM ANHUIENSE

4.516.000 : LILIUM AURATUM (var. *auratum*) Japan, Honshu, Shizuoka Pref., Tochu River gorge. Ex a D. Elick coll., (November, 1996). (The "Queen of Lilies", a spectacular Honshu endemic, with huge, heavily scented, horizontally held flowers in waxy white, banded with gold & spotted with crimson, on stems of 1m. or more in late summer. A species of hill-slopes at quite low altitudes & likely to thrive best in good, loose, sandy loam in a warm, sunny site in the UK : definitely not in a cool, wet, peaty place.)

4.516.001 : LILIUM AURATUM (var. *auratum*) Japan, Honshu, Shizuoka Pref. D. Elick coll. (The "Queen of Lilies", a spectacular Honshu endemic, with huge, heavily scented, horizontally held flowers in waxy white, banded with gold & spotted with crimson, on stems of 1m. or more in late summer. A species of hill-slopes at quite low altitudes & likely to thrive best in good, loose, sandy loam in a warm, sunny site in the UK : definitely not in a cool, wet, peaty place.)

4.516.030 : LILIUM AURATUM var. **PLATYPHYLLUM** No data. Apparently the southern race & rated to be hardier & an easier plant to grow in UK gardens. Broader leaved with enormous flowers with fewer, more central crimson spots. Raising these from seed ensures virus-free plants. It does not take long. We have flowered *L. auratum* in less than 2 years

4.516.200 : LILIUM BAKERIANUM (stock ex Kaichen as *L. nanum*, etc.)

4.516.230 : LILIUM BAKERIANUM var. **AUREUM** China, Yunnan, 2700m. (A marvellous little high altitude lily from NW Yunnan and adjacent SW Sichuan. The 1-3, wide trumpets, carried on 60cm. stems clad with scattered, linear leaves, in this form are brownish yellow peppered with purple-red spots, which become denser towards the centre of the flower. George Forrest, who probably introduced this to cultivation (it flowered at the RBG Edinburgh in 1923 and was subsequently lost) described it as "of a rich golden-yellow throughout, minutely speckled purple on the interior from the base to the tips of the segments." The *L. bakerianum* complex is highly variable, confusing and little-known in cultivation. This variant might be better placed with *L. bakerianum* var. *delavayi* in a separate species, for which the valid name *L. delavayi* would be available. Probably not easy to maintain in cultivation. We have found *L. delavayi* greatly resents excess moisture at and time but particularly when dormant in winter, when it would be under snow.

4.516.250 : LILIUM BAKERIANUM var **DELAVAYI** see *L. delavayi* (stock ex Kaichen as *L. nanum*)

4.516.270 : LILIUM BREVISTYLUM

4.516.300 : LILIUM BROWNII (var. *brownii*)

4.516.350 : LILIUM BROWNII var. **AUSTRALE** SE China

4.516.400 : LILIUM BROWNII var. **VIRIDULUM** China, Gansu

4.516.509 : LILIUM BUSCHIANUM (*L. concolor* var. *pulchellum*) Russia, Magadan. (About 1m. tall with up to 6 orange-red flowers with small, dark spots. From Ussuri, Mongolia & E Siberia.

4.516.600 : LILIUM CALLOSUM

- 4.516.609 : LILIUM CALLOSUM** Russia, Magadan. (Up to 1m. with nodding, orange-red flowers. From dry slopes in oak forests of Ussuri.)
- 4.516.700 : LILIUM CERNUUM**
- 4.516.709 : LILIUM CERNUUM** Russia, Magadan. (About 80cm. tall with up to 8, nodding, lilac-pink flowers with brown spots. From dry slopes & rocky areas near the coast & oak woodland in Ussuri, N China & Korea.)
- 4.516.809 : LILIUM CONCOLOR** China.
- 4.516.815 : LILIUM CONCOLOR var. CORIDION**
- 4.516.820 : LILIUM CONCOLOR var. MUTSUANUM**
- 4.516.825 : LILIUM CONCOLOR var. PULCHELLUM** (*L. buschianum*) Russia, Ussuri. (The most northern race, from the Russian Far East & Korea, of this slender, lime-tolerant, sun-loving species, widely distributed in NE Asia. Slender stems, 50cm. or more high, with many linear leaves carry up to 10 erect flowers in glossy orange-scarlet speckled with purple.)
- 4.516.830 : LILIUM CONCOLOR var. STICTUM**
- 4.517.000 : LILIUM DAURICUM**
- 4.517.010 : LILIUM DAURICUM** No data. A handsome, hardy, hairy, Siberian species, widely distributed from the Altai eastwards to North Korea & Hokkaido. Stoloniferous stems rise to about 50cm. with large, open, upward-facing scarlet flowers, spotted with brown, in summer. It needs good well-drained soil in a sunny site in the UK.
- 4.517.200 : LILIUM DAVIDII** China, Gansu
- 4.517.209 : LILIUM DAVIDII** China, Yunnan. 1500m. (A beautiful, graceful, *Martagon*-type species about 1.5m. high with up to 20, nodding flowers in orange-red with raised black spots, opening in late summer from woolly buds & held out on stiff, horizontal pedicels. A very hardy species said to enjoy full sun and to be comparatively lime-tolerant.)
- 4.517.279 : LILIUM DEBILE** (*L. medeoloides*) Russia, Magadan. (Up to 10, pendant, orange-red, dark-speckled flowers.)
- 4.517.300 : LILIUM DELAVAYI** (*L. bakerianum* var. *delavayi*) Endemic to N. Yunnan, at altitudes over 3300m., growing in open sites, along woodland margins or among scrub & boulders. Reduced to a var. of the structurally similar, white-flowered *L. bakerianum* by Wilson, with which it sometimes apparently grows. This is so distinct to us that we revert to Franchet's original specific status but the lilies of this area are still little-known & complex. It flowers with us much earlier than white *L. bakerianum* from the same area : up to 1m. high with up to 5, nodding trumpets of yellowish olive-green, finely speckled all over with dull crimson and with dark crimson throats.
- 4.517.408 : LILIUM DISTICHUM** Russia, Magadan. (60-100cm. tall with up to 5, pendant, orange yellow flowers, occasionally with a few dark spots. From Ussuri, N China & Korea.)
- 4.517.409 : LILIUM DISTICHUM** No data. Stock ex Kaichen. Archibald Archive www.srgc.net
- 4.517.600 : LILIUM DUCHARTREI** China, Gansu
- 4.517.608 : LILIUM DUCHARTREI** China, Gansu. Ex Cox 5103. (A glorious, stoloniferous, W Chinese species, closely allied to *L. taliense* & *L. lankongense*. Brownish, 1.5m. stems with up to 12, pendant, scented, white flowers, with recurving segments spotted with deep purple & reddening with age. This seed is from a recent coll. by Peter Cox, one of the first made since the 1915 Farrer coll. in S Gansu, where he wrote that 'its cold bone-white turksaps have a glacial beauty.' Moist but well-drained, humus-rich soil in light shade.
- 4.517.609 : LILIUM DUCHARTREI** No data. China. Stock ex Kaichen, 1999, is strongly stoloniferous & appears to be correctly named.
- 4.517.610 : LILIUM DUCHARTREI** A glorious, stoloniferous, W Chinese species, closely allied to *L. taliense* & *L. lankongense*. Brownish, 1.5m. stems with up to 12, pendant, scented, white flowers, with recurving segments spotted with deep purple & reddening with age. Most cultivated stock appears to derive from the 1915 Farrer coll. in S Gansu, where he wrote that 'its cold bone-white turksaps have a glacial beauty.' Moist but well-drained, humus-rich soil in light shade.
- 4.517.700 : LILIUM EUXANTHUM**
- 4.517.800 : LILIUM FARGESII**
- 4.517.809 : LILIUM FARGESII** China, Gansu. (This demure, slender, little species "appears never to have been in cultivation" according to Woodcock & Stearn. After many attempts to secure it, we are now growing the genuine plant. About 30cm. tall with few, dark, linear leaves & pendant, turksap flowers like a miniature *L. martagon* in palest green, delicately speckled with vinous purple. Unobtrusive but exquisite when grown in the alpine-house, where it can be appreciated.)
- 4.518.010 : LILIUM FORMOSANUM var. PRICEI** Taiwan. 2600m. (A dwarf, alpine ecotype of this species with big, scented, white trumpets, purple-tinted outside. Almost all cultivated stock appears to be derived from seed collected by W. Price in 1912 near "Arisan" on "Mount Morrison". Recorded as not exceeding 45cm. in the wild, it has remained dwarf (or even dwarfer by selection) in gardens. Fairly hardy in the UK, it flowers quickly from seed, if sown in gentle warmth in winter.)
- 4.518.111 : LILIUM FORMOSANUM var. PRICEI : RESELECTED DWARF FORM** Taiwan. 2600m. (The dwarf, alpine ecotype of this species with huge, scented, white trumpets, purple-tinted outside has become increasingly tall after almost a

century in cultivation. This stock has been reselected over several generations from an extremely dwarf clone by Basil Smith. Almost all cultivated stock appears to be derived from seed collected by W. Price in 1912 near Arisan on "Mount Morrison". It flowers quickly from seed sown in gentle warmth in winter. Only a few cm. tall. Superb.)

4.518.050 : LILIUM GLORIOSOIDES (stock ex Kaichen, 1998) (Ex China, Hubei, Wufeng. 1300m., according to Paul Christian)
: see *L. speciosum* var. *gloriosoides*

4.518.100 : LILIUM HANSONII

4.518.109 : LILIUM HANSONII South Korea. Ex R.Bryer & C.Cowler 110. (A magnificent turkscap lily with sturdy, 1.5m. stems, whorled with broad, deep green leaves & carrying about 12, fragrant, nodding flowers with thick-textured, recurving segments in orange-yellow, spotted with brown. Long-lived, lime-tolerant & reliable in part-shade in the UK.)

4.518.200 : LILIUM HENRICI

4.518.260 : LILIUM HENRYI

4.518.269 : LILIUM HENRYI Native to montane slopes between 700m. and 1000m. in Guizhou, Hubei and Jiangxi in S central China, this beautiful lily has been in cultivation in the UK for over 100 years, where it long been rated as one of the finest and most adaptable species. Stems about 2m. high with 10 to 20 flowers (it is recorded in cultivation at 3m. with 70 flowers), which are large, nodding and soft-orange in colour, with a few sparse black spots and distinctive, fimbriate projections along the nectaries. A limestone plant in nature, it is reputed to grow best in part-shade in humus-rich (not peaty) loam.

4.519.300 : LILIUM HUIDONGENSE

Archibald Archive www.srgc.net

4.519.405 : LILIUM JAPONICUM A little, wild-collected seed from Don Elick in Japan. A very beautiful species, less than 1m. high with up to 5, fragrant, delicate rose-pink trumpets, for moist, loose, well-drained leafmould. Not easy in the UK.

4.519.409 : LILIUM JAPONICUM 1998 seed from Don Elick.

4.519.430 : LILIUM JINFUSHANENSE

4.519.450 : LILIUM LANCIFOLIUM

4.519.460 : LILIUM LANCIFOLIUM var FLAVIFLORUM A beautiful tiger lily variant, originating in Japan. Pale yellow flowers evenly spotted with mahogany-purple. Unlike the commercial stocks of the type, this seems virus-free.

4.519.509 : #LILIUM LANKONGENSE China, Yunnan. 2700m. (An exquisite species, narrowly endemic to N Yunnan & close to white *L. duchartrei*, under which it has been included. This recent collection flowers later than our *L. duchartrei* & does not appear to be stoloniferous. Stems 1m. to 1.5m. high with scattered, dark green leaves bear a raceme of about 12, scented, pendulous, *L.martagon*-type flowers in lilac-pink, shading to white at the centre around the green nectaries, lightly speckled with purple and with orange anthers. For moist, humus-rich soil in semi-shade.)

4.519.600 : LILIUM LEICHTLINII

4.519.620 : LILIUM LEICHTLINII var. MAXIMOWICZII No data. Pendant, orange-red, turkscap flowers, profusely and evenly spotted with brown-purple, on graceful 2m. stems in late summer. A handsome, stoloniferous plant from the mountains of N Japan & Korea, more accommodating, in rich soil in light shade, than the yellow type-race and flowering quite quickly from seed.

4.519.700 : LILIUM LEUCANTHUM (stock ex Kaichen, 1998)

4.519.720 : LILIUM LEUCANTHUM var. CENTIFOLIUM China, Gansu

4.519.750 : LILIUM LIJIANGENSE

4.519.800 : LILIUM LONGIFLORUM

4.519.919 : LILIUM LOPHOPHORUM China, Yunnan. 3300m. (The most distinct of lilies. Possibly closest to *L. oxypetalum* and of similar height & habit but the drooping, pale-yellow flowers have greatly drawn-out, attenuate tips to the segments. These cling together and the globular flowers look like pendant, Chinese paper-lanterns. Native to the area where Tibet meets Gansu, Sichuan & Yunnan between about 2500m. and 4500m. altitude, this needs cool, moist growing conditions in summer but prefers to be rather dry and cold from late summer through winter. After losing many bulbs & failing to establish seedlings from collected seed, we have at last acquired what appears to be a very adaptable form : our own UK-grown seeds.)

4.520.009 : LILIUM MACKLINIAE India, Manipur, Sirhoi near Ukhrul. 2300-2450m. Steep, grassy slopes. (While all cultivated stock stems from the collections made by Frank Kingdon-Ward on this one mountain in 1946 & 1948, over 50 years of cultivation have resulted in variation. This seed from Mike & Polly Stone is from what they consider to be the "original, smaller form." An exquisite species approaching *Nomocharis* with nodding, white, bowl-shaped flowers, flushed with rose-pink outside. Perfectly hardy with us : enjoys an acid soil & the cool, moist summers of the N & W of the UK.)

4.520.010 : LILIUM MACKLINIAE India, Manipur, Sirhoi near Ukhrul. 2300-2450m. Steep, grassy slopes. (All cultivated stock seems to stem from the collections made by Frank Kingdon-Ward on this one mountain in 1946 & 1948. An exquisite species in the group approaching *Nomocharis* with nodding, white, bowl-shaped flowers, flushed with rose-pink outside, on stems of about 50cm. Perfectly hardy with us : enjoys an acid soil & the cool, moist summers of the N & W of the UK.)

4.520.015 : LILIUM MACKLINIAE India, Assam, Nagaland. Pink form ex Cox.

4.520.050 : LILIUM MATANGENSE

4.520.110 : LILIUM MEDEOLOIDES No data. Distributed in moist woodland from Honshu in Japan into Kamchatka, Korea & NE China, this is a hardy species, growable in a suitable site in the UK. Usually 30-60cm. tall with a single whorl of lanceolate leaves, halfway up the stem, & apricot to scarlet, turkscap flowers, more or less speckled with black.

4.520.150 : LILIUM MEDOGENSE

4.520.200 : LILIUM MYRIOPHYLLUM

4.520.400 : LILIUM NANUM India, Garhwal Himal, above Fula Narayan. 3000m. Meadow. D. Roberts coll. (A dwarf, 30cm. high species, which has been included in *Nomocharis*. Usually with lilac to purplish, drooping, bell-shaped flowers but sometimes yellowish. Collected in fruit, these may be the allied pale lemon-yellow *L. oxypetalum* which also grows in this area.)

4.520.409 : LILIUM NANUM India, Almora, Nanda Devi region. 3000m. Alpine meadow just above tree-line of *Abies* forest. J. Shipton coll. (Collected in fruit, there is a possibility that these may be the allied pale lemon-yellow *L. oxypetalum* which also extends to this area of the Himalayas, just W of Nepal. Should do well outside in the cooler areas of the UK.)

4.520.410 : LILIUM NANUM No data. From an established form, probably originating in N India, of this charming dwarf species, about 30cm. high. Described as a *Fritillaria*, it has oscillated between *Nomocharis* & *Lilium*. The species is distributed from the Garhwal Himalaya to NW Yunnan at altitudes between 2700m. & 5000 m. Lilac to purplish, drooping, bells.

4.520.415 : LILIUM NANUM from SIKKIMESE FORM Sikkim : no further data. Ex an AGSES coll. (More outward-facing flowers with heavily speckled pink interiors are often carried 2-3 on each 30cm. stem on mature plants.)

4.520.420 : LILIUM NANUM from BHUTANESE FORM Bhutan : no further data. A distinct race. Somewhat taller & more robust than the preceding two, with flowers tending to lavender shades on striking mahogany-coloured stems.

4.520.440 : LILIUM NANUM (stocks ex Kaichen, 1998 & 1999 are forms of *L. bakerianum* or *L. amoenum*)

4.520.460 : LILIUM NANUM var. FLAVIDUM No data. The pale yellow phase of this little Himalayan species. It was first described as *Fritillaria flavida*. Rather like *L. oxypetalum* but with much narrower leaves.

4.520.500 : LILIUM NEILGHERRENSE

4.520.600 : LILIUM NEPALENSE

4.520.609 : LILIUM NEPALENSE Sikkim. 3000m. J. Shipton coll. (Wild seed collected in April 2004 by John Shipton from overwintered capsules. Identity not absolutely confirmed but should be this striking, 1m. tall species with large, pendant, funnel-shaped flowers (not the turkscap shape of allied *L. primulinum*) in yellow-green with a burgundy-purple central area and orange anthers. The true plant has a stoloniferous habit and is better planted out than pot-grown.)

4.520.610 : LILIUM NEPALENSE No data. From Robin White's vigorous form which grows up to 2m. high in his raised sleeper-bed in a shade tunnel. Archibald Archive www.srgc.net

4.520.700 : LILIUM NOBILISSIMUM

4.520.750 : LILIUM OXYPETALUM

4.520.800 : LILIUM OXYPETALUM var. INSIGNE

4.520.810 : LILIUM OXYPETALUM var. INSIGNE No data. The form with dusky pink bells, ageing to maroon shades. This dwarf, usually yellow, species from the NW Himalaya, between 3000m. & 4000m. is about 20 cm. high with a single, nodding, campanulate flower with pointed segments. It is close to *L. nanum* (but has broader leaves overtopping the flower) & to the genus *Nomocharis*

4.520.850 : LILIUM PAPILLIFERUM No data. Stock ex Kaichen.

4.520.880 : LILIUM PARADOXUM

4.520.910 : LILIUM PHILIPPINENSE No data. Slender, elegant, 1m., grassy-leaved stems with very long-tubed, horizontally carried, pure-white, scented trumpets, sometimes tinged green or brown outside. One of the most southern Asian lilies, from the mountains of Luzon in the N Philippines. Australian seed but recorded as hardy over several years in N England.

4.521.000 : LILIUM PINIFOLIUM

4.521.400 : LILIUM POLYPHYLLUM India, Kashmir, NW of Pahlgam. 2200m. Steep slope below forest. Ex KBE 93. (From Chris Chadwell's 1983 coll.)

4.521.500 : LILIUM PRIMULINUM (var. primulinum)

4.521.520 : LILIUM PRIMULINUM var. BURMANICUM China, Yunnan. (From material recently received from China. One of the most striking representatives of a group of very confusing, very variable lilies distributed through N Burma, Thailand & adjacent SW China. This race is one of the more tender taxa and definitely needs protection in the UK though it has grown and flowered well in our unheated polytunnel. Stems of about 1.2m., with broader leaves than *L.p.* var. *ochraceum*, carry up to about 12 pendulous flowers with a fruity orange-peel scent and strongly reflexed segments, astonishingly coloured with bright greenish yellow tips contrasting with the dark, brownish purple throats. A marvellous thing.)

4.521.530 : LILIUM PRIMULINUM var. OCHRACEUM

- 4.521.539 : LILIUM PRIMULINUM var. OCHRACEUM** China, Yunnan. 2300m. (From material recently received from China. A striking representative of a group of very confusing, very variable lilies distributed through N Burma, Thailand & adjacent SW China. This race from NW Yunnan is possibly the hardest. Stems of about 1.2m. carry up to about 12 pendulous flowers with strongly reflexed segments, astonishingly coloured with bright greenish yellow tips contrasting with the dark, brownish purple throats. A marvellous thing.)
- 4.521.608 : LILIUM PUMILUM** (*L. tenuifolium*) Russia, Magadan. (A brilliant, little, early-flowering species from NE Asia. This Russian form is about 1m. tall with linear, alternate leaves and about 12 bright scarlet, pendant, turkscap flowers, mostly without any spots at all. It needs a well-drained site in sun in the UK and is usually easily grown from seed.)
- 4.521.609 : LILIUM PUMILUM**
- 4.521.704 : LILIUM REGALE** 1998 stock ex Kaichen appears to be *L. sargentiae* : 4.521.909
- 4.521.705 : LILIUM REGALE** No data but all UK cultivated stock would seem to derive from the bulbs shipped to the Veitch nursery in 1903 by Ernest Wilson from its only known locality in the Min valley of W Sichuan. Most easily distinguished from its fellow Chinese trumpet-lilies by its bright yellow pollen. Recent bulb importations from China bearing this name have been other species. Without equal as a reliable garden plant in the UK, flowering quickly from seed.
- 4.521.759 : LILIUM ROSTHORNII** An obscure species, little-known until recently. It is closest to *L. henryi* and like it has dimorphic foliage. The lower, linear-lanceolate stem-leaves are very much narrower and with us it is dwarfier, at less than 1m. tall, only half the height of *L. henryi*, flowering several weeks later in late summer. Racemes of up to 9, large flowers with recurving orange-yellow tepals, spotted with maroon and with their nectaries embellished with many fringed projections. First collected in Sichuan, its distribution extends into Guizhou and Hubei between 300m. and 900m. altitude
- 4.521.800 : LILIUM RUBELLUM**
- 4.521.850 : LILIUM SACCATUM**
- 4.521.909 : LILIUM SARGENTIAE** China, Yunnan. 1300m. (A magnificent, trumpet lily with stout, purplish, 1.5m. stems carrying about 12, large, very fragrant flowers, pure-white shading to yellow in their throats inside & rose-purple suffused with green & brown tints outside. It needs a sheltered site in a rich, lime-free soil with its head in the sunshine.)
- 4.522.009 : LILIUM SEMPERVIVOIDEUM** China, Yunnan. 2700m. (A little-known *Nomocharis*-like species endemic to Yunnan & Sichuan on grassy slopes at about 2500m. altitude. One or two nodding, cup-shaped, white flowers, sparsely speckled inside with red-purple on 20-30cm. stems clad in narrow, linear leaves. Close to *L. mackliniae*, narrow-leaved *L. pinifolium* & the rose-pink *L. amoenum*, with which it has been confused. The latter two species have been included under *L. sempervivoideum* but all are kept separate in the latest account of the genus in China.)
- 4.522.070 : LILIUM SHERRIFFIAE**
- 4.522.100 : LILIUM SOULIEI**
- 4.522.200 : LILIUM SPECIOSUM**
- 4.522.220 : LILIUM SPECIOSUM var. CLIVORUM** Japan, S Shikoku, Agawa river gorge. Damp shady cliffs. Ex a D. Elick coll. (From Don's 1988 type-locality coll. of this very local race, described in 1956. Hanging out of the cliffs "like a giant *Tricyrtis*...stems 6ft. or longer with up to 20, light-pink flowers on very long pedicels." A truly sumptuous plant, growing successfully in the UK, in rich, peaty soil, both under glass & outside, with gloriously scented, crimson-speckled flowers in late summer. In 2003, a stock-plant here, grown under glass, had about 50 flowers on an arching stem almost 3m. long.)
- 4.522.230 : LILIUM SPECIOSUM var. GLORIOSOIDES** No data. One of the most significant re-introductions among the Chinese material exported to western gardeners in recent years. It is not certain that we have had mainland Chinese material in cultivation in the West since the Maries introduction of 1878. Plants grown under this name in the 1930's are more likely to have originated in Taiwan & were probably more deserving of varietal status under Japanese *L. speciosum* than this most distinct, disjunct mainland race, which fully deserves specific rank : even the seeds are very different to the preceding. Baker, describing it in 1880, commented on the the "much reflexed, crisped perianth segments reminding one of *Gloriosa superba*" & Wilson thought it "the loveliest of the coloured forms of *L. speciosum*" : "a very lovely variety, well distinguished by its much reflexed, waved, perianth-segments with scarlet rather than crimson spots and papillae." Wilson describes it growing in central China on exposed sandstone cliffs & among low scrub. Arching stems about 1m. tall carry smaller but more richly coloured flowers than Japanese *L. speciosum* in early autumn : which makes seed like this a challenge to produce.
- 4.522.250 : LILIUM STEWARTIANUM**
- 4.522.300 : LILIUM SULPHUREUM** (*L. myriophyllum*) China, Yunnan. (A majestic trumpet lily, "essentially an aristocrat and one of the noblest of all lilies." Stiffly erect stems, over 3m. high with us, are densely clad in many, narrow, dark green leaves & carry a compact head of about 12, long trumpets. Soft yellow in this form, which approximates to the plant from N Burma described by Wilson as *L. myriophyllum* var. *superbum*. (5 stem-bulbils : EU customers only)
- 4.522.320 : LILIUM SULPHUREUM from YUNNAN FORM** Archibald Archive www.srgc.net
- 4.522.409 : LILIUM TALIENSE** China, Yunnan. (A distinct and beautiful early-flowering turkscap lily, about 1.5m tall, with racemes of up to 12 nodding flowers. These are quite small but exquisitely coloured. Yellow buds open to ivory flowers, rapidly fading to white, discretely peppered with maroon. The long green nectary along each tepal becomes purple as the flower ages. A plant of openings in woodland and grassy slopes between 2600m and 3600m. in Sichuan and Yunnan.

4.522.500 : LILIUM TIANSHANICUM

4.522.600 : LILIUM TSINGTAUENSE

4.522.609 : LILIUM TSINGTAUENSE South Korea, Taebaek, Hambae-san. 1350-1400m. Ex M.Holmberg & U.Strindberg 92-129

4.522.809 : LILIUM WALLICHIANUM Sikkim. 1200-2400m. Among rocks on open, grassy hillsides. Ex C. Chadwell 2198

4.522.900 : LILIUM WARDII

4.522.950 : LILIUM WENSHANENSE

4.523.000 : LILIUM WILSONII

4.523.100 : LILIUM XANTHELLUM

4.524.000 : LINDELOFIA LONGIFLORA A rhizomatous, W Himalayan member of the *Boraginaceae* spread from Pakistan to Nepal in open meadows up to 3600m. Clumps of narrow leaves & erect, 60cm. stems with deepest blue flowers from blue-purple buds in summer. "Crozier's of large deep-sapphire anchusa-flowers uncurling all the summer" wrote Farrer.

4.530.000 : LONICERA

4.540.000 : LYCORIS

4.541.510 : LYSICHITON CAMSCHATCENSIS No data. Beautiful, white, green-tinged, sweet-scented spathes in spring. A plant of the bogs & lakesides of cold NE Asia, from N Japan up through Sakhalin to Kamchatka. At about 30cm. high, a smaller plant than its yellow-flowered N American relative. Freshly collected seed for immediate sowing in very wet conditions.)

4.542.000 : LYSIMACHIA

4.542.500 : LYSIMACHIA DECURRENS China, Yunnan, Dali, Cang Shan. 3000m. Loose gravel in road-cut. Ex I. Stokes 46.092. (An attractive species proving most adaptable in both moist & drier, exposed sites in W Wales. Of mounded habit, about 50cm. high & as much across, because of the spreading side-shoots, with upright racemes of white flowers, with a darker lilac tinge in their throats, produced over a very long period in summer.) Archibald Archive www.srgc.net

4.544.000 : LYSIONOTUS PAUCIFLORUS

4.545.000 : MAGNOLIA

4.545.710 : MAGNOLIA SIEBOLDII No data. Native from S Japan into Korea & a reliable plant for UK gardens. A large, deciduous shrub or small tree up to 5m. high, flowering from the end of May onwards with us. Slightly pendant, white flowers with a central cone of crimson stamens "look you in the face". Stored in a refrigerator so sow immediately.

4.545.711 : MAGNOLIA SIEBOLDII No data. Seed from John Weagle in Nova Scotia, Canada, collected from an outstanding, extremely hardy form grown in Halifax. With an extensive south-north range, from S Japan into Korea, the species will certainly vary in this respect. A reliable plant for UK gardens, forming a large, deciduous shrub or small tree up to 5m. high, flowering from the end of May onwards with us. Slightly pendant, white flowers with a central cone of crimson stamens "look you in the face". Thoroughly cleaned seed has been stored moist in a refrigerator and will be sent out damp. Sow immediately!

4.547.000 : MAHONIA

4.550.050 : MECONOPSIS ACULEATA Pakistan. Ex SEP 277

4.550.100 : MECONOPSIS ARGEMONANTHA

4.550.200 : MECONOPSIS BELLA

4.550.310 : MECONOPSIS BETONICIFOLIA No data. Seeds from a fairly reliably perennial strain of this incomparable herbaceous plant for cool, moist conditions in very rich soil. Huge blue poppies on 1m. tall stems.

4.550.311 : MECONOPSIS BETONICIFOLIA from WHITE FORMS No data.

4.550.312 : MECONOPSIS BETONICIFOLIA from 'HENSOL VIOLET' A lovely strain with flowers of pale, lucent, violet-purple. It comes fairly evenly from seed if the stock is kept segregated, which ours is.

4.550.315 : MECONOPSIS BETONICIFOLIA from TAYLOR SELECTIONS From our own second generation selections of particularly good, floriferous classic blues, derived from the finest, late-flowering plants selected by those legendary Scottish plantmen, Henry & Margaret Taylor. The ultimate in blue poppies and the parents are good perennials here.

4.550.400 : MECONOPSIS CHELIDONIFOLIA

4.550.510 : MECONOPSIS DELAVAYI A superlative dwarf species, the ultimate alpine poppy, unlike any other in the genus & placed in a section of its own. Of fairly limited distribution in the wild, confined to limestone screes & stony turf in NW Yunnan, between 10,000ft. & 14,000ft., it has been in an out of cultivation since Forrest's original introduction of 1913. This seed is derived from several collections made in recent years, raised by Ian & Margaret Young in Aberdeen with a view to establishing a strain more adapted to cultivation. It was successfully maintained over many years by Dick Trotter near Inverness and we grew plants derived from his stock for some time. The main problem in our case was finding the right degree of moisture to keep the overwintering buds in good condition without rotting them or drying them out. It is a challenge but it is possible and it is perennial. Diminutive rosettes of glaucous, entire, more or less hairless, leaves & large half-nodding, usually 4-petalled, flowers

in the richest, most luminous imperial purple on stems of about 15cm. Truly exquisite.

4.550.600 : MECONOPSIS DHWOJII

4.550.700 : MECONOPSIS DISCIGERA

4.550.800 : MECONOPSIS FLORINDAE

4.550.900 : MECONOPSIS FORRESTII

4.551.000 : MECONOPSIS GEORGEI

4.551.100 : MECONOPSIS GRACILIPES

4.551.200 : MECONOPSIS GRANDIS

4.551.210 : MECONOPSIS GRANDIS No data. "One of the classic garden plants worth any effort, a perennial with breathtakingly blue flowers" writes James Cobb in his monograph. He adds "nearly all seeds offered as *M. grandis*...are in fact *M. betonicifolia*." These are from authentic parents grown by Mike and Polly Stone in Inverness-shire, Scotland

4.551.211 : MECONOPSIS GRANDIS Ex R. McBeath

4.551.400 : MECONOPSIS HENRICI China, Gansu

4.551.500 : MECONOPSIS HORRIDULA China, Qinghai, Nan Shan, NW of Maqin. 4500m. (From the NW limit of the distribution of this species-complex, this differs from collections made in Yunnan (*M. prattii*), Sichuan (*M. rudis*) & the Himalaya ('true' *M. horridula*). It might be better placed under *M. racemosa*, described from neighbouring Gansu. Greyish, bristle-leaved rosettes send up erect stems with axillary pale-blue poppies with charcoal-grey anthers. From an extremely cold & dryish part of Central Asia, this will need scree-conditions (optimum drainage) and a sunny site (in cool climates).

4.551.501 : MECONOPSIS HORRIDULA China, Yunnan, Da Xue Shan. 3995m. A. Dickerson 01-17 (A 2001 wild coll. by Tony Dickerson as possibly *M. rudis*. As we have listed the preceding under the 'blanket' name for this complex of high altitude blue poppies, we also include this under *M. horridula* but it is likely to be quite distinct from the Qinghai coll.).

4.551.549 : MECONOPSIS aff. HORRIDULA China, Yunnan. Ex A.C.E. 2442. From one of several recent collections made in Yunnan. Current thinking is that most of these belong under *M. prattii* and *M. rudis*, under which we have listed two others. This fine blue one is more difficult to place. It is unlikely, however, that, without a considerable amount of effort, these local races can be kept 'pure' in cultivation. Expect bristle-leaved rosettes and racemes of blue poppies on stems of around 30cm. high. All this group may be happier with better drainage & more sun than many in this genus.

4.551.550 : MECONOPSIS aff. HORRIDULA From several collections made in Yunnan. Current thinking is that these should not be placed under *M. horridula* at all & may belong under *M. prattii* and *M. rudis*. It is unlikely, however, that, without a considerable amount of effort, the local races can be kept 'pure' in cultivation. Expect bristle-leaved rosettes and racemes of violet-blue poppies on stems of around 30cm. high. These may be happier with better drainage & more sun than many in this genus.

4.551.600 : MECONOPSIS HORRIDULA var. RACEMOSA China, Gansu

4.551.700 : MECONOPSIS IMPEDITA

4.551.800 : MECONOPSIS INTEGRIFOLIA (subsp. *integrifolia*) China, Qinghai, Nan Shan, NW of Maqin. 4300m. (This magnificent yellow poppy, collected at the NW extremity of its distribution, up near the borders of Sinkiang & Mongolia & likely to differ somewhat from recent, southern collections made in Sichuan. This will need perfect drainage : see climate-note under *M. horridula*.) Archibald Archive www.srgc.net

4.551.810 : MECONOPSIS INTEGRIFOLIA (subsp. *integrifolia*) No data. The famous, sumptuous, yellow poppy from W China & E Tibet, growing between 2700m. & 5200m. altitude. It can have 10 or more huge, silken flowers, up to 20cm. across, and reach 1m. in height but is usually half of that in gardens. A fast-grower and gross-feeder.

4.552.000 : MECONOPSIS LANCIFOLIA

4.552.100 : MECONOPSIS LATIFOLIA

4.552.200 : MECONOPSIS LONGIPETIOLATA

4.552.300 : MECONOPSIS LYRATA

4.552.400 : MECONOPSIS NAPAULENSIS

4.552.447 : MECONOPSIS aff. NAPAULENSIS Nepal. Ex E.Needham 148. (Magnificent. About 1.5m. tall with pale lemon-yellow flowers. Like all the yellow-flowered variants near *M. napaulensis*, it may owe its colour to *M. paniculata*. *M. regia* may also be involved in the origins of some of these confusing wild forms with beautiful winter rosettes.)

4.552.448 : MECONOPSIS NAPAULENSIS from PINK FORMS

4.552.449 : MECONOPSIS NAPAULENSIS from RED FORMS No data. The cultivated, colour variants attributed to *M. napaulensis* are derived from introductions from Nepal, 50 years ago, by Stainton, Sykes and Williams. At first the red-flowered plants were attributed to *M. regia* but now all have been subsumed into a complex of *M. napaulensis*-like plants with superlative evergreen rosettes of golden-haired, dissected foliage, which send up 2m. tall stems massed with flowers.

- 4.552.450 : MECONOPSIS NAPAULENSIS** from **YELLOW FORMS** No data. Soft-yellow cups.
- 4.552.600 : MECONOPSIS NEGLECTA**
- 4.552.700 : MECONOPSIS OLIVERANA**
- 4.552.750 : MECONOPSIS PANICULATA**
- 4.552.780 : MECONOPSIS PRATTHI**
- 4.552.790 : MECONOPSIS PRATTHI** No data. See our comments under 4.551.549 regarding these Chinese relatives of the Himalayan *M. horridula*. Seeds from some excellent collections made in Yunnan, grown by Mike & Polly Stone in Inverness-shire, UK. Greyish, bristle-leaved rosettes send up erect stems with axillary blue poppies with charcoal-grey anthers. Possibly best grown in scree-conditions but with plenty summer-moisture and in a sunny site (in cool climates).
- 4.552.800 : MECONOPSIS PSEUDOINTEGRIFOLIA**
- 4.552.809 : MECONOPSIS PSEUDOINTEGRIFOLIA** China, Yunnan, Da Xue Shan. 4015m. A. Dickerson 01-14
- 4.552.850 : MECONOPSIS PSEUDOINTEGRIFOLIA var. ROBUSTA** China Yunnan, Bei Ma Shan. 4800m. Cliffs & rocky areas.
- 4.552.900 : MECONOPSIS PSEUDOVENUSTA**
- 4.553.010 : MECONOPSIS PUNICEA** The famous scarlet species from Tibet & China, N to Gansu, where it grows in damp meadows among *Rhododendron* scrub. Eulogised by Farrer, who saw it in Tibet in 1914, "hovering in flapping flags of vermilion... wave-winged butterflies of incandescent blood." A long succession (James Cobb records over 50 on a second-year plant) of drooping, scarlet-silk poppies, pendant on 30-60cm. stems, rising from tight clumps of upright, entire, softly hairy leaves. Similar in aspect to *M. quintuplinervia* but altogether larger in leaf and flower. Hand-pollinated seed from the pale-haired form of the 1986 reintroduction by Peter Cox under CHM 2586. Not easy and likely to prove monocarpic, though it can build up large, many crowned plants up to 30cm. across. Best in rich, moist but well-drained conditions in the cooler N of the UK but seems to needs some warmth to set seed, (Alan Edwards in Surrey produced more than us) which it does not do at all generously. This needs to be overwintered cold. Late sown seed will not germinate the first spring but should germinate the following year after a full winter. Archibald Archive www.srgc.net
- 4.553.100 : MECONOPSIS QUINTUPLINERVIA** China, Gansu
- 4.553.111 : MECONOPSIS QUINTUPLINERVIA** Ex R. McBeath : fertile form
- 4.553.150 : MECONOPSIS RACEMOSA**
- 4.553.200 : MECONOPSIS REGIA**
- 4.553.400 : MECONOPSIS ROBUSTA**
- 4.553.450 : MECONOPSIS RUDIS**
- 4.553.460 : MECONOPSIS RUDIS** No data. The blue poppies, related to *M. horridula*, from Sichuan are possibly best placed under this species. Seed from a richly coloured, vigorous form grown by Mike & Polly Stone.
- 4.553.500 : MECONOPSIS SIMPLICIFOLIA**
- 4.553.600 : MECONOPSIS SINUATA**
- 4.553.700 : MECONOPSIS SMITHIANA**
- 4.553.800 : MECONOPSIS SPECIOSA**
- 4.553.900 : MECONOPSIS SUPERBA**
- 4.554.000 : MECONOPSIS TORQUATA**
- 4.554.100 : MECONOPSIS VENUSTA**
- 4.554.200 : MECONOPSIS VILLOSA**
- 4.554.300 : MECONOPSIS VIOLACEA**
- 4.560.000 : MENZIESIA**
- 4.562.000 : MERTENSIA**
- 4.562.600 : #MERTENSIA PTEROCARPA var. YEZOENSIS** (*M. rivularis* var. *japonica*, *M. sibirica* group) No data. A very beautiful plant from alpine-levels in Hokkaido, the northernmost island of Japan. Clumps of pointed, cordate leaves in bluish, greyish green form a perfect background to the soft turquoise-blue flowers, which open on 20cm. stems over a long period in summer.
- 4.562.800 : MERTENSIA SIMPLICISSIMA** (*M. asiatica*) No data. More easily grown, NE Asian version of *M. maritima*. Like it, a plant of sea-shore shingles. Prostrate with the most beautiful, fleshy, grey-blue foliage & sky-blue flowers.
- 4.565.010 : MORINA LONGIFOLIA**
- 4.565.205 : MORINA NEPALENSIS** (var. *nepalensis*) China, Yunnan, around Tian Chi, the lake W of Xiao Zhongdian. Ex KGB

- 4.573.099 : NEPETA CLARKEI** Pakistan, Hazara, Kaghan Valley. 2100-3300m. By streams & lakes in dry valleys. Ex C. Chadwell 2043. (A W Himalayan species from wet habitats in high, dry areas of N Pakistan into Kashmir. Most accommodating in cultivation here, forming clumps with many, erect, greyish leaved, 1m. stems whorled with pale to deep violet-blue flowers splashed with white on their lips.)
- 4.574.100 : NEPETA CLARKEI** No data. A W Himalayan species from wet habitats in high, dry areas of N Pakistan into Kashmir. Quite accommodating in cultivation here, forming clumps with many, erect, 1m. stems whorled with blue flowers.
- 4.574.150 : NEPETA CONNATA** Himalayas in Pakistan & N India. Archibald Archive www.srgc.net
- 4.574.310 : NEPETA GOVANIANA** No data. One of our favourite plants for a cool site. A pale yellow-flowered, W Himalayan woodlander from N Pakistan & adjacent NW India, it enjoys our moist acid soil, flowering all through late summer and autumn with airy flights of long-tubed flowers carried on long pedicels from widely branching, velvety-leaved stems about 1m. high.
- 4.574.400 : NEPETA NERVOSA** Kashmir
- 4.574.450 : NEPETA STEWARTIANA** China, Yunnan, S of Zhongdian. 3215m. Ex ACE 1611. (This has settled down well with us, proving to be an excellent garden-plant with whorls of long-tubed, violet-blue flowers on leafy, 60cm. stems.)
- 4.574.500 : NEPETA SUBSESSILIS** No data. A pleasant perennial, growing easily here. From moist mountain slopes in N Japan, on Hokkaido & Honshu. Stout, erect stems, about 60cm. high, with toothed, downy leaves carry densely verticillate, terminal spikes of lavender-blue flowers, individually large for the genus & like little penstemons. Late-season & long-flowering.
- 4.576.000 : NOMOCHARIS APERTA** (*Lilium apertum*)
- 4.576.007 : NOMOCHARIS APERTA** (*Lilium apertum*) China, Yunnan. Ex CLD 229 (This can reach about 1m. in height but is usually half of that. Up to 6, wideopen, saucer-shaped flowers in pink, speckled with crimson & with deep purple nectary-blotches.)
- 4.576.008 : NOMOCHARIS APERTA** (*Lilium apertum*) China, Yunnan. Ex CLD 524
- 4.576.009 : NOMOCHARIS APERTA** (*Lilium apertum*) China, Yunnan, near Tianchi Lake. 3315m. Among *Betula*, *Quercus* & *Rhododendron* scrub. Ex ACE 2271 (Superb & reputedly one of the easier species. It can reach about 1m. in height but is usually half of that. Up to 6, wideopen, saucer-shaped flowers in rose-pink, speckled with crimson & with deep purple nectary-blotches.)
- 4.576.030 : NOMOCHARIS BASILISSA**
- 4.576.050 : NOMOCHARIS FARRERI**
- 4.576.075 : NOMOCHARIS GEORGEI**
- 4.576.100 : NOMOCHARIS MAIREI** China, Yunnan. Ex CLD 1490. (Endemic to SW Sichuan & N Yunnan between 3000m & 4000m. Up to 7, almost flat, drooping flowers with white segments, the inner 3 of which have fringed margins, are evenly spotted all over with crimson & have crested, purple-red nectary glands. A glorious & distinct plant.)
- 4.576.150 : NOMOCHARIS MELEAGRINA**
- 4.576.160 : NOMOCHARIS MELEAGRINA** China, Yunnan. 3300m. to 4000m. (From material received from China : we are not altogether happy that this is this species, reputedly close to *N. mairei*, but it is like no other we have seen.)
- 4.576.200 : NOMOCHARIS PARDANTHINA** Type species of this exquisite genus. Close to *N. mairei*, which is included under it in the latest Flora of China. Up to 10, pink flowers opening widely on stems, which can reach to almost 1m. Only the rounded, toothed inner segments are consistently spotted with brown-purple in the lower third. Unlike *N. mairei*, the entire, outer segments can be spotted or unspotted.
- 4.576.220 : NOMOCHARIS PARDANTHINA f. PUNCTULATA** Type species of this exquisite genus. Close to *N. mairei*, which some have sunk into it. About 10 flowers opening widely on stems, reaching to almost 1m. Unlike *N. mairei*, only the rounded, finely toothed inner segments are sparsely speckled with brown-purple in the lower third
- 4.576.250 : NOMOCHARIS SALUENENSIS** (*Lilium apertum* var. *tibeticum*) No data. Separated from *N. aperta* on the basis of the white to pink-flushed flowers being freckled with tiny purple dots rather than blotches and by the cinnamon-brown, rather than yellow, pollen. Native to the border area where Sichuan, Yunnan, Tibet & Burma meet.
- 4.576.300 : NOMOCHARIS SOULIEI**
- 4.576.500 : NOTHOLIRION BULBULIFERUM**
- 4.576.509 : NOTHOLIRION BULBULIFERUM** (*N. hyacinthinum*) Ex Cox 5074. (A beautiful lily-relative, which can reach 1m. high with racemes of up to 30 horizontal, lilac trumpets, tipped with green. Distributed in alpine meadows from Nepal into W China, it is most likely to succeed in the UK in a cool, part-shaded site in moist but well-drained, humus-rich soil.)
- 4.576.510 : NOTHOLIRION BULBULIFERUM** (*N. hyacinthinum*) No data. A beautiful lily-relative, which can reach 1m. high with racemes of up to 30 horizontal, lilac-purple trumpets, tipped with green. Distributed in alpine meadows from Nepal into W China, it is most likely to succeed in the UK in a cool, part-shaded site in moist but well-drained, humus-rich soil.
- 4.576.560 : NOTHOLIRION CAMPANULATUM** No data. Native to the area where the borders of Burma, Yunnan & Tibet meet,

this remains a rare plant, though introduced to cultivation from Burma by Farrer in 1919. He likened it to a leafy-stemmed *Galtonia candicans* "with bells of bright cerise-crimson tipped...with vivid green...". About 1m. tall with up to 20 flowers, this has always grown best in cool, wet climates : "good drainage with plenty of moisture."

4.576.600 : NOTHOLIRION MACROPHYLLUM

4.576.609 : NOTHOLIRION MACROPHYLLUM Nepal, Langtang valley. 3200m. Ex E.Needham 6284.

4.576.610 : NOTHOLIRION MACROPHYLLUM No data. A charming, low-growing Himalayan species from Nepal, Sikkim, Bhutan & SE Tibet. A slender stem of about 30cm. in height carries several large, flaring, rich violet bells in early summer. A choice plant for a cool, sheltered site in humus-rich soil, most likely to thrive in northern & western parts of the UK. Polly Stone in Inverness-shire, Scotland finds this "vigorous, hardy and easy." Archibald Archive www.srgc.net

4.576.650 : NOTHOLIRION THOMSONIANUM

4.577.000 : OMPHALOGRAMMA

4.577.200 : OMPHALOGRAMMA DELAVAYI China, Dali Pref., Cang Shan. 3850m. Ex KBG 800.

4.577.300 : OMPHALOGRAMMA FORRESTII

4.577.400 : OMPHALOGRAMMA VINCIFLORUM China, Yunnan. (Stock ex Kaichen, 2001.)

4.577.500 : OPHIOPOGON

4.577.950 : OPHIOPOGON WALLICHIANUM From R. McBeath : "dense tufts of dark green leaves, spikes of small white flowers & blue-black berries."

4.578.500 : ORESITROPHE RUPIFRAGA A monospecific genus in *Saxifragaceae*, with one Chinese endemic species. (stock ex Kaichen, 1998)

4.479.590 : PAEONIA AMURENSIS Russia.

4.479.600 : PAEONIA ANOMALA

4.479.609 : PAEONIA ANOMALA (subsp. *anomala*) Russia, Severo Chuysky district. (A collection from far eastern Siberia lying North of the Mongolian border.)

4.479.700 : PAEONIA DECOMPOSITA

4.579.807 : PAEONIA DELAVAYI China, Yunnan, Dali, Cangshan. Ex SBEC 794. Three clones from R. McBeath as *P. lutea* var. *lutea*: "smaller yellow flowers and finer leaves than *P. ludlowii*".

4.579.808 : PAEONIA DELAVAYI from SELECTED YELLOW China, Yunnan, Dali, Cangshan. Ex SBEC 794. (From a particularly fine clone selected out of a wild coll. of this shrubby species with cup-shaped flowers, currently considered to include Chinese *P. lutea* & *P. potaninii*, as a variable intergrading species. The clones we have differ in their beautifully cut & tinted foliage (worth growing for this alone) as well in flower colour : coppery & crimson-tinted yellows. All are about 1-1.5m. high with stiff, upright woody stems and have not suckered widely from the base yet. Seed is all from a plant with very fine, large, full-petalled, soft-yellow flowers, just tinted with copper in the bud, but they will be likely to vary.)

4.579.809 : PAEONIA DELAVAYI China, Yunnan. Ex CLD 460. (From a wild coll. of this shrubby species with drooping, cup-shaped flowers, currently considered to include Chinese *P. lutea* & *P. potaninii*, as a variable intergrading species. The parents are quite variable in their beautifully cut & tinted foliage (worth growing for this alone) as well in flower colour : coppery yellows and crimsons. All are about 1m. high with stiff, upright woody stems and have not suckered widely from the base yet.)

4.579.810 : PAEONIA DELAVAYI No data. From the 'standard', UK cultivated, mahogany crimson form.

4.580.000 : PAEONIA EMODI India, Garhwal Himal, near village of Panna. 3000m. D. Roberts coll. (Collected late in 1995. A superlative W Himalayan species, distributed from Chitral to W Nepal. Bright-green foliage, deeply cut into tapering segments & huge, floppy, outward-facing, pure-white flowers, up to 4 on the 75cm. stems. Well suited to UK gardens.)

4.580.001 : PAEONIA EMODI Pakistan. No further data currently available. D. Roberts coll. (A fresh wild collection made in N Pakistan late in 1997. We hope further field data will be available for the seed packets. A superlative W Himalayan species, distributed from Chitral to W Nepal. Bright-green foliage, deeply cut into tapering segments & huge, floppy, outward-facing, pure-white flowers, up to 4 on the 75cm. stems. This is from the western end of the species range & is likely to vary from David Roberts' Garhwal coll. listed in 1996. The latter germinated well & the species is generally well suited to UK gardens.)

4.580.200 : PAEONIA INTERMEDIA

4.580.250 : PAEONIA JAPONICA

4.580.300 : PAEONIA JISHANENSIS

4.580.500 : PAEONIA LACTIFLORA NE Russia - no further data. Archibald Archive www.srgc.net

4.580.501 : PAEONIA LACTIFLORA Russia, E Siberia. The wild species is virtually unknown in gardens, where its influence is manifest only in the multitude of hybrid herbaceous species. Should have large white flowers with golden stamens.

4.580.502 : PAEONIA LACTIFLORA (*P. albiflora*) Russia, Chitinsky district. 900m. (A wild collection from a corner of E Siberia lying along the northern borders of Mongolia & NE China. This beautiful species is virtually unknown in gardens, where its

influence is manifest only in the multitude of herbaceous hybrid clones. Dark-green leaves, usually crimson-tinted, divided into lanceolate lobes & 70cm. stems carrying two or more huge white flowers with golden stamens.)

4.580.503 : PAEONIA LACTIFLORA (*P. albiflora*) Russia, Primorskiy Kray, Sakhalin. (Parent stock from this island lying to N from Japan. This beautiful species is virtually unknown in gardens, where its influence is manifest only in the multitude of herbaceous hybrid clones. Dark-green leaves, usually crimson-tinted, divided into lanceolate lobes & 70cm. stems carrying two or more huge white flowers with golden stamens.)

4.580.520 : PAEONIA LACTIFLORA No data. The wild species from Siberia, Mongolia & NW China is virtually unknown in gardens, where its influence is manifest only in the multitude of herbaceous hybrid clones. Dark-green leaves, divided into lanceolate lobes & 60cm. stems carrying two or more large white or pale pink flowers with golden stamens.

4.580.525 : PAEONIA LACTIFLORA var. PARADOXA No data. A handsome variant, which may be of hybrid origin. Stems, 60-80 cm. tall, and leaves, both in dark reddish green, with flowers, up to 20cm. in diameter, in dark violet-red.

4.580.710 : PAEONIA LUDLOWII No data.

4.580.800 : PAEONIA MAIREI

4.580.809 : PAEONIA MAIREI Stock ex Kaichen, 2001.

4.581.000 : PAEONIA OBOVATA Russia, Sakhalin. (We assume this wild collection will be from the pale-rose race, which we have never seen in cultivation & which is the only one we can find recorded from this island immediately N from Japan, & not from the white-flowered race, sometimes segregated as *P. japonica*. These are also supposed to differ in their stigmas & follicles. All this group, about 50cm. high, have beautiful, lobed foliage. A further opportunity to acquire seed from this obscure locality.)

4.581.001 : PAEONIA OBOVATA (subsp. *obovata*) Russia, Primorsky region. (An E Siberian coll. which may be white or, more likely, from pink to rose-coloured forms. The type-race has more or less glabrous leaves & distributed through the forests of N China & the Far East of Russia to Korea & Japan. All are about 50cm. high with beautiful, lobed foliage.)

4.581.020 : PAEONIA OBOVATA var. ALBA No data. New Zealand grown seed of this white-flowered variant, the most generally grown one and one of the loveliest. This is essentially similar to *P.o.* subsp. *willmottiae* but should lack the downy undersides to the leaves and usually flowers a few weeks later than it in cultivation.

4.581.030 : PAEONIA OBOVATA var. JAPONICA No data Archibald Archive www.srgc.net

4.581.050 : #PAEONIA OBOVATA subsp. WILLMOTTIAE No data. Outstandingly beautiful even in such an aristocratic genus. Rounded, lobed foliage, greyish with coppery tints, especially richly coloured when it unfolds in spring, forms a perfect background for the translucent, ivory-white cups holding the golden stamens around the crimson stigmas. A native of deciduous woodland between 800m. and 2800m. in W China, from SE Gansu to E Sichuan. Perfectly growable in the UK

4.581.200 : PAEONIA OSTII

4.581.250 : PAEONIA QIUI

4.581.300 : PAEONIA ROCKII

4.581.400 : PAEONIA STERNIANA

4.581.450 : PAEONIA SUFFRUTICOSA

4.581.500 : PAEONIA SUFFRUTICOSA subsp. ROCKII (*P. rockii*, *P. s.* 'Rocks Variety') No intelligible data. Wild-collected Chinese seed of this mythical tree-peony but do not hold your breath - one Australian grower has already flowered a seedling from seed sown in 1996 (how do these people do this so quickly ?) and there was no blotch on the flowers. We suspect that as with so many species, the wild colonies are variable and the maroon blotch may not be a consistent feature in all individuals. The introduction to western gardens was made by Joseph Rock with seed collected in 1925 from plants cultivated at the Choni lamasery in Gansu at 2600m., where it had first been seen by Farrer, but it has since been recorded growing wild in several remote areas of Gansu, Shaanxi & Hubei.. As the origins of our western garden plants were Chinese cultivated plants, we may well be best to return to the same source for a reintroduction. The maroon-blotched, white tree-peony is still cultivated in China, where it is known simply as the Gansu tree-peony - Gansu Mudan. We shall almost certainly be able to do as well as Rock & better than Farrer by listing 1998 cultivated seed of this from Gansu next winter. In the meantime, while we can be reasonably confident the wild seed will produce huge flowers "refulgent as pure snow and fragrant as heavenly roses with a heart of gold", as described by Farrer, we cannot guarantee "each stainless petal flamed at the base with a clean and definite feathered blotch of maroon." A recent account of the members of the group, beautifully illustrated with photographs & paintings, by G.L. Oost is in 'The New Plantsman' (Vol. 1, Part 4, Dec. 1994)

4.581.589 : PAEONIA VEITCHII China, Gansu, Yuzhong county. Ex W. McLewin. Possibly dwarf form.

4.581.590 : PAEONIA VEITCHII (var. *veitchii*) (*P. anomala* subsp. *veitchii* in 'Flora of China') No data. Seed from Hermann Fuchs in Germany of a form received from Japan (where it is not native). It appears to be a form of the type-race, less often seen in gardens than the following, *P.v.* var. *woodwardii*. Smaller, deeper coloured flowers, opening earlier in the season. Similar, attractive, glossy green foliage. Archibald Archive www.srgc.net

4.581.600 : PAEONIA VEITCHII var. WOODWARDII No data. Wide, dense clumps of shiny green, deeply cut foliage & slightly drooping, rosy-red, bowl-shaped flowers. From around 3000m. in W China, in Gansu & NW Sichuan & an excellent, reliable grower in UK gardens. This ill-defined variety is said to be distinguished by the longer hairs on the leaf-veins.

- 4.581.609 : PAEONIA VEITCHII var. WOODWARDII** from PINK FORM No data. Pale, soft rose-pink flowers..
- 4.581.610 : PAEONIA VEITCHII** from WHITE FORM This appears to be a white variant of *P. veitchii* var. *woodwardii*, a lovely plant, very rarely seen in cultivation, with pure-white flowers against cut, bright-green foliage. Our past experience indicated that a reasonable proportion will come white from seed with the balance in a very pale pink.
- 4.582.000 : PAPAVER
- 4.582.050 : PAPAVER AMURENSE** Russia, near Vladivostok. Ex a M. Wickenden coll.
- 4.582.200 : PAPAVER FAURIEI** Japan, Hokkaido, Rishiri Island. Ex a H. Yoshioko coll. (A dwarf relative of *P. nudicaule*, extremely rare in the wild where it is confined to gravelly alpine slopes in this locality. A bristly perennial about 15cm. High with pinnately divided leaves and little, lime-tinged yellow poppies opening from rusty-haired buds.)
- 4.584.010 : PARAQUILEGIA GRANDIFLORA** India, Garhwal Himal, SW of Josimath. D. Roberts coll. (A W Himalayan coll. of this classic cliff-plant, distributed in a variety of races from Afghanistan to China. An exquisite filigree of grey-green leaves topped by diaphanous, gold-stamened flowers, likely to be in lavender-blue, though many western forms are white.)
- 4.585.000 : PARIS
- 4.585.100 : PARIS CRONQUISTII** China, Sichuan, Mu-Li. (PC 98)
- 4.585.300 : PARIS DELAVAYI PETIOLATA** (*P. henryi*) China, Sichuan. 2300m. (PC 98)
- 4.585.500 : PARIS FARGESII var. PETIOLATA** China, Gansu
- 4.585.650 : PARIS INCOMPLETA** From R. McBeath.
- 4.585.800 : PARIS LANCIFOLIA** (*P. hamifer*) China, Sichuan, near Jinyang. 1500m. (PC 98)
- 4.586.010 : PARIS POLYPHYLLA** China, Yunnan. Ex a G. Forrest coll.
- 4.586.020 : PARIS POLYPHYLLA var. CHINENSIS** China, Gansu
- 4.586.050 : PARIS POLYPHYLLA var. LATIFOLIA** China, Gansu
- 4.586.100 : PARIS POLYPHYLLA var. STENOPHYLLA** China, Gansu
- 4.586.600 : PARIS THIBETICA APETALA** China, Sichuan, Muli. 2500m. (PC 98)
- 4.586.800 : PARIS VERTICILLATA** China, Gansu
- 4.587.000 : PARIS YUNNANENSIS** China, Yunnan, Lufeng. 2300m. (PC 98) ; distributed from India, through Burma to SW China.
- 4.587.050 : PARIS YUNNANENSIS ALBA** China, Yunnan. From R. McBeath. Sometimes included under *P. polyphylla*.
- 4.588.010 : PELTOBOYKINIA TELLIMOIDES** (*Boykinia tellimoides*)
- 4.588.020 : PELTOBOYKINIA WATANABEI** (*Boykinia watanabei*) No data. A pleasant, if unassuming, shadelover in *Saxifragaceae*. Large, palmately cut leaves and 50cm. tall stems, carrying cymes starry pale yellow flowers in summer, rise up from slowly creeping rhizomes. A local plant in the mountain woodlands on the Japanese islands of Shikoku and Kyushu.
- 4.589.000 : PERSICARIA** : Leave space for transfer of *Polygonum* to *Persicaria* here if necessary.
- 4.590.000 : PETROCOSMEA**
- 4.591.000 : PINELLIA
- 4.591.000 : PINELLIA CORDATA** China, Yunnan
- 4.591.050 : PINELLIA INTEGRIFOLIA** China, Yunnan (stock ex Kaichen, 1998)
- 4.591.110 : PINELLIA TRIPARTITA** No data.
- 4.592.010 : PLATYCODON GRANDIFLORUS**
- 4.592.500 : PLECTRANTHUS** (Labiatae) : PLECTRANTHUS SP. China, Sichuan, Emei Shan. 2290m. Ex an E. Needham coll. ("should be hardy ; foliage velvety purple-black at some stage of growth ; tubular violet flowers in autumn ; described the botanist at Wisley as 'something like some plant which grows in the Gobi desert.'")
- 4.593.009 : PLEUOSPERMUM BENTHAMII** No data. Ex a B. & S Wynn-Jones coll. A sturdy, E Himalayan, perennial umbellifer, distributed on open mountain slopes from Nepal to SW China between 3500m. & 4300m. Coarsely toothed, pinnate foliage & stout, 1.5m. stems carrying big inflorescences of white flowers surrounded by large, lobed, pale bracts. "Very striking both in foliage and flower" comments Tim Ingram.
- 4.593.209 : PLEUOSPERMUM SZECHENYII** China, Gansu. Xiahe. 3300m.
- 4.594.019 : PODOPHYLLUM HEXANDRUM** China, Yunnan, Zhongdian. 3300m. A. Dickerson 01-19
- 4.594.020 : PODOPHYLLUM HEXANDRUM** (*P. emodi*) No data. From several forms of this slow-growing, herbaceous, woodland species, widespread through the Himalaya into China. Pink or white, cup-shaped flowers top the mottled parasols of the expanding leaves as they appear in spring to be followed by big, squashy, scarlet fruits, dangling below in autumn.

- 4.595.110 : POLEMONIUM CASHMERIANUM** A fine, floriferous version of *P. caeruleum*, possibly not sustainable botanically. The *P. caeruleum* complex, with its circumpolar distribution is very variable & extends S to the Himalayas (this is not the slender *P.c.* subsp. *himalayanum*). Easy to grow & 1m. or more high with masses of flowers in quite a distinct slatey blue.
- 4.596.000 : POLYGONATUM
- 4.596.010 : POLYGONATUM CIRRHIFOLIUM** No data. A more eastern version of *P. verticillatum*, differing most notably in the coiling tendrils on the tips of the very narrow leaves which whorl the 1m. tall stems. The short-stemmed flowers, white flushed with purple or green, appear in the leaf-axils & are followed by red-purple fruits. A plant of scrubby slopes & forests between 1500m. & 3500m. in the mountains from N India to SW China. Archibald Archive www.srgc.net
- 4.598.000 : POLYGONUM
- 4.598.110 : POLYGONUM AMPLEXICAULE from CRIMSON FORM'** (*Persicaria amplexicaulis*)
- 4.598.111 : POLYGONUM AMPLEXICAULE from PINK FORM** ('Rosea') (*Persicaria amplexicaulis*)
- 4.598.112 : POLYGONUM AMPLEXICAULE from WHITE FORM** (*Persicaria amplexicaulis*)
- 4.598.113 : POLYGONUM AMPLEXICAULE from COMPACT FORM** ('Taurus') (*Persicaria amplexicaulis*)
- 4.598.120 : POLYGONUM AMPLEXICAULE var. PENDULUM** (*Persicaria amplexicaulis* var. *pendula*) Nepal, Arun Valley. From the excellent & distinct form introduced in 197? and grown as 'Arun Gem' but not seen .
- 4.599.000 : POTENTILLA
- 4.599.210 : POTENTILLA ATROSANGUINEA var. ARGYROPHYLLA** No data. The eastern, orange to orange-yellow form of this Himalayan perennial from montane meadows at altitudes up to about 4500m. The species, red-flowered in the West, is distributed from Afghanistan to Sikkim. Spreading 60cm. stems and silver-backed, trifoliate leaves.
- 4.599.710 : POTENTILLA NEPALENSIS** India, Himachal Pradesh, Kulu, Parasher. 2100m. Open meadows. Ex R. McBeath 1698 (A really excellent new form, now well established in the UK from Ron's 1985 coll. Wiry, branching, 40cm. stems curve upwards from the compact, central crowns of strawberry-leaves to carry a succession of flowers in rich, deep cherry-pink with darker centres, on & on from late summer until ended by the first severe frost. Much daintier & wilder-looking than 'Miss Willmott'.)
- 4.599.711 : POTENTILLA NEPALENSIS** Pakistan. Ex "Shogran". Ex H. Zetterlund. From another excellent geographical variant of similar colour and good qualities but much dwarfer & more likely to appeal to the rock-gardener. Compact & neat with successions of cherry-pink flowers on almost prostrate stems all summer. Best suited to the rich scree or a raised bed.)
- 4.600.900 : PRIMULA ALPICOLA** (Sect. *Sikkimensis*)
- 4.601.100 : PRIMULA ANISODORA** (Sect. *Proliferae*)
- 4.602.000 : PRIMULA AURANTIACA** (Sect. *Proliferae*)
- 4.604.009 : PRIMULA BULLEYANA** (Sect. *Proliferae*) China, Yunnan, Hei-Shui. 2800m. Marshy meadow by riverside. Ex ACE 2484 (From a recent collection of this beautiful, wet-growing, early summer-flowering, candelabra primula, distinct in the beetroot red midribs to its leaves. White-mealy stems up to 1m. high with superimposed whorls of yellow to pale orange flowers opening from scarlet buds.)
- 4.604.010 : PRIMULA BULLEYANA** (Sect. *Proliferae*) No data. A beautiful, wet-growing, summer-flowering, candelabra primula from marshy meadows in NW Yunnan & S Sichuan. Distinct in the beetroot red midribs to its leaves. White-mealy stems up to 1m. high with superimposed whorls of yellow to pale orange flowers opening from scarlet buds.
- 4.604.100 : PRIMULA BULLEYANA subsp. BEESIANA** (Sect. *Proliferae*)
- 4.604.200 : PRIMULA BURMANICA**
- 4.606.400 : PRIMULA CHIONANTHA** (Subsect. *Crystallophlomis*) China, Gansu
- 4.606.450 : PRIMULA CHIONANTHA subsp. SINOPURPUREA** China, Yunnan. Ex KGB 140 (Yellow farina. Purple flowers. 30cm. Flowers in May in UK.)
- 4.606.451 : PRIMULA CHIONANTHA subsp. SINOPURPUREA** (Subsect. *Crystallophlomis*) China, Yunnan, Da Xue Shan. 3990m. A. Dickerson 01-23. (A chance to grow a wild coll. of a member of the diverse interfertile *P. chionantha* group, which has largely 'merged' in gardens. John Richards has sunk the dozen or so 'species' under the white-flowered type, limited to the Chungtien plateau. If this has yellow farina & rich-purple flowers, it will almost certainly fit under his *P.c.* subsp. *sinopurpurea*. Easiest of the nivalids : "a magnificent garden plant, one of the best of all primulas for the open garden.")
- 4.607.000 : PRIMULA CHUNGENSIS** (Sect. *Proliferae*) No data. Native to China in SW Sichuan, NW Yunnan & adjacent Assam & SE Tibet. Wet areas in coniferous forest around 3000m.
- 4.607.500 : PRIMULA COCKBURNIANA** (Sect. *Proliferae*)
- 4.608.010 : PRIMULA CONCHOLOBA** No data.
- 4.609.000 : PRIMULA DENTICULATA**
- 4.616.009 : PRIMULA FLORINDAE** (Sect. *Sikkimensis*) Tibet. Ex K. Rushforth 3579. (From a new collection of this magnificent

plant, possibly the first since the 1924 Kingdon Ward introduction. Narrowly endemic to the Tsangpo basin of SE Tibet but naturalised in the UK & an important species for UK gardens, where many plants are now crosses with *P. alpicola* and *P. waltonii*. The largest in its genus with huge umbels of up to 80 fragrant, sulphur-yellow bells hanging on mealy stalks atop a stem up to 1.5m. high. in mid to late summer. Easy in any rich, wet soil.)

4.616.500 : PRIMULA FORRESTII (Sect. *Bullatae*) A famous, woody-based plant of the Lichiang limestones, dry habitats except when deluged by the monsoons of late summer. Umbels of yellow, orange-eyed flowers on 15cm. stems from rosettes of long-stalked, wrinkled, light-green leaves. Needs alpine-house cultivation with careful watering in the UK.)

4.617.410 : PRIMULA HELODOXA (Sect. *Proliferae*) (*P. prolifera* complex) No data. Introduced by Forrest from Yunnan but now probably crossed with some of its allies, like Bhutanese *P. smithiana*, in gardens. Nevertheless, it remains the finest yellow candelabra primula with bright, clear-yellow whorls on 50cm. stems from evergreen rosettes of rich-green leaves.

4.618.800 : PRIMULA IOESSA (Sect. *Sikkimensis*)

4.619.700 : PRIMULA JAPONICA (Sect. *Proliferae*)

4.619.710 : PRIMULA JAPONICA 'MILLER'S CRIMSON' (Sect. *Proliferae*) A fine rich-red strain of this species from mountain streamsides of Japan. Robust clumps of red-ribbed, light-green leaves send up 50cm. high candelabra of large, deep red flowers. The species is a self-fertile, tetraploid homostyle and the seedlings will come evenly and 'true'

4.619.712 : PRIMULA JAPONICA 'VALLEY RED' (Sect. *Proliferae*)

4.619.714 : PRIMULA JAPONICA 'POSTFORD WHITE' (Sect. *Proliferae*)

4.619.716 : PRIMULA JAPONICA 'FUJI' (Sect. *Proliferae*)

4.619.719 : PRIMULA JAPONICA from PINK FORMS (Sect. *Proliferae*)

4.619.720 : PRIMULA JAPONICA from WHITE FORMS (Sect. *Proliferae*) Archibald Archive www.srgc.net

4.619.910 : PRIMULA JESOANA (Sect. *Cortusoides*) No data. A pretty little Japanese species with a scattered distribution on the mountains of W Hokkaido & N Honshu. Like a smaller, more slender version of *P. kisoana* with notched, purple-rose flowers carried in candelabra of superimposed whorls above the downy, rounded leaves. Loose, humus-rich soil in shade.

[**788.350 : PRIMULA MACROPHYLLA** (Sect. *Crystallophlomis*) (Tadjikistan & Pamirs to Chitral, Karakoram, Kashmir, Ladakh, Garhwal, Hazara, Simla, Kamaon, W Nepal, Sikkim, Bhutan & SE Tibet. Usually by streams or melting snow at 3550-5400m.) Four varieties recognized by Richards.]

4.624.010 : PRIMULA MOLLIS (Sect. *Cortusoides*) No data. A most distinct species, scattered around the headwaters of the Brahmaputra & Irrawaddy, from Bhutan to Yunnan, at altitudes up to 3300m. Downy, pale-green, rounded leaves, like opening umbrellas, on woolly stalks & 30cm. candelabra of little rosy crimson flowers. For a cool, moist, sheltered site.

PRIMULA OBLIQUA Ex K212. From Jim Jermyn

4.628.610 : PRIMULA POISSONII (Sect. *Proliferae*) No data. A most distinct, long-lived and neat candelabra primula, close to *P. wilsonii*, from NW Yunnan and SW Sichuan, where it grows in the black, acid earth of wet meadows and along streams. Tidy rosettes of smooth, evergreen leaves with 40cm. stems carrying whorls of golden-eyed flowers, described by John Richards as "velvety plum-purple". We should be more effusive and describe it as luminous carmine-purple, an arresting and penetrating colour, which always attracts attention. "An attractive plant which should be more frequently grown."

4.629.800 : PRIMULA PULVERULENTA (Sect. *Proliferae*)

4.629.810 : PRIMULA PULVERULENTA (Sect. *Proliferae*) From wet sites above 2000m. in W Sichuan. The earliest candelabra primula with whorls of flat, crimson flowers with darker eyes on contrasting white, mealy stems up to 1m. tall.

4.629.812 : PRIMULA PULVERULENTA 'BARTLEY STRAIN' (Sect. *Proliferae*) Painstakingly selected by Huw Dalrymple in the 1920's. Shades of pink and rose with pale or dark eyes. : may be of hybrid origin : better in 6.....section?

4.636.219 : PRIMULA SECUNDIFLORA (Sect. *Proliferae*) China, Yunnan, Da Xue Shan. 4010m. A. Dickerson 01-26 (Smooth, bright, evergreen rosettes & graceful, white-mealy, 60cm. stems carrying drooping bells in a luminous, deep crimson. Long placed in Sect. *Sikkimensis* but moved into Sect. *Proliferae* (with the superficially dissimilar 'candelabra primulas') by John Richards, who comments that "this stunning species is seen less often than it deserves." Moist, rich humus in semi-shade.)

4.636.220 : PRIMULA SECUNDIFLORA (Sect. *Proliferae*) No data.

4.637.000 : PRIMULA SIKKIMENSIS (Sect. *Sikkimensis*)

4.642.310 : PRIMULA VIALII (Sect. *Muscarioides*) No data. An extraordinary species of unique appearance : clumps of erect downy leaves send up 50cm. stems carrying a cylindrical spike of about 100, close-packed violet-blue flowers opening from brilliant red buds. It has a scattered distribution in meadows & scrub, around 3000m. in SW Sichuan & NW Yunnan, whence it was introduced by George Forrest in 1906 & has been maintained in gardens since. It needs a cool site in a humus-rich, fertile soil, moist but well-drained. Though often short-lived in cultivation, this seed is from clumps about 5 years old.

4.643.210 : PRIMULA WALTONII (Sect. *Sikkimensis*) No data. A plant of damp river-meadows in Tibet, Sikkim & Bhutan. Though its name appears from time to time applied to garden-hybrids, the genuine species is rare and has proved difficult to maintain in cultivation in the UK. It was last introduced from Sikkim in 1983. Umbels of up to 30, pendant bells in deep pink to

wine-red shades on mealy stems, up to 50cm.tall. Seeds from authentically named parents grown by Mike & Polly Stone in Inverness-shire, Scotland, but the species appears to cross readily with other members of its section.

4.644.110 : PRIMULA WILSONII var. ANISODORA (Sect. *Proliferae*) From among deciduous scrub in moist sites around 3,500m. in Sichuan and N Yunnan. Evergreen rosettes of smooth, aromatic leaves. Willowy stems rise to 50cm. or more, whorled with deep velvety-crimson to purple-black bell-shaped flowers ringed centrally with neat pale-yellow 'eyes'

4.645.700 : PRIMULA YUPARENSIS

PRIMULA SP. China, Yunnan, Zhongdian. 3300m. A. Dickerson 01-20

PRIMULA SP. (Sect. *Crystallophlomis*) China, Yunnan, Beima Shan. 4035m. A. Dickerson 01-22

PRIMULA SP. (Sect. *Crystallophlomis*) China, Yunnan, Da Xue Shan. 3890m. A. Dickerson 01-24

4.680.000 : PRUNUS

4.685.000 : PULSATILLA

4.690.010 : RANZANIA JAPONICA From R. McBeath.

4.698.910 : RHEUM ACUMINATUM Ex a Ron McBeath coll. An excellent species from the exposed, alpine meadows of the eastern Himalaya, above 3000m.. "Superbly worthy of cultivation for both foliage and flower" comments Dan Hinkley. Deeply veined, heart-shaped leaves, soft crimson beneath, carried on bright red stems with 1m. high, panicles of rosy flowers followed by glistening scarlet fruits. With us, an excellent garden-plant, whose foliage remains in fine condition all summer.

4.699.000 : RHEUM ALEXANDRAE China, Diqing Pref., Tian Chi, Lake W of Xiao Zhongian. 3850m. Ex KGB 767 (Neat clumps of smooth, dark-green, leathery foliage send up 1m. flower-stems wrapped round with striking, inflated, greenish-cream, papery bracts. It did well on the deep, peaty fen-soil of Bressingham Gardens & they used to use this a centre-piece of their Chelsea exhibits in the 1970's but it is not an easily suited plant in most gardens. Worth every effort, however.)

4.699.100 : RHEUM AUSTRALE Pakistan, Hunza, Batura glacier. 3300-4200m. Ex SEP 60 Archibald Archive www.srgc.net

4.699.400 : RHEUM KIALENSE

4.699.450 : RHEUM MOORCROFTIANUM From R. McBeath.

4.699.500 : RHEUM NOBILE

4.699.600 : RHEUM PALMATUM from RED-LEAVED FORM One of the most imposing of herbaceous perennials but it needs space for its very large, deeply cut leaves, which in the parent are crimson, flushed with scarlet, as they emerge in spring, remaining crimson-tinted below well into summer, when a panicle of brilliant cerise flowers soars to about 3m. high. This is from 'Red Herald', selected, when we were at Buckshaw Gardens, as the best out of hundreds of seedlings from the variable plants circulated as 'Atrosanguineum', 'Bowles' Variety', etc. Sow the seed promptly, select the best but please don't call them 'Red Herald'

4.699.601 : RHEUM PALMATUM from GREEN-LEAVED FORM From our other selected clone 'Green Knight', raised from a plant we had as *R.p. var. tanguticum*. Green-leaved but, if anything, larger & more spectacular in its soaring stems of vivid cerise-red flowers. The very fine, jaggedly cut foliage tends to remain in better condition in recent hot summers &, on the whole, we prefer it in W Wales. Anyway, the two will probably have crossed. These "germinated in 5 days" according to a NZ customer!

4.699.700 : RHEUM TIBETICUM Pakistan, Swat, Ushu Valley, Mahodan. 3050-3350 m. Ex SEP 352

4.701.000 : RHODODENDRON : c.80,000 numbers ; c.250 spacing on species for fluidity.

4.704.110 : RHODODENDRON ALBRECHTII No data

4.704.910 : RHODODENDRON AMBIGUUM No data

4.705.110 : RHODODENDRON ARBOREUM No data

4.706.910 : RHODODENDRON AUGUSTINII No data.

4.707.110 : RHODODENDRON AURICULATUM No data.

4.714.000 : RHODODENDRON CERASINUM

4.715.810 : RHODODENDRON CILIATUM No data.

4.716.000 : RHODODENDRON CINNABARINUM

4.718.560 : RHODODENDRON CUNEATUM No data.

4.719.560 : RHODODENDRON DAVIDSONIANUM No data.

4.730.810 : RHODODENDRON FORTUNEI No data.

4.731.710 : RHODODENDRON GLAUCOPHYLLUM No data.

4.732.910 : RHODODENDRON GRIERSONIANUM No data.

4.733.110 : RHODODENDRON GRIFFITHIANUM No data.

- 4.735.510 : RHODODENDRON HIPPOPHAEOIDES** No data.
- 4.739.110 : RHODODENDRON KELETICUM** No data.
- 4.742.510 : RHODODENDRON LEUCASPIS** No data.
- 4.746.910 : RHODODENDRON MORII** No data
- 4.747.211 : RHODODENDRON MUCRONULATUM** No data. Jim fell in love with this *doyenne* of winter-flowering shrubs in the woodlands of the RBG Edinburgh long ago. Botanically near *R. dauricum* but vastly different from a gardener's viewpoint, this extremely hardy, deciduous, 2m. shrub, distributed from N China through Ussuri & Korea to N Japan, wreathes its slender, naked twigs with little, flat, rosy flowers in midwinter. In the UK almost always out for Christmas, continuing into February, but later in really cold climates. Canadian seed from a superlative pure-pink clone, derived from crossing newer 'Woodland Pink' & 'Cornell Pink' (selected in New York from a thousand seedlings raised from Japanese seed in the 1930's ; AM from the RHS in 1965). This is *la creme de la creme*, it can flower in 2-3 years from seed & we are assured that it will come almost 100% evenly.
- 4.766.950 : RHODODENDRON SCABRIFOLIUM var. SPICIFERUM** No data
- 4.778.350 : RHODODENDRON UNIFLORUM var. IMPERATOR** No data
- 4.784.609 : RHODODENDRON YAKUSHIMANUM** Japan, Kyushu, Yakushima. 1200-1800m. (Narrowly endemic to the high mountains of Yakushima Island. From the wild-collected, FCC clone, 'Koichiro Wada', open pollinated in the UK but with little else concurrently in flower.
- 4.784.820 : RHODODENDRON YUNNANENSE** No data
- 4.798.000 : RODGERSIA
- 4.798.009 : RODGERSIA AESCULIFOLIA** (var. *aesculifolia*) China, Sichuan, Mao Co., at Mo Zhi Gou in the Huangtuliang Hills above Maowen. 2050m. Ex SICH 1663. Archibald Archive www.srgc.net
- 4.798.010 : RODGERSIA AESCULIFOLIA** No data (100+)
- 4.798.100 : RODGERSIA AESCULIFOLIA var. HENRICI**
- 4.798.150 : RODGERSIA NEPALENSIS**
- 4.798.200 : RODGERSIA PINNATA** (var. *pinnata*) No data. (100+)
- 4.798.250 : RODGERSIA PINNATA var. STRIGOSA**
- 4.798.300 : RODGERSIA PODOPHYLLA**
- 4.798.410 : RODGERSIA SAMBUCIFOLIA** (var. *sambucifolia*) No data. A noble foliage plant of quite limited distribution in SW China, between 1800m. and 3700m. altitude in W Guizhou, SW Sichuan and N Yunnan. Huge, deeply veined, pinnate leaves & arching panicles, over 1m. tall with a myriad white flowers. For rich, moist soil in semi-shade.
- 4.798.450 : RODGERSIA SAMBUCIFOLIA var. ESTRIGOSA**
- RODGERSIA SP.** China, Yunnan, Dali, Cangshan. 3000m. Among scrub in wet hollow. Ex I. Stokes 46090
- 4.800.000 to 4.825.000 : ROSA : say approx. 250 species at 100 per species
- 4.810.000 : ROSA FILIPES
- 4.820.000 : ROSA MACROPHYLLA
- 4.820.300 : ROSA MOYESII
- 4.824.000 : ROSA SERICEA
- 4.824.007 : ROSA SERICEA** Sikkim, above Choka. 3100m. Ex AGSES 373. (By far the finest and most vigorous of the three collections of this very variable species, which we grow. Almost 3m tall with profuse ferny foliage and masses of small, white flowers, usually with only 4 petals, followed by elongated crimson fruits. The young stems are covered with huge, flattened, translucent, scarlet prickles, just as impressive as Chinese *R. s.f. pteracantha*, a poor grower with us.)
- 4.824.008 : ROSA SERICEA** Ex C. Chadwell & A. McKelvey
- 4.824.009 : ROSA SERICEA** China, Yunnan. Ex ACE (as *R. omeiensis pteracantha*)
- 4.825.010 : ROSA WEBBIANA** No data but originally from material collected in the western Himalaya, where it is native to the drier, inner valleys. A splendid species, armed with yellowish prickles & seldom more than 2m. tall with rather glaucous leaves & white, sometimes pink-flushed, flowers, followed by globular, bright-red fruits.
- 4.830.000 : ROSCOEA ALPINA**
- 4.830.009 : ROSCOEA ALPINA** India, Himachal Pradesh, Kailas Himalaya. c.3000m. Among shrubs. Ex C. Chadwell 3667. (A variable Himalayan species, distributed from Kashmir to Bhutan up to 4300m. Quite distinct in its very long-tubed flowers with rounded dorsal petals, mauve-pink to deeper purple in this coll., which is 10-15cm. in height.)
- 4.830.010 : ROSCOEA ALPINA** No data. A variable Himalayan species, distributed from Kashmir to Bhutan up to 4300m. Quite distinct in its very long-tubed flowers with rounded dorsal petals. Usually quite dwarf at about 15cm. in height.

4.830.100 : ROSCOEA AURICULATA

4.830.110 :# ROSCOEA AURICULATA No data. A robust E Himalayan species with broad, bright-green, auriculate leaves sheathing the 50cm. high stems which carry the rich purple flowers, with large, deflexed lips, emerging from among pale-green bracts, over a long period in late summer. Native to Sikkim & adjacent Nepal & Tibet, between 2000m & 4000m., this was long confused with *R. purpurea* but the two are perfectly distinct. Thrives here in rich, moist soil in semi-shade.

4.830.200 : ROSCOEA AUSTRALIS

4.830.300 : ROSCOEA BRANDISHII

4.830.400 : ROSCOEA CAPITATA

4.830.409 : ROSCOEA CAPITATA Nepal, Langtang valley. 2600m. Ex E. Needham 6277 : looks like *R. purpurea*. Check !

4.830.500 : ROSCOEA CAUTLEOIDES

4.830.505 : ROSCOEA CAUTLEOIDES

4.830.550 : ROSCOEA CAUTLEOIDES from YELLOW FORM

4.830.551 : ROSCOEA CAUTLEOIDES from YELLOW FORM No data. The species is a very variable Chinese endemic from Yunnan & adjacent Sichuan, between 2000m. and 3400m. It can grow up to 50cm. in height ; the flowers can appear in the wild from May through to August and can be purple, pink, yellow or white. This seed is from an early-flowering, elegant, upright form, which came to us from Ron McBeath : a long succession of soft-yellow flowers, starting with us in May.

4.830.560 : ROSCOEA CAUTLEOIDES from PURPLE FORM

4.830.570 : ROSCOEA CAUTLEOIDES from WHITE FORM 3200m. (stock ex Kaichen, 2000 & 2001.)

4.830.600 : ROSCOEA DEBILIS

4.830.700 : ROSCOEA FORRESTII

4.830.800 : ROSCOEA HUMEANA

4.830.810 : ROSCOEA HUMEANA No data.

4.830.900 : ROSCOEA NEPALENSIS

4.831.000 : ROSCOEA PRAECOX

4.831.100 : ROSCOEA PURPUREA

4.831.120 : ROSCOEA PURPUREA No data. A Himalayan species, distributed in N India from Himachal Pradesh to Assam, as well as in Nepal & Bhutan, usually growing in grassland or along forest margins between 1500m. & 3000m. It lacks the strongly auriculate leaves of *R. auriculata*, as well as having longer, narrower segments to the flowers, which do not have a deflexed lip and are usually paler lilac, though white, purple-marked variants frequently occur. Flowers in late summer.

4.831.200 : ROSCOEA SCHNEIDERIANA Archibald Archive www.srgc.net

4.831.209 : ROSCOEA SCHNEIDERIANA China, Yunnan, Lijiang. Ex CLD 0773. (Endemic to the Lijiang range of Yunnan and to adjacent Sichuan, growing between 2600m. and 3350m., on limestone often in rocky habitats or on cliff-ledges. Closest to the lower altitude, more southern *R. praecox* & *R. debilis* but most distinct in its rosette of long, linear, falcate leaves. Stems about 30cm. tall carry concolorous, rich purple flowers with deeply notched lips in late summer.)

4.831.300 : ROSCOEA SCILLIFOLIA

4.831.312 : ROSCOEA SCILLIFOLIA from PINK FORM No data. An extremely variable little species, quite narrowly endemic to Yunnan, mainly in the Lijiang area, in moist mountain-pastures between 2700m. & 3400m. Only about 20cm. in height with small strawberry-pink flowers appearing among wide, bright-green bracts.

4.831.313 : ROSCOEA SCILLIFOLIA from PURPLE FORM No data. Usually a little taller & earlier flowering with longer, narrower leaves and deepest violet-purple flowers with yellow anther appendages (white ones in the pink form).

4.831.400 : ROSCOEA TIBETICA

4.831.408 : ROSCOEA TIBETICA China, Yunnan. 3100m. (Stock ex Kaichen, 2001.)

4.831.409 : ROSCOEA TIBETICA China, Yunnan. 3100m. ("Red-flowered" : stock ex Kaichen, 2000.)

4.831.410 : ROSCOEA TIBETICA No data. This starts to flower as a compact rosette with the flowers, purple-red in this form, appearing on long tubes from the axils of the broad leaves, completely encircling the stem, which gradually elongates. Quite widely distributed in S Tibet, Bhutan, N Burma, W Yunnan & Sichuan up to 4270m.

4.831.600 : ROSCOEA TUMJENSIS

4.831.700 : ROSCOEA WARDII

4.831.800 : ROSCOEA YUNNANENSIS ("White-flowered : stock ex Kaichen, 2001.) Possibly *R. cautleoides* or *R. schneideriana*.

4.831.801 : ROSCOEA YUNNANENSIS ("Red-flowered : stock ex Kaichen, 2001.) Possibly *R. cautleoides* or *R. schneideriana*.

- 4.835.600 : RUBUS NEPALENSIS** India, Garhwal Himal, S of Kuari pass. *Rhododendron* forest. D. Roberts coll. 12.9.95 (A variable, creeping, thornless shrub - it may differ from cultivated material. Purple-bristled stems & white flowers from reddish calyces.)
- 4.838.049 : SALVIA BULLEYANA** China, Yunnan. Ex CLD 801 (A dry-meadow plant, hardy & easily grown in open border conditions in the UK. Big, bold, cordate leaves and 1m. stems with many, paired, soft-yellow flowers with distinctive brown-purple lower lips, opening over a long period in high summer.) Archibald Archive www.srgc.net
- 4.838.049 : SALVIA BULLEYANA** China, Yunnan. Ex CLD 981 (A dry-meadow plant, hardy & easily grown in open border conditions in the UK. Big, bold, cordate leaves and 1m. stems with many, paired, soft-yellow flowers with distinctive brown-purple lower lips, opening over a long period in high summer.)
- 4.838.050 : SALVIA BULLEYANA** No data. A dry-meadow plant from Yunnan with big, bold, cordate leaves and 1m. stems with many, paired, soft-yellow flowers with distinctive brown-purple lower lips, over a long period in high summer.
- 4.838.150 : SALVIA CAMPANULATA from YELLOW FORM** From R. McBeath. (A handsome, 50cm. tall, robust, E Himalayan dry-meadow plant with a tuberous rootstock. Distributed from N India to SW China at altitudes up to 4000m. and accordingly variable. The paired flowers emerging from large calyces can be cream, yellow, pink or blue. For a well-drained sunny site in the UK.).
- 4.838.200 : SALVIA DIGITALOIDES** From R. McBeath : "similar to *S. campanulata* with white, purple-flushed flowers."
- 4.838.400 : SALVIA HIANIS** No data. A fine, characteristic Himalayan species, distributed from Pakistan to Bhutan on open slopes up to 3000m. Clumps of sticky, aromatic leaves & 60cm. stems whorled with rich purple-blue flowers.
- 4.838.500 : SALVIA LANATA**
- 4.838.600 : SALVIA MOORCROFTIANA**
- 4.838.709 : SALVIA NUBICOLA** Pakistan, Hazara, Kahgan valley. 2100-4000m. Open slopes & forest clearings. Ex C. Chadwell 2031. (A robust perennial, sticky with glandular hairs. Large, basal leaves & branching, 60cm. stems whorled with pale yellow flowers with orange-pink lips.)
- 4.838.800 : SALVIA PRZEWALSKII** China, Yunnan, Zhongdian. 3300m. Ex ACE 1157 (Large greyish leaves with reddish petioles and branching, 1m. high stems of bright rose-purple flowers in summer. For a dry, sunny site.)
- 4.841.010 : SANGUISORBA ALBIFLORA** No data.
- 4.841.509 : SANGUISORBA HAKUSANENSIS** Ex a BSWJ coll.
- 4.842.009 : SANGUISORBA MAGNIFICA** Russia, near Vladivostok. Ex a M. Wickenden coll. (A name misapplied in cultivation, usually to the white *S. albiflora*, but Michael believes this collection from the Russian Far East to be the true species. Soft-pink tassels droop on 50cm. stems above greyish green pinnate foliage, which turns to dusky orange in autumn.)
- 4.842.260 : SANGUISORBA OBTUSA**
- 4.842.510 : SANGUISORBA TENUIFOLIA** No data.
- 4.844.010 : SARUMA HENRYI** No data. Native to moist, shaded habitats in SW China, in Hubei, Guizhou & Yunnan, this monotypic genus in *Aristolochiaceae*, closely related to *Asarum*, is comparatively recently introduced to cultivation. Slow-growing clumps of stems, about 30cm. tall, clad in large, cordate, grey-green, velvet leaves, tinged with purple, carry small, 3-petalled flowers over a long period in summer. Hardy, tolerant & an unassuming touch of class
- 4.845.000 : SAUSSUREA
- 4.848.500 : SAUSSUREA STELLA** From R. McBeath. Archibald Archive www.srgc.net
- 4.850.000 : SAXIFRAGA
- 4.851.050 : SAXIFRAGA FORTUNEI from WADA'S FORM** No data. From an outstanding, vigorous Japanese form of a very variable species, distributed through much of NE Asia, along streamsides & among wet rocks in mountains. Airy, 40cm. high flights of little, white, zygomorphic butterfly-flowers above beautiful mahogany-tinted, crimson-lined leaves in late autumn.
- 4.859.010 : SCOPOLIA STRAMONIFOLIA** : See *Anisodus luridus*
- 4.865.010 : SELINUM TENUIFOLIUM** No data. "The queen of umbellifers...the most beautiful of all fern-leaved plants" according to E.A. Bowles. From Himalayan meadows at up to 4000m. between Kashmir & Bhutan. Over 1m. high with slow-growing clumps of very finely cut, soft-green foliage & lacy, flat, white heads. No trouble in a good, moist soil in sun or part-shade.
- 4.865.100 : SELINUM WALLICHIANUM** Stock ex Peter Chappell.
- 4.867.000 : SEMIAQUILEGIA ADOXIOIDES** China, Quinghai. Ex SBQE 1157. From R. McBeath.
- 4.870.050 : SHORTIA SOLDANELLOIDES var. INTERCEDENS** Japan, Honshu, Shizuoka Pref., Tenryu River gorge near Kunma village. D. Elick coll. in late November, 1998 (An unusually good seed set this year so a few more seeds to supplement Don's earlier colls. of this extremely local and genuinely 'threatened' race from "dark damp serpentine cliffs" in a few river-gorges of a small area of Honshu. Don writes that "at least half if not more of its sites have been drowned in hydroelectric schemes."

Very much for the experienced specialist, who will need a lens to count the tiny seeds plus a lot of skill and patience but it can be done.)

4.870.600 : SILENE DELAVAYI China, Yunnan, Lijiang, Yulong Shan. 3200m. Ex CLD 778. (Dark violet.)

4.874.000 : SORBUS

SORBUS CASHMERIANA Pakistan, Gilgit, near Rama, 6 km. W of Astor. 3150-3400m. Ex SEP 516.

SORBUS aff. CASHMERIANA Pakistan, Gilgit, between Sango Sar Lake & Rama, 6km. WSW of Rama. 3380-3500m. (Pink fruits.)

SORBUS FILIPES

SORBUS FOLIOLOSA Bhutan. Ex K. Rushforth 876.

SORBUS GLOMERULATA China, Sichuan, Emei Shan. 2850m.

SORBUS MONBEIGII

4.874.950 : SORBUS POTERIIIFOLIA No data. A tiny dwarf shrub, about 20cm. high, with running, rooting stems, once confused with *S. reducta* but different from this in its pink flowers & white fruits. Native to NW Yunnan & adjacent N Burma at altitudes up to 4000m., most plants in cultivation would appear to originate from F. Kingdon Ward colls. made in NW Burma, where he writes that "its clusters of reddened berries turned snow-white, beading the crinkly black stems like moonstones."

4.874.989 : SORBUS REDUCTA China, Yunnan, Xiao Geza. 3000m. Ex KGB 254.

4.874.990 : SORBUS REDUCTA No data. A dwarf shrub from Yunnan, 15-50cm, high, slowly spreading into thickets by underground runners in a good, moist soil. White flowers followed by pink fruits and bronze autumn-colour.

SORBUS SCALARIS

SORBUS VILMORINII

4.875.309 : STACHYURUS PRAECOX Japan, Honshu, Tottori, Daisen. 900m.

4.875.550 : STREPTOPUS PARVIFLORUS (stock ex Kaichen, 1998)

4.876.000 : STROBILANTHES

4.876.010 : STROBILANTHES ATROPURPUREA No data. Archibald Archive www.srgc.net

4.876.050 : STROBILANTHES ATTENUATA Nepal. A member of a mainly tropical genus in *Acanthaceae*. Low, spreading growth, about 50cm. high with the hooded, violet flowers over a long period in late summer & autumn. Entirely hardy and adaptable in an open site with us. Possibly best in good, moist soil, in semi-shade if in hotter gardens than ours.

4.877.010 : STYLOPHORUM LASIOCARPUM China, Sichuan. From recent colls of this perennial woodlander in *Papaveraceae*, sister to the N American *S. diphyllum*. Clumps of cut, toothed foliage, 30cm. high, with a long, late spring, succession of lucent yellow poppies each followed by an attenuated tapering seed-capsule. Hardy & easy in a cool, rich, sheltered site.

4.878.000 : THALICTRUM

4.878.110 : THALICTRUM CHELIDONII No data. An E Himalayan species, from Sikkim & Bhutan. Well developed, purple, petaloid sepals, generally similar to *T. delavayi*, but the basal foliage has larger, coarse-toothed leaflets.

4.878.150 : THALICTRUM CULTRATUM Stock ex Peter Chappell ; further data possibly available from Kevin. This stock is almost certainly not correctly named.

4.878.210 : THALICTRUM DELAVAYI (*T. dipterocarpum* of gardens) No data. An exquisitely elegant & airy, 2m. high perennial from Yunnan. Maidenhair fern foliage & wiry, 2m. stems dividing into a multitude of branches to carry a myriad clear lavender-purple flowers, the petal-like sepals surrounding the bunch of hanging stamens. Cool site in good, humus-rich soil.

4.878.211 : THALICTRUM DELAVAYI from WHITE FORM No data. Pure-white flowers and paler green foliage.

4.878.215 : THALICTRUM DELAVAYI var. DECORUM (stock ex Kaichen, 1998)

4.878.250 : THALICTRUM DIFFUSIFLORUM No data. Another local variation on the SW Chinese species with petaloid sepals, native to SE Xizang at about 3500m. It is a superb thing with big, soft-lavender flowers, the largest individual flowers of those listed here and the foliage is very finely cut into the smallest leaflets. It is, however, both the most difficult to suit and the most difficult to place in the garden. Its habit is obviously adapted to straggling over shrubs & it needs some support. We remember seeing it many years ago, climbing to over 3m. on a wall in N. Ireland but it will be doing well if it reaches 1m. in most gardens.

4.878.280 : THALICTRUM DIPTEROCARPUM China, Yunnan. Ex ACE Archibald Archive www.srgc.net

4.878.305 : THALICTRUM FILAMENTOSUM S Korea, Cheju-do, Halla-san, Yong-sil valley. 1730m. Ex M. Holmberg & U. Strindberg 92-410

4.878.350 : THALICTRUM FOENICULACEUM

4.878.409 : THALICTRUM GRANDIFLORUM (stock ex Kaichen, 1998)

4.878.500 : THALICTRUM ICHANGENSE (*T. coreanum*)

4.878.700 : THALICTRUM PUNCTATUM Stock ex Peter Chappell ; further data possibly available from Kevin.

4.878.805 : THALICTRUM ROCHEBRUNEANUM S Korea, Kansong, N of Hangye. 370m. Ex M. Holmberg & U. Strindberg 92-167. (A handsome, tall, erect species, reaching over 2m. in height and producing its lilac-purple flowers with petaloid sepals over a long period. Earlier flowering than *T. delavayi* and with less finely cut, maidenhair foliage.)

4.878.900 : THALICTRUM UCHIYAMAE Korea. From a coll. by P. Cave. (New Zealand seed from Ray Freeman, who describes this exciting, new, hardy plant, as a larger version of lilac *T. delavayi*, both in flower-size & height - up to 2.5m.)

4.879.000 : TIARELLA

4.882.000 : TRICYRTIS

4.883.510 : TRICYRTIS ISHIANA Endemic to Sagama Prefecture, Honshu. (More or less glabrous. Bracts ovate up to 8mm. long. Spur 5-6mm. wide.)

4.883.520 : TRICYRTIS ISHIANA var. SURUGENSIS Endemic to Mount Tenshigatake, Suruga Prefecture, Honshu. (Leaves pubescent on edges and nerves beneath. Bracts short. Spur small, 1-1.5mm. wide. Anthers dark brown.)

4.884.005 : TRICYRTIS LATIFOLIA China, Sichuan, Mao Co, Mo Zhi Gou, Huangtuliang Hills above Maowen. 2100m. Ex SICH 1669 Archibald Archive www.srgc.net

4.884.100 : TRICYRTIS MACRANTHA Japan, Kochi Pref., Agawa-gun, Nanokawa, Omogo river gorge. In the spray of waterfalls on limestone rocks in deep gorges, growing with *Lilium speciosum* var. *clivorum*. Ex a D. Elick coll.

4.888.900 : TRILLIDIUM GOVANIANUM Pakistan, Hazara, Kahgan valley, above Shogran Forest Resthouse. 2670-3050m. Ex SEP 264 (From a western coll. of this Himalayan *Trillium* relative (you can include it in *Trillium* if you wish), which extends from around here E to Bhutan. Stem of 30cm. or less carry a purple-tinged, yellowish, greenish or brownish flower with narrow segments, followed by a purple fruit. Like other *Trillium* spp. should germinate if kept long enough at about room-temperature - or give second-year germination if kept at outdoor temperatures. See comments under American species..

4.888.000 : TRILLIUM

4.888.000 : TRILLIUM APETALON

4.888.050 : TRILLIUM CAMSCHATCENSE

4.888.100 : TRILLIUM HAGAE

4.888.150 : TRILLIUM SMALLII

4.888.170 : TRILLIUM SMALLII No data. A somewhat ill-defined species from low altitude, deciduous woodland on Hokkaido in N Japan & adjacent S Sakhalin in the Russian Far East. Thought to be of hybrid origin, possibly between white *T. camschatcense* & red-brown *T. apetalon*. It is placed under the latter species by Ohwi in the 'Flora of Japan'.

4.888.200 : TRILLIUM TSCHONOSKII

4.890.000 : TROLLIUS

4.890.000 : TROLLIUS ACAULIS

4.890.050 : TROLLIUS ASIATICUS

4.890.200 : TROLLIUS HONDOENSIS Japan, Honshu.

4.890.400 : TROLLIUS PULCHER No data but endemic to Rishiri Is. off the NW tip of Hokkaido in the far N of Japan : stock from R. McBeath looks like *T. riederianus* : check with Ron !

4.890.450 : TROLLIUS PUMILUS

4.890.500 : TROLLIUS RANUNCULOIDES China, Yunnan, above Napa Hai. 3850m. Ex KGB 41

4.890.550 : TROLLIUS RIEDERIANUS Japan, Kurile Islands ; Sakhalin ; Kamchatka

4.890.560 : TROLLIUS RIEDERIANUS var. JAPONICUS Japan, Hokkaido & Honshu.

4.890.800 : TROLLIUS YUNNANENSIS China, Yunnan, Bei Ma Shan. 3600m. Ex KGB 678

4.890.801 : TROLLIUS YUNNANENSIS China, Yunnan, above Wengsui. 3590m. Mixed woodland in degraded *Abies* forest. Ex ACE 1881 (distributed as 1887) Archibald Archive www.srgc.net

4.890.809 : TROLLIUS YUNNANENSIS From R. McBeath

4.920.100 : TYPHONIUM DIVERSIFOLIUM Nepal. 3350m. Ex E. Needham 451

4.920.210 : TYPHONIUM GIRALDII No data.

4.930.000 : VERATRUM

4.930.200 : VERATRUM GRANDIFLORUM

4.930.300 : VERATRUM LONGEBRACTEATUM

4.930.410 : VERATRUM MAACKII No data. A very variable species, widely distributed from the moist, mountain woodlands of Japan, N into Korea, the Russian Far East & northern China. Broadly linear, glabrous, mainly basal leaves and branched, 1m. tall panicles of many little, starry flowers which can be either green or dark purple. Possibly closest, among the better known species, to *V.nigrum*, under which it has been included. Fresh 2004 NZ-grown seeds.

4.930.500 : VERATRUM MOXYSEPALUM

4.930.600 : VERATRUM STAMINEUM Archibald Archive www.srgc.net

4.940.000 : VIBURNUM

4.940.100 : VIBURNUM BETULIFOLIUM China, Gansu, SE of Tianshui. 1500m. (A new wild coll. of this deciduous shrub, about 3m. high with toothed, ovate leaves, and one of the finest of fruiting species, "when its slender branches are weighed down with the heavy trusses of bright red, translucent berries", writes 'Bean'. Fruits best when two clones are grown together and it did well on alkaline soils when we were in Dorset. Some cultivated material may originate from Farrer's 1914 coll. in this area.)

4.940.101 : VIBURNUM BETULIFOLIUM China, Yunnan, around Tian Chi, lake W of Xiao Zhongdian. 3400m. Ex KGB 775.

4.950.000 : VIOLA

5.005.000 : ABROTANELLA

5.005.100 : ABROTANELLA CAESPITOSA

5.005.200 : ABROTANELLA FORSTERIOIDES

5.005.300 : ABROTANELLA SCAPIGERA (Both Tasmanian endemics.)

5.009.000 : ACAENA

5.010.000 : ACIPHYLLA : c. 40 SPP.

5.010.100 : ACIPHYLLA ANOMALA

5.010.200 : ACIPHYLLA AUREA NZ, Otago, Pisa Range. 1300m. Tussock grassland on open, stony slopes. (One of the arresting, tall, S Island species. A big tuft of stiff, yellowish-edged, spine-tipped foliage send up an erect flower stem, about 1.5m. high, foaming with greenish cream flowers, especially spectacular in the more showy male form.)

5.010.209 : ACIPHYLLA AUREA NZ, Otago, Old Man Range. (Arresting tufts of stiff, yellowish-edged, spine-tipped foliage ; 1.5m. high, foaming with greenish cream flowers, especially spectacular in the more showy male form.)

5.010.300 : ACIPHYLLA COLENZOI

5.010.400 : ACIPHYLLA CONGESTA

5.010.500 : ACIPHYLLA CRENULATA Archibald Archive www.srgc.net

5.010.600 : ACIPHYLLA CROSBY-SMITHII

5.010.700 : ACIPHYLLA DISSECTA

5.010.800 : ACIPHYLLA DIVISA

5.010.900 : ACIPHYLLA DOBSONII

5.011.000 : ACIPHYLLA FEROX NZ, Marlborough, Black Birch Range. 1100m. Tussock grassland on open slope. (A spectacular tall plant, over 2m. high , which seems likely to be this species, close to the more southern *A. horrida*, but the differences between these larger species seem rather fine and it may well prove to be *A. colensoi* or indeed another form of *A. aurea*. Rigid spires frothing with creamy, greeny white flowers rise up from the clumps of cut, yellow-veined stiletto-leaves.)

5.011.100 : ACIPHYLLA FLEXUOSA

5.011.200 : ACIPHYLLA GLAUCESCENS

5.011.300 : ACIPHYLLA HECTORI

5.011.400 : ACIPHYLLA HOOKERI

5.011.500 : ACIPHYLLA HORRIDA

5.011.600 : ACIPHYLLA INERMIS

5.011.700 : ACIPHYLLA INDURATA

5.011.800 : ACIPHYLLA INTERMEDIA

5.011.900 : ACIPHYLLA KIRKII

5.012.000 : ACIPHYLLA LATIBRACTEATA

5.012.100 : ACIPHYLLA LECOMTEI

5.012.200 : ACIPHYLLA LEIGHII

5.012.300 : ACIPHYLLA LYALLII

5.012.400 : ACIPHYLLA MONROI NZ, Marlborough, Black Birch Range. 1400m. Open, stony ridge. (A smaller species from the snow tussock grassland of the northern part of S Island, closely allied to *A. similis* from further S but with fewer leaflets. Close clumps of beautifully cut, glossy yellowish-green foliage and creamy white flowers on stems about 30cm. high.)

5.012.500 : ACIPHYLLA MONTANA

5.012.530 : ACIPHYLLA MONTANA var. GRACILIS

5.012.600 : ACIPHYLLA MULTISECTA

5.012.700 : ACIPHYLLA PINNATIFIDA

5.012.710 : ACIPHYLLA PINNATIFIDA No data. A most distinct species. The rosettes of deeply divided leaves with striking yellow midribs are pressed on to the ground. Erect, 15cm. tall stems are sheathed with large, colourful, orange bracts from which the umbels of pale yellow flowers appear. A plant of wet, alpine sites between 1100m. & 1700m in the mountains of Southland and Fiordland in the SW part of South Island, New Zealand. Growable outside in the UK.

5.012.800 : ACIPHYLLA POLITA

5.012.900 : ACIPHYLLA PROCUMBENS (Tasmanian endemic)

5.013.000 : ACIPHYLLA SCOTT-THOMSONII

5.013.009 : ACIPHYLLA SCOTT-THOMSONII NZ, Canterbury, Torlesse Range, Porter's Pass. (Stiff, dissected, spine-tipped, glaucous, yellow-margined leaves up to 1m. long. Armed flowering stems up to 3m. tall clustered with thousands of greenish cream flowers.) Archibald Archive www.srgc.net

5.013.100 : ACIPHYLLA SIMILIS

5.013.200 : ACIPHYLLA SIMPLEX NZ, Central Otago, Pisa Range. 1700m. Exposed, stony fell-field. (One of a trio of compacted, high-alpine species, forming hard hummocks, all local endemics of the mountains of the southern part of S Island. Of these *A. dobsonii* is perhaps most seen in cultivation. This is even more reduced with stiff rosettes of tiny leaves, each a mere single, thick, brownish, rigid leaflet, forming compact domes like some complex carving in stained, polished walnut-wood. Very tight umbels of greeny, creamy lemon-coloured flowers on stems of about 5cm. in height. Definitely for the experienced alpine-grower.)

5.013.300 : ACIPHYLLA SPEDENII

5.013.400 : ACIPHYLLA SQUARROSA

5.013.409 : ACIPHYLLA SQUARROSA Data needed "OPLV"/S. Bond coll. (Much divided, glaucous foliage. Flower stems under 1m.)

5.013.500 : ACIPHYLLA STANNENSIS

5.013.600 : ACIPHYLLA TAKAHEA

5.013.700 : ACIPHYLLA TOWNSONII

5.013.800 : ACIPHYLLA TRAILLII

5.013.900 : ACIPHYLLA TRIFOLIOLATA

5.014.000 : ACIPHYLLA VERTICILLATA

5.024.000 : ACTINOTUS

5.025.000 : ANEMONE CRASSIFOLIA : Entry in 'Alpine Wildflowers of Tasmania' Archibald Archive www.srgc.net

5.025.010 : ANEMONE CRASSIFOLIA No data. Fresh, 1998 seed just received from Mike Jones of this summer-growing, Tasmanian endemic. We don't know it, have never seen it mentioned as in cultivation in the UK & have no time to find out more about it. Mike describes as "very, very attractive." Possibly best sown promptly - flowers in a couple of years.

5.030.220 : ANIGOZANTHOS FLAVIDUS No data. From red-flowered selections of this variable W Australian species, received years ago from Terry Hatch in NZ. These have proved of unequalled value in our unheated greenhouse, flowering for the whole growing-season. Stems over 2m. high carry hundreds of long-lasting, curved, tubular flowers covered outside in scarlet-orange velvet. Especially attractive in the kangaroo-paw bud-stage before they open to show their jade-green interiors.

5.035.000 : ANISOTOME

5.035.000 : ANISOTOME ANTIPODA NZ, Campbell Island. (While the New Zealand flora is predominantly white flowered, the allied species of the Subantarctic Islands are often brightly coloured. This member of the *Umbelliferae* (*Apiaceae*) is no exception. About 60cm. tall with cut, green foliage and umbels of rosy purple flowers. The first time we have been able to list any species from this remote island, lying over 600km. south from South Island.)

5.035.100 : ANISOTOME AROMATICA

5.035.209 : ANISOTOME FILIFOLIA NZ, Lake Lindon Road. (Red-tinted, greyish thread-like leaf-segments. White heads. 15cm.)

5.035.310 : ANISOTOME HAASTII No data. (Native to NZ, S Island in subalpine, high rainfall areas up to 1500m. (Tufts of finely divided, fresh-green foliage send up conspicuous compound heads of white flowers on 20-30cm., crimson-tinted stems.)

5.035.500 : ANISOTOME PILIFERA New Zealand, S Island.

5.040.000 : ANOPTERUS GLANDULOSA

5.040.009 : ANOPTERUS GLANDULOSA No data. Fresh seed from this very beautiful, erect, Tasmanian endemic shrub, closely related to the S. American genus *Escallonia* but with toothed, leathery, evergreen foliage & terminal racemes of cup-shaped, white, sometimes pink-tinged, flowers resembling a larger-flowered *Clethra arborea*. It can reach small-tree dimensions in Tasmania but is of much more modest dimensions in the only part of the UK where it has been successfully grown outside : the coastal areas of the SW. It needs an equable, moist climate, some shade and a humus-rich, acid soil.

5.050.500 : AOTUS VILLOSA

5.063.000 : ARCHERIA TRAVERSII

5.064.000 : ARISTOTELIA

5.065.000 : ARTHROPODIUM CANDIDUM

5.065.105 : ARTHROPODIUM CIRRATUM New Zealand, Hen Island (W of Northland coast). Ex a T. Hatch coll. (Originally from a pink form, selected in the wild, though the few we have had space to grow to flowering have all been white.)

5.065.106 : ARTHROPODIUM CIRRATUM from MATAPURI BAY FORM From a fine form of this large New Zealand, rhizomatous perennial in *Liliaceae* (*Anthericaceae*). Tufts of fleshy, evergreen, pale-green, strap-shaped leaves & panicles of white flowers held just above the foliage. This will only take a few degrees of frost.

5.065.110 : ARTHROPODIUM CIRRATUM No data. Archibald Archive www.srgc.net

5.070.000 : ASTELIA

5.070.105 : ASTELIA BANKSII New Zealand, Mercury Island (NW of Coromandel Peninsula). T. Hatch coll. May, 1997. A spectacular & distinct island race. Arching, 1m. high, peeling, silver-scaled leaves. Spectacular red-purple fruits.)

5.070.300 : ASTELIA COCKAYNEI

5.071.000 : ASTELIA NERVOSA NZ, Nelson, SW of Lewis Pass. 950m. Open, rocky area in *Nothofagus* zone. (One of the showiest and hardiest New Zealanders in this Pacific-centred genus. *Yucca*-like clumps of narrow, arching, silver-skinned foliage, grey-white beneath, about 50cm. high. The small flowers hide among the foliage but the females have splendid heads of orange-scarlet fruits on elongating stems in autumn.)

5.071.001 : ASTELIA NERVOSA NZ, Canterbury, N of Hanmer Springs, above Jack's Pass. Moist, peaty depressions on open slope. One of the showiest and hardiest New Zealanders in this Pacific-centred genus. *Yucca*-like clumps of narrow, arching, silver-skinned foliage, grey-white beneath, about 50cm. high. The small flowers hide among the foliage but the females have splendid heads of orange-scarlet fruits on elongating stems in autumn.)

5.090.000 : BAECKEA GUNNIANA : Entry in 'Alpine Wildflowers of Tasmania'

5.110.000 : BAUERA RUBIODES : Entry in 'Alpine Wildflowers of Tasmania'

5.120.000 : BELLENDENA MONTANA : Entry in 'Alpine Wildflowers of Tasmania' A monotypic genus in *Proteaceae* endemic to Tasmania. Only between 20 & 60cm. high.

5.120.009 : BELLENDENA MONTANA Tasmania, near Lake Esperance. M. Harvey coll. (A monotypic genus in *Proteaceae* endemic to the alpine grasslands of Tasmania & most resembling such Western Australian relatives as *Conospermum*. A dwarf shrub, usually between 20 & 60cm. high. with wedge-shaped, greyish leaves on erect branches. Showy rounded heads of many small, white or pale pink flowers, which are held well above the foliage & mature to striking bright red fruits.)

5.124.000 : BILLARDIERA LONGIFLORA (Various fruiting colour-forms - pink, red, white & var. *alpina*)

5.124.011 : BILLARDIERA LONGIFLORA f. FRUCTU-ALBO No data. A charming small, evergreen climber in *Pittosporaceae*, endemic to Tasmania and just on the borderline of hardiness in the UK. Elongated, greenish yellow, tubular bells are followed by large white fruits instead of the usual dark blue. Possible in a sheltered site in mild areas.

5.124.012 : BILLARDIERA LONGIFLORA f. FRUCTU-ALBO Tasmania, Mt. Wellington, Ridgeway. M. Harvey coll. A charming small, evergreen climber in *Pittosporaceae*, endemic to Tasmania and just on the borderline of hardiness in the UK. Elongated, greenish yellow, tubular bells are followed by large white fruits instead of the usual dark blue. Possible in a sheltered site in mild areas. Archibald Archive www.srgc.net

5.125.000 : BLANDFORDIA PUNICEA (*B. marginata*) Tasmania, South Bruny Island, Jetty Beach. M. Harvey coll. (Endemic to Tasmania & possibly the hardiest member of this small Australian genus in *Liliaceae*. Reputedly difficult, but no trouble in sandy, peaty soil in our unheated greenhouse & worth trying outside in milder parts of the UK. Racemes of up to 25, tubular flowers, in scarlet tipped with orange-yellow, on stems of about 60cm. from tufts of narrow, leathery, dark-green leaves.)

5.125.001 : BLANDFORDIA PUNICEA (*B. marginata*) Tasmania, Cockle Creek. M. Harvey coll. (Endemic to Tasmania & possibly the hardiest member of this small Australian genus in *Liliaceae*. Reputedly difficult, but no trouble in sandy, peaty soil in our unheated greenhouse & worth trying outside in milder parts of the UK. Racemes of up to 25, tubular flowers, in scarlet tipped with orange-yellow, on stems of about 60cm. from tufts of narrow, leathery, dark-green leaves.)

5.126.000 : BORONIA

5.138.000 : BRACHYGLOTTIS

5.140.000 : BRACHYSCOME

5.145.000 : BRACHYSCOME SCAPIFORMIS

5.145.200 : BRACHYSCOME STRICTA

5.150.000 : BRUNONIA AUSTRALIS

5.160.000 : BULBINELLA ANGUSTIFOLIA NZ, S Island E of the Alps.

5.160.100 : BULBINELLA GIBBSII NZ, Stewart Island.

5.160.200 : BULBINELLA HOOKERI NZ, Canterbury, N of Hanmer Springs, above Jack's Pass. Moist, peaty depressions on open slope. (A hardy, worthwhile perennial in most UK gardens. Tufts of grassy foliage send up colourful, *Kniphofia*-like spires

of bright yellow starry flowers on stems of about 50cm., in summer. Maybe best in an acid soil in sun but generally easy if it is not too hot & dry in summer.)

5.160.210 : BULBINELLA HOOKERI No data. Native to the N part of New Zealand, this proves a hardy & worthwhile perennial in most UK gardens. Tufts of grassy foliage send up colourful, *Kniphofia*-like spires of bright yellow starry flowers on stems of about 50cm., in summer. Maybe best in an acid, peaty soil in sun but generally easy if it is not too hot & dry in summer.

5.160.220 : BULBINELLA HOOKERI NZ, Nelson, Cobb Valley. (Distinct glaucous-leaved form from NW Nelson.)

5.160.300 : BULBINELLA TALBOTII NZ, endemic to Goulard Downs.

5.163.000 : BURCHARDIA UMBELLATA Australia, Victoria, Dromana, Mornington Peninsula, Two Bays Track. W. Ashburner coll., 6.1.98

5.168.000 : CALTHA NOVAE-ZELANDIAE

5.168.100 : CALTHA OBTUSA

5.170.000 : CAREX

5.175.000 : CARMICHAELIA

5.175.050 : CARMICHAELIA APRESSA NZ, Banks Peninsula. Loose shingle-bank. Sea-level. (One of the smallest members of this New Zealand genus of shrubs in *Leguminosae* (*Fabaceae*). A minute, congested, prostrate shrublet with virtually leafless, green branches and tiny, violet-veined flowers. Confined to this specialized coastal habitat and clipped by the Pacific gales, this is unlikely to tolerate British winters but will be best fully exposed outside in summer.) Archibald Archive www.srgc.net

5.175.150 : CARMICHAELIA CARMICHAELIAE (*Notospartium carmichaeliae*) No data. A 2-3m. tall, leafless, rush-like shrub with masses of small pinkish purple pea-flowers in summer. A lovely plant, very local on South Island, New Zealand, this used to thrive in the garden of our late friend, Bert Hopwood, in Devon, UK. Protect when young.

5.180.000 : CELMISIA : c. 50 spp. ; Tasmania : *C. asteliifolia* (= *C. longifolia* in Tasmania), *C. saxifraga*

5.180.200 : CELMISIA ALLANII

5.180.300 : CELMISIA ALPINA

5.180.400 : CELMISIA ANGUSTIFOLIA

5.180.500 : CELMISIA ARMSTRONGII

5.180.600 : CELMISIA ASTELIIFOLIA

5.180.700 : CELMISIA BELLIDIOIDES

5.180.800 : CELMISIA BONPLANDII

5.180.900 : CELMISIA BREVIFOLIA

5.181.000 : CELMISIA CLAVATA

5.181.100 : CELMISIA COCKAYNEANA

5.181.200 : CELMISIA COMPACTA

5.181.300 : CELMISIA CORDATIFOLIA

5.181.400 : CELMISIA CORIACEA

5.181.500 : CELMISIA DALLII

5.181.600 : CELMISIA DENSIFLORA

5.181.700 : CELMISIA DISCOLOR NZ, Nelson, Clarence River valley, S of Lake Tennyson. Open, stony areas with grasses & dwarf scrub. (A creeping sub-shrub, spreading to about 1m. across. The terminal tufts of little, leathery leaves are greyish above and densely white tomentose below, send up their white daisies on 15cm., slender, sticky stems.)

5.181.800 : CELMISIA DUBIA

5.181.900 : CELMISIA DURIETZII

5.182.000 : CELMISIA GIBBSII

5.182.100 : CELMISIA GLANDULOSA

5.182.200 : CELMISIA GRACILENTA

5.182.300 : CELMISIA GRAMINIFOLIA

5.182.400 : CELMISIA HAASTII

5.182.500 : CELMISIA HECTORI

5.182.600 : CELMISIA HIERACIFOLIA

5.182.700 : CELMISIA HOLOSERICEA Archibald Archive www.srgc.net

5.182.800 : CELMISIA INACCESSA
5.182.900 : CELMISIA INCANA
5.183.000 : CELMISIA LANCEOLATA
5.183.100 : CELMISIA LARICIFOLIA
5.183.200 : CELMISIA LATERALIS
5.183.300 : CELMISIA LINEARIS
5.183.400 : CELMISIA LYALLII
5.183.450 : CELMISIA MACKAUII NZ, Banks Peninsula.
5.183.500 : CELMISIA MACMAHONII
5.183.600 : CELMISIA MAJOR
5.183.700 : CELMISIA MARKII
5.183.800 : CELMISIA MONROI
5.183.900 : CELMISIA PARVA
5.184.000 : CELMISIA PETIOLATA
5.184.100 : CELMISIA PETRIEI
5.184.200 : CELMISIA PHILOCREMNA
5.184.300 : CELMISIA PROREPENS
5.184.400 : CELMISIA RAMULOSA
5.184.500 : CELMISIA RUPESTRIS
5.184.600 : CELMISIA RUTLANDII
5.184.700 : CELMISIA SAXIFRAGA
5.184.800 : CELMISIA SEMICORDATA NZ, Canterbury, N of Hanmer Springs, above Jack's Pass. Moist, peaty depressions on open slope. (The largest species in the genus and a spectacular plant by any standard. Big tufts of leathery, lanceolate leaves, silvery green above and white tomentose below, with woolly flower stems, 10 or more to each tuft & about 40 cm. high, each with a huge, many-rayed daisy, up to 10cm. across, in pure white with a yellow disc.)
5.184.900 : CELMISIA SESSILIFLORA NZ, Marlborough, Black Birch Range. 1350m. Exposed grassland on stony slopes. (Little rosettes of stiff, linear, grey leaves, compressed into dense, firm cushions on which the almost sessile, white daisies sit. An important S Island alpine of moist sites in high, snow-tussock grassland.) Archibald Archive www.srgc.net
5.185.000 : CELMISIA SIMILIS
5.185.100 : CELMISIA SINCLAIRI
5.185.110 : CELMISIA SINCLAIRI No data. Quite a local species from damp peaty sites in the montane tussock-grasslands of Nelson & Marlborough in the N of South Island, NZ. A low-growing, shrubby plant with rosettes of quite broad, bright-green leaves, carrying white daisies on short stems. Some excellent UK-grown seed.
5.185.200 : CELMISIA SPEDENII
5.185.300 : CELMISIA SPECTABILIS NZ, Marlborough, Black Birch Range. 1350m. Exposed grassland on stony slopes. (One of the most widespread and variable species, native to both North & South Islands. The tufts of thick, leathery leaves, felt-covered underneath are fine but not so spectacular as those of *C. semicordata*. White heads on stiff, hairy stems, about 30cm. tall.)
5.185.400 : CELMISIA THOMSONII
5.185.500 : CELMISIA TRAVERSII
5.185.600 : CELMISIA VERBASCIFOLIA
5.185.700 : CELMISIA VESPERTINA
5.185.800 : CELMISIA VISCOSA
5.185.900 : CELMISIA WALKERI
5.210.000 : CHIONOCHLOA
5.220.000 : CHIONOHEBE CILIOLATA
5.220.100 : CHIONOHEBE DENSIFOLIA
5.220.200 : CHIONOHEBE MYOSOTOIDES
5.220.300 : CHIONOHEBE PULVINARIS

5.220.400 : CHIONOHEBE THOMSONII

5.230.000 : CHORDOSPARTIUM

5.250.000 : CLEMATIS AFOLIATA

5.250.009 : CLEMATIS AFOLIATA NZ, Marlborough, Lake Summers. (Rush-like, green stems & pale yellow flowers.)

5.250.010 : CLEMATIS AFOLIATA No data. A unique, virtually leafless species with interlacing, rush-like, green stems, which can reach 3m. in height. The pale, greenish yellow, bell-shaped flowers are notably fragrant.

5.250.050 : CLEMATIS ARISTATA Tasmania, Mt. Wellington foothills. M. Harvey coll. (A comparatively hardy climber, found up to about 700m. on Mt. Wellington, where "its cascades of creamy blossoms are a delight.")

5.250.055 : CLEMATIS ARISTATA X GENTIANOIDES A few seeds of the hybrid with the other endemic, 30cm. high, herbaceous species. We are uncertain whether this will produce 'even' seedlings or a range of variation.

5.250.200 : CLEMATIS CUNNINGHAMII New Zealand, Little Barrier Island (in Hauraki Gulf, W of Northland coast). 200m. Volcanic scoriae. T. Hatch coll. 21.1.97 (An elegant, intriguing species with soft-green, scented flowers.)

5.250.909 : CLEMATIS FOETIDA NZ, Nelson, Cobb Valley. (Soft-green flowered forest species.)

5.250.910 : CLEMATIS FOETIDA No data. A vigorous woodland species reaching 4m. with pale yellow flowers. Native to both the main islands and, in spite of its specific name, sweetly scented. Archibald Archive www.srgc.net

5.250.959 : CLEMATIS FORSTERI No data.. Large panicles of nodding, lemon-scented, palest yellow flowers on climbing stems up to 3m. tall. Native to forest margins in both North Island and northern South Island. .

5.251.000 : CLEMATIS GENTIANOIDES

5.251.950 : CLEMATIS MARATA No data. A small climber with purplish stems and lobed, leathery leaves. The spicily scented yellow-green flowers have only 4 sepals. Only grows in South Island where it extends far south.

5.252.005 : CLEMATIS MARMORARIA No data. Quite recently discovered & described, this little suckering alpine subshrub is only known from marble-crevices between 1280m. & 1460m. on Mt. Crusader & Mt. Hoary Head in the Arthur range of NW Nelson in S Island, NZ. Spreading mats, up to 30cm. across, with leathery, dark-green, deeply divided leaves & profuse, creamy white flowers. This has settled in as an excellent alpine-house or trough plant in the UK and is now the parent of several larger hybrids. You need both male and female plants to get viable seed so this is seldom available. Our own freshly collected seed, kept refrigerated.

5.252.199 : CLEMATIS PANICULATA (*C. indivisa*) New Zealand, d'Urville Island. 600m. Exposed, ultramafic rocks. T. Hatch coll. (A very beautiful, vigorous, evergreen, New Zealand endemic climber, found in both main islands. Big panicles of unisexual, white flowers, up to 10cm. across with pink anthers on male plants. Marginally hardy in the UK but worth protecting.)

5.252.200 : CLEMATIS PANICULATA (*C. indivisa*) A very beautiful, vigorous New Zealand endemic climber, found in all the main islands. It can reach 4m. with big panicles of white flowers, up to 10cm. across, often with pink anthers on male plants. Marginally hardy in the UK but worth protecting : this is South Island seed which should be quite hardy.

5.252.300 : CLEMATIS PETRIEI No data. Quite close to *C. forsteri* and sometimes included under this but with thinner, untoothed leaves. Restricted to the NW of South Island. Masses of little, yellow-green, elfin bells.

5.253.000 : COMESPERMA VOLUBILE (Tasmania : blue-flowered climber in *Polygalaceae*)

5.254.000 : COPROSMA

5.254.008 : COPROSMA ATROPURPUREA NZ, Crimea Range, Mt. Southey. 1600m.. Gravelly areas. (A dwarf, montane member of quite a large Malaysian and SW Pacific genus in *Rubiaceae* with many species in New Zealand. Deep purplish red fruits on tight, creeping mats of woody stems set with tiny, linear leaves.)

5.254.009 : COPROSMA ATROPURPUREA NZ, Nelson, Lake Tennyson area. (Deep purple fruits on creeping mats.)

5.254.050 : COPROSMA BRUNNEA

5.254.100 : COPROSMA CHEESEMANII

5.254.150 : COPROSMA CRENULATA

5.254.200 : COPROSMA DEPRESSA

5.254.250 : COPROSMA HIRTELLA

5.254.300 : COPROSMA MOOREI

5.254.350 : COPROSMA NIPHOPHILA

5.254.400 : COPROSMA NITIDA

5.254.450 : COPROSMA PERPUSILLA

5.255.500 : COPROSMA PETRIEI

5.255.550 : COPROSMA PSEUDOCUNEATA

5.255.600 : COPROSMA PUMILA

5.254.650 : COPROSMA SERRULATA

5.254.700 : COPROSMA TALBROCKEI

5.254.900 : CORALLOSPARTIUM CRASSICAULE

5.255.000 : CORDYLINE

5.255.200 : CORDYLINE BANKSII NZ, South Island, near Rangiora. T. Hatch coll. (This coll. from quite a cold area of NZ, N of Christchurch, should produce plants at least as hardy as the widely grown *C. australis*. This is different in general aspect to the better-known plant, a shrub with several slender stems 3m or more high bearing great tufts of linear leaves up to 2m. long, among which rise the 1m. long, airy panicles made up of many, dainty racemes of pure white flowers.)

5.256.000 : CORIARIA

5.257.400 : CORTADERIA TUBARIA NZ, Chatham Islands, Pitt Island. Sandy swamp. Ex a T. Hatch coll. (A spectacular, tufted perennial grass, now, like some other Chatham Is. endemics, an extremely rare plant, virtually grazed out by sheep. As plants in this genus are usually unisexual, seedlings will show some variation between males & females - it is obviously also necessary to grow both to ensure seed and maintain this island species in cultivation. As far as we know, this has not been in cultivation before but, from the cool, wet climate of the Chathams, it should be growable in the UK, especially in coastal areas.)

5.258.000 : COTULA ATRATA (*Leptinella atrata*) Archibald Archive www.srgc.net

5.265.000 : CRASPEDIA

5.265.000 : CRASPEDIA INCANA NZ, Canterbury, Torlesse Range, W of Springfield, Porters Pass. 1050m. Loose & partially stabilized scree. (An alpine localized on the screes of the drier, central S Island greywacke ranges & certainly the most striking in this genus. The low rosette of leaves & sturdy, 15cm. flower stem, clad in leafy bracts, are entirely & thickly covered with a dense layer of snow-white wool from which the dome-like head, close-packed with lemon yellow flowers emerges.)

5.265.100 : CRASPEDIA LANATA NZ, Central Otago, Pisa Range. 1500m. Exposed snow tussock grassland. (A less specialised and somewhat commoner alpine plant. Grey-white tomentum more closely adpressed to the slightly smaller leaves and smaller flower-heads which can be either white or yellow.)

5.265.200 : CRASPEDIA UNIFLORA

5.270.000 : CYATHODES

5.270.200 : CYATHODES COLENSOI NZ, Nelson, Clarence River valley, S of Lake Tennyson. Open, stony areas with grasses & dwarf scrub. (A dwarf shrub in *Epacridaceae*, spreading, in nature, to over 1m. across. The upright branches, about 30cm. high, are densely set with tiny, rigid, shiny leaves, pale beneath and carry the clusters of small, tubular, white flowers at their tips. In female plants these are followed by (usually) red fruits.)

5.270.300 : CYATHODES DIVARICATA

5.270.400 : CYATHODES EMPETRIFOLIA

5.270.409 : CYATHODES EMPETRIFOLIA No data. Creeping, needle-leaved shrublet with red, fleshy fruits.

5.270.500 : CYATHODES FRASERI

5.270.600 : CYATHODES GLAUCA

5.270.700 : CYATHODES JUNIPERINA

5.270.800 : CYATHODES PARVIFOLIA

5.270.900 : CYATHODES PUMILA

5.280.500 : DESMOSCHOENUS SPIRALIS NZ, Canterbury, Banks Peninsula. Sandy & gravelly sites. Sea-level. (A most attractive and intriguing sedge, which we have not seen grown in the UK.)

5.300.100 : DIANELLA TASMANICA Tasmania, Cockle Creek. M. Harvey coll. (We have long found this *Phormium*-relative from moist woodland hardy in the UK in a sheltered, shady place. Stoloniferous clumps of tough, leathery, bright-green foliage about 1m. tall with panicles of pale-blue flowers, which later develop into the most striking, glossy, violet-blue berries.)

5.302.000 : DICHPOGON STRICTUS Australia, Victoria, Dromana, Mornington Peninsula, Cemetery Track. W. Ashburner coll., 7.1.98 Archibald Archive www.srgc.net

5.305.000 : DIPLARRENA LATIFOLIA Tasmania, Mt. La Perouse, Moonlight Ridge. M. Harvey coll. 3.4.97 (A Tasmanian alpine endemic in the *Iridaceae* usually with fans of foliage about 30cm. high, though it can be taller, and white *Moraea*-like flowers, marked with yellow & heavily pencilled with purple overtopping the leaves in early summer. Hardy in the UK.)

5.305.020 : DIPLARRENA MORAEEA No data. More widely distributed in SE Australia, generally dwarfer & with narrower foliage. White flowers, marked yellow on the inner segments, but we include seed from 'Amethyst Fairy', distributed in 1991.(20+)

5.308.000 : DOLICHOGLOTTIS LYALLII

5.308.100 : DOLICHOGLOTTIS SCORZONEROIDES

5.310.000 : DONATIA NOVAE-ZELANDIAE

5.320.500 : DRACOPHYLLUM MILLIGANII Tasmania, Mt. Sprent above Strathgordon. 1000m. Among alpine-sedge vegetation on high moorland. M. Harvey coll. (One of two Tasmanian endemics in this Australasian genus of the *Epacridaceae*. A clump-forming shrublet, usually about 30cm. high, with reddish stems & bracts, among which the clusters of white flowers appear. This alpine species will certainly be hardy in the UK, grown in moist peaty soil.)

5.320.550 : DRACOPHYLLUM MINIMUM Endemic to Tasmania.

5.330.000 : DRAPETES DIEFFENBACHII

5.340.000 : DROSERA

5.345.500 : ELYMUS SOLANDRI No data. Seed from a really excellent, blue-leaved form of this NZ grass, selected by Terry Hatch. The species, as a whole, is native to both main islands at altitudes up to 1500m. in tussock grassland & screes. Stems, about 50cm. tall with distinctive heads of florets with very long, slender awns. Should prove hardy in the UK & a worthy addition to cultivated blue grasses. Archibald Archive www.srgc.net

5.350.000 : EPACRIS

5.350.500 : EPACRIS IMPRESSA

5.355.000 : EPILOBIUM

5.360.000 : ERIOSTEMON

5.360.500 : ERIOSTEMON OBOVALIS

5.361.000 : EUCALYPTUS

5.363.000 : EUCALYPTUS COCCIFERA : Entry in 'Alpine Wildflowers of Tasmania'

5.375.000 : EUCALYPTUS NIPHOPHILA

5.380.000 : EUCALYPTUS VERNICOSA : Entry in 'Alpine Wildflowers of Tasmania'

5.385.000 : EUCRYPHIA LUCIDA : Entry in 'Alpine Wildflowers of Tasmania'

5.385.020 : EUCRYPHIA MILLIGANII : Entry in 'Alpine Wildflowers of Tasmania'

5.390.000 : EWARTIA CATIPES : Entry in 'Alpine Wildflowers of Tasmania'

5.390.050 : EWARTIA MEREDITHAE : Entry in 'Alpine Wildflowers of Tasmania'

5.390.100 : EWARTIA PLANCHONII : Entry in 'Alpine Wildflowers of Tasmania'

5.398.000 : FORSTERA

5.400.000 : FUCHSIA EXCORTICATA

5.400.050 : FUCHSIA PERSCANDENS

5.400.099 : FUCHSIA PROCUMBENS NZ, N Island, Coromandel Peninsula, N of Onemana. 10m . Opening in coastal scrub. B. Bradding coll. (While on a short hike from our daughter's 'in-laws' beach house, we saw a fine patch of this wiry-stemmed, prostrate species with its big, pink fruits. Though it is a rare and localized species of the northern coasts, we did not collect any seed as it is so well-known in cultivation. However, Arthur Tickner of Fuchsia Research International expressed interest in obtaining seed with field data, so Bevan Bradding has collected a little seed and we list some for anyone interested.)

5.400.100 : FUCHSIA PROCUMBENS No data.

5.402.000 : GAULTHERIA ANTIPODA NZ

5.402.200 : GAULTHERIA COLENSOI NZ, N Island.

5.402.300 : GAULTHERIA CRASSA

5.402.600 : GAULTHERIA DEPRESSA var **NOVAE-ZELANDIAE** NZ, Nelson, SW of Lewis Pass. 950m. Open, rocky area in *Nothofagus* zone. (A low, mat-forming shrub with more or less prostrate branches bearing little, toothed evergreen leaves & small white flowers followed by large, fleshy fruits, in this case white, though they can be pink or red on different plants.)

5.402.700 : GAULTHERIA HISPIDA

5.402.800 : GAULTHERIA LANCEOLATA (*Pernattya lanceolata*) Archibald Archive www.srgc.net

5.402.900 : GAULTHERIA MACROSTIGMA

5.403.000 : GAULTHERIA NUBICOLA

5.403.100 : GAULTHERIA PARVULA

5.403.200 : GAULTHERIA RUPESTRIS

5.403.300 : GAULTHERIA SUBCORYMBOSA

- 5.403.400 : GAULTHERIA TASMANICA** (*Pernettya tasmanica*)
- 5.404.000 : GENTIANA (New Guinea species when NZ species are moved into Gentianella.)
- 5.405.100 : GENTIANA AMABILIS**
- 5.405.200 : GENTIANA BELLIDIFOLIA**
- 5.405.300 : GENTIANA CERINA**
- 5.405.400 : GENTIANA CONCINNA**
- 5.405.500 : GENTIANA CORYMBIFERA**
- 5.405.580 : GENTIANELLA DIEMENSIS** : Entry in 'Alpine Wildflowers of Tasmania'
- 5.405.600 : GENTIANA DIVISA** NZ, Central Otago, Pisa Range. 1650m. Seeps and open, stony slopes. (A spectacular species from the higher ranges of South Island, where its dense, rounded mounds of large, white flowers spatter the windswept fellfields and ridges like snowballs in late summer. The basal rosette of, often reddish, leaves is usually concealed by the 5-20cm. high globose mass of flowers.) Archibald Archive www.srgc.net
- 5.405.700 : GENTIANA FILIPES**
- 5.405.800 : GENTIANA GIBBSII**
- 5.405.900 : GENTIANA GRACILIFOLIA**
- 5.406.000 : GENTIANA GRISEBACHII**
- 5.406.100 : GENTIANA LINEATA**
- 5.406.200 : GENTIANA LILLIPUTIANA**
- 5.406.300 : GENTIANA MATTHEWSII**
- 5.406.400 : GENTIANA MONTANA**
- 5.406.500 : GENTIANA PATULA**
- 5.406.509 : GENTIANA PATULA** NZ, Nelson, Cobb Valley. 850m. (Stout stems, 20cm. or more long, carry heads of white, bell-shaped flowers, often veined with purple, above close basal leaf-rosettes. A plant of wet grassland.)
- 5.406.600 : GENTIANA SAXOSA** (The only Tasmanian gentian = *Gentianella diemensis*.)
- 5.406.610 : GENTIANA SAXOSA** No data. From a compact, vigorous form of this New Zealand endemic (Tasmanian plants are split into *Gentianella diemensis*), forming prostrate pads of fleshy leaves covered with upturned, white flowers. Not an alpine but a plant of coastal habitats. One of the most accommodating New Zealand species in cultivation in the UK.
- 5.406.000 : GENTIANA SPENCERI**
- 5.406.200 : GENTIANA TENUIFOLIA**
- 5.406.300 : GENTIANA TERETICAULIS** Annual
- 5.406.400 : GENTIANA TOWNSONII**
- 5.406.600 : GENTIANA VERNICOSA**
- 5.415.500 : GERANIUM TRAVERSII** New Zealand, Chatham Islands. Archibald Archive www.srgc.net
- 5.421.050 : GEUM TALBOTIANUM** : Entry in 'Alpine Wildflowers of Tasmania'
- 5.421.050 : GEUM TALBOTIANUM** Tasmania, Mt. Sprent above Strathgordon. 1200m. Shaded crevices & between boulders in summit area. M. Harvey coll. (Quite recently described & only known from a few small colonies on the tops of a few mountains in cold, wet, windy SW Tasmania, where it "often ascends vertical cracks in rocks for several metres". Ken Gillanders writes that it "must rank as one of our most beautiful and difficult alpine plants." Clumps of wrinkled, kidney-shaped foliage, matted with hairs above & below, send up 15cm. stems with large, pure-white flowers, 5cm. across, "the outer rows of stamens being reddish brown and greatly enhancing the flower." Definitely a plant which should be grown shaded, outside in UK summers ; alpine-house in winter. A few fresh, wild-collected seeds.)
- 5.421.100 : GEUM UNIFLORUM** NZ, Nelson Mts. S to Otago.
- 5.425.000 : GINGIDIA
- 5.420.000 : GREVILLEA AUSTRALIS** : Entry in 'Alpine Wildflowers of Tasmania'
- 5.430.000 : GUNNERA**
- 5.435.000 : HAASTIA PULVINARIS** NZ, Marlborough, Black Birch Range. 1400m. Part-stabilised, greywacke talus on steep slopes. (One of the world's most distinct and amazing alpine plants, restricted to high elevations on the drier ranges of Marlborough & SE Nelson. We think this is the classiest of the 'vegetable sheep' with its columnar rosettes firmly, tightly packed into massive, ancient mounds, up to 2m. across and 30cm. deep, all densely blanketed in gold-tinged wool. The sessile yellow flower-heads nestle unobtrusively, sunk in the wool of the branch-tips. *H. pulvinaris* var. *minor* with smaller mounds of smaller

rosettes, covered in whiter wool is supposed to grow here with the type-race but our untrained eyes lacked confidence in assigning variable individuals to one variety or the other. Successfully cultivated by several expert growers in the UK. We guess it will benefit from full exposure outside in the UK for the 6 summer months of the year with optimum drainage, plenty water and as much sun & wind as the UK climate has to offer.)

5.435.050 : HAASTIA PULVINARIS var. MINOR

5.435.100 : HAASTIA RECURVA

5.435.200 : HAASTIA SINCLAIRI

5.436.000 : HEBE Archibald Archive www.srgc.net

5.437.510 : HEBE HULKEANA No data. An outstanding species, singled out in "Bean" as "of remarkable beauty and distinction". Endemic to rock-outcrops, often with *Pachystegia insignis*, in the dryish Marlborough area at the NE corner of South Island, NZ, Hardest in the drier E coast areas of the UK & safest in a sunny, well-drained site against a wall. A shrub, up to about 1m. high, with dark, glossy, toothed leaves & huge panicles of delicate pale-lavender flowers, individually large for this genus.

5.438.010 : HEBE MACRANTHA No data. Native to the wetter, western areas of S Island, NZ, where it grows from Nelson S to Fiordland in damp, rocky sites at altitudes up to 1500m. A gaunt, dwarf shrub, 20-60cm. in height, with quite large, smooth, thick, toothed evergreen leaves & terminal clusters of big, pure white flowers, the largest in the genus.

5.439.000 : HECTORELLA CAESPITOSA

5.440.000 : HELICHRYSUM

5.440.200 : HELICHRYSUM APICULATUM

5.440.300 : HELICHRYSUM BELLIDIOIDES NZ, Coromandel Mts. S to Stewart Island

5.440.400 : HELICHRYSUM BRACTEATUM

5.440.600 : HELICHRYSUM DEALBATUM

5.441.000 : HELICHRYSUM MILLIGANII

5.441.500 : HELICHRYSUM SCORPIOIDES

5.441.600 : HELICHRYSUM SEMIPAPPOSUM

5.444.000 : HERPOLIRION NOVAE-ZELANDIAE

5.445.000 : HIBBERTIA

5.453.000 : HOHERIA

5.455.000 : HOVEA

5.458.000 : HYMENANTHERA

5.460.500 : HYPOXIS HYGROMETRICA

5.470.000 : ISOPHYSIS TASMANICA Australia, Tasmania, Mt. Sprent above Strathgordon. 1200m. Crevices & between boulders in summit area. M. Harvey coll. (A spectacular Tasmanian endemic alpine, usually placed in *Iridaceae*, sometimes in *Liliaceae*, sometimes in its own family, *Isophysideae*. Densely tufted, 15cm. fans of stiff, grassy basal leaves send up stems of about 20cm. carrying terminal flowers, wide open stars up to 8cm. across with glossy, deep purple-red, equal segments surrounding the yellow anthers. It is illustrated on the cover of 'The World of Iridaceae' by C. Innes but, as far as we know, it is not in cultivation in the UK at present. We suggest a lime-free, peaty, sandy compost with plenty water in summer (this area has a very high rainfall), when it might be best grown outside. Possibly it will be better with alpine-house protection in winter but this collection should be temperature-hardy in the UK. Apparently it is locally quite common above 800m. but it is a real challenge to collect a little seed : "the wallabies eat the flowers and seed pods so that only on the most precipitous crags can good seed be found."

5.475.000 : JOVELLANA

5.475.010 : JOVELLANA REPENS No data. A dwarf herbaceous New Zealand *Calceolaria*. Creeping stems with rosettes of downy foliage send up airy inflorescences of white flowers speckled with maroon. We are told this is a very rare plant in the wild but it thrives in a shaded, peaty bed in an unheated greenhouse here and gives us much pleasure each summer.

5.475.050 : JOVELLANA SINCLAIRI No data. Like most of this genus, primitive relatives of *Calceolaria* with wideopen, bell-shaped, pouchless flowers, this is shrubby. Archibald Archive www.srgc.net

5.481.500 : KENNEDYA PROSTRATA

5.489.809 : LEPIDOTHAMNUS LAXIFOLIUS NZ, Nelson, Cobb Valley. (Dwarf form of this prostrate alpine conifer)

5.490.000 : LEPTINELLA ATRATA

5.490.100 : LEPTINELLA DENDYI

5.491.000 : LEPTORRHYNCHUS

5.500.000 : LEPTOSPERMUM

5.530.000 : LEPTOSPERMUM RUPESTRE : Entry in 'Alpine Wildflowers of Tasmania'

5.580.000 : LEUCOGENES GRANDICEPS

5.580.100 : LEUCOGENES LEONTOPODIUM

5.580.200 : LEUCOGENES NEGLECTA

5.580.300 : LEUCOGENES TARAHAOA

5.580.500 : LEUCOPOGON

5.600.000 : LIBERTIA

5.600.500 : LIBERTIA GRANDIFLORA Archibald Archive www.srgc.net

5.600.520 : LIBERTIA aff. GRANDIFLORA NZ, Gisborne, Gentle Annie Road. T. Hatch coll. (This is not *L. grandiflora* and may be a new species but this interesting genus of the *Iridaceae*, divided between S America & Australasia, is not 'easy' taxonomically. Stems over 1m. high rise from clumps of iris-like leaves to carry clustered umbels of white flowers.)

5.604.100 : LIGNOCARPA CARNOSULA (*Anisotome carnosula*) NZ, Nelson, Crimea Range, Mt. Southey. 1600m. Mobile, greywacke scree. (Belonging to an endemic NZ genus with two very similar species, the duo stand out among the most specialised and eccentric of alpine. Both are highly specialised adaptations to an extremely inimical environment, floating from deep taproots on loose, mobile talus on steep slopes. Both have adopted the colour of their surroundings, though we wonder why they should have evolved in this way in the absence of grazing mammals. They are not only unobtrusive but also far from frequent even within their own specialised niche habitat. *L. carnosula* is the dwarfer of the two and it tends to conceal its heads of tiny, whitish flowers with deeply divided bracts but this is no great loss as it is the leaves that are the attraction : a mounded filigree, a few cm. high, of finely cut, fleshy foliage, smooth & grey & glaucous. The most aristocratic of all parsleys and possibly the most difficult to grow, though we have seen superb plants, exhibited in character by UK alpine-experts.)

5.604.101 : LIGNOCARPA CARNOSULA (*Anisotome carnosula*) NZ, W of Springfield, Porters Pass. 1050m. Loose scree.

5.604.200 : LIGNOCARPA DIVERSIFOLIA

5.605.000 : LISSANTHE STRIGOSA

5.606.909 : LOBELIA LINNAEOIDES NZ, White flowers dance on thready stems above mats of tiny reddish-leaves

5.607.000 : LOBELIA ROUGHII NZ, Nelson, Crimea Range, Mount Southey. 1600m. Mobile, greywacke scree. (Another of the camouflaged, scree-specialists from the Nelson-Marlborough ranges. Reddish bronze, fleshy leaves with jaggedly cut edges hide the tiny white flowers on the prostrate, questing stems, weaving among the loose rock-detritus. A very few seeds.)

5.608.000 : LUZURIAGA

5.609.000 : MAZUS

5.610.000 : MELALEUCA

5.620.000 : MILLIGANIA DENSIFLORA (Genus *Milligania* has 5 species all endemic to Tasmania.)

5.620.100 : MILLIGANIA JOHNSTONII

5.620.200 : MILLIGANIA LINDONIANA

5.620.300 : MILLIGANIA STYLOSA

5.622.000 : MITRASACME

5.625.000 : MUEHLENBECKIA

5.630.000 : MYOSOTIDIUM HORTENSIA New Zealand, Chatham Islands, Pitt Is. Beach, at tide line. Ex a T. Hatch coll. (An extraordinary endemic of the remote Chatham Islands, where it grows along the shore but, according to Terry, is now very rare due to intensive grazing by sheep, which has all but eliminated the unique flora of these islands. Our plants from Pitt Is. seed, growing in a bed against a N-facing wall, survived a damaging winter a few years ago, having come through the 1995 drought without watering. Top-growth was frosted & we thought they had been killed, just as our stock of cultivated, Irish origin had been a few years earlier. They surfaced late in spring & grew vigorously. Last winter foliage was undamaged & we have some excellent 1998 seed. Huge, ribbed, shining leaves & a long succession of giant forget-me-not flowers in celestial blue. Seed germinates irregularly but definitely comes up at lower temperatures, in spring or autumn, so do not cook it in a 'propagator'. It is a plant from a cold, moist, equable climate and hates hot, wet greenhouse conditions, so plant it outside in a cool site as soon as you can)

5.630.010 : MYOSOTIDIUM HORTENSIA No data. An extraordinary endemic of the Chatham Islands, where it grows along the beaches at the tide-line but, according to Terry Hatch, is now very rare indeed due to intensive grazing by sheep, which has all but eliminated the unique flora of these islands. We grow plants of his collection from Pitt Is. here against a N-facing wall but had no seed last year. Huge, ribbed, shining leaves & a long succession of giant, forget-me-not flowers in celestial blue. Seed is usually irregular in germination but definitely comes up at lower temperatures, in spring or autumn, so do not cook it in a 'propagator'. It hates greenhouse conditions so plant it outside as soon as you can.) Archibald Archive www.srgc.net

5.630.011 : MYOSOTIDIUM HORTENSIA from WHITE FORM New Zealand seed. We have not grown this here yet

5.631.000 : MYOSOTIS ALBOSERICEA

5.631.100 : MYOSOTIS AMABILIS

5.631.200 : MYOSOTIS ANTARCTICA

5.630.300 : MYOSOTIS AUSTRALIS

5.630.400 : MYOSOTIS CAPITATA

5.630.500 : MYOSOTIS CHEESEMANII

5.630.600 : MYOSOTIS COLENSOI

5.630.700 : MYOSOTIS CONCINNA

5.630.800 : MYOSOTIS ELDERI

5.630.900 : MYOSOTIS EXPLANATA

5.631.000 : MYOSOTIS GLABRESCENS

5.631.100 : MYOSOTIS LYALLII

5.631.200 : MYOSOTIS MACRANTHA

5.631.300 : MYOSOTIS MONROI

5.631.400 : MYOSOTIS OREOPHILA

5.631.450 : MYOSOTIS POTTSII var. PETIOLARIS

5.631.500 : MYOSOTIS PULVINARIS

5.631.600 : MYOSOTIS PYGMAEA

5.631.700 : MYOSOTIS SUAVIS

5.631.800 : MYOSOTIS TENERICAULIS

5.631.900 : MYOSOTIS TRAVERSII NZ, Nelson, Crimea Range, Mt. Southey. 1600m. Partially stabilised, greywacke scree. (Worthwhile and desirable for alpine-house growers but no doubt a somewhat difficult species, localised on the screes of the northern part of S Island. Close clumps of thickish leaves covered with adpressed white hairs send up pinkish stems to about 15cm. carrying tight, rounded heads of white or creamy flowers, sometimes with yellow eyes.)

5.635.000 : MYRSINE NUMMULARIA

5.635.000 : MYRSINE NUMMULARIA NZ, Nelson, Lake Tennyson area. (Prostrate alpine shrub with rambling, red-brown stems, dark, leathery, rounded leaves & big, violet-blue fruits.) Archibald Archive www.srgc.net

5.660.000 : NEOPANAX

5.670.000 : NERTERA

5.675.500 : NOTHOFAGUS GUNNII

5.680.000 : NOTOSPARTIUM

5.690.000 : NOTOTHLASPI AUSTRALE

5.690.100 : NOTOTHLASPI ROSULATUM NZ, Nelson, Crimea Range, Mt. Southey. 1600m. Mobile, greywacke scree. (Surely one of the world's great alpine, the penwiper plant tends to occupy slightly more stable areas of talus than some of its specialised compatriots. It shares their camouflage colour in its exquisitely formed, flat rosettes of overlapping leaves in grey, tinged with brown. When mature, after several years, these send up a mound, or even a stout column up to 25cm. high, packed with large, beautifully fragrant, creamy flowers. With that other monocarpic, rosetted alpine treasure, *Saxifraga florulenta*, flowering is perhaps an anticlimax ; this is a triumphant grand finale. You won't get the chance of this too often as a good seed set is not an annual event.)

5.700.000 : OLEARIA

5.705.000 : OLEARIA LEDIFOLIA : Entry in 'Alpine Wildflowers of Tasmania'

5.708.000 : ORITES REVOLUTA : Entry in 'Alpine Wildflowers of Tasmania'

5.710.000 : OURISIA CAESPITOSA

5.710.100 : OURISIA CONFERTIFOLIA

5.710.200 : OURISIA GLANDULOSA

5.710.250 : OURISIA INTEGRIFOLIA : Entry in 'Alpine Wildflowers of Tasmania' Archibald Archive www.srgc.net

5.710.300 : OURISIA LACTEA

5.710.400 : OURISIA MACROCARPA

5.710.500 : OURISIA MACROPHYLLA

5.710.600 : OURISIA REMOTIFOLIA

5.710.700 : OURISIA SESSILIFOLIA (subsp. *sessilifolia*) NZ, Central Otago, Pisa Range. 1650m. Moist turf and stony seeps. (A diminutive, downy, creeping alpine species, rooting as it goes in moist sites. Rosettes of imbricate, rounded, softly hairy, pale-green leaves & big, white, yellow-throated flowers in pairs, subtended by hairy bracts, up the 10cm. stems.)

5.710.800 : OURISIA SPATHULATA

5.710.900 : OURISIA VULCANICA

5.720.000 : PACHYSTEGIA INSIGNIS NZ, Marlborough, NW of Kaikoura. Ledges on coastal cliffs. (A very classy daisy indeed, endemic to Marlborough rock crevices. A low, stiff shrub with large, very thick, rhododendron-like, glossy green leaves, densely felted below, and huge white daisies, opening from woolly-scaled buds on curving stems. We were fond enough of this to give it alpine-house space for many years in Dorset and it is possible outside in a dry, sheltered site in the UK.)

5.727.000 : PARAHEBE BIRLEYI

5.727.200 : PARAHEBE CHEESEMANII

5.727.400 : PARAHEBE DECORA

5.727.600 : PARAHEBE HOOKERIANA

5.727.800 : PARAHEBE LINIFOLIA

5.728.000 : PARAHEBE LYALLII

5.728.250 : PARAHEBE PERFOLIATA (*Derwentia perfoliata*) No data. A lax, 50cm. shrubby perennial, reaching high altitudes on the ranges of SE Australia. Very tolerate of drought & perfectly hardy in the UK in a well-drained site. Leathery, blue-grey perfoliate foliage, purple-tinged when young, with racemes of violet-blue *Veronica*-flowers in early summer.

5.728.300 : PARAHEBE PLANOPETIOLATA

5.728.500 : PARAHEBE SPATHULATA Archibald Archive www.srgc.net

5.728.700 : PARAHEBE TRIFIDA

5.730.000 : PATERSONIA

5.730.700 : PATERSONIA FRAGILIS (*P. glauca*) Tasmania, Cockle Creek. M. Harvey coll. (A Tasmanian coll. of the one species in this attractive genus of the *Iridaceae*, which is near-hardy in the UK. Iris-like clumps of foliage & purple-blue flowers opening flat with 3, showy segments. About 30cm. high, this should succeed in mild parts of the UK. No trouble if protected.)

5.730.800 : PATERSONIA LONGISCAPUS Australia, Victoria, Langwarrin, Reservoir Track. W. Ashburner coll., 16.2.98

5.730.900 : PATERSONIA OCCIDENTALIS Australia, Victoria, Langwarrin. W. Ashburner coll. (Perhaps safest if grown frost-free. Numerous rich-blue flowers on short stems among narrow, rigid leaves, about 30cm. in height.)

5.735.000 : PELARGONIUM AUSTRALE Tasmania, Rheban Beach, North Point. Cliffs. Ex an M. Harvey coll. (A southern coll. of this Australasian species, as far removed from the main centre of the genus in S Africa as the two Turkish ones. About 30cm. high with little, rounded, downy, crenate leaves & umbels of up to 25, small flowers in white with pronounced crimson markings. So far this is proving fairly hardy outside with Tim Ingram (Kent, UK). Well worth trying in a well-drained, sunny site.)

5.736.000 : PENTACHONDRA PUMILA NZ, Marlborough, Black Birch Range. 1400m. Open, stony ridge. (From a very free-fruited form of this mat-forming member of the *Epacridaceae*. Creeping pads of tiny, purplish-green leaves, like bristly moss. Tiny tubular white flowers are followed by large, long-lasting brilliant red fruits, which take a year to mature.)

5.739.900 : PHORMIUM COOKIANUM (*P. colensoi*) NZ, Nelson, SW of Lewis Pass. 950m. Opening in scrub near tree-line. (Ascending to 1400m., this is smaller and with less rigid leaves than *P. tenax*, from which it is easily distinguished in seed by its drooping, twisted capsules. Branching stems, about 2m. high, with many tubular, dark red and yellow-green flowers.)

5.740.000 : PHORMIUM TENAX NZ, W Coast, NE of Bruce Bay. Sea-level. (Maybe the most spectacular foliage-plant hardy in the UK. Clumps of tough, leathery, 2m. long evergreen leaves & 3-5m. inflorescences of bizarre, dull-crimson flowers.)

5.740.050 : PHORMIUM TENAX No data. A New Zealand native, well-known as one of the most spectacular foliage-plants hardy in the UK. Clumps of tough, leathery, 2m. long evergreen leaves, overtopped by 3-5m. high inflorescences of bizarre, dull-crimson flowers. From a very hardy form with erect, somewhat greyish foliage, narrowly margined with maroon.

5.740.055 : PHORMIUM TENAX - from purple-leaved clone. From a more compact seedling with good bronze-purple leaves, raised & selected by us out of a large batch of seedlings years ago. As hardy as the preceding with us in W Wales.

5.745.000 : PHYLLACHNE COLENZOI

5.748.000 : PIMELEA

5.748.900 : PIMELEA MILLIGANII : Entry in 'Alpine Wildflowers of Tasmania' Archibald Archive www.srgc.net

5.749.010 : PIMELEA PROSTRATA From a fine selected form of this very variable and complex species, collected by Terry Hatch. A widespreading, prostrate shrub with small, crowded, leathery, grey-green leaves. Profuse clusters of fragrant, white

flowers followed, in hermaphrodite plants, by numerous small white fruits like rice-grains. Usually near-hardy in the UK.

5.749.050 : PIMELEA PYGMAEA

5.749.280 : PIMELEA SERICEA : Entry in 'Alpine Wildflowers of Tasmania'

5.749.309 : PIMELEA SERICEO-VILLOSA NZ, Nelson, Cobb Valley. (Prostrate, grey-leaved alpine shrublet. Orange fruits.)

5.753.000 : PITTOSPORUM

5.758.505 : PODOCARPUS NIVALIS No data. A low, dense New Zealand conifer, the alpine totara, with rigid evergreen leaves & fleshy, red fruits. Usually hardy in the UK. Fresh seed but anticipate waiting 2 years for germination.

5.760.000 : POMADERRIS

5.765.000 : PRATIA

5.765.100 : PRATIA ANGULATA

5.765.500 : PRATIA MACRODON

5.770.000 : PRIONOTES CERINTHOIDES

5.771.000 : PROSTANTHERA

5.773.000 : PROSTANTHERA LASIANTHOS

5.775.000 : PSEUDOPANAX FEROX New Zealand. T. Hatch coll. Archibald Archive www.srgc.net

5.780.000 : PTERYGOPAPPUS LAWRENCEI

5.782.000 : PULTENAEA

5.785.000 : RANUNCULUS

5.785.500 : RANUNCULUS BUCHANANII

5.785.600 : RANUNCULUS CARSEI

5.785.700 : RANUNCULUS CHEESEMANII

5.785.800 : RANUNCULUS CRITHMIFOLIUS

5.785.900 : RANUNCULUS ENYSII

5.786.000 : RANUNCULUS FOLIOSUS

5.786.100 : RANUNCULUS GODLEYANUS

5.786.200 : RANUNCULUS GRACILIPES

5.786.300 : RANUNCULUS GRAHAMII

5.786.400 : RANUNCULUS HAASTII

5.786.500 : RANUNCULUS INSIGNIS NZ, Marlborough, Black Birch Range. 1400m. Moist, stony areas. (From a fine population of this variable but usually spectacular alpine buttercup. Thick, rounded, evergreen basal leaves fringed with brown hairs around their toothed margins. Stout, branched stems, here rising to 20-30cm. though it can reach 50cm., carry many, huge, glossy bright-yellow buttercups, which in these Marlborough populations can have as many as 12 petals, rather than the usual 5-7. By no means impossible to grow well in moist, peaty scree in the UK, though it thrives best in the cooler North.)

5.786.600 : RANUNCULUS LAPPACEUS

5.786.700 : RANUNCULUS LYALLII NZ, Southland, Hunter Mts., 1400m. Among grasses in wet depression. (Surely the most sumptuous of New Zealand mountain-plants, this giant buttercup is distributed locally through most of the high rainfall ranges of South Island, usually growing in moist hollows, wet-flushes and stream-banks. The large, rounded leaves are overtopped by the branching stem, which can reach 1m. in height, carrying many huge, white flowers with up to 25 overlapping petals surrounding the yellow stamens.) Archibald Archive www.srgc.net

5.786.800 : RANUNCULUS MACULATUS

5.786.900 : RANUNCULUS MIRUS

5.787.000 : RANUNCULUS MULTISCAPUS

5.787.100 : RANUNCULUS NIVICOLA

5.787.200 : RANUNCULUS PACHYRRHIZUS NZ, Central Otago, Pisa Range. 1650m. Moist turf and stable, stony seeps. (A mat-forming high-alpine, localised in melt-water seeps & moist rock-crevices on the higher mountains of SW South Island & approaching related *R. sericophyllus* towards the W. Prostrate, creeping, rooting stems with little 3-lobed, notched fleshy leaves & flat, bright-yellow buttercups with 5-15 overlapping petals on very short stems.)

5.787.300 : RANUNCULUS ROYI

5.787.400 : RANUNCULUS SCRITHALIS

5.787.600 : RANUNCULUS SERICOPHYLLUS

5.787.800 : RANUNCULUS VERTICILLATUS

5.790.000 : RAOULIA

5.790.500 : RAOULIA BRYOIDES NZ, Marlborough, Black Birch Range. 1400m. Open, stony ridge. (A superlative, hard, silvery white 'vegetable sheep', closely related to the more southern *R. mamillaris* & like it never making such massive mounds as *R. eximia*. A hummock 1m. across would be an ancient & extreme example but none of us will live long enough to grow such a plant in cultivation. A few cm. can be hoped for & is indeed achieved by some UK alpine-plant specialists.)

5.790.600 : RAOULIA BUCHANANII

5.791.000 : RAOULIA EXIMIA

5.791.200 : RAOULIA GLABRA

5.791.300 : RAOULIA GOYENII

5.791.400 : RAOULIA GRANDIFLORA

5.791.600 : RAOULIA HECTORI

5.791.700 : RAOULIA HOOKERI

5.792.000 : RAOULIA MAMMILLARIS

5.792.100 : RAOULIA PARKII

5.792.200 : RAOULIA PETRIENSIS

5.792.500 : RAOULIA RUBRA

5.792.600 : RAOULIA SUBSERICEA

5.792.700 : RAOULIA SUBULATA

5.792.800 : RAOULIA TENUICAULIS

5.792.900 : RAOULIA YOUNGII NZ, Central Otago, Pisa Range. 1650m. Exposed stony slopes. (A beautiful little mat-former, endemic to the southern ranges of S Island. Like a softer version of the more familiar *R. grandiflora* covered in snow-white down. The comparatively large flower-heads are surrounded by papery, petal-like scales in shining white and parchment.)

5.800.000 : RHODODENDRON

5.820.000 : RICHEA (8 spp.)

5.820.050 : RICHEA ALPINA Tasmania, Mt. Sprent. 800m. Wet, boggy, meadow. M. Harvey coll. 15.4.97 (About 90cm. high & appears to be this recently described high-altitude species but Marcus points out that it may be a dwarf form of *R. pandanifolia*, (though it seems to have a differently structured inflorescence). The genus *Richea* is quite small & almost wholly Tasmanian. It is in *Epacridaceae* but some resemble *Cordyline* in their foliage. *R. scoparia* (q.v.) is the only one of proven hardiness in the UK but these colls. by Marcus are from considerable altitudes & there is no reason why they should be less hardy.)

5.830.100 : RICHEA DRACOPHYLLA Tasmania, Mt. Wellington. M. Harvey coll. (This & the next belong to a small, almost wholly Tasmanian genus, in *Epacridaceae* but somewhat resembling *Cordyline* in its foliage. *R. scoparia* is the only one of proven hardiness in the UK but these two colls. are from reasonable altitudes & will be worth trying in milder areas, in full sun in a moist, lime-free soil. This is a large shrub, near *R. scoparia*, with leaves to 30cm. long & huge, branched panicles of creamy white flowers.) Archibald Archive www.srgc.net

5.830.200 : RICHEA PANDANIFOLIA Tasmania, Hartz Mts. M. Harvey coll. (This & the next belong to a small, almost wholly Tasmanian genus, in *Epacridaceae* but somewhat resembling *Cordyline* in its foliage. *R. scoparia* is the only one of proven hardiness in the UK but this coll. is also from a reasonable altitude & will be worth trying in full sun in a moist, lime-free soil. This is a large shrub, the tallest of the genus, up to about 9m. high with heads of arching, 1m. leaves & huge, branched panicles of creamy white flowers. May be possible in milder areas of S & W UK, certainly in much of California & NZ.)

5.830.300 : RICHEA SCOPARIA Tasmania, Mt. Field, Tarn Shelf. M. Harvey coll., 1997 (Ascending to over 1300m., this is the only species of proven hardiness in the UK - it grows well on the rock-garden at the RBG Edinburgh. Most British stock seems to be derived from the H.F. Comber coll. of 1930. We seem to have but one colour-form but he describes the flowers varying in "white, pale or deep pink, red or maroon." It can form wide dense hummocks about 1m. high in exposed montane sites. Short, rigid, linear leaves cover the stems and the flowers are close-packed into stiff, terminal racemes. Low-nutrient, acid soil.)

5.830.301 : RICHEA SCOPARIA Tasmania, Hartz Mts., near Lake Esperence. M. Harvey coll. (Ascending to over 1300m., this is the only species of proven hardiness in the UK : it grows well on the rock-garden at the RBG Edinburgh. Most British stock seems to be derived from the H.F. Comber coll. of 1930. We seem to have but one colour-form but he describes the flowers varying in "white, pale or deep pink, red or maroon." It can form wide dense hummocks about 1m. high in exposed montane sites. Short, rigid, linear leaves cover the stems and the flowers are close-packed into stiff, terminal racemes. Low-nutrient, acid soil.)

5.830.350 : RICHEA SPRENGELIODES Tasmania, Mt. Field, Tarn Shelf. M. Harvey coll., 1997 (Another dwarfer, spreading, montane plant, under 1m. high. Globular, reddish flower-heads. This should be as hardy as the preceding.)

5.850.000 : **SENECIO** : SEE BRACHYGLOTTIS, DOLICHOGLOTTIS, ETC. FOR THE PRESENT

5.851.000 : SENECIO CENTROPAPPUS

5.851.500 : SENECIO LAGOPUS

5.851.700 : SENECIO LYALLII see *Dolichoglottis lyallii*

5.852.200 : SENECIO SCORZONEROIDES see *Dolichoglottis scorzoneroides*

5.875.005 : SOLLYA HETEROPHYLLA No data. A beautiful, Australian, evergreen twiner in the *Pittosporaceae*. Wiry stems, leafy with narrow, dark-green foliage, twine to about 2m. carrying dainty sky-blue bells from summer into autumn. Borderline hardiness in the UK, where it is reputedly possible in mild areas but no trouble in an unheated or frost-free greenhouse here.

5.880.000 : STELLARIA ROUGHII

5.885.200 : STYLIDIUM GRAMINIFOLIUM

5.887.000 : STYPANDRA CAESPITOSA (A little, 15cm. high liliaceous plant with starry, white flowers from grassy tufts.)

5.890.000 : TELOPEA TRUNCATA Tasmania, Lake King William, Tarraleah. 600m. Wet, sclerophyll forest. (A Tasmanian endemic, the hardest member of this small E Australian genus in *Proteaceae* & related to *Embothrium*. In the wild it can vary from a low shrub to an 8m. tall tree. A specimen grown at Wakehurst Place (Sussex, UK) for over 50 years is recorded as having reached 18ft. Usually recommended for acid soils in high rainfall areas of the British Isles, our fondest recollection of this is of a plant only about 1m. tall, grown in full sun on the rock garden at the RBG Edinburgh, where it flowered regularly (and may still do so). A stiffly branching shrub with oblanceolate, leathery evergreen foliage and terminal heads, about 10cm. across, densely packed with many, curved, bright crimson flowers, in summer.) Archibald Archive www.srgc.net

5.890.011 : TELOPEA TRUNCATA from YELLOW FORM

5.895.000 : TETRATHECA GLANDULOSA

5.897.000 : THELIONEMA CAESPITOSUM Australia, Victoria, Langwarrin, Reservoir Track. W. Ashburner coll., 17.1.98

5.899.000 : TRICORYNE ELATIOR Australia, Victoria, Langwarrin, Reservoir Track. W. Ashburner coll., 17.1.98

5.900.000 : **TROCHOCARPA**

5.900.500 : TROCHOCARPA DISTICHA

5.901.000 : TROCHOCARPA THYMIFOLIA

5.940.009 : UTRICULARIA MONANTHOS NZ, Lake Lindon Road. Permanently wet, streamside gravel. (A minute, creeper of montane peat-bogs. Comparatively large, lipped, violet-blue flowers on thready stems, about 5cm. high.)

5.950.000 : **VIOLA**

5.950.200 : VIOLA CUNNINGHAMII

5.950.400 : VIOLA LYALLII

5.970.000 : **WAHLENBERGIA**

5.970.200 : WAHLENBERGIA ALBOMARGINATA

5.970.400 : WAHLENBERGIA BROCKIEI

5.970.500 : WAHLENBERGIA CARTILAGINEA NZ, Nelson, Crimea Range, Mt. Southey. 1600m. Mobile & part-stabilized, greywacke talus. (For the alpine-plant enthusiast, this is certainly the choicest, most desirable among the 10 New Zealand species and possibly among the 100 plus members of the entire genus. Another of the specialised, camouflaged species endemic to the greywacke screes on a few of the drier ranges of Nelson & Marlborough in the N of S Island, this is a stoloniferous perennial forming small, flat, starry rosettes of thick, leathery leaves, glaucous-grey, sometimes purplish-tinged, in colour. From the centre of each of these, one or two wide-open bells in pale lilac-blue or white look upward on a short, stiff stem, a few cm. high. Like most of these scree-specialists, it is by no means common in the wild nor can we recollect seeing it grown in cultivation.)

5.971.000 : WAHLENBERGIA GRACILIS

5.971.500 : WAHLENBERGIA PYGMAEA

5.972.000 : WAHLENBERGIA SAXICOLA

5.980.000 : WITTSTEINIA VACCINIACEA

5.985.000 : WURMBEA DIOICA Australia, Victoria, Dromana, Mornington Peninsula, Cemetery Track. W. Ashburner coll., 22.12.97

5.996.000 : XANTHORRHOEA MINOR Australia, Victoria, Langwarrin. W. Ashburner coll. (Dwarfest species in this remarkable small genus, endemic to southern Australia. There is currently a UK business in the importation of ancient, wild-collected specimens of some of the taller, trunk-forming species, the grasstrees and blackboys. This has a barely discernible woody stem, topped by the characteristic grassy tuft of thick, narrow leaves, about 50cm. long. The dense cylindrical white flower spike, about 20cm. long, rises above these. Only for greenhouse cultivation in the UK but no more than frost-protection will be needed.)

5.998.000 : XERONEMA CALLISTEMON New Zealand, Hen Island (W of Northland coast). (A really extraordinary member of the *Liliaceae*, only known from here & Poor Knight's Island, where it grows, wind-blasted with sea-spray, as a semi-epiphyte on volcanic scoriae. It must be grown frost-free in a well-drained, low-nutrient, lime-free medium. One would suggest something 'far-out', like old, weathered boiler-cinders, were it not for the fact that, when we last listed seed about 10 years ago, several British gardeners told us they were growing it without too much trouble & we have just been offered cultivated seed from a customer in California. So it is by no means impossible even if its spectacular sprays of brilliant red flowers remain incredible.)

5.998.001 : XERONEMA CALLISTEMON New Zealand, Poor Knight's Island (off N Island). Ex a T. Hatch coll.

5.998.500 : XYRIS GRACILIS Australia, Victoria, Langwarrin, Reservoir Track. W. Ashburner coll., 16.2.98

- 6.002.499 : AGAPANTHUS from MID-BLUE HYBRIDS** Mainly from tough, vigorous 'Profusion' plus some others.
- 6.002.500 : AGAPANTHUS from DEEP BLUE HYBRIDS** From a wide range of named, rich-blue hybrid clones, hardy in the UK, mostly near *A. campanulatus* : 'Podge Mill', 'Kingston Blue' & several L. Palmer clones.
- 6.002.510 : AGAPANTHUS from PALE BLUE HYBRIDS** Mainly from our outstanding pale blue, 'Blue Moon'
- 6.002.520 : AGAPANTHUS from WHITE HYBRIDS** From tall 'Ardernei' to dwarfer 'Snow Baby' & 'Lady Moore'.
- 6.002.530 : AGAPANTHUS from A. INAPERTUS HYBRID** From a fine, robust clone, doubtfully the pure species but with the large head of drooping flowers in deepest blue, which characterises *A. inapertus*. Archibald Archive www.srgc.net
- 6.025.000 : ALLIUM X HOLLANDICUM** Seed collected by Janis Ruksans in Latvia, from such clones as 'Purple Sensation' & 'Purple Surprise'. Seedlings may vary from 50-100cm. but all should have large umbels of deep purple-violet flowers.
- 6.027.860 : ALSTROEMERIA LIGTU HYBRIDS from 'JOY APRICOT'** From a beautiful NZ selection
- 6.027.870 : ALSTROEMERIA LIGTU HYBRIDS from 'JOY PASTELS'** NZ grown seed from Terry Hatch
- 6.027.900 : ALSTROEMERIA LIGTU HYBRIDS** Thriving in British gardens from Cornwall to Aberdeen
- 6.035.000 : ANDROSACE CYLINDRICA X HIRTELLA** Much cultivated stock of the cushion-forming, saxatile *Androsace* spp. in Section *Aretia* is of hybrid origin. Characteristics are often only preserved in nature because of isolation. With their compact mounds covered in white flowers, all remain superlative alpine-house plants to challenge the skilled grower.
- 6.035.100 : ANDROSACE PUBESCENS HYBRID** From a more widespread version of the above two Pyreneans.
- 6.100.050 : ASTILBE SIMPLICIFOLIA HYBRIDS** From 'Sprite', 'Inshriach Pink', 'Bronze Elegans' & others. Finer foliage & much daintier, more open inflorescences of pink or white flowers than the common, taller, heavier hybrids.
- 6.223.000 : BERGENIA from RED HYBRIDS** From some of the best modern crimson flowered hybrids : German ones like 'Abendglocken' & 'Admiral' as well as some of our own, like 'Bartok'. Good, tough foliage colours well in winter.
- 6.223.100 : BERGENIA from WHITE HYBRIDS** From our compact white-flowered hybrids, bred from *B. stracheyi* 'Alba', such as 'Britten', 'Bach' & 'Beethoven'. Most seedlings will be apple-blossom pinks. Bronze weather-resistant winter-leaves.
- 6.350.000 : CROCOSMIA HYBRIDS**
- 6.350.010 : CROCOSMIA from BRESSINGHAM HYBRIDS.** Mainly from 'Lucifer' & other hybrids with *C. paniculata*.
- 6.360.001 : CYCLAMEN COUM from PLAIN LEAVES, RED FLOWERS**
- 6.360.002 : CYCLAMEN COUM from PLAIN LEAVES, PINK FLOWERS**
- 6.360.003 : CYCLAMEN COUM from PLAIN LEAVES, WHITE FLOWERS**
- 6.360.004 : CYCLAMEN COUM from PLAIN LEAVES, ALL COLOURS**
- 6.360.005 : CYCLAMEN COUM from PATTERNED LEAVES, RED FLOWERS**
- 6.360.006 : CYCLAMEN COUM from PATTERNED LEAVES, PINK FLOWERS**
- 6.360.007 : CYCLAMEN COUM from PATTERNED LEAVES, WHITE FLOWERS**
- 6.360.008 : CYCLAMEN COUM from PATTERNED LEAVES, ALL COLOURS**
- 6.360.010 : CYCLAMEN COUM from PLAIN & PATTERNED LEAVES, ALL COLOURS.**
- 6.360.015 : CYCLAMEN COUM from CARMINE STRAIN** Derived from a Peter Davis collection made in southern Turkey in the 1950's and given to us many years ago by *Cyclamen* enthusiast Jack Boggis, by which time the number had been lost. This was originally distributed by Davis under the name *C. hiemale*.
- 6.360.016 : CYCLAMEN COUM from MEADEN'S CRIMSON** Outstanding dark-flowered form.
- 6.360.020 : CYCLAMEN COUM from BICOLOURED FORMS** Mainly derived from Peter Moore's silvery-leaved selection 'Tilebarn Elizabeth' but including others with more variable leaves but two-toned pink flowers.
- 6.360.045 : CYCLAMEN COUM from DARK-CENTRED SILVER LEAVES** Silver leaves with a strongly contrasting, dark-green, central 'Christmas-tree' marking. A striking & beautiful R.& R. Wallis foliage-selection.
- 6.360.049 : CYCLAMEN COUM from SELECTED PATTERNED LEAVES** Some good forms from Jim Almond.
- 6.360.050 : CYCLAMEN COUM from SILVER & PEWTER LEAVES** From pink-flowered, silver-leaved forms..
- 6.360.051 : CYCLAMEN COUM from 'MAURICE DRYDEN'** Silver-suffused leaves. White flowers.
- 6.360.055 : CYCLAMEN COUM from 'NYMANS STRAIN'** Selected out of the EKB 371 coll. by the head gardener at Nymans in Sussex, UK. An exquisite little plant with intensely silvered leaves and bright carmine-pink flowers
- 6.360.057 : CYCLAMEN COUM from 'QUAKER PEARL'** From another selection derived from EKB 371 with beautifully

marked silver foliage and white flowers. These are both choice and not always easy to grow well.

6.360.060 : CYCLAMEN COUM from 'VAN TUBERGEN'S VARIETY' A name used in the old Blanchard garden to distinguish a fine form with large, dark leaves, beautifully zoned with pale-grey, & mid-pink flowers, which was supplied before the middle of last century by the famous Dutch bulb firm as *C. orbiculatum*. No doubt the original tubers were wild collected & represent a local population, so it has persisted with little variation in the seedlings over the decades.

6.362.050 : CYCLAMEN GRAECUM from SILVER-LEAVED FORMS Archibald Archive www.srgc.net

6.363.000 : CYCLAMEN GRAECUM from "C. GAIDUROWRYSII var. MALINGERI" Allegedly a tetraploid *C. graecum*, "obtained by Glasau from an undesignated island in the Aegean" & given by him to the *Cyclamen* guru Doris Saunders in the 1950's under this *nomen nudum*. Our stock came from the old battle-axe herself in the 1960's and Dave Hoskins has maintained it : good silver-zoned foliage but not earth-shattering, though worth growing for the improbable, invalid name.

6.364.000 : CYCLAMEN HEDERIFOLIUM from MIXED LEAF-FORMS An infinite variety of shapes & patterns.

6.364.020 : CYCLAMEN HEDERIFOLIUM from SELECTED LEAF-FORMS From a very wide range of outstanding leaves : silvers, pewters, 'Apollo-types', arrowheads, etc. Should produce an infinite variety of shapes & patterns.

6.364.050 : CYCLAMEN HEDERIFOLIUM from APOLLO STRAIN Derived from seed, given to us decades ago by Ken Aslet from the original 'Apollo' grown at Wisley. This had been selected by E. A Bowles as the clone with the most outstanding foliage. Intricately silver-patterned leaves, often pink-flushed when young. This & the other leaf-forms need selection when grown from seed. We have seen plants labelled as this but bearing no resemblance to the original. This is a problem. We do not like using these names but how else can they be distinguished?

6.364.051 : CYCLAMEN HEDERIFOLIUM from WHITE APOLLO (also now distributed as 'Artemis') From white-flowered plants. Similar leaves. Seed from Dave Hoskins who originally selected & developed these whites.

6.364.055 : CYCLAMEN HEDERIFOLIUM from APOLLO-TYPE, ARROWHEAD LEAVES

6.364.090 : CYCLAMEN HEDERIFOLIUM from PEWTER LEAVES Leaves suffused with a silvery mist. Nearest to the Phil Cornish 'Silver Cloud' leaf-form but with a broader, dark-green edge.

6.364.099 : CYCLAMEN HEDERIFOLIUM from ROSENTEPPICH The German strain developed for rich, deep-pink flower colour, which has given rise to some outstanding deeper coloured seedlings, like Phil Cornish's 'Ruby Glow'

6.364.100 : CYCLAMEN HEDERIFOLIUM from RUBY GLOW At last a selection for the deepest flower colour. Phil Cornish has been working on really rich, glowing ruby-pinks. Use only the best from these strains as parents. They will vary.

6.364.100 : CYCLAMEN HEDERIFOLIUM from RUBY-RED FORM From a selection for the deepest colour.

6.364.140 : CYCLAMEN HEDERIFOLIUM from SILVER ARROWS Long, narrow, silvered, arrow-head leaves.

6.364.150 : CYCLAMEN HEDERIFOLIUM from SILVER CLOUD Leaves suffused with a white mist.

6.364.151 : CYCLAMEN HEDERIFOLIUM from WHITE CLOUD From white-flowered plants. Leaves as above.

6.364.160 : CYCLAMEN HEDERIFOLIUM from SILVER LEAVES Jim Almond's selections, distinct from above.

6.364.161 : CYCLAMEN HEDERIFOLIUM from SILVER LEAVES, WHITE FLOWERS' Similar foliage to above..

6.364.180 : CYCLAMEN HEDERIFOLIUM from SCENTED FLOWERS From plants originating from Tom Blanchard, John's father, and, if our recollections are correct, collected near Thessaloniki in N Greece in the early part of last century. We must add we cannot smell the scent (but we cannot smell wild *C. persicum* scent either). Authentic seed from Dinah Batterham (who can smell it). She adds that this is a good deep pink with a fine leaf, so the nasally impaired should be well compensated.

6.365.000 : CYCLAMEN X MEIKLEI Variable hybrid between *C. creticum* and *C. repandum*. Frost-free.

6.366.000 : CYCLAMEN MIRABILE from 'TILEBARN ANNE' Entirely silver leaves, all luminous pink in autumn. Striking but unfortunately rather a weak-growing, temperamental plant which is unwilling to set much seed.

6.366.005 : CYCLAMEN MIRABILE from 'TILEBARN JAN' White flowers, sometimes with just a hint of a pink nose, and particularly fringed margins to the petals. These 'Tilebarn' strains are from Peter Moore's outstanding selections

6.366.010 : CYCLAMEN MIRABILE from 'TILEBARN NICHOLAS' Dark central area on leaves with a brilliant silver surround, bright pink in autumn. The finest, most striking and most vigorous of Peter Moore's selections.

6.379.000 : CYCLAMEN X SAUNDERSIAE The very variable hybrid between *C. repandum* and *C. balearicum*. Flowers can be shades of pink or white and there is an enormous variation in the size, shape and markings of the ivy-shaped leaves. Like its parents, it likes a lot of shade. Probably best grown frost-free though some clones are perfectly hardy.

6.380.000 : CYCLAMEN X WELLENSIEKII from PINK FORM (*C. cyprium* x *C. libanoticum*) From an improbable hybrid made in Wageningen, Holland, in 1969 between two very different-looking species, one flowering in autumn and the other in spring. Usually a vigorous plant, more or less intermediate in appearance between the parents, flowering from November to February. This seed is from a pink-flowered form closer to *C. libanoticum*. Archibald Archive www.srgc.net

6.380.001 : CYCLAMEN X WELLENSIEKII from WHITE FORM (*C. cyprium* x *C. libanoticum*) From a white-flowered clone, more like *C. cyprium*. Seedlings from both of these will, of course, be variable.

6.415.000 : DIERAMA from SLIEVE DONARD HYBRIDS Little genuine material of the selected clones & hybrids developed by Slieve Donard Nursery in Co. Down, N Ireland between 1923 & 1960 now exists. Their capacity to self-seed in Irish gardens makes it dubious that more than one or two cultivar name can be authentically applied. Initially, *D. pulcherrimum*, with bell-shaped, rich carmine-pink flowers, & *D. pendulum*, with more flaring flowers in paler shades, were involved with *D. dracomontanum* being used later. In previous lists we kept seed gathered from plants approximating to the first two separate but the use of specific names for material of obscure origin is misleading. There is no assurance what the seedlings will be like. Some of our stock, apparently almost pure *D. pulcherrimum*, was actually raised from Slieve Donard seed in the 1960's. We also include seed purporting to originate from 'Blackbird', as well as a range of pinks nearer *D. pendulum*. All supremely elegant plants about 2m. high. Archibald Archive www.srgc.net

6.463.050 : ERYNGIUM X ZABELII From 'Slieve Donard' & other clones of this *E. bourgatii* & *E. alpinum* hybrid .

6.470.020 : ERYTHRONIUM OREGONUM from 'NYMANS' (Sussex, England, UK)

6.470.050 : ERYTHRONIUM REVOLUTUM from 'SPINNERS' (Boldre, Hampshire, England, UK)

6.470.095 : ERYTHRONIUM HYBRIDS from PHYLLIS GUSTAFSON'S GARDEN (Center Point, Oregon, USA)

6.470.099 : ERYTHRONIUM HYBRIDS from BOYD KLINE'S GARDEN (Medford, Oregon, USA)

6.475.000 : EUPHORBIA PASTEURII (*E. stygiana* x *E. mellifera*) Archibald Archive www.srgc.net

6.499.700 : FRITILLARIA MESSANENSIS subsp. GRACILIS HYBRID From Norman Stevens. Large, brown flowers.

6.499.710 : FRITILLARIA PYRENAICA X LUSITANICA Hand-pollinated seed from a cross made in 1998 by Norman Stevens between a "rather green form of *F. pyrenaica*" pollinated with the splendid form of *F. lusitanica* from the Sierra Nevada, grown as "*F. nevadensis*", which has rich brown edges to the flowers. "Should make an ideal garden plant ? " writes Norman. Certainly seedlings should produce some fine things and, we hope, something growable outside in most UK gardens.

Fritillaria stenantha ex Kath Dryden

6.500.100 : GENTIANA from ASIATIC HYBRIDS From named clones of a wide range of hybrids between the SW Chinese *G. sino-ornata* and allied species. Particularly , which set seed well here. These are surely the most superlative of autumn-flowering alpine-plants, forming wide mats of rooting, narrow-leaved, decumbent stems covered with trumpets in the richest of penetrating blues. No trouble in cool climates in lime-free, humus-rich soils, kept moist in summer ; worth every effort elsewhere.

6.501.450 : GERANIUM from 'BROOKSIDE' The parent is supposedly a hybrid between *G. pratense* and *G. clarkei*, though its general appearance is much nearer to the former. It is very fertile & seedlings are comparatively even in appearance. Fine garden-plants with spreading stems producing successions of large, rich violet-blue flowers over a very long period in summer.

6.501.500 : GERANIUM SANGUINEUM from INSHRIACH SEEDLINGS From the two outstanding, compact, magenta-pink clones, 'Shepherd's Warning' & 'Jubilee Pink', (the only variant of this species to receive an FCC), selected by Jack Drake & John Lawson at Inshriach in the 1960's, out of a batch of seedlings from *G. sanguineum* var. *striatum* (*G.s.* var. *lancastrense*). Jack Drake told us these can produce seedlings very similar to the parents, as well as reduced, even more compact variants.

6.564.005 :# HELLEBORUS from 'ANDROMEDA' An excellent large, bowl-shaped,crimson-purple with a slight, blue bloom. Bronze-tinged nectaries and cauline leaves. An extremely late-flowering plant, opening after all others here

6.564.008 : HELLEBORUS from 'AQUARIUS' A most distinct, floriferous 'Zodiac' type : rose-pink outside, paler inside with a diffuse zone of small, crimson speckles. Large, flat flowers carried on long pedicels (like *Galanthus* 'Magnet') give it an unmistakeable appearance. As with 'Philip Ballard', we have included seed from selected, similar offspring.

6.564.015 : HELLEBORUS from 'CASSANDRA' A very rich black-purple of vigorous disposition, forming good clumps. Not particularly outstanding as an individual flower but somehow one visitors to our garden always home into

6.564.016 : HELLEBORUS from 'CASSIOPEIA' A lush-leaved, vigorous clone picked out by Amy Doncaster from a bed of seedlings flowering at Buckshaw Gardens in the 1970's. Soft shell-pink delicately tinged with green & cream.

6.564.018 : HELLEBORUS from 'CITRON' From one of the best-known Helen Ballard yellows. Not actually any yellower than others like 'Sirius' & 'Orion' but with the characteristic Ballard shape : rounded flowers with overlapping sepals.

6.564.020 : ###HELLEBORUS from 'COSMOS' 3 pictures [#Second pic.](#) [#Third pic.](#) Greenish white bowls densely & evenly spotted all over the interiors with crimson. Rose-pink flushed, crimson-veined exteriors. A paragon from Eric Smith with rounded 'Ballard-type' flowers.

6.564.023 : HELLEBORUS from 'DRACO' Even rose-pink outside with a pale rose interior, largely occupied by a crimson basal patch made up from a coagulation of speckles, which diffuse in streaks & dots around the picottee edge.

6.564.025 : HELLEBORUS from 'ELECTRA' Eric Smith thought highly of this seedling from 'Early Purple' (*H. atrorubens* of gardens), often thought to be sterile. A not too special purple to us but interesting, vigorous, floriferous and early

6.564.035 : HELLEBORUS from 'INCA' Some *H. torquatus* influence in this slate-purple with dull, crimson-black cauline leaves. Fine, rounded flowers with yellow-green nectaries but not quite so vigorous here as we had hoped at first.

6.564.040 : HELLEBORUS from 'KATINKA' An *H. o.* subsp. *guttatus* hybrid like no other in colour. Parchment to antique ivory ground-colour with a zone of dull crimson spots. Like 'Inca' & 'Zuleika' named by us in 1981 but never distributed.

- 6.564.043 : HELLEBORUS from 'LEO'** From one of Eric Smith's original Zodiac hybrids : a pink *H.o. guttatus* type. Vigorous with large, pendant flowers, bright rose-pink outside, paler inside with a zone of dense, crimson spots.
- 6.564.045 : HELLEBORUS from 'MAIA'** From an excellent clone we selected a few years ago : the only one we have named for a decade. A vigorous plant with large, bowl-shaped white flowers strikingly marked on the interior with a crimson flash at the base of each sepal. We have not flowered seedlings yet so have no idea what children she may produce.
- 6.564.046 : HELLEBORUS from 'MIRANDA'**
- 6.564.048 : HELLEBORUS from 'NANCY BALLARD'** From an excellent Helen Ballard, *H.o. guttatus* type selection with the characteristic, rounded, 'Ballard flowers' in white with a zone of crimson speckles. Archibald Archive www.srgc.net
- 6.564.050 : HELLEBORUS from 'ORION'** An outstanding, floriferous garden-plant. Primrose yellow with dark nectaries & a maroon basal blotch. "A particular favourite" of Brian Mathew & illustrated on the cover of his monograph on hellebores. In our experience, it produces few children like itself but we have seen a photograph of a seedling which looks identical.
- 6.564.060 : HELLEBORUS from 'PHILIP BALLARD'** Only a few clones named by Helen Ballard merited the hype surrounding her plants. This is one, appropriately named after her husband, so she obviously thought it was rather special as well. Very robust with very large, rounded flowers in blue-bloomed maroon-black, it really is spectacular & always stands out. A good proportion of the seedlings can resemble the original and we have included seed from some selected, similar children.
- 6.564.063 : HELLEBORUS from 'PLEIADES'** From a dwarf, dainty *H.o. guttatus* type named by Eric Smith many years ago. Wiry stems, less than 30cm. high, carry several, rounded white cups, neatly speckled with crimson inside
- 6.564.065 : HELLEBORUS from 'PLUTO'** The most famous of Eric Smith's original *H. torquatus* hybrids. Outward-facing, wide open flowers. Dull, dark wine-purple with a blue-white bloom externally ; pale green obscured by a slate-purple flush internally. Rich chestnut-brown nectaries surround the cream anthers. Likes a dryish, well-drained, part-shaded site
- 6.564.066 : HELLEBORUS from 'POLLUX'** Small, cup-shaped, rich purple-black flowers & much-cut foliage which is beautifully tinted with red-purple as it unfolds in spring. We have included seed from some similar dark seedlings
- [6.564.070 : #HELLEBORUS from 'SIRIUS'](#)** [2 pictures](#) One of Eric Smith's earliest seedlings, named in the 1970's, this remains a [magnificent](#), vigorous clone. Large, green-tinged primrose-yellow flowers surrounded by a ruff of bright-green cauline leaves.
- 6.564.080 : HELLEBORUS from 'TITANIA'** Jenny's favourite hellebore. A *H. torquatus* hybrid : we have seen a very similar wild plant in Montenegro. Little, rounded, cup-shaped flowers are creamy green inside but covered with tiny reddish dots outside to give a misty mushroom-colour. Opens its first flowers early on short stems, which elongate & branch later.
- 6.564.090 : HELLEBORUS from 'ZULEIKA'** Mega-*H. torquatus* flowers, symmetrical & cup-shaped, on stout stems but lacks the much-cut, deciduous foliage characteristic of this species & its hybrids. Red-purple with a blue bloom outside. Chalky green-white, flushed marginally with crimson & with a dense zone of tiny crimson speckles, inside. Pale-green nectaries.
- 6.564.100 : HELLEBORUS from BLUE & BLACK-FLOWERED HYBRIDS .**
- 6.564.120 : HELLEBORUS from CREAM HYBRIDS** Creamy whites, some with slight basal speckling
- 6.564.130 : HELLEBORUS from H.O. GUTTATUS HYBRIDS** Whites, sometimes green or cream tinged but all with a distinct basal zone of maroon or crimson speckles, which in some cases bleed together into streaks.
- 6.564.140 : HELLEBORUS from SELECTED UNMARKED PINKS** We have been long time in putting together a group of good clear-pinks. When we were in Dorset, Eric Smith's predilection for spots resulted in every pink seedling having some speckles. This seed is from lovely, large-flowered selected clones with speckle-free flowers in shades varying from soft-rose-pink to shell-pink. We grow these a long way from the spotty ones but offer no guarantee that the children will be immaculate.
- 6.564.142 : HELLEBORUS from DEEP ROSE-PINK FLOWERED HYBRIDS** Mainly from what we used to label 'old rose' : dusky, satiny, antique, rose shades of which we are fond. Some of these have very large, outward-facing flowers.
- 6.564.143 : HELLEBORUS from ROSE-PINK HELEN BALLARD HYBRID** Classic, cup-shaped flowers
- 6.564.150 : HELLEBORUS from PURPLE-FLOWERED HYBRIDS** From good plum and purple shades
- 6.564.151 : HELLEBORUS from SELECTED PURPLES** The parents are mainly selected seedlings from 'Andromeda' and from the best of what Eric Smith used to call 'Midnight Sky' types (purple with an even dusting of darker speckles all over the flowers). We have collected separately from a few outstanding selected clones, many with the bowl-shaped, even flowers which appealed to Helen Ballard. From unnamed clones but some are, quite frankly, better than their parents.
- 6.564.152 : HELLEBORUS from WINE-PURPLE HELEN BALLARD HYBRID** Good shape & good grower.
- 6.564.160 : HELLEBORUS from SPECKLED HYBRIDS** From what Eric Smith used to categorize as 'Galaxy Strain', all along the lines of 'Cosmos' - white or greenish white, speckled all over with tiny crimson dots in varying density
- 6.564.170 : HELLEBORUS from H. TORQUATUS HYBRIDS** From 'Ariel', 'Miranda', 'Titania' & 'Zuleika', close to or derived from *H. torquatus*. Mostly with smallish, early, cup-shaped flowers & much-cut, deciduous foliage.
- 6.564.180 : HELLEBORUS from WHITE-FLOWERED HYBRIDS** From unspotted whites, usually green-tinged
- 6.564.190 : HELLEBORUS from ZODIAC-TYPE HYBRIDS** Eric Smith's category for what are, in effect, *H. guttatus* types with a pink, instead of white, ground colour, all with a zone of maroon speckles. Eric's unrivalled speciality

- 6.564.200 : HELLEBORUS from HYBRIDS OF ALL COLOURS** From purple, cream, green, pink & speckled clones : an especially good buy this year as we have planted up a bank with new seedlings from selected parents. These are now flowering well with some excellent new clones, which have not been selected out, so all have gone into 'mixed'.
- 6.564.201 : HELLEBORUS from NEW ZEALAND HYBRIDS** Fresh NZ seed from Terry Hatch in Pukekohe. He has spent years selecting seedlings originating from our own & other European material. "Wonderful results, 50-70cm. tall stems with huge, rounded flowers." Seed from all colours, purples, creams, pinks, speckles, etc. May not germinate in N hemisphere till 1998
- 6.564.500 : HELLEBORUS X STERNII 'BLACKTHORN STRAIN'** For many years, nurseries such as Bressingham distributed seedlings of this hybrid between *H. argutifolius* & *H. lividus*, which were virtually indistinguishable from the former parent. Robin & Sue White assiduously selected towards *H. lividus* to produce an outstanding group of distinct character and considerable vigour & hardiness, which come very evenly from seed. It will vary but expect plants of compact habit with leathery, grey-green,, pale-veined,, evergreen foliage, purplish below, & large clusters of pink-flushed, pale-green flowers in late winter. Archibald Archive www.srgc.net
- 6.565.000 : HOSTA from BLUE-LEAVED HYBRIDS** From both first & second generation clones derived from Eric Smith's cross between *H. sieboldiana* & *H. tardiflora*, mainly 'Halcyon' & 'Eric Smith'. Seedlings will be mainly compact plants with pointed, tough-textured, blue-grey foliage but can be expected to vary greatly in leaf-size & to include miniatures.
- 6.575.495 : IRIS BUCCHARICA X VICARIA** Some distinct clones of both these amenable plants are involved as parents.
- 6.575.500 : IRIS BUCCHARICA HYBRID** An easy juno, given to Norman Stevens as a bicoloured form of *I. orchicoides*, Norman thinks it likely to be an *I. bucharica* hybrid. Winged, yellow falls & cream-white standards. Open-pollinated seed
- 6.575.550 : IRIS HOOGIANA X KOROLKOWII** Second generation (F2) seeds from this cross between two of the most distinct and beautiful irises, both in Sect. *Regelia* & both native to Central Asia.
- 6.575.590 : IRIS MAGNIFICA X BUCCHARICA** Crosses with a form of *I. bucharica* from Tadjikistan with lemon-yellow standards, which Alan believes will make a worthwhile parent, as well as clones with full orange-yellow flowers
- 6.575.595 : IRIS MAGNIFICA X VICARIA** These involve a number of selected clones of both parents, including the fine, bluish *I. vicaria* 'Sangardak' with a yellow-green blotch on the falls
- 6.575.600 : IRIS MAGNIFICA X WILLMOTTIANA** Several clones of *I. magnifica*, including a dwarfer one with a markedly orange blotch on the falls, pollinated with *I. willmottiana*, grown from wild collected seeds
- 6.575.605 : IRIS MAGNIFICA ALBA X BUCCHARICA** Sumptuous white *I. magnifica* with yellow-orange *I. bucharica*.
- 6.575.790 : IRIS RETICULATA from GARDEN HYBRIDS** The unusually warm February of 1998 may have upset some of the later-flowering bulbs but it did suit the *I. reticulata* hybrids in the garden of Norman Stevens (Cambridge, UK). Exceptionally these set seed well. As they have no doubt crossed further between themselves, it seems pointless to keep seed separate, so we offer mixed seed from a wide range of hybrid clones in blues and purples. All the seedlings should be well worth growing.
- 6.575.800 : IRIS RETICULATA from ARMENIAN HYBRIDS** Seed from hand-pollinated crosses, made in Canada by Alan McMurtrie. Some parents are second generation hybrid clones already selected by Alan but a wild form from Armenia with red-purple to pink flowers is somewhere in the parentage of all the seeds. *I. hyrcana* & *I. bakeriana* are involved in some, as well as the cultivars 'Cantab', 'Gordon', 'Pauline' & 'J.S. Dijt'. Likely to produce some worthwhile & distinct clones, which should be quite different from what is already available in commerce. These hybrids represent a lot of dedicated work. *I. reticulata* is never generous with its seeds. Incidentally, these sometimes take two winters to germinate, in Alan's experience.
- 6.576.020 : IRIS UNGUICULARIS from VARIOUS CULTIVARS** Seed from Brian Mathew
- 6.590.000 : KNIPHOFIA**
- 6.660.105 : LAPAGERIA ROSEA from 'CONTULMO'**
- 6.660.120 : LAPAGERIA ROSEA from NAMED CHILEAN CLONES**
- 6.700.000 : LEWISIA COTYLEDON from DRAKE'S SUNSET STRAIN** We inherited the last of Jack Drake's selected clones, derived from the plants he took with him from the Inshriach Alpine Plant Nursery in Aviemore, when he retired to Dorset. He continued to select and raise seedlings. We have hand-pollinated among those with the most intense colours, particularly the brilliant oranges he liked.. Expect pinks, reds and yellows as well. "Stunning plants" as Jack might have said.
- 6.720.000 : MECONOPSIS X SHELDONII** The beautiful hybrids between *Meconopsis grandis* and *M. betonicifolia*, known collectively as *M. x sheldonii*, are frequently sterile. This is from a fine form given to us by Jack Drake shortly before he died. Jack said this, as well as being fertile, was reliably perennial. About 1m. tall with intense blue poppies.
- 6.720.001 : MECONOPSIS X SHELDONII** The beautiful hybrids between *Meconopsis grandis* and *M. betonicifolia*, known collectively as *M. x sheldonii*, are frequently sterile. This is from the fertile 'Lingholm' strain. Outstanding, perennials about 1m. tall with intense blue poppies.. Archibald Archive www.srgc.net
- 6.729.000 : MUSCARI from 'ROSY SUNRISE'** From a new selection made by Augis Dambrauskas derived from an undescribed species, allied to *M. armeniacum*, which occurs around Nalchik in the Russian republic of Kabardino-Balkaria (next to North Ossetia in the North Caucasus). Considered to be the deepest pink muscari yet. Soft-pink buds open to deeper pink flowers. Seeds from isolated plants. See also 688.012, the Bob & Rannveig Wallis pink form of *M. armeniacum*.

6.730.000 : NOMOCHARIS X FINLAYORUM The hybrid between N Burmese *N. farreri* & W Chinese *N. pardanthina*, named after Major & Mrs. Knox-Finlay, who cultivated this genus to perfection in their Perthshire garden. Stems up to 1m. tall with whorled leaves can carry up to 20 flowers, which can be nodding, horizontal or erect, in white or pink with deep purple centres & very variably spotted with crimson. Superb plants for areas with cool, moist summers.

6.747.800 : PAEONIA from 'CLAIRE DE LUNE' The yellow peonies, like *P. mlokosewitschii* & *P. wittmanniana* will occasionally hybridize in gardens when other species are in flower at the same time, often producing beautiful plants in soft, apricot-tinted creams & pinks. Some have been named & this is from the old French *P. wittmanniana* hybrid 'Claire de Lune'.

6.747.810 : PAEONIA MLOKOSEWITSCHII & P. WITTMANNIANA HYBRIDS The beautiful yellow *P. mlokosewitschii* & *P. wittmanniana* will occasionally hybridize in gardens when other species are in flower at the same time, producing so-called pink *P. mlokosewitschii*. These are often beautiful plants in soft, apricot-tinted creams & pinks & some have been named. Seed from several, including ivory, crimson-veined 'Fedora' & the old French *P. wittmanniana* hybrid 'Claire de Lune'.

6.747.811 : #PAEONIA from TBLISI HYBRIDS Seed from a bed of mixed hybrids in the Tblisi Botanic Garden, where cultivated Caucasian species, yellow *P. mlokosewitschii* & *P. wittmanniana*, have crossed with pink *P. caucasica*. Will McLewin, who has seen these in flower in Georgia, describes some of them as "superb" (underlined three times). These are often beautiful plants in soft, apricot-tinted creams & pinks. Such hybrids have occurred in cultivation in Europe & been named : ivory, crimson-veined 'Fedora' & the old French *P. wittmanniana* hybrids 'Claire de Lune', 'Mai Fleuri' & 'Avant Garde'.

6.747.850 : PAEONIA SUFFRUTICOSA from CHINESE HYBRIDS Cultivated tree-peony seed from China collected from a wide range of named hybrid clones : mainly doubles, in purple, pink, white & green. What might result is unpredictable.

6.747.860 : PAEONIA from GANSU MUDAN This is from a Chinese nursery specialising in growing local Chinese tree-peonies in their home in the far western province of Gansu, where most of the collecting by Farrer & Rock took place. The name 'Gansu Mudan' means simply Gansu (Kansu) tree-peony. The basis of their stock has been *P. rockii* (*P. suffruticosa* 'Rock's variety' now elevated to somewhat dubious specific status) and this seed is more than likely to yield plants which will approximate to the Rock collection, which it must be remembered was from a cultivated plant in the first place, gathered in 1925 by Joseph Rock from plants at the Choni lamasery in Gansu at 2600m., where it had first been seen by Farrer. As the origins of our western garden plants were Chinese cultivated plants, we may well be best to return to the same source for a reintroduction. We can certainly do as well as Rock & better than Farrer by listing this cultivated seed from Gansu. We can be confident the cultivated seed will produce huge flowers "refulgent as pure snow and fragrant as heavenly roses with a heart of gold", as described by Farrer, & we hope we can offer assurance of "each stainless petal flamed at the base with a clean and definite feathered blotch of maroon".

6.750.100 : PENSTEMON from 'RONDO' Seeds from a strange hybrid, possibly a *P. barbatus* cross, which produces both pink and blue flowers on the same plant. We are uncertain how reliably this comes from seed. Archibald Archive www.srgc.net

6.750.110 : PENSTEMON from 'ROSE ELF' Seeds from one of the 'Prairie Hybrids' derived from the breeding programme initiated by Glenn Viehmeyer at the University of Nebraska in the 1950's. These were based on the mysterious *Penstemon* 'Flathead Lake', a naturalized hybrid resembling a dwarfer, pink-flowered *P. barbatus*. Seedlings may vary.

6.600.050 : PRIMULA from HYBRID ALPINE AURICULAS

6.600.060 : PRIMULA from HYBRID SHOW AURICULAS

6.625.000 : PRIMULA PULVERULENTA 'BARTLEY STRAIN' One of the loveliest candelabra primulas (Sect. *Proliferae*). Developed from the crimson type-form by Huw Dalrymple in the 1920's, it may have some *P. bulleyana* in its ancestry. Originally, it varied in shades of pink and rose with both pale and dark eyes but now its whorls of flowers on white, mealy stems have settled into a fairly even, crimson-eyed, soft shell-pink, very beautiful in rich. wet soil in semi-shade.

6.650.650 : PRIMULA from 'WHARFEDALE BLUEBELL' The parent, an excellent little hybrid in the auricula section, is maybe the nearest to a true blue which has been produced so far and, unusually for these plants, it is self-fertile. Jim Almond tells us he has raised some very fine seedlings from it. Well worth sowing & growing on for the alpine-house, scree or trough.

6.802.550 : PULSATILLA from RED FLOWERED HYBRIDS From isolated, deep velvety terracotta-red parents

6.845.000 : RHODOHYPOXIS HYBRIDS

6.860.000 : RODGERSIA from 'BUCKLAND' Seeds from Keith Wiley's outstanding clone, one of the finest in this aristocratic genus for rich, moist soils in sun or part-shade. A form of *R. pinnata* or perhaps a hybrid of *R. pinnata* 'Superba' with deeply veined, pinnate, bronze-green leaves with toothed margins and wide panicles raspberry-pink flowers.

6.898.500 : SEMIAQUILEGIA ECALCARATA 'FLORE PLENO' An odd form of this summer-flowering Chinese Columbine, which reputedly comes 'true' from seed. Spurless, double, pale maroon-purple flowers on 30cm., branching stems.

6.900.000 : SCHIZOSTYLIS COCCINEA from RED FORMS

6.900.001 : SCHIZOSTYLIS COCCINEA from PINK FORMS

6.900.005 : SCHIZOSTYLIS COCCINEA from SELECTED RED & PINK FORMS Seed from almost all the named clones of this late-flowering member of the *Iridaceae* (now moved into *Hesperantha* by Peter Goldblatt).

TRILLIUM ERECTUM X FLEXIPES

Some plants from Archibald Seed may be pictured in the SRGC Forum but not itemised by the seed collection details here : it may be worth searching the forum thread <http://www.srgc.net/forum/index.php?topic=9360.0> for missing photos.