

News from

Jim & Jenny Archibald

'BRYN COLLEN', FFOSTRASOL,
LLANDYSUL, SA44 5SB, WALES, U.K.

NEWSLETTER & SEED LIST

JANUARY, 2002

Paradise lost ? Paradise regained ? Let's hear it for

THE GARDENERS OF AFGHANISTAN

A few weeks after the atrocities of September, 2001, a customer wrote to us from the United States apologizing for the lateness of her order. She had just not been able to get her mind round sending it earlier and commented "if only more people were gardeners." So, let's hear it now for the gardeners of Afghanistan.

Paradise : f.F. *paradis* f.L. f.Gk. *paradeisos* f.Old Persian *pairidaeza* park or enclosed garden.

1520

"Its verdure and flowers render it, in spring, a heaven."
The Emperor Babur on his city Kabul

1832

"The gardens are well-kept and laid out ; the fruit trees are planted at regular distances. The ground was covered with the fallen blossom, which had drifted into the corners like so much snow. The Nawab and myself seated ourselves under a pear-tree of Samarcand and admired the prospect. There were peaches, plums, apricots, pears, apples, quinces, cherries, walnuts, mulberries, pomegranates, and vines, all growing in one garden. There were also nightingales, blackbirds, thrushes and doves to raise their notes..."
Alexander Burnes in Kabul in 1832 (from 'Travels into Bokhara')

1956

"...life was being lived happily : a party of ladies in reds and brilliant blues walked along the opposite bank, talking gaily to one another ; poplars shimmered ; willows bowed in the breeze ; water flowed slowly in the irrigation ditches through a hundred gardens, among apricot trees with the fruit still heavy on them, submerging the butts of the mulberries, whose owners squatted in their properties and viewed the scene with satisfaction. Old white-bearded men sat proudly on stone walls with their grandchildren, grave-looking little boys with embroidered pill-box hats and little girls of extraordinary beauty. This evening was like some golden age of human happiness, attained sometimes by children, more rarely by grown-ups, and it communicated its magic in some degree to all of us."

Eric Newby in the Panjshir Valley, 1956 (from a "A Short Walk in the Hindu Kush")

1960

"The practice of Buddhism has been extinct in Bamian for perhaps eleven hundred years by now, yet the peace which the practice brought with it still reigns here. You will feel it if you look out across the valley in the moonlight. There is peace in the glistening white poplar-trunks. There is peace in the shadowy shapes of the

Buddhas and the caves. As you gaze, this Buddhist peace will come 'dropping slow' on your restless Western soul."

Arnold J. Toynbee, on a 1960 visit to the giant Buddhas of Bamian (destroyed by the Afghan Taliban) (from 'Between Oxus and Jumna.')

2001

"In the midst of hunger and war, the Afghans maintain a touching obsession with flowers. You see them planted and carefully watered in the front line and on patches of ground beside the road in impoverished dusty villages.

Abdullah Abdullah, the foreign minister of the Northern Alliance, gives his press conferences in the splendid garden of a government guest house, which is filled with carefully tended orange, pink and scarlet flowers.

The gardener in charge is determined to show his blooms to television viewers around the world. At the last press conference he first placed a large jug of them on the table in front of Mr. Abdullah. This was rapidly removed to make way for reporters' microphones.

Undaunted the gardener then tied a bouquet of pink flowers to a sapling just behind the minister's head until an officious security man told him to take them away."

Patrick Cockburn, journalist, in the Panjshir Valley, September, 2001.

Ordering from this list could not be easier

We shall accept your personal cheque in US \$ or £ sterling. Cheques in US \$ must be on a US bank account, as charges on negotiating cheques on foreign accounts are very high in the USA (foreign banks can sometimes sell you a US \$ cheque drawn on one of their US branches). Apart from personal cheques in these two currencies, payments can be made in US \$, £ sterling or € bank-notes (please send by registered mail), a bank draft or International Money Order (in US \$ or £ sterling for these please). Personal € cheques are at present a problem as there is, as yet, no central bank clearing system within the eurozone. This makes it disproportionately expensive for us to have cheques for comparatively small amounts cleared. We hope to resolve the difficulty in 2002. In the meantime we should be grateful if eurozone customers send payment in € by cash by registered mail or use a bank

draft in US \$ or £ sterling : just convert at the current exchange rate. We do not operate a Giro account to enable direct transfers nor do we accept credit card payments at present. If remitting by sterling cheque, it is a great help both to you and to us, if you send us an open cheque, limited to the total value of your order. Obviously, it cannot be made out for more than the limit but it can certainly be made out for less, avoiding annoying credits or refunds : you will only pay for what we have sent after the order is despatched. If you do not wish to do this, a list of some possible substitutes will be very helpful : we shall not use them unless we have to and, if we do, we always try to send more than the value of the items not supplied. We shall not pay in your cheque until after your order has been sent : it is in our interest, as well as yours, to complete your order as quickly as we can .

PLEASE HELP US BY PRINTING YOUR NAME & ADDRESS CLEARLY.

THERE IS NO CHARGE FOR POSTAGE, BY AIRMAIL IF ABROAD, ON SEEDS OR LISTS.

New customers please understand

There may be a delay of some weeks before you receive your order. Most orders come in during the first few weeks after we send out a list. We receive orders much faster than we can despatch them. If you feel your order is too long in arriving, check with your bank to find out if your cheque has been cashed : we do not pay in cheques until orders have been despatched. If it has been cashed, let us know immediately. One or two items are lost or delayed each year. In such an unlikely event, you will find us totally sympathetic. We are glad to say such problems are very rare. Postal services are, on the whole, very reliable. We try to be as reliable ourselves.

**WE REVIEW THE MAILING LIST FOR CUSTOMERS OUTSIDE EUROPE ANNUALLY
IF YOU DO NOT ORDER, WRITE TO ASK US TO SEND THE NEXT LIST**

This present list has had to be severely edited and is somewhat compressed and telegraphic in parts. For the amount of material, we can now access, we really need to be issuing three or four lists each year to offer you the seeds as freshly as possible and at the best times for sowing. The problem could be partially solved by the use of the internet and we shall be starting to work on setting up a website of an acceptable standard during 2002. "Not before time" many of you will be thinking. Putting such a project in place will take quite a lot of work and a lot of time, which is a scarce commodity in our lives, so we ask for your patience. It will appear !

Our population reference numbers

The species in our lists are divided into five distinct geographical areas. Within these areas they run in alphabetical order. The numbers appearing before the names run in numerical order (which means we do not much like generic 'splitting'). These numbers refer to particular populations, mainly in the wild, though cultivated material without data is given a number also. Wild collections which cannot be fully identified will be found under a five-digit field number. This number refers to a collection made by us on a particular date only. Both sets of numbers are permanent. The use of population references is to avoid seed from the same population of plants being distributed under a proliferation of field-numbers. In some instances, the same population of plants can be found in our own field-notes under a multitude of field-numbers, when it has been visited by us in different years. When another collector is involved their name or field

number is quoted in the data following the plant name. Identified species from Europe, W Asia & N Africa have six-digit numbers here (they have an 0. before them on our records and you may see this on a label). The seven-digit numbers start with a 1. for North America, 2. for South America, 3. for Southern Africa (S of the Sahara), 4. for Eastern Asia and 5. for Australasia. Garden hybrids or selections start with 6. Cultivated seed, which has become increasingly evident in our lists, as we build up stocks raised from seed of wild origin, is marked with an asterisk (*). The field-data given in these cases refers to the parents. Almost all cultivated seed was collected in 2001. Much is hand-pollinated but it will not necessarily produce similar-looking seedlings. As our parent-stocks represent samples of wild populations, seedlings will show the variation present in the wild..

The figure in brackets before the price code is the number of seeds per packet

Allium : some fine Persian onions

- 130.670 : ALLIUM BODEANUM** * No data but possibly from the Paul Furse 7471 coll. made N of Quchan between 2000m & 2300m. A splendid endemic of Khorasan, in NE Iran, & adjacent Turkmenistan. In Sect. *Acanthoprason* & 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, who considered it to be "certainly one of the more remarkable species of its genus." A rare plant in cultivation & safest in the bulb-frame in the UK. (8) E
- 131.850 : ALLIUM CUPULIFERUM** * Tadjikistan, Hissar range. (A most distinct, arresting & very little known, 50cm. high species with umbels of large, purple, cup-shaped flowers carried in dense umbels on elongating pedicels, which extend to different lengths as the flowers open. "One of the most attractive Alliums" writes Latvian allium-enthusiast, Janis Ruksans) (20+) D
- 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. . . (10) C
- 134.200 : ALLIUM NEVSKIANUM** * Tadjikistan, Varsob Gorge, near Chinoro. Ex RM 82-72 (In Sect. *Acanthoprason* (like *A. akaka* & *A. karataviense*) with large umbels of rich, dusky, pinkish-red flowers. Satisfactory outside so far in the UK).. (10) E
- 134.350 : ALLIUM NUTANS** * No data. A very hardy species, carrying its bulbs on a short rhizome, from central Russia & Siberia. Spherical umbels, nodding before the cup-shaped, lilac-rose flowers open, in summer. About 50cm. high in flower. . . (15+) B
- 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.) (20+) C
- 136.805 : ALLIUM SCHUBERTII** * No data. One of the most 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. (15+) C
- 137.050 : ALLIUM SHELKOVNIKOVII** * Iran, Ardabil, W of Ardabil, Kuh-e-Sabalan. 2400m. Among steppe vegetation on tuffs of volcanic ash. (The first seed from our 2000 reintroduction of this N Iranian endemic, collected by us (& no doubt others) in the 1960's but since lost. An excellent, dwarf member of Sect. *Acanthoprason* with a dense, rounded umbel of starry, lilac flowers on a fat, 5-10cm. stem between two broad, prostrate, grey leaves. Small & choice enough for an alpine-house pan.) (8) E
- 146.010 : AMSONIA ORIENTALIS** (*Rhazya orientalis*) * No data. Only recorded from a few lakeside sites in Bursa & Balikesir provinces in NW Turkey & from winter-wet marshes on the coast of Thrace in NE Greece. Thought to be "near extinction" in nature. A good, long-lived perennial in a well-drained, sunny site in the UK. Woody-based clumps send up 50cm. stems, clad in narrow, grey-green, willow-like leaves & carrying cymes of starry, long-tubed, soft-blue flowers in summer. (10) C
- 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.) (20+) B
- 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.) (10) B
- 194.752 : ARUM ALPINUM** * Greece. Ex Christian, Elliott & Hoog 806. (Hardy European species with green spathes.) . . (10) B
- 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. (8) D
- 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.) (8) D
- 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.) (8) E
- 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 well with minimal protection, planted out under polythene.) (8) C

- 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.) (8) C
- 195.150 : ARUM DIOSCORIDIS** (var. *dioscoridis*) * Turkey, Mersin, NNW of Mersin towards Arslankoy. 500m. Crevices in limestone pavement. (In this form the very large spathes are often entirely velvety black-purple. The species is a plant of lower altitudes which needs a warm, dry site in the UK or is better grown in the bulb-frame so it can have a summer rest.) . . . (10) C
- 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 the purple spadices. (8) D
- 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 (8) D
- 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 1,750m., 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 spadix : altogether most striking in flower & little-known in cultivation.) . . (5) E
- 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. (8) C
- 196.200 : ARUM KOROLKOWII** * Turkmenistan, Kopet Dag, 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.) (5) E
- 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.) . . (8) E
- 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*. (5) E

Arum pictum : the only autumn-flowering Arum

- 196.910 : ARUM PICTUM** * No data. Native to the Balearic Islands, Corsica & Sardinia, this is the only member of the genus to flower in autumn. 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. (8) D
- 197.000 : ARUM PURPUREOSPETHUM** * Greece, Crete, Samaria gorge. Below 100m. Ex P. Boyce 51. (From the type collection of this very local species, described in 1987. Very large, uniformly rich purple spathe with a black-purple spadix.) (8) E
- 197.104 : ARUM RUPICOLA** (var. *rupicola*) (*A. conophalloides*) * Turkey, Kahramanmaras, SSE of Goksun. 1550m. NE-facing limestone slope. (Elegant, purple-tinged, grey-green spathes on tall stems surround massive, cylindrical, purplish-brown spadices. Withstands extremely low winter-temperatures but best protected from excess moisture in the UK by a bulb-frame.) . . . (5) D
- 204.700 : ASPHODELINE BREVICAILIS** (subsp. *brevicaulis*) * Turkey, Adana, Nurdag Gecidi, 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, starchy, soft-yellow flowers, apricot-orange in bud & on the reverse. Needs a hot, dry site in the UK.) . . (10+) D
- 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. . (30+) C
- 252.700 : CAMPANULA CARPATHA** * Greece, Karpathos. Shady, limestone crevices. Ex a H. & I. Barton coll. (A superlative alpine-house species, seldom without its large, elongated bells in soft blue-violet against its downy foliage.) (30+) D
- 253.600 : CAMPANULA COLLINA** * Turkey, Trabzon, Sogani Dag. 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.) (20+) B
- 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.) . . . (8) C

A : \$2.00 ; £1.50 ; € 2.5	C : \$4.00 ; £2.50 ; € 4. -	E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. -	D : \$5.00 ; £3.50 ; € 5.5	F : \$9.00 ; £6.00 ; € 10. -

Species from Europe, W Asia & N Africa : Seeds from Jim & Jenny Archibald

- 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*. Brilliant carmine-pink. . . (30+) **C**
- 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. (10+) **C**
- 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 (only lots of fluff) with us in over 30 years. Simon Bond has 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. (10+) **C**
- 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 trifoliolate leaves & young shoots with long, upright cylindrical racemes packed with pineapple-scented yellow flowers in early summer. (10) **C**
- 380.420 : DAPHNE ALPINA** * No data. Neat, dwarf, deciduous shrub with fragrant, white flowers in summer. (10+) **B**

An outstanding Macedonian endemic

- 401.050 : DIANTHUS MYRTINERVIUS** subsp. **CAESPITOSUS** Greece, Pela, Kajmakcalan, Voras. 2000m. H. Zetterlund & U. Strindberg 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* but 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 of tiny, stiff leaves, smothered with stemless flowers, usually in a deeper shade of pink than the type-race. One of the last of Europe's great alpinines to enter cultivation : if only a tenth as easy to grow as the accommodating type-race of *D. myrtinervius*, it will have a great future.) (10+) **F**
- 407.210 : DIGITALIS DAVISIANA** * A slender, SW Turkish, rhizomatous perennial, about 50cm. high, from limestone screes of the coniferous forest zone, between 600 & 1600m. Related to *D. grandiflora*, with pale yellow, orange-veined foxgloves. (30+) **B**
- 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 well-spaced, downturned foxgloves in pale sugar-pink with speckled white palates. Small & tidy enough for the shaded alpine-house.) . . (30+) **D**
- 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.) . . (50+) **A**
- 408.300 : DIGITALIS LAMARCKII** * Turkey, Gumushane, Vauk Dagi, 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.) . . (50+) **B**
- 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.) . . . (50+) **B**
- 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.) . . (30+) **B**
- 412.180 : DIONYSIA INVOLUCRATA** * Tadjikistan, 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) (15+) **E**
- 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 in a hot, dry site but safest in a bulb-frame in colder areas.) . . . (8) **D**
- 432.300 : ECHIUUM RUSSICUM** * No data. A striking plant, more than 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. (20+) **B**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

Eremurus : the giant asphodels of Central Asia

The giant asphodels, a magnificent genus of hardy plants spread from the Lebanon & Turkey through to the W Himalaya but centered on Central Asia, are not the easiest of perennials to manage in UK gardens. These are steppe-plants, adapted to a dry climate of extreme cold in winter and extreme heat in summer. While tolerant of very low temperatures when dormant their new growth is vulnerable if their noses emerge too early, so spring growth may need some protection both from late

frosts and slugs. While best suited to gardens in the drier, more continental climates of central Europe or the Rocky Mountain states of the USA, they can be very successfully grown in a well-drained, sunny situation in the UK, especially in the drier east. Several species provide well-established displays at the RBG, Edinburgh, in Scotland. Their massive, fleshy, octopus-like roots need time to establish & strongly resent disturbance. They are best grown from seed : most will flower in 3-4 years.

- 444.044 : EREMURUS FUSCUS *** No data. From Central Asia & adjacent N Afghanistan & seldom seen in cultivation. Fascinating rather than showy. Slender racemes of golden-brown flowers, emerging from papery white bracts, on 1m. stems. (10) C
- 444.060 : EREMURUS HIMALAICUS *** No data. A truly magnificent NW Himalayan species with erect, 2m. spires solidly packed with starry white flowers. The earliest to flower in UK gardens, where it is usually one of the more reliable ones. (10+) C
- 444.067 : EREMURUS OLGAE *** No data. Perhaps our favourite species, distributed from Iran into Central Asia. By far the latest to flower with towering, 2.5m high, cylindrical racemes of soft-pink flowers in summer. Superlative when well-grown. (10) C
- 444.085 : EREMURUS ROBUSTUS *** No data. Equally imposing Central Asian with towering, soft-pink racemes. 2.5m. (10) C
- 444.086 : EREMURUS ROBUSTUS from WHITE FORM *** No data. Central Asian with towering racemes. 2.5m. . . . (10) C
- 444.102 : EREMURUS SPECTABILIS *** Turkey, Gumushane, Kop Dag. 1300m. Ex a N. Stephens coll. (Spires of green-white flowers with exerted orange-brown anthers. 1.5m. In spite of its name, not so spectacular as some but fascinating.) (10+) C
- 444.103 : EREMURUS SPECTABILIS *** Uzbekistan, Tashkent area. Ex a H. Fuchs coll. (10+) C
- 444.150 : EREMURUS STENOPHYLLUS (subsp. *stenophyllus*) (*E. bungei*) *** No data. Cylindrical racemes of brilliant yellow flowers, about 1m. high. A showy species from N Iran through Central Asia to W Pakistan & usually the easiest. (10+) B
- 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. (20+) A
- 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. (20+) B
- 481.503 : EUPHORBIA RIGIDA *** Turkey, Antalya, Bey Da., Kemer to Ovacik. Ex a 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. Usually perfectly hardy in a hot, dry site in the UK.) . . (10+) C
- 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. (10+) B
- 485.510 : FERULA TINGITANA *** No data. The giant fennel of SE Spain & NW Africa. Less robust in habit than *F. communis* & the lobes of its dissected basal foliage are shorter & with revolute margins, rather than thread-like. Spectacular. (10+) B
- 515.652 : GENTIANA ASCLEPIADEA *** No data. The elegant willow gentian. Clumps of 60cm. stems with clusters of dark blue trumpets in the axils of the pointed, lanceolate leaves from late summer until frosted. A plant of moist woodlands.) . . (50+) B
- 515.652 : GENTIANA ASCLEPIADEA from PALE BLUE FORM *** From a beautiful paler, turquoise-blue form . . (50+) B
- 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. (20+) B
- 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 successful with some. This seed is from Dinah Batterham who grows it well outside in Dorset, UK.) (20+) D
- 519.201 : GENTIANA OLIVIERI** Iran, Kordestan, SW of Negel (between Sanandaj & Marivan). 1350m. Openings among *Quercus* scrub on shale. (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. Dormant in summer and needs bulb-frame treatment in the UK.) (50+) D
- 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.) . (50+) C

A : \$2.00	;	£1.50	;	€ 2.5		C : \$4.00	;	£2.50	;	€ 4. -		E : \$7.00	;	£4.50	;	€ 7. -
B : \$3.00	;	£2.00	;	€ 3. -		D : \$5.00	;	£3.50	;	€ 5.5		F : \$9.00	;	£6.00	;	€ 10. -

Species from Europe, W Asia & N Africa : Seeds from Jim & Jenny Archibald

- 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.) (10+) C
- 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.) (10+) A
- 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.) (10+) B
- 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. . . (10+) A
- 526.925 : GERANIUM PRATENSE from PINK FORMS *** Delicate, milky pinks (10+) A
- 526.926 : GERANIUM PRATENSE from PALE BLUE FORMS *** Soft ice-blues (10+) A
- 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.) (10+) B
- 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 unmistakable 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. . (10+) C
- 528.220 : GERANIUM SANGUINEUM *** No data. Mainly from Max Frei's selected clone 'Elspeith'. 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 on bright magenta-pink flowers. (10+) A
- 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. (10+) B
- 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.) (10+) B
- 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. . . (10+) C
- 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. . . . (20+) B

Iris : bearded ones from the Middle East

- 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.) . . (10+) C
- 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.) . (8) C
- 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.) . . . (10+) C
- 590.405 : IRIS LACTEA (Ser. *Ensatae*)** Russia, near Tomsk. (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. Very hardy & drought-resistant.) (15+) B
- 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.) (8) E
- 597.800 : IRIS SINTENISII (subsp. *sintenisi*) (Ser. *Spuriae*) *** Greece, above Konitsa. Balkan & NW Turkish species, about 30cm. high & an excellent garden-plant. Grassy leaves & rich violet-blue flowers, rather like large versions of *I. reticulata*. . (10+) B
- 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 from Iran NE into W China 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 over a long period.) . (10+) C

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

- 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. . . (8) **B**
- 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.) (8) **D**
- 599.807 : IRIS TAOCHIA from YELLOW FORM** (Sect. *Iris*) * Data as above. Large flowers in smoky, pale-yellow. . . (8) **D**
- 599.905 : IRIS TIMOFEJEWII** (Sect. *Iris*) * Russia, Dagestan. A dwarf bearded iris, endemic to the Caspian republic of Dagestan & very 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 actually 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 from Russia in the 1960's by Eliot Hodgkin from the (then) Leningrad Botanic Garden. (5) **E**
- 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. . . . (10+) **B**

Jankaea heldreichii : from Zeus with love

- 605.002 : JANKAEA HELDREICHII** Greece, Pieria, Oros Olimbos, North side. 1300-1400m. Limestone fissures in shady ravine. (Just received : special delivery by Hermes. The famous endemic of Mt. Olympus with rock-hugging, grey-velvet rosettes and crystalline lavender flowers. Maybe the most beautiful of European chasmophytes & perhaps the greatest challenge for the alpine-plant enthusiasts. Certainly, 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. We have not listed seeds for about 15 years!) (50+) **F**
- 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. (10+) **B**
- 619.860 : LATHYRUS VERNUS from PINK & WHITE FORM** From the form with bicoloured, pink & white flowers, called 'Alboreous', 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. (10+) **A**
- 627.801 : LEUCANTHEMOPSIS RADICANS** (*L. pectinata*) * Spain, Granada, Sierra Nevada, SE of Pico del Veleta. 3000m. 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. Acid scree-mix in full sun in the alpine-house or a trough. Too much water in summer can be just as dangerous as in winter - these are dry & windy mountains after snow-melt is over.) . (possibly 20+) **E**

Lilium : scarlet lilies from Greece & France

- 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.) (10+) **D**
- 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.) (10) **E**
- 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.) (10+) **E**
- 634.030 : LILIUM MARTAGON** Russia, near Tomsk. (The Siberian race from this area has been separated at specific, subspecific and varietal levels, the last possibly being the most acceptable, as *L.m.* var. *pilosiusculum*, distinguished by its narrower leaves and sparsely spotted, vinous-purple flowers, covered outside with long hairs and opening from cobwebby buds.) (15+) **C**
- 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. (20+) **A**
- 634.401 : LILIUM POMPONII** * France, Alpes-Maritimes, Montagne de Maurel, NE of La Mure. 1000m. Among scrub in steep-sided limestone gully. (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. For a well-drained, sunny site.) (10+) **D**
- 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, turkscap flowers above close-packed, narrow leaves.) . (10+) **B**

A : \$2.00 ; £1.50 ; € 2.5	C : \$4.00 ; £2.50 ; € 4. -	E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. -	D : \$5.00 ; £3.50 ; € 5.5	F : \$9.00 ; £6.00 ; € 10. -

Species from Europe, W Asia & N Africa : Seeds from Jim & Jenny Archibald

635.220 : LILIUM SZOVTSIANUM * 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. (10+) **B**

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.) (10+) **B**

Paeonia : wild seed from Azerbaijan, Georgia & Russia

Even if sown promptly, these may not show leaf-growth until spring, 2003. These are plants for the dedicated and patient grower. Always keep ungerminated seed : it is large enough to check that it is sound. Like some lilies, many peonies will germinate hypogeally, forming a root-system underground during the first cool period before sending up true leaves the following season. Most species are very local in nature,

occurring in isolated colonies. It can be a lot of trouble to arrange to collect seed from them. Our thanks to Will McLewin for his painstaking efforts to continue collaboration with the botanists in the republics of the former USSR, who have made several of these collections. It is not at all easy. Our efforts to establish parent stocks in cultivation from this wild-collected material will, we hope, ensure seed supplies in future years.

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.) (6) **C**

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.) (6) **F**

746.100 : PAEONIA CAMBESSEDESII * The dwarfiest 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. (6) **C**

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 in 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. (6) **F**

746.150 : PAEONIA CAUCASICA (*P. mascula* complex) SE Georgia, Daba area. (The 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.) (6) **C**

746.500 : PAEONIA DAURICA (*P. triternata*) (*P. mascula* complex) 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*".) (6) **D**

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.) (6) **D**

746.708 : PAEONIA MASCULA (subsp. *mascula*) * Yugoslavia, Crna Gora (Montenegro). A widespread species, occurring sporadically through southern Europe. Hairless foliage, cut into very few segments & magnificent large, rosy-red flowers. (6) **C**

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 dwarfiest race of the *P. mascula* group. Like other Mediterranean island species, it needs a sheltered site outside in the UK.) (6) **E**

747.110 : PAEONIA MLOKOSSEWITSCHII * No data. A restricted Georgian endemic & 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. Open-pollinated English-grown seed. Open-pollinated seed occasionally produces hybrids with red or pink-flowered species giving pink-flushed creams or apricot-tinted flowers . . . (6) **C**

747.111 : PAEONIA MLOKOSSEWITSCHII * No data. Hand-pollinated, German-grown seed from Hermann Fuchs. (6) **D**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

- 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. (6) **D**
- 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.) (6) **D**
- 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. (6) **E**
- 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. (6) **D**
- 747.720 : PAEONIA PEREGRINA from ROMANIAN FORM** (*P. romanica*) * No data. We have not seen this form from the eastern end of the species distribution but it is 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. . . (6) **E**
- 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. mlokosewitschii*. 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. mlokosewitschii*. We still know little of the variation of these Caucasian populations & suspect that Russian 'splitting' is justified.) (6) **E**
- 747.852 : PAEONIA STEVENIANA** (*P. wittmanniana* complex) From selected forms of a high altitude race with reddish stems & leaves coll. above 2000m. in the Caucasus of SE Georgia. We now have seedlings of all these but no flowers as yet (6) **F**
- 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.) (6) **F**
- 747.961 : PAEONIA TOMENTOSA** Seed listed in previous years was collected in the Talysh range, which runs from SE Azerbaijan on into Iran. This is from a locality up towards Armenia, in the the main body of the Caucasus, in NE Azerbaijan. 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 but a colony Jim saw in this area of Iran in May 2000, had deep yellow flowers with thick, extremely glaucous foliage. . . (6) **F**
- 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.) (50+) **A**
- 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. (20+) **D**
- 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. . . . (10+) **B**
- 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. liliastrum*. 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. . . . (15+) **C**
- 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.) . . (5) **C**
- 764.800 : PHELYPAEA COCCINEA** Iran, Kordestan, ESE of Sanandaj. Steep, rocky slopes with diverse steppe-vegetation. (The ultimate parasite : the whole visible plant, mainly composed of a low cluster of huge, black-throated 'gloxinia'-like flowers on short fleshy stems is intense scarlet. This species is parasitic only on *Centaurea*, so if you do not have a host, forget it (or rush out and buy a perennial one from the garden centre) : Fritz Kummert told us he grew this successfully, so it can be done.) . . (100+) **C**
- 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 alpiners. . . . (20+) **B**
- 785.301 : PRIMULA AURICULA var. ALBOCINCTA** (Subsect. *Auricula*) Italy, Lombardia, Monte Tremalzo. 1800m. Fissures in N & W-facing limestone cliffs. P. & P. Watt coll. (A rare plant in cultivation but perhaps the finest race of this widespread & variable Alpine species. White-edged, greyish leaves & big yellow flowers with round 'eyes' of white meal.) (20+) **C**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
 B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

Species from Europe, W Asia & N Africa : Seeds from Jim & Jenny Archibald

- 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 wet-growing species. Heads of lilac-pink flowers on stems which reached 30cm. in seed.) (50+) **C**
- 786.000 : PRIMULA DAONENSIS** (Subsect. *Erythrodosum*) Italy, Lombardia, P. di Croce Domini. 1900m. Schistic debris. P&P. Watt coll. (Almost restricted to a small area near Lake Garda. Rose-pink flowers. Red glands give the leaves a rusty tinge.) (20+) **D**
- 787.901 : PRIMULA LATIFOLIA** (Subsect. *Brevibracteata*) 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 striking, violet-blue forms. A fine species neglected by British alpine enthusiasts.) . . (30+) **D**
- 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. Near Chalus, the flowers vary from rich red to pink, yellow & white. We have not seen these plants from northernmost Iran in flower but they should be similarly variable & we hope can be established in cultivation. UK.) . . (20+) **D**
- 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. (15+) **C**
- 800.601 : PULSATILLA CAMPANELLA** Kyrgyzstan, Talas Alatau, Kara Bura pass, S of Klyuchevka. 2350m. A. Dickerson 00-25 (A delightful, little Central Asian species. Very finely cut, basal foliage and drooping bells in a deep violet.) (10+) **D**
- 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 much more finely cut & woollier than the type-race.) (15+) **C**
- 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+) **B**
- 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.) (50+) **D**
- 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 at its best when the bristly, reddish foliage unfolds in spring or when the erect, branched 50cm. stems are set with shiny, scarlet seeds. Try this in sunny scree in the UK.) (6) **C**
- 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. (20+) **C**
- 844.201 : SALVIA CYANESCENS** * Turkey, Bolu, W of Goynuk. 800m. Loose, exposed shale slopes. (A delightfully airy perennial. Flat rosettes of felted leaves and diffuse, branching stems, 50cm. high, of pale-violet flowers. Hot, dry site in the UK.) (20+) **B**
- 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*, but very much dwarfier than these : only 10-15cm. high in flower with rich lavender-blue whorls from rosettes of superlative, white-felted foliage. Successful with Jack Elliott in Kent but strongly resents the damp atmosphere of our Welsh winters. An outstanding new plant.) (15+) **D**
- 845.201 : SALVIA HYPARGEIA** * Turkey, Adana, N of Saimbeyli. 1200m. Open rocky areas. (Neat clumps of narrow, grey-green, wool-backed leaves & 50cm. herbaceous stems whorled with lilac-blue flowers. Now a standard plant in Denver garden-centres but quite accommodating in the UK with good drainage in sun. It used to do well on the RBG Edinburgh rock-garden.) . (20+) **B**
- 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 with glandular hairs. Pinnate leaves & large, widely spaced, rose-pink flowers.) (15+) **C**
- 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 little, 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. . (50+) **C**
- 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, NE Turkey & NW Iran. Ground-covering clumps & dense spikes of white flowers. (10+) **B**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
 B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

- 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. (15+) **A**
- 950.011 : THALICTRUM AQUILEGIFOLIUM var. ALBUM** * From the beautiful, creamy-white version. (15+) **A**
- 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. (15+) **B**
- 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. (30+) **B**
- 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.) (10+) **D**
- 966.910 : TROLLIUS ASIATICUS** Russia, Altai near Tomsk. (A wild coll. of this spectacular, spring-flowering meadow-plant. Brilliant orange-yellow globe-flowers above clumps of dark, dissected foliage. Usually dwarfer than *T. europaeus*.) . . (50+) **C**
- 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. (20+) **C**
- 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.) (20+) **C**
- 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. . . (20+) **C**
- 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) (50+) **C**
- 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 its close relative *V. cenisia* by the collectors, Peter & Penny Watt. The flowers are always bright violet-purple.) . . (15+) **E**
- 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.) . (15+) **E**

Garden hybrids & selections : Seeds from Jim & Jenny Archibald

- 6.027.900 : ALSTROEMERIA LIGTU HYBRIDS** Thriving in British gardens from Cornwall to Aberdeen : even here in our cold, wet garden. Every shade from pink to orange, flame & biscuit. By all accounts, derived from *A. ligtu* subsp. *simsii* (coll. by Clarence Elliott in 1927 as *A. haemantha*) & *A. ligtu* subsp. *incarnata* (coll. by Harold Comber in 1926 as *A.l. angustifolia*). The Comber plant was more likely to be *A. presliana*, explaining the dwarf, deep pinks which sometimes appear (20+) **A**
- 6.501.500 : GERANIUM SANGUINEUM from INSHRIACH SEEDLINGS** * From the 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*). We have seedlings from these given to us by Jack Drake : some are very similar to the parents ; some are even more compact variants. . . . (10) **C**
- 6.747.860 : PAEONIA from GANSU MUDAN** * From a Chinese nursery growing local tree-peonies 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' elevated to somewhat dubious specific status). The Rock collection, it must be remembered, was from a cultivated plant in the first place, gathered in 1925 by Joseph Rock from plants growing 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 return to the same source for a reintroduction. We can be confident the 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". . . . (5) **E**

A : \$2.00 ; £1.50 ; € 2.5	C : \$4.00 ; £2.50 ; € 4. -	E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. -	D : \$5.00 ; £3.50 ; € 5.5	F : \$9.00 ; £6.00 ; € 10. -

Our two collecting areas in 2001 were Iran & western North America. It was dry again in both these areas & much Californian seed was sparse. We have updated seed collections of many species but a few late-maturing ones are offered from August & September, 2000, collections. These have been stored appropriately and should still give satisfactory germination. Our

own collections have been supplemented by some fine 2001 collections by others, notably John Andrews. We must draw attention to the publication of Jane McGary's excellent 'Bulbs of North America' by Timber Press & the North American Rock Garden Society during 2001. This fills a great need & is an indispensable reference companion to our lists.

- 1.005.004 : ACHLYS CALIFORNICA** Cal., Humboldt Co., N of Weitchpec. 950m. Edge of coniferous forest. (We have never seen this genus in *Berberidaceae*, (2 species in N America & 1 in Japan) grown in the UK. Rhizomatous, herbaceous perennials about 40cm. high, whose dense spikes of flowers, composed only of creamy stamens, are not 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.) . . (8) C
- 1.011.010 : ACTAEA ALBA** (*A. pachypoda*) * No data. From eastern woodlands : surely the finest of fruiting herbaceous plants. The small, fluffy racemes of white flowers, followed,, by striking white fruits, 'doll's eye' fruits on thickened red pedicels.) (10+) B
- 1.011.190 : ACTAEA RUBRA** f. *NEGLECTA* * Distinct white-fruited form of this excellent western woodlander. . . . (15+) B
- 1.025.200 : AGASTACHE URTICIFOLIA** Cal., Plumas Co., Homer Lake. 1830m. Moist, N-facing slope. G. Greger coll. (An erect, woodland perennial with whorls of sessile, rose-purple flowers on stems about 1m. high clad in lanceolate leaves.) . . . (50+) B

Allium : striking, dwarf western onions

- 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.") . (20+) C
- 1.032.251 : ALLIUM OBTUSUM** var. *CONSPICUUM* Cal., Plumas Co., Keddie Ridge. 1460m. SW-facing slope. G. Greger coll. (A very local plant from the granitic grits of the northern Sierras. Dense heads of pale pink flowers on 15cm. stems.) . (15+) C
- 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, cold-climate, 'tumbleweed' species, resembling the SW Asian Sect. *Acanthoprason*, flowering very early, just after the snow has melted.) . (10+) D
- 1.048.210 : AMSONIA TABERNAEMONTANA** var. *SALICIFOLIA* * No data. Widespread but local in wooded areas of SE North America, E to Kansas & S into Texas & Georgia. Cymes of starry, pale-blue flowers with darker blue tubes. 1m. . . . (10+) B
- 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. Pink & cream flowers.) (20+) D
- 1.060.819 : AQUILEGIA FORMOSA** Cal., Plumas Co., Eisenhimer Ridge. 2130m. G. Greger coll. (The most widespread western columbine. A plant of moist habitats with many nodding, spurred scarlet flowers dancing on branched 60cm. stems.) . (20+) B
- 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*. Soft, creamy yellows with long spurs tinged with apricot on 30-50cm. glandular stems) (20+) C
- 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.) (15+) D
- 1.061.850 : AQUILEGIA SCOPULORUM** Nevada, White Pine Co., Snake Range. 3440m. Exposed limestone talus up to the summits. J. Andrews coll. (The much-reduced forms which delight the alpine-plant enthusiast occur near the summits of a few of the highest limestones of the Great Basin. One we grew many years ago from a Carl Worth coll. remained compact in cultivation with imbricate, blue-grey foliage. Extremely long-spurred flowers, entirely in rich-blue, on stems of only a few cm.) . (10+) E
- 1.061.851 : AQUILEGIA SCOPULORUM** Nevada, White Pine Co., Mt. Moriah Table. 3475m. Limestone. (10+) E
- 1.068.000 : ARCTOMECON CALIFORNICA** Nevada, Clark Co., SE of Valley of Fire. 500m. Exposed ridgetops on eroded clay & gravel hills. (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." May be ungrowable but worth every effort.) (20+) D
- 1.068.050 : ARCTOMECON HUMILIS** Utah, Washington Co., S of St. George. 920m. Ridges on eroded clay hills. (To Dwight Ripley this was "one of the most startling plants in all Utah." Lobed, blue leaves, clad in long, soft, white hairs. White poppies on branching stems to 20cm. but usually 10cm. Very unpredictable in germination and so far proving very difficult.) (15+) E

- 1.075.301 : ARGEMONE MUNITA subsp. ARGENTEA** Cal., 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.) (20+) **A**
- 1.076.710 : ARISAEMA TRIPHYLLUM subsp. STEWARDSONII** * Canada. No further data. (A plant of acid, humus-rich soils in distinctly wet, deciduous woodland. Green spathes, striped with purple in the throat. Scarlet fruits in autumn.) (10+) **C**
- 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.) . (15+) **C**
- 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.) (10+) **D**
- 1.108.650 : ASTRAGALUS PURSHII var. TINCTUS** (Sect. *Argophylli*) Cal., Kern Co., E of Mt. Pinos. 2530m. Open granite-gravel slope. (The Western race with clustered, vivid purple-pink flowers on its mats of downy, grey, dissected leaves, followed by the marvellous pods, densely clothed in white wool, which are characteristic of this outstanding section of the genus.) . . . (10+) **C**
- 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.) (15+) **C**
- 1.130.150 : BLOOMERIA CROCEA var. AUREA** Cal., San Luis Obispo Co. 170m. Among grass on open, heavy clay slope. (The central Coast Range race of this seldom-seen corm near *Brodiaea*. Umbels of delicate, golden stars on 30cm. stems.) (20+) **B**

Calochortus : an unrivalled range

The scope and diversity of this amazing genus is still little appreciated by the skilled growers of Eurasian bulbs, who have developed in recent decades. The following listing may be the most extensive ever offered. We were able to replenish seed of many during our 2001 visit to the USA but we now grow an extensive range from wild-collected seed. Species from the cold,

dry climates of the Great Basin and further east are proving the most difficult to maintain. We suspect these may be best left unwatered until later winter. The western species need watering earlier, along with most Mediterranean bulbs. We are convinced that most need little further watering after the first flowers open. The quality of the dormant bulbs will be much better.

- 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.) (20+) **B**
- 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.) (20+) **B**
- 1.150.100 : CALOCHORTUS ALBUS var. RUBELLUS** * Cal., San Luis Obispo Co., W of Templeton. 400m. Steep, shaded banks. (From a famous & outstanding population with translucent, ruby-pink lanterns. Awarded a PC in the UK in 1995.) . . (20+) **C**
- 1.150.501 : CALOCHORTUS AMABILIS** * Cal., Lake Co., Walker Ridge. 600m. Among scrub on serpentine slope. (Branching, 20-30cm. stems with nodding flowers in clear, deep yellow with widespreading outer and incurved inner segments.) . (20+) **B**
- 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 Sierras.) (20+) **B**
- 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 originally listed under "*C. simulans*". Extremely 'growable', setting seed well. A lovely, rather dwarf, white Mariposa, more or less flushed lilac, with variable dark basal stains & markings.) (20+) **C**
- 1.152.000 : CALOCHORTUS AUREUS** Arizona, Coconino Co., WSW of Kayenta. 1980m. Among *Artemisia*. (Southern race of *C. nuttallii*, from N Arizona & NW New Mexico. Rich soft-yellow 'tulips' with maroon-purple crescents.) (20+) **D**
- 1.153.000 : CALOCHORTUS BRUNEAUNIS** Cal., Inyo Co., White Mts., Westgard Pass. 2230m. Openings among *Artemisia*. (Near the more eastern *C. nuttallii* but distinct in its green-striped segments. Pure solid-white with clean purple spots.) . . . (20+) **C**
- 1.154.001 : CALOCHORTUS CATALINAE** Cal., Ventura Co., below Triunfo Pass. 625m. J. Andrews coll. (Erect, white flowers edged with lavender & with dark basal blotches. Becoming rare in the wild but fortunately, not too difficult to grow.) (20+) **C**
- 1.155.003 : CALOCHORTUS CLAVATUS** (subsp. *clavatus*) * Cal., San Luis Obispo Co., La Cuesta Ridge. 665m. (A big Mariposa, local on coastal serpentines. Huge yellow bowls, red-brown lined & hairy inside on zig-zag stems of 30-50cm.) (20+) **C**
- 1.155.200 : CALOCHORTUS CLAVATUS var. AVIUS** * Cal., El Dorado Co., ENE of Pollock Pines. 1280m. (A very local, disjunct race. Spectacular umbel-like inflorescences of sumptuous butter-yellow bowls on stems of up to 1m.) (20+) **D**
- 1.156.002 : CALOCHORTUS CONCOLOR** Cal., Riverside Co. 2300m. Sandy soil in chaparral. J. Andrews coll. (The Goldenbowl Mariposa from the far south. Huge, bright-yellow 'tulips' marked inside with dark red, up to 7 on 20-40cm. stems.) . . (15+) **C**

A : \$2.00 ; £1.50 ; € 2.5	C : \$4.00 ; £2.50 ; € 4. -	E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. -	D : \$5.00 ; £3.50 ; € 5.5	F : \$9.00 ; £6.00 ; € 10. -

Species from North America : Seeds from Jim & Jenny Archibald

- 1.156.500 : CALOCHORTUS COXII *** Oregon, Douglas Co., W of Myrtle Creek. 450m. Among sparse conifers on serpentine slopes. (Bowl-shaped flowers, white with red striae, densely covered & fringed with yellow to white hairs.) (15+) **E**
- 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.) (15+) **F**
- 1.158.000 : CALOCHORTUS EURYCARPUS *** Idaho, Butte Co., W of Craters of the Moon. 1520m. Stony ridge. (Wiry, 30-50cm. stems carry elegant, bowl-shaped flowers in white or lilac-pink, blotched with maroon and striped with green.) (20+) **B**
- 1.158.500 : CALOCHORTUS EXCAVATUS *** Cal., Inyo Co., Owens Valley S of Bishop. 1350m. Among scrub in clay. (In Subsect. *Nuttaliani* with up to six, widely bell-shaped flowers in pale lavender to white, dark purple at the base.) (20+) **D**
- 1.159.000 : CALOCHORTUS FLEXUOSUS** Cal., Inyo Co., Amargosa Range, Daylight Pass. 1315m. Along dry gullies. (Sinuous stems twist and spiral. Up to 6 erect, white, lilac-tinged flowers, purple-spotted & yellow-banded inside.) (20+) **D**
- 1.163.001 : CALOCHORTUS HOWELLII *** Oregon, Josephine Co., Eight Dollar Mt. SW of Selma. 500m. Among *Arctostaphylos*. (Beautiful, erect, white flowers, covered with hairs and darkening centrally to smokey brown. 30-50cm tall) (15+) **D**
- 1.163.500 : CALOCHORTUS INVENUSTUS** Cal., Ventura Co., Mt. Pinos. 2680m. Alpine steppe, in granite grit. (Only 15cm. high here, with 1-2, erect, pale lavender flowers, basally stained deep purple. A montane species in Subsect. *Nuttaliani*.) (20+) **B**
- 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 several of us have flowered it from seed in the UK.) (20+) **B**
- 1.164.200 : CALOCHORTUS KENNEDYI var. MUNZII** Cal., Inyo Co., Panamint Range. 2130m. Gravelly soil. (The high altitude race from over 1850m. in the Clark, Providence & Panamint Mts. : intense yellow with black-purple basal markings.) (20+) **D**
- 1.164.506 : CALOCHORTUS LEICHTLINII** Cal., Plumas Co., N of Greenville. 1100m. G. Greger coll. (A cold-climate mariposa from the high Sierra Nevada N to Modoc Co. Maroon-blotched white flowers, sometimes tinged pink or smoky-blue.) (20+) **C**
- 1.166.000 : CALOCHORTUS LUTEUS *** Cal., Lake Co., N of Clear Lake. 410m. Among grasses on open slope. (Clear yellow, tinged green basally and with extremely variable brown internal markings. One of the most easily grown Mariposas.) (20+) **B**
- 1.166.005 : CALOCHORTUS LUTEUS** Cal., San Luis Obispo Co., Arroyo de los Chinos. 10m. J. Andrews coll. (A very dwarf, floriferous form of this splendid yellow Mariposa, from the exposed Californian coast, windswept by Pacific gales.) (20+) **D**
- 1.166.100 : CALOCHORTUS LUTEUS X SUPERBUS *** Cal., Lake Co., Walker Ridge. 600m. Open grassy area, in heavy clay. (Some fine ivories, creams and soft yellows to deep yellow, very variably marked inside.) (20+) **B**
- 1.167.005 : CALOCHORTUS MACROCARPUS** Canada, British Columbia, N Okanagan Valley. 625m. C. Bailey coll. (In a section on its own : about 50cm. high with large, elegant, erect, purple flowers with median green stripes on the segments.) (20+) **C**
- 1.168.000 : CALOCHORTUS MONOPHYLLUS *** Cal., Tuolumne Co. 750m. N-facing clay bank. (The only yellow in Subsect. *Eleganti*. A plant of coniferous woods in the N Sierra Nevada & S Cascades. A little 'sweetie', a few cm. high.) (15+) **D**
- 1.169.503 : CALOCHORTUS NUDUS *** Cal., Trinity Co., W of Mt. Eddy. 2080m. Wet mountain-meadow. Ex a J. Andrews coll. (A 15cm. high alpine species with soft, blue-purple flowers. Fits in surprisingly well with the others under glass here.) (15+) **D**
- 1.170.003 : CALOCHORTUS NUTTALLII** Colorado, Mesa Co., SW of Whitewater. 1800m. Among *Artemisia* on stony, sandstone slopes. (Almost certainly the amazing sugar-pink form of this species, which flowers early in the Uintah Basin area.) (20+) **C**
- 1.170.500 : CALOCHORTUS OBISPOENSIS *** Cal., 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.) (15+) **D**
- 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. Pink with occasional whites.) (15+) **D**
- 1.171.101 : CALOCHORTUS PALMERI var. MUNZII** Cal., Riverside Co. 1300m. Sandy clay in open woodland. J. Andrews coll. (Lacks the stem-bulbils of the type. Little-known and very local with bright lavender-pink flowers.) (15+) **E**
- 1.171.500 : CALOCHORTUS PANAMINTENSIS** Cal., Inyo Co., Panamint Mts. 2300m. Stony openings among *Pinus* & *Juniperus*. (An isolated endemic in Subsect. *Nuttaliani*, stranded on the top of this desert range. Immaculate, white flowers.) (15+) **E**
- 1.171.510 : CALOCHORTUS aff. PANAMINTENSIS** Cal., Kern Co., W of Walker Pass. 1650m. Open stony areas among *Artemisia*. (A puzzling population from the SE limits of the Sierra Nevada, WSW of the Panamints but separated by about 120km. of desert. Unspotted, white, green-striped flowers key-out as *C. panamintensis* but a few are flushed rose or lavender.) (15+) **E**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
 B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

- 1.173.200 : CALOCHORTUS PERSISTENS** * Cal., Siskiyou Co., W of Yreka. 1750m. Loose serpentine talus. (A few cultivated seeds from our 1992 coll. of this remarkable species, unlike any other : tulip-like in its big, broad, fleshy, basal leaf & two large, bowl-shaped flowers on a 10cm. stem. Bright-pink with yellow hairs. A superb plant for the alpine-bulb specialist.) (10) **F**
- 1.173.501 : CALOCHORTUS PLUMMERAE** Cal., Ventura Co., Triunfo Pass. 680m. J. Andrews coll. (Superlative, large, late-flowerer in Subsect. *Weediani*. Great lavender-pink bowls, densely golden hairy inside, on branching 60cm. stems.) (20+) **C**
- 1.174.500 : CALOCHORTUS PULCHELLUS** * Cal., Contra Costa Co., Mt. Diablo NE of Danville. 520m. Steep, wooded slopes. (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.) (15+) **C**
- 1.175.800 : CALOCHORTUS SIMULANS** Cal., San Luis Obispo Co., La Panza Summit. 600m. J. Andrews coll. (The true plant. Confused by us with *C. argillosus* (both described by Hoover in 1944), which grows on heavy clays. This inhabits granitic, sands. Flowers are superficially similar to *C. catalinae* with dark nectaries but can vary to pale yellow edged with rose.) . . (15+) **D**
- 1.176.000 : CALOCHORTUS SPLENDENS** * Cal., Ventura Co., Lockwood Valley. Openings among *Artemisia* in sandy clay. (Beautiful Mariposa, easily grown in our experience. Soft lavender with white, wispy hairs and dark anthers.) (20+) **B**
- 1.176.001 : CALOCHORTUS SPLENDENS** * Cal., Lake Co., Walker Ridge. 600m. Openings in scrub over serpentine. (From near the northern limit for this species, in a form marked basally with deep purple. 30-50cm. high.) (20+) **B**
- 1.176.500 : CALOCHORTUS STRIATUS** Cal., Los Angeles Co., N of Lancaster. 760m. Open 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 well so far. Splendid 2001 coll.) (20+) **D**
- 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. vemustus* in its linear, inverted V-shaped gland. Almost invariably white here with purple-brown blotches & basal markings. Easy to grow with us and now setting seed well. 30-50cm.) (20+) **B**
- 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. The superficial impression to us was of a splendid version of *C. leichtlinii*. Seeds are different to both this & *C. superbus* but, whatever its ancient affinities, it seems distinct with large, solid-white flowers, yellow & hairy at the base & with neat chestnut-brown blotches. 60cm.) (10+) **F**
- 1.177.006 : CALOCHORTUS SUPERBUS** * Cal., El Dorado Co., N of Placerville. 720m. Openings among *Pinus*. (From the famously spectacular Spanish Flat colony with lilac, lavender & purple flowers, rich shades of faded antique fabrics.) . (15+) **D**
- 1.178.002 : CALOCHORTUS TOLMIEI** * Oregon, Josephine Co., Eight Dollar Mt. SW of Selma. 450m. Open S-facing slope, among volcanic detritus. (A little, hairy Cat's Ear, most widespread in the genus & impressively robust here. 20cm.) . (20+) **B**
- 1.178.020 : CALOCHORTUS TOLMIEI** * Cal., Humboldt Co. 900m. Open, grassy meadow. Ex a J. & G. Robinett coll. (A beautiful violet-centred form of this pale lavender species, arguably the most variable in this genus. 20cm.) (15+) **C**
- 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. Extremely hairy flowers, creamy white with a large maroon-black centre. About 20cm. high, very striking and not too difficult so far in the UK.) (15+) **E**
- 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*, easy in Europe, where it fits in well with Mediterranean bulbs. 15cm.) (15+) **B**
- 1.179.501 : CALOCHORTUS UNIFLORUS** * Oregon, Josephine Co., SW of O'Brien. 550m. Wet depressions among conifers. (This may be possible outside in the UK. Flowers later than the preceding : lilac with purple markings above the nectaries.) (15+) **B**
- 1.180.507 : CALOCHORTUS VENUSTUS** * Cal., Fresno Co., Stump Springs Road (Sierra Nevada NE of Fresno), 1740m. Sparsely wooded slope in sandy, granitic soil. From a J. & G. Robinett coll. (This population exceeds imagination in shades of pink, purple, red and orange in every combination with complex blotches and basal markings. A truly wonderful species.) (15+) **D**
- 1.180.550 : CALOCHORTUS VENUSTUS** * Cal., Kern Co., Cuddy Valley. 1840m. Openings among *Pinus*. (A very restricted & unique colony in a series of subtle red shades, like crimson & scarlet velvet, faded to varying degrees. Superlative.) . . (15+) **D**
- 1.181.500 : CALOCHORTUS VESTAE** Cal., Mendocino Co., SW of Covelo. 390m. Among grasses on heavy clay slope. (Double crescent nectaries & a different chromosome number distinguish this from *C. superbus* & *C. vemustus*. Spectacular, solid-white flowers with big brown-purple blotches in yellow zones & purple-pencilled bases. A splendid northern mariposa.) . . . (20+) **B**
- 1.182.005 : CALOCHORTUS WEEDII** (var. *weedii*) Cal., San Diego Co., Inspiration Point. 1430m. J. Andrews coll. (In Subsect. *Weediani*. Up to 6, erect, rich-yellow bowls, brown-tinted & intricately marked, filled with long, yellow hairs. 60cm.) (15+) **C**
- 1.182.200 : CALOCHORTUS WEEDII** var. *VESTUS* Cal., Monterey Co., Lottie Potrero Camp. 700m. Serpentine outcrops. J. Andrews coll. (Odd, northern disjunct race. Squarish bowls in creamy, brownish or purplish shades with dark hairs.) . (15+) **E**
- 1.182.500 : CALOCHORTUS WESTONII** Cal., Kern Co., S of Alta Sierra. 2050m. Coniferous woodland. (A little subalpine Cat's Ear stranded on top of the Greenhorn Mts. About 15cm. with hairy, lilac-tinged bells. It enjoys the cool UK summers.) (15+) **E**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
 B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

Calochortus : start to find your way here

CALOCHORTUS : COLLECTION No. 1 : FAIRY LANTERNS & CAT'S EARS

Eight members of Section *Calochortus*. If you grow Mediterranean bulbs, you can grow these : *C. albus*, *C. albus rubellus*, *C. amabilis*, *C. amoenus*, *C. nudus*, *C. pulchellus*, *C. tolmiei*, *C. uniflorus* List value at least \$20.00 or £17. - for only \$15.00 or £10.

CALOCHORTUS : COLLECTION No. 2 : MARIPOSAS

Eight members of Section *Mariposa*. Some of the 'classic' later-flowering species : *C. argillosus*, *C. clavatus*, *C. luteus*, *C. splendens*, *C. superbis*, *C. venustus* in two variants, & *C. vestae*. List value at least \$20.00 or £17. - for only \$15.00 or £10.

CALOCHORTUS : COLLECTION No. 3 : INTERMOUNTAIN SPECIES

For the serious enthusiast : some of the most difficult to grow : *C. aureus*, *C. bruneacumis*, *C. eurycarpus*, *C. excavatus*, *C. flexuosus*, *C. invenustus*, *C. kennedyi*, *C. kennedyi munzii* and *C. nuttallii* List value at least \$37.00 or £25. - for only \$20.00 or £15.00

- 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.) . . . (20+) **A**
- 1.211.050 : CEANOTHUS INTEGERRIMUS var. CALIFORNICUS** Cal., Plumas Co., Indian Falls. 1220m. G. Greger coll. (A variable, deciduous shrub, about 3m. high. Can be white through to blue or occasionally pink. Seed from a cold area.) (30+) **B**
- 1.213.005 : CEANOTHUS PROSTRATUS** Cal., Lassen Co., N of Westwood. 1580m. G. Greger coll. (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.) (20+) **B**
- 1.220.110 : CHELONE GLABRA** * This & the next are reliable summer-flowering perennials. A 2m. high, *Penstemon* relative with a long succession of white flowers, native to E North America, from Newfoundland to Alabama, in wet woodland. . . (50+) **B**
- 1.220.310 : CHELONE OBLIQUA** * Stiff spikes of deep lilac-pink flowers. From the SE USA : Tennessee to Florida. . (30+) **B**
- 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. (10+) **B**
- 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, 30cm. stems.) (10+) **D**
- 1.231.810 : CLEMATIS VIORNA** * No data. A semi-woody, pinnate-leaved, eastern species, climbing to 2-3m. Little, nodding, leathery, narrow-mouthed bells with recurved tips to the sepals, in red-purple, followed by feathery, brown seed-heads. (15+) **B**
- 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. Great, winged translucent pitchers, about 50 cm. high, overtopped by bizarre yellow-green & dull purple flowers on stems of almost 1m. A montane plant.) . . . (50+) **C**
- 1.300.700 : DELPHINIUM CARDINALE** * Cal., Ventura Co., NW of Ojai. 650m. In scrub above dry stream-bed. (A big plant over 2m. high, from a massive rootstock. A branched stem carries a succession of opulent brilliant scarlet-red flowers.) . . . (20+) **D**
- 1.300.900 : DELPHINIUM DEPAUPERATUM** * Cal., Sierra Co., SE of Sierraville. 1870m. Gravelly areas among sparse *Pinus*. (A pretty, summer-dormant species with flights of rich purple flowers on branching 20cm. stems in spring.) (20+) **C**
- 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 NW of San Francisco. Branching stems, of about 30 - 50cm., packed with large, waxy, shining, clear-yellow flowers in early summer. Dormant in late summer.) (20+) **D**
- 1.302.700 : DELPHINIUM NUDICAULE** Cal., Plumas Co., S of Greenville. 1370m. Among conifers on gravelly slope. (A high altitude inland form, about 30cm. high, of this scarlet-orange species. Distinct from widely grown coastal material) . . (20+) **B**
- 1.302.750 : DELPHINIUM NUDICAULE** * Cal., Mendocino Co., Etsel Ridge ESE of Covelo. 1980m. Among rocks. (Tall race from the serpentines of the N Coast Ranges. Up to 1m. high with long-spurred, brilliant scarlet flowers on long pedicels.) . (20+) **D**
- 1.304.300 : DELPHINIUM TROLLIIFOLIUM** Cal., Humboldt Co., SSW of Willow Creek. 1070m. Steep, moist, part-shaded banks. (A magnificent wet-grower. About 2m. high with large, laciniately lobed leaves & spires of rich, deep blue flowers.) . (20+) **C**
- 1.304.500 : DELPHINIUM VARIEGATUM** (subsp. *variegatum*) * Cal., Mendocino Co., SW of Covelo. 390m. Heavy clay on open, grassy slope. (A spectacular summer-dormant species, 50cm. high with racemes of flowers in rich, deep royal-blue.) . (20+) **C**

- 1.306.250 : DICENTRA FORMOSA : CREAM FORM** Cal., Humboldt Co., N of Weitchpec. 900m. Steep, loose bank in coniferous forest zone. (A very striking plant. Cut foliage in deep bluish green, rather than greyish, and creamy ivory flowers.) . (20+) C
- 1.306.350 : DICENTRA NEVADENSIS** Cal., Tuolumne Co., Pilot Ridge (Sierra Nevada E of Oakdale). 1340m. Outcrops in conifer-oak forest. J. Andrews coll. (A very narrow Sierra Nevada endemic. It has been included under *D. formosa*.) (20+) C
- 1.308.300 : DICHELOSTEMMA IDA-MAIA** * Cal., Humboldt Co., NNE of Orleans. 180m. Stony slope at woodland margin. (Pendant, tubular flowers in pure glowing red with greenish-cream segments surrounding the white staminodes. 1m.) . (20+) C
- 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. Easily grown.) (20+) B
- 1.309.510 : DISPORUM TRACHYCARPUM** No data. The Rocky Mt. representative in this genus of woodlanders, related to *Polygonatum*. Greeny cream bells on branching 30cm. stems are followed by orange berries. Moist soil in shade. (10+) B
- 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.) (20+) B
- 1.313.659 : ECHINACEA PALLIDA** * Arkansas, Benton Co. Ex an S. Marak coll. (The coneflower of the SE Great Plains. Longer, narrower leaves than *E. purpurea*. Big pale pink heads with drooping rays carried on 1m. stems in late summer.) (10+) B
- 1.315.450 : EPILOBIUM RIGIDUM** Oregon, Josephine Co., SW of O'Brien. 700m. Open, stony areas on serpentine. (The finest in the genus, & choicest of the trio centred on *E. obcordatum*. Confined to a few sites on the serpentines along the California-Oregon line, this tiny, woody-based perennial carries extremely large, rich-pink flowers over neat, fleshy, blue-green leaves.) . . . (5) E
- 1.322.300 : ERIGERON NANUS** Idaho, Cassia Co., Albion Range, Mt. Harrison. 2800m. Exposed S-facing summit slopes. B.J. Lowry coll. (A few seeds left of this 2000 coll. Betty writes: "a marvellous plant...compact...very dwarf habit (about 5cm.) and fine color (a good lavender-blue - no pallid daisy here)." It appears to be endemic to windswept ridges at 2100-3300m.) (15+) E
- 1.330.250 : ERIOGONUM CAESPITOSUM** Cal., Mono Co., White Mts. 2300m. Open, stony, limestone slope. (Compact mats of tiny, spatulate, white-felted leaves. Clustered yellow heads, opening almost stemless, flush to red as they mature.) (20+) C
- 1.330.850 : ERIOGONUM HOLMGRENII** Nevada, White Pine Co., Snake Range. 3400m. Exposed limestone talus. J. Andrews coll. (Endemic to this range, in Sect. *Capitata* with rarities like *E. gracilipes* & *E. kingii*. Raspberry-pink heads.) . . . (15+) E
- 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*. New to cultivation.) (15+) E
- 1.331.500 : ERIOGONUM OVALIFOLIUM** Cal., Mono Co., White Mts., Westgard Pass. 2230m. Gravelly steppe. (Woody mats of oval, grey-white leaves send up many 10cm. stems with round heads of flowers, creamy-white maturing to pink.) (20+) C
- 1.373.901 : GENTIANA SETIGERA** Oregon, Josephine Co., SW of O'Brien. 550m. Wet flushes with *Darlingtonia* on serpentine slopes. (A beautiful, late-flowering gentian of wet habitats Up to 4, big, pure-blue flowers with fringed throats.) (30+) C
- 1.404.001 : HASTINGSIA ALBA** Cal., Trinity Co., Scott Mountain summit. 1650m. Open, wet meadow in coniferous forest. (Narrow basal leaves & spires of densely packed, yellow-white flowers on stems of 60cm. A plant of seeps & wet meadows) . . (10+) C
- 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*, about 5cm. high with tiny, narrowly spoon-shaped, hairy leaves and bell to funnel-shaped flowers, usually in white, tinged with lavender and veined with purple.) (30+) C
- 1.422.109 : HESPEROCHIRON PUMILUS** Cal., Plumas Co., Bellas Flat. 1370m. G. Greger coll. (Differs in its smooth leaves & flat, rounded, wide-open flowers. Sow thinly: if repotting, spread most of the contents of the seed-pot over a larger pan.) (30+) C
- 1.460.000 : IRIS BRACTEATA** Oregon, Josephine Co., Waldo Hill. 650m. Stony, serpentine areas, among scrub. (From Howell's 1884 type-locality. Broad, leathery leaves & large, showy flowers, always in pale yellow, veined maroon or brown.) . (15+) C
- 1.460.202 : IRIS DOUGLASIANA** Cal., Sonoma Co., Irish Hill. 150m. grassy slopes with coastal exposure. (Tough & vigorous, although a low-altitude, coastal plant. Rich purples here. Easy with no particular soil preferences in gardens.) (15+) B
- 1.460.600 : IRIS HARTWEGII subsp. COLUMBIANA** * Cal., Tuolumne Co., NE of Columbia. 650m. Stony slope. (Only known from around the type-locality here. Virtually, a yellow version of splendid *I. munzii*, which grows 225km. to the S.) . (15+) C
- 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 on the E slope of the Sierra Nevada. Usually much dwarfer than the long-stemmed type-race, it often opens two of its creamy yellow flowers simultaneously. Very cold here.) . . (15+) C
- 1.461.105 : IRIS MISSOURIENSIS** Cal., Alpine Co., S of Carson Pass. 2700m. Among grasses in moist meadow. (The only *Iris* listed here not from Series *Californicae*: in *Longipetalae*. Pale-blue to lavender-blue on stems 50cm. or more high.) (15+) C
- 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. Creamy white flowers with horizontal falls. Here it 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.) (15+) C

A : \$2.00	;	£1.50	;	€ 2.5		C : \$4.00	;	£2.50	;	€ 4.-		E : \$7.00	;	£4.50	;	€ 7.-
B : \$3.00	;	£2.00	;	€ 3.-		D : \$5.00	;	£3.50	;	€ 5.5		F : \$9.00	;	£6.00	;	€ 10.-

Species from North America : Seeds from Jim & Jenny Archibald

- 1.461.701 : IRIS TENUISSIMA subsp. PURDYIFORMIS** Cal., Butte Co., Butte Meadows. 1220m. G. Greger coll. (A very local and somewhat obscure, pale yellow race from the shade of yellow pine woodland in the northern Sierra Nevada.) . . . (10+) **E**
- 1.461.800 : IRIS THOMPSONII** Cal., Del Norte Co., SW of Gasquet. 530m. Stony openings among *Arctostaphylos* & sparse conifers. (Boyd Kline considers this the 'true' *I. thompsonii* : you could call it *I. innominata* 'Dwarf Purple Form'. The smallest iris we have seen in this series : tight tufts of leathery, grassy leaves & short stems. It ranges through rich, deep blues & purples.) (15+) **D**
- 1.470.602 : KUMLIENIA HYSTRICULA** (*Ranunculus hystriculus*) Cal., Plumas Co., North Fork Feather River Canyon, W of Cresta Dam. 490m. Wet moss-sheets on granite cliffs. G. Greger coll. (A very local, summer-dormant, Sierra Nevada endemic. Rounded crenate basal leaves. Buttercup-flowers radiate from the rosettes on decumbent, 15cm. stems large white petaloid sepals surround the central cluster of stamens and small, yellow-green, gland-like petals or honey-leaves, as in *Helleborus*.) (30+) **E**
- 1.495.009 : LEUCOCRINUM MONTANUM** Cal., Plumas Co., Dry Flat. 1680m. Seasonally moist open areas among *Artemisia*. G. Greger coll. (A very beautiful, dwarf, summer-dormant member of the *Liliaceae*, in a genus on its own. Tufts of linear leaves from deep, fleshy, roots. Big, starry, fragrant, white flowers rise up from the centre on long tubes. A challenge to grow.) . . (10+) **E**
- 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.) . . . (20+) **E**
- 1.496.701 : LEWISIA KELLOGGII** Cal., Madera Co., Shuteye Peak (Sierra Nevada E of Merced). 2310m. Granite. J. Andrews coll. (Dense rosettes of leathery, spoon-shaped leaves, withering in summer ; pink or white flowers on 3cm. stems.) (20+) **E**
- 1.496.801 : LEWISIA LEANA** * Cal., Shasta Co., Castle Crags, SW of Castle Lake. 1700m. Gravelly areas between serpentine outcrops. (Rosettes of succulent, linear leaves ; many-flowered 15cm. panicles of bright magenta-pink flowers.) (20+) **E**
- 1.497.000 : LEWISIA OPPOSITIFOLIA** * Oregon, Josephine Co., Waldo Hill. 600m. Among serpentine detritus along gully. (Narrow, blunt, succulent leaves : 15cm. umbels of up to 6, rounded, white flowers with red-fringed sepals.) (20+) **D**
- 1.497.200 : LEWISIA REDIVIVA** * Wyoming, Albany Co., E of Centennial. 2700m. In granite grit of open, stony 'flats'. (Huge, diaphanous, water-lily flowers, appear successively on the shortest of stems. Generally of a richer pink than many.) . . (20+) **C**
- 1.497.202 : LEWISIA REDIVIVA** * Idaho, Butte Co., NE of Carey. 1520m. E & SE-facing slopes of stony ridge. (From a splendid site of sumptuous whites, which we found in 1989 : rather similar to the Californian plants separated as var. *minor*.) . (20+) **D**
- 1.497.230 : LEWISIA REDIVIVA** Cal., Napa Co., N of Calistoga. 840m. J. Andrews coll. (Especially large pink.) (20+) **D**
- 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. Exquisite with rounded, pearl-white flowers and bronze sepals.) . (20+) **D**
- 1.497.401 : LEWISIA STEBBINSII** * California, Mendocino Co., ESE of Covelo, Hell's Half Acre. 1600m. Open, gravelly slope. J. Andrews coll. (Short, radiating, ground-hugging stems, each carrying up to 5, upward-facing, rose-pink flowers.) . . . (20+) **E**
- 1.497.610 : LEWISIA TWEEDYI** * No data. The famous endemic of the Wenatchee granites, in Washington, & queen of the genus to some (we prefer *L. rediviva*). Silky flowers in palest tea-rose shades of salmon, apricot and cream. Not difficult. . . (20+) **C**

Lilium : a fine range of the western species

- 1.498.100 : LILIUM BOLANDERI** Cal., Humboldt Co. 1200-1500m. In chaparral on serpentine. (Maybe the most beautiful & the most difficult. Endemic to dry, serpentine localities on the Coast Ranges on the California-Oregon line. Stems whorled with thickish, blue-grey leaves carry nodding, funnel-shaped flowers in soft crimson, glaucous outside & purple-dotted inside.) . . . (15+) **E**
- 1.498.409 : LILIUM CANADENSE** Canada, Quebec, N of Quebec City. F. Cabot coll. (From the most northern population of the most widespread N American, distributed from Quebec down to Alabama. Stems of about 1.5m., whorled with lanceolate leaves carry umbels up to 20, large, nodding, flaring bells in yellow to orange-yellow, speckled inside with black-purple.) . . . (20+) **C**
- 1.498.501 : LILIUM COLUMBIANUM** Cal., Del Norte Co. 350 m. Redwood forest. (The spectacular lily of the redwood glades, extending N from here up into Canada. Up to 30 or so golden orange turkscape 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.) (15+) **C**
- 1.499.100 : LILIUM KELLEYANUM** Cal., Tulare Co., E side of Moses Mt. 2070m. 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 intergrades with *L. parvum*. Up to 25 fragrant, uniformly yellow, pendant, wide bells with dull-red anthers. 1m.) (15+) **D**
- 1.499.209 : LILIUM KELLOGGII** Cal., Humboldt Co., near Kneeland. 1150m. B. Kline coll. (A dry-grower from around the California-Oregon line, usually in openings among conifers. Can have 15-20 fragrant, turkscape flowers in pink, striped yellow on the basal third of each segment & speckled purple on the edges. Narrow, greyish, crinkled leaves. Usually under 1m.) (15+) **E**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
 B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

- 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 long filaments & capacity to form clonal rhizomatous mats. Red-orange turkscap flowers with maroon spots, margined with yellow near the recurving segment-tips.) (20+) **C**
- 1.499.702 : LILIUM PARDALINUM** Cal., Humboldt Co., SSW of Willow Creek. 1580m. Wet gully at woodland margin. (From a magnificent small colony at the edge of *L. columbianum* territory : possibility of some introgression here.) (20+) **C**
- 1.499.900 : LILIUM PARRYI** * Cal., Los Angeles Co., San Gabriel Mts., along Little Rock Creek. 1990m. Ex a J. Andrews coll. (Like no other in its strongly fragrant, bright yellow, trumpet-shaped flowers, with tiny, sparse maroon dots, held horizontally or nodding : up to 30 on stems of about 2m. A local plant of wet areas in coniferous forest in SW California & S Arizona.) (20+) **D**
- 1.499.920 : LILIUM PARRYI** * Arizona, Santa Cruz Co., Huachuca Mts., S of Tucson. Ex an S. Walker coll. (10+) **D**
- 1.500.009 : LILIUM PARVUM** Cal., El Dorado Co., Fallen Leaf Lake. 2000m. Wet meadow. B. Kline coll (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. Splendid but not so easy to grow in the UK.) (20+) **D**
- 1.500.050 : LILIUM aff. PARVUM** Cal., Nevada Co., Sierra Nevada, Monument Ridge. 2010m. Wet sites on granite. J. Andrews coll. (This seems a consistent local race with much wider flowers, not campanulate & opening out flat, in yellow to clear orange-yellow, fragrant & sometimes with a few crimson spots. John's plant may well deserve recognition as a distinct taxon.) (20+) **E**
- 1.500.401 : LILIUM RUBESCENS** Cal., Humboldt Co. 1000m. Among scrub at edge of coniferous forest. (A beautiful Coast Range endemic, closest to *L. washingtonianum*. A dry-grower with stems of up to 2m. carrying 20 or more upward-facing, extremely fragrant, trumpets opening white with minute purple dots, which suffuse over the surface until it is wine-coloured.) . . . (15+) **D**
- 1.500.900 : LILIUM VOLLMERI** Oregon, Josephine Co. 500m. Along wet ditch. (A wet-grower in the *L. pardalinum* group. Near *L. shastense* but distinguished by its purple anthers with red pollen. A really splendid, 2m. high population here.) (15+) **C**
- 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.) (15+) **D**
- 1.501.101 : LILIUM WASHINGTONIANUM subsp. PURPURASCENS** Cal., Humboldt Co. SSW of Willow Creek. 1580m. Among *Arctostaphylos* scrub 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 different and the flowers are slightly smaller, flushing to pink-purple with age.) . . (15+) **D**
- 1.501.201 : LILIUM WIGGINSII** Oregon, Jackson Co. B. Kline coll. (A local wet-grower, in the *L. pardalinum* group, with distinct, rhizomatous bulbs & many, nodding chrome-yellow flowers speckled with black-purple on 2m. high stems.) (15+) **D**
- 1.505.210 : LOBELIA CARDINALIS** No data. Canadian seed of this utterly & indestructibly hardy species, sadly confused by UK gardeners with the tender Mexican *L. fulgens* & its hybrids. Spires of lipped, brilliant scarlet flowers reach 1m. (100+) **B**
- 1.515.300 : LUPINUS ALBIFRONS** (var. *albifrons*) * Cal., Contra Costa Co., above Orinda. 450m. (A shrubby perennial, about 1m. high. Silvery foliage & 30cm. racemes of lavender-blue flowers. Yellow to white banner-patches mature to purple.) . . (15+) **B**
- 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 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.) . . (10) **C**
- 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.) . . (10) **B**
- 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 vivid rose-red flowers.) (20+) **B**
- 1.710.600 : PENSTEMON ROSTRIFLORUS** (Sect. *Bridgesiani*) Cal., Mono Co., S of Bridgeport. 2750m. Exposed, steep, loose, gravelly slope. (Neat & shrubby based with narrow, leathery leaves surmounted by spectacular scarlet tubes. 50cm.) . . (20+) **B**
- 1.710.704 : PENSTEMON RUPICOLA** (Sect. *Erianthera*) Cal., Siskiyou Co., SW of Castle Lake. 1750m. Granite crevices on open slopes. (Shrubby mats with small, glaucous-grey leaves and large, woolly-anthered flowers in pale to deep pinks.) . . . (20+) **C**
- 1.712.100 : PENSTEMON THOMPSONIAE** (subsp. *thompsoniae*) (Sect. *Caespitosi*) Nevada, White Pine Co. 2050m. Calcareous clay. J. Andrews coll. (Prostrate stems, tiny, ashy-white leaves & violet-blue flowers with orange-gold staminodes.) . . (20+) **D**
- 1.751.101 : PHLOX STANSBURYI** (*P. longifolia* var. *stansburyi*) Cal., Inyo Co., White Mts. 2500m. Among *Juniperus* in fragmented shale. (Stems of about 15cm. with narrow, linear leaves carry large, long-tubed, pink to white flowers.) (10) **C**
- 1.760.200 : POLEMONIUM CARNEUM** * Oregon, Jackson Co., Siskiyou Mts., S of Ashland. 1400m. Ex a P. Gustafson coll. (An unusual & handsome, taller species, up to 50cm. high, with clusters of rather flat, bell-shaped flowers in apricot-pink.) (20+) **B**
- 1.760.660 : POLEMONIUM PAUCIFLORUM** * No data. An elegant, 30cm. high perennial from streamsides in N Arizona & New Mexico. Clustered, pendant, long-tubed flowers in soft yellow, flushed with pink externally, in late summer. (20+) **B**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
 B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

Species from North America : Seeds from Jim & Jenny Archibald

- 1.760.950 : POLEMONIUM VISCOSUM** Nevada, White Pine Co., Snake Range, Mt. Moriah Table. 3475m. J. Andrews coll. (Tufts of sticky, dissected basal leaves with 15cm. stems carrying dense heads of flowers in a famously intense violet-blue.) (20+) **D**
- 1.768.000 : PRIMULA CAPILLARIS** Nevada, Elko Co., Ruby Mts., Thomas Creek Canyon. 2835m. J. Andrews coll. (20+) **F**
- 1.768.100 : PRIMULA DOMENSIS** Utah, Millard Co., House Range, Notch Peak. 2450m. Ledges on limestone cliffs. (20+) **E**
- 1.768.400 : PRIMULA NEVADENSIS** Nevada, White Pine Co., Snake Range. 3440m. Limestone fell-field. (20+) **E**
- 1.768.459 : PRIMULA PARRYI** Nevada, White Pine Co., Snake Range, Mt. Moriah Table. 3500m. J. Andrews coll. . . (30+) **B**
- 1.768.650 : PRIMULA SUFFRUTESCENS** Cal., Alpine Co., above Winnemucca Lake. 2750m. Granite talus. (20+) **D**
- 1.770.001 : PRUNUS ANDERSONII** Cal., Lassen Co., near Milford. 1340m. G. Greger coll. (The desert peach : can reach 2m. but usually much dwarfer with a stiff, spiny habit. Deep-pink to red flowers followed by orange-red, downy fruits.) (5) **C**
- 1.829.510 : SALVIA APIANA** * No data. A SW Californian endemic, mainly a plant of coastal scrub. A grey-white, shrubby perennial about 2m. tall with lanceolate basal leaves & clusters of lavender-white flowers. Reasonably hardy in Kent, UK. (20+) **B**
- 1.831.560 : SALVIA PACHYPHYLLA** * No data. A low-growing, grey-leaved, shrubby native to S California, Nevada & Arizona, at 1400-2500m., which comes with a high recommendation from Panayoti Kelaidis at Denver : "a souped up *S. dorrii* - flowers all summer." Blue-purple to rose flowers among dark, purplish calyces & bracts. About 50cm. high. Hot, dry situation.) (15+) **D**
- 1.832.100 : SALVIA SPATHACEA** * Cal., Solano Co., NW of Vacaville. 300m. Openings in scrub. (A stout, aromatic herbaceous perennial with large, woolly-backed, wrinkled leaves & 60cm. stems, whorled with dusky red flowers.) (8) **D**
- 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. Prostrate stems carry flowers with deeply cut petals in eye-burning scarlet. Smaller-flowered & less 'classy' than *S. hookeri* subsp. *bolanderi* (from the same area) but very striking nonetheless.) (15+) **C**
- 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.) (10+) **C**
- 1.855.500 : SILENE HOOKERI subsp. BOLANDERI** * Cal., Trinity Co., S of Hayfork. 750m. Among conifers. (A very local plant, limited to this area. Large, pure-white flowers with the petal blades deeply cut into linear segments.) (10+) **D**
- 1.855.550 : SILENE HOOKERI var. INGRAMII** * Oregon, Douglas Co., S of Tiller. 460m. Openings among *Pinus* on steep serpentine slopes. (A splendid race, again very local, only known from the Roseburg area. Large flowers with each of the 5 petals notched into 4 lobes and richly coloured in a beautiful deep cherry-pink.. It should be maintained in cultivation.) (10+) **D**

Trillium : a wide selection of 2001 seed

Unfortunately much cultivated *Trillium* seed is just not ready in time to include it in our earlier summer list. We are, however, increasingly inclined to subscribe to Kath Dryden's counsel of "sow it, put it outside and wait." Feed-back from those who have used various refrigeration & warming techniques have

been mixed. Melvyn Jope on the other hand tells us he has never failed to germinate any *Trillium* seed he has had from us, dried or otherwise, by sowing on to composted bark (easily obtained in the UK at any rate) and placing the pots outside. It may take time but has proved a reliable method for the patient grower.

- 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". Upright creamy white petals.) (10+) **D**
- 1.919.520 : TRILLIUM ALBIDUM** * No data. Distributed through NW California & SW Oregon.) (20+) **C**
- 1.919.830 : TRILLIUM CERNUUM X ERECTUM** * No data. 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. (15+) **C**
- 1.920.120 : TRILLIUM CUNEATUM** * No data. One of the largest & most vigorous of the sessile eastern species. Mottled leaves & green, purple-tinged sepals surround the upright petals in a wide range of shades of maroon, yellow, green or brown. (15+) **C**
- 1.920.520 : TRILLIUM ERECTUM** * No data. Elegant, outward-facing or declined flowers with pointed segments in stems about 30cm. high. Seed from a wide range of colour forms, some of which may have resulted from natural hybridization. . . (15+) **C**
- 1.920.521 : TRILLIUM ERECTUM var. ALBUM** * No data. White flowers with dark maroon ovaries (10+) **C**
- 1.920.525 : TRILLIUM ERECTUM from BICOLOURED FORM** * No data. Yellowish white with a violet edge. . . (10+) **C**
- 1.920.530 : TRILLIUM ERECTUM from PINK FORM** * No data. Delicately pink-flushed form. (10+) **C**

A : \$2.00	;	£1.50	;	€ 2.5		C : \$4.00	;	£2.50	;	€ 4. -		E : \$7.00	;	£4.50	;	€ 7. -
B : \$3.00	;	£2.00	;	€ 3. -		D : \$5.00	;	£3.50	;	€ 5.5		F : \$9.00	;	£6.00	;	€ 10. -

- 1.920.532 : TRILLIUM ERECTUM from RED FORM** * No data. The 'typical' velvety dark-red. (10+) C
- 1.920.535 : TRILLIUM ERECTUM from YELLOW FORM** * No data. The most frequent variant in soft-yellow. (10+) C
- 1.920.620 : TRILLIUM FLEXIPES** * No data. The white flowered species of the E central lowlands, S of the Great Lakes. Outward-facing, creamy white flowers on stout stems 30cm. or more tall. Horticulturally "an outstanding species" writes Case. . . (10) D
- 1.921.010 : TRILLIUM KURABAYASHII** No data. German-grown seed received under this name. This taxon is merged under the more southern *T. angustipetalum* (syn. *T. chloropetalum* var. *angustipetalum*) in the most recent Californian flora (1993). It may be the same as the plant as we grow as a red form of *T. chloropetalum*. Distinguishing garden material is not easy. . . (20+) C
- 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. (15+) C
- 1.921.600 : TRILLIUM OVATUM** (var. *ovatum*) Cal., Mendocino Co., NW of Boonville. 100m. Moist areas in *Sequoia* forest. (The variable western cousin of *T. grandiflorum*, large white flowers, on 30cm. stems usually mature to pink shades.) (15+) C
- 1.921.650 : TRILLIUM OVATUM f. MACULOSUM** Cal., Mendocino Co., N of Gualala. 20m. Among undergrowth in 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. The form with dark purple-green blotches on the foliage is unique among the pedicellate trilliums.) (15+) D
- 1.922.420 : TRILLIUM RUGELII** * No data. From the wooded mountains of the Carolinas, Tennessee, Georgia & Alabama. Up to 40cm. tall with nodding flowers, usually with white petals and deep purple anthers surrounding the reddish ovary . . . (15+) D
- 1.922.520 : TRILLIUM SESSILE** * Widespread through central, eastern USA from the Great Lake S to Alabama & from Ohio E to the Atlantic. Rarely more than 25cm. tall with mottled leaves & spicily scented flowers, usually maroon. (20+) C
- 1.922.820 : TRILLIUM SULCATUM** * No data. A "robust and splendid plant" according to Case. Of limited distribution, along the Cumberland Plateau. One of the largest leaved pedicellate species. Stems up to 70cm. carry rich maroon-red flowers. . (15+) D
- 1.923.120 : TRILLIUM VASEYI** * No data. Mainly a plant of wooded slopes in the western Carolinas, progressing south into the neighbouring states. Flowers with thick-textured, crimson petals, with impressed veins, on stems about 50cm. high. . . . (20+) C
- 1.923.121 : TRILLIUM VASEYI from GREY-BACKED FORM** * No data. Silver-grey reverse to maroon-red petals. (20+) C
- 1.925.119 : TRITELEIA BRIDGESII** Cal., Butte Co., SE of Chico. 150m. G. Greger coll. (A spectacular N Californian species in this neglected genus of late-flowering corms. Wide umbels of translucent, purple-blue flowers on 50cm. stems.) (20+) B
- 1.925.120 : TRITELEIA BRIDGESII from 'ROBINETT SELECTIONS'** * These have 12cm. wide umbels of starry flowers, 2cm. across, in pink, rose & lavender, with lighter centres & a glassy appearance. Selected in N Californian locations. . . . (20+) B
- 1.926.300 : TRITELEIA HENDERSONII** Oregon, Douglas Co., above Callahan Creek. 460m. Among *Pinus* on serpentine. (A SW Oregon endemic, superficially not unlike *T. crocea*. Yellow flowers with a central inky-blue stripe on each segment.) . (15+) D
- 1.926.409 : TRITELEIA HYACINTHINA** Cal., Butte Co., Butte Meadows. 1220m. G. Greger coll. (A big, handsome *Brodiaea*, up to 60cm. high with umbels of many, bowl-shaped, white flowers, sometimes flushed with purple externally.) (20+) A
- 1.926.700 : TRITELEIA IXIODES subsp. SCABRA** * Cal., Fresno Co. 1740m. Steep granite slope. Ex a J. & G. Robinett coll. (Light yellow flowers striped grey on the reverse on 25cm. stems, carried in wide umbels, over 15cm. across.) (20+) B
- 1.926.820 : TRITELEIA LAXA from 'GIANT LAVENDER'** * Cal., 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.) (20+) B
- 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 plus very dark purple flowers. Up to 40cm. high.) (20+) B
- 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.) (20+) C
- 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 have grown this successfully.) (10+) E
- 1.981.370 : VIOLA DOUGLASII** Cal., Plumas Co., N of Greenville. 1100m. G. Greger coll. (Erect stems 10cm. high with dissected, bipinnate leaves. Dark-veined, golden violets, with the upper two petals, usually stained brown-purple on the backs.) . (10+) D
- 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. From a cooler habitat than *V. beckwithii*.) (10+) E
- 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.) . . (20+) B

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
 B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

Alstroemeria : an unrivalled range of UK grown seeds

With its main centre in Chile (a lesser secondary centre is in Brazil), this spectacular genus includes species which grow, literally, from the Pacific seaside to elevations of over 3000m. in the Andes, from the Atacama desert to the temperate rain-forests of the S & on to the steppes of Patagonia. Ideally seed should be given a warm period followed by a cool period for germination. We have always found germination occurs at a

reasonably even temperature between 5 & 10 degrees C (40-50F). Soaking seed in warm water for 24 hours before sowing, then placing the seed at the bottom of a domestic refrigerator should give the even 5C required, though we have always found conventional sowing quite satisfactory. The names follow those in the meticulously researched 'Die Gattung *Alstroemeria* in Chile' by E. Bayer (1987).

- 2.026.400 : ALSTROEMERIA AUREA *** Chile, VIII, Nuble, SW of Termas de Chillan. 1500m. Open banks in *Nothofagus* woods. (From an outstanding population : its coppery reds & orange-scarlets approach *A. ligtu* subsp. *simsii*.) (10+) **C**
- 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. An excellent, hardy garden-plant in our cool, wet climate & no doubt elsewhere in the UK. From wild seedlings : quite variable in rich, egg-yolk yellow shades) . . (15+) **B**
- 2.026.900 : ALSTROEMERIA EXSERENS *** Chile, Reg. Metro., La Parva to Valle Nevado. 2800-3100m. Loose, stony slopes. (A high altitude species with about the largest flowers in the genus on the dwarfest of plants. Rich pink, darker tips.) (10+) **E**
- 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. Big heads of rose-pink flowers, neatly banded bright yellow.) (10+) **B**
- 2.027.000 : ALSTROEMERIA GARAVENTAE *** Chile, V, Cerro Vizcacha. Ex a J. Watson coll. (Local & obscure. Large flowers speckled on the inner segments with broken lines of crimson dots on a salmon-pink ground, ageing to ruby shades.) . . (10) **D**
- 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 above type-locality one. Heavily speckled on every segment (not just the inner ones)) . . . (10) **D**
- 2.027.110 : ALSTROEMERIA HOOKERI** (subsp. *hookeri*) * No data. A beautiful dwarf species, 15-20cm high, & one of the best for pot-cultivation in the alpine-house. Green-tipped, pastel pink flowers, blotched with gold & lightly speckled.) . . . (10+) **D**
- 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. (About 1m. high, always with a pink ground-colour. "Gorgeous...sumptuous...!") . . . (10+) **C**
- 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.) (10+) **C**
- 2.028.500 : ALSTROEMERIA PALLIDA *** Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2200m. Steep, stony slopes. (Alpine remaining 20cm. or less high. Palest pink to white, the upper segments gold-blotched & crimson-streaked.) . (10+) **C**
- 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 (Orange-yellow. Taller & more slender than the next.) (8) **D**
- 2.028.610 : ALSTROEMERIA PATAGONICA *** Chile, XII, Magallanes, near Punta Arenas. Ex an O. Magen coll. (Broader, twisted, blue-grey foliage & little, upward-facing, orange-yellow flowers on stems under 10cm. high. Absolutely hardy.) (8) **D**
- 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. (A plant of the Pacific coastal fog-belt. About 30cm. high with lilac flowers, sparsely streaked with deep violet. Distinct, broad, thick-textured, matt grey-green leaves with very undulate margins.) (10) **E**
- 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. Very large, beautiful, pure white flowers. . . (10+) **D**
- 2.029.100 : ALSTROEMERIA PRESLIANA subsp. AUSTRALIS *** Chile, IX, Malleco, Cordillera de Nahuelbuta, W of Vegas Blancas. 1200m. Openings in woodland, often in shade. (Upper segments, streaked with crimson. Intense, deep-pink.) (10+) **C**
- 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 (White or pale lilac, streaked with crimson.) . (10+) **C**
- 2.068.900 : ASTER VAHLII** Falkland Islands, E Falkland, Cape Pembroke. 5m. Dune slack. R. Reid coll. (A wet-growing rhizomatous perennial. Leafy stems, about 20cm. high carry heads with pale purple ray florets & a yellow disc.) . . . (20+) **C**
- 2.182.000 : CALCEOLARIA FOTHERGILLII** Falkland Is., W of Green Patch on E-facing cliff above Berkley Sound. 10m. Well-drained, shallow peat over clay & shale. R. Reid coll. (Mats of foliage, densely covered with down; erect stems of about 8cm. each carry a single large, pouched flower, usually yellow streaked with red inside & with a broad, reddish band outside.) . (20+) **F**

- 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.) (20+) **B**
- 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, Eric Walton.) (20+) **E**
- 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 15cm. perennial from the Falklands & Magellan Straits, wrapped up in an overcoat of wool to protect it from the Antarctic gales. Rosettes of small, pinnatisect leaves & white flowers with a beautiful perfume.) (15+) **E**
- 2.530.010 : LIBERTIA CAERULESCENS** * No data. A Chilean with clumps of stiff, linear leaves, about 30cm. tall, & stems packed with stemless umbels of pale-blue flowers with membranous bracts. Needs a sheltered site in the UK. (20+) **C**
- 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. The classiest of the pink Andean daisies with a summer-long succession of broad-rayed heads in what Bean describes as a "beautiful silky pink.") (10+) **D**
- 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. Superior flowers to those of *M. illicifolia*, which often now masquerades as this & the preceding, in the UK.) (10+) **D**
- 2.635.900 : NASSAUVIA GAUDICHAUDII** Falkland Is., above Yorke Bay minefield. Rock outcrops. R. Reid coll. (A Falkland Is. endemic, in cultivation from a Peter Erskine coll. & given an Award of Merit. A tiny, dwarf shrub forming dense, 8cm. high cushions. Stiff stems clad in imbricate, spine-tipped leaves, each carry a single head of cream, honey-scented flowers.) (10+) **E**
- 2.659.000 : NOTHOSCORDUM OSTENII** * Uruguay. No further data. Ex a J.A. Castillo coll. (This is a choice, little 'sweetie', very scarce and local in nature. Alberto Castillo sent Brian Mathew a few wild-collected seeds in 1987. Brian gained a P.C. for the species in April, 1992. 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. Temperature-hardy here & only increases by seed.) . (20+) **E**
- 2.749.900 : PRIMULA MAGELLANICA** (subsp. *magellanica*) Chile, Tierra del Fuego, between Yendegaia & Lapataia valleys. Marshy ground. J. Shipton coll. (The type-race, endemic to Tierra del Fuego, is usually a smaller, daintier plant than the next with purple or sometimes white flowers. Both are growable in the UK, in a cool site or trough, in gritty, peat.) (50+) **D**
- 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, usually with creamy white flowers.) (50+) **D**
- 2.781.500 : RHODOPHIALA PRATENSIS** * Chile, IX, Malleco, Cordillera de Nahuelbuta. 1200m. Openings among scrub. (Elegant, pale scarlet-flowered species, about 20cm. high. Prof. Grau, who is working on the Chilean species, suggests these two may be the "often wrongly interpreted *R. pratensis*." No problem to grow in our unheated bulb-house, flowering in summer.) (10+) **D**
- 2.781.501 : RHODOPHIALA PRATENSIS** * Chile, IX, Nuble, SW of Termas de Chillan. 1400m. Volcanic rocks. . . (10+) **D**
- 2.840.100 : SCHIZANTHUS GRAHAMII** * Argentina, Mendoza, Malargue, Valle de las Lenas. 2200m. Loose, stony soils on steep slopes & along gulleys. (Much-cut, rich-green, glandular foliage & branching stems to about 50cm., carrying successions of 'upside-down', butterfly-like flowers, here in the most violent colour-form : shocking pink & luminous orange. An amazingly improbable & spectacular alpine, an opportunistic colonist of disturbed slopes, revelling on the trashed ski-runs in summer. It has provided a spectacular display, almost 1m. high, over about 3 months in our netting-sided polytunnel this year.) (20+) **D**
- 2.871.451 : SISYRINCHIUM FILIFOLIUM** (*Olsynium filifolium*) Falkland Islands, E of Stanley, Whalebone Bay. 5m. Shallow peat over clay. R. Reid coll. (A fine endemic of the Falkland Is., rare in cultivation & separated at specific level from the variable mainland races 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.) (20+) **D**
- 2.940.010 : TECOPHILAEA CYANOCROCUS** * No data. The famous blue Chilean crocus, supposedly extinct in the wild but well established in cultivation. Its crocus-like flowers in spring have no equal in the purity & intensity of their gentian-blue.. (10) **E**
- 2.940.011 : TECOPHILAEA CYANOCROCUS 'LEICHTLINII'** Exquisite paler blue form with a large white centre. . (10) **D**
- 2.940.012 : TECOPHILAEA CYANOCROCUS 'VIOLACEA'** Hand-pollinated from the dusky, violet-blue form . . . (10) **E**
- 2.968.500 : TRISTAGMA NIVALE** * Argentina, Neuquen, Cerro Chapelco. 1680m. Exposed, stony slopes. (Distinctively curled, fleshy leaves coil on the scree. Purple-black to green, tubular flowers, with reflexed lobes, on 15cm. stems.) (10+) **D**
- 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 always easy to establish in the first place, however : try sowing direct.) . (5) **D**
- 2.971.610 : TROPAEOLUM SPECIOSUM** * No data. Summer-growing climber from wet S Central Chile. Loves cool, moist British gardens, forming curtains of dainty, light-green foliage sheeted with scarlet flowers in late summer & autumn. (5) **B**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
 B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

The summer-growers of southern Africa

Though it is simple in theory to appreciate the opposite rainfall patterns of southern Africa, it is not quite so simple to understand the plants which grow in the two very different climates. There are both summer-growers & winter-growers in the same genus : think of *Gladiolus*. We list only summer-growers for immediate sowing in the present list. A generalisation on South African species for UK gardeners might be that the montane, summer-growers are the ones you may be able to grow outside in our cool temperate climate.

- 3.143.909 : DIERAMA PULCHERRIMUM** Eastern Cape, Amathole 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.) (15+) C
- 3.144.200 : DIERAMA ROBUSTUM** E Cape, Drakensberg, NE of Rhodes. 2000m. Among grasses on open slopes. (Reaching higher altitudes, between 1600m. & 2900m., than almost any other. 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. Though temperature-hardy, a plant of sunny slopes, it may be intolerant of winter-wetness : for a well-drained site in the UK.) (15+) C
- 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.) (8) C
- 3.243.300 : GERANIUM MAGNIFLORUM *** E Cape, Witteberge, SE of Lady Grey. 1500m. Among long grass in marshy area. (A very fine, green-leaved, pink flowered species, about 30cm. high, which Panayoti Kelaidis & Jim collected 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 when it is more widely grown.) (10+) D
- 3.243.410 : GERANIUM PULCHRUM *** No data. A 1m. tall, handsome, subshrubby species, with silky foliage and masses of large pink to purple flowers. From marshy land up to 2400m. in the Drakensberg & of proven reliability in the UK. (10+) C
- 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 four winters in a sunny, well-drained bed. (10+) B
- 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. Though a late-flowering, winter-grower, with new growth appearing in autumn, it grows well outside with Gary Dunlop in N Ireland & with Dave Hoskins (Hampshire, UK), replacing growth damaged in winter & flowering a month or so later than our stock in an unheated greenhouse.) . . . (15+) C

Gladiolus flanaganii : the suicide gladiolus is within reach

- 3.261.000 : GLADIOLUS FLANAGANII *** KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Fissures on S & SE-facing, basalt cliffs. (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. In 1996 we remarked that it should be a priority for us all to establish this species in cultivation : in 2001 Jim Almond exhibited it and we now list seed, hand-pollinated by Robert Grant-Downton from our 1996 coll.) (10+) F
- 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) (15+) C
- 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.) (10+) C
- 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 chasmophyte, *G. flanaganii*. Both have 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.) . . (10+) C

- 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. For a cool, moist site in almost all UK gardens.) (20+) **B**
- 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. 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.) (20+) **C**
- 3.463.600 : KNIPHOFIA SARMENTOSA** W Cape, SE of Sutherland, Komsberg. 1800-2000m. (A most distinct species which grows along streams in the arid ranges of the W Karoo. Jane Taylor considers it "worth growing for its good glaucous foliage & easy temperament alone...a thoroughly good garden plant....a fairly lax spike of spreading, greenish cream to soft coral-pink flowers" opens "from a dense cone of green buds." The 1m. flower stem has the longest bracts in the genus.) (15+) **C**
- 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. 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.) (15+) **C**
- 3.545.201 : MELIANTHUS MAJOR** W Cape, near Hermanus. 100m. (One of the most spectacular foliage-plants growable in British gardens. In mild areas, this is a 2-3m. high shrub ; in colder gardens, 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.) (10+) **B**
- 3.545.709 : MELIANTHUS VILLOSUS** KwaZulu-Natal, Drakensberg, Cathedral Peak.. (A shrubby species, up to 2m. high, from stream-sides 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.) (10+) **C**

Nerine bowdenii : from the top of the Drakensberg

- 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 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 here in an open border but 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 earlier. 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 be active on despatch.) (5) **E**
- 3.704.150 : ROMULEA MACOWANII var. ALTICOLA (*R. longituba* var. *alticola*)*** Lesotho, no further data. (Ex the H. Milford type-collection, long grown & 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.) (15+) **B**
- 3.772.009 : SENECIO MACROSPERMUS *** KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. (Two *Senecio* species with a future in gardens : rated as "a great border perennial" by Panayoti Kelaidis at Denver, where it needs a cool, moist site, so should do well in full sun in the UK. Stems of about 1m. carry heads of large yellow daisies above striking clumps of big, grey *Verbascum*-like leaves. Endemic to the Drakensberg & adjacent ranges on steep scree or grass slopes between 2300 & 3000m.) (15+) **D**
- 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 outstanding Irish plantsman, Carl Dacus, rates this very highly & has been distributing it to his friends much to their delight. We saw this in several Irish gardens last November : like many Drakensberg plants this will keep flowering through late summer until frosted. It grows up to 3000m. & is hardy in Denver. A plant of marshland and seasonally wet seeps, it should tolerate climates with wet winters.) (30+) **D**
- 3.790.400 : STREPTOCARPUS GARDENII *** KwaZulu-Natal, Drakensberg, SW of Njesuthi valley. 1400m. In moss on boulders in deep shade. (UK seed grown by Alan King from our 1996 coll. A beautiful, little plant with rosettes of narrowly ovate leaves & pale violet flowers, with pale-green tubes & purple-lined lobes, on 10cm. stems. Suited to the alpine-house treatment given to the hardy European & SE Asian *Gesneriaceae*. Moist & shaded in summer, cool & dryish in winter.) (50+) **D**
- 3.953.609 : WATSONIA PILLANSII (*W. beatricis*, *W. socium*, etc.)** Eastern Cape. (The only *Watsonia* generally cultivated in the UK & of proven reliability. Distributed, usually in moist grassland, from the S Cape through Natal into the Drakensberg, at low to middle elevations. Spikes of 30 or so, bright orange-red, long-tubed flowers on 50-120cm. stems in late summer.) (15+) **B**
- 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 stream-sides in the Swartberg & Kamanassie ranges of the S Cape. Flowering in late summer with spectacular 1.5m. spikes of large flowers. According to Goldblatt, the Swartberg populations range from deep red to orange, pink & cream. UK-grown seed from our 1996 coll. : no reason why this should not be as hardy as *W. pillansii*.) . . . (15+) **D**

A : \$2.00 ; £1.50 ; € 2.5	C : \$4.00 ; £2.50 ; € 4. -	E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. -	D : \$5.00 ; £3.50 ; € 5.5	F : \$9.00 ; £6.00 ; € 10. -

- 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.) (10+) E
- 4.023.000 : **ALLIUM PRATTII** var. **LATIFOLIATUM** * China, Sichuan, Emei Shan. 2600m. Cliff ledges. Ex E. Needhan 981 (Provisionally identified by Jill Cowley at Kew as this or perhaps *A. ovalifolium* : the names may be conspecific. It forms clumps of bulbs with reticulate tunics, their necks above the ground, like orchid pseudo-bulbs. These send up, big, broad, shiny-green, aspidistra-like leaves. In midsummer, rounded umbels of purple-pink flowers rise above them on 20cm. stems.) (10+) E
- 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. . (15+) C
- 4.050.010 : **ANEMONOPSIS MACROPHYLLA** * No data. A monotypic genus in *Ranunculaceae*, endemic to Japan & restricted to a few montane woodlands in central Honshu. A choice, slow-growing perennial, 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. . . . (20+) D
- 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. . (20+) B

Arisaema : fashionable eastern aroids

- 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, exquisitely sculptured in jade and rose-tinted alabaster. Not difficult if moist & well-fed in humus-rich soil in light shade. From stock maintained in UK gardens since the Forrest introduction from Yunnan early last century. . . . (6) D
- 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.) (8) D
- 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. (10+) B
- 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 has translucent, pale-yellow spathes rimmed with purple.) (8) D
- 4.081.551 : **ARISAEMA** aff. **CONSANGUINEUM** * China, Yunnan. (Received as a purple form of *A. brevipes*.) (8) D
- 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.) . . . (8) F
- 4.082.100 : **ARISAEMA ELEPHAS** * China, Yunnan, Cangshan. 3200m. Ex E. Needham 1024. (Ron McBeath writes "one of my favourites...reasonably easy to cultivate at Edinburgh." Large, trifoliate, rugose leaves, flushed purple & margined with red. Elongated purple-black spadices snake out of hooded spathes, striped with purple & translucent white lines. 40cm.) . (10) E
- 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. (10+) B
- 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 effect, the largest & most spectacular race of an extraordinary species. Two big leaves with 3 segments overtop the large spathe with very broad, conspicuous lateral lobes, up to 20cm. wide, netted with creamy white on a purple-brown ground. The purple spadix-appendage snakes out of this, tapering to a flagellate tail, 50cm. long.) . . (8) E
- 4.083.309 : **ARISAEMA JACQUEMONTII** * No data. The most western & possibly the hardest Himalayan species, distributed between 2800 & 4000m., among the alpine & subalpine scrub of drier areas from Afghanistan to SE Tibet. The elegant, elongated spathes, striped longitudinally in green & white, with their extended, tortuous tips rise up well above the foliage. (6) D
- 4.087.109 : **ARISAEMA RHOMBIFORME** * China, Yunnan. 2500m. (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.) (5) E

A : \$2.00	;	£1.50	;	€ 2.5	C : \$4.00	;	£2.50	;	€ 4. -	E : \$7.00	;	£4.50	;	€ 7. -
B : \$3.00	;	£2.00	;	€ 3. -	D : \$5.00	;	£3.50	;	€ 5.5	F : \$9.00	;	£6.00	;	€ 10. -

- 4.096.610 : ARISAEMA SERRATUM** (subsp. *serratum*) Russia, Primorskiye. (Form from the Russian Far East of a variable species, distributed through Japan & adjacent NE Asia but seldom grown. 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.) (10+) **D**
- 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 . (5) **D**
- 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 : 1m. high or more. Stout, purple-mottled stems with large, pedate leaves carry green spathes above the foliage. From these an extraordinary, tapering, 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.) (10) **C**
- 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.) (10) **E**
- 4.099.975 : ARISAEMA YUNNANENSE** * China, Yunnan, Gholigan Shan. 2400m. Rough grassland near stream. Ex I. Stokes 46.190 (Listed last year without a specific name, we are now fairly confident that this is the correct determination. 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. Likely to be reasonably hardy in the UK.) (8) **E**
- 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 quantity & viability even with a lens but we shall be generous with them.) **D**
- 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.) (15+) **C**
- 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. (15+) **B**
- 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." (30+) **B**
- 4.200.110 : CLEMATIS AETHUSIFOLIA** * No data. A very graceful, hardy, small climber, no more than 2m. high, from N China. Finely cut downy leaves & a profusion of little, narrow, nodding, pale yellow bells in late summer. (20+) **B**
- 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. (20+) **B**
- 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. (20+) **B**
- 4.202.110 : CLEMATIS REHDERIANA** * 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. . . . (20+) **C**

Codonopsis : the climbing Campanulas

- 4.221.210 : CODONOPSIS GREY-WILSONII** (*C. nepalensis* Grey-Wilson non Hara, most *C. convolvulacea* & *C. forrestii* of gardens) 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*. . (20+) **C**
- 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. . . (20+) **D**
- 4.221.420 : CODONOPSIS LANCEOLATA** * No data. A hardy climber (distinct in its winged seeds, unlike any other we know) from N China through E Russia & Korea to Japan. Rated by specialist Paul Kneebone as "one of the best...covered in largish green bells with purple markings", growing about 2.5m. high. Don Elick described it in Japan as reaching 5m., often in alluvial soil along streams, where "wide open bells reminiscent of a richly coloured *Fritillaria graeca* dangle in profusion." (15+) **D**
- 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*. This is 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 over many years.) . . (30+) **C**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -

- 4.222010 : **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. (20+) **B**
- 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.) (20+) **B**
- 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. (20+) **B**
- 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. . . . (20+) **B**
- 4.223.000 : **CODONOPSIS VIRIDIS** * Nepal, Langtang Valley. Ex C. Chadwell 1602. (Another Himalayan climber.) (20+) **C**
- 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. (20+) **C**

Cremanthodium campanulatum : one of the glories of the race

- 4.237.500 : **CREMANTHODIUM CAMPANULATUM** China, Yunnan, Da Xue Shan. 4040 m. A. Dickerson 01-06 (The normally laconic Sampson Clay rises to Ferrerian 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." (15+) **E**
- 4.264.010 : **DEINANTHE CAERULEA** * No data. A herbaceous relative of *Hydrangea*, about 30cm. high, one of the choicest of hardy plants. In late summer, downward-facing flowers with waxy, cup-shaped, lavender-blue petals around the cluster of violet stamens, overtop the bristly, soft-green foliage. From wet, shady cliffs in Hubei, W China, it has been maintained for almost 100 years from Wilson's collection. It needs shade and shelter from cold or drying winds in a moist, humus-rich compost. (50+) **E**
- 4.265.310 : **DELPHINIUM BRUNONIANUM** * No data. Variable & widespread in nature above 4000m. from the Pamirs through the Himalaya to SE Tibet. This is from the form established in British gardens & close to *D. cashmerianum*. About 30cm. high with rounded, lobed foliage and chubby, downy black-eyed flowers of dusky purple with stubby spurs. (20+) **B**
- 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.) (20+) **C**
- 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.) (20+) **C**
- 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. (20+) **B**
- 4.285.500 : **DRABA OREADES** * No data. One of the most worthwhile E Asian species for the alpine-house enthusiast. A high-alpine, widespread from Central Asia, through the Himalayas to SW China, between 3500m. & 5500m. Tiny, hairy rosettes compressed into pads with heads of yellow flowers on 2cm. stems. Not too difficult given careful cultivation. (20+) **D**
- 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. . . (10+) **C**
- 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. . . . (10+) **C**
- 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. . . . (20+) **C**

- 4.428.510 : **GENTIANA TRIFLORA** * An eye-catching, late-flowering perennial, about 40cm. high. Erect red-tinged stems clad in lanceolate leaves carry clustered, sessile, deep blue flowers in late summer.. Excellent with us in a peaty bed. (50+) **B**
- 4.430.510 : **GERANIUM CLARKEI** from **PURPLE FORMS** * No data. From the mountain meadows of Kashmir between 2000 & 4000m. Mats of creeping rhizomes, deeply cut leaves and 50cm. stems with large, veined, blue-purple flowers. . . (10+) **B**
- 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. . . . (10+) **B**
- 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. . . (10+) **B**
- 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. . . . (10+) **B**
- 4.431.510 : **GERANIUM POGONANTHUM** * No data. A dainty plant with marbled basal leaves, from Yunnan, Sichuan & adjacent 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." Often temperamental & needs a little care.(10+) **D**
- 4.432.010 : **GERANIUM SINENSE** * No data. A late-flowering, 60cm., woodland-plant of SW China, in Yunnan & Sichuan with successions of many, small, inverted flowers with reflexed petals in ruby-black around a coral-pink base. (10+) **C**
- 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+) **C**
- 4.432.500 : **GERANIUM WALLICHIANUM** * India, Garhwal Himal. Ex an Udai Pradhan coll. (An enthusiastically 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.) (10+) **C**
- 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 (10+) **C**
- 4.432.550 : **GERANIUM WALLICHIANUM** 'BUXTONS VARIETY' * No data. Called after E.C. Buxton, who gardened in N Wales. 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 (10+) **B**
- 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. (10+) **B**

Incarvillea : sumptuous Sino-Himalayan alpines

- 4.478.150 : **INCARVILLEA DELAVAYI** from **WHITE FORM** (Subgenus *Pteroscleris*) * From a good white form of this splendid, hardy, herbaceous perennial in *Bignoniaceae*. Exotic trumpet-shaped flowers. Good soil in a well-drained, sunny site. (15+) **B**
- 4.478.205 : **INCARVILLEA EMODI** (Subgen. *Amphicome*) * Pakistan, Rawalpindi, Margalla Hills. Crevices of limestone rocks. Ex an A. Paterson coll. (A woody based 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.) (20+) **D**
- 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.) . (10+) **C**
- 4.478.850 : **INCARVILLEA SINENSIS** var. **PRZEWALSKII** (Subgenus *Incarvillea*) China, Gansu, S of Lanzhu. 1700m. (A local race from Gansu & Shensi, in a variable species-group.. 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...") . . . (15+) **D**
- 4.478.910 : **INCARVILLEA YOUNGHUSBANDII** (Subgenus *Pteroscleris*) * Tibet, no further data. (Received as living material from China. Smallest of the genus & endemic to the bleak Tibetan Plateau above 4500m., it flowers stemless, as the ground-hugging, young leaves expand. The purple-pink trumpets have not been entirely stemless in cultivation.) (10+) **E**
- 4.478.951 : **INCARVILLEA ZHONGDIANENSIS** (Subgenus *Pteroscleris*) * China, Yunnan, Diqing, S of Zhongdian. 3215m. Dry grassy banks on eroded hillsides. Ex ACE 1600. (Recently described & possibly allied to *I. mairei* but with numerous, smooth, thin-textured leaves. Huge bright magenta-crimson trumpets with white flares around their yellow throats.) (15+) **C**
- 4.478.952 : **INCARVILLEA ZHONGDIANENSIS** (Subgenus *Pteroscleris*) China, Yunnan, Diqing, Zhongdian. 3250m. A. Dickerson 01-11. (A fresh 2001 wild coll. by Tony Dickerson of this spectacular species described in 1998.) (10+) **D**

A : \$2.00	£1.50	€ 2.5	C : \$4.00	£2.50	€ 4. -	E : \$7.00	£4.50	€ 7. -
B : \$3.00	£2.00	€ 3. -	D : \$5.00	£3.50	€ 5.5	F : \$9.00	£6.00	€ 10. -

- 4.479.660 : **INULA ROYLEANA** * No data. A W Himalayan plant, of 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. . . . (20+) C
- 4.480.201 : **IRIS BULLEYANA** (Ser. *Sibiricae*) China, Yunnan, Zhongdian. 3300m. A. Dickerson 01-12 (Wild plants vary from pale to deep blue & violet & vary from 30cm. to 70cm. in height. Now recognized as 'good' species. Easy to grow.) . . . (10+) C
- 4.480.509 : **IRIS CHRYSOGRAPHES** (Ser. *Sibiricae*) China, Yunnan, Da Xue Shan. 3950m. A. Dickerson 01-13 (Fine wet-grower with intense, deep purple flowers with yellow-marked falls. A rare chance to grow wild-collected seed of these two.) (10+) C
- 4.480.520 : **IRIS CHRYSOGRAPHES from DARK FORMS** (Ser. *Sibiricae*) * No data. A good range of velvety purple-blacks can be expected, though hybrids can occur with other members of Ser. *Sibiricae* & even Ser. *Californicae* (20+) A
- 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.) (20+) B
- 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, from spreading, green rhizomes. "Beautiful but rarely seen" writes Martyn Rix. Hardy & trouble-free in an open, well-drained site. (10+) B
- 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.) . (15+) B

Lilium : 2001 seed from recent Chinese collections

- 4.516.001 : **LILIUM AURATUM** (var. *auratum*) * Japan, Honshu, Shizuoka Pref. Ex a 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.) (15+) D
- 4.516.825 : **LILIUM CONCOLOR var. PULCHELLUM** (*L. buschianum*) * Russia, Ussuri. (Quite a robust form of this slender, lime-tolerant, sun-loving species, widely distributed in NE Asia. This is the most northern race from the Russian Far East & Korea, about 50cm. high with many linear leaves carry up to 10 erect flowers in glossy orange-scarlet speckled with purple.) (10+) E
- 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.) (15+) D
- 4.518.110 : **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". It flowers quickly from seed, if sown in gentle warmth in winter.) (20+) B
- 4.519.509 : **LILIUM LANKONGENSE** * China, Yunnan. 2700m. (Endemic to N Yunnan & close to white *L. duchartrei*, under which it has been included. Stems 1m. to 1.5m. high with scattered, dark green leaves bear a raceme of about 12, scented, pendulous, *L. martagon*-type flowers in rose-pink, speckled with purple. For moist, humus-rich soil in semi-shade.) . (15+) E
- 4.520.010 : **LILIUM MACKLINIAE** * India, Manipur, Sirhoi near Ukhrul. 2300-2450m. Steep, grassy slopes. (All the 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.) . . (20+) C
- 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. (20+) C
- 4.520.415 : **LILIUM NANUM from SIKKIMESE FORM** * Sikkim : no further data. Ex an AGSES coll. 30cm. (15+) D
- 4.520.420 : **LILIUM NANUM from BHUTANESE FORM** * Bhutan. A distinct race with a striking mahogany stem. (15+) E
- 4.520.810 : **LILIUM OXYPETALUM var. INSIGNE** * No data. The dusky pink form of this dwarf, usually yellow, species from the NW Himalaya, between 3000m. & 4000m. About 20 cm. high with a single, nodding, campanulate flower. (15+) D
- 4.520.910 : **LILIUM PHILIPPINENSE** * No data. Elegant, 1m., grassy-leaved stems & very long-tubed, horizontal, pure-white, scented trumpets, sometimes tinged green or brown outside. From the mountains of Luzon in the N Philippines. . . . (20+) C

- 4.521.539 : LILIUM PRIMULINUM var. OCHRACEUM** * China, Yunnan. 2300m. (Recently received from China & in a group of very confusing lilies. This race from NW Yunnan is possibly the hardiest. Stems of about 1.2m. carry about 12 pendulous flowers with reflexed segments, striking with greenish yellow tips and contrasting dark, brown-purple throats.) (15+) **E**
- 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 &, like most lilies, its head in the sunshine.) (15+) **D**
- 4.522.009 : LILIUM SEMPERVIVOIDEUM** * China, Yunnan. 2700m. (A little-known *Nomocharis*-like species endemic to Yunnan at about 2500m. altitude. One or two nodding, cup-shaped, white flowers, sparsely speckled inside with red-purple on 30cm. stems clad in narrow, linear leaves. Close to *L. mackliniae* & the rose-pink *L. amoenum*, with which it has been confused.) (10+) **F**
- 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 local race, described in 1956. Hanging out of the cliffs "like a giant *Tricyrtis*...stems 6ft. or longer with up to 20 smaller, light-pink flowers on very long pedicels." Growing successfully in the UK, in rich, peaty soil, both under glass & outside, with gloriously scented, crimson-speckled flowers in late summer.) . . . (15+) **E**
- 4.542.500 : LYSIMACHIA DECURRENS** * China, Yunnan, Dali, Cang Shan. 3000m. Loose gravel. Ex I. Stokes 46.092. (An attractive species proving adaptable. Of mounded habit, about 50cm. high & as much across with spreading side-shoots. Upright racemes of white flowers, with a darker lilac tinge in their throats, produced over a very long period in summer.) . . . (50+) **C**

Meconopsis : azure & gold poppies of the East

- 4.550.316 : MECONOPSIS BETONICIFOLIA from SELECTED FORMS** * From particularly good, floriferous classic blues, derived originally from late-flowering plants selected by legendary Scottish plantsmen, Henry & Margaret & Taylor & also from Michael Wickenden's selected outstanding blues with a reliably perennial habit. The ultimate in blue poppies. (50+) **C**
- 4.550.510 : MECONOPSIS DELAVAYI** * A superlative dwarf, perennial, a paragon among alpine poppies, unlike any other in the genus & placed in a section of its own. Confined to limestone screes in NW Yunnan, between 3000m. & 4,300m., it has been in an out of cultivation since Forrest's introduction of 1913. The main problem is finding the right degree of moisture to keep the overwintering buds in good condition without rotting them or drying them out. Diminutive rosettes of glaucous, entire leaves & large half-nodding, usually 4-petalled, flowers in the richest, luminous imperial purple on stems of about 15cm. (20+) **E**
- 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 will differ 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 a very cold & dryish part of Central Asia, this will need the scree-conditions (optimum drainage) and sunny site (in cool climates) preferred by this group.) . . . (50+) **C**
- 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.) (50+) **C**
- 4.551.800 : MECONOPSIS INTEGRIFOLIA** (subsp. *integrifolia*) China, Qinghai, Nan Shan, NW of Maqin. 4300m. (The magnificent yellow poppy, collected at the NW extremity of its distribution, on the borders of Sinkiang & Mongolia. Likely to differ from recent collections made in Sichuan, its large, deep yellow, silky flowers should be erect or outward-facing. This is Farrer's 'Lampshade Poppy' from neighbouring Gansu. It will need perfect drainage : see note under *M. horridula*.) (50+) **D**
- 4.552.851 : MECONOPSIS PSEUDOINTEGRIFOLIA subsp. ROBUSTA** China, Yunnan, Da Xue Shan. 4015m. A. Dickerson 01-14. (Reinstated as a good species, covering the SE populations of big yellow poppies, in Chris Grey-Wilson's revision of the *M. integrifolia* complex. On distributional grounds, this coll. should fit under his *M.p.* subsp. *robusta*. This race, growing to over 1m. tall, has a sturdy, well-defined stem with several huge, nodding flowers in a softer lemon-yellow than the above.) (30+) **D**
- 4.565.010 : MORINA LONGIFOLIA** * No data. Bright-green, aromatic, thistle-like rosettes send up, in late summer, stiff, erect, 1m. stems whorled with long-tubed, pink flowers, opening from white buds & maturing to crimson, in summer. (10+) **B**
- 4.574.100 : NEPETA CLARKEI** * No data. A W Himalayan species from wet habitats in high, dry areas of N Pakistan into Kashmir. Accommodating in cultivation here, forming clumps with many, erect, 1m. stems whorled with soft-blue flowers. (20+) **B**
- 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 & 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. (20+) **B**
- 4.574.450 : NEPETA STEWARTIANA** * China, Yunnan, S of Zhongdian. 3215m. Dry, grassy banks. Ex ACE 1611. (This has settled down well with us. An excellent plant with whorls of long-tubed, violet-blue flowers on leafy, 60cm. stems.) (20+) **B**
- 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. (20+) **B**

A : \$2.00 ; £1.50 ; € 2.5	C : \$4.00 ; £2.50 ; € 4. -	E : \$7.00 ; £4.50 ; € 7. -
B : \$3.00 ; £2.00 ; € 3. -	D : \$5.00 ; £3.50 ; € 5.5	F : \$9.00 ; £6.00 ; € 10. -

Nomocharis & Notholirion : not quite lilies but just as beautiful

- 4.576.007 : NOMOCHARIS APERTA** * 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 rose-pink, speckled with crimson & with deep purple nectary-blotches.) (15+) **D**
- 4.576.009 : NOMOCHARIS APERTA** * China, Yunnan, near Tianchi Lake. 3315m. Among scrub. Ex ACE 2271. . . . (15+) **D**
- 4.576.100 : NOMOCHARIS MAIREI** * China, Yunnan. Ex CLD 1490. (A glorious endemic of SW Sichuan & N Yunnan at 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. All these need humus-rich soil in a cool, moist site.) (15+) **D**
- 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.) (10+) **E**
- 4.576.510 : NOTHOLIRION BULBULIFERUM** (*N. hyacinthinum*) * No data. A beautiful lily-relative, up to 1m. high with racemes of up to 30 horizontal, lilac trumpets, tipped with green. Distributed in alpine meadows from Nepal into W China. . . (20+) **C**
- 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, lilac-pink bells in summer. (20+) **D**
- 4.581.050 : PAEONIA OBOVATA** var. **WILLMOTTIAE** * No data. Outstandingly beautiful even in such an aristocratic genus. Rounded, lobed foliage, greyish with coppery tints, forms a perfect background for the translucent, ivory-white cups holding the golden stamens around the crimson carpels. A native of W Hubei & E Sichuan, perfectly growable in the UK (6) **E**
- 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. (8) **C**
- 4.581.609 : PAEONIA VEITCHII** var. **WOODWARDII** from **PINK FORM** * No data. Pale, soft rose-pink flowers. . . (6) **D**
- 4.581.610 : PAEONIA VEITCHII** from **WHITE FORM** * Rarely seen with pure-white flowers against cut, bright-green foliage. Our experience indicates that a reasonable proportion will come white from seed with the balance in a very pale pink. . (6) **E**
- 4.586.010 : PARIS POLYPHYLLA** * No data. Classiest of woodlanders, very, very slowly forming clumps of erect, 1m. stems, ruffed with pointed leaves & topped with prominent, lanceolate green sepals & thready, yellow petals, surrounding the violet-tinged ovary, which matures to burst open, displaying clustered, brilliant orange seeds. Treat seed as for other *Trilliaceae*. (10+) **D**
- 4.594.020 : PODOPHYLLUM HEXANDRUM** (*P. emodi*) * No data. 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. (8) **B**
- 4.599.710 : POTENTILLA NEPALENSIS** * India, Himachal Pradesh, Kulu, Parasher. 2100m. Open meadows. Ex R. McBeath 1698 (A really excellent, dainty new form, established from Ron's 1985 coll. Branching, 40cm. stems curve up from the compact, crowns of strawberry-leaves, carrying flowers in rich, deep cherry-pink with darker centres, from late summer until frosted.) (20+) **B**
- 4.606.451 : PRIMULA CHIONANTHA** subsp. **SINOPURPUREA** (Subsect. *Crystallophlomis*) China, Yunnan, Da Xue Shan. 3990m. A. Dickerson 01-23. (A rare chance to grow a wild coll. of the interfertile *P. chionantha* group. Rich-purple flowers. Easiest of the nivalids : "a magnificent garden plant, one of the best of all primulas for the open garden.") (30+) **E**
- 4.616.009 : PRIMULA FLORINDAE** (Sect. *Sikkimensis*) * Tibet. Ex K. Rushforth 3579. (Possibly the first coll since the 1924 Kingdon Ward introduction. Narrowly endemic to the Tsangpo basin of SE Tibet. 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 summer. Rich, wet soil.) . (50+) **B**
- 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' (50+) **A**
- 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. . . . (50+) **B**
- 4.636.219 : PRIMULA SECUNDIFLORA** (Sect. *Proliferae*) China, Yunnan, Da Xue Shan. 4010m. A. Dickerson 01-26 (Evergreen rosettes, white-mealy 60cm. stems & drooping bells in a luminous, deep crimson. Superficially like a member of Sect. *Sikkimenses*. John Richards comments : "this stunning species is seen less often than it deserves." Moist humus in semi-shade.) . . (30+) **C**
- 4.642.310 : PRIMULA VIALII** (Sect. *Muscarioides*) * No data. An extraordinary species of unique appearance : 50cm. stems carrying a cylindrical spike of about 100, close-packed violet-blue flowers opening from brilliant red buds. From meadows & scrub, around 3000m. in SW Sichuan & NW Yunnan. Cool site in a humus-rich, fertile soil, moist but well-drained. (50+) **C**

4.644.110 : PRIMULA WILSONII var. ANISODORA (Sect. *Proliferae*) * No data. 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'. (50+) **B**

Primula : unidentified collections from Yunnan

- PRIMULA SP.** China, Yunnan, Zhongdian. 3300m. A. Dickerson 01-20 (30+) **D**
- PRIMULA SP.** (Sect. *Crystallophlomis*) China, Yunnan, Beima Shan. 4035m. A. Dickerson 01-22 (30+) **E**
- PRIMULA SP.** (Sect. *Crystallophlomis*) China, Yunnan, Da Xue Shan. 3890m. A. Dickerson 01-24 (30+) **E**
- 4.698.910 : RHEUM ACUMINATUM** * Ex a Ron McBeath coll. An splendid 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. (15+) **C**
- 4.699.601 : RHEUM PALMATUM from GREEN-LEAVED FORM** * From our selected clone 'Green Knight', raised from a plant we had as *R.p.* var. *tanguticum*. Spectacular, erect stems of vivid cerise-red flowers soar to about 3m. in height. (20+) **B**

Roscoea : orchid-like cousins of the gingers

- 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. (20+) **D**
- 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. (20+) **C**
- 4.830.551 : ROSCOEA CAUTLEOIDES from YELLOW FORM** * No data. A very variable Chinese endemic from Yunnan & adjacent Sichuan, between 2000m. and 3400m. From an early-flowering, rather elegant, upright form, which came to us from Ron McBeath : a long succession of soft-yellow flowers, starting with us in May & growing up to 50cm. in height (20+) **C**
- 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. (20+) **C**
- 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. Worth growing in a pan in the alpine-house. ... (20+) **D**
- 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). ... (20+) **D**
- 4.838.150 : SALVIA CAMPANULATA from YELLOW FORM** * China, Yunnan. (A handsome, 50cm. tall, robust, dry-meadow plant with a tuberous rootstock. Distributed from N India to SW China 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.) (10+) **D**
- 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.) (20+) **C**
- 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. (50+) **C**
- 4.859.010 : SCOPOLIA STRAMONIFOLIA** * No data. The Himalayan representative of this intriguing, small genus in *Solanaceae*. Distributed from Kashmir to SW China between 2700m. & 4300m., this is taller than the E European *S. carniolica*, reaching 1-2m. in height, & often has downy, white undersides to the large leaves but the drooping, wide bells in lurid shades of yellow-green to brownish purple are similar. Very hardy & trouble-free in a good, rich, well-drained soil in semi-shade. (15+) **D**
- 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. . (20+) **A**
- 4.888.170 : TRILLIUM SMALLII** * No data. An ill-defined species from deciduous woodland on Hokkaido & adjacent S Sakhalin in the Russian Far East. Possibly of hybrid origin, between white *T. camschatcense* & red-brown *T. apetalon*..... (15+) **E**

A : \$2.00 ; £1.50 ; € 2.5 C : \$4.00 ; £2.50 ; € 4. - E : \$7.00 ; £4.50 ; € 7. -
 B : \$3.00 ; £2.00 ; € 3. - D : \$5.00 ; £3.50 ; € 5.5 F : \$9.00 ; £6.00 ; € 10. -