

Jim & Jenny Archibald

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

NEWSLETTER & SEED LIST

SEPTEMBER, 2008

2008 seeds from Cyclamen, Oncocyclus Irises, Paeonia and Scilla

Seeds of alpine & herbaceous species from Chile & Argentina

Wild Wales, 2008

We do not imagine that any book written by George Borrow is much read nowadays but when, in 1862, he published 'Wild Wales', accounting his journeys through the principality, often on foot, he contributed greatly to increasing awareness of life in rural Britain among urban Victorians. Today Wales may not be as wild as it was in Borrow's time but gardening here remains a little closer to a battle with nature than it might be in some more cloistered urban environments. The weather is as wild as ever it was.

We have lived in West Wales since 1988 but have never experienced such torrential rain with such frequency as we have over the last nine months. A valley-bottom with a stream running through is an attractive site in which to garden but we must never forget that almost all the water falling on both sides of the valley will eventually end up at the bottom. It has been the amount of this water falling in a very short time and the speed of its descent which has been our problem recently. We are often asked what the rainfall is here. Unlike some of our friends we do not assiduously keep records so we cannot be precise. We usually reply, "A lot. About 2m. or more than 6ft., if you like, annually." Somehow, in our climate, metres or feet seem more appropriate units of measurement than millimetres or inches. Not so long ago, before we were being told that heat and drought were going to be the gardening problems of the future, we had an abnormally high rainfall one year. A nearby village recorded about 8ft. I guess we may have exceeded that. We live near the head of the valley, a convenient place for the clouds sweeping in from the West to offload their burden. The overall volume of rain is not a problem but this year vast amounts have fallen in short spaces of time. Our stream has flooded four times since last December. Up till now we expected that it would do so only every few years. The most recent flood, a few weeks ago, was the most ferocious we have seen. The torrent gouged out the boulder-clay of the streambed, lowering its level by about a foot in some places, depositing tons of stones and gravel in others and all but foiling our attempts to keep the stream on a managed course.

We have been very discriminating on what we have been planting alongside the stream and in the wet valley-bottom. Woody genera such as Alnus, Metasequoia, Nyssa and Liquidambar are well-adapted to ground which is periodically water-logged or inundated. Wet-growing species both woody and herbaceous, have evolved over millenia to be comparatively flood-proof and we have had almost no losses, although almost all of the planting is comparatively recent. It is not easy to shift a clump of Lysichiton or Crinum, as anyone who has tried to move them will know. The tenacity of streamside plants can be impressive. We recollect seeing Darmera peltata all but choking a fast-flowing stream in northern California. The only significant loss was quite a large Fargesia nitida, which was undercut by the water and whipped out of the ground. It may well now be floating in the Irish Sea. It was no great loss. It was in flower and we have been saved the work of removing a dead plant in future.

Our home lies high above the stream on the side of the valley. We can look out across our field to the two ponds we have excavated. They remain unfinished with their margins still unplanted. The ground around them has stayed too wet all summer to allow access for machinery to work on the banks. It is the second year that it has remained too soft for us get a digger in to finish these, dig more ditches and complete paths in the valley-bottom. It is hopeless to attempt this in winter. It is at such a time we feel the impatience of age. Can we afford yet another year? We can only hope for a drier 2009.

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 a US branch. Apart from personal cheques in these two currencies, payments can be made in US \$, £ sterling or € bank-notes (please send these by registered mail), a bank draft or International Money Order (in US \$ or £ sterling for these please). We do not operate a Giro account for direct transfers. Credit card payments can be made only online through PayPal in US \$, using our e-mail address: sales@jjaseeds.com 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 been able to send 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, so 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 a few weeks before you receive your order. While we are ready to send out orders by return, most come in during the first 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. A few 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.

Customers in the USA, New Zealand and Australia

USA: USDA regulations regarding the importation of seeds continue to be applied by the authorities with a realistic, pragmatic approach, as far as small quantities are concerned. If you wish, you can obtain a permit and mailing labels from the USDA but this can be more trouble than it is worth. We have had no report of any of the many orders sent from recent lists without USDA mailing labels failing to arrive with customers in the USA. We always replace, credit or refund if an order does not arrive & are happy to continue to take any risk ourselves. Packets will be labelled honestly and accurately "Dried botanical specimens."

New Zealand customers have a more serious problem. With a much smaller volume of mail entering the country and, we suspect, an overstaffed agricultural inspectorate, it is best to stick to the list of permitted species, which is quite extensive now.

Australia has now also adopted the policy of listing permitted species. Previous regulations were both informed and realistic, though less favourable to bureaucratic empire-building. We suggest customers in Australia ascertain which species will be permitted entry.

Customers in the Euro Zone

Personal € cheques are a problem. It is disproportionately expensive to clear cheques for comparatively small amounts through British banks. We should be grateful if eurozone customers send payment in € in cash by registered mail or use a bank draft in US \$ or £ sterling: just convert at the current exchange rate. Credit card payments can be made only online through PayPal in US \$.

Our population reference numbers

The species in our lists are divided into five geographical areas. Within these areas they run in alphabetical order. The numbers appearing before the names run in numerical order. 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. 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. 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 will see this on labels). 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. Our web-site follows this system also. 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. 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

A new wild collection of a classic Turkish cliff-plant

127.202 : ALKANNA AUCHERIANA Turkey, Içel, E of Gülnar. 800-1000m. Limestone fissures. (Regarded by some as the "Turkish Eritrichium", this is much more suited to year-round, alpine-house conditions than its northern cousin : it is accustomed to hot summers and dry conditions. It packs its pads of silvery-grey rosettes into the limestone cliff-crevices of several of the valleys of the central Taurus range but it is only here in the Gülnar area that it occurs in the most desirable, intense azure-blue form. We have made a special effort to secure a good collection of this classic alpine-house plant.) . . . (10+) F

ALLIUM, ARUM, BELLEVALIA, BIARUM, COLCHICUM & CROCUS: 2008 seeds will be in our next list.

160.303: ANEMONE BIFLORA * Iran, Markazi, SW of Arak. 2300m. Exposed gravelly sites on summit ridge. (One of the finest and most striking plants of the Zagros Range. Much-cut, rich-green foliage a few cm. high & 5-8cm. stems carrying "cup-shaped crimson-scarlet flowers an inch or more across & with a mass of golden anthers carried on crimson filaments" (Paul Furse, writing in 1965). As they mature, the petals fold over the fluffy seeds & mature to coppery honey shades, until the growth dries, disintegrates & disperses. Reliable with us given standard choice bulb treatment with a dry rest in summer.) (20+) E

Cyclamen: a selection of 2008 seed

- 358.000: CYCLAMEN AFRICANUM * Algeria, Kabylie, E of Azazga. 850 m. Humus under deciduous *Quercus*. (Large, patterned, dark green leaves & big, pink flowers in autumn. Borderline hardiness in UK and best grown frost-free. A clone from this coll., made by us in 1966, gained an FCC from the Royal Horticultural Society for this species in 2002.) (10) C
- 358.230: CYCLAMEN ALPINUM (C. trochopteranthum) * No data. A spring-flowering, SW Turkish endemic, closest to C. coum but with foliage more like C. cilicium. Wide flowers with distinctively twisted lobes, in pink & carmine shades, maroon at the bases. Strongly honey-scented. Temperature-hardy but seldom successful outdoors in the UK. (15+) D
- 358.231 : CYCLAMEN ALPINUM from WHITE FORMS * Selections from R. & R. Wallis & P.& P.Watt colls. Seeds from crimson-nosed whites but expect some pale pinks to occur among the seedlings as well. (15+) D
- 358.500: CYCLAMEN BALEARICUM * Spain, Mallorca, N of Andratx. 350m. In humus among *Quercus*. Ex a D.M. Hoskins coll. (Delicately pencilled, white flowers in spring. Likes a lot of shade, resents overdrying & is best frost-free.) . (15+) B
- 359.003: CYCLAMEN CILICIUM * Turkey, Konya, NW of Bozkir. 1100m. Base of N-facing, limestone cliffs. (Dainty, pale-pink, autumn flowers & small, rounded leaves. Hardy in a well-drained, sunny site in the UK.) (15+) B
- 359.019: CYCLAMEN CILICIUM * No data. Mainly from R.& R. Wallis selections. Very variable in leaf patterns and in flower colour from pale to deeper pink. Tolerant of very low temperatures in drier climates if snow-covered (15+) B
- 359.021: CYCLAMEN CILICIUM f. ALBUM * Turkey, Antalya, N of Murtici to Akseki. Ex Frank & Koenen 82-10. (From a pure white without a pink 'nose'. Dark, well-marked leaves. Usually comes very evenly from seed.) (10+) D
- 360.001 : CYCLAMEN COUM (subsp. coum) * Turkey, Rize, SW of Camlihemsin. Mossy ledges on & below shaded cliffs.

 (A neat wild form with patterned leaves & pink flowers from the Pontus foothills S of the Black Sea.) (15+) C
- **360.048**: CYCLAMEN COUM (subsp. *coum*) * Turkey, Artvin. 800m. Ex the Cyclamen Society 88-397 coll. (From the far NE corner of Turkey, near the border with Georgia. A fine population with especially good leaf-forms.) (15+) C
- 360.050: CYCLAMEN COUM (subsp. coum) * Turkey, Bolu. 1000m. Beech leafmould over limestone. Ex BSBE 513. (Originally described as "scented; dark purple; some with plain green leaves" but this is now many generations removed from the original collection & the number is now applied only to selected forms with silver-patterned leaves.)...... (15+) C
- 360.100: CYCLAMEN COUM f. ALBISSIMUM * Syria (Israeli Occupied Territory), Golan Heights near Mas'ada. (The quite recently introduced pure white form of *C. coum*, lacking the dark 'nasal markings' of previously cultivated whites. Rather thintextured, round, unmarked, dark foliage and big, broad flowers. Interesting not only in its distinct appearance but in its southern habitat. Because of the latter, as well as its rarity in cultivation, it will be best grown under glass in the UK.) (8) F
- 360.602 : CYCLAMEN COUM : DARK NOSE ; WHITE FLOWERS * Particularly arresting colour-contrast (10) F

361.008 : CYCLAMEN CRETICUM* Greece, Crete, above Omalos. 1200m. Shaded limestone rocks. Ex D.M. Hoskins & P.& P.Watt colls. (This relative of <i>C. repandum</i> is not the easiest species to maintain and persuade to set seed in cultivation. It needs a lot of shade & is usually safest grown frost-free in the UK but these colls.were made at a very high altitude for this species Cordate, dull grey-green leaves usually with mottled bands of silvery grey. White flowers in spring.) (15+) D
361.510: CYCLAMEN CYPRIUM * No data. Endemic to Cyprus with fragrant, white flowers with auricles & magenta blotches around their mouths, appearing in late autumn to winter. Distinctive, grey-marbled, dull-green leaves, crimson below. Seed from a good range of leaf-variations. Best grown frost-free with a dry summer-rest in the UK.) (15+) C
361.512 : CYCLAMEN CYPRIUM from FINEST SELECTED LEAF FORMS *
362.000 : CYCLAMEN ELEGANS (<i>C. coum</i> subsp. <i>elegans</i>) * Iran, Mazandaran, S of Chalus. 20m. In humus & moss in wet <i>Fagus</i> woodland. (Maintained from our 1966 coll. by D. Hoskins, who is able to spare some seed this year. Petals & leaves are the most elongated but it is more difficult to grow than the Azerbaijan & Sari populations.) (8) F
362.001: CYCLAMEN ELEGANS (C. coum subsp. elegans) * Iran, Mazandaran, SE of Sari. 200m. In humus & moss in woodland. (From as far East as we have found this species. Not easy plant to grow, seldom setting much seed, it continues to be rare in cultivation. Large pink flowers without a white 'nose' & with elongated, acute petals above silver-patterned leaves in mid-winter. Needs protection in the UK & is best grown frost-free, shaded & cool in summer.)
362.020: CYCLAMEN ELEGANS (C. coum subsp. elegans)* Azerbaijan, Talysh, NW of Lerik. (From material derived from Moscow Botanic Garden & from A. Seisums collections in Azerbaijan. Not quite the same as our colls. from further east on the Caspian coast of Iran but seems the easiest to grow & still has the characteristics of this taxon.)
363.003 : CYCLAMEN GRAECUM * Greece, Lakonia, Agios Nikolaos NW of Githio. 500m. Steep slopes under olives. (From several forms, originally selected by us in the wild in 1984 for the outstanding patterns & shapes of their leaves.) . (10+) C
363.008 : CYCLAMEN GRAECUM (subsp <i>graecum</i>) * Greece, Crete, Rodopos peninsula. 95m. Ex the Cyclamen Society coll. 94-046. (From a selected, very floriferous clone. Superb leaves with a striking, silver shield-pattern.) (10+) E
363.010 : CYCLAMEN GRAECUM * Greece, Evia, Aliveri to Amarinthos. 100m. Ex a D.M. Hoskins coll (10+) C
363.017: CYCLAMEN GRAECUM* Greece, Messinia, SW of Hora. Ex an H. & I. Barton coll. (From two fine clones selected by Ivor Barton in 1980, with excellent foliage & particularly deeply coloured, carmine-pink flowers.) (10+) C
363.022 : CYCLAMEN GRAECUM from SELECTED DARK-FLOWERED FORM * Greece, Lakonia, N of Chalkida. c.200m. Ex D.M. Hoskins 00-08. (From a superlative, exceptionally richly coloured clone, "near carmine".) (10+) D
363.030: CYCLAMEN GRAECUM* Greece, Rhodes. Ex C.C. Mountfort colls. (Originally derived from some very fine leafforms grown by John Blanchard's father. It is suggested that the Rhodes populations should be included under C. graecum subsp. anatolicum but many who know them in the wild prefer to leave them under C.g. subsp. graecum.) (10+) D
363.040 : CYCLAMEN GRAECUM * Greece, Crete, near Kolibari. c.100m. Ex D.M.Hoskins 02-12
363.095 : CYCLAMEN GRAECUM from SELECTED DARK-FLOWERED FORM * No data but originally from a Manfred Koenen collection. The richest, deepest pink selection grown & shown by Bob & Rannveig Wallis
363.099: CYCLAMEN GRAECUM* No data. From a very wide range of this magnificent, autumn-flowering species, variable from carmine-pink to shell-pink, in time of flowering (from August to November in the UK) & in size, shape & markings of the leaves. Worth growing for the last feature alone. Safest frost-free, with a warm, dry summer-rest.) (20+) B
363.100: CYCLAMEN GRAECUM f. ALBUM * Data as for 363.003. (This superlative, vigorous, pure white variant, originally located in the wild by Ronald Frank, has now been further selected for leaf-variation by Manfred Koenen and seed we list comes from several different leaf-forms. Beautiful & reliable given a really hot, dry rest in summer.)
363.148 : CYCLAMEN GRAECUM subsp. ANATOLICUM * Turkey, Antalya, near Kalkan. Olive grove. Ex R.& R.Wallis 88-19. (The fairly recently segregated & seldom grown, SW Turkish race with well-marked foliage. Unlike the typerace from the Greek mainland, most of these Turkish plants are delicately scented.)
363.197: CYCLAMEN GRAECUM subsp. CANDICUM Greece, Crete, Rethimno, near Selia. Ex R.& R.Wallis 89-24. (An island race, quite recently accorded subspecific status but not really very well defined. Usually white-flowered, its dark, velvety leaves are characteristic, as is its reluctance to set much seed in cultivation. We are seldom able to list it.) (10) E
364.003 : CYCLAMEN HEDERIFOLIUM * Greece, Evia, W of Karistos. 200m. On schist. (A distinct, large-leaved, large-flowered race, resembling <i>C. africanum</i> . Long, late flowering-season, into November under glass with us.) (15+) B
364.010 : CYCLAMEN HEDERIFOLIUM * Greece, Crete, near Agia Sofia. c. 350m. Under trees on steep, rocky slopes. Ex a D.M. Hoskins coll. (The type-race from a very disjunct, isolated locality. An extremely local plant on Crete.) (10+) C
364.099 : CYCLAMEN HEDERIFOLIUM * No data. From a wide range of pink & white forms of this incomparable, autumn-flowering species, the hardiest & best garden-plant of all. It will establish well in most of the UK (20+) A
364.100 : CYCLAMEN HEDERIFOLIUM f. ALBUM * No data. From white-flowered plants. Variable foliage (20+) B
A: \$3.00 ; £1.50 ; \in 2 C: \$5.00 ; £2.50 ; \in 4 E: \$9.00 ; £4.50 ; \in 7 B: \$4.00 ; £2.00 ; \in 3 D: \$7.00 ; £3.50 ; \in 5 F: \$12.00 ; £6.00 ; \in 9

364.200: CYCLAMEN HEDERIFOLIUM var. CONFUSUM * Greece, Crete, Topolia. Between limestone rocks, under Pinus brutia, on steep slopes. Ex D.M.Hoskins 02-05. (Recently described. We listed the original discovery under C. hederifolium, ref. 364.050, from the M. Jope 95-038 coll. An extremely local, very large-leaved, scented, tetraploid race.) (10+) C 364.515: CYCLAMEN INTAMINATUM * No data but selected over decades from the E.K. Balls 628 coll. for its silver-marked foliage. A beautiful leaf-form of this little, hardy species with small, veined, white flowers in early autumn. (10+) D 364.518: CYCLAMEN INTAMINATUM * No data. From both pale pink and white forms of this tiny, dainty, autumn-flowering species from SW Turkey. Variably marked leaves. Temperature-hardy in the UK but best in a trough. (15+) B 364.520 : CYCLAMEN INTAMINATUM from PLAIN-LEAVED FORM * No data. Distinct variant with dark, unmarked leaves, like a plain-leaved C. coum. Dainty, delicately veined, white flowers in early autumn. (20+) B 365.010: CYCLAMEN LIBANOTICUM * No data. Most sumptuous of the spring-flowering ones with large, pale-pink flowers, distinctively marked with crimson. It can be grown successfully outside in the UK but it is best under glass. (15+) C 365.520: CYCLAMEN MIRABILE * No data. Dark-green, rounded leaves, zoned with silver & often suffused with carminepink as they unfold. The autumnal, pink flowers, basally blotched with crimson, have toothed corolla lobes. (10+) C 366.500: CYCLAMEN PERSICUM * Lebanon, S of Tripolis. (From material we collected in the 1960's in the Lebanese hills,... It fills the dry-stone walls of abandoned terraces with a profusion of white & pale pink, crimson-nosed flowers.) . (15+) C 366.510: CYCLAMEN PERSICUM * Greece, Rhodes. Ex an E. Sewell coll. (From an excellent form, dwarfer & altogether more 366.550: CYCLAMEN PERSICUM * No data. From a range of wild-forms with elegant flowers, mostly in crimson-nosed, palest 366.551: CYCLAMEN PERSICUM f. PUNICEUM * No data. From crimson-pink forms, some probably originating in Syria. These deeper coloured forms have been further selected by Peter Moore as 'Tilebarn Karpathos', though there was no other indication that the originals came from that island. Likely to produce some lovely, deep, dusky shades of pink.) .. (10+) C 367.010: CYCLAMEN PSEUDIBERICUM * No data. Among spring-flowering ones, this S Turkish endemic rivals the related C. libanoticum. Magnificent rich crimson-purple flowers. Possible outside & splendid in a cold greenhouse (15+) C 367.015: CYCLAMEN PSEUDIBERICUM f. ROSEUM * Turkey, Adana, near Dortyol. Ex ACW 664. (From pale pink forms, originally selected out of the Albury, Cheese & Watson coll. of this variable Amanus population by Jack Boggis in the 1960's. Distinct from most cultivated forms, not only in the colour but in their elegant, more elongated petals.) (10+) D 367.908: CYCLAMEN REPANDUM (subsp. repandum) * France, Corsica, near Belogodere. c.350m. Under Arbutus in soil pockets over slate. Ex D.M.Hoskins colls. (From selections made for the depth and intensity of flower colour. Not always the easiest of species to grow, though it can be seen naturalized in quantity in some mild, UK gardens. Variably patterned, ivy shaped leaves and elegant flowers of luminous carmine-pink in spring. Like cool, shaded conditions in summer.) . (15+) D 367.990: CYCLAMEN REPANDUM f. ALBUM * From white forms of the type of C. repandum originating from collections in Corsica. Pure white flowers without a pink nose. Produces a good number of white seedlings. (15+) E 368.002 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM (C.peloponnesiacum) * Greece, Lakonia, Parori near Sparti. 250m. Beneath Quercus and Buxus, in humus. (From collections made by Ken Aslet, Peter & Penny Watt and ourselves in the Parori gorge, Many clones are outstanding with white-stippled foliage and flowers in luminous neon-pink.) (15+) D 368.003: CYCLAMEN REPANDUM subsp. PELOPONNESIACUM (C.peloponnesiacum) * Greece, Lakonia, Oros Taigetos, above Paleopanagia. 1400m. In humus under Platanus, Abies & Pinus. Ex JJA 5157 (From a clone with foliage, speckled all over with white, but this population, from a much higher altitude than that usually recorded for this subspecies, has extremely variable leaf-markings, many like the type-race. Flowers, however, are consistently pale-pink with red noses.) ... (15+) E 368.009: CYCLAMEN REPANDUM subsp. PELOPONNESIACUM (C.peloponnesiacum) * Greece, Lakonia, Oros Taigetos, Profitis Ilias. 2000m. Under rocks on open hillside. Ex D.M.Hoskins 98-23. (From another extremely high altitude coll. made well above the tree-line. Foliage variably speckled with white. Flowers are consistently pale-pink with red noses.) (15+) E 368.010: CYCLAMEN REPANDUM subsp. PELOPONNESIACUM (C.peloponnesiacum) * Greece, Lakonia, S of Kardamili. 30m. At base of cliff with Scilla & Lithodora. Ex D. Hoskins 93-8. (From a "superb leaf-form" selected in nature.). (10+) E 368.100: CYCLAMEN REPANDUM subsp. PELOPONNESIACUM f. VIVIDUM (C.peloponnesiacum f. vividum) * Greece, Lakonia/Arkadia, Oros Parnonas. c.500m. Ex a P.& P.Watt coll. (A poorly defined population localized in hills of the Parnon area of the central Peloponnese. Typically it is a rich, glowing crimson in colour but it is extremely variable in foliage & flowershape. Peter and Penny Watt tell us that the deepest-coloured forms only occur in open, terra rossa situations. In shady gulleys, paler shades predominate, so expect some variation. Superlative and absolutely striking at its best.). (10+) E

A: \$3.00 £1.50 € 2. -C: \$5.00 £2.50 € 4. - \mathbf{E} : \$9.00 £4.50 € 7. -\$4.00 £2.00 € 3. -D: \$7.00 £3.50 € 5. -**F**: \$12.00; £6.00 € 9. •

endemic to Rhodes. Leaves irregularly splashed with greyish white & white (or occasionally very pale pink) flowers with pin 'noses' in spring. Not a vigorous race and definitely best grown frost-free under glass in the UK.)
369.000: CYCLAMEN ROHLFSIANUM * Libya, Cyrenaica, Benghazi to Jebel Akhdar. 200m. Among scrub on limestone (Pink flowers with projecting cones of anthers in autumn. Beautiful rounded leaves. Must be frost-free.) (10+)
384.020: DAPHNE MEZEREUM * No data. A glorious shrub, deciduous shrub, about 1m. or less in height, with purple-pin flowers wreathing the naked branches in spring. Red fruits cluster up the stems in summer
384.050 : DAPHNE MEZEREUM f. ALBA * No data. White flowers in spring are followed by amber-yellow fruits. A outstanding plant, which sows itself in our garden and invariably comes 'true' from seed
FRITILLARIA: 2008 seeds will be in our next list
531.809: GLADIOLUS ANATOLICUS * Turkey, Antalya, N of Akseki. 1300m. (A handsome, purple-pink S Turkish endemic 30-40cm. high, related to the Cypriot G. triphyllus. Usually grows in scrub over limestone. Easy in a bulb-frame.) (15+)
532.000: GLADIOLUS ATROVIOLACEUS* Iran, Lorestan, W of Azna. 1900m. Fallow-fields. (Splendid, 60cm. high species which stains the fresh green fields of the high Zagros valleys with its rich, dusky violet-purple flowers in spring. Seldom see in gardens but an extremely hardy species, suited to a well-drained site in full sun in the UK.)
532.309 : GLADIOLUS ILLYRICUS Spain, Segovia, El Espinar. 1300m. R.D.Dominguez coll. (A hardy species, distribute through S & W Europe. Red-purple flowers on 50cm. tall stems. Easy in the UK, where it is a very rare native.) (15+)
532.360 : GLADIOLUS IMBRICATUS Lithuania. Wet meadow. (A hardy species from eastern Europe through Russia to the Ukraine. Dense, one-sided spikes with up to 12, purple flowers on 80cm. stems. Like the somewhat more southern G. palustria a species of seasonally wet habitats in cold climates. It should be well suited to British gardens.)
532.601: GLADIOLUS KOTSCHYANUS * Turkey, Van, NNW of Baskale. 2800m. Along seasonal, snow-melt stream. (A sof lilac, 30cm., alpine-meadow form of this species of spring-wet, grassland habitats in cold E Anatolia.)
532.602 : GLADIOLUS KOTSCHYANUS * Turkey, Erzurum, Kop Dag. 2400m. Among Salix in wet-flush. (A good deep crimson montane form, originally collected as a dwarf variant but it now reaches 40cm. in cultivation.)
532.810 : GLADIOLUS PALUSTRIS * No data. An attractive plant very seldom seen in UK gardens, though it is utterly hard and well-adapted to the climate. Distributed in moist meadows, here and there though central & E Europe, from SE France to the Ukraine. About 30cm. high with a loose, secund spike of up to 6 purplish red flowers in early summer (15+)
563.001: HELLEBORUS VESICARIUS * Turkey, Gaziantep, hills between Gaziantep & Sakcagoz. c. 1000m. Among spars scrub in terra rossa over limestone. (Like no other hellebore in its spectacular, inflated seed-capsules, up to 15cm. long, this is summer-dormant & usually best suited to the bulb-frame in the UK. Seed usually germinates irregularly. The cucumber-lik seedlings often go dormant without producing true leaves. These first-year, dormant roots can be lost through overdrying of this is the most critical period. Viability of seed lasts for many years so do keep ungerminated seed.)
HYACINTHELLA, HYACINTHOIDES: 2008 seeds wil be in our next list
Hyacinthus: a complete listing of this beautiful genus
572.500: HYACINTHUS LITWINOWII * Iran, Khorasan, W of Bojnurd. 1200m. Steep, open, loose, stony slopes. (A Kope Dag endemic. Most distinct in its rosettes of very broad, flat basal leaves, in the centre of which several very short, archin stems carry a succession of delicately scented hyacinth-flowers, variable from palest ice-blue to soft lilac-pink, opening near ground-level in early spring. It needs a hotter, drier summer rest than the other species in this genus.)
572.550: HYACINTHUS ORIENTALIS (subsp. orientalis) * Turkey, Gaziantep, Nur Daglari, above Fevzipasa. 1150m. In shad of Quercus scrub. Ex JJA 17744 (The more southern, lower altitude type of the ancestor of the bloated commercial hyacinthe Up to 12, waxy bells on 20cm. stems in soft, celestial blue with a heavenly scent. A very beautiful plant seldom seen i cultivation. These two collections flower a few weeks apart & represent quite distinct variations.)
572.551: HYACINTHUS ORIENTALIS (subsp. orientalis) * Turkey, Mersin, E of Gulnar. 900m. Limestone cliffs. (10) 1
572.600: HYACINTHUS ORIENTALIS subsp. CHIONOPHILUS * Turkey, Sivas, Ziyaret Tepe. 2100m. Limestone crevices (A dwarf, few-flowered hyacinth. A snow-melt alpine from the high mountains in S Central Turkey. Pale slate-blue, wax flowers with long perianth lobes, on short stems. Stays neat here under glass & has the most exquisite scent.) (10)
572.602: HYACINTHUS ORIENTALIS subsp. CHIONOPHILUS * Turkey, Nemrut Dag. 2000m. Limestone (10) 1
572.650: HYACINTHUS TRANSCASPICUS* Iran, Mazandaran, S of Azad Shahr to Shahrud. 2200m. Rock crevices & at bas of cliffs. (An Iranian endemic from the ranges at the eastern end of the Elburz. From similar habitats to Turkish H.o. subspachionophilus & probably more closely allied to this than to H. litwinowii. A dwarf, alpine species with a few pale-blue hyacinth flowers on very short stems in early spring. Not easy &, like H. litwinowii, tends to flower prematurely.) (10)
A 62.00 C1.50 C2 C2 C5.00 C4.50 C4. F. 60.00 C4.

Iris: 2008 hand-pollinated Oncocyclus seed

iris: 2008 nand-pollinated Oncocyclus seed
583.105: IRIS ACUTILOBA subsp. LINEOLATA (Sect. Oncocyclus) * Iran, West Azerbayejan, pass between Agh Bolagh & Disaj. 2200m. Among steppe vegetation on stony slopes & ridgetops. (Dwarf & exquisitely elegant with narrow, falcate foliage. Pointed whitish segments with dark brown veins & a small maroon-black signal-patch.)
584.701: IRIS BARNUMAE (subsp. barnumae f. barnumae) (Sect. Oncocyclus) * Turkey, Van, SW of Timar. 1880m. Among steppe vegetation on open slopes. (The first time we have been able to list seeds of the Turkish type-race. A superlative, dwarf steppe-species: beautifully proportioned, violet-purple flowers with narrow, beards of creamy yellow hairs.) (5) F
584.750: IRIS BARNUMAE f. PROTONYMA (Sect. Oncocyclus) * Iran, West Azerbayejan, N of Khoi, Khamsian pass. 1585m. Residual steppe between cultivated areas. (Flowers in pure, penetrating, rich red-violet. The standards are slightly paler than the falls with their glossy, black-violet signal-patches below distinctive, broad beards of dense, short, black hairs, like patches of moleskin. This race is endemic to NW Iran and this colony has the finest forms we have seen.)
589.605: IRIS IBERICA subsp. ELEGANTISSIMA (Sect. Oncocyclus) * Turkey, Iğdir, N of Tuzluca. 1000m. Loose igneous slopes with sparse Artemisia & Salvia scrub. (One of the most spectacular of the dwarf Irano-Turanian steppe irises. Huge flowers with upright, cream standards & vertical, concave falls, so densely veined & stippled with darkest maroon as to appear almost black. From an area with very cold winters and dry summers, which are not too hot.)
590.256: IRIS KIRKWOODII (Sect. Oncocyclus) * Syria, W of Aleppo, Bishmishli. Rocky outcrops between cultivated fields. Ex R.& R.Wallis 95-09 (From a type-locality collection of this spectacular relative of <i>I. gatesii</i> from around the border of Turkey & Syria. Somewhat intermediate between this and the dark-veined, more southern species centred on <i>I. sofarana</i> . About 30-40cm. tall with huge flowers with tucked-in falls. Standards veined & stippled with violet on a whitish ground. Falls veined with deeper purple. A vigorous plant, possibly needing richer treatment than the Iranian steppe-species.) (5) F
590.801: IRIS LYCOTIS (I. iberica subsp. lycotis) (Sect. Oncocyclus) * Iran, West Azerbayejan, N of Khoi. 1380m. Among steppe vegetation on low hills. (Huge flowers, densely veined on both standards and falls with a netting of maroon-black on a grey-white ground & with a big, dark, velvety signal-patch, are carried on short stems. This population is not far from the type-locality, Nakhichevan across the border in Armenia, but the name is the only one available for all the very variable, dark-veined irises, which extend from this area down the western mountains of Iran to Shiraz and maybe beyond.) (5) F
590.806: IRIS aff. LYCOTIS (Sect. Oncocyclus) * Iran, Lorestan, WNW of Dorud. 2100m. In steppe vegetation on steep, N-facing slope. (Taller & more robust. Netted with maroon-black & with a black velvet signal-patch.)
591.061: IRIS MEDA (Sect. Oncocyclus) * Iran, Esfahan, SE of Aligudarz. 2400m. Among steppe-vegetation on steep slopes. (A striking Iris, close to I. sari (not accepted as occurring in Iran) but the falls are tucked in. The ground-colour is basically yellow, veined with dull brown & with a dense beard of bright yellow hairs above a maroon-black signal patch. This collection is from the central Zagros Mts., much further S than we would have expected to find I. meda & into the territory of the big I. lycotis forms. From a spectacular and diverse colony with flowers varying from bright yellows to browns.) (5) F
592.320: IRIS PARADOXA (f. paradoxa) (Sect. Oncocyclus) * Armenia, near Lake Sevan. Ex a M. Prasil coll. (The northern, Transcaucasian type-race from Georgia & Armenia. Small, stiff, horizontal falls covered in black velvet & large, upright standards veined with deep-purple on a violet ground, in contrast to the white ground-colour of the more familiar SE Turkish & NW Iranian I.p.f. choschab. A good grower and by far the first of this section to flower with us.)
591.350: IRIS PARADOXA f. CHOSCHAB (Sect. <i>Oncocyclus</i>) * Turkey, Van, NW of Gűzelsu (Hošab). 1800m. Among steppe vegetation in open sites. (Huge white standards, delicately veined with purple, & horizontal black-velvet falls.) (5) F
596.601: IRIS SARI (Sect. Oncocyclus) Turkey, Gaziantep, W of Gaziantep. 850m. Openings among scrub on limestone slopes. (A robust Turkish endemic most closely allied to the Iranian I. meda. Some find it one of the easier members of this difficult section to cultivate. Both standards & falls are veined with deep maroon on a straw-yellow ground. A large signal-patch of velvety maroon-black stains the falls below the cream to deep yellow beard of dense, short hairs.)
600.600: IRIS URMIENSIS (Sect. Oncocyclus) (I. barnumae subsp. barnumae f. urmiensis) * Iran, West Azerbayejan, S of Salmas. 1780m. Montane grassland over crystalline rock & on open, stony slopes. (A beautiful & unmistakeable Iris, a restricted endemic from a range of hills S of Salmas. About 20cm. high with clumps of little, curved, grey-green leaves & large clear-yellow flowers with beards of dense, orange-yellow hairs above deep-yellow signal-patches on the falls.) (5) F
IRIS: A extensive range of 2008 seeds from other sections of this large genus will be in our next list.
630.740: LEUCOJUM VERNUM var. CARPATHICUM * No data. A variant of the large, early spring snowflake from the Carpathians with acid yellow (instead of green) tips to its big white bells on 30cm. tall stems. L. vernum and L. aestivum are the only two species remaining in the recently, sensibly, revised genus Leucojum. We grow an excellent, vigorous fertile form of this handsome, hardy bulb, which came to us from Ivor Barton. A lover of really moist sites

€ 2. -

€3.-

C: \$5.00 ;

D: \$7.00

£2.50 ;

; £3.50 ;

€ 4. -

€ 5. -

E: \$9.00;

F: \$12.00; £6.00

£4.50

£1.50

£2.00

A : \$3.00

B: \$4.00

Muscari: some choice species

We list a farly extensive range of this genus, which includes many choice and challenging species, as well as easily grown ones. It can be conveniently split into three or four genera. The most recent Kew check-list places some of the species in *Leopoldia* and some in *Pseudomuscari* but this is done so indiscriminately and contains such bizarre aberrations as

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placing Bellevalia forniculata in the genus Pseudomuscari that it is obvious that the compiler knew little if anything about these and allied plants. For the present, we follow the 'Flora of Turkey' and 'Flora Europaea' in keeping them all together and await a revision of all or part of the genus by someone with a genuine knowledge of the plants.

687.950: MUSCARI ANATOLICUM (Subgen. <i>Botryanthus</i>) * Turkey, Konya, Sultan Dağ. 1760m. Exposed limestone ridgetop. (Tiny, recently described species. Open-mouthed, white-tipped flowers. See also <i>Muscari</i> aff. <i>discolor</i> .) (15+) C
688.002 : MUSCARI ARMENIACUM (Subgen. Botryanthus) * Turkey, Gaziantep. Ex a N. Stevens coll. (From an excellent, striking brilliant ultramarine blue form. Easy to grow but by no means invasive)
688.012: MUSCARI ARMENIACUM from PINK FORM (Subgen. Botryanthus) * Turkey, Konya, S of Beyşehir Gölu. 1100m. Roadside verge. Ex R.& R. Wallis 90-50. (The clone, selected in Turkey by Bob & Rannveig Wallis ago is now named 'Gul', Turkish for rose. Pinkish white flowers blush to deep pink as they mature. A good percentage come 'true'.) (15+) E
688.101 : MUSCARI AUCHERI (Subgen. <i>Botryanthus</i>) * Turkey, Bolu, near Abant Golu. 1000m. Ex N. Stevens 2541 (A striking bicoloured form. Mid-blue and white flowers over short, neat foliage. From a cool, moist part of Turkey.) (20+) A
688.205: MUSCARI AZUREUM (Subgen. <i>Pseudomuscari</i>) * Turkey, Kahramanmaras, S of Goksun. 1240m. Cultivated field. Ex R.& R.Wallis 93-28 (A local plant in the wild, close to <i>M. pseudomuscari</i> & <i>M. mcbeathianum</i> with dense, ovoid racemes of open-mouthed, sky-blue bells on 10cm. stems. The wild species does not proliferate much vegetatively.) (15+) D
688.500: MUSCARI BOURGAEI (Subgen. Botryanthus) * Turkey, Denizli, Honaz Dağ, SE of Denizli. 1700m. Exposed, limestone ridge. (Dense heads of globular flowers, in mid-blue, with paler lobes, on 10 cm. stems. Not easy.) (15+) D
688.500: MUSCARI BOURGAEI (Subgen. <i>Botryanthus</i>) Turkey, Eğridir, above Davras. 2000m. (Identified by Arnis Seisums who comments on its comparatively wide leaves with a central whitish stripe, like some <i>Ornithogalum</i> spp. This subgenus needs revision but this is probably the same taxon as the Honaz Dağ plant.)
688.600 : MUSCARI CAUCASICUM (Subgen. <i>Leopoldia</i>) * Turkey, Kars, SSW of Sarikamis. 1800m. Igneous slopes. (Very handsome. Extends across Transcaucasia to NW Iran. 30cm. high with arresting, amethyst-violet sterile flowers.) (15+) A
688.705: MUSCARI COELESTE (Subgen. <i>Pseudomuscari</i>) * Turkey, Nigde, Kamirkazik Dag, 1700-1750m. Ex KPPZ 90-318. (A diminutive Turkish alpine endemic with a classic Anatolian diagonal distribution, obliquely from here almost to the Georgian & Iranian borders. Only a few cm. high with tight, rounded racemes of open-mouthed, sky-blue bells followed by turquoise-blue tinted capsules. A very local species, which is little-known but will certainly resent hot, dry conditions.) (15+) D
689.050: MUSCARI aff. COMOSUM (Subgen. Leopoldia) * Greece, Ioanina, N of Konitsa. 800m. Shale. (Will not key-out as M. comosum as the bulb tunics are not pink. We dissuaded Kit Tan from describing it as a new species.) (15+) A
689.210: MUSCARI CYCLADICUM (Subgen. Leopoldia) * No data. A distinct Leopoldia endemic to the Kiklades off the Greek coast. About 30cm. high with cylindrical racemes of brown fertile flowers with bright tawny-yellow teeth and colourful sterile flowers on pale-violet pedicels. The true plant from the stock grown at Berlin Botanic Garden (10+) C
Muscari discolor: the genuine species
689.270: MUSCARI DISCOLOR (Subgen. Botryanthus) * Turkey, Mardin, N of Mardin. 1100m. Among talus on steep limestone slopes. (This is the 'true' plant. Haussknecht's type-collection was from Mardin & this taxon appears to be restricted to the hills in southern Urfa & Mardin provinces, along the northern edge of the Syrian Desert running towards the Iraqi border. Extremely early flowering (February with us) & about 10cm. tall with racemes of bicolored, open-mouthed bells, the blackish blue of the base contrasting with the white of the apex, which occupies almost half the length of each flower.) (15+) D
689.300: MUSCARI aff. DISCOLOR (Subgen. Botryanthus) Turkey, Sivas, Ziyaret. 2100m. Limestone-gravel. (Identified by both Kit Tan and Karin Persson independently as M. discolor. We cannot accept this. It is similar to but certainly not the same as the above taxon from the N edge of the Syrian Desert. We are told that this populations has been identified as M. anatolicum but again they appear different from the Konya populations. Tiny with white-mouthed, dark-blue bells.) (15+) C
689.450: MUSCARI GRANDIFOLIUM (Subgen. <i>Botryanthus</i>) * Morocco, Middle Atlas Mts., above Ifrane. 1700m. Red clay on limestone. (Not unlike a large version of <i>M. latifolium</i> , though considered by Kew to be a synonym of <i>M. neglectum</i> (it is not even remotely like any form of this variable species). Blue-black flowers from china-blue buds. 20-30cm.) (20+) B
689.800: MUSCARI LATIFOLIUM (Subgen. <i>Botryanthus</i>) * Turkey, Balikesir, Kaz Da. 1200m. Coniferous woodland. (A local species but an easy garden-plant in the UK. Racemes of deepest violet-black flowers from pale-blue buds) (20+) B
689.850: MUSCARI LEUCOSTOMUM (Subgen. <i>Botryanthus</i>) * Turkmenistan, Kopet Dag, near Duschak. Ex a J. Ruksans coll. (An eastern species, allied to <i>M. neglectum</i> , barely known in cultivation. Distinct blue-black flowers.) (20+) C
A: \$3.00 ; £1.50 ; €2 C: \$5.00 ; £2.50 ; €4 E: \$9.00 ; £4.50 ; €7

£3.50

€ 5. -

£6.00

\$12.00 ;

- **689.900**: MUSCARI LONGIPES (Subgen. *Leopoldia*) * Turkey, Malatya, WNW of Darende. 1500m. Shale. (Distinct with a big tassel of violet, sterile flowers. Pedicels elongate in fruit & the dry stem blows away tumbleweed-fashion.) . . (15+) C
- 690.000: MUSCARI MACROCARPUM (Subgen. *Muscari*) * Greece, Samos, Mt. Vigla. 800m. Old olive-groves. Ex a D. Hoskins coll. (A superb form of this gloriously scented species, near *M. muscarimi*, very local in SW Turkey & some E Aegean islands. Greyish, channelled leaves & yellow flowers opening from dull-purple buds on 15cm. stems.) (10+) **D**

Muscari massayanum: 'the pink tassel-hyacinth'

- 690.040: MUSCARI MASSAYANUM (Subgen. Leopoldia) * Turkey, Niğde, SW of Çiftehan to Maden. 1200m. Loose, igneous, rock detritus on steep, open slope. (At last we have a stock of the genuine pink tassel-hyacinth, about 20cm. tall with greyish leaves. One of the most distinct in the genus & the only member of its subgenus with indehiscent capsules. In our experience, this desirable taxon with a bright carmine-pink coma of sterile flowers seems to be confined to a comparatively small area of the Taurus range around the Cilician Gates. A marvellous, choice plant for the bulb-frame. (10+) E
- 690.050: MUSCARI aff. MASSAYANUM (Subgen. Leopoldia) * Turkey, Erzurum, N of Aşkale. 2000m. Serpentine talus. (Plants allied to M. massayanum occur in Erxincan, Tunceli & Erzurum provinces, about 400km. to the NE of the preceding locality. They tend to be somewhat taller with different leaf characteristics & have bright violet sterile flowers. In spite of the fact that the pink colour is cited as the diagnostic character, they are being distributed in cultivation as M. massayanum. Possibly subspecific level would be appropriate. About 30cm. or more tall & very handsome but not the pink taxon.) (10+) E
- 690.080: MUSCARI MCBEATHIANUM (Subgen. *Pseudomuscari*) * Turkey, Adana, ENE of Tufanbeyli. 1200m. Open areas among *Pinus* in fine sand. (Racemes of open-mouthed, ice-blue to white flowers from porcelain-blue buds on 10cm. stems. A charming, delicate little species we discovered in 1985. Needs careful watering in the alpine-house.) (15+) **D**
- 690.150: MUSCARI MIRUM (Subgen. Leopoldia) * Turkey, Mugla, SE of Altinyayla. 1650m. Open serpentine ridge. (Recently described & distinct in flower, foliage & seed. Subtle rather than spectacular in dull gold & purple. Not easy.) (10) E
- 690.220: MUSCARI MUSCARIMI (Subgen. *Muscari*)* No data. A better-known form. (This is in Group A in the account mentioned above: from serpentine in Antalya & Usak provinces. Whitish flowers from buds, tinted violet-blue.) . . (10) C
- 690.550: MUSCARI PALLENS (Subgen. *Pseudomuscari*) * Russia, North Ossetia, near Holst. 2400m. Rock crevices. Ex RP 83-27 (A distinct, beautiful & local plant from the mountains of the northern Caucasus. One of the latest to flower with 15cm. stems bearing compact heads of open-mouthed, palest ice-blue or creamy white flowers.) (20+) C
- 690.700: MUSCARI PSEUDOMUSCARI (Subgen. *Pseudomuscari*) * Iran, Mazandaran, S of Chalus. 1500m. Ledges on limestone cliffs. (Lovely endemic of the Chalus gorge on the wet Caspian slope of the Elburz, described as *M. chalusicum* in the 1960's, but *M. pseudomuscari* has priority. Refined heads of open-mouthed, china-blue bells.) (20+) B
- 691.008: MUSCARI SPREITZENHOFERI (Subgen. Leopoldia) Greece, Crete, Monasteraki gorge. Ex a N. Stevens coll. (Tassels of amethyst-purple sterile flowers top racemes of fertile ones in brown with bright yellow lobes.) (10) C
- 691.202: MUSCARI TENUIFLORUM (Subgen. Leopoldia) * Turkey, Antalya, S of Bakaran. 1200m. Limestone. (Distinct from M. caucasicum & M. comosum in the black teeth of the fertile perianths. Violet sterile flowers. 50cm. tall.) (15+) A
- 691.251: MUSCARI aff. TENUIFLORUM (Subgen. Leopoldia) * Iran, Kordestan, SW of Negel 1350m. Quercus scrub on shale. (A distinct taxon, which merits a name. It seems to be confined to the oak-scrub areas of Kurdistan, along the borders of Turkish Hakkari & NW Iran, possibly extending S into N Iraq. With its big coma of violet-blue sterile flowers, Paul Furse dubbed it the 'bluehot poker' in the 1960's. The tallest of all, 1m. or more high in the wild, it can be keyed-out to M. longipes, as the lower pedicels elongate in seed. It could be considered intermediate between the two species.) (10+) D
- 691.409: MUSCARI WEISSII (Subgen. Leopoldia) * Turkey, Antalya, Gulluk Daği. 500m. Terra rossa. Ex a P.& P.Watt coll. (Local on some Greek & Turkish islands & in SW Anatolia. Amethyst-purple sterile flowers. 30cm. tall.) (10) C
- 741.500: OSTROWSKIA MAGNIFICA * Tajikistan, Hissar range, Karatag valley. ("Unique among perennials it is worthy of any care to make it a success" wrote William Robinson in 1883. "An unbelievable plant until seen" commented Graham Stuart Thomas in 1973. A monotypic genus in Campanulaceae, locally endemic to Central Asia. Best described as a giant Platycodon, growing between 50cm. and 1m. tall, with stems whorled with glaucous leaves carrying enormous, floppy bells in chalk-white, tinged and veined with lilac-blue, in early summer. It quickly retires to a fat tuber after flowering. It is a long-lived perennial & very slow to build-up from seed but we grew it successfully in Dorset in a raised bed against a South-facing wall. Patience & a good, rich, deep but well-drained soil in a warm sunny site are the essentials for cultivation in the UK.) (20+) E

A: \$3.00 £1.50 € 2. -C: \$5.00**E**: £2.50 € 4. -\$9.00 £4.50 € 7. -B: \$4.00 £2.00 € 3. -D: \$7.00 £3.50 € 5. -F : \$12.00 £6.00 € 9. -

Paeonia: hand-pollinated seeds from authentic parents

Our efforts to establish parent stocks in cultivation, derived from authentic, wild-collected material, are now yielding seeds for our lists and will ensure reliable seed supplies of an expanding range. Seeds are from the 2008 harvest from our stock-plants, all originally raised from wild-collected seed, planted out in a polytunnel & hand-pollinated between clones. As we are now getting to know these better, we have adjusted prices and quantities of seed per packet to reflect the difficulties in cultivation and the yield of seed from each species. Even if sown promptly, these may not show leaf-

growth until spring 2010 or later. 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 germinate hypogeally, forming a rootsystem underground during the first cool period before sending up true leaves the following season. Though these are dry-climate plants able to withstand summer drought, it is best to ensure young seedlings do not become dehydrated. In the UK, just standing the container outside in a shaded place is usually enough to avoid this.

- 745.950 : PAEONIA BIEBERSTEINIANA (P. tenuifolia complex) * Russia, Stavropol, Beketovaya. (Much dissected leaves but less finely cut than P. lithophila & bright red flowers. Distinct from others in this disjunct complex in its greyish, hairy 746.020: PAEONIA BROTEROI * No data. A fine species, confined to the Iberian peninsula. Smooth, much cut foliage, 746.100: PAEONIA CAMBESSEDESII * The dwarfest species, endemic to the limestones of the Balearic Islands and best with a little protection in the UK. About 30cm. high with beautiful, smooth, grey-green foliage, crimson beneath, & big, rosy flowers, up to 10cm, across in spring. Our parent stock-plants are always a breathtaking sight when in flower. (8) 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. The most robust of the P. tenuifolia complex.) (5) F 746.209: PAEONIA CLUSII * Greece, Crete, Spakhia, Samaria Gorge at Agios Nikolaos. ("The most elegant of Greek peonies" remark William Stearn & Peter Davis in their monograph. About 30cm. tall with "cerise-tinged stems, finely cut leaves and large white clove-scented flowers". Needs a sheltered, well-drained site if attempted outside in the UK)..................... (6) F 746.409: PAEONIA CORIACEA var. MAROCCANA (P.c. var. atlantica) * Morocco. No further data. Ex a M.Salmon coll. (A spectacular feature of the cedar-forests of the Middle Atlas mountains. Smooth foliage & large rose-pink flowers. Not always easy outside in the UK. Absolutely temperature hardy but seems to miss the cold winters & warm, dry summers.) .. (6) F 746.500: PAEONIA DAURICA (P. mascula subsp. triternata) Ukraine, Krim (Crimea). (Pink-flowered & 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 but for the purist the Crimean ones are the 'real thing'. The valid name is an unfortunate mispelling of "P. taurica".) . (5) D 746.520: PAEONIA FLAVESCENS (P. mascula subsp. hellenica, Sicilian population.) * Italy, Sicily. Ex W. McLewin 01-08. (In spite of the considerable geographical disjunction, this is placed under P. mascula subsp. helllenica by Stearn & Davis in their monograph. Grown in cultivation, it is, however, perfectly distinct from the Greek plants. Fortunately Presl described it as a full species in 1822, so we have a name for it. A much taller plant than P.m. hellenica with more bowl-shaped, white flowers, which are sometimes rimmed with a pink suffusion giving a beautiful, diffuse picottee effect.) (8) F 746.608: PAEONIA KESROUANENSIS * Syria, Alladiqiyah, Jabal an Nuşayriyah. (An oak-scrub species of the Syrian & Lebanese coastal mountains, just entering Hatay in S Turkey. Its soft-pink flowers open very early as the large foliage unfolds, so it will need a sheltered, well-drained site if attempted in the open garden in the UK. Most distinct in its very large, thick-746.640: PAEONIA LITHOPHILA (P. tenuifolia complex) * Ukraine, Krim (Crimea). (The Crimean race, which probably covers 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. Brilliant red cups hold bright yellow stamens in early summer on compact plants, about 50cm. high. We grew this as "P. tenuifolia" in our nursery years ago from seed received from what was then the Nikita Botanic Garden in Yalta. Maybe the most striking of this complex & the most satisfactory garden plant in it for UK gardens.) (8) E 746.680: PAEONIA MACROPHYLLA (P. wittmanniana complex) * Georgia, Bakhmaro area. Woodland. (A few cultivated seed of this rather distinct plant. Creamy white flowers. Not easy to grow. Needs humus-rich soil in shade.) (3) F 746.706: PAEONIA MASCULA (subsp. mascula) * Cyprus, Mt. Adhelfi. Ex A. King 224. (A big robust plant, which Mike Sinnott, currently working on a Kew Monograph of Paeonia, considers may have some affinities to P. kesrouanensis from the adjacent Syrian mainland, though, unlike it, this has tomentose carpels. Plants from this island have always been placed under P. mascula. Almost blue-tinged, hairless foliage, cut into few segments & magnificent rosy-pink flowers.) (8) C 746.800: PAEONIA MASCULA subsp. ARIETINA * Turkey, Gümüşhane, Soğanli Dağlari above Bayburt. 1800m. Very steep, open slopes, in igneous scree. (A splendid plant, widespread but local in E Turkey. About 50cm. tall with foliage, downy beneath, cut into many segments. Bowls of rose-red petals, up to 15cm. across, hold the yellow anthers surrounding the woolly
- A: \$3.00 £1.50 € 2. -C: \$5.00£2.50 € 4. -E: \$9.00 €7.-£4.50 **F**: B: \$4.00 £2.00 € 3. -D: \$7.00 £3.50 € 5. -\$12.00 ; £6.00 € 9. -

white follicles. From a cold part of Turkey & usually not too demanding in a well-drained site in the UK.) (8) C

746.880: PAEONIA MASCULA subsp. BODURII * A recently described race, narrowly endemic to the Canakkale region in 746.909: PAEONIA MASCULA subsp. HELLENICA (var. hellenica) * Greece, no further data but possibly the Evia population. ("The large flowers...with their spreading, lightly crinkled pure white petals and red and yellow stamens, arising out of bold foliage, place it among the most beautiful of wild peonies," comment Stearn & Davis in their monograph 'Peonies of Greece'. Quite recently described, in 1977, we should prefer to have seen it placed at specific level.) (8) E 746.951: PAEONIA MASCULA subsp. HELLENICA var. ICARICA * Greece, Ikaria, foothills of Atheras. 400-650m. On schist. (Endemic to the island of Ikaria, where it grows in mixed deciduous and Abies woodland, and distinguished from the 747.002: PAEONIA MASCULA subsp. RUSSI * Italy, Sardinia. Ex J. Persson 92-1 (Beautiful, distinctive, smooth, red-backed foliage, which is usually just expanding as the glorious pink, bowl-shaped flowers open. At 20-45cm, high, the dwarfest race of the P. mascula group. Like other Mediterranean island species, it needs a sheltered site outside in the UK.) (8) D 747.109: PAEONIA MLOKOSEWITSCHII from SELECTED EARLY YELLOW * Georgia, Kakheti, Lagodekhi, near Shirati. (Some years ago we obtained a small quantity of seed collected in the Lagodekhi Nature Reserve by a botanist from the Georgian Academy of Sciences in Tblisi. While foliage on all is typical of this species, as we know it, the flowers on the resulting plants have been disconcertingly variable with several pinks occurring. This is one of the only two known localities for P. mlokosewitschii & it is also the type-locality and the only site for P. lagodechiana, the "pink P. mlokosewitschii". We tentatively concluded that in the wild the colour-forms are mixed and that what we grow in cultivation is a garden selection. This has subsequently been confirmed to us by Dr. Michael Almond who recently visited this colony in flower. It grows on very steep slopes in dense woodland & the flowers vary from white to pink and yellow. This seed is from our selection from these wild seedlings: a very fine, robust, early-flowering yellow with crimson-tinged filaments.) (6) E 747.110 : PAEONIA MLOKOSEWITSCHII * No data. A restricted Georgian endemic & a "a sovereign among Paeonies" according to Farrer. Few would disagree. Large, pale lemon-yellow flowers with deeper yellow stamens above 60cm. clumps of rounded, greyish-green leaves, which are beautifully tinted with crimson as they emerge in spring. English-grown seed, openpollinated but any colour variation would now appear to be an inherent characteristic of the 'species'............... (8) C 747.150: PAEONIA OFFICINALIS (subsp. officinalis) * Croatia, Istria. (From a fine form of this variable South European species, distributed from France to Romania. Deeply divided foliage & red flowers with crimson filaments.). (6) D 747.659: PAEONIA PARNASSICA * Greece, Fokida, Oros Parnassos. 1300m. (Unlike any other in its glossy, black-maroon flowers and its running, stoloniferous habit. Only known from the twin mountains of Parnassus & Elikon.) (3) F 747.720: PAEONIA PEREGRINA from ROMANIAN FORM (P. romanica) * No data. From the eastern end of the species distribution but does not differ substantially from other races of this magnificent plant from Italy through the Balkans. Distinct & spectacular with large, glossy flowers in eye-burning scarlet over deeply cut, shiny, bright-green foliage. (6) E 747.820: PAEONIA RUPRECHTIANA * No data. A local, Caucasian population in the P. mascula complex with fine pink 747.845 : PAEONIA SINJIANGENSIS * China, Xinjiang. (Described from the wooded valleys of the Tien Shan in N Xinjiang near the Kazakhstan border. Placed under widespread P. anomala subsp. anomala in the account of this genus in 'Flora of China', in which rose to red P. anomala is considered to encompass variable populations, including P. veitchii.) ... (5) F 747.850: PAEONIA STEVENIANA (P. wittmanniana complex) (possibly the same as P. wittmanniana var. nudicarpa) * Georgia, Bakuriani area. (A beautiful yellow-flowered peony, wholly different to P. mlokosewitschii. Paler flowers, just tinged with citron-yellow, holding stamens with reddish filaments, over larger, thinner textured foliage.) (8) E 747.900: PAEONIA TENUIFOLIA * Georgia, Igoeti area. Steppe. (The crimson-flowered type-race has darker green, glabrous foliage, less finely cut than P. lithophila. Less vigorous & not such a good grower here as P. lithophila.) (5) F 747.961: PAEONIA TOMENTOSA * Azerbaijan. (A little-known, yellow-flowered species with woolly white carpels. Distinct from both P. mlokosewitschii & P. steveniana. There appear to be at least four distinct taxa of Paeonia along the southern rim of the Caspian.. There is another undescribed deep yellow one in the Iranian Talysh and the following undescribed, whiteflowered plant far to the East in Iran. The original collection, from which the parents of this seed were raised, was made somewhat to the North, up towards Armenia, in the main body of the Caucasus, in NE Azerbaijan.) (6) F JJA 17180: PAEONIA SP. NOV. * Iran, Mazandaran, ENE of Firuzkuh. 2000m. Steep slope near tree-line in rich diversity of dense, deciduous scrub. (A very beautiful white-flowered plant, morphologically easily distinguished from the geographically closest species, P. tomentosa & P. steveniana, which grow 600km. or more to the West. With its glabrous carpels & globular, pure-white flowers, which sometimes open almost at ground-level, it bears a superficial resemblance to P. obovata but the more

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Scilla: the best of the blues

$\begin{array}{cccccccccccccccccccccccccccccccccccc$
R.& R.Wallis 96-28: SCILLA SP. * Syria, NW of Misyaf. 890m. N-facing, rocky terraces & on rocky outcrops. (A very handsome plant, which may well prove to be an undescribed species. Beautiful, deep blue flowers with reflexed segments (like S. rosenii or S. greilhuberi), a characteristic not noted on any species recorded from this area.)
878.000: SCILLA VERNA * Spain, Avila, Sierra de Gredos, SW of Hoyos de Espino. 1700m. Moist turf. (Racemes of starry, lilac-blue flowers with blue-purple anthers. A montane, snow-melt form of this W European species.) (15+) B
877.550: SCILLA ROSENII Turkey, Ardahan, Çam geçidi ESE of Şavşat. 2300m. In wet turf below snow-patches and along snow-melt runnels. (A beautiful, high altitude, snow-melt species, centred on the Caucasus and just entering Turkey in the far NE corner next Georgia. Not the easiest to grow at low elevations, appearing very late with us and resenting high temperatures & summer drought. Very large pale-blue flowers with segments reflexing like an <i>Erythronium</i> flower.) (15+) E
877.200: SCILLA PUSCHKINIOIDES * Uzbekistan, Tashkent, Chatkal range, NW of Angren, Mazardjan. 1300m. In shade of shrubs. (Distinctive & choice. Many ice-blue, dark-striped flowers. 10cm. Resents hot conditions.) (10+) D
876.502: SCILLA PERSICA * Iran, Kordestan, ESE of Sanandaj. 1800m. Among long grasses in wet hay-meadow. (A fine plant, which should be growable outside in the UK. It usually inhabits subalpine meadows which are very wet in spring. Here it can contribute to a magnificent spectacle, growing in huge numbers in marshy hay-meadows with inky blue <i>Bellevalia pycnantha</i> and purple-red orchids & gladioli. Up to 50cm. high with open racemes of up to 50 blue flowers.) (15+) C
875.605 : SCILLA MORRISII * Cyprus, Paphos district. 700m. Moist, shaded crevices & banks, under <i>Quercus</i> . Ex D. Meikle 4015. (A very local Cyprus endemic, being successfully maintained in cultivation. About 10 cm. high, erect racemes of 3-5, campanulate flowers in milky-white tinged with lilac & with pale-blue anthers. No great problem to grow.) (10+) D
875.509: SCILLA MONOPHYLLOS * Spain, Cadiz, between Alcala & Ubrique. Cork oak woodland. Ex R.& R.Wallis 91-06 (A little, 10cm. tall species with a solitary, lanceolate leaf & racemes of up to 20, starry, mid-blue flowers.) (10+) C
875.200 : SCILLA MESSENIACA * Greece, Messinia, S of Kardamili. 30m. Shaded limestone rocks. (Local & confined to the tail-end of the Taigetos but seems totally temperature-hardy here. Racemes of pale-blue, starry flowers. 20cm.) (15+) B
875.000: SCILLA MELAINA * Turkey, Hatay, E of Belen. 1300m. Fissures on & at base of limestone cliffs. (A beautiful plant, more or less endemic to the Amanus Mts., the southernmost point of central Turkey. Excellent & trouble-free under glass & now proving a fine garden-plant. Several prussian-blue flowers on 20cm. stems in early spring) (15+) C
874.800: SCILLA LITARDIEREI* Bosnia & Hercegovina, above Dubrovnik to Trebinje. 500m. Fragmented limestone. (Heads of starry, pale-blue flowers on 20cm. stems. A lovely plant, local in nature but hardy in a sunny site in the UK.) (15+) A
874.400: SCILLA LILIO-HYACINTHUS * France, Hautes-Pyrenees, N of Col du Pourtalet. 1500m. Deciduous woodland. (Easy in the garden in the UK. Lush, glossy leaves always attract attention. 30cm. racemes of soft-blue stars.) (15+) A
874.309: SCILLA LIBANOTICA * Lebanon, E of Beirut, Tarchich. Damp, shady, rock crevices. Ex R.& R.Wallis 99-04. (A fine species, little, if at all, known in cultivation until this introduction. Very large, pale-blue flowers.) (10+) E
874.009: SCILLA INGRIDIAE (S. ingridiae var. taurica, S. siberica subsp. taurica) * Turkey, SE of Kahramanmaraş. Ex a N. Stevens coll. (This collection has been attributed to S. leepii and we have listed the R.& R.Wallis 93-33 collection from an adjacent area as S. siberica subsp. taurica. We believe it is now correctly identified. A seldom-collected, little species, endemic to the upper drainage of the Tigris, with up to 6, usually single-flowered, slender, 5cm. scapes rising from each bulb to carry flowers with lilac-blue segments with darker midribs. A lovely, early & long-flowering pan-plant.) (15+) D
873.800: SCILLA HYACINTHOIDES * Turkey, Siirt, between Kurtalan & Besiri. 500m. Wet meadows & streamsides. Ex a N. Stevens coll. (Seldom seen in gardens. A tall species, occurring locally & sporadically through southern Europe to N Iraq. Stout stems over 1m. high carry cylindrical racemes of about 100, starry, pale-margined, violet-blue flowers.) (15+) B
873.650: SCILLA GREILHUBERI * Iran, Mazandaran, S of Chalus. (Paul Furse's 'Caspian Bluebell', which grows locally in quantity in the crevices of large, limestone boulders in the central Caspian woodlands. Early & delightful with soft violet-blue flowers with reflexed segments. Hardy in the UK but flowers are better protected from winter-weather.) (15+) B
873.409: SCILLA CAUCASICA from SELECTED FORMS * Armenia, Zangezur range, Hustup. (Seeds from isolated selections from a colony with a fairly intense purple suffusion on the upperside of the foliage, which is adpressed to the ground at the time the flowers open. Seedlings so far are reliably purple-leaved. Very striking.) (15+) E
873.408: SCILLA CAUCASICA * Azerbaijan, Talish. (Like S. armena, this probably merits specific status. From a horticultural viewpoint, it is taller with a larger number of intense blue flowers than familiar forms of S. siberica.) (15+) C
873.210: SCILLA BITHYNICA * No data. An attractive plant for the open garden, which sows itself here. Native to the Black Sea coasts of Bulgaria & NW Turkey. From both pale-blues & whites with navy-blue anthers (20+) A
872.604: SCILLA AUTUMNALIS Spain, Segovia, El Espinar. 1300m. (A charming plant and seldom seen. Conical racemes of bluish lilac flowers on 15cm. stems appear before the leaves in early autumn & continue over a long period.) (20+) B

- 1.030.350: ALLIUM BOLANDERI * No data. From a neat, crimson-purple form of this species from below 1000m, in the Coast Ranges of S Oregon & N California. Open, rounded umbels of starry flowers on 15cm. stems. (20+) C 1.030.580: ALLIUM CRENULATUM * No data. A seldom-cultivated, dwarf, alpine species, rated as "a delightful small plant" to grow in a pot or a trough. Distributed locally in gravelly soils at high altitudes from British Columbia to Oregon. Two narrow, prostrate leaves and an umbel of white or pink flowers on a very short, sturdy, winged stem. (20+) C 1.030.805 : ALLIUM FALCIFOLIUM * Oregon, Josephine Co. Serpentine scree in full sun. (Showy umbels of red-purple flowers carried on flat, 1-5 cm. stems above falcate, blue-green leaves. A choice, compact plant ideal for scree in full sun. This population is more robust and vigorous in cultivation than those from the Californian Coast Ranges.) (20+) B 1.032.601: ALLIUM PLATYCAULE * California, Modoc Co., Warner Mts., Cedar Pass. 1600m. Steep, loose, gravelly slopes. (Round umbels of deep rose, starry flowers with dark anthers on short flat stems between two thick, falcate leaves. A spectacular 'tumble-weed' species, resembling the SW Asian Sect. Acanthoprason, flowering very early, as the snow melts. It needs cold winters to germinate & fits in well with those from similar climates in E Turkey, Iran & Central Asia.) (15+) C 1.033.310: ALLIUM STELLATUM * No data. A prairie plant, distributed from S Canada down into N Texas. Slender stems, about 30cm. tall, carry umbels of deep pink, cup-shaped flowers, drooping at first before becoming erect. (15+) B 1.060.310: AQUILEGIA CHRYSANTHA * No data but 'clean' stock of the true species from a Mike & Polly Stone coll. From moist sites in the mountains of the southern states, mainly New Mexico & Arizona, into N Mexico. Tufted clumps of dissected, glaucous foliage & stems, 50cm. or more tall, with many large, long-spurred flowers with spreading sepals, wholly in clear golden-yellow, carried over a long period. A delightful plant for good soil in a semi-shaded site. (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 but maybe another is involved. Not very variable in the flowers: soft, creamy yellows with long spurs tinged with apricot - but leaves and the 30-50cm, stems vary greatly in their pubescence.) (20+) C Calochortus: fairy lanterns and cats-ears 1.150.001 : CALOCHORTUS ALBUS California, Tuolumne Co., NE of Columbia. 750m. Steep scrub-covered slopes. (The Sierran foothill race of this Fairy Lantern with pendant, globular, pearly-white flowers on 20cm. stems. A widespread, variable Californian endemic, extending down the Coast Ranges from near San Francisco almost to the Mexican border. Usually a plant 1.150.003 : CALOCHORTUS ALBUS * California, San Diego Co., Julian. Scrub. (From just N of the Mexican border, as far South as the species goes. More campanulate, alabaster-white flowers appear several weeks later than the above.) (20+) B 1.150.100: CALOCHORTUS ALBUS var. RUBELLUS * California, San Luis Obispo Co., W of Templeton. 400m. Steep, stony, shaded banks. (From a famous & outstanding population, on York Mt. in the Coast Range, with translucent, ruby-pink lanterns. The name is not sustainable botanically but is useful for gardeners for denoting this colour phase. Like other forms of C. albus, this fits in with Mediterranean species & has been grown well in the UK, gaining awards.) (20+) C 1.150.500: CALOCHORTUS AMABILIS * California, Solano Co., NW of Vacaville, Mix Canyon. 550m. Steep, scrub-covered slopes. (Another Fairy Lantern. Branching, 20-30cm. stems with nodding flowers in clear, deep yellow with widespreading outer and incurved inner segments. A Coast Range species, one of the easiest to grow under glass in the UK.) ... (20+) B 1.151.001 : CALOCHORTUS AMOENUS * California, Tulare Co., NE of Three Rivers, Mineral King Road. 750m. Among scrub on steep slopes & ledges on granite outcrops. (Like all the preceding, in Subsect. Pulchelli but with a succession of purple-rose nodding flowers. Limited to the western foothills of the central & southern Sierra Nevada, this is not so easy as some of its close relatives but it has been very well grown & exhibited in the UK.) (20+) C 1.151.209: CALOCHORTUS APICULATUS * Montana. Flathead Co., Flathead Lake. 1200m. (A northern, often alpine, member of Subsect. Eleganti, mainly distributed in NW Montana but extending W through N Idaho & N into Canada. Wiry stems, 20cm. or less tall, carry upward-facing, hairy, creamy white flowers with round, dark glands.) (15+) E 1.168.001: CALOCHORTUS MONOPHYLLUS * Cal. Butte Co.550m. Ex a J.& G. Robinett coll. (The only yellow-flowered species in Subsect. Eleganti. A plant of openings in coniferous woodland in the N Sierra Nevada & S Cascades. A little 'sweetie', a few cm. high with bright yellow Cat's Ears. A 'must' for a pan in the alpine-house. Keep it cool.) (20+) D 1.169.599: CALOCHORTUS NUDUS Cal., Plumas Co., Long Valley. 1680m. G. Greger coll. (A dainty plant, like C. uniflorus, in Subsect. Nudi. About 15cm. high with erect, lavender flowers, pencilled with purple basally. Always a cold-climate, moist grower, often found in bogs with Darlingtonia & Dodecatheon. We are not sure how "ethnically pure" these Plumas Co. populations are: there are hybrids with C. minimus in this area but we do not know this particular colony.)..... (20+) C
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1.174.500: CALOCHORTUS PULCHELLUS * California, 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 1.177.800: CALOCHORTUS TIBURONENSIS * California, Marin Co., Tiburon Peninsula, Ring Mt. 140m. Rocky serpentine hillside. Ex a J. Andrews coll. (Unlike any other, this extraordinary species is known only from this single locality above San Fransisco Bay. Placed in Subsect. Weediani but with features of Sect. Calochortus, it should be in a section on its own. About 20cm. tall with up to 8, erect bells, extremely hairy inside & with ciliate margins to the pale greenish yellow segments, densely peppered with purplish brown. It will not appreciate very low winter or very high summer temperatures.) (20+) E 1.178.006 : CALOCHORTUS TOLMIEI * California, Sierra Co. G. Greger coll. (This little Cat's Ear is the most widespread & arguably the most variable species in this genus. About 20cm, tall with branching stems carrying many, rose or purple-tinted white flowers, heavily bearded on the inner segments. From an inland locality with a severe continental climate.). (20+) B 1.178.008 : CALOCHORTUS TOLMIEI * Oregon, Douglas Co., W of Myrtle Creek. 450m. Among sparse conifers on steep serpentine slopes. (Another really good form with extremely hairy flowers from further N into Oregon) (20+) B 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, only described in 1989. Possibly closest to C. howelli and not unlike it in its very hairy flowers, creamy white with a large maroon-black, panda-eye-patch-centre, but much largerflowered & much dwarfer at about 20cm. high, as well as being substantially different in its large, drooping seed-capsules, A choice & very striking species, which does not appear too difficult so far under glass in the UK.) (15+) E 1.179.500 : CALOCHORTUS UNIFLORUS * California, Lake Co., NE of Middletown. 290m. Open meadow in heavy clay. (A dwarf, lilac flowered member of Subsect. Nudi, easily grown in Europe, where it fits in well with Mediterranean bulbs, In this site, it grows mixed with C. vestae but has dropped its seeds and gone dormant before the latter flowers.) (30+) B 1.182.500 : CALOCHORTUS WESTONII California, Kern Co., S of Alta Sierra. 2050m. Coniferous woodland. (A little subalpine Cat's Ear stranded a long way from any relatives, on top of the Greenhorn Mts. at the S end of the Sierra Nevada. About 15cm. with hairy, lilac-tinged bells. Likely to be upset by hot, dry summers so keep it cool when dormant.) (15+) E 1.229.310 : CLEMATIS ADDISONII (Viorna Subsect. Viorna) * No data. A slender, scrambling subshrub, endemic to the Blue Ridge Mts. & distributed down the range from SW Virginia to N Georgia, usually along wooded riverbanks. Thick-textured, nodding, urn-shaped flowers with pointed, recurving tips, rose-purple outside and creamy white within. (10+) C 1.229.335 : CLEMATIS ALBICOMA (Viorna Subsect. Integrifoliae) * No data. An erect, 30cm. herbaceous species, narrowly endemic to the shale-barrens of the Allegheny Mts. in the Virginias. Closest to C. ochroleuca but covered in silky white hairs and the nodding, urn-shaped flowers, yellowish white or faintly purple-flushed, are carried on shorter stems. (10+) D 1.229.750: CLEMATIS COACTILIS (Viorna Subsect. Integrifoliae) * Virginia. Shale barrens. (A clump-forming, woody-based, herbaceous perennial, up to 50cm. tall. Close to C. albicoma but with pale green, velvet-backed foliage and downy, nodding, 1.302.500: DELPHINIUM LUTEUM * California, Sonoma Co., SW of Bodega. Ex a W. Roderick coll. (A species hovering on the verge of extinction, known from two small populations on seasonally wet cliffs near the coast NW of San Francisco. It is essential that we maintain this unique species in cultivation. Like many plants from the chilly, misty Californian coast, it does not enjoy hot weather. How temperature-hardy it will be outside in a severe UK winter, however, is yet to be established. A truly beautiful plant when well grown: the only really yellow North American species. Branching stems, of about 30-50cm., packed with large, waxy, shining, clear-yellow flowers in early summer. Dormant in late summer.) (20+) E 1.350.600 : ERYTHRONIUM ELEGANS * Oregon, Tillamook Co., Mt. Hebo escarpment. 950m. Exposed, grassy, rocky clifftop. Ex a J. Andrews coll. (A very local species, described in 1985 & more or less restricted to this locality, where it is abundant in meadows & coniferous woodland with Gaultheria & Vaccinium. Considered to be closest to the more or less ungrowable E. montanum, some plants appear to show the influence of E. revolutum in their mottled foliage & pinker flowers. Seed is from typical plants with plain, deep-green leaves & white to palest pink flowers. Robust & growable.) ... (10+) E 1.352.000 : ERYTHRONIUM MULTISCAPOIDEUM * California, Butte Co., N of Magalia. 600m. Under Cupressus on serpentine. (Mottled leaves and white flowers with pale, greenish yellow centres & white anthers. It has no close affinities & is the only species with stoloniferous corms. In the wild, these are very much dwarfer plants than the following but when established in cultivation they are indistinguishable from it. Almost certainly best kept dryish in summer.) (20+) C 1.352.100: ERYTHRONIUM MULTISCAPOIDEUM (E. "cliftonii") * California, Butte Co., S of Pulga. 420m. Steep, open, serpentine scree. (Once considered to be more or less a giant form of the species only known from this one site but fortunately never described botanically. Still grown in the UK as E. "cliftonii" or 'Cliftonii Group', wholly unjustifiably. A good grower with us, the species has proved adaptable and is reputedly quite accommodating in the open garden.) (20+) **D** 1.353.120: ERYTHRONIUM REVOLUTUM * No data. From the vigorous stock in Peter Chappell's Hampshire garden at 'Spinners'. These will be in varying shades of pink & may show some hybrid influence. A species of the wet Pacific NW with beautiful, brown-marbled, lush, green foliage. It can be more adaptable than E. dens-canis, so if you just want a good gardenplant for the UK, where this will usually sow itself in shady conditions, this is what you should have. (20+) B

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Iris: the Pacific Coast species

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1.460.000: IRIS BRACTEATA * Oregon, Josephine Co., Waldo Hill. 650m. Open, stony, serpentine areas, among scrub. (From Howell's 1884 type-locality for this very local & distinct species, rather like a giant yellow <i>I. innominata</i> . Thick, broad, leathery, red-based leaves & very large, showy flowers, always in pale yellow, veined with maroon or brown, in the 'true' species. Handpollinated seeds from our own coll. We doubt if much, if any, other cultivated stock is 'pure'.) (15+) C
1.460.109: IRIS CHRYSOPHYLLA * Oregon, Lane Co., Cascade Range, Steamboat Creek. 530m. Ex R. Ratko 00-430. (Hand-pollinated seeds of this attractive, dwarf species with cream, gold-veined flowers & narrow, glaucous leaves. The most northern of the Pacific Coast irises, this should be suited to a well-drained site in lime-free soil in UK gardens.) (15+) C
1.460.202: IRIS DOUGLASIANA California, Sonoma Co., Irish Hill. 150m. Grassy slopes with coastal exposure. (Hardy, tough & vigorous, although a low-altitude, coastal plant, this is surely the easiest to grow with no particular soil preferences: it does well outside with us in W Wales and thrived in Dorset. Particularly fine rich purple forms in this locality.) (15+) B
1.460.600: IRIS HARTWEGII subsp. COLUMBIANA * California, Tuolumne Co., NE of Columbia. 650m. Steep, stony slope. (Only known from around the type-locality and "much more attractive" than the type-race according to Victor Cohen. Virtually, a pale-yellow version of splendid <i>I. munzii</i> , which grows 225km. to the S. Well established with us under cover.) (15+) C
1.460.701: IRIS HARTWEGII subsp. PINETORUM California, Plumas Co., near Greenville, 1100m. Openings in coniferous forest. G. Greger coll. (A Plumas Co. endemic & the only taxon extending to the E slope of the Sierra Nevada. Dwarfer than the type-race, it often opens two of its creamy yellow flowers simultaneously. A very cold area here.) (15+) C
1.460.791: IRIS INNOMINATA * Oregon, Josephine Co., SW of Galice. 350m. Stony banks at edge of woodland. (The jewel of the group, as far as rock-gardeners are concerned. Little tufts of very narrow, glossy leaves with crimson bases & 20cm. stems with large, rich butter-yellow to cream flowers beautifully veined with brown. Parents from wild-collected seeds hand-pollinated in our polytunnel should ensure authentic seedlings. For an open, well-drained, lime-free site) (15+) C
1.461.007: IRIS MACROSIPHON* California, Lake Co., NW slope of Mt. St. Helena. 700m. Grassy opening among <i>Pinus</i> & Arctostaphylos on serpentine. (A delightful, floriferous, little species from the foothills to the North of the Central Valley. It as dwarf as <i>I. innominata</i> with beautifully veined, long-tubed flowers. These can be yellow but our parent plants are lavender-blue to purple. Tuffets of very narrow, grassy, grey-green leaves send up stems of about 20cm. in height.) (15+) C
1.461.300: IRIS MUNZII * California, Tulare Co., E of Springville. 520m. Among boulders on sides of scrub-filled gulley. (Largest flowered & most spectacular of the group, limited to a few colonies above the Tule & Kaweah Rivers in the S Sierra Nevada. A big plant with broad, glaucous, evergreen leaves & stout 60cm. stems with up to 4 flowers, which have been described as "from pale powder-blue through lavender to purple." Worth trying against a S wall in the UK.) (10+) D
1.461.301: IRIS MUNZII * Ca., Tulare Co., Kaweah River gorge, Mineral King Road. 750m. Granite cliffs (10+) D
1.461.701: IRIS TENUISSIMA subsp. PURDYIFORMIS California, Butte Co., Butte Meadows. 1220m. G. Greger coll. (A local race from the yellow pine woodland in the N Sierra Nevada. We have never managed to collect more than a few seeds of this. Pale yellow flowers with few or no dark veins on stems clasped by pink-flushed, bract-like leaves.) (10+) D
1.461.800: IRIS THOMPSONII * California, Del Norte Co., SW of Gasquet. 530m. Stony openings among Arctostaphylos & sparse conifers. (From one of two places where Boyd Kline considers the 'true' plant grows. A taxon disregarded by 'Jepson': we're not worried if you call this <i>I. innominata</i> 'Dwarf Purple Form'. The smallest iris we have seen in this group: tight tuffets of leathery, grassy leaves & short stems carrying flowers which range through rich, deep blues & purples.) (15+) D
Lewisia: a selection of 2008 seeds
1.497.000: LEWISIA OPPOSITIFOLIA * Oregon, Josephine Co., Waldo Hill. 600m. Among serpentine detritus along gulley. (From a type locality coll. of this Illinois Valley endemic. Narrow, blunt, succulent leaves and 15cm. umbels of rounded, white flowers with red-fringed sepals. A plant of seasonal seeps, very wet in spring but dried-out in summer.) (20+) D
1.497.200: LEWISIA REDIVIVA * Wyoming, Albany Co., E of Centennial. 2700m. Granite grit on stony 'flats'. (We think this species is the most beautiful and thrilling of all N American plants. The tiny clusters of fleshy, linear leaves are hardly noticeable under the huge, diaphanous, pink, water-lily flowers, appearing successively on short stems.) (20+) C
1.497.202: LEWISIA REDIVIVA * Idaho, Butte Co., NE of Carey. 1520m. E & SE-facing slopes of stony ridge. (A magnificent white-flowered population, which we have found to be particularly successful and reliable in cultivation under glass here. These white bitterroots are considered by Roy Davidson to be "among the most exquisite of wildflowers.") (20+) C
1.497.232: LEWISIA REDIVIVA * California, Butte Co, N of Oroville, Table Mountain. 400m. Ex a J.Whittlesey coll. (Large pink flowers, typical of the early-flowering, lower altitude, W Californian plants, restricted to serpentine.) (20+) C

- 1.497.240: LEWISIA REDIVIVA * Cal., Monterey Co., Jolon. Ex a W. Roderick coll. (From another fine, low altitude population introduced by Wayne Roderick from a site now "largely destroyed by highway development" & further selected in cultivation in the UK by Kath Dryden. Paler, broad-petalled flowers over 7cm. (3in.) across.) (15+) C
- 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: most distinct where we have seen it, though ignored by "Jepson". Local on the drier interior ranges from the San Bernardinos through the Panamint & White Mts. into W Nevada. An exquisite little plant, a reduced version with rounded, pearl-white flowers with pink anthers and bronze sepals.). (20+) D
- 1.497.610: LEWISIA TWEEDYI * No data. The famous endemic of the Wenatchee granites, in Washington. Acknowledged queen of the lewisias and unlike any other (in fact, removed from the genus *Lewisia* by some authorities on *Portulacaceae*). Rosettes of smooth, fleshy, obovate leaves & a long succession of immense, silky flowers in palest tea-rose shades of salmon, apricot and cream. Not difficult with care in a very gritty, lime-free mix, dryish from late summer to spring. (20+) C
- 1.839.001: SCOLIOPUS BIGELOVII * Cal., Marin Co., near Nicasio Reservoir. 30m. Woodland. Ex an R.& R. Wallis coll. (Strange, summer-dormant member of the *Liliaceae*, local in moist, shady sites in the redwood-forests of NW California. Two, big, basal, veined & mottled leaves lie flat on the ground with many, complex greenish white flowers, intricately marked & lined with purple-brown on 5cm. stems. Will grow in the peat-garden in the UK but best appreciated in a pan.) (20+) **D**
- 1.839.060: SCOLIOPUS HALLII * No data. The more northern of the two species, endemic to Oregon in the damp woods of the W Cascades & coastal mountains. A succession of slightly smaller, shorter-stemmed, greyish yellow flowers marked with red-purple. These diminutive woodlanders with their large, flat leaves are among the most fascinating plants. (20+) D

Trillium: fresh 2008 seed: just collected

We have not found it practicable to send out *Trillium* seeds damp-packed. All seeds are washed & dried but in our experience this does not inhibit germination, though it may delay it. We are inclined to subscribe to Kath Dryden's counsel of "sow it, put it outside and wait." Bob & Rannveig Wallis tell us they have also generally been successful using a similar simple method. Feed-back from those who have used various refrigeration & warming techniques has 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. 'Trilliums' by Fred & Roberta Case is the unchallenged reference work. This 2008 seed is what we have harvested to date. We anticipate more in our next list.

- 1.920.532: TRILLIUM ERECTUM from RED FORM * No data. The 'typical' velvety dark-red form of this exceptionally variable pedicellate species, widespread through NE America from Quebec to Georgia in moist woodlands on acid soils. Elegant, outward-facing or slightly declined flowers with pointed segments on stems about 30cm. high. (10+) D
- 1.920.920: TRILLIUM GRANDIFLORUM The best-known species & maybe the finest of all: a superlative plant with large, full-petalled, snow-white flowers on 30cm. stems. Widespread in the wooded areas of NE North America. (15+) C
- 1.922.301: TRILLIUM RIVALE* Oregon, Josephine Co., SW of O'Brien. 550m. Among moss on level, stony areas under *Pinus*. (An exquisite little endemic from both sides of the serpentine ranges dividing Oregon and California. A delight outside or in the shaded alpine-house or trough. No more than 15cm. high with white or palest pink flowers, more or less variably speckled with purple. Easier & quicker to flower from seed than most: dried seed gives no problems with germination.) . . (20+) **D**
- 1.922.321: TRILLIUM RIVALE from 'PURPLE HEART' * This seed is from a selected seedling raised from seed given to us by Boyd Kline of Medford, Oregon, from his original 'Purple Heart'. Those who have seen it consider it the most striking clone of this type they have seen: the central zone of fused purple spots occupies about two-thirds of the flower. . (15+) F
- 1.922.820: TRILLIUM SULCATUM * No data. A "robust and splendid plant" according to Case. Of comparatively limited distribution in the wild, along the Cumberland Plateau from SW Virginia to NE Alabama. Allied to T. erectum & T. flexipes, this is one of the largest leaved pedicellate species with stems up to 70cm. carrying rich maroon-red flowers. (15+) E
- 1.923.120: TRILLIUM VASEYI* No data. A pedicellate species of fairly restricted distribution in nature. Mainly a plant of steep, sheltered, wooded slopes on the western mountains of the Carolinas, progressing south into the neighbouring states. Flowers with thick-textured, crimson petals, with impressed veins, on stems about 50cm. high. (15+) D
- 1.925.300: TRITELEIA CROCEA (var. crocea) * California, Siskiyou Co., W of Yreka. 1750m. Exposed, loose serpentine talus. (Confined to the Klamath Ranges on the Oregon line. About 20cm. high with bright yellow flowers.) (15+) D
- 1.926.815: TRITELEIA LAXA from 'DEXTER' * This outstanding dwarf bulb, originally from Wayne Roderick, gained an Award of Merit, when shown by Bob & Rannveig Wallis. Very short stems carry large heads of luminous, deep violet-blue flowers in early summer, well after most Eurasian 'bulbs' are over. Easily grown in bulb-frame conditions. (20+) C

A: \$3.00 £1.50 € 2. -C: \$5.00 E: £2.50 € 4. -\$9.00 €7.-£4.50 B: \$4.00 £2.00 € 3. -D: \$7.00 £3.50 € 5. -\$12.00 ; **F**: £6.00 €9.-

Alpines, herbaceous plants, bulbs and shrubs from the southern Andes

We list the full range of seeds of South American species, which we have available at present. Many of these are from wild collections made recently in Chile & Argentina by John & Anita Watson. Though we anticipate a few more collections for a short offering in a future list, we shall not be

including those listed here. Moreover, it will not be possible to offer some collections again, particularly the bulbs in *Amaryllidaceae*, which have a comparatively short viability, until we have new, fresh wild collections. So, make the most of the outstanding range of Andean material on offer now.

- 2.004.109: ACACIA CAVEN Chile, Aconcagua, Paso Chacabuco. 950m. Dominant element in mediterranean, low savannah.

 A. Flores & J. Watson 11313. (A small tree, 2-6m. tall, with abundant, dark orange-yellow, scented pompons. This has proved hardy at Kew, where it flourished for many years near the old alpine-house. Well worth trying in drier areas.) . . . (10+) C
- 2.006.500 : ACAULIMALVA NUBIGENA Argentina, Tucuman, Tombolon to Lara. 3800m. High, peaty moorland. A.Flores & J.Watson 11481. (A superlative, dwarf, rosette-forming alpine Nototriche-relative, only about 3cm. high when in flower. Its large, yellow-anthered, stemless, crocus-like flowers are whiter than white, emphasised by a bright blue-violet splash at the base of each petal. Its specific name, 'cloud-dweller', is apt: it is bathed in summer by regular, dripping mists.) . . (10+) F

Alstroemeria: an unrivalled range of the species

With its main centre in Chile, this spectacular genus includes species which grow from the Pacific seaside to elevations of over 3000m. in the Andes. Seed is reputedly difficult to germinate. Ideally it 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°C (40-50°F). Soaking seed in warm water for 24 hours before sowing, then placing the container at the bottom of a domestic refigerator should give the even 5°C required,

though we have always found conventional sowing quite satisfactory. Seed we have sown by November has usually taken 4-5 weeks to germinate in our normally mild autumnal climate. If grown in containers, annual repotting is recommended as these are greedy plants. Names follow those in the meticulously researched 'Die Gattung Alstroemeria in Chile' by E. Bayer published in 1987 except for a couple of subspecies of A. hookeri elevated to specific rank by Flores & Watson and to be published formally in the near future.

- 2.026.410: ALSTROEMERIA AUREA * Chile, IX, Cautin, W of Vilcun. 200m. 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: variable in rich, egg-yolk yellow shades) (15+) B
- 2.026.651 : ALSTROEMERIA CUMMINGIANA (A. hookeri subsp. cummingiana) Chile, IV, Coqimbo, N of Los Vilos. A.Flores & J.Watson 11228. (Flowers quite differently proportioned to A. hookeri in paler pink with the upper, inner segments only very sparsely speckled with red-brown. The most northern site for this elegant, little species, which, in spite of originating from the southern edge of the Atacama, grows well with us under glass without frost protection.) (10+) E
- 2.026.700 : ALSTROEMERIA DILUTA (subsp. diluta) * Chile, VII, Talca, near San Rafael. 300m. Ex an A. Brinck coll. (An intriguing, little species, 10-25cm. high, only described in 1986 & limited to a small area around the type-locality between Talca & Curico. Distinct but may be closest to A. pulchra, though much dwarfer. White to pinkish segments with attentuated, darker tips, the upper, inner ones very heavily marked with dull red streaks, which sometimes fuse together.) (10) D
- 2.026.902: ALSTROEMERIA EXSERENS from DWARF FORM Chile, VII, Rio Teno valley E of Curico. c. 2500m. A. Flores & J. Watson 11240. (A high altitude taxon of this fine species endemic to central Chile. Among the largest flowers in the genus on the dwarfest of plants only a few cm. tall. Flat-faced flowers with broad, overlapping segments in rich pink with darker tips & crimson flecking on the yellow ground of the upper, inner ones. May be easier in the cooler N of the UK.) ... (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. or more, than the alpine race. Long, narrow leaves & big heads of rose-pink flowers, neatly banded bright yellow above the white, crimson-speckled zone of the upper, inner segments. Though different in character, a bit like a very large A. pallida, we cannot assign this to another species. Worthwhile & hardy.) (10+) B
- 2.027.000: ALSTROEMERIA GARAVENTAE * Chile, V, Cerro Vizcacha. Ex a J. Watson coll. (From a type-locality coll. of this striking & most distinct plant limited to one or two localities in the northern coastal ranges of Chile. The large flowers on stems of about 30cm. are heavily speckled all over with broken lines of crimson dots on the salmon-pink ground, which ages to ruby shades. This provides a spectacular display over a long period in our unheated greenhouse.) (10+) D

- 2.027.110: ALSTROEMERIA HOOKERI (subsp. hookeri)* No data. A beautiful dwarf species, 15-20cm high. Narrow, greyish leaves & medium-sized, green-tipped, pastel pink flowers, blotched with gold & lightly speckled with red-brown on the white ground of the inner segments. Late-flowering & one of the best for cultivation in the alpine-house. (10+) C

- 2.027.801: ALSTROEMERIA LIGTU subsp. INCARNATA Chile, VII, Curico, Rio Teno valley E of Curico. c. 1500m. A.Flores & J.Watson 11239. (A spectacular race, more or less restricted to the Rio Teno valley. About 1m. high, always with a pink ground-colour & distinct in its rather short, broad, upper segments. Glowingly described by Mike Tucker, growing it in Somerset, UK, as "gorgeous...sumptuous...like no other...the largest flowered plant I have...the best one here.") (10+) C
- 2.027.900: ALSTROEMERIA LIGTU subsp. SIMSII (A. haemantha) * Chile, VI, Cachapoal, Rio Cachapoal valley W of Pangal. 950m. Among scrub in sandy soil. (Long known as A. haemantha, a misapplied name, this is the tallest race of A. ligtu, reaching 1.6m. in nature with huge umbels. Basically brilliant orange-red to tomato-red with the long, prominent, upper, inner segments streaked red-brown on a gold-orange ground. Distributed to about 2000m. in the Andean foothills.) . . . (10+) C
- 2.028.001: ALSTROEMERIA MACULATA (syn. A. hookerisubsp. maculata) * Chile, IV, Coquimbo. 150m. Deep sand on hills facing sea with low, semi-xerophytic scrub. Ex A.Flores & J.Watson 9578. (A choice, elegant plant, limited to a few areas on the Coquimbo coast: a Mediterranean climate with frequent sea-fogs in winter. About 20cm. tall with narrow foliage, it is distinct in the heavy, ruby-red markingson all three, pink inner segments. Hardy with us under unheated glass.) . . (10+) E
- 2.028.109: ALSTROEMERIA MAGENTA * Chile, Region V, Coquimbo, Ovalle, Fray Jorge. 500m. Ex Beckett, Cheese & Watson 4683. (A showy species, about 50cm. tall, nearest to A. pulchra and A. magnifica but distinct in having all the inner segments, not just the upper 2, of the lilac flowers heavily streaked with maroon-red. We have maintained this stock from John's 1972 coll. but it is always reluctant to set much seed. Historically, this may have been grown as "A. violacea".) . . (10+) E
- 2.028.300: ALSTROEMERIA MAGNIFICA subsp. MAXIMA * Chile, IV, Choapa, Pichidangui. Ex an A. Brinck coll. (Indeed magnificent with very large, flat, lilac flowers marked on the two upper segments with dark red. Up to 50cm, high with distinct, bright-green, fleshy foliage, glossy on the upper surface. Though a low altitude race, centred on the Valparaiso area, the sterile, overwintering rosettes have never been harmed by frost in our unheated greenhouse.) (10+) C
- 2.028.500: ALSTROEMERIA PALLIDA Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2200m. Open, S & SW-facing, stony slopes. (Few alpine plants can rival the spectacle of this in flower. Remaining 20cm. high with us under glass, its umbels of large flowers in palest pink to white have the upper, inner segments blotched with gold & streaked with crimson. Limited to the ranges S & W of Aconcagua between 1500m. & 2800m. Try it outside in sunny scree in the UK.) . (10+) C
- 2.028.610: ALSTROEMERIA PATAGONICA * Chile, XII, Magallanes, near Punta Arenas. Ex an O. Magen coll. (The dwarfest species in this genus, it also has the most southern distribution, S from Santa Cruz & Chubut in Argentina to Tierra del Fuego. Narrow, twisted, fleshy, blue-grey foliage & small, upward-facing, brilliant orange-yellow flowers, carried on stems under 10cm. high. Absolutely hardy in the UK & possible in a trough or scree-bed but maybe easiest in the alpine-house.) (10+) D
- 2.028.811: ALSTROEMERIA PELEGRINA from WHITE FORMS * No data. A plant of rocks on the north Chilean coast, tender in the UK, though often mentioned as growable in "warm borders". Large, beautiful, pure white flowers with the upper, inner segments retaining the yellow zones. About 30cm. tall in cultivation & definitely safest kept frost-free. (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. (One of the most southern taxa, distinct from the type-race in its striking, red-brown anthers, more elongated upper segments, heavily streaked with crimson, & intense, deep-pink ground-colour. It has proved hardy, remaining compact both in its rootstock & height at around 30cm.) (10+) D
- 2.029.410: ALSTROEMERIA PULCHRA (subsp. pulchra) * Chile, V, Valparaiso, Con Con. 115m. In heavy, red soil on W-facing banks in cultivated, littoral area. Ex Beckett, Cheese & Watson 4762 (Quite widespread in the Valparaiso-Santiago area up to 1000m., this is of borderline hardiness in the UK but we have maintained this from John's 1972 coll. under unheated glass. It can be grown outside in S England. In the same group as A. magnifica, about 40cm. high with white flowers (pale lilac under glass), the upper, inner segments streaked with crimson on a bright yellow ground.) (10+) C
- 2.029.603 : ALSTROEMERIA REVOLUTA Chile, VI, O'Higgins (Rancagua), near the Termas de Cauquenes. 700-800m. Light woodland & on mossy boulder-banks. A.Flores & J.Watson 11254. (A most distinct plant, viewed from afar rather more like a ball-headed Allium species than a 'conventional' Alstroemeria. Stems, about 30cm. high here (but it can reach more than twice that), with little, narrow leaves carry rounded umbels of many, small, pink, red-freckled flowers with strongly reflexed segments. From the same site as the A. ligtu coll., where it flowers much later in summer.) (10+) C

A: \$3.00 £1.50 € 2. -C: \$5.00 £2.50 € 4. - \mathbf{E} : \$9.00 €7.-£4.50 B: \$4.00 £2.00 € 3. -D: \$7.00 € 5. -**F**: \$12.00 ; £3.50 £6.00 € 9. -

- 2.029.904 : ALSTROEMERIA SPATHULATA Chile, V, Aconcagua, above Portillo. 3000m. Steep, bare, earth or scree slopes. A.Flores & J.Watson 11266. (A very fine & distinct, dwarf, high-alpine species limited to the border-ranges to the S of Aconcagua, only on the western, Chilean side. Tight sterile rosettes of fleshy, grey-green foliage with 5-15cm. tall stems carrying several, bright-pink flowers, speckled & streaked with dark red on the 3 inner segments.) (10+) E
- 2.030.001 : ALSTROEMERIA UMBELLATA * Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2200m. Loose, igneous talus on steep slopes. A.Flores & J.Watson 11273. (An extraordinary alpine centred on the mountains above the Rio Maipo up to 3000m. Succulent, sempervivum-like, sterile rosettes of rounded, grey-green leaves & almost stemless umbels of dark-tipped, pink flowers, marked with gold & speckled with crimson, ride deep, mobile screes, often with Tropaeolum polyphyllum. It has been grown outside in the UK in a raised scree-bed but is not easy to keep in character.) (10+) E
- 2.030.205: ALSTROEMERIA WERDERMANNII (subsp. werdermannii) Chile, III, Atacama, Vallenar, Huasco. 15-30m. Open areas, in sand above shore. A. Flores & J. Watson 11234. (One of the most local species in the genus. A very dwarf plant of the Atacama coast, about 10cm. high with small, glaucous, lead-green, fleshy leaves & distinctive flowers with narrow segments in silvery pink to deep red-violet, peppered with purple-brown. Slow from seed and not so easy to grow. Possibly safest kept frost-free in the UK but like several of these Atacama plants it has proved surprisingly frost-tolerant in our unheated glasshouse. Only known from two populations, this seed is from the more southern one at the type-locality, where it differs from the next in its narrower segments, paler ground-colour and the absence of a yellow cross-band on the upper, inner segments.). (8) E

- 2.059.009 : ARGEMONE HUNNEMANNII Chile, IV, Coquimbo, E of Vallenar. 400-900m. Seasonally hot, dry sides of steep rocky river-valley. A. Flores & J. Watson 11232. (Maybe the most imposing in this genus of prickly poppies. It can reach 80cm. plus in height with upright branching stems, grey-leaved & carrying large, white poppies, 12cm. across, with many overlapping petals surrounding the golden anthers on crimson filaments. "A statuesque beast...rather calling to mind a suffruticose paeony." It will need a very hot, dry, sunny site in the UK. Monocarpic and maybe best treated as a spring-sown annual.) . . (15+) B

Argylia: golden incarvilleas of the Andes

- 2.060.250 : ARGYLIA ADSCENDENS var. VIRIDIS Chile, Reg. Metro., ENE of San Jose de Maipo. 2200m. Exposed ridgetops. A.Flores & J.Watson 11259. (A magnificent alpine-plant forming suckering mats of greyish, much cut leaves with 20cm. stems carrying huge trumpets, opening in purple-red shades & maturing to oranges & apricot-yellows. At its most robust with big flower-heads when growing in deep talus. These specious alpines must be grown one day.) (15+) D
- 2.062.000: ARGYLIA USPALLATENSIS Argentina, Mendoza, Valle de Uspallata, N of Uspallata. 2100m. Loose gravel in open areas of exposed steppe. A.Flores & J.Watson 11226. (Suckering mats with cut, greyish foliage & almost stemless, long-tubed trumpets with flattish, rounded faces in chrome-yellow, streaked with lines of crimson speckling inside. A spectacular, choice & local species used to extreme cold, usually with snow-cover, in winter but baked in summer.) (15+) D
- 2.126.009: BOMAREA EDULIS (B. hirtella) * These mainly climbing, tuberous-rooted perennials in Alstroemeriaceae with regular flowers (unlike Alstroemeria) are centred on the N Andes, where many grow at considerable altitudes. Most grow easily in a greenhouse, unheated or barely frost-free, & are possible outside in sheltered sites in the UK. Seed of all species usually germinates rather slowly & irregularly. This is one of the better-known species, widespread throughout northern South America. Heads of tubular flowers with rose-pink outer segments and greenish yellow, heavily speckled inner ones. Under its pseudonym, B.hirtella, it is a parent with the following of the allegedly hardy(ish) hybrid, B. x cantabrigiensis. (8) C
- 2.128.101: BOMAREA MULTIFLORA subsp. CALDASII * Ecuador, Napo, Papallacta. 3100m. Margins of montane forest. (This name appears to cover a disconcerting range of plants: this climbs to 2-3m. with heads of up to 50 bell-shaped flowers, usually unspotted, with scarlet outer segments & orange inner ones. We have grown this well against a N wall.).... (8) C

B: \$4.00 ; £2.00 ; \in 3.- D: \$7.00 ; £3.50 ; \in 5.- F: \$12.00 ; £6.00 ; \in 9.-

- 2.129.510: BOMAREA SALSILLA * No data. From central Chile & the most southern species in this genus. Twining stems up 2.139.500: CAIOPHORA ACONQUIJAE Argentina, Catamarca, Cerro El Globo. 3900m. Bare soil in lee of rock-outcrops. A. Flores & J. Watson 11495. (A little high-alpine member of the largely neotropical family Loasaceae, so often characterized by their stinging hairs, which seem absent in this species: at least it did not sting John. About 25cm. high with bright creamyvellow flowers of the distinctive and highly complex shape, also characteristic of many in this family.) (50+) D 2.151.059: CALANDRINIA CAESPITOSA (C. rupestris) Chile, V, Aconcagua, above Portillo. 3500m. Gravel barrens & soilpans on steep N & NW-facing slopes. A.Flores & J.Watson 11268. (A brilliant, jewel-like, little high-alpine, which, in John's opinion, is the true and only C. caespitosa, a name now applied to quite a diversity of taxa. Tuffets of tiny, fleshy leaves & many little, bright orange-scarlet flowers with glossy yellow centres, both garish & charming. It grew well in the 1970's from a B.C.& W. coll. (as C. rupestris) both in an alpine-house pan and outside in a trough or scree-bed. It even reached the stage of appearing for sale with the easier alpines in the Wisley plant centre. Then it was suddenly not around any more.) (15+) D 2.155.509: CALANDRINIA SKOTTSBERGII Argentina, Neuquen, Paso Rahue. 1600m. Among dwarf steppe-flora on bare, stony levels or slides of W-facing outsrop. A.Flores & J.Watson 11578. (A splendid alpine, which has been quite successfully grown in both Europe & the USA. Currently 'lumped' under C. caespitosa but John, who knows it well in the wild, regards it as being "horticulturally, botanically & ecologically distinct". Rolf Fiedler (describing it as "C. portulacoides") states it "forms low armeria-like tufts of slightly succulent narrow leaves and has big yellowish-orange flowers up to 5cm. across." John calls it "multipetalled & shining orange"; others describe it as "yellow suffused with orange" and "deep gold": the Lewisia tweedyi Calceolaria: alpine species from Argentina 2.180.209: CALCEOLARIA ARACHNOIDEA Chile, VII, Rio Teno valley E of Curico. c. 2500m. W-facing slopes. A.Flores & J.Watson 11243. (Tight basal rosettes of white-felted leaves send up 20cm. stems of black-maroon bubbles. Quite easy to grow & absolutely temperature-hardy if protected from too much wetness from late summer through the winter.). (50+) C 2.182.500: CALCEOLARIA GLACIALIS Argentina, Catamarca, Cerro El Globo. 3950m. In shade of rocks just below mountain summit. A.Flores & J.Watson 11492. (A high-alpine forming mats or cushions of rosettes & producing its clear yellow flowers singly on short stems. Summed up by John as "one of the most desirable herbaceous alpines of the genus.") (20+) F 2.188.550 : CALCEOLARIA TEUCRIOIDES Argentina, Tucuman, Tafi del Valle, El Infiernillo. 3600m. Steep banks among grasses, usually in more exposed, sunny sites. A.Flores & J.Watson 11440. (An alpine subshrub, about 30cm. tall with dense inflorescences of a multitude of flowers in a strong yellow. Possibly for a sunny, well-drained site in the UK.) ... (50+) E 2.188.950 : CALCEOLARIA UMBELLATA Argentina, Tucuman, Tafi del Valle, El Infiernillo. 3600m. Moist sites on steep, shaded banks & among rock-outcrops. A.Flores & J.Watson 11439. (A small, alpine, herbaceous species, only about 10cm. high with many-flowered inflorescences of clear yellow flowers "Choice" comments John.) (50+) E 2.249.209: CLEMATIS HAENKEANA Argentina, Catamarca, Nevados de Aconquija. 3000m. Mountain shrubberies. A.Flores & J.Watson 11204. (A N Andean species, here at the southern extremity of its distribution. In Subsection Dioicae but actually monoecious with large cymes of small, cream or greenish-white flowers. Climbs vigorously to about 5m.) (10+) D 2.252.200: COMMELINA ELLIPTICA (C. alpestris) Argentina, Tucuman, Tafi del Valle, El Infiernillo. 3600m. Moist hollow on E side of summit pass. A.Flores & J.Watson 11436. (An upright, 20cm. tall, tuberous-rooted, herbaceous alpine, which from this altitude will be absolutely temperature-hardy in the UK. This taxon is currently 'lumped' by some with "plebeian" C. tuberosa: "surely an insult" comments John. Flowers "are that show-stopping, otherworldly blue of the best of the genus. They unfold in succession from prominent, dark purple-brown-tinged, hooded, erect bracts. The immediate impression on approach was of stumbling upon something like the Australian blue sun-orchid, Thelymitra, crossed with a Serapias.") (10) E 2.256.109: CONVOLVULUS CRENATIFOLIUS Argentina, Catamarca, Paso Mina Capillitas. 2500m. Well-drained sites with sparse grasses or scrub. A. Flores & J. Watson 11385. (A prostrate, alpine, herbaceous species with stems radiating quite widely from a central crown (it will not be invasive) to carry white flowers, slightly flushed with pink.) (8) C 2.260.000: CRUCKSHANKSIA HYMENODON (var. hymenodon) Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2300m. Exposed, stony area on steep NW-facing slope. A. Flores & J. Watson 11274. (A very local and utterly distinct alpine member of the Rubiaceae. Quite unobtrusive out of flower, like a choice, little alyssum with rather fleshy, grey-green leaves on prostrate stems spreading among the stones, but, when in flower, each clustered head of long-tubed flowers in bright orangeyellow is surrounded by a widely flaring skirt of violet-pink petaloid sepals: the sort of daring colour combination to be seen in an early Hollywood musical. A French customer told us that he flowered this to his satisfaction, growing it outdoors in a scree-bed, from our 1994 collection but, as far as we know, it has not yet danced on to the British show-bench.) . . (10+) E 2.275.009: DEUTEROCOHNIA LONGIPETALA Argentina, Catamarca. Hot, dry, rocky slopes. A.Flores & J.Watson 11197. (A distinct, xerophytic member of the Bromeliaceae forming hummocks of grey-green, Puya-like rosettes, which send up branching stems of bright yellow, green-tipped, tubular flowers. An inflorescence can produce flowers for about 3 years. This will need very dry growing conditions but is probably tolerant of frost if the atmosphere is dry.) (20+) D
- A: \$3.00 £1.50 € 2. -C: \$5.00 £2.50 € 4. - \mathbf{E} : \$9.00 €7.-£4.50 B: \$4.00 £2.00 €3.-D: \$7.00 £3.50 € 5. -**F**: \$12.00 £6.00 € 9. -

- 2.288.509: ELEUTHERINE BULBOSA Argentina, Salta, W of Quijano. 2000m. Grassy verge. A. Flores & J. Watson 11463. (A cormous species in *Iridaceae* with starry white or ivory-yellow flowers on 15-20cm. tall stems.) (15+) E
- 2.293.509: ENNEALOPHUS FIMBRIATUS Argentina, Salta, W of Quijano. 2000m. Growing at foot of rock-wall above wet ditch. A. Flores & J. Watson 11472. (A fine representative of this little-known, cormous genus in *Iridaceae*. Branched, 40-50cm. tall inflorescences of lavender-blue flowers: "very much resembling an even more dainty *Iris japonica*."). (20+) E
- 2.317.509: GAILLARDIA MEGAPOTAMICA (var. megapotamica) Argentina, Neuquen, Zapala to Catan Lil. c. 1000m. Poor, dry, bare, stony soil. A.Flores & J.Watson 11551. ("Very striking" & "Looks to have serious garden potential" comments John. A neat, stiffly erect, basally branched, aromatic subshrub up to 60cm. tall with grey, ferny leaves, cut into linear segments, & freely produced, ochre-yellow heads, lacking ray florets so forming 'pom-poms' about 1.5cm across. The area experiences a dry, windy, N Patagonian, continental climate, cold & rainy in winter, so it will need an exposed site in the UK.) . (15+) C
- 2.342.000: GENTIANELLA cfr. KURTZII Argentina, Catamarca, Cerro El Globo. 3900m. Moist sites with permanent seepage on steep slopes below mountain summit. A.Flores & J.Watson 11493. ("Very pretty and putting on a fine show" according to John. A plant of the high Andes, about 10cm. tall with many pale, clear flax-blue flowers.) (20+) E
- 2.350.010: GETHYUM ATROPURPUREUM * No data. A strange, summer-dormant, bulbous member of the Alliaceae, endemic to Chile &, as far as we know, in a monotypic genus. The umbels of elegant, starry, brownish black flowers, about 2 cm. across, are produced on 20 cm. high stems in spring & last in good condition for about a month. Almost certainly satisfactory grown under glass without heat or with minimal frost-protection in the UK. (15+) E
- 2.370.209: GLANDULARIA PERAKII Argentina, La Rioja, Cuesta de Aguadita N of Famatina. 2000m. Flat crest of low pass with open, scattered scrub. A.Flores & J.Watson 11509. (An erect subshrublet in *Verbenaceae*. Around 30cm. tall with little digitate leaves and typical verbena-heads of pinkish violet flowers borne over the top of the plant.) (20+) C
- 2.421.900: HABRANTHUS cfr. SALTENSIS Argentina, Tucuman, valley of Rio Santa Maria, S of Amaicha. 1700m. Among scattered shrubs on sandfields of intermontane river-valley. A. Flores & J. Watson 11417. ("An absolute stunner" writes John Watson. A summer-dormant bulbous species in *Amaryllidaceae*, tentatively attributed to *H. saltensis*. About 15cm. tall in flower, with large, erect. pearly white or pale-pink 'crocuses' with blackish red-purple throats. The rainfall in this habitat is mainly in spring, followed by a long, hot, dry summer. Should be temperature-hardy under glass in the UK.). (20+) E

Hieronymiella: obscure amaryllids

- 2.460.009: HIERONYMIELLA ARGENTINA Argentina, Tucuman. 1800-2200m Among bushes in rocky, lower mountain valleys. A. Flores & J. Watson 11335. (These little-known, bulbous members of the Amaryllidaceae are all from areas with a temperate climate where the main rainfall is in spring with dry late summers & autumns. They should all be perfectly growable without frost-protection under glass in the UK. This has stout stems rising from tufts of broadish leaves to carry umbels of pendant, tubular flowers in "orangey brown blended with red & green". It is always difficult to know how to treat seed of a little-known genus like this: we have established that all of these germinate at higher summer temperatures but seed may need a preceding cold period. In the UK, they will be summer-growers & should be kept cool & dry in winter) (10+) F
- 2.460.209: HIERONYMIELLA CLIDANTHOIDES Argentina, Tucuman. W of Amaicha. 1800m. Among scattered xerophytic shrubs on dry, inclined, deep sand-fields. A. Flores & J. Watson 11418. ("Something extra-special" writes John: "only seen & collected in seed here" but growing abundantly in a localised colony. Very large, scented, long-tubed white flowers on 40sm. tall stems. The area has a shortish period of heavy winter and spring rainfall and a long, hot, dry summer.) (10+) F
- 2.460.509: HIERONYMIELLA MARGINATA Argentina, La Rioja, mine-road to La Mexicana. 3200m Among very scattered dwarf scrub. A. Flores & J. Watson 11519. (Along similar lines to *H. argentina* with tubular, pendulous, red, green-tipped flowers, up to 6 on a stem, but somewhat shorter at about 20cm. & with much narrower leaves. The stems & bracts are flushed with bright red. The habitat in this high-sided valley is seasonally fairly moist in spring & early summer.) (10+) F
- 2.463.509: HOFFMANNSEGGIA ERECTA Argentina, La Rioja, Villa Union. 1300m. Flat, bare ground. A.Flores & J.Watson 11529. (A neat, dwarf herbaceous plant in *Caesalpiniaceae*. About 10cm. tall with pinnate leaves & 'candle' inflorescences of many, small yellow flowers, freckled with red in their throats. A dryish, continental climate in this area.) (15+) C

Hypseocharis: 'the most beautiful plant I have ever seen'

2.464.009: HYPSEOCHARIS PIMPINELLIFOLIA Argentina, La Rioja, mine road to La Mexicana. 2700m. Clearing in dryish scrubland. A.Flores & J.Watson 11514. (A little prostrate alpine in *Oxalidaceae* with a generous, long succession of starry flowers in "dayglo-orange-scarlet with brilliant yellow centres....more from the Christopher Lloyd-cum-Disney than Sissinghurst school of garden colour-blending", writes John. English gardener, Bob Brown, rated it "the most beautiful plant I have ever seen" on encountering it in the wild. Growing it in character to "retain an effective, compact stance" will be the challenge. John suggests sowing some seed directly "out-of-doors on a hot site in poor, stony soil.") (20+) D

A : \$3.00€ 2. -£1.50 C: \$5.00£2.50 € 4. -E: \$9.00 £4.50 € 7. -B: \$4.00 £2.00 € 3. -D: \$7.00 £3.50 € 5. -F: \$12.00 £6.00 € 9. -

Hysterionica: 'a glorious Andean that has it all'

- 2.466.000: HYSTERIONICA PULCHELLA Argentina, Catamarca, Cerro El Globo. 4000m. Exposed mountain summit with low outcrops. A.Flores.& J.Watson. 11485. (A small prostrate to ascending alpine herb in Asteraceae. Only 5 cm. tall with a multitude of flower-heads like choice erigerons (Hysterionica was once classified as Erigeron) arrayed in a ring radiating from the central crown. Heads are comparatively large & bronzy-golden, recalling Erigeron aureus. "Another glorious Andean that potentially has it all for alpine buffs. Please push this beaut to the limit to try to get it established." writes John . . . (20+) E
- 2.471.500: IPHEION UNIFLORUM subsp. TANDILIENSE * Argentina, Buenos Aires, near Tandil. Ex a P. Ravenna coll. (Recently described local race of this little bulb. Long-tubed flowers in white just flushed with llavender.) (20+) C
- 2.475.501: IPOMAEA HIERONYMI var. CALCHAQUIENSIS Argentina, Tucuman, Los Cardones E of Amaicha. 2600m. Rough, rocky slopes with steppe vegetation. A.Flores & J.Watson 11422. (Described by John as a "gorgeous, long-lived, herbaceous perennial" with radiating prostrate stems covered in silvery leaves, from the internodes of which appear spectacular clusters of convolvuloid flowers in soft-pink with purple central 'eyes'. The variety is a high-altitude ecotype of the species & should be temperature-hardy. Last year we listed a small collection, which rapidly sold out. John & Anita have now made a top-quality collection of the large seeds, each clad "in a silky golden cape like that of colobus monkeys.") (5+) F
- 2.475.801: IPOMOEA PLUMMERAE Argentina, La Rioja, mine road to La Mexicana Clearings in dryish scrubland on well-drained, very stony terrain. A.Flores & J.Watson 11522. (A dwarf, prostrate, tuberous-rooted alpine with comparatively large flowers in glowing, reddish purple, inadequately described by John in the 'AGS Encyclopaedia'. He now knows "What an exciting little beauty it is! ... a well-grown panful at a show would surely rock the alpine fraternity on its heels." . . (10+) F
- 2.512.009: LATHYRUS TROPICALANDINUS Argentina, Catamarca, S of Paso Mina Capillata. 2650m. Among dense grasses & scrub on moist to dryish banks. A.Flores & J.Watson 11497. (A herbaceous species up to 50cm. high with subtly coloured rather than spectacular pinkish violet pea-flowers. From this altitude it should be growable outside in the UK) (8) D
- 2.519.000: LESQUERELLA MENDOCINA Argentina, Catamarca, Cerro El Globo. 4000m. Flat, exposed mountain summit. F.& W. 11486. (A little, prostrate, alpine member of the *Brassicaceae*. Grey-green leaves & golden-yellow flowers: a choice "small alyssum with ridiculously large flowers that might have been grafted on from an alpine wallflower.") (10+) E

Leucocoryne: the glories of Chile

This small genus of beautiful bulbous plants in *Alliaceae* comprises about a dozen species, all endemic to Chile. With the exception of the one or two, less showy, high altitude species, they are on the borderline of hardiness & are

probably best grown under glass in frost-free conditions in the UK. We find the following and several others trouble-free in an unheated glasshouse in W Wales but some would probably be happier with just a little more warmth in winter.

- 2.525.231: LEUCOCORYNE COQUIMBENSIS Chile, IV, Coquimbo, S of Coquimbo. 100m. Mediterranean-type zone with winter rainfall, in sand-fields with scattered shrubs. A. Flores & J. Watson 11296. (A spring-flowering bulb with umbels of starry flowers in mid-royal blue with white centres carried on stems of about 30 cm. in height.) (15+) C
- 2.525.240: LEUCOCORYNE COQUIMBENSIS X PURPUREA Chile, IV, Coquimbo, S of Coquimbo. 100m. Field data as above. A. Flores & J. Watson 11297. (Medium-sized, starry to saucer-shaped flowers in light violet or bluish tones with a pale to dark reddish central zone. A striking & variable hybrid occurring when both species grow together.) (15+) D
- 2.525.400: LEUCOCORYNE ODORATA * Chile, Reg. Metro., near Polpaico. 650m. Grassland & among scrub on open, slopes. Ex A. Flores & J. Watson 8668. (Closest to *L. ixioides*, the only member of this genus of Chilean bulbs widely grown in cultivation, but with umbels of white flowers with broad segments on 20-30cm. stems. Intensely fragrant.). (10+) C
- 2.525.500: LEUCOCORYNE PURPUREA Chile, IV, Coquimbo, S of Coquimbo. 100m. Growing in sandy soil among coastal mist-belt scrub & in grassland. A. Flores & J. Watson 11298. ("The most striking species" according to Brian Mathew, with "the most substantial perianth segments of all." Umbels of up to 7 flowers, opening white with a purple stain, which expands & intensifies with maturity. The three large, central staminodes are yellow tipped with purple.) (15+) D
- 2.525.600: LEUCOCORYNE VITTATA * Chile, III, Atacama, Vallenar, Huasco. 15m. Open areas, among grasses & sparse scrub on coastal sand-dunes in mist-belt. Ex A.Flores & J.Watson 9540. (Heads of several, long-lasting, pale-blue flowers with a striking deep violet-blue stripe up the centre of each segment. Hardy here under unheated glass.) (10+) D

A : \$3.00	;	£1.50	;	€ 2	C: \$5.00	;	£2.50	;	€ 4	E :	\$9.00 ;	£4.50	:	€7
					D: \$7.00									

- 2.563.509: LUPINUS CHILENSIS Chile, II, Antofagasta, SE of Calama. A.Flores & J. Watson 11121. (Tentatively identified as this species by John, the other possibility is L. ananeanus. An annual but an excellent one, neat & low with "compact, dense spikes of very blue flowers sitting down, the tops level with the foliage." Definitely worth a trial.) (15+) C
- 2.565.000: LUPINUS OREOPHILUS Chile, II, Antofagasta, E of Calama. A.Flores & J.Watson 11114. (A subshrubby perennial, again with a tentative name: the other possibility is L.. tarapacensis. Erect bushes, 1m. or less high, "with neat foliage & many shortish spikes of a good blue marked with gold." There are not many lupins in Chile with most of the 7 species confined to this farthest NE, high corner on the altiplano, where Chile, Bolivia & Argentina meet, a little-collected area & a very long way from Santiago. Absolutely temperature-hardy, of course, but the extreme climate is also very dry.) .. (5) E
- 2.567.009: LUPINUS ULTRAMONTANUS Argentina, Catamarca, S of Paso Mina Capillitas. 2700m. Among sparse grasses & rocks on moist to dryish banks. A.Flores & J.Watson 11496. (A perennial up to 40cm. tall with bright ultramarine-blue,
- 2.583.001: MALESHERBIA LINEARIFOLIA Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2300m. Among low boulders & scrub. A.Flores & J. Watson 11275. (A superb, woody-based herbaceous perennial, which John Watson considers is one of the Chileans with the greatest potential in cultivation. About 60cm. high with stems & leaves covered in glandular hairs and panicles of flowers, about 2cm. across, somewhat Delphinium-like in effect, in rich, dusky blue-violets & red-violets, generously produced over a long period. Try it in a really well-drained, lime-free scree-bed in a sunny site.) (15+) D
- 2.587.109: MASTIGOSTYLA cfr. BRACHYANDRA Argentina, Salta. S of La Viñña. 1500m. Low woodland with some clearings. (A cormous member of the Iridaceae, from 12 to-25 cm.tall with quite large Moraea-like flowers in soft lavenderlilac, spotted pale gold. Quite uncommon here, growing near borders of undergrowth in bluebell-like conditions, all with dappled light shade. John writes: "a lovely, choice item to have the bulb-fanatics with tongues lolling, eyes popping, and awhistling like the wolf at the girl in the old Warner Bros. cartoons." Tentatively assigned to M. brachyandra.) ... (20+) F
- 2.595.009: MENONVILLEA CUNEATA Chile, V, Aconcagua, above Portillo. 3800m. WNW to W-facing, summit gravel slopes of Andean watershed. A.Flores & J.Watson 11272. (By far the most desirable of the Chilean Brassicaceae (Cruciferae), limited to between 3500m. & 4600m. in the highest Andes, & an outstanding alpine by any standards. About 15cm. tall, its tomentose stems, set with little, notched, downy, grey-green leaves, carry clustered heads of white to palest yellow flowers, each with a purple centre & exquisitely scented. These are followed by distinctive, rounded seed-capsules.) (10+) E
- 2.588.009: MAURANDELLA ANTIRRHINIFLORA Argentina, La Rioja, La Canpana. 1800m. Scrambling over wire-strand fence below open tree-cover. (A dainty, 2m. high, small-leaved climber, which smothers itself in a succession of spurred, deep violet-blue snapdragons. Probably best grown in a frost-free greenhouse or outside only in summer in the UK.) .. (20+) C
- 2.615.109: MONTIOPSIS CISTIFLORA Argentina, Neuquen, S of Parque Tromen. 2000m. In loose, sandy soil among bunchgrass tussocks. A.Flores & J.Watson 11593. (A 'split' from Calandrinia with little tuffets of narrow, glaucous, rather fleshy, basal leaves & radiating, wiry stems carrying large, silky-petalled flowers in brilliant rose-pink.) (20+) D
- 2.615.500: MONTIOPSIS SERICEA (Calandrinia sericea) Chile, Reg. Metro., ESE of San Jose de Maipo. 2300m. Exposed ridgetops & open, stony slopes. A.Flores & J.Watson 11258. (The finest of the group of hairy-leaved, crimson-flowered species for the alpine-house grower. An outstanding pan-plant with compact hummocks of silvery-grey, downy foliage covered with generously produced brilliant magenta flowers on short stems. Full sun & year-round alpine-house conditions.) . (20+) D

Mutisia: aristocratic daisies of the Andes

- 2.625.109: MUTISIA ACEROSA Chile, Reg. Metro., ENE of San Jose de Maipo. 2300-2500m. Montane steppe & scrub patches on & around ridgecrests & highest major outcrops. A.Flores & J.Watson 11276. (About 30cm. tall with linear leaves & big,
- 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. (Wide-spreading, suckering mounds of stems, about 30cm. high. with a summer-long succession of broad-rayed heads describes as a "beautiful silky pink (almost salmon-pink)." Try it outside in scree or a raised bed. This is the true plant from the locality where Poeppig collected the type-material in 1835: "Andes de Antuco.") (10+) D
- 2.629.109: MUTISIA SINUATA Chile, Reg. Metro., ENE of San Jose de Maipo. 1900-2500m. In montane steppe-scrub. A. Flores & J.Watson 11260. (Another little alpine species: prostrate stems, to about 15cm., with stiff, toothed, grey leaves & cream-
- 2.629.559 : MUTISIA SUBULATA subsp. ROSMARINIFOLIA Chile, VII, Rio Teno valley E of Curico. 2000-2300m. In steppe vegetation on precipitous, W-facing slope. A.Flores & J.Watson 11242. (Sprigs of evergreen, rosemary-like foliage carry huge daisies with strap-shaped ray-florets in eye-burning scarlet. A plant, grown from an earlier Watson collection, grew,

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B: \$4.00 £2.00 € 3. - D: \$7.00

€ 5. -

£6.00

€ 9. -

2.636.250: NASSAUVIA LAGASCAE (var. lagascae) Chile, V, Aconcagua, above Portillo. 3800m. WNW to W-facing, summit gravel slopes of Andean watershed. A.Flores & J.Watson 11271. (A robust, very attractive form of this desirable, dwarf highalpine, forming mats of tiny, firm rosettes of minute, imbricate leaves. Rounded, terminal heads of little flowers, white or lilactinged, are carried on the shortest of stems. Can be grown successfully in the UK in the alpine-house or trough.). (10+) E 2.655.500: NIEREMBERGIA PULCHELLA Argentina, Catamarca, Paso Mina Capillitas. 2500m. Openings among scattered, low, montane scrub. A.Flores & J.Watson 11500. (A small neat alpine, which according to its botanical name, 'beautiful', & to John "can be a truly lovely plant." This collection has been selected by John & Anita from the best forms at the highest altitude. About 10cm. high with fine, linear foliage & white flowers, usually with violet centres.) (50+) E 2.659,000: NOTHOSCORDUM OSTENII * Uruguay, Ex an.A. Castillo coll. (Apparently extremely scarce & local in nature. Alberto Castillo sent Brian Mathew a few wild-collected seeds in 1987. Brian grew these and gained a P.C. for this in April, 1992. Seed he gave to us was grown under unheated glass, where it has proved hardy and comparatively trouble-free ever since. Delicate, thready leaves and wiry stems, about 10cm, high, with umbels of rich chrome-yellow, freesia-scented flowers, opening wide and striped green on the outside. It needs a few bulbs to make a worthwhile potful and, as it has not shown any enthusiasm Nototriche: the classic Andean high-alpines 2.660.800: NOTOTRICHE CAESIA Argentina, Catamarca, Cerro El Gobbo. 4000m. Flat, open, exposed summit in loose, sandy soil & among rocks. A.Flores & J.Watson 11484. (A superb representative of the last of the great alpine genera to be tamed in cultivation. Alpine-plant specialists have had little opportunity to experiment with this genus of the Malvaceae, distributed from Ecuador to Chile but centred on the high Andes of Peru & Bolivia, This alpine forms compact cushions of rosettes to 4-5 cm. with stemless, crocus-like flowers in variable shades of icy blue, slightly paler in the centres. "No need to blow trumpets for any of the nototriches listed." comments John, "They stand among the best of the genus". (10+) F 2.661.000: NOTOTRICHE COMPACTA Chile, V, Aconcagua, above Portillo. 3800m. WNW to W-facing, summit gravel slopes of Andean watershed. A. Flores & J. Watson 11270. (Most southern representative of this amazing genus, this Chilean has been seen, pretty much in character, on the British showbench. Soft, velvety cushions of rosettes, composed of tiny, woolly, grey, 3-fingered leaves. Large, stemless, cup-shaped flowers, open in white or ice-blue from violet-blue buds.) (10+) E 2.665.000: NOTOTRICHE NIEDERLEINII Argentina, La Rioja, above Mina La Mexicana. 4300m. SE exposures of summits, subject to persistent snowbeds in winter and regular cool, moist mists and showers in spring and early summer. A.Flores & J.Watson 11515. (A high-alpine with compact rosettes bearing large, stemless flowers in extraordinary colours: "variable in the coffee-cum-chocolate-with-touch-of-chartreuse range." One of several remarkable brown nototriches.) (10+) F 2.681.509: OENOTHERA LONGITUBA Argentina, Catamarca, Passo Mina Capillitas. 2500m. Among rocks on dry, sunny slopes. A.Flores & J.Watson 11503. (About 30cm. tall, Pale yellow flowers with extremely long corolla tubes.) . (20+) C 2.682.009: OENOTHERA NANA Argentina, Catamarca, Cerro El Globo. 3900m. Earthy banks on steep boulder-slopes. A.Flores & J.Watson 11494. (An erect alpine, about 15cm. high, with spikes of yellow & orange flowers.) (20+) C 2.682.209: OENOTHERA PUNAE Argentina, Catamarca, Cerro El Globo. 3950m. Mountain summit zone with dwarf steppe flora. A.Flores & J.Watson 11490. (A dwarf high-alpine with 4-petalled, daffodil-yellow flowers.) (20+) E Oxalis: choice but easy 2.700.208: OXALIS ADENOPHYLLA Argentina, Neuquen, Cerro Bolas. 1000m Bare areas among other steppe-vegetation. A. Flores & J. Watson 11571. (A vigorous form of this splendid, dwarf Andean alpine steppe-plant with fine, pleated, grey-green leaves & large pink flowers. Well-known in cultivation, where it is a troublefree, rock-garden plant in sunny scree. Wild seed offers the chance of variations: it is usually more variable in colour in the wild than in cultivated forms.) (15+) C 2.700.209: OXALIS ADENOPHYLLA Argentina, Neuquen, Passo Rahue, N side. 1500m. Bare, stony ground among dwarf, Andean steppe-vegetation. A.Flores & J.Watson 11572. (Collected about 100km. North from the previous listing & at a greater altitude in a more exposed habitat. Flowers were an exceptionally dark pink & foliage very dwarf & neat.) (15+) D 2.702.000: OXALIS ENNEAPHYLLA * Falkland Islands, W end of Berkeley Sound. 3m. Dryish, well-drained, peaty loam. Ex a R. Reid coll. (A delightful species, more compact than O. adenophylla with little, glaucous, rounded, radially palmate leaves & big, white to pale-pink flowers on 2cm. stems. Quite easily grown in a trough or scree outside in the UK.) (10+) D 2.709.009: OXALIS SQUAMATA Chile, VII, Rio Teno valley E of Curico. 2000-2300m. Level, bare, gravelly patches. A.Flores & J.Watson 11247. (A truly alpine Chilean which has proved to be a trouble-free garden-plant in the UK. Tufts of little, greygreen, trifoliate leaves, a few cm. high, & lots of bright, rosy flowers. Neat & well-behaved enough for a trough.) (15+) C F & W 11462: PASSIFLORA SP. Argentina, Salta, W of Quijano (W of Salta). 2000m. Among scattered dwarf scrub on precipitous slope. A.Flores & J.Watson 11462. (Small climber but usually prostrate here. Collected out of flower.) (15) D F & W 11478: PASSIFLORA SP. Argentina, Salta, S of La Viña. 1500m. Sparse, low woodland. A.Flores & J.Watson 11478. A: \$3.00 £1.50 € 2. -C: \$5.00 £2.50 € 4. -E: \$9.00 £4.50 €7.-€ 3. -B: \$4.00 £2.00 D: \$7.00 € 5. -**F**: £3.50 \$12.00 ; € 9. -

- 2.745.750: PHYCELLA HERBERTIANA Chile, VII, Rio Teno valley E of Curico. 2000-2400m. Forming small colonies among steppe-scrub or in the lee of large outcrops. A.Flores & J.Watson 11250 (New to cultivation, a high altitude, inland representative of a small Chilean genus of bulbs in Amaryllidaceae, which is very close to Rhodophiala. Tubular red flowers in summer. Altogether a more slender plant than the better-known species of the Pacific coast and, of course, absolutely temperature-hardy. The area has an Andean 'mediterranean' climate with a heavy, persistent snowfall in winter..) . . (10) F
- 2.746.500: PITHECOCTENIUM CYNANCHOIDES Argentina, Catamarca, W of Andalgala. 900m. Woodland remnant. A. Flores & J. Watson 11415. (A very lovely and choice climber in *Bignoniaceae*, reaching here to a height of 3-4m into tall, multi-branched, broadleaved trees. Large white and cream, *Incarvillea*-like flowers with curved corolla-tubes. This would make an outstanding addition to climbers hardy in the UK if it could be persuaded to thrive against a sunny wall.) (5) E
- 2.746.829: PORTULACA FULGENS Argentina, Tucuman, Tafi del Valle, El Infiernillo. 3500m. Exposed, well-drained site (but on a cloud-shrouded summit). A.Flores & J.Watson 11435. (A dwarf alpine, more or less prostrate, with large flowers in "shiny, fulvous golden yellow, orange or scarlet...another 'real little beaut' for those with strong colour-stomachs or who wear dark polarising shades," comments John. These alpine perennials reveal an entirely new aspect of this genus. (20+) C
- 2.747.009: PORTULACA PERENNIS Argentina, border of Salta & Tucuman provinces. c. 1100m. Sunbaked, loose sand of flat, open legume-savannah. A.Flores & J.Watson 11158. ("A perennial ringer for the well-known garden annual *P. grandiflora*" writes John. Its size & succulent foliage are similar but the impressively large flowers are always in an "eye-hitting, silky, rosy pink...hot colour, hot spot." This would seem to be an extremely significant new, dwarf perennial.) (20+) C

Rhodophiala: the hardy hippeastrums

These glorious, late-flowering bulbs in Amaryllidaceae are becoming better understood by northern hemisphere enthusiasts now that they are proving perfectly growable alongside more familiar Mediterranean & SW Asian winter & spring-growing species. Nomenclature is a problem & shows every likelihood of continuing to be one. Over 10 years ago, we were grateful to Prof. J. Grau of the Universität

München, who was working on the genus for the 'Flora Chilensis', for his help with identification of our collections. On his recommendation we split the high altitude ones with capitate stigmas into the genus *Rhodolirion*. Since then little progress seems to have been made and the genus *Rhodolirion* has not been widely adopted, so we are, at least for the moment, listing all together under *Rhodophiala*.

- 2.780.009: RHODOPHIALA ADVENA Chile, IV, Coquimbo, N of Los Vilos. 150m. Hills in coastal mist-belt with low, semi-xerophytic scrub. A. Flores & J.Watson 11230. (Usually no trouble to grow in the bulb-frame or cold-greenhouse in the UK. Up to 5 elegant flowers, usually scarlet but it can vary to yellow and intermediate apricot-tints. 20-30cm. tall.) . . (10+) C
- 2.780.455: RHODOPHIALA BAGNOLDII * Chile, III, Atacama, Vallenar, Huasco. 15m. Open areas, among grasses & sparse scrub on sand-dunes in mist-belt. A. Flores & J. Watson 11293. (The spectacular *Hippeastrum* of the Atacama coast. Stout stems about 40cm. high with umbels of large, pure-yellow, funnel-shaped flowers. Best grown frost-free.) (10+) C
- 2.780.510: RHODOPHIALA BIFIDA * Argentina, Buenos Aires prov., Pipinas. (The original coll. was from about 200km. S from Buenos Aires itself, about as far South as this species from N Argentina and Uruguay extends. It should be the hardiest form and it has grown well in an unheated greenhouse in Wales for the past decade. Spectacular umbels of up to 7, funnel-shaped flowers in brilliant red with yellow anthers cluster on 20cm. tall stems in early autumn.) (10+) D
- 2.780.800: RHODOPHIALA ELWESII * Argentina, Neuquen, Lacar, E of Lago Lolog. 1100m. Open areas, among grasses & scrub, in sandy soil. (From near San Martin, where Elwes stayed in February, 1902, & presumably made the type coll. Very beautiful with upward-facing, soft-yellow flowers with wine-coloured throats on 30cm. tall stems. The name has been misapplied in gardens to some colls., probably yellow R. advena, from Chile. Absolutely temperature-hardy & does well, raised from our 1994 seed coll. & planted out in our netting-sided polytunnel: our 2008 seed just collected.) (10+) D
- 2.781.800: RHODOPHIALA RHODOLIRION (Rhodolirion montanum, not Rhodophiala montana, a yellow species, if you wish to split it.) Chile, Reg. Metro., ENE of San Jose de Maipo. 2000-3000m. Slopes on all exposures & ridgetops in soil pans. (Most sumptuous & spectacular of high-alpine bulbs, once thought to be ungrowable, but we flower this regularly from our own 1991 seed coll. It just takes a little longer to flower from seed than many bulbs & like most of this genus likes its fleshy, perennial roots to penetrate undisturbed as deeply as possible. Forms clumps of bulbs which send up a sheaf of 15cm. stems carrying huge, wideopen trumpets, mainly deep-pink to red in this area & variously striated with purple.) (10+) D
- 2.781.808: RHODOPHIALA RHODOLIRION Chile, VII, Rio Teno valley E of Curico. 1900-2400m. W-facing slopes of precipitous mountain valley. A. Flores & J. Watson 11241. (These are worth every effort and patience.) (10+) D
- 2.781.820: RHODOPHIALA RHODOLIRION from WHITE FORM * Chile, Reg. Metro., NE of Valle Nevado. 3100m. Loose, sandy soil on open slopes. (A few cultivated seeds from our 1994 coll of this local population with huge, pure-white trumpets, patterned with lines of tiny crimson spots running along the veins, back into the yellow-green throat.) . . . (10) E

2.781.909: RHODOPHIALA SEROTINA Chile, III, Atacama, between Ovalle & Huasco. A.Flores & J.Watson 11106. (An undescribed species to be published under this name by John & Anita in a forthcoming book on the Chilean desert flowers. An extremely late, few-flowered plant with quite short-stems carrying flowers with "pyjama-striped tepals in candy pink & silvery white." It occurs, but rarely, in a comparatively limited area of the southern Atacama.)
2.792.109: RUELLIA CILIATIFLORA Argentina, La Rioja, S of Bazan. 500m. Rich deep soil of clearings among lush vegetation. (A superb and spectacular herbaceous perennial, 50cm. or more in height. with "showy spikes of pure sky-blue, Incarvillea-like corollas." "What a plant! We must give it a chance." enthuses John. The hardier members of this largely tropical genus in Acanthaceae have mostly been somewhat challenging to grow. We hope this may be an exception.) (10+) E
Salvia: new introductions from Argentina
2.811.509: SALVIA GILLIESII Argentina, Catamarca, Paso Mina Capillitas. 2500m. Among vigorous montane scrub & herbs. A.Flores & J.Watson 11502. (A 2m. tall subshrub with notable quantities of small, grey-purplish blue flowers. A fine species &, as far as we know, the only one of those listed here, ever to have been introduced into cultivation.) (15+) D
2.813.509: SALVIA LORENTZII Argentina, Catamarca, Paso Mina Capillitas. 2500m. Among vigorous montane scrub & herbs. A.Flores & J.Watson 11499. (A worthwhile herbaceous species, up to 1m. tall, with deep blue flowers.) (10+). E
2.815.509 : SALVIA PERSONATA Argentina, Catamarca, Paso Mina Capillitas. 2500m. Among vigorous montane scrub & herbs. A.Flores & J.Watson 11506. (Herbaceous with spikes of purple-blue flowers. Up to 1.5m. in height.) (15+) D
2.817.509: SALVIA STACHYDIIFOLIA Argentina, Catamarca, Paso Mina Capillitas. 2500m. Among vigorous montane scrub & herbs. A.Flores & J.Watson 11498. (A 1m. tall herbaceous perennial. Among species in cultivation, this most resembles a much more compact version of rich-blue <i>S. guaranitica</i> . John comments that "these salvias are surely musts for anyone with herbaceous pretensions." All grow in the lower alpine zone on moister, SE-facing, rain-catchment exposures.) (15+) D
2.840.100: SCHIZANTHUS GRAHAMII* Argentina, Mendoza, Malargue, Valle de las Lenas. 2200m. Loose, stony soils on steep slopes & along gulleys. (One of two or three species in a small genus of the Solanaceae, (all but confined to Chile), which have climbed to high elevations & acquired a perennial, even if short-lived, habit. Much-cut, rich-green, glandular foliage & branching stems to about 50cm., carrying successions of 'upside-down', butterfly-like flowers in a most violent colour combination of shocking pink & luminous orange. An opportunistic colonist of disturbed slopes, revelling on the trashed skiruns here in summer. It can be grown with a care in scree-bed conditions in the UK. It annually provides a spectacular display, almost 1m. high, over about 3 months in our netting-sided polytunnel, where it sows itself.) (20+) C
2.852.000: SENECIO CRITHMOIDES Chile, V, Aconcagua, above Portillo. 3800m. WNW to W-facing, summit gravel slopes of Andean watershed. A.Flores & J.Watson 11269. (A characteristic element of the scattered, specialised, high-alpine scree-flora of these border mountains with their heavy persistent winter snowfall & drier summers. A dwarf, glabrous subshrub about 10cm. tall with tiny, fleshy, toothed leaves & discoid heads of yellow flowers.) (10+) D
2.880.010: SISYRINCHIUM PALMIFOLIUM (S. macrocephalum) * No data. A remarkable plant, described as "surely one of the largest and most robusta seemingly endless display of large yellow saucer-shaped flowerswith bold tufts of broad grey-green leaves overtopped by stiff, widely-winged flower stems over a metre in height." Widely distributed in damp grassland up to 1200m. in Uruguay, SE Brazil & N Argentina, it has proved hardy both with Brian Mathew in Surrey and with Bob & Rannveig Wallis in West Wales. The 1m. high, arching, branched inflorescence produces about 100 of the bright yellow flowers with orange anthers: "a very desirable species anda spectacular sight." As it appears not to thrive in pots, it may be best to plant the seedlings out in the garden next spring, as soon as they are large enough (15+) D
2.905.009: SOLANUM ACAULE Argentina, Catamarca, Cerro El Globo. 3950m. Mountain summit zone in barish soil pans. A.Flores & J.Watson 11491. (A prostrate, rosette-forming high-alpine, only about 5cm. high when producing its rich violetblue, angular-rounded flowers carried in shortly radiating, few-flowered inflorescences. "From an alpine point of view, unquestionably the aesthetically choicest of its vast race," comments John
2.910.500 : SOLENOMELUS PEDUNCULATUS * Chile, VI, Cachapoal, Rio Cachapoal valley W of Pangal. 950m. Openings among scrub in sandy soil. (A fine, rhizomatous <i>Sisyrinchium</i> -relative for the alpine-house or bulb-frame. Broad, tapered, grassy foliage & big, rounded, rich-yellow flowers from prominent spathe-bracts on 20cm. stems.) (15+) C
Tarasa : a spectacular new alpine
2.938.100 : TARASA ROSIFLORA (<i>ined.</i>) Argentina, Neuquen, N of Volcan Tromen. 2000m. Among dwarf steppe-flora on bare stretches of flat, stony mountain-upland. A.Flores & J.Watson 11595. (An even dwarfer version of desirable <i>T. humilis</i> , which John considers distinct and worthy of specific rank. The running rootstock branches below ground and surfaces as a colony of small neat, felted rosettes; in the centre of each of these appears a succession of comparatively large, rich rose-pink, mallow-flowers, opening wide in sunlight like single, wild roses. Not previously cultivated as far as we know.) (10+) F
2.939.109: TECOMA GARROCHA Argentina, La Rioja, N of Famatina. 1500m. Open, stony, pampas scrubland. A. Flores & J. Watson 11321. (A 2-3m. tall shrub with wand-like stems carrying clusters of honeysuckle-like, orangey red flowers. "Well worth a whirl" comments John. Its habitat has a dryish, continental climate so it should be temperature-hardy.) (20+) D

Tecophilaea: gentian-blue 'crocuses'

Tecophilaea : gentian-blue 'crocuses'
2.940.010: TECOPHILAEA CYANOCROCUS * No data. The famous blue Chilean crocus, long-supposed to be extinct in the wild but recently rediscovered. It is well established in cultivation & not difficult to grow in standard Mediterranean bulb conditions, though perhaps best not overheated in summer. We have never attempted to grow it outside in the UK but it has reputedly been grown outdoors in Ireland. It can be increased slowly but steadily from seed or offsets. Its crocus-like flowers in spring have no equal in the purity & intensity of their gentian-blue. We hand-pollinate between different clones of the different colour forms, which come fairly 'true' from this selfed seed. Any further colour variants are a bonus (10+) E
2.940.011: TECOPHILAEA CYANOCROCUS 'LEICHTLINII' * A slightly paler blue form with a large white centre, considered by many to be the most beautiful variant. It is also the most vigorous & fertile form with us. It is interesting to note that the entire colony of this species, recently discovered not far from Santiago, is reported as approximating most closely to this colour phase, so maybe this is more typical of the species than the one regarded as the type-form (10+) D
2.940.012 : TECOPHILAEA CYANOCROCUS 'VIOLACEA' * Hand-pollinated dusky, violet-blue form (10+) E
2.966.100: TRIFURCIA LAHUE (subsp. lahue) (syn. Herberta lahue, Alophia lahue) * Argentina, Buenos Aires Prov. Ex an A. Castillo coll. (We hope this charming, cormous genus in <i>Iridaceae</i> , previously listed by us under <i>Herbertia</i> , is now settled under <i>Trifurcia</i> . This species has proved hardy with us in an unheated greenhouse over many years. A long succession of delightful, violet <i>Tigridia</i> -like flowers on 10cm. stems. Dormant by mid-summer so fits in with other 'bulbs'.) (20+) B
2.966.209: TRIFURCIA TIGRIDIOIDES Argentina, Salta, W of Quijano. 2000m. Grassy verge. A. Flores & J. Watson 11465 (A cormous species, 10-15cm. tall. <i>Tigridia</i> -like, rich-blue flowers with white centres, spotted darker-blue.) (20+) D
2.968.500: TRISTAGMA NIVALE * Argentina, Neuquen, Lacar, Cerro Chapelco. 1680m. Among igneous rocks on exposed, stony slopes. (Distinctively curled, fleshy leaves coil on the scree. Tubular flowers, with narrow, reflexed lobes, on 15cm. stems, vary from purple-black to green. A fascinating bulb for the alpine-house or bulb-frame.) (10+) D
Tropaeolum: fashionable tuberous climbers
2.970.109: TROPAEOLUM ARGENTINUM Argentina, Tucuman, S of Chusqua. 800m. Dense, low woodland and scrub in humid conditions. A. Flores & J. Watson 11449. (A vigorous climber, reaching 4-5m. Candle-like inflorescences of small, fringed flowers in light orange-yellow. New to cultivation, as far as we know, this "looks decidedly perennial" & tuberous. Very unlikely to show year-round hardiness in the UK but should grow enthusiastically outside in a British summer.).(5) D
2.970.200: TROPAEOLUM AZUREUM Chile, Reg. Metro., Chacabuco near Polpaico. 500m. Hot, dry hillslopes, scrambling through low bushes. A. Flores & J. Watson 11530. (A fresh wild coll. of this lovely, fragile, tuberous-rooted climber. In the UK, where it is not always easy to maintain, it is best kept almost frost-free when growing in winter & dry (but not completely so) when dormant in summer. Very beautiful with many, flat-faced flowers in soft violet-blues with white centres.) . (5) D
2.970.901: TROPAEOLUM HOOKERIANUM (subsp. hookerianum) Chile, IV, Coquimbo, S of Halcones. 355m. Among scrub in coast range valley. Ex A. Flores & J. Watson 8632. (A small, neat, summer-dormant, tuberous climber to about 80cm. Similar in general aspect to T. brachyceras but most obviously different in its clustered flowers, which are also larger & of an even brighter yellow. We have found this quite easily grown and temperature-hardy under unheated glass.)
2.970.929: TROPAEOLUM HOOKERIANUM subsp. AUSTROPURPUREUM Chile, IV, Coquimbo. 40m. Among rocks & scrub on S-facing hillside. A. Flores & J. Watson 11310. (A recently discovered, more southern race with rich-purple flowers, more or less tinged with redder or bluer shades. Otherwise similar to T. h. subsp. hookerianum.)
2.971.200: TROPAEOLUM POLYPHYLLUM * Argentina, Mendoza, Puente del Inca. 2720m. Steep, loose, clay slopes. (Flowers vary here from cream through the usual bright yellow to some with orange & red tints. These appear all along the 1m. long trails of beautiful, deeply cut, blue-grey leaves. Ascending 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.) (5) D
2.971.300: TROPAEOLUM RHOMBOIDEUM * Chile, Reg. Metro. 1800m. Loose soil on S-facing slopes. Ex A.Flores & J.Watson 8681. (A dwarf, montane species with tiny, dissected leaves. It threads among low scrub to no more than 30cm. in the wild. Large, prominently spurred flowers of bright, egg-yolk yellow, often age to white at the tips.)
2.971.400: TROPAEOLUM SESSILIFOLIUM Chile, Reg. Metro., Lagunillas. 2200m. Steep, open rocky slopes. A. Flores & J. Watson 11255. (A charming plant & one of the dwarfest in the genus with 20cm., branching stems with tiny, lobed leaves & white or pale lavender flowers with orange-yellow centres. Not difficult in a scree-bed or the bulb-frame.) (5) D
2.971.610: TROPAEOLUM SPECIOSUM* No data. A summer-grower from wet S Central Chile down into Chiloe. Loves cool, moist British gardens, forming curtains of dainty, light-green foliage sheeted with scarlet flowers in late summer & autumn, when the stacky blue fruits appear. Diclikes heat & drought but glorious in Scotland, the West & Iroland.

when the steely blue fruits appear. Dislikes heat & drought but glorious in Scotland, the West & Ireland. (5) B

Viola: an incredible range of the incredible rosulates

- 2.980.959: VIOLA aff. CORONIFERA Argentina. Neuquen, W of Primeros Pinos. 1800m. Among low herbs & shrubs in bare, soily pockets on rocky, N-facing (sunny) scarp. A.Flores & J.Watson 11590. ("A marvellous plant" which appears to be a unrecorded population of one of the most spectacular & desirable 'rosulates', though more evaluation is needed to confirm if it is identical to the incomparable V. coronifera, only known from the area of the locus classicus, more than 100km. to the South. Clumps, about 5cm. high, composed of small, neat, columnar rosettes of little, firm, leathery, translucent-edged, evergreen leaves. When in flower, coronets of deep, rich, egg-yolk yellow flowers encircle the fertile rosettes.) . . . (10) F
- 2.981.950: VIOLA ESCONDIDAENSIS Argentina, Neuquen, S of Parque Tromen. 2000m. In loose, sandy soil among bunch-grass tussocks. A.Flores & J.Watson 11594. (A mat-forming, rather than rosulate, steppe-species, forming a patch of rosettes, about 6cm. tall, from spreading underground rhizomes. Elegant flowers of creamy white or greyish blue with yellow throats appear in quantity at the tips of fertile shoots. Sounds as if it might make a fine alpine-house pan-plant.) (10) F
- 2.981.579: VIOLA aff. FLOS-IDAE Argentina, La Rioja, mine road to La Mexicana. 2700m. Gravel-beds & fine talus. A. Flores & J. Watson 11521. (A stemless, rosette-forming alpine forming small cushions, only 5cm. high. White, pale lavender or pinkish flowers with dark centres. Investigation of this & the following taxon was the main reason for John & Anita travelling to this little-collected corner of Argentina. Much study is needed before firm taxonomic conclusions can be drawn but the possibilities of this & several other collections here being undescribed & new to science cannot be discounted. Whatever their eventual taxonomic status, they have certainly never before been introduced to cultivation.) (20+) F

The quest for rosulate violets

Over the last few years John & Anita Watson have become increasingly involved in the field-work necessary for their research on the Chilean and Argentinian flora, particularly the rosulate violas. Many of their collections in the preceding South American section of this list are the spin-off from their journeys to investigate the *Viola* taxa on this page. Their travels have taken them North to the area where the borders of Chile, Bolivia and Argentina come together. Material from this area has never been collected before and might never be collected again. They have also travelled South towards Argentinian Patagonia, a better-known area, to come up with an entirely new locality for the amazing *Viola coronifera* (or perhaps even a new species allied to it). They operate on the

shoestring provided by a grant from the Alpine Garden Society & the support you may provide by purchasing their seeds from us. The cutting-edge of gardening is being honed by their detailed knowledge of the Andean flora and their experience of seed-collecting, accummulated over a lifetime. We hope that we can keep them travelling even if it is only to run-up the road from their Chilean home in Los Andes to the most accessible localities. The Andes are vast and provide the last great reservoir of little-known mountain-plants which can be tapped by gardeners. Establishing these Andean genera in cultivation is the ultimate horticultural challenge. We hope John and Anita will continue to provide us with the seeds of these plants. With your support we can keep them collecting.

£1.50 € 2. -A : \$3.00C: \$5.00£2.50 € 4. -E: \$9.00 € 7. -£4.50 B: \$4.00 £2.00 € 3. -D: \$7.00 £3.50 € 5. -F: \$12.00 £6.00 ; €9..

3.410.250: HESPERANTHA BACHMANNII * No data. A winter-growing, Western Cape species, given to us by our late Californian friends, Stan Farwig & Vic Girard. We thought it would probably need to be grown frost-free in the UK but John Blanchard (Dorset, UK) has grown it from our seed under unheated glass without any frost protection for several years now and rates it as "a super plant". About 30cm. high with elegant white flowers with dark markings. (20+) C 3.541.310: MASSONIA PUSTULATA * No data. (A winter-grower, like almost all the species in this genus. A large, subsessile, white, 'shaving-brush' heads sits on flat, rounded, strongly-veined leaves, which are rough & covered with pustules. From comparatively high altitudes in the N Cape & Namaqualand ranges, this is comparatively temperature-hardy.) ... (15+) C Moraea loubseri: 'saved' by cultivation 3.555.300: MORAEA LOUBSERI * Western Cape, Langebaan, Olifants Kop. (A winter-grower: one of the most striking and localized Cape species. First recorded in 1973 on the granite outcrop of Olifants Kop, just before quarrying started there. It has been found nowhere else. Narrow leaves & wiry stems, about 20cm. high, with complex, flat 'iris' flowers in penetrating blue-violet with dense black beards on the outer tepals. Our own seed, grown in our unheated glasshouse.) (20+) E 3.645,200 : POLYXENA LONGITUBA * No data. Described only in 2001 but grown in UK alpine-houses for decades under the misapplied name, P. ensifolia. A little, winter-growing member of the Hyacinthaceae, endemic to the Roggeveldberge, in the N Cape, around 1600m. Reliably hardy under unheated glass in the UK. White flowers, variably tinged with lilac, on long perianth tubes nestle among linear leaves. An excellent autumn-flowering, alpine-house pan-plant. (20+) B Romulea: the 'crocuses' of the Cape 3.700.670: ROMULEA CITRINA * No data. A winter-growing, Namaqualand endemic which is fairly reliably temperaturehardy under glass in the UK. Quite large lemon-yellow 'crocuses' usually with brownish exteriors. (15+) C 3.701.800: ROMULEA DIVERSIFORMIS * N Cape, Komsberg, SE of Sutherland. 1800-2000m. Ex a R.& R. Saunders coll. (Very local in the desert-ranges of the Sutherland region, along the southern margin of the Great Karoo. Clean, bright, buttercup-yellow flowers, distinct in the absence of dark internal markings. Temperature-hardy.) (15+) C 3.703.400: ROMULEA HIRTA * N Cape, near Middlepos. 1800m. Ex a R.& R. Saunders coll. (A temperature-hardy species from the continental climate of the inland plateaux, S of the Great Karoo, SE from Nieuwoudtville to the Klein Roggeveld. Distinct, winged, ciliate leaves & pale yellow flowers, marked internally with a transverse brown band.) (15+) C 3.703.700: ROMULEA KOMSBERGENSIS* N Cape, Komsberg, SE of Sutherland. 1800-2000m. Ex a R.& R. Saunders coll. (Only recorded from sandy soils on the high Komsberg plateau & inured to low winter-temperatures. The big, rosy flowers are usually tipped with violet-blue & the buttercup-yellow cup, below a bluish band, has a brown base.) (15+) C 3.704.700: ROMULEA MONTANA * N Cape, S of Nieuwoudtville, near Moedverloor. 1300m. (Distributed at high altitudes S from the Bokkeveldberge to the Cedarberg. Shiny, buttercup-yellow flowers, usually blotched with dark brown & tinted or feathered red-brown outside. The name of the locality means 'lost hope' but we have high hopes for this.) (15+) C 3.704.800: ROMULEA MONTICOLA * N Cape, S of Nieuwoudtville, near Moedverloor. 1300m. (Confined to the high plateaux of the Bokkeveld & Gifberg, this is sympatric with the preceding & remarkably similar in flower. The two are not closely allied, however, & have quite different corms. Red-brown backed, golden yellow flowers, with deeper yellow centres.) . (15+) C 3.706.110: ROMULEA SALDANHENSIS * No data. From sandy clays near the Atlantic Ocean, N & S of Saldanha Bay. One of the easiest & most satisfying species to grow: in spite of its habitat near sea-level, we have grown it unheated but it may be safest kept frost-free. Big, bright-yellow flowers, darkly pencilled inside & marked brown outside.) (20+) C 3.706.800 : ROMULEA SLADENII * W Cape, Gifberg S of Vanrhynsdorp. 1000m. (Endemic to the sandstone of the Gifberg plateau. Very crocus-like with its white, yellow-centred flowers, usually purple-stained externally.) (15+) C 3.707.500: ROMULEA TETRAGONA (var. tetragona) * Northern Cape, Roggevelddberge, near Middlepos. 1800m. (A most distinct plant, possibly not close to any other, though placed in Section Hirtae with R. hirta. Like it in its winged, hairy leaves 3.707.701: ROMULEA TORTUOSA (subsp. tortuosa) * Northern Cape, Roggeveldberge. (A species from the cold, dry, western ranges, the Hantamberge, the Bokkeveldberge, the Komsberg & the Roggeveld. Fascinating, flexuose, spiralled leaves twist on the ground. Striking, big, yellow to orange flowers with spade-shaped black blotches on each segment.) (15+) C 3.707.751: ROMULEA TORTUOSA subsp. AUREA * Northern Cape, Nieuwoudtville area. 1500m. (According to De Vos, distinguished from the type-race "by its slightly larger, crocus-like, fragrant, buttercup-yellow or almost orange-yellow flowers without dark markings, with the upper part of the perianth segments paler yellow" among other characters. The two races are usually separated geographically but apparently colonies of intergrades occasionally occur.) (15+) C

In this list, we have included only South African winter-growers from the winter-rainfall areas of the Northern & Western Cape provinces. Some summer-growers from the Drakenberg & elsewhere in the summer-rainfall area will be offered in a future list.

A: \$3.00 £1.50 € 2. -C: \$5.00 £2.50 € 4. -E : \$9.00 €7.-£4.50 B: \$4.00 £2.00 € 3. -D: \$7.00 £3.50 € 5. - \mathbf{F} : \$12.00 £6.00 €9.-

 $B: \$4.00 ; \pounds2.00 ; \in 3.$

4.044.010: ANEMONE OBTUSILOBA from BLUE FORM * No data. From a good, rich blue form of this very variable, buttercup-like perennial, widespread in meadow habitats through the Himalayas from Pakistan to Burma, between 2000 & 4300m. Like a bright-blue buttercup with decumbent flower stems rising to 15cm. from close clumps of leaves, in this case, hairless, deeply cut and bright shining green. Sows itself happily in our gravel-surfaced peat-bed (10+) C
4.045.007: ANEMONE RIVULARIS * China, Yunnan. Ex ACE 1698 (A lovely, 60cm. high meadow-plant, widespread from Kashmir to Yunnan. Long-stalked, cup-shaped flowers, white inside & heavily tinged with purplish-blue outside.) (15+) B
4.267.810 : DELPHINIUM TATSIENENSE * No data. Recorded up to 4000m. in S Sichuan & a delight in a raised bed, scree or other well-drained, sunny site. Flights of azure-blue butterfles on widely branching, 30cm stems in summer (20+) B
4.541.510: LYSICHITON CAMSCHATCENSIS * No data. Beautiful, white, green-tinged, sweet-scented spathes in spring. A plant of the bogs & lakesides of cold NE Asia, from N Japan up through Sakhalin to Kamchatka. At about 30cm. high, a smaller plant than its N American relative. Freshly collected seed for immediate sowing in very wet conditions (15+) C
4.545.710: MAGNOLIA SIEBOLDII * No data. Native from S Japan into Korea & a reliable plant for UK gardens. A large, deciduous shrub or small tree up to 5m. high, flowering from the end of May onwards with us. Slightly pendant, white flowers with a central cone of crimson stamens "look you in the face". Just collected: sow immediately (10+) C
4.546.810: MAGNOLIA WILSONII * No data. A glorious small tree from SW China & one of the finest of Ernest Wilson's introductions. Pendulous white flowers, holding dark-red stamens, in early summer. These two related species are the most satisfying magnolias to raise from seed: they grow relatively quickly and flower when quite young (10+) C
Paeonia: the hardy, eastern species
4.580.000: PAEONIA EMODI * India, Garhwal Himal. 3000m. (Floppy, outward-facing, pure-white flowers. Few.) . (3) E
4.579.808 : PAEONIA DELAVAYI from SELECTED YELLOW * China, Yunnan, Dali, Cangshan. Ex SBEC 794. (From a particularly fine clone selected out of a wild coll. of this shrubby species, currently considered to include Chinese <i>P. lutea</i> & <i>P. potaninii</i> , as a variable intergrading species. About 1.5m. high with stiff, upright woody stems, beautifully cut & tinted foliage (worth growing for this alone) & flowers in coppery & crimson-tinted yellows. Seeds from a plant with very fine, large, full-petalled, soft-yellow flowers, just tinted with copper in the bud, but they will be likely to vary.)
4.580.250: PAEONIA JAPONICA.* No data. A woodland species from the mountains of southern Japan on Honshu, Shikoku & Kyushu. It has been placed as a variety of <i>P.obovata</i> but, while obviously allied to it, it is utterly distinct in its thin textured, yellowish green foliage on stems about 40cm. tall, which carry cup-shaped, pure-white flowers holding golden anthers on pink filaments. Not the easest species to grow in our experience: it needs a lot of shade in rich well-drained soil.) (5) F
4.580.520 : PAEONIA LACTIFLORA (<i>P. albiflora</i>) * No data. The wild species from Siberia, Mongolia & NW China is little known in gardens, where its influence is manifest only in the multitude of herbaceous hybrid clones. Dark-green leaves, divided into lanceolate lobes & 60cm. stems carrying two or more large white flowers with golden stamens
4.580.521 : PAEONIA LACTIFLORA from PALE PINK FORM * No data. Soft-lilac-pink variant
4.580.525: PAEONIA LACTIFLORA "var. PARADOXA" * An improbable name for a handsome variant, maybe of hybrid origin. Stems, 60cm. tall, and leaves, both in dark reddish green, with flowers, up to 20cm. across in dark violet-red (6) D
4.581.020: PAEONIA OBOVATA var. ALBA * No data. A white-flowered variant & the most generally grown one. Essentially similar to <i>P.o.</i> subsp, willmottiae but lacks the downy undersides to the leaves and usually flowers later
4.581.050: PAEONIA OBOVATA subsp. WILLMOTTIAE * No data. Outstandingly beautiful even in such an aristocratic genus. Rounded, lobed foliage, greyish with coppery tints, especially richly coloured when it unfolds in spring, forms a perfect background for the translucent, ivory-white cups holding the golden stamens around the crimson stigmas. A native of deciduous woodland between 800m. and 2800m. in W China, from SE Gansu to E Sichuan. Perfectly growable in the UK (6) E
4.581.590: PAEONIA VEITCHII (var. veitchii) (P. anomala subsp. veitchii in 'Flora of China')* No data. The type-race, less often seen in gardens than the following, P.v. var. woodwardii. Smaller, deeper coloured flowers, opening earlier (6) D
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. An ill-defined variety 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 * This appears to be a white variant of <i>P. veitchii</i> var. <i>woodwardii</i> , a lovely plant, very rarely seen in cultivation, with pure-white flowers against cut, bright-green foliage. Our past experience indicated that a reasonable proportion will come white from seed with the balance in a very pale pink
A: \$3.00 ; £1.50 ; €2 C: \$5.00 ; £2.50 ; €4 E: \$9.00 ; £4.50 ; €7 B: \$4.00 : £2.00 : €3 D: \$7.00 : £3.50 : €5 F: \$12.00 : £6.00 : €9

D: \$7.00

; £3.50 ;

€ 5. -

F: \$12.00;

£6.00

- **5.013.009 : ACIPHYLLA SCOTT-THOMSONII** NZ, Canterbury, Torlesse Range, Porter's Pass. S.Bond 08-050. (Stiff, dissected, spine-tipped, glaucous, yellow-margined leaves up to 1m. long. Armoured flowering stems up to 3m. tall clustered with thousands of greenish cream flowers. A spectacular, evergreen foliage-plant of great architectural value.) . . . (20+) C
- **5.124.012: BILLARDIERA LONGIFLORA f. FRUCTU-ALBO** * Tasmania, Mt. Wellington, Ridgeway. Ex a M. Harvey coll. A charming small, evergreen climber in *Pittosporaceae*, endemic to Tasmania and just on the borderline of hardiness in the UK. Elongated, greenish yellow, tubular bells & large white fruits instead of the usual dark blue ones.). (20+) **B**
- 5.125.000: BLANDFORDIA PUNICEA (B. marginata) * Tasmania, South Bruny Island, Jetty Beach. Ex a M. Harvey coll. (Endemic to Tasmania & possibly the hardiest member of this small Australian genus in Liliaceae. Reputedly difficult, but we have grown it with no trouble in sandy, peaty soil in an unheated greenhouse. Racemes of up to 25, tubular flowers, in scarlet tipped with orange-yellow, on stems of about 60cm. from tufts of narrow, leathery, dark-green leaves.) (20+) C
- **5.181.509**: CELMISIA DALLII NZ, Nelson, Cobb Valley. S. Bond 08-123. (A narrow endemic of NW Nelson, close to the Fiordland endemic *C. holosericea*, but with showy rosettes of larger, shiny, pale-green leaves, upturned along their edges to display the undersides clad in dense white or pale buff tomentum. Big white daisies on leafy, 30cm. stems.) (10+) E
- 5.183.109: CELMISIA LARICIFOLIA NZ, Nelson, Cobb Valley. S. Bond 08-113. (A choice, dwarf alpine: woody-based mats of little rosettes like tufts of leathery, white-backed larch-needles; white daisies on stems of 10cm. or less.) (10+) E
- **5.185.301**: CELMISIA SPECTABILIS NZ, Canterbury, Torlesse Range, Porter's Pass. S.Bond 08-074. (One of the most widespread and variable species, native to both North & South Islands & usually growing in exposed grassland. Tufts of thick, leathery leaves, felt-covered underneath. White daisy-heads on stiff, hairy stems, about 30cm. tall.) (10+) **D**
- **5.250.008**: CLEMATIS AFOLIATA NZ, Marlborough, Awatere valley. S.Bond 08-023. (A utterly distinct NZ endemic, unique in its leafless, rush-like, green stems, which can reach 3m., massed with profuse, pale yellow, fragrant flowers.). (15+) C
- **5.250.909 : CLEMATIS FOETIDA** NZ, Nelson, Cobb Valley. S.Bond 08-122. (A vigorous woodland species reaching 4m. with pale yellow flowers. Native to both the main islands and, in spite of its specific name, sweetly scented.) (15+) C
- **5.254.009**: COPROSMA ATROPURPUREA NZ, Canterbury, Lake Tennyson area. Gravelly areas. S.Bond 08-028. (A dwarf, montane member of quite a large Malaysian and SW Pacific genus in *Rubiaceae* with many species in New Zealand. Deep purplish red fruits on tight, creeping mats of woody stems set with tiny, linear leaves.) (10+) C
- 5.300.101: DIANELLA TASMANICA * Tasmania, Mt. Wellington. Ex a M. Harvey coll. (We have long found this *Phormium*-relative from moist woodland hardy in the UK in a sheltered, shady place. Stoloniferous clumps of tough, leathery, bright-green foliage about 1m. tall with panicles of pale-blue flowers, developing into striking, glossy, violet-blue berries.) . . . (15+) C
- **5.402.309**: **GAULTHERIA CRASSA** NZ, Nelson, Cobb Valley. S.Bond 08-112. (A sturdy small shrub, which can reach 1m. tall, though usually less. Small, leathery, evergreen leaves & clusters of white, lily-of-the-valley flowers.) (50+) C
- 5.402.609: GAULTHERIA DEPRESSA var NOVAE-ZELANDIAE NZ, Canterbury, near Lake Tennyson. S.Bond 08-029. (A low, mat-forming shrub with prostrate branches bearing little, toothed evergreen leaves & white flowers followed by large, fleshy fruits, in this case white ageing to bluish, though they can be pink or red on different plants.) (50+) B
- **5.580.709**: LEUCOPOGON FRASERI (*Cyathodes fraseri*) NZ, Canterbury, Torlesse Range, Porter's Pass. S.Bond 08-059. (A distinctive, more or less prostrate, mat-forming shrub with scented, tubular, white flowers & orange fruits.) (10) C
- **5.606.909 : LOBELIA LINNAEOIDES** NZ, Nelson, Cobb Valley. S.Bond 08-073. (A prostrate plant of permanently damp sites, usually in tussock-grassland. White flowers dance on thready stems above mats of tiny reddish leaves.) (30+) C
- 5.736.009: PENTACHONDRA PUMILA NZ, Canterbury, N of Hanmer Springs. S.Bond 08-025. (A member of the *Epacridaceae*: creeping pads of tiny, purplish leaves, tubular white flowers & long-lasting brilliant red fruits.) .. (10+) C
- 5.875.005: SOLLYA HETEROPHYLLA No data. A beautiful, Australian, evergreen twiner in the *Pittosporaceae*. Wiry stems, leafy with narrow, dark-green foliage, climb to about 2m. carrying dainty sky-blue bells from summer into autumn. Borderline hardiness in the UK but no trouble in an unheated or frost-free greenhouse here. (20+) B

6.027.900: ALSTROEMERIA LIGTU HYBRIDS Thriving in British gardens from Cornwall to Aberdeen; 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 actually much more likely to be A. presliana, explaining the dwarf, deep pinks which sometimes appear (20+) A
Cyclamen coum: unrivalled for winter-flowers
6.360.001 : CYCLAMEN COUM from PLAIN LEAVES, RED FLOWERS
6.360.003 : CYCLAMEN COUM from PLAIN LEAVES, WHITE FLOWERS
6.360.006: CYCLAMEN COUM from PATTERNED LEAVES, PINK FLOWERS
6.360.007: CYCLAMEN COUM from PATTERNED LEAVES, WHITE FLOWERS
6.360.010: CYCLAMEN COUM from PLAIN & PATTERNED LEAVES, ALL COLOURS (20+) A
6.360.020: CYCLAMEN COUM from BICOLOURED FORMS Mainly derived from Peter Moore's silvery-leaved selection 'Tilebarn Elizabeth' but including others with more variable leaves but two-toned pink flowers (15+) C
6.360.050 : CYCLAMEN COUM from SILVER & PEWTER LEAVES Pink-flowered, silver-leaved forms (15+) C
6.360.051 : CYCLAMEN COUM from 'MAURICE DRYDEN' Silver-suffused leaves. White flowers (10+) C
6.360.055 : CYCLAMEN COUM from 'NYMANS STRAIN' Selected out of the EKB 371 coll. by the head gardener at Nymans in Sussex, UK. An exquisite little plant with intensely silvered leaves and bright carmine-pink flowers (10+) E
Cyclamen graecum : exquisite foliage
6.362.049: CYCLAMEN GRAECUM from SILVER-CENTRED LEAF FORM A very beautiful selection from Bob & Rannveig Wallis. Leaves with a large central silver zone surrounded by a dark green margin
6.362.050: CYCLAMEN GRAECUM from SILVER-LEAVED FORMS Exquisite silver foliage (10) E
6.363.000: CYCLAMEN GRAECUM from "C. GAIDUROWRYSII var. MALINGERI" Allegedly a tetraploid C. graecum, given by Glasau to the Cyclamen guru Doris Saunders in the 1950's under this highly improbable, invalid nomen nudum. Our stock came from the old battle-axe herself in the 1960's. Silver-zoned foliage but not earth-shattering
Cyclamen hederifolium: hardy & reliable
6.364.150: CYCLAMEN HEDERIFOLIUM from SILVER CLOUD Leaves suffused with a white mist (10+) D
6.364.151: CYCLAMEN HEDERIFOLIUM from WHITE CLOUD White-flowered plants. Leaves as above (10+) D
6.364.160 : CYCLAMEN HEDERIFOLIUM from SILVER LEAVES Various selections, distinct from above (10+) D
6.365.000: CYCLAMEN X MEIKLEI Variable hybrid between C. creticum and C. repandum. Grow frost-free (15+) E
6.366.000: CYCLAMEN MIRABILE from 'TILEBARN ANNE' The parent has entirely silvered leaves, flushed with luminous pink in autumn. Striking but unfortunately rather a weak-growing, temperamental plant (10) E
6.366.005: CYCLAMEN MIRABILE from 'TILEBARN JAN' White flowers with fringed margins to the petals (10+) E
6.366.010 : CYCLAMEN MIRABILE from 'TILEBARN NICHOLAS' Dark central area on leaves with a brilliant silver surround, bright pink in autumn. Perhaps the finest, most striking and most vigorous of Peter Moore's selections. (15+) E
6.379.000: CYCLAMEN X SAUNDERSIAE Variable hybrid between C. repandum and C. balearicum (15+) E
6.380.000: CYCLAMEN X WELLENSIEKII from PINK FORM (C. cyprium x C. libanoticum) An improbable hybrid made in Wageningen, Holland, in 1969: one parent flowers in autumn and the other in spring. Usually a vigorous plant, more or less intermediate in appearance between the parents, flowering from November to February (10+) E
6.415.000: DIERAMA from SLIEVE DONARD HYBRIDS Little if any genuine material of the selected clones & hybrids developed by Slieve Donard Nursery in Co. Down, N Ireland between 1923 & 1960 now exists. Their capacity to self-seed in Irish gardens makes it dubious that cultivar names can be applied with acceptable authenticity. D. pulcherrimum, D. pendulum & later D. dracomontanum were involved. Some of our stock was raised from Slieve Donard seed in the 1960's. We also include seed purporting to originate from 'Blackbird', 'Milkmaid' & others. Supremely elegant (30+) A
6.470.000: ERYTHRONIUM DENS-CANIS from NAMED SELECTIONS Elegant dog-tooth violets in purple, pink & white with beautiful glaucous foliage variably mottled with brown. Arguably the loveliest of this genus (15+) B
A: \$3.00 ; £1.50 ; \in 2 C: \$5.00 ; £2.50 ; \in 4 E: \$9.00 ; £4.50 ; \in 7 B: \$4.00 ; £2.00 ; \in 3 D: \$7.00 ; £3.50 ; \in 5 F: \$12.00 ; £6.00 ; \in 9

Hellebores x hybridus: 2008 seed from clones & colour categories

6.564.008: HELLEBORUS from 'AQUARIUS' A most distinct, floriferous 'Zodiac' type: rose-pink outside, paler inside with a diffuse zone of small, crimson speckles. Of distinct appearance with large, flat flowers carried on long pedicels. (15+) D 6.564.016: HELLEBORUS from 'CASSIOPEIA' A lush-leaved, vigorous clone picked out by Amy Doncaster from a bed of seedlings flowering at Buckshaw Gardens in the 1970's. Soft shell-pink delicately tinged with green & cream. ... (15+) D 6.564.020: HELLEBORUS from 'COSMOS' Greenish white bowls densely & evenly spotted all over the interiors with crimson. Rose-pink flushed, crimson-veined exteriors. A paragon from Eric Smith with rounded 'Ballard-type' flowers. . . . (15+) D 6.564.050: HELLEBORUS from 'ORION' An outstanding, floriferous garden-plant. Primrose yellow with dark nectaries & a maroon basal blotch. "A particular favourite" of Brian Mathew & illustrated on the cover of his monograph. (15+) D 6.564.130: HELLEBORUS from H.O. GUTTATUS HYBRIDS Whites with a basal zone of crimson speckles. . . . (15+) C 6.564.151: HELLEBORUS from SELECTED PURPLES The parents are mainly selected seedlings from 'Andromeda' and from the best of what Eric Smith used to call 'Midnight Sky' types (purple with an even dusting of darker speckles all over the flowers). We have collected separately from a few outstanding selected clones, many with the bowl-shaped, even flowers which appealed to Helen Ballard. From unnamed clones but some are, quite frankly, better than their parents. (15+) **D** 6.564.160: HELLEBORUS from SPECKLED HYBRIDS From what Eric Smith used to categorize as 'Galaxy Strain': along the lines of 'Cosmos': white or greenish white, speckled all over with tiny crimson dots in varying density (15+) C 6.564.185: HELLEBORUS from YELLOW-FLOWERED HYBRIDS From Helen Ballard's 'Citron', Eric Smith's 'Sirius' and similar but unnamed clones. Should give some excellent yellows of vigorous constitution. (15+) D 6.564.190: HELLEBORUS from ZODIAC-TYPE HYBRIDS Eric Smith's category for what are, in effect, H. guttatus types with a pink, instead of white, ground colour, all with a zone of maroon speckles. Eric's unrivalled speciality (15+) C 6.564.200: HELLEBORUS from HYBRIDS OF ALL COLOURS From purple, cream, green, pink & speckled clones as well as H. torquatus hybrids. An especially good buy as we have included seeds from many named clones and more recent selections Extra large packets of hybrid seed (all colours mixed only) (80+) F 6.575.550: IRIS HOOGIANA X KOROLKOWII Second generation (F2) seeds from a cross between two of the most distinct 6.575.650: IRIS 'PACIFIC COAST HYBRIDS' Mainly derived from I. douglasiana & I. innominata & as easily grown as the former. Mostly seed from named purple-blue clones: more showy, blowsier flowers than the wild species but they will be much more accommodating garden-plants. We have also included open-pollinated seed of our Galice form of I. innominata. It will have crossed but may lend a touch of class to the seedlings. Best in lime-free soil with some sunshine. (20+) B 6.690.000 : LEUCOCORYNE 'LOS ANDES HYBRIDS' Open-pollinated seeds from the many F.& W. collections of this glorious genus of Chilean bulbs growing in John & Anita Watson's garden in Los Andes, Chile. They will have crossed 6.700.000: LEWISIA COTYLEDON from DRAKE'S SUNSET STRAIN We inherited the last of Jack Drake's selected clones, derived from the plants he took with him from the Inshriach Alpine Plant Nursery in Aviemore, when he retired to Dorset, He continued to select and raise seedlings. We have hand-pollinated among those with the most intense colours, particularly the brilliant oranges he liked.. Expect pinks, reds and yellows as well. "Stunning plants" as Jack might have said. . . . (20+) C 6.747.811 : PAEONIA from TBLISI HYBRIDS Originally raised from a bed in the Tblisi Botanic Garden, where yellow P. mlokosewitschii & P. wittmanniana, have crossed with pink P. caucasica. Yellows, pinks & apricot-tinted creams. . (6) D 6.802.550: PULSATILLA from RED FLOWERED HYBRIDS From isolated, deep velvety terracotta-red parents (20+) B

www.JJAseeds.com

We have temporarily discontinued online ordering on our web-site. We had a number of problems with online ordering & just cannot find time to maintain the site & to deal with a considerable inflow of orders throughout the year. We need to re-think online ordering, perhaps just concentrating on listing seeds from a very few genera, such as *Iris*, *Lilium* and *Narcissus*. The web-site JJAseeds.com is still there as a vast

reference source with information pages on many genera. You can still use it to make credit card payments (based on US\$ prices in this list) via PayPal. You can also send payment directly through PayPal in US\$, using the e-mail address: sales@jjaseeds.com However, we should very much rather you send an order on paper and pay by cheque, which we can hold until after your order has been sent.

A :	\$3.00	;	£1.50	;	€ 2	C :	\$5.00	;	£2.50	;	€ 4	E:	\$9.00 ;	£4.50	;	€7
B :	\$4.00	:	£2.00	:	€ 3	D :	\$7.00	:	£3.50	:	€ 5	F:	\$12.00 :	£6.00		€9.