

# News from

## Jim & Jenny Archibald

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

Complete range of 2003 and 2004 seeds available online at [www.JJaseeds.com](http://www.JJaseeds.com)

NEWSLETTER & SEED LIST

JULY, 2004

▶ **SOUTH AFRICA**  
2004 seeds from  
Dierama, Eucomis,  
Kniphofia, Watsonia  
and an exciting range  
of species from the  
Drakensberg

▶ **TASMANIA**  
2004 wild collections  
of some endemic  
alpines from the  
mountains

▶ **CHILE**  
2004 seed from the  
scarlet gorse and  
many other species

▶ **NORTH AMERICA**  
2003 seeds from a  
wide range of  
Penstemon species

▶ **EASTERN ASIA**  
2004 seeds from  
Fritillaria & Lilium

## Bring on the clowns

The tented Chelsea Flower Show ('sponsored by Merrill Lynch') is the public face of the Royal Horticultural Society. It has always had a certain attraction for those of us who have a nostalgic (but currently politically incorrect) weakness for circuses of the traditional kind. Just as old-fashioned circuses have changed over recent decades, so has Chelsea. Now, there is no high-wire act without a safety net. The big beasts have gone and we see more of the clowns.

In 2004, the publicity-hungry Royal Horticultural Society participated in a tedious television series (possibly more contrivance than reality), depicting the 'adventure' of television presenter Diarmuid Gavin, as he designed and constructed one of the outdoor gardens. The garden-design itself had considerably less artistic worth than much of the transient trivia collected by advertising agent Charles Saatchi, whose taste dictates the value of current 'Britart'. Its horticultural significance was negligible. Instead of ignoring it and justifying their decision by simply stating 'it was crap', the judges obsequiously awarded it a Silver Gilt (or should that be Guilt) Medal. Among several infantile ploys to make his 'adventure' more telegenic, the normally affable Gavin attempted to initiate a feud between himself and the adjacent garden-designer and announced that he had lied to the organisers about the funding for his garden. As Gavin's design was dominated by large, lurid, coloured balls from the start, one has the suspicion that he may well have lied about having lied. Such people are complex. Who else but Camelot, eventually revealed as the sponsor and to whom the British National Lottery is franchised, would have been prepared to pay-out an alleged £300,000 (\$500,000) for a load of balls?

As with many establishment-institutions, the Royal Horticultural Society has reflected the changes in British society. Until about 30 years ago, it was dominated by the crumbling aristocracy and 'landed gentry'. It moved on to be being run by money-men, the city capitalists and accountants. Now the clowns are being invited to take over the circus. The R.H.S. already has media 'celebrities' on its council and has recently bestowed its highest award on another television presenter. The water in which it is swimming may appear shallow but can be dangerous. Did the organisers of what they like to think is the greatest gardening show on earth really want to see themselves depicted on national television as gullible fools, conned by a liar? They are already obliged to keep stating, every time 'Chelsea Show' is mentioned, that it is 'sponsored by Merrill Lynch'. Doubtless seen as a shrewd move at the time, they now find themselves associated with a firm involved in a multitude of distasteful law suits on both sides of the Atlantic. According to another former pillar of the British establishment, 'The Times', documents it has seen "indicate that behind its pinstriped respectability, the US investment bank Merrill Lynch is ruled by leering bullies with a puerile obsession with sex."

It might be worse. Chelsea could have been 'sponsored by Enron' and Arnie Schwarznegger might have wanted to be elected President of the R.H.S.

## 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 by registered mail), a bank draft or International Money Order (in US \$ or £ sterling for these please). We do not operate a Giro account to enable direct transfers. Credit card payments can be made only online through PayPal in US \$. A handling charge of \$5 to cover commission is added to each order made online. If

remitting by sterling cheque, it is a great help both to you and to us, if you send us an open cheque, limited to the total value of your order. Obviously, it cannot be made out for more than the limit but it can certainly be made out for less, avoiding annoying credits or refunds : you will only pay for what we have sent after the order is despatched. If you do not wish to do this, a list of some possible substitutes will be very helpful. We shall not use them unless we have to and, if we do, we always try to send more than the value of the items not supplied. We shall not pay in your cheque until after your order has been sent : it is in our interest, as well as yours, to complete your order as quickly as we can.

**PLEASE HELP US BY PRINTING YOUR NAME & ADDRESS CLEARLY.**

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

## New customers please understand

There may be a delay before you receive your order. While we are ready to send out orders by return, most come in during the first few weeks after we send out a list. We receive orders much faster than we can despatch them. If you feel your order is too long in arriving, check with your bank to find out if your cheque has been cashed : we do not pay in cheques until orders have been despatched. If it has been cashed, let us know immediately. 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 and New Zealand

Some customers in the United States have expressed concern as to the threat by the USDA to apply regulations regarding the importation of seeds in 2002. The regulations are not new but the authorities have previously adopted a realistic, pragmatic approach in applying them to small quantities. We doubt if it is practical for this to change. We had no report of any of the many orders sent from our last list or placed through our web-site failing to arrive in the USA. However, a few have disappeared en route to Canada, Belgium, France and England. 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." Phytosanitary certificates, even if we can persuade our local office to issue them for tiny quantities of seeds, will be meaningless but they do not come cheaply in Britain. New Zealand customers have a more serious problem. With a much smaller volume of mail entering the country and, we suspect, an overstuffed agricultural inspectorate, it is best to stick to the list of permitted species, which is quite extensive now.

## Customers in the Euro Zone

Personal € cheques are a problem as there is, as yet, no central bank clearing system within the eurozone. It is disproportionately expensive for us to have cheques for comparatively small amounts cleared through British banks. We hope this difficulty will be resolved in time. In the meantime 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 \$. A handling charge of \$5 to cover commission is added to each order made online.

## 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 (which means we do not much like generic 'splitting'). These numbers refer to particular populations, mainly in the wild, though cultivated material without data is given a number also. Wild collections which cannot be fully identified will be found under a five-digit field number. This number refers to a collection made by us on a particular date only. Both sets of numbers are permanent. The use of population references is to avoid seed from the same population of plants being distributed under a proliferation of field-numbers. 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.

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.

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

We include a few 2004 seeds, which have just been collected and are best sown as soon as possible and some 2003 seeds received too late for inclusion in our last list. These are all also suitable for northern hemisphere customers to sow in summer.

- 113.611 : ACONITUM SEPTENTRIONALE from WHITE FORM** (*A. vulparia* group) \* No data. From the creamy white clone, grown as 'Ivorine', of this subarctic species, distributed from Norway into Russia. Earliest of all monkshoods, starting to flower here towards the end of May, with stiff upright stems, less than 1m. high, densely set with deflexed, narrow helmets, rising above the neat clumps of darkest green, coarsely cut leaves. 2004 seed just collected. Sow promptly . . . . . (20+) **B**
- 253.800 : CAMPANULA CORIACEA** \* Turkey, Van, W of Yukari Narlica. 2200m. Shady, conglomerate cliffs. (A most distinct species, restricted to the Van area of SE Turkey & of great promise for the alpine-house. Rosettes of thick-textured leaves with wide lilac-blue bells. Seed from plants maintained in Germany from our 1986 introduction.) . . . . . (50+) **E**
- 257.721 : CAMPANULA LATIFOLIA from WHITE FORM** \* From the outstanding white form of this easily grown, 1m. tall, clump-forming herbaceous perennial with profuse, large, elongated bells in summer. Native to most of Europe, eastward to W Siberia & N Iran, this is glorious in the wilder parts of the garden in sun or shade . . . . . (50+) **A**
- 384.050 : DAPHNE MEZEREUM f. ALBA** \* No data. Freshly collected, 2004 seeds of this glorious, 1m. tall shrub. White flowers wreath the naked branches in spring, followed by yellow fruits. Comes 'true' from seed. . . . . (10) **B**
- 409.310 : DIGITALIS MARIANA** \* No data. A beautiful relative of *D. purpurea* (and included under it in 'Flora Europaea' as *D.p.* subsp. *mariana*) endemic to igneous rock-fissures in the Sierra Morena of central Spain & adjacent E Portugal. The broader leaves are clad in soft, silky, white wool, contrasting with the purple foxgloves. . . . . (50+) **C**
- 559.810 : HELLEBORUS ARGUTIFOLIUS** (*H. corsicus*) \* No data. A caulescent species endemic to Corsica & Sardinia and a splendid, reliable garden-plant throughout the UK. A plant of great architectural value with leathery, overwintering, spine-edged leaves & huge, 1m. high heads of many, pale-green cups. Freshly collected 2004 seeds . . . . . (20+) **A**
- 561.020 : HELLEBORUS FOETIDUS** \* No data. Our British native caulescent hellebore with handsome, dark, divided foliage & stout heads of many green, purple-rimmed cups. Seed can be slower to germinate than others (except *H. vesicarius*), sometimes waiting for a second winter, even if sown freshly. Freshly collected 2004 seeds. . . . . (20+) **A**
- 562.399 : HELLEBORUS ORIENTALIS** \* Turkey, Artvin-Kars, Yalnizcam Daglari, ESE of Ardanuc. 1800m. Ex a N. Stevens coll. (A fine creamy, yellow-green form from an interesting locality on a range which runs on into Georgia, well away from the Black Sea coast-ranges. Freshly collected, hand-pollinated, 2004 seed from segregated plants.) . . . . . (15+) **D**
- 563.000 : HELLEBORUS VESICARIUS** \* Turkey, Adana, Nur Da. above Hasanbeyli. 1150m. Among deciduous *Quercus* on shaley slope. (Like no other in its inflated seed-capsules, up to 15cm. long, this is summer-dormant & usually best suited to the bulb-frame in the UK. Seed germinates irregularly. The cucumber-like seedlings usually go dormant without producing true leaves. These first-year, dormant roots can be lost through overdrying & this is the most critical period. Viability of seed lasts for many years so do keep ungerminated seed. Cultivated seed is still very limited & likely to remain so.) . . . . . (10+) **E**
- 634.015 : LILIUM MARTAGON var. CATTANIAE** (*L. m. var. dalmaticum*) \* No data. This name, now of horticultural relevance only, is taken to cover all the very dark-coloured forms of this widespread, lime-loving Euro-Siberian turkscap lily. Most originated in the Balkans and tend to be taller than some other races as well as having the characteristic deep burgundy-red to almost black flowers. This seed is from clones grown by Mike & Polly Stone, Inverness-shire, Scotland. . . . . (15+) **E**
- 800.550 : PULSATILLA ALPINA subsp. APIIFOLIA** \* No data. The lovely, sulphur-yellow species of acid, peaty meadows in the Pyrenees & Alps. Finely cut foliage & large flowers open low down but by the time it is in seed, stems may be 60cm. or more. Takes time to establish & build up the long-lived clumps from seed. Be patient and leave it undisturbed. (15+) **C**
- 800.750 : PULSATILLA HALLERI subsp. SLAVICA** \* No data. Basal leaves much woollier & much less finely cut than *P. vulgaris*. The violet-flowered, Carpathian race of this eastern species with its widely isolated populations. . . . . (15+) **C**
- 800.780 : PULSATILLA HALLERI subsp. STYRIACA from PINK FORM** \* No data. A pink-flowered form of the race from the Steiermark region of SE Austria. Foliage is usually somewhat larger than in *P.h.* subsp. *slavica*. . . . . (15+) **C**
- 801.009 : PULSATILLA MONTANA** \* No data. A handsome thing opening bells of intense black-violet with a cone of golden anthers on 15cm. stems. Distributed in steppe & dry meadow habitats from SW Switzerland across SE Europe to E Romania, this is a characteristic species of the plant-rich meadows on the exposed limestone-karsts of Slovenia. . . . . (15+) **C**
- 801.410 : PULSATILLA PRATENSIS** (subsp. *pratensis*) \* No data. Cylindrical, nodding flowers open on 10cm. tall stems, elongating to almost 50cm. in fruit above the clumps of downy, tripinnate, basal leaves. The central European type-race of this continental-climate meadow-plant is usually pale violet in colour. . . . . (15+) **C**
- 801.450 : PULSATILLA PRATENSIS subsp. HUNGARICA** \* No data. The variation in flower colours of this central to eastern European species is correlated with distribution & this eastern race is normally pale yellow to grey-violet. . . . . (15+) **C**

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

- 802.710 : PULSATILLA RUBRA** (subsp. *rubra*) \* No data. A species distributed from central France to central Spain. Close to *P. montana* but with less finely cut cauline leaves and flowers in redder shades from brownish to blackish red. . . . (15+) C
- 802.800 : PULSATILLA SUKACZEVII** \* No data. A 15cm. tall, hairy, E Siberian endemic in the widespread *P. albana* group. Very finely cut foliage & drooping, creamy bells tinged with pale lilac externally. Only a few seeds this year . . . . (15+) D
- 802.060 : PULSATILLA VULGARIS subsp. GOTLANDICA** \* Sweden, Gotland. (An isolated and disjunct population of this very variable species-complex, more closely resembling the Central European race, *P.v. grandis*, than the western type-race. Broader perianth segments to the dark violet flowers, which appear before less finely cut leaves develop.) . . (15+) C
- 844.201 : SALVIA CYANESCENS** \* Turkey, Bolu, W of Goynuk. 800m. Exposed shale slopes. (A delightfully airy perennial with flat rosettes of felted leaves and diffuse, branching stems, about 50cm. high, of lovely pale-violet flowers. One of several species well-established in Colorado gardens from collections we made in the 1980's. Hot, dry site in the UK.) . . . (20+) B
- 844.300 : SALVIA DAGHESTANICA** \* Russia, North Ossetia, Dzavgiss. 1000m. Ex H. Zetterlund 82-49 (The Caucasian representative of the disjunct species-group, which includes Turkish *S. hypargeia*. Very much dwarfed than this: only 10-15cm. high in flower with rich lavender-blue whorls from rosettes of superlative, white-felted foliage. Successful in Kent but strongly resents the damp atmosphere of our Welsh winters. An outstanding new plant.) . . . . . (15+) D
- 845.100 : SALVIA HUBERI** \* Turkey, Erzurum, W of Narman. 1500m. Steep, loose, stony slopes. (One of the neat, dwarf, woody-based species with pinnatisect, greyish leaves. Close to *S. rosifolia* & the western *S. pisidica* but endemic to a very small area of NE Turkey. Erect, 30cm. tall stems whorled with flowers which can vary from lilac-pink to violet.) . . . . . (10+) E
- 845.201 : SALVIA HYPARGEIA** \* Turkey, Adana, N of Saimbeyli. 1200m. Open rocky areas. (Neat clumps of narrow, grey-green, wool-backed leaves & 50cm. tall, herbaceous stems whorled with lilac-blue flowers. Stocks derived from our collections, made in the 1980's, have now become standard plants in Denver garden-centres but it can be quite accommodating in the UK with good drainage in full sun. It used to do well on the RBG Edinburgh rock-garden.) . . . . . (20+) B
- 846.000 : SALVIA MACROCHLAMYS** \* Turkey, Hakkari, Zab gorge near Bagisli. 1500m. Loose igneous scree on steep slope. ("A very handsome and distinctive species...without any close allies" comments Ian Hedge in his account of this genus in Turkey. A Kurdish plant from the area where the borders of Iraq, Iran & Turkey meet, its large, greenish white, papery bracts almost enclose the pink or white flowers with lower lips marked with violet, carried in large heads on shrubby, procumbent, leafy stems rising to 50cm. or less. Seeds from plants maintained in the USA from our 1986 introduction.) . . . . . (8+) E
- 846.410 : SALVIA PACHYSTACHYS** \* No data. A shrubby, pinnate-leaved species from E Turkey, Transcaucasia & NW Iran, like a larger version of *S. caespitosa*. Stems about 30cm. tall whorled with large white flowers. . . . . (10+) D
- 847.051 : SALVIA RECOGNITA** \* Turkey, Nevsehir, W of Urgup. 1200m. Base of cliffs in light shade. (A distinct, woody-based perennial, up to 1m. high & sticky with glandular hairs. Pinnate leaves & large, widely spaced, rose-pink flowers on elegant, sparsely branched stems. Successful with many growers in the UK, western North America & Australia.) . . . . . (15+) C
- 808.000 : RAMONDA MYCONI** \* Spain, Catalunya, Sierra de Montserrat. 900m. Cracks in part-shaded, conglomerate rocks. Ex a P. & P. Watt coll. (Hand-pollinated seeds from the 'true' *R. myconi* raised from a coll. in its isolated type-locality. It is a little different to the Pyrenean plants, which grow quite a distance away & were originally separated botanically as *R. pyrenaica*. From the gardeners viewpoint it is the most desirable form as the flowers are especially large and fine. Flat rosettes of wrinkled, hairy leaves & violet flowers with yellow anthers. This species is by far the easiest of this trio of relic members of the *Gesneriaceae* & the best for garden-purposes, unrivalled in a N-facing dry-stone wall. Though utterly hardy, these have not forgotten their tropical ancestry & are best raised from their very fine seeds sown uncovered on the surface of a sterile, peaty soil, in gentle warmth, watered from below, and covered with a pane of glass or kept in a plastic bag.) . . . . . (50+) D
- 808.401 : RAMONDA SERBICA** \* Greece, Ioanina, Farangi Vikou. 800m. Limestone fissures. (Least well-known & reputedly the most temperamental species. Usually considered to be best grown in the alpine-house in shade though this seed is from plants, growing happily here in a trough outside in a NW-facing corner. Rosettes of rather greyish, hairy leaves & more bell-shaped, violet flowers, approaching those of *Jankaia* in form, with distinctive dark purple anthers.) . . . . . (50+) D
- 809.500 : RANUNCULUS ABNORMIS** \* Spain, Avila, Sierra de Gredos, NE of PicoAlmanzor. 1800m. Among rocks in melt-water gulleys. (A beautiful, tuberous-rooted species, which goes dormant in summer. Branching, 10cm. stems with many varnished, lemon-gold buttercups, each with up to 10 'petals', from tufts of grassy foliage. Choice & delicate but not difficult with some care. It fits in well with alpine-house 'bulbs', though it may resent complete dehydration in summer.) . . (20+) D
- 813.400 : RANUNCULUS CADMICUS** \* Turkey, Denizli, Honaz Dag. 1700m. Exposed limestone ridge. (From a type-locality coll. of this diminutive, summer-dormant, snow-melt species. A really sweet little plant with tiny leaves & neat, glossy, yellow buttercups on 5cm. stems. It makes a delightful, long-flowering pan-plant for the alpine-house.) . . . . . (15+) D
- 993.150 : VIOLA SCHARIENSIS** \* Macedonia, Sar Planina, Popova Sapka above Tetovo. 2000m. Alpine turf & among *Vaccinium*. (An excellent alpine species, endemic to the Albanian border mountains above Tetovo, a battleground in 2001. We first collected it in 1964 &, in the absence of an acceptable name, it has been distributed as both the allied *V. albanica* & *V. grisebachiana*. It has been described as a new species at last. A dwarf plant with profuse lavender flowers, which is not difficult to grow in a very well-drained site in the UK.) . . . . . (15+) E

---

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

As well as some cultivated, 2004 seeds from species which are best sown as soon as possible, we list a significant range of 2003 seeds received too late for inclusion in our last, December, 2003, list. There are some outstanding wild collections from John Andrews and others here. We considered it best to list these now rather than store them for inclusion in a later list. We suggest northern hemisphere

growers sow in summer and overwinter any resulting seedlings with some protection before potting them up individually in spring 2005. Containers with ungerminated seeds should be exposed to cold weather outside over the next winter. Alternatively seeds can be stored for sowing in September or October for germination in spring 2005. Southern hemisphere growers should sow immediately.

- 1.025.050 : AGASTACHE RUPESTRIS** \* A 60cm. tall shrublet in *Labiatae*, ex a Sally Walker Arizona coll. Subtle rather than spectacular with aromatic, silvery, lavender-like foliage & heads of flowers in "a burnt brownish orange". . . . . (50+) **B**
- 1.040.210 : AMORPHA CANESCENS** \* A shrubby, perennial, prairie species in *Leguminosae (Fabaceae)*, reaching about 1m. or more in height and sometimes running underground. It is widely distributed in the eastern parts of North America, though grazed out in many areas. Dense racemes of violet flowers cluster in the axils of the downy, pinnate leaves . . . . . (20+) **B**
- 1.047.710 : AMSONIA ILLUSTRIS** \* No data. A widespread eastern member of this attractive genus in *Apocynaceae*, most diverse in the SW states. An erect, woody-based perennial up to 1m. tall with leathery, lanceolate, shiny, dark green leaves and cymes of light blue flowers carried on darker tubes. Distributed from the Great Plains S into Texas and growing in stream-beds and flood-plains, seasonally wet habitats similar to those of the rare Eurasian species, *A. orientalis*. . . . . (10+) **C**
- 1.047.760 : AMSONIA JONESII** \* No data. A local, dry-climate species from scrub and sagebrush up to 2150m. in E Utah, W Colorado and N Arizona. A glabrous perennial up to 50cm. tall with lanceolate leaves and cymes of blue flowers. (10+) **C**
- 1.048.210 : AMSONIA TABERNAEMONTANA var. SALICIFOLIA** \* No data. Doubtfully sustainable, narrow-leaved variant of this species, widespread but local in wooded areas of SE North America, E to Kansas & S into Texas. An elegant, woody-based, willow-leaved perennial up to 1m. high with cymes of starry, pale-blue flowers with darker blue tubes. . . . (10+) **B**
- 1.049.510 : ANDROSACE NIVALIS** (*Douglasia nivalis*) \* No data. A distinctly coloured, choice, alpine, mat-forming species distributed from British Columbia & Alberta into Washington. Rosettes of narrow, fleshy, grey-green leaves. Its 5cm. tall umbels of wine-red flowers are like no other. Alpine-house or trough in the UK. . . . . (10+) **C**
- 1.060.210 : AQUILEGIA CHAPLINII** \* New Mexico, Eddy Co. Ex a S. Walker coll. (A relative of *A. chrysantha*, endemic to the Guadalupe Mts., on the border of Texas & New Mexico, where its delicately cut, ferny foliage sheets the moist cliff-faces around Sitting Bull Falls. Very long-spurred, red-tinted, pale yellow flowers on stems of about 20cm.) . . . . . (20+) **C**
- 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. Finely cut leaves, sticky with glandular pubescence & many flowers in soft, creamy yellows with long spurs tinged with apricot on 40cm., branching stems. Almost certainly the colony illustrated in Plate 35 of Robert Nold's book 'Columbines' as a yellow form of *A. micrantha*.) . . . . . (20+) **C**
- 1.158.009 : CALOCHORTUS EURYCARPUS** Nevada, Elko Co., Ruby Mts., along Thomas Creek. 2380m. Meadow. J. Andrews coll. (Wiry, 30-50cm. stems carry elegant, bowl-shaped flowers in white or lilac-pink, neatly blotched with maroon and striped with green. A steppe species, in Subsect. *Nitidi*, spread around the N rim of the Great Basin from E Oregon to Montana. A type-locality coll., though it is a much less common plant here than further N in Idaho.) . . . . . (20+) **C**
- 1.161.509 : CALOCHORTUS GUNNISONII** Utah, Uintah Co., E of Lapoint, Halfway Hollow. 1670m. J. Andrews coll. (The most western, Utah forms of this predominantly Rocky Mt. species are usually especially fine with pale lavender flowers, intricately & heavily purple-pencilled & hairy inside, though John tells us pinks occur here as well. It is one of our favourite species but is not easy to germinate well & grow on. It definitely needs a cold, dry winter rest.) . . . . . (20+) **D**
- 1.255.500 : COMMELINA DIANTHIFOLIA** \* Arizona, Cochise Co., Chiricahua Mts. Ex an S. Walker coll. (A dwarfer, more slender version of *C. coelestis* (*C. tuberosa*) with narrow, recurved leaves. A long succession of ephemeral flowers in the same intense, penetrating blue. Seems reliably hardy outside in most of the UK, in a well-drained, open site) . . . . . (20+) **B**
- 1.300.900 : DELPHINIUM DEPAUPERATUM** \* Cal., Sierra Co., SE of Sierraville. 1870m. Gravelly areas. (A pretty, summer-dormant species with flights of rich purple flowers on 20cm. stems over a long period in spring.) . . . . . (20+) **C**
- 1.302.500 : DELPHINIUM LUTEUM** \* Cal., Sonoma Co., SW of Bodega. Ex a W. Roderick coll. (A species hovering on the verge of extinction, known from two small populations on seasonally wet cliffs near the coast NW of San Francisco. A truly beautiful plant when well grown : the only really yellow N American. Branching stems, of about 30-50cm., packed with large, waxy, shining, clear-yellow flowers over a long period in late spring. Dormant in late summer.) . . . . . (20+) **E**
- 1.304.500 : DELPHINIUM VARIEGATUM** (subsp. *variegatum*) \* Cal., Mendocino Co., SW of Covelo. 390m. Heavy clay on open slope. (A spectacular species around 50cm. high with racemes of flowers in rich, deep royal-blue.) . . . . . (20+) **C**

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

## Eriogonum : diverse buckwheats from mountains and steppes

- 1.330.890 : ERIOGONUM JAMESII var. FLAVESCENS** (*E. arcuatum* var. *flavescens*) \* No data. In a diverse species-group spread throughout the West. A woody-based perennial forming wide mats with rosettes of woolly, white foliage. Singled out for mention in 'A Utah Flora' as "a remarkably beautiful species, with its bright sulfur yellow flowers." ..... (15+) C
- 1.331.810 : ERIOGONUM PHARNACEOIDES** \* No data. A very attractive annual species with an intermountain distribution. Narrow, greyish leaves & downy inflorescences of yellow flowers on wiry, 20cm. tall stems. .... (30+) A
- 1.335.000 : ERIOGONUM UMBELLATUM** (var. *umbellatum*) \* No data. The core species of this vast assemblage of buckwheats, distributed over much of western North America. They are all, more or less, woody based perennials which form wide mats, up to 1m. across. The showy flowerheads, each comprising a myriad tiny flowers, rise from evergreen leaf rosettes, which in this case are greener than most, taking on wine-purple shades in winter. Bright yellow flowers. .... (20+) B
- 1.335.040 : ERIOGONUM UMBELLATUM var. AUREUM** \* No data. Seeds from a really excellent, selected form of this variant, included under the type-race of *E. umbellatum* by some botanists. .... (20+) C
- 1.335.180 : ERIOGONUM UMBELLATUM var. HUMISTRATUM** \* No data. An uncommon, compact race of very limited distribution between 1700m. and 2800m., on the serpentine mountains, like Mt. Eddy, along the California-Oregon line. Bright yellow flower-heads on dense, ground-hugging mats. A plant for the alpine-house or trough. .... (15+) E
- 1.335.300 : ERIOGONUM UMBELLATUM var. POLYANTHUM** \* No data. The characteristic race of the mountains of North California & southern Oregon. Spreading, shrubby mats with rounded foliage and bright yellow flowers. .... (20+) C
- 1.335.350 : ERIOGONUM UMBELLATUM var. SPECIOSUM** \* Oregon, Jackson Co., Carberry Creek, W of Applegate Lake. 1220m. Dry, rocky, S-facing serpentine slope. Ex P. Gustafson 98-0859 (A local race from N California & adjacent Oregon. One of the most spectacular variants. A robust, dwarf shrub, about 30cm. high with big, rich-green leaves, massed with compound inflorescences of brilliant yellow flowers which mature in intense scarlet to rust-red shades.) .... (15+) D
- 1.422.009 : HESPEROCHIRON CALIFORNICUS** Cal., Plumas Co., Dry Flat. 1680m. Open, seasonally wet flat. G. Greger coll. (This small genus in *Hydrophyllaceae* comprises two species of beautiful, little, summer-dormant species. They are similar in aspect : about 5cm. high with tiny, narrowly spoon-shaped leaves and flat, wide-open flowers, usually in white, more or less tinged with lavender and veined with purple. They are plants of wet meadows & flats, inundated after snow-melt in spring but drying out later. Delightful pan-plants for the alpine-house, they can spend most of the year sleeping under the bench. It is all but impossible to find the small, dormant roots, so sow thinly &, if you have to repot, spread most of the contents of the seed-pot over a larger pan. Then you are set for the next decade. They deserve every effort to cultivate successfully but actually need very little. Rather less in fact than locating & collecting the seed in the wild.) .... (30+) C
- 1.422.109 : HESPEROCHIRON PUMILUS** Cal., Plumas Co., Bellas Flat. 1370m. G. Greger coll. (This has narrower, glabrous or less hairy leaves than *H. californicus*. The flowers are rotate with rounded lobes rather than bell-shaped.) .... (30+) C
- 1.424.250 : HEUCHERA PULCHELLA** \* New Mexico, Sandoval Co., Sandia Mts. above Albuquerque. 3600m. Shady fissures on summit cliffs. (One of the best, dwarf members of this genus, a tiny endemic of the Sandias with tufts of little, lobed leaves & dense, 10cm. tall spikes of pink bells. An excellent little plant for an alpine-house pan or a trough.) .... (50+) E
- 1.436.100 : HYMENOXYSLAPIDICOLA** Utah, Uintah Co., southern base of Blue Mountain Plateau. 1890m. J. Andrews coll. (A remarkable saxatile species, "largely inaccessible except by helicopter", quite recently described and only known from a few sandstone cliffs at the eastern end of the Uinta Mts. Dense, rounded mounds of crowded, dark green, saxifrage-like rosettes with golden-yellow heads. It has been grown and exhibited by one or two British alpine-plant enthusiasts but will always remain a classic challenge for the skilled grower of alpine-house cushion-plants.) .... (10+) F
- 1.482.950 : LATHYRUS VESTITUS var. ALEFELDII** (*L. laetiflorus* subsp. *alefeldii*) Cal., San Diego Co., N of Campo. 1000m. J. Andrews coll. (The large-flowered, southern race of this variable Californian pea. A scandent perennial of chaparral with stems about 2m in length. Dense racemes of flowers can vary from wine-red to deep blue-purple.) .... (5+) C

## Lewisia : 2004 seeds of summer-dormant species

- 1.497.000 : LEWISIA OPPOSITIFOLIA** \* Oregon, Josephine Co., Waldo Hill. 600m. Among serpentine detritus along gully. (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 the shortest of stems.) (20+) C
- 1.497.202 : LEWISIA REDIVIVA** \* Idaho, Butte Co., NE of Carey. 1520m. E & SE-facing slopes of stony ridge. (From a splendid colony, which we came across in 1989. A magnificent white-flowered population, which we have found to be particularly successful and reliable in cultivation here. Not dissimilar to but larger than *L. rediviva* var. *minor*. These white bitterroots are considered by Roy Davidson to be "among the most exquisite of wildflowers.") .... (20+) C

---

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

- 1.497.231 : LEWISIA REDIVIVA** \* Cal., Napa Co., near Middletown. 300m. J. Andrews coll. (Extremely large pink flowers, typical of these early-flowering, lower altitude, W Californian plants, which seem to be restricted to serpentine.) . (20+) C
- 1.497.232 : LEWISIA REDIVIVA** \* Cal., Butte Co, N of Oroville, Table Mountain. 400m. Ex a J. Whittlesey coll. . (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, from 2000-2700m., most distinct where we have seen it, though ignored by "Jepson" and other botanists who only know their plants as herbarium sheets. Local on the drier interior ranges from the San Bernardinios through the Panamint & White Mts. into W Nevada. An exquisite little plant, altogether a reduced version with rounded, pearl-white flowers with pink anthers and bronze sepals.) . . . . . (20+) D
- 1.497.302 : LEWISIA REDIVIVA var. MINOR** \* Cal., Inyo Co., White Mts. 2650m. Fragmented shale. . . . . (15+) D
- 1.497.400 : LEWISIA STEBBINSII** \* Cal., Mendocino Co., ESE of Covelo, Etsel Ridge to Hull Mountain. 1600m. Open, gravelly slope. (Most recently discovered member of this genus only known from one or two sites around Hell's Half Acre. Most distinct in its leaf-shape and short, radiating, ground-hugging stems, each carrying up to 5, upward-facing, rose-pink flowers, veined with deeper rose. It is summer-dormant & should be treated like *L. rediviva*, though, unlike this, it does not appear until spring & is not so easy to grow. We find seed can be difficult to germinate.) . . . . . (10+) E
- 1.531.009 : LITHOPHRAGMA TENELLUM** \* Nevada, Nye Co., Toyabe Range. Ex M.& P. Stone 99-054. (A summer-dormant member of the *Saxifragaceae*, relying on snow-melt for its brief spring appearance. Small, rounded, divided, basal leaves & racemes of fringed, pale pink flowers on erect 20cm. tall stems, downy with purplish hairs.) . . . . . (30+) D

### Lupinus : from mats to metre high perennials

- 1.515.300 : LUPINUS ALBIFRONS** (var. *albifrons*) \* Cal., Contra Costa Co., above Orinda. 450m. (A shrubby perennial, about 1m. high. Silky, silvery foliage & 30cm. racemes of lavender-blue flowers with yellow to white banner-patches, maturing to purple. Tim Ingram (Kent, UK) considers this the most reliable silver-leaved lupin, hardy to -10 C.) . . . . . (10) B
- 1.516.150 : LUPINUS ARGENTEUS var. MEIONANTHUS** (*Lupinus meionanthus*) Cal., Plumas Co., E of Chilicoot. 1520m. Open ridge-top. G. Greger coll. (A sub-shrubby perennial, the continental climate race of this variable species, from the drier, N Sierra Nevada & Nevada. Leaves appressed with silver hairs & racemes, from 20cm. to 90cm. high, of blue to lilac flowers with yellow banner-patches. Adapted to extremely low temperatures but likely to be intolerant of wetness.) . . . . . (10) C
- 1.517.010 : LUPINUS BICOLOR** \* Cal., Butte Co, N of Oroville, Table Mountain. 400m. (A variable dwarf, annual species, about 20cm. high. Petals are usually blue with a white banner spot, maturing to magenta, & the keel is white. Several growers have found this form a first-rate garden-plant. Germination can be irregular but it sows itself where suited.) . . . . . (10) A
- 1.517.210 : LUPINUS BREWERI** Cal., Sierra Co., Yuba Pass above Satley. 2050m. Openings in coniferous woodland. G. Greger coll. (Prostrate, woody-based mats of silver foliage with stubby, 3-5cm. tall racemes of violet-blue flowers marked with white or yellow. One of the finest dwarf species but seldom seen in cultivation. . . . . (5) E
- 1.532.810 : LUPINUS NOOTKATENSIS** \* No data. One of the best dwarf, eastern perennials. About 30cm.tall with downy, divided, greyish foliage & compact racemes of violet-blue flowers with white banners. Easy to grow. . . . . (15+) A
- 1.534.350 : LUPINUS POLYPHYLLUS** (var. *polyphyllus*) \* Canada, BC, Vancouver Is., S of Port Renfrew. Sea-level. Ex a N. Macer coll. (A fine large herbaceous perennial from moist sites and marshy areas, distributed S into California & E into Idaho. Lush, palmately compound foliage & densely whorled racemes of purple-blue flowers can rise to as much as 1.5m. high. An excellent wild-garden plant, absolutely hardy in the UK & much less formal than its sophisticated children.) . . . . . (15+) B
- 1.534.700 : LUPINUS STIVERSII** Cal., Plumas Co., near Tobin. 600m. G. Greger coll. (A spectacular, 40cm. tall, colourful annual species from the northern Sierra Nevada. Flowers with yellow banners and pink wings.) . . . . . (10) B
- 1.535.000 : LUPINUS VARIICOLOR** \* Cal., Sonoma Co., above Shell Beach. 20m. Ledges on coastal cliffs. (A woody based perennial about 60cm. high, with downy, greyish leaves & short racemes of beautiful, blue & creamy-white flowers (in this form - it can vary from yellow to pinks & purples). "One of the best shrubby lupins in the garden.") . . . . . (10) B
- 1.570.310 : MARSHALLIA GRANDIFLORA** \* No data. Rated by Panayoti Kelaidis as "one of America's best dwarf perennials". Perhaps the finest in a genus in *Compositae* (*Asteraceae*), ignored both in European gardens and garden literature. Close clumps of foliage and large pink flower-heads, rather like something between a *Centaurea* and a scabious, on stems about 30cm. tall. It has a very limited, specialized distribution in the Appalachians and Cumberland Plateau in wet sites along riverbanks scoured by flooding. It should be successful in open garden conditions in northern Europe. . . . . (30+) C

- 1.692.720 : OXYTROPIS LAMBERTII** \* No data. A handsome & striking plant of the Rocky Mt. region, distributed from Saskatchewan & Manitoba, South to Arizona & New Mexico. Neat clumps of silver-grey pinnate leaves and stiffly erect racemes, about 30cm. tall, of brilliant carmine-purple pea-flowers. Perhaps the showiest species in the genus . . . . (20+) **B**
- 1.693.420 : OXYTROPIS SERICEA** \* No data. A look-alike of *O. lambertii*, with which it sometimes crosses, distributed from Yukon South to New Mexico & Oklahoma. Less spectacular than this but perhaps more tasteful with its stout, 30cm. tall stems of white flowers rising from the silver-leaved clumps. Both need well-drained sites in full sun. . . . . (20+) **B**

## Penstemon : America's greatest perennial genus

- 1.700.810: PENSTEMON ANGUSTIFOLIUS var. CAUDATUS** (Sect. *Coerulei*) \* No data. The variant, from S Utah, Arizona and New Mexico, of this 30cm. high, narrow-leaved species. "Another queen in the race...spikes of ample blossoms...not even in *Omphalodes* is there any matching the tenderyet assured magnificence of the pale azures..." wrote Farrer. . . . . (20+) **B**
- 1.700.980 : PENSTEMON AURIBERBIS** (Sect. *Cristati*) \* No data. A dwarf species endemic to the Arkansas River valley in S Colorado. Lavender flowers with gold-bearded staminodes on 15cm., narrow-leaved stems. . . . . (20+) **C**
- 1.701.110 : PENSTEMON BARBATUS** (Sect. *Elmigera*) \* No data. Many, brilliant red flowers with the swept-back lower lips, characteristic of humming-bird pollinated species. About 1m. tall and native southwards from Colorado and Utah into Texas and northern Mexico but "hardy in Surrey" (UK) according to Graham Stuart Thomas. . . . . (20+) **B**
- 1.701.200 : PENSTEMON BARNEBYI** (Sect. *Cristati*) Nevada, White Pine Co., Ward Mt. 2060m. J. Andrews coll. (Endemic to limestone-derived soils in central Nevada. About 20cm. tall with violet flowers. A very few seeds.) . . . . . (10+) **E**
- 1.701.350 : PENSTEMON BRACTEATUS** (Sect. *Caerulei*) Utah, Garfield Co., Red Canyon. 2600m. Loose limestone talus on steep slopes. (A specialized scree-plant, narrowly endemic to this area & rated as possibly the best of all the dwarf species by Dwight Ripley but a real challenge to cultivate. Heads of blue flowers on 5cm. stems from rosettes of fleshy, blue-grey leaves, which rise from subterranean stems, threading among the screes of pink Wasatch limestone.) . . . . . (10+) **E**
- 1.702.810 : PENSTEMON COBAEA** (Sect. *Cristati*) \* No data. One of the parents of the hybrids grown in British gardens and "surely one of the most showy species" (Robert Nold). From calcareous loams in E Nebraska, Missouri and Arkansas, it is temperature-hardy and enjoys plenty summer rain. Huge, bloated lilac to purple flowers on leafy, 60cm. stems. . . (20+) **B**
- 1.702.960 : PENSTEMON COMPACTUS** (Sect. *Glabri*) Utah, Cache Co., Bear River Range, Mt. Naomi. 2600m. Open, stony, E-facing, limestone slopes. (An extremely desirable dwarf plant, about 15cm. tall with compact verticillasters of flowers in deep, pure sky-blue. Endemic to a small area of these mountains bordering Utah and Idaho, it is maintained as a separate species by Holmgren in 'Intermountain Flora' but reduced to a var. of *P. cyananthus* by Neese in 'A Utah Flora'. It grows with the more widespread *P. cyananthus* and *P. leonardii* but the population remains distinct and even.) . . . . . (20+) **E**
- 1.703.010 : PENSTEMON CONFERTUS** (Sect. *Penstemon*) \* No data. A long-lived, 40cm. tall species widely distributed in the Pacific NW, extending into Alberta and British Columbia. Dense clusters of pale-yellow flowers. . . . . (50+) **B**
- 1.703.302 : PENSTEMON CYANANTHUS** (Sect. *Glabri*) Utah, Cache Co., Bear River Range. 3100m. (The glory of the Wasatch Mts., E of Salt Lake City. Stout 80cm. tall stems with dense-flowered, cylindrical spires of rich gentian-blue flowers. "A beautiful, showy plant...it creates a stunning show when in full flower" writes Robert Nold.) . . . . . (30+) **B**
- 1.703.720 : PENSTEMON DAVIDSONII var. PRAETERITUS** (Sect. *Erianthera*) \* An outstanding variant endemic to the isolated Steens Mts. of SE Oregon and adjacent Santa Rosa range in N Nevada. "One of the most spectacularly beautiful wildflowers of the Intermountain Region" comments Noel Holmgren. The shrubby, greyish mats have smaller leaves but the huge blue-lavender to violet flowers, packed with shaggy white hairs inside & with yellow-hairy staminodes, are almost twice as large as the type-race. The latter is a superlative alpine, usually growable in a trough or raised bed in the UK. . (30+) **E**
- 1.705.460 : PENSTEMON GRANDIFLORUS** (Sect. *Caerulei*) \* No data. The most eastern and the most moisture tolerant member of its section, this is a sturdy, 60cm. tall Great Plains species, which, though once distributed from NE Wyoming to Minnesota and S into Texas, has now lost most of its habitat. Big purple-pink bells with darkly lined throats. . . . (20+) **B**
- 1.705.620 : PENSTEMON HALLII** (Sect. *Glabri*) \* No data. A marvellous species endemic to the Colorado Rockies at the higher altitudes around the Continental Divide. Mats of close-clumped rosettes of narrow, smooth leaves and 15cm. tall stems of bell-shaped flowers in an unusual shade of luminous, reddish violet with projecting bearded staminodes. . . . . (20+) **B**
- 1.705.760 : PENSTEMON HAVARDII** (Subsect. *Havardiana*) \* No data. A big, showy plant endemic to the Big Bend of Texas, where the Gulf of Mexico curves South to Mexico. Large leaves clasp the 1.5m. tall stem carrying hairy, scarlet flowers with projecting upper lips. It should enjoy moist British summers but, though temperature hardy, not the wet winters. . (20+) **D**
- 1.705.960 : PENSTEMON HIRSUTUS** (Sect. *Penstemon*) \* No data. An eastern species, distributed from Ontario southward to Tennessee & easily grown in British gardens. About 40cm tall with pale-purple, white-lobed flowers . . . . . (20+) **A**
- 1.706.100 : PENSTEMON IDAHOENSIS** (Sect. *Glabri*) Idaho, Cassia Co., Goose Creek drainage. 1480m. J. Andrews coll. (A very local species restricted to the Idaho/Utah line & quite recently described. About 20cm. tall with narrow, sticky leaves & blue-purple flowers, described by John as a "fantastic looking plant in white tuff soil.") . . . . . (20+) **E**

---

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



- 1.706.200 : PENSTEMON IMMANIFESTUS** (Sect. *Coerulei*) Nev., White Pine Co., Snake Range. 2130m. (About 30cm. tall with blue-grey leaves and many lavender-pink flowers. A plant of clay soils in the eastern Great Basin.) . . . . . (20+) **B**
- 1.707.201 : PENSTEMON LEONARDII** (var. *leonardii*) (Sect. *Saccanthera*) Utah, Cache Co., Bear River Range. 3100m. (A dwarf, compact species, forming low, 20cm. high shrubs with narrow, thickish leaves and masses of deep gentian-blue flowers. A superlative plant but "unfortunately very difficult to germinate" according to Robert Nold.) . . . . . (20+) **D**
- 1.707.550 : PENSTEMON LINARIOIDES** var. **COLORADOENSIS** (Sect. *Caespitosi*) \* The race of this complex species from SW Colorado and NW New Mexico. A neat, heath-like shrublet with numerous, erect, 15-20cm. stems, each with up to 30, soft lilac-blue flowers with white throats. This section has proved quite amenable to UK alpine-house cultivation.) . . . (30+) **D**
- 1.707.700 : PENSTEMON MENSARUM** (Sect. *Glabri*) \* A beautiful endemic of the great flat-topped mountain, Grand Mesa in Delta Co., Colorado, by no means a dry habitat. Whorls of deepest royal-blue flowers on 50cm. stems. . . . . (30+) **C**
- 1.708.150 : PENSTEMON MORIAHENSIS** (Sect. *Glabri*) Nevada, White Pine Co., Snake Range, Mt. Moriah. 2670m. In pinyon-juniper-sagebrush. J. Andrews coll. (A local species, only discovered in 1977 & limited to this county. Erect stems of about 30cm. carry cymes of large flowers, in a rich penetrating blue, with white-hairy anthers in their throats.) . . . (30+) **C**
- 1.708.201 : PENSTEMON NANUS** (Sect. *Cristati*) Utah, Beaver Co., Lime Point. 1890m. Calcareous gravel. J. Andrews coll. (A restricted Utah endemic, only 7cm. or less tall. Maybe nearest *P. duchesnensis* with ashy foliage & rose-purple flowers with orange-bearded staminodes. Alpine-house in UK with as much sun as possible throughout the year.) . . . . . (15+) **E**
- 1.708.501 : PENSTEMON NEWBERRYI** (var. *newberryi*) (Sect. *Erianthera*) Cal., Plumas Co. 1370m. E-facing, granite slope. G. Greger coll. (Woody mats of little, toothed, leathery leaves with 15cm. stems of tubular, vivid rose-red flowers: "baggy bugles of a ferocious aniline red-mauve most terrible and breathtaking" wrote Farrer. The type-race from the Sierra Nevada. An excellent, hardy, rock-garden plant, more vulnerable to excess water in summer than cold in winter.) . . . . . (20+) **B**
- 1.708.760 : PENSTEMON OPHIANTHUS** (Sect. *Cristati*) \* No data. A 30cm. tall endemic of the Four Corners area, where Utah, Colorado, Arizona and New Mexico meet. Lavender to blue-violet flowers with yellow-bearded staminodes. . . . (20+) **C**
- 1.708.900 : PENSTEMON PACHYPHYLLUS** var. **CONGESTUS** (Sect. *Coerulei*) \* Nevada, White Pine Co., Snake Range. 2450m. Ex a J. Andrews coll. (The Great Basin race of this showy species with thick, glaucous basal foliage & 30-50cm. stems of many, lavender-blue flowers with yellow-bearded staminodes. A plant of gravelly or sandy soils.) . . . . . (20+) **B**
- 1.709.150 : PENSTEMON PALMERI** (Sect. *Spectabiles*) \* No data. A native of southern Utah, Nevada & adjacent California & Arizona, which is hard to surpass for sheer size and impact. Woody-based clumps of blue-grey, toothed leaves and great, 2m. tall wands of huge, pink flowers, marked inside with wine-red & with yellow-bearded staminodes.) . . . . . (50+) **B**
- 1.709.660 : PENSTEMON PINIFOLIUS** (Sect. *Leptostemon*) \* No data. Spreading mats of needle-leaved, shrubby stems with tubular scarlet flowers. Well-known to European alpine-growers but rather a local plant in nature, confined to northern Mexico and just across the border into Arizona and New Mexico. Without hummingbirds little seed is set in the UK. . . . (50+) **C**
- 1.710.100 : PENSTEMON PSEUDOPARVUS** (Sect. *Penstemon*) New Mexico, Socorro Co., Magdalena Mts. 3170m. Moist alpine meadow. M. & P. Stone 02-028. (A little-known endemic of the summits of the Magdalena & San Mateo ranges, W of Socorro in W New Mexico. A dwarf, 15cm. version of the more widespread *P. oliganthus*. Rich blue flowers.) . . (20+) **C**
- 1.710.160 : PENSTEMON PSEUDOSPECTABILIS** (Sect. *Spectabiles*) \* No data. "Superb!" comments Panayoti Kelaidis. "Incomparable" writes Robert Nold. Putting rose-pink flowers on 1.5m. stems, clasped by blue-green leaves. Distributed SE from Nevada through Arizona and New Mexico it occurs up to about 2000m. altitude and is temperature-hardy. . . (50+) **C**
- 1.710.620 : PENSTEMON ROSTRIFLORUS** (Sect. *Bridgesiani*) \* No data. A spectacular, 50cm., scarlet-flowered species from the mountain-ranges of the south-western States of the USA. Its tubular, hooded orange-red flowers appear late in summer. Temperature-hardy and tolerant of very dry conditions, it will need the hottest, driest site available in the UK.) . . (30+) **B**
- 1.711.310 : PENSTEMON SMALLII** (Sect. *Penstemon*) \* No data. Endemic to a small area in the western Carolinas and adjacent Tennessee, this is "possibly the showiest species" in its subsection according to Robert Nold. About 60cm. tall with big purple flowers appearing among large, leafy bracts in midsummer. This should be a good plant for the UK . . . . . (50+) **C**
- 1.711.720 : PENSTEMON STRICTUS** (Sect. *Glabri*) \* No data. Flat basal rosettes of narrow leaves send up erect, 60cm. stems carrying many, rich-blue with woolly white anthers. An outstanding species of the Rocky Mountain States, from Wyoming to New Mexico. Seed from the selection, 'Bandera', slightly darker blue but otherwise typical of the species) . . . . . (30+) **B**
- 1.712.920 : PENSTEMON VIRENS** (Sect. *Penstemon*) \* No data. Inflorescences of bright deep-blue flowers on 20cm. tall stems from rosettes of glossy green leaves. One of the most satisfactory in the rock-garden even in the UK. . . . . (50+) **B**
- 1.713.120 : PENSTEMON VIRGATUS** subsp. **ASA-GRAYI** (Sect. *Glabri*) \* No data. A beautiful, 60cm. tall meadow-plant of the Rocky Mts. in Colorado & S Wyoming. Erect wands of white-bearded flowers in rich light-blue. . . . . (30+) **B**

- 1.768.000 : PRIMULA CAPILLARIS** Nevada, Elko Co., Ruby Mts., Thomas Creek Canyon. 2835m. J. Andrews coll. (The most local and certainly the most difficult to grow of the relict, western primroses. A pinch of seed only.) . . . . . (20+) **F**
- 1.800.120 : RANUNCULUS ALISMIFOLIUS var. LEMMONII** Cal., Plumas Co., Light Creek. 1370m. (Clumps of entire, narrow foliage & branching 30cm. decumbent stems carrying big, yellow buttercups. This race of a variable species, extending E to Montana, is a plant of wet meadows in the sage-brush or juniper scrub of NE California.) . . . . . (30+) **B**
- 1.830.410 : SALVIA DORRRII** \* No data. A fine, dwarf shrubby sage forming spreading clumps, about 40cm. high, with stems & leaves all densely white-scaly and whorls of deep purple-blue flowers among rounded bracts. This species of the arid, winter-cold, continental climates of the Great Basin and Colorado Plateau will need a very hot, dry site in wetter areas) . (15+) **C**
- 1.840.650 : SCUTELLARIA NANA var. SAPPHIRINA** Nevada, White Pine Co., SE of Little Antelope Summit. 1980 m. Calcareous clay. J. Andrews coll. (A gem endemic to the Great Basin. Tufts of rounded, grey-green leaves & gentian-blue skullcap flowers, only 5 cm. high, pop up from wide-growing subterranean rhizomes. Not difficult under glass but becomes rather leafy there. We are told this is growable and more worthwhile outside in scree, in full sun of course.) . . . . . (15+) **D**
- 1.860.520 : SISYRINCHIUM DOUGLASII var. INFLATUM** (*Olsynium inflatum*, *Olsynium grandiflorum* var. *inflatum*) \* Oregon, Jackson Co., Siskiyou Mts. 1500m. (We have previously listed seed from this population under 1.860.310 as *S. douglasii* but we feel it should be more correctly placed under this more south-eastern variety, which extends across to Idaho. The two races do intergrade. A 20cm. high plant of open, montane meadows with grassy stems & leaves. "Noble hanging bells", in this case, are in satin-textured shades of rose, pink & white. It flowers early and goes dormant later in summer. Growable in the alpine-house (do not over dry) or in a trough or scree-bed outside in the UK.) . . . . . (15+) **C**
- 1.870.246 : SPHAERALCEA CAESPITOSA** Utah, Beaver Co., Lime Point. 1890m. Open slopes in calcareous gravel. J. Andrews coll. (More or less a type-locality collection of this very local & highly desirable, woody-based, dwarf perennial in *Malvaceae*. Only 5-10cm. high with tightly clustered orange flowers on pads of felted foliage, which, typically, should be thick, grey-white & crenate, barely if at all lobed. Our own 1993 & 1995 colls., from Millard Co. though probably grading into *S. ambigua*, produced some good compact plants which have appeared on the British show-benches. This is a very hot, dry area in summer and it will need full exposure to sun throughout the year in a British alpine-house.) . . . . . (10+) **F**

### Viola : violets from serpentine-woodland & sagebrush-steppe

- 1.981.150 : VIOLA BAKERI** Cal., Plumas Co., near Greenville. 1100m. G. Greger coll. (A dwarf, more or less summer-dormant, tap-rooted perennial from openings in the coniferous forests of N California up to Washington. Tufts of entire, lanceolate basal leaves and bright yellow flowers, often backed with purple and veined with brown on the lower three petals.) . . . . . (10) **E**
- 1.981.265 : VIOLA BECKWITHII** Cal., Plumas Co., N of Lake Davis. 1830m. G. Greger coll. (A summer-dormant species from the northern rim of the Great Basin. A very lovely thing with greyish leaves palmately cut into linear segments & two-toned flowers : the 2 upper petals deep red-purple ; the 3 lower ones pale lilac, yellow at the base. We maintained this for many years without any great trouble in an alpine-house in the UK. All these dry-growing species need similar treatment but don't ask us how to trigger an even seed-germination. While their fleshy roots survive drought in nature, a well-drained mixture can result in overdrying in cultivation. There is a lot underground so use a deep clay pot plunged in damp sand. We always potted very low & topped up with grit, building this up to a depth of about 8cm. over a few years.) . . . . . (10) **E**
- 1.981.370 : VIOLA DOUGLASII** Cal., Plumas Co., N of Greenville. 1100m. G. Greger coll. (A plant of vernal moist grassland, often on serpentine, & one of the more widespread, summer-dormant Californians but, like them all, very difficult to locate in seed and to time a seed collection if you can. Erect stems around 10cm. high with dissected, bipinnate leaves carry dark-veined, golden-yellow violets, with the upper two petals, usually stained brown-purple on the backs.) . . . . . (10) **E**
- 1.981.606 : VIOLA LOBATA** (subsp. *lobata*) Cal. Plumas Co., above Round Valley Lake. 1370m. Sandy soil under *Pinus*. (A plant of dry, usually coniferous, woodland, widespread S from S Oregon into N Mexico but always occurring very sparsely. Palmately lobed, glaucous leaves rise to about 8cm. from running rhizomes, overtopped by the deep yellow flowers, purple-brown outside & veined with purple on the lower petals. Possibly very difficult.) . . . . . (8) **E**
- 1.981.900 : VIOLA PINETORUM** (subsp. *pinetorum*) Cal., Plumas Co., Dixie Canyon. 1370m. G. Greger coll. (In a complex group of tap-rooted, Californian endemics occurring sporadically from here S to the San Jacinto Mts. near Mexico. A plant of rather dry habitats, usually under pines, with tufts of narrow, more or less linear, wavy-edged leaves and lemon-yellow flowers with purple-brown veining & backs to the petals. Probably difficult to grow.) . . . . . (10) **E**
- 1.982.809 : VIOLA SHELTONII** Cal., Plumas Co. G. Greger coll. (A beautiful, dwarf, cut-leaved, summer-dormant species, distributed in open woodland & scrub from S California N to Washington. Palmately divided, blue-green foliage & deep yellow, purple-backed flowers, veined with purple-brown on the lower 3 petals. Not easy to grow.) . . . . . (10) **E**
- 1.995.220 : ZAUSCHNERIA CALIFORNICA** (*Epilobium canum*) \* No data. Seeds from an especially large-flowered form of this startling orange-red, hummingbird-pollinated complex of shrubby perennials with races spread from California and southern Oregon through to Wyoming, New Mexico and northern Mexico. These have been sunk by Raven into *Epilobium* but we hope gardeners will continue to recognize this most distinct group of plants as a separate genus, which includes some of the most spectacular of late-flowering plants for the rock-garden or raised bed in full sun, even in the UK. . . . . (20+) **C**

---

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

## Alstroemeria : an unrivalled range of UK grown seeds

We are harvesting 2004 seed as we compile this list. 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, from the Atacama desert to the temperate rain-forests of the S & on to the steppes of Patagonia. 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 refrigerator should give the even 5°C required, though we have always found conventional sowing quite satisfactory. Seed we sowed last November took 4-5 weeks to germinate in our mild autumnal climate. If grown in containers, annual repotting is recommended as these are greedy plants. The names follow those in the meticulously researched 'Die Gattung *Alstroemeria* in Chile' by E. Bayer (1987).

- 2.026.400 : ALSTROEMERIA AUREA \*** Chile, VIII, Nuble, SW of Termas de Chillan. 1500m. Open banks in *Nothofagus* woods. (From an outstanding population, singled out for mention by Bayer, at one of the most northern stations for the species. Its coppery reds & orange-scarlets approach *A. ligtu* subsp. *simsii*, to which we have seen it attributed, though the latter does not grow further S than Region VI. More elegant, almost stylised, flowers than the old cottage-garden "*A. aurantiaca*". About 60 cm. high & one of the easiest, most reliable species outside in the UK.) ..... (10+) C
- 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
- 2.026.950 : ALSTROEMERIA aff. EXSERENS \*** Chile, VI, Cachapoal, NE of Coya. Ex an A. Brinck coll. (as *A. exserens*) (Much taller, about 60cm., than the alpine type-race. Long, narrow leaves & big heads of rose-pink flowers, neatly banded bright yellow above the white, crimson-speckled zone of the upper, inner segments. Though different in character, a bit like a very large *A. pallida*, we cannot assign this to another species. Worthwhile & hardy.) ..... (10+) B
- 2.027.090 : 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 has 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. From low altitudes in Regions VII & VIII but temperature-hardy here under cold glass & one of the best for cultivation in the alpine-house, where it is almost the last to flower... ..... (10+) C
- 2.027.200 : ALSTROEMERIA HOOKERI subsp. CUMMINGIANA \*** Chile, Reg. Metro., Angostura de Paine (between Santiago & Rancagua). Ex an A. Brinck coll. (A slightly taller plant with differently proportioned, pink flowers. The upper, inner segments are only very sparsely speckled with red-brown. The most southern site for this subspecies.) ..... (10+) E
- 2.027.520 : ALSTROEMERIA aff. KINGII \*** Chile, III, Atacama. Ex an A. Brinck coll. (Received as an unidentified coll., this is certainly closest to this little desert species. A dainty thing, no more than 20cm. high with very fine, narrow, grassy, grey-green foliage and long-lasting flowers in pure, rich yellow, streaked on the upper, inner segments with crimson. Typical *A. kingii* is unmarked but this resembles it much more closely than it does *A. diluta* subsp. *chrysantha*. Successful in our unheated greenhouse for many years. Overwintering sterile rosettes are sometimes frosted but it regenerates in spring and has never failed to flower well. Needs careful watering under glass in the UK & possibly safest kept frost-free.) ..... (8) D
- 2.027.800 : ALSTROEMERIA LIGTU subsp. INCARNATA \*** Chile, VII, Cerro de los Cipreses (Rio Teno valley E of Curico). 1500m. Ex an A. Brinck coll. (Almost all colls. of this very local race have been made in this area. Robust & about 1m. high, always with a pink ground-colour & distinct in its rather short, broad, upper segments. Described by Mike Tucker as "gorgeous...sumptuous...like no other...the largest flowered plant I have...the best one here". It does best protected from excess moisture from late summer through winter in his bulb-frame.) ..... (10+) C
- 2.028.109 : ALSTROEMERIA MAGENTA \*** Chile, Region V, Coquimbo, Ovalle, Fray Jorge. 500m. Ex Beckett, Cheese & Watson 4683. (A spectacular species nearest to *A. pulchra* and *A. magnifica* but distinct in having all the inner segments, not just the upper 2, of the lilac flowers heavily streaked with maroon-red. We have maintained this stock from John's 1972 coll. but seldom had enough seed to list. 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 heavily 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 coastal race, centred on the Valparaiso area, the sterile, overwintering rosettes have never been harmed by frost in our unheated greenhouse.) ..... (10+) C

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

- 2.028.500 : ALSTROEMERIA PALLIDA \*** Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2200m. Open, 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
- 2.028.608 : ALSTROEMERIA PATAGONICA** Chile, XI, Aisen, near Coihaique. F. Cerda coll. (Wild, 2004 seed of 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, blue-grey foliage & small, upward-facing, orange-yellow flowers on stems under 10cm. high. Absolutely hardy in the UK & possible in a trough or scree-bed but maybe easiest in the alpine-house, where it can make a superb pan-plant though it does not enjoy being too warm, when dormant in summer.) ..... (10) D
- 2.028.609 : ALSTROEMERIA PATAGONICA \*** Argentina, Santa Cruz, Guer Aike. 30-50m. Among low scrub on steep, SW-facing banks of consolidated sand. Ex S. Pern & J. Watson 6226. (Slightly taller than the next.) ..... (10) D
- 2.028.610 : ALSTROEMERIA PATAGONICA \*** Chile, XII, Magallanes, near Punta Arenas. Ex an O. Magen coll. (This more southern coll. has been established in cultivation much longer than John's 1988 one & this may account for it being slightly easier to grow with us. The two are quite distinct in habit & this has somewhat broader foliage.) ..... (10) D
- 2.028.811 : ALSTROEMERIA PELEGRINA from WHITE FORMS \*** No data. *A. pelegrina* is the type species for the genus & long-cultivated. A plant of rocks & cliffs along the north Chilean coast & definitely tender in the UK, though often mentioned as growable in "warm borders". Very large, beautiful, pure white flowers with the upper, inner segments retaining the yellow zones. About 30cm. in cultivation & safest kept frost-free in winter. .... (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, distinct from the type-race in its striking, red-brown anthers, more elongated upper segments, heavily streaked with crimson, & intense, deep-pink ground-colour. In autumn, it forms swathes of pink in the *Araucaria* cloud-forest at 1400m. but tends to flower about mid-summer in the UK, where it has proved hardy, remaining compact both in its rootstock & height at around 30cm.) ..... (10+) C
- 2.029.410 : ALSTROEMERIA PULCHRA (subsp. pulchra) \*** Chile, V, Valparaiso, Con Con. 115m. In heavy, red soil on W-facing banks in cultivated, littoral area. Ex Beckett, Cheese & Watson 4762 (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

## Anarthrophyllum : 2004 seed from the Patagonian scarlet gorse

- 2.048.209 : ANARTHROPHYLLUM DESIDERATUM** Chile, XI, Aisen, near Coihaique. F. Cerda coll. (This highly desirable spiny hummock from the steppes of Patagonia has been in and out of cultivation for almost 50 years. We remember when the first plants were raised from Ruth Tweedie's Argentinian seeds and there have been several more recent collections. One day someone will put a well-flowered hummock of this on a show-bench. Don't ask us how to do it. We have grown it but never flowered it. Rather than gorse, imagine a more compact, softer, greyer cushion of *Erinacea anthyllis* covered with orange-scarlet pea-flowers. Producing such a plant is one of the ultimate challenges for the skilled alpine-house grower.) ..... (10) F
- 2.128.101 : BOMAREA MULTIFLORA subsp. CALDASII \*** Ecuador, Napo, Papallacta. 3100m. Margins of montane forest. (These magnificent, mainly climbing, tuberous-rooted perennials in *Alstroemeriaceae* with regular flowers (unlike *Alstroemeria*) are centred on the N Andes, where many grow at considerable altitudes. They grow easily in a greenhouse, unheated or barely frost-free. As well as under glass, we have this growing outside against a N-facing wall, where it is cut to the ground each winter & tends to be late in making new growth in spring, so that it does not flower until very late in the season. Seed usually germinates rather slowly & irregularly. This name appears to cover a disconcerting range of plants, varying in habit, proportions of perianth-segments & the amount of speckling inside the flowers. Plants in this area climbed to 2-3m. with heads of up to 50 bell-shaped flowers, usually unspotted, with scarlet outer segments & orange inner ones.) ..... (8) C
- 2.182.001 : CALCEOLARIA FOTHERGILLII \*** Falkland Is., W of Goose Green, Brenton Loch. 2m. Fissures in shale of low cliff. Ex a R. Reid coll. (Established from Bob Reid's recent coll. of this Falklands endemic. One of the most desirable in the genus for the alpine-plant enthusiast. Mats of foliage, densely covered with down, send up erect stems of about 8cm. each carrying a single large, pouched flower, usually yellow streaked with red inside & with a broad, reddish band outside. The British Antarctic Survey Report No. 60 describes the flowers as "sometimes almost entirely red or entirely yellow with small red spots." Always a plant of open, dryish coastal slopes, it resents stagnant moisture at any time but offers no insurmountable difficulty for the experienced grower of alpine-plants in a trough or alpine-house pan in the UK.) ..... (20+) E
- 2.440.000 : HERBERTIA LAHUE (subsp. lahue) \*** Argentina, Buenos Aires Prov. Ex an A. Castillo coll. (This has proved reliably hardy with us in an unheated greenhouse over many years. A delightful little corm in *Iridaceae* with a long succession of violet tigridia-like flowers on 10cm. stems. Dormant in summer so fits in with other 'bulbs'.) ..... (20+) B
- 2.469.999 : IPHEION 'ALBERTO CASTILLO' \*** Argentina. Ex an A. Castillo coll. (As far as we know, this superb plant has never been definitely assigned to a species. It is like a very large, 20cm. tall, pure-white version of the well-known *I. uniflorum*. Flowers over a long period &, as with the others here, hardy with us in an unheated glasshouse.) ..... (20+) B

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

## Ipheion : 2004 seed from a superlative Argentinian species

- 2.470.010 : IPHEION DIALYSTEMON** \* Argentina. Ex an A. Castillo coll. (Like the excellent *Nothoscordum ostenii*, the British stock of this exquisite little bulb was sent to Brian Mathew by Alberto Castillo. Both come from from Rio de la Plata delta area of Uruguay & N Argentina & have proved perfectly hardy with us in an unheated glasshouse. We have grown it with our Eurasian bulbs for years but had only one clone and could not induce it to set seeds until Norman Stevens acquired another for us from Australia. We list it for the first time. Prostrate, narrow, glossy-green foliage and a profusion of brilliant-yellow, upward facing flowers on stems only about 5cm. tall in spring. Much esteemed as an AGS show-plant, it is considered temperamental by some but we cannot say we have ever found it a problem-plant if it is not overdried in summer.) . . . . . (15+) E
- 2.471.412 : IPHEION UNIFLORUM from PINK FORM** \* Seed from the lilac-pink 'Charlotte Bishop' . . . . . (20+) C
- 2.471.420 : IPHEION UNIFLORUM 'ROLF FIEDLER'** \* May be a clone of *I. pedunculata*. Masses of large, well-formed, white-throated flowers in pure sky-blue over a long period. Many commercial stocks now mixed. . . . . (20+) A
- 2.525.050 : LEUCOCORYNE ANGUSTIPETALA** \* Chile, Reg. Metro., Valle Nevado. (A diminutive high-alpine species with narrow, white, scented flowers which open at dusk. In spite of our efforts, sets little seed.) . . . . . (10+) E
- 2.525.400 : LEUCOCORYNE ODORATA** \* Chile, Reg. Metro., near Polpaico. 650m. Grassland & among scrub on foothill slopes. Ex A. Flores & J. Watson 8668. (Closest to *L. xcioides* (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.) . . . (15+) C
- 2.530.010 : LIBERTIA CAERULESCENS** \* No data. A blue flowered species from Chile : an exception in this white-flowered genus in the *Iridaceae*. Clumps of stiff, linear leaves, about 30cm. in height, send up stems packed with stemless umbels of pale-blue flowers with membranous bracts. Needs a very sheltered site or some protection in the UK. . . . . (20+) C
- 2.555.000 : LOBELIA TUPA** \* Chile, Reg. VI, Cachapoal, ESE of Machali. 900m. Openings among scrub in gravelly soil. (2004 New Zealand seed from our coll. of this regal Chilean endemic, towering to 2.5m. with spires packed with thick-textured, hooded, scarlet flowers, exquisitely adapted for humming-bird pollination, above the large, rough, grey-green foliage. Early collections were coastal but this is from the Andean foothills and it seems to be proving hardier in the UK, where it is currently marketed as 'Archibald's form'. It will grow best anywhere in a well-drained, sunny site.) . . . . . (50+) C
- 2.615.500 : MONTIOPSIS SERICEA** (*Calandrinia sericea*) \* Chile, Reg. Metro., Lagunillas (ESE of San Jose de Maipo). 2300m. Open, stony slopes. (Certainly the finest of the group of hairy-leaved, crimson-flowered species for the alpine-house grower. Hummocks of silvery-grey, downy foliage with generously produced brilliant magenta flowers on short stems. To keep its character, it must have full sun & year-round alpine-house conditions.) . . . . . (20+) D

## Mutisia : climbing daisies of the Andes

- 2.628.500 : MUTISIA OLIGODON** \* Chile, Reg. VIII, Bio Bio, SE of Antuco to Volcan Antuco. 650m. Among scrub on steep slopes of volcanic ash. (A great success here in our cold greenhouse from our 1991 coll. Technically separated from *M. spinosa* (*M. retusa*) in that it is not a climber but forms wide-spreading, suckering mounds of stems, about 30cm. high. In cultivation, our plants are about 60cm. high. All the plants we have seen under this name from other sources in the UK have been quite strong-growing climbers and incorrectly named. Most appeared to be the vigorous, rather mean-flowered *M. illicifolia* but the pink Chilean climbers are a very complex group. Bean mentions a plant (of the real thing) raised from Comber's seed flourishing for 40 years in a Sussex garden and it does seem to be one of the best for UK gardens. Certainly the classiest & most aristocratic of these pink Andean daisies with a summer-long succession of broad-rayed heads in what Bean describes as a "beautiful silky pink (almost salmon-pink)." Try it outside in scree or a raised bed and be assured that this is the true plant - it came from the locality where Poeppig collected the material he described as this in 1835 - "Andes de Antuco.") . . . . . (10+) D
- 2.629.200 : MUTISIA SPINOSA** (*M. retusa*) \* Argentina, Neuquen, Lacar, E of Lago Lolog. 1100m. Among scrub in gravelly soil. (Can climb to 6m., though usually much less. Coarsely toothed, leathery, evergreen leaves & profuse, large pink flower heads. This & *M. oligodon* are possibly the best for UK gardens. It is still grown from the Comber 1925-27 collections & Norman Hadden used to have a fence covered with it from that source in his Somerset garden. . . . . (10+) D
- 2.659.000 : NOTHOSCORDUM OSTENII** \* Uruguay. No further data. Ex an.A. Castillo coll. (This is a choice, little 'sweetie' and apparently extremely scarce and local in nature. Alberto Castillo sent Brian Mathew a few wild-collected seeds in 1987. Brian grew these and gained a P.C. for the species in April, 1992. Seed given to us by Brian produced bulbs which we have been grown under unheated glass along with our other winter-growing bulbs and it has fitted in well, proving hardy and comparatively trouble-free (it is surprising just how hardy these bulbs of the Rio de la Plata delta area are). Delicate, thready leaves and wiry stems, about 10cm. high, with umbels of rich chrome-yellow, freesia-scented flowers, opening wide and striped green on the outside. It needs a few bulbs to make a worthwhile potful and, as it has not so far shown any enthusiasm to increase vegetatively, seed is the obvious way to achieve this. "An excellent little bulb" comments Brian.) . . . . . (20+) E

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

- 2.693.200 : ORTHROSANTHUS CHIMBORACENSIS** \* Ecuador, Carchi, NW of El Carmelo (SSE of Tulcan). 3300m. Grass & *Espeletia* paramo, in wet, black, peaty soil. (A member of the *Iridaceae* characteristic of the N Andean moorland - the paramo. Clumps of tough, iris-leaves & erect, 60cm. stems, close-packed with rich-blue flowers, rather like a blue *Libertia*. This seems to be quite reliably hardy in most of the UK and certainly thrives in areas with cool, moist summers.) . . . . . (30+) C
- 2.780.510 : RHODOPHALA BIFIDA** \* Argentina, Buenos Aires prov., Pipinas. (Seeds from the form which was given an RHS Award of Merit, when shown by Bob and Rannveig Wallis in September, 2002. The original coll. was from about 200km. S from Buenos Aires itself, about as far South as this species from N Argentina and Uruguay extends. It should be the hardiest form and it has grown well in an unheated greenhouse in Wales for the past decade. Spectacular umbels of up to 7, funnel-shaped flowers in brilliant red with yellow anthers cluster on 20cm. tall stems in early autumn.) . . . . . (10+) E
- 2.840.100 : SCHIZANTHUS GRAHAMII** \* Argentina, Mendoza, Malargue, Valle de las Lenas. 2200m. Loose, stony soils on steep slopes & along gulleys. (One of two species in a small genus of the *Solanaceae*, (all but confined to Chile), which have climbed to high elevations & acquired a perennial, even if short-lived, habit. Much-cut, rich-green, glandular foliage & branching stems to about 50cm., carrying successions of 'upside-down', butterfly-like flowers in a most violent colour combination of shocking pink & luminous orange. An amazingly improbable & spectacular alpine-plant, an opportunistic colonist of disturbed slopes, revelling on the trashed ski-runs 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. Its image-problem is that no-one believes it is a temperature-hardy alpine!) . . . . . (20+) D
- 2.871.451 : SISYRINCHIUM FILIFOLIUM** (*Olsynium filifolium*) \* Falkland Islands, E of Stanley, Whalebone Bay. 5m. Moderately drained, shallow peat over clay. Ex a R. Reid coll. (A fine endemic of the Falkland Is., known locally by the charming name of 'pale maiden'. Currently separated at specific level from the variable mainland races (placed by some under *S. filifolium* subsp. *junceum*) by Peter Goldblatt, who moves these back to an old genus *Olsynium*. A dainty plant with stems up to about 30cm., usually less, sheathed with rather stiff, linear leaves, carrying up to 8 white flowers, veined with purple & nodding on thready pedicels. Not difficult in the UK in a trough or raised scree-bed.) . . . . . (20+) D
- 2.880.010 : SISYRINCHIUM PALMIFOLIUM** (*S. macrocephalum*) \* No data. A remarkable plant, described as "surely one of the largest and most robust...a seemingly endless display of large yellow saucer-shaped flowers...with bold tufts of broad grey-green leaves overtopped by stiff, widely-winged flower stems over a metre in height." Widely distributed in damp grassland up to 1200m. in Uruguay, SE Brazil & N Argentina, it has 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 and...a 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
- 2.910.500 : SOLENOMELUS PEDUNCULATUS** \* Chile, VI, Cachapoal, Rio Cachapoal valley W of Pangal. 950m. Openings among scrub in sandy soil. (A fine, rhizomatous *Sisyrrinchium*-relative for the alpine-house or bulb-frame. Broad, tapered, grassy foliage & big, rounded, rich-yellow flowers from prominent spathe-bracts on 20cm. stems.) . . . . . (15+) C
- 2.940.010 : TECOPHILAEA CYANOCROCUS** No data. The famous blue Chilean crocus, 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. 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 colour forms, which come fairly 'true' from 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. . . . . (10+) D
- 2.940.012 : TECOPHILAEA CYANOCROCUS 'VIOLACEA'** Hand-pollinated from the dusky, violet-blue form . (10+) E
- 2.968.500 : TRISTAGMA NIVALE** \* Argentina, Neuquen, 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
- 2.970.200 : TROPAEOLUM AZUREUM** \* Chile, Reg. Metro., Chacabuco near Polpaico. 500m. Hot, dry hillslopes, scrambling through low bushes. Ex S. Pern & J. Watson 6055 & subsequent Watson colls. in the same area. (A beautiful, fragile, tuberous-rooted climber. In the UK, where it is not so easy to maintain, this is best kept frost-free when growing in winter & dry when dormant in summer. Very beautiful with many, flat-faced flowers in soft violet-blues with white centres.) . . . . . (5) D
- 2.970.305 : TROPAEOLUM BRACHYCERAS** \* Chile, V, Los Molles. 15m. Among boulders in coastal scrub. Ex A. Flores & J. Watson 8626. (A pretty climber from the coastal mist-belt with delicate stems scrambling to about 1m., clad in small, whirlygig leaves, carrying a multitude of tiny 'nasturtium' flowers in bright yellow with short, green spurs. Generally satisfactory in an unheated glasshouse in the UK but may be safest frost-free.) . . . . . (5) D
- 2.971.200 : TROPAEOLUM POLYPHYLLUM** \* Argentina, Mendoza, Puente de Inca. 2720m. Steep, loose, clay slopes. (Flowers vary here from cream through the usual bright yellow to orange & red tints, all along the 1m. long trails of deeply cut, blue-grey leaves. Growing to about 3300m. around Aconcagua, this high-alpine, often a coloniser of deep, mobile screes, can be trouble-free & embarrassingly vigorous when settled in UK gardens. It occupies a considerable space in our netting-sided polytunnel where we sowed seed directly. It is not always easy to establish in the first place, however.) . . . . . (5) D

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

## Wet and dry

Our 2004 collections from South Africa and New Zealand were intended to be the core of our planned spring list. Not for the first time, our collecting plans were totally upset by the weather. In both the South Island of New Zealand and the Drakensberg of South Africa the season preceding our visits had been exceptionally dry. The condition of the wild plants was as poor as anyone could remember and little flowering had taken place. Much to the delight of the local populations in both areas, the rains started with our arrival. It was all too

late to make much difference to the 2004 flowering and seed-set but it did sometimes make travelling unpredictable and collecting more difficult. In the Drakensberg, driving conditions were occasionally very slow with several roads washed out and our attempts at seed-gathering were either done in a mist of low cloud or to the accompaniment of the explosive flashing from spectacular thunderstorms. While we have managed to put together a presentable list, at least of Drakensberg species, seed of most is in short supply.

## The summer-growers of southern Africa

Though it is simple in theory to appreciate the precisely opposite rainfall patterns of southern Africa, it is not quite so simple to understand the plants which grow in the two very different climates. We have the disconcerting fact that there are both summer-growers & winter-growers in the same genus: think of *Gladiolus*. This all-important dichotomy should be stressed. Generalisations about most genera tend to be based on low altitude, winter-growers from the small (but, floristically, incredibly rich) area in the SW Cape which has a Mediterranean climate. This makes it difficult to understand

the growth cycle of the species from the rest of this country, where drier winters and wetter summers are the norm. With South African plants, you have to know whether each individual species comes from the winter rainfall area or the summer rainfall area, before you know how to grow it. A fair generalisation on South African species for UK gardeners might be that the summer-growers are the ones you may be able to grow in the open garden without too much trouble & the winter-growers are the ones you will have to grow under glass. We list only summer-growers in the following section.

- 3.005.550 : ALBUCA FASTIGIATA var. FLORIBUNDA** Free State, Drakensberg, Mont-aux-Sources. 2900m. Stony slopes & fissures in sloping rock-slabs. (A robust plant with 50cm. tall stems carrying terminal racemes of upright white flowers, heavily banded with green on the spreading outer segments, as well as the erect inner ones. The general pattern of the flowers is of a *Galanthus*-shape & is characteristic of this genus in *Liliaceae* with about 70 species spread from Arabia down through Africa to the Cape, where most species occur. Those listed are all hardy, high altitude summer-growers.) . . . . . (15+) C
- 3.005.700 : ALBUCA HUMILIS** Lesotho, Drakensberg, Mont-aux-Sources. 3000m. Gravelly cliff-ledges. (A very dwarf, saxatile plant, which probably belongs to this species with upright, white, snowdrop-flowers. Only 5cm. high here.) . . . . (15+) C
- 3.006.200 : ALBUCA RUPESTRIS** E Cape, Witteberge, E of Lady Grey. 2200m. Diorite fissures. (Terminal racemes of quite large, upward-facing bright yellowflowers, heavily striped with green on the exterior, carried on 30cm. stems. Endemic to the Drakensberg and, like several species, an inhabitant of fissures on cliffs and sloping rock-slabs.) . . . . . (15+) C
- 3.006.410 : ALBUCA SHAWII** \* No data. A species of many synonyms (*A. elliottii*, *A. minima*, *A. trichophylla*) from cliffs and rock-sheets, reaching between 1800m. & 2400m. in the Drakensberg. Hairy leaves and stems up to 40cm. high with bright yellow, distinctively scented, nodding flowers. In fact the whole plant smells exotically of liquorice . . . . . (15+) C
- 3.007.251 : ALEPIDEA NATALENSIS** KwaZulu-Natal, Drakensberg, S of Sani Pass. 2750m. Moist, stony turf below E & SE-facing basalt cliffs. (A dwarf species in *Umbelliferae*, about 40cm. high, not uncommon on damp, grassy slopes in the Drakensberg. Hairy, basal rosettes send up stems with many *Astrantia*-like flower-heads, each surrounded by long-lasting, thick-textured, petal-like, white bracts, tinted with mauve, not altogether unlike *Astrantia minor*.) . . . . . (15+) D
- 3.011.100 : ANDROCYBIUM LONGIPES** Lesotho, Drakensberg, NW of Sani Pass. 2900m. Gravel-filled depressions on rock-slabs. (A summer-rainfall species from the high-alpine fell-fields on top of the Drakensberg. Prostrate rosettes.) . (15+) D
- 3.012.500 : ANDROCYBIUM STRIATUM** E Cape, Drakensberg, NE of Rhodes. 2100m. Loose, sandy clay. (Another summer-grower in this genus of *Colchicum*-relatives, with about 30, mainly winter-growing, species distributed S from the Mediterranean, through E Africa to the Cape. Stemless clusters of many, white flowers surrounded by large, showy, petaloid, green-veined, white bracts appear in the centres of leaf rosettes, lying flat on the ground.) . . . . . (15+) C
- 3.022.309 : ARISTEA MONTANA** KwaZulu-Natal, Drakensberg, SE of Sani Pass. 2800m. Steep, grassy slope. (One of the few in this genus to ascend to high altitudes in the summer rainfall area. There are around 50 species of these rhizomatous perennials, in *Iridaceae* & confined to subsaharan Africa. About 80% of them grow in the winter rainfall area of the SW Cape. Most are on a similar pattern, forming clumps of linear, sometimes falcate, iris-like leaves with erect stems carrying, in this case, stemless clusters of many flowers, opening in succession over a long period. The flowers on the 20 cm. stems are a notably intense gentian-blue. This will certainly be temperature-hardy in the UK) . . . . . (20+) C

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

- 3.034.100 : CHIRONIA PEGLERAE** KwaZulu-Natal, Drakensberg, Cathedral Peak. c. 2000m. ( A pink, 30cm. herbaceous perennial in the *Gentianaceae* from damp, grassy slopes, to 2300m. in the Natal Drakensberg area.) ..... (30+) **D**
- 3.036.550 : COTYLEDON ORBICULATA var. OBLONGA** KwaZulu-Natal, S of Sani Pass. 2850m. Ledges on E-facing basalt cliffs. (A member of a species-group of spectacular saxatile succulents widespread in the drier areas of S Africa, this high altitude race is one the paradoxes which alpine-vegetation sometimes comes up with. Large rosettes of fleshy, obovate, blue-white foliage produce 30cm. stems of elongated, pendant bells in soft apricot to red. One of the most exotic-looking species temperature-hardy in the UK but remember cliffs act as efficient storage-heaters & the winters here are dry, so only try it in a well-drained, sunny site. This race is well-illustrated in Phillips & Rix 'Perennials' Vol. 2, p. 57.) ..... (50+) **C**
- 3.100.000 : CROCOSMIA AUREA \*** KwaZulu-Natal, near Merrivale. 1500m. Ex a R. & R. Saunders coll. (This has an altitudinal limit of 1800m. in the Drakensberg, usually in the shade of forest remnants. About 1m. high with spikes of large, outward-facing flowers, usually in soft orange-yellow. This coll. has produced some outstanding forms) ..... (15+) **B**
- 3.100.210 : CROCOSMIA MASONORUM \*** No data. From the richly coloured clone, 'Flamenco', selected over several generations, by Eric Smith. Pleated foliage & 1m. arching spikes of spectacular, upward-facing flowers in luminous orange-scarlet. Absolutely hardy in the UK, though from quite a low an altitude, 1370m., in KwaZulu-Natal. .... (15+) **B**
- 3.105.510 : CYRTANTHUS BREVIFLORUS \*** Lesotho. No further data. (From the stock introduced by Helen Milford & hardy in the UK. As the species goes, this is quite a dwarf form, about 30cm. high (it can be much taller). Though bulbous it is usually a plant of wet, peaty habitats. We have seen it on an island in a fast-flowing stream at almost 3000m., growing about 1m. high. Arching stems carry pendant, yellow, tubular flowers. Seed just harvested should give good germination.) ..... (10+) **D**

## Dierama : the hairbells from mountain marsh and grassland

The 1991 publication of the beautifully illustrated Hilliard & Burt monograph stimulated interest in this exquisitely graceful genus of the *Iridaceae*. With over 40 species spread from the Cape to Ethiopia, it is unusual in that it is absent from the winter-rainfall area of the SW Cape. Its centre of diversity is in the summer-rainfall area of KwaZulu-Natal with 26 species there. We guess the criterion for 'growability' in the UK might be whether they are wet-growers or species from winter-dry grassland. A low altitude species from a winter-wet habitat may well prove more tolerant of UK garden conditions than a dry-grower from a higher altitude.

This is borne out by the only two species (or their hybrids) well-known in cultivation. *D. pendulum* (a very low altitude plant) & *D. pulcherrimum* (from between 900m. & 1700m.) both from areas at the edge of the winter-summer rain divide must experience wetter winter conditions than most. *D. robustum* must experience lower temperatures than almost any other but it is a plant of drier habitats. The two high altitude growers, *D. dracomontanum* & *D. pauciflorum*, are reliable with us & tolerate our cool, wet winters. We have emphasised the need for a sunny well-drained site where we feel it might be necessary to alleviate winter-wetness.

- 3.141.101 : DIERAMA DRACOMONTANUM \*** KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Among grass tussocks on broad ledges of E-facing cliffs. (The highest altitude species & an excellent, very hardy garden-plant in the UK, forming compact, grassy tufts, sometimes spreading by stolons with us, with pendant clusters of wide-open flowers, in beautiful coral-red & terracotta-pink shades, between brown bracts, dancing on wiry stems of about 60cm. in late summer.) .... (20+) **B**
- 3.141.409 : DIERAMA ERECTUM** KwaZulu-Natal, E of Vryheid, Ngome. 1100m. Wet grassland. (Narrowly endemic to this area & closest to *D. insigne* with erect, 1.5m. high stems, with many side branches, from clumps of broader leaves. Wide open, light magenta-pink flowers with distinct, darker eyes. A wet-grower which may adapt well to UK conditions.) ... (15+) **D**
- 3.141.709 : DIERAMA GALPINII** Eastern Transvaal, near Wakkerstroom. (A species of open grassland up to 1600m. altitude. Erect stems about 1m. high from small, tufted clumps. Pale to rich magenta-pink bells among translucent bracts.) (15+) **C**
- 3.141.900 : DIERAMA GRANDIFLORUM \*** E Cape, Ouberg, NNW of Graaff-Reinet. 1700m. Among sandstone rocks around edge of summit plateau. (A little-known species, only recorded from here & the Bosberg to the SE. Tufts of tough, narrow foliage. Whippy, 1.5m. stems hang out pendulous clusters of rich pink flowers with blue-violet perianth-tubes, among the largest in the genus. This is a cold, interior area but it is on the edge of the Karoo & is much drier than the Drakensberg, so, while certainly temperature-hardy, it may succumb to winter-wetness in the UK. Our Welsh-grown seed.) ..... (10+) **E**
- 3.142.010 : DIERAMA IGNEUM \*** A low to middle-altitude species, quite widespread from the central coastal region of KwaZulu-Natal southward into E Cape at altitudes up to 1500m., so well worth trying in the UK in a sunny well-drained site. About 1m. high with bells varying from pale to deep lilacs & rose-pinks. South African cultivated seed. .... (15+) **B**
- 3.142.110 : DIERAMA INSIGNE \*** Almost confined to rocky grassland on the Highveld of SE Mpumalanga, just entering Swaziland and Natal. Arching 1.5m. stems of beautiful, pendulous pink flowers. S African cultivated seed. .... (15+) **B**
- 3.142.501 : DIERAMA LATIFOLIUM** KwaZulu-Natal, Kamberg Valley W of Rosetta. 1700m. Open grassland over sandstone slabs. (From the grasslands E of the Drakensberg up to 2100m. Large clumps of grassy leaves. Many tough stems, as much as 3m. tall, with arching sprays of pale to deep-pink, or occasionally wine-red, flowers among papery, white bracts. A magnificent plant, used to drier winter conditions, so best tried in a well-drained, sunny site in winter-wet climates.) ..... (15+) **D**

---

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



- 3.142.800 : DIERAMA MEDIUM** \* A local species from E Mpumalanga & neighbouring Swaziland. An extremely dainty plant of occasionally marshy grassland between 1300m & 2000m. it grows about 70cm. high with clustered bells in pale-mauve to magenta-pink, among brown bracts, on the finest of stems. S African cultivated seed. .... (15+) C
- 3.143.500 : DIERAMA PAUCIFLORUM** \* E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Among grasses in moist, peaty soil. (An outstanding garden-plant in the UK. Tolerant of winter-wetness (it sometimes grows in standing water in the wild) & dwarfier than *D. dracomontanum*, it flowers earlier than any other we have with many, wiry, 40cm. stems from dense grassy tussocks. Wide-open, sometimes upward-facing, bright purple-pink flowers amid rust-brown bracts.) .... (15+) C
- 3.143.909 : DIERAMA PULCHERRIMUM** E Cape, Amathole Mts., W of Stutterheim. (A familiar name in the UK, where most stock is now likely to have crossed with paler pink *D. pendulum*. The true species is one of the most distinct & richly coloured with arching stems almost 2m. high dripping with long, conical flowers, often in deep purplish red. A species from open grassland between 900m. & 1700m. elevation in the E Cape & of proven reliability in UK gardens.) .... (15+) D
- 3.144.201 : DIERAMA ROBUSTUM** E Cape, Witteberg, E of Lady Grey. 1900m. Among rocks & scrub. (Reaching higher altitudes, between 1600m. & 2900m., than any other except *D. dracomontanum*, this is the commonest Lesotho species, extending into the Natal & Cape Drakensberg. A close clump of 1m. long leaves with a single, 2m. arching stem with many pendant clusters of large bells, usually pink but variable from cream to deeper shades. This is a plant of drier slopes & though temperature-hardy may be intolerant of winter-wetness so give it a well-drained, open site in the UK.) .... (15+) B
- 3.165.500 : DIMORPHOTHECA JUCUNDA** (*Osteospermum jucundum*, *Dimorphotheca barberiae*) Free State, Drakensberg, Merit aux Sources. 2900m. Open stony slopes. (Highest alpine in the genus, recorded up to 3200m., & only likely to be lost through winter-wetness, not cold, in the UK. Here in a very neat race with mat-forming clumps bearing a multitude of brilliant daisies, with rich purple-pink, copper-backed rays and yellow discs, on stems of about 20cm. More compact here than clones distributed in the UK as *Dimorphotheca barberiae* f. *compacta* but not quite so diminutive as the original one described by Vera Higgins in 1946 under this name from a Helen Milford collection & which we fear has now vanished from cultivation. Those prepared to interpret the name *Dimorphotheca* will appreciate seeds are of two different forms.) .... (10+) C

### Eucomis : pineapple lilies enjoy a cool, wet summer

This small genus of 10 species has already shown remarkable hardiness & tolerance of UK garden conditions. As even the one species from Zimbabwe can be grown outside in the UK, we need say no more about the hardiness of the following mountain-plants. All but one are summer-growers from habitats which are moist in summer but dry in winter, so, with

winter requirements in mind, give them a well-drained site in full sun in the UK & compensate with plenty water in a hot, dry summer. There is nothing like these with their broad, lush, basal leaves & stout stems carrying a dense, cylindrical raceme of flowers, topped with the striking tuft of bracts, which gives them their popular name of pineapple lilies.

- 3.230.106 : EUCOMIS AUTUMNALIS subsp. CLAVATA** E Cape, Amathole Range, W of Stutterheim. (A dwarf, broader-leaved race of *E. autumnalis*, ascending to above 3000m. Its rosette of wide leaves lies flat on the ground, with the dense, cylindrical head packed with fleshy, yellow-green flowers & topped with the characteristic pineapple tuft rising to around 30cm. in height. Our 1996 Drakensberg colls. are established and proving hardy so far in the UK.) .... (8) C
- 3.230.220 : EUCOMIS BICOLOR** \* No data. Long, wavy-edged leaves & purple-spotted stems, up to 60cm., with cylindrical racemes of creamy green flowers, each neatly edged with deep purple, topped by a large tuft of bracts. Quite widespread along the E slope of the Natal Drakensberg at up to 2300m. according to Hilliard & Burtt but we have found it on exposed rock-slabs at almost 3000m. on the Lesotho border. Cultivated seed from stock grown outside in Wales, UK. .... (10) B
- 3.230.510 : EUCOMIS MONTANA** \* Distributed in Mpumalanga & Swaziland on stony, grassy slopes at around 1500m. Semi-erect, wavy-edged foliage, purple-tinged & purple-speckled below. Stems of about 30cm. with short, dense racemes of green flowers with purple anther-filaments. Not a species we have seen in cultivation in the UK. S African seed. .... (8) D
- 3.230.610 : EUCOMIS POLE-EVANSII** (*E. pallidiflora*) \* No data. The tallest, most robust species, which can reach 2m. in height. Basal rosettes of undulate, strap-shaped leaves with white cartilaginous margins & long, dense racemes of spirally arranged, wideopen, creamy-green flowers topped by a coma of up to 30 bracts. A species from grassy marshes and wet gulleys in the higher, montane areas of E Mpumalanga and W Swaziland. Cultivated S African seed. .... (8) C
- 3.235.100 : EURYOPS ACRAEUS** KwaZulu-Natal, Drakensberg, N of Sani Pass. 2850m. Fissures in S-facing cliffs. (The stiff, platinum-plated bushes with aristocratic, bright-yellow daisies are well-known from Helen Milford's 1939 introduction, long-grown incorrectly as *E. evansii*. A species of cold, moist, shaded, basalt cliffs to 3300m., not the sunny scree where UK gardeners put it but where, nevertheless, it thrives, as long as the summer is not too dry.) .... (10+) D
- 3.235.400 : EURYOPS EVANSII** (Subsp. *evansii*) KwaZulu-Natal, Drakensberg, S of Sani Pass. 2700m. Stony gully on steep slope below basalt cliffs. (A very much larger, shrubby species than *E. acraeus* & from slightly lower altitudes. It can reach over 1m. in height with broad, leathery, grey leaves and terminal clusters of big yellow daisies.) .... (10+) C

A : \$2.00 ; £1.50 ; € 2.-

C : \$4.00 ; £2.50 ; € 4.-

E : \$7.00 ; £4.50 ; € 7.-

B : \$3.00 ; £2.00 ; € 3.-

D : \$5.00 ; £3.50 ; € 5.-

F : \$9.00 ; £6.00 ; € 9.-

- 3.239.060 : GALTONIA PRINCEPS** \* No data. A lower altitude species from the area to the east of the Drakensberg. Rather like a somewhat dwarfer, greener-flowered version of *G. candicans*. Erect stems, almost 1m. tall, with pale green to greenish cream bells in late summer. From the stock we used to grow when we were in Dorset almost 20 years ago. .... (10+) **B**
- 3.239.110 : GALTONIA VIRIDIFLORA** \* No data. Mainly distributed in Lesotho, in drier areas to the west of the Drakensberg escarpment. Much broader, erect, more glaucous leaves than the other species. Stems about 1m. high carry up to 30 pale yellowish green bells in late summer. Hardy in W Wales in a well-drained site. .... (10+) **B**
- 3.240.000 : GARULEUM WOODII** \* Free State, Platberg E of Harrismith. 2300m. Rock fissures & gravelly ledges. (A blue-flowered shrubby member of the *Compositae*, which could pass for a *Felicia*, with an intriguing distribution, following the Cave Sandstone right round the high Drakensberg from SE Lesotho to here on the Platberg but absent from the main range. Seems certainly to be temperature-hardy in the UK but may resent winter-wetness. A distinguished, stiffly compact, saxatile shrub, about 20cm high but more across, with fine, rich-blue, yellow-centred 'daisies'. Worthy of the alpine-house.) .... (10) **D**
- 3.243.300 : GERANIUM MAGNIFLORUM** \* E Cape, Witteberge, SE of Lady Grey. 1500m. Among grass in marshy area. (Large pink flowers on plants about 30cm. high with very finely cut green leaves. Panayoti Kelaidis & Jim collected this in 1996. "Superb" and "indestructibly hardy" at Denver says Panayoti. It is the highest growing S African in this genus, recorded up to 3200m., always in moist sites, so should prove every bit as worthwhile in European gardens.) .... (10+) **D**
- 3.243.409 : GERANIUM PULCHRUM** KwaZulu-Natal, Drakensberg, SE of Sani Pass. 2600m. (A handsome, sturdy, shrubby-based species, up to 1m. in height, with lobed, silky foliage and masses of large pink to purple flowers. From moist rock-slides & streamsides up to 2400m. in the Drakensberg, this is of proven reliability in many UK gardens. .... (10+) **C**
- 3.243.460 : GERANIUM ROBUSTUM** \* No data. Most British-grown stock probably originates from S.& S. Hannay 14 collected in the E Cape. We are told we have a particularly fine, compact form, which makes mounds about 50cm. high and 1m. or more across. Branching, stiff, sticky stems set with deeply cut soft-green leaves carry masses of flowers in a pleasing pinkish purple over a long period in summer. Excellent and absolutely hardy here in a sunny, well-drained bed. .... (10+) **B**

### Gladiolus : the summer-growers like it high but not so dry

- 3.257.201 : GLADIOLUS CRASSIFOLIUS** Eastern Cape, ENE of Rhodes. c.2000m. (A summer-growing, grassland species, widespread through the summer rainfall area from E Cape up through Lesotho into Mpumalanga, climbing to about 2000m. in the Drakensberg. Spikes about 1m. high with up to 40, curved, bell-shaped flowers, usually in pink or mauve with long, dark blotches on the lower segments. Should be hardy & growable outside in most of the UK.) .... (15+) **B**
- 3.257.800 : GLADIOLUS DALENII** E Cape, Witteberge, E of Lady Grey. 2000m. Among grasses & scrub in deep, moist soil. (A very showy member of a very variable group which extends N from the E Cape to Ethiopia & Arabia. Under Goldblatt's revision these are all absorbed into *G. dalenii* subsp. *dalenii*. Summer-growing, from altitudes up to 2500m. in the Drakensberg, many populations must be growable & totally hardy in most of the UK. About 60cm. high in this form with hooded, brilliant scarlet-orange flowers, large bright yellow blotches almost occupying their lower segments. Our 1996 coll. from this area included quite a lot of *G. saundersii* seed and this may be the case again.) .... (20+) **B**
- 3.257.847 : GLADIOLUS DALENII** E Cape, NW of Maclear, Pot River Pass. 1500m. (Rich red form) .... (20+) **B**
- 3.257.849 : GLADIOLUS DALENII** \* Northern Province, Tzaneen. (Lime-green form.) .... (20+) **B**
- 3.257.850 : GLADIOLUS DALENII** KwaZulu-Natal, near Nottingham Road. 1500m. (The clear yellow form, once described as *G. primulinus*, which contributed much to some of the familiar garden-hybrids.) .... (20+) **B**
- 3.258.700 : GLADIOLUS ECKLONII** (subsp. *ecklonii*) KwaZulu-Natal, near Underberg. 1500m. (From foothill grassland along the summer rainfall, Drakensberg escarpment from E Cape to Mpumalanga up to 2300m. & should be fairly hardy. Funnel-shaped flowers, among big, glaucous bracts, densely speckled with red or maroon on a whitish ground. 40cm.) .. (15+) **B**
- 3.261.000 : GLADIOLUS FLANAGANII** \* KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. Fissures on S & SE-facing, basalt cliffs. (The 'Suicide Gladiolus', an alpine chasmophyte, almost always out of reach on inaccessible cliff-faces at the highest altitudes in Lesotho & the Natal Drakensberg, up to 3300m. Rounded, thick-textured, scarlet flowers with neat, narrow, white guide-lines on the lower segments. We now have this striking species established from our 1996 coll.) .... (10+) **F**
- 3.264.009 : GLADIOLUS LONGICOLLIS** (subsp. *longicollis*) E Cape, ENE of Rhodes. c.2000m. (An elegant, 50cm. high, grassland species with very long-tubed white or cream flowers, sometimes brown-speckled along the mid-veins and purple-flushed outside. Opens in the evenings with a heavy, spicy fragrance to attract its hawkmoth pollinators.) .... (15+) **C**
- 3.268.209 : GLADIOLUS MORTONIUS** Eastern Cape, Amathole Mts., W of Stutterheim. (A spectacular, 50cm. high plant of stony grassland in the mountains of the E Cape. Up to 16, magnificent, long-tubed, pink flowers with red nectar-guides. Not unlike *G. oppositiflorus* but differs substantially in the floral bracts. Should be reasonably hardy in the UK) .... (15+) **C**
- 3.270.101 : GLADIOLUS OPPOSITIFLORUS** subsp. *SALMONEUS* Eastern Cape, NW of Maclear, Pot River Pass. c. 1500m (One of the loveliest. About 60cm. high with, one-sided spikes of big, salmon-pink flowers, sparsely marked with crimson in their throats. The high altitude, inland race of the species which has contributed much to the large hybrids. Our 1996 Naudesnek coll. of this summer-grower, is so far proving a good, hardy garden-plant in a well-drained site in the UK.) .... (10+) **C**

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

- 3.276.501 : GLADIOLUS SAUNDERSII** E Cape, Witteberge, E of Lady Grey. 2000m. Diorite outcrops. (A startlingly spectacular species distributed from the Witteberge & Cape Drakensberg N through Lesotho at altitudes up to 2900m. but absent from almost all of the Natal Drakensberg. It has been confused with the very local, closely related *G. flanaganii*. Both are summer-growers with brilliant scarlet flowers marked with white on the lower segments but flower shape, habit & habitat are quite different. Temperature-hardy in a well-drained site in the UK but flowers too late to set seed with us.) . . . . . (10+) D
- 3.277.700 : GLADIOLUS SERICEO-VILLOSUS** KwaZulu-Natal, E of Howick. 1500m. (Widespread in rich, moist, montane grassland up to 2100m. from the E Cape to S Mpumalanga. Distichous spikes, up to 1m. high, of up to 40 cream to pale lavender, funnel-shaped flowers with elongated, yellow, dark-edged markings on the lower lobes.) . . . . . (15+) C
- 3.300.200 : GLUMICALYX GOSELOIDES** KwaZulu-Natal, Drakensberg, N of Sani Pass. 2850m. In turf & among stones at base of SE-facing cliffs. (In a small genus of 6 herbaceous perennial species in *Scrophulariaceae*, endemic to the alpine region of the high Drakensberg, this has proved accommodating & hardy in cultivation in the UK & is illustrated growing in Kent in Rix & Phillips Vol. 2, page 110. Aromatic, leafy clumps of creeping stems rising to carry dense, nodding heads of long-tubed, pale-yellow flowers with bright orange interiors. In spite of the colour, demure rather than flamboyant.) . . . . . (20+) C
- 3.305.000 : GOMPHOSTIGMA VIRGATUM** E Cape, Witteberge, SE of Lady Grey. 1900m. Among rocks at edge of stream. (A suffrutescent perennial in a genus of 2 species in the *Loganiaceae*, this appears to be endemic to the rocky beds of fast-flowing streams in the SE African mountains. It does not need such a specialized situation in cultivation. Established from our 1996 coll., it is proving hardy & certainly moisture-tolerant in the UK. Bushes of whippy, dark-green stems, about 2m. high, wreathed with white, crucifer-like flowers - try to imagine a cross between a *Cytisus* & a *Crambe*.) . . . . . (50+) B
- 3.350.800 : HELICHRYSUM AUREUM** \* Lesotho. Ex a P. Kelaidis coll. (Seed from one of Panayoti's 1994 collections, now well established & totally hardy at Denver. A 50cm. high, herbaceous perennial. Showy heads with bright yellow, 'everlasting' bracts. Temperature-hardy in the UK, of course, but should be tried only in a sunny, well-drained site.) . . . . . (30+) B
- 3.410.320 : HESPERANTHA BAURII** \* No data. A lovely, rich-pink species from wet grassland, reaching 3000m. in the Drakensberg. Up to 75cm. high and flowering in late summer, this should be growable in a cool, moist site in almost all UK gardens. This does well in Mike & Polly Stone's Inverness-shire garden, so don't say it's not hardy. . . . . (20+) B
- 3.415.709 : HESPERANTHA WOODII** \* KwaZulu-Natal. No further data. A beautiful Natal endemic from wet sites, so may be possible outside in the UK. Around 30cm. high with starry, deep-pink flowers & long, slender leaves. . . . . (20+) C
- 3.445.101 : JAMESBRITTENIA BREVIFLORA** (*Sutera breviflora*) KwaZulu-Natal, Drakensberg, SE of Sani Pass. 2500m. Open, rocky slopes. (This is a fine member of a fine African genus in the *Scrophulariaceae*, recently split from *Sutera* and distinguished by having the stamens concealed within the corolla tube, whereas in *Sutera* these are exerted. There are over 80 species, mainly S African, with quite a few montane plants. Masses of flat-faced, 2-lipped, brilliant orange-red, yellow-centred flowers on 20cm. clumps. Our 1996 coll. from the E Cape was listed as *Sutera* under 3810200) . . . . . (50+) C

### Kniphofia : redhot poker cool off by the streams

This splendid genus of herbaceous perennials in the *Liliaceae* (or *Asphodelaceae*, if you wish to split the family) comprises about 70 species, spread from the Cape N through E Africa into the Yemen, with over 40 of them in S Africa. They are mainly plants of the mountains & moister habitats, prevalent in the summer rainfall areas rather than in the SW Cape. In Britain, though the genus is well-known and there are many specific names about, a lot of these are misapplied or applied to plants of possible hybrid origin. Writing in 1914, the S African botanist N.E. Brown commented "that in a very great majority of cases plants of this genus raised from seed

produced in any garden where more than one kind is grown, whether that garden be in South Africa or Europe, will not be true to name." Bear this in mind with the cultivated seeds listed. These are all harvested from garden stocks of correctly named parents raised from wild-collected seeds but they may have crossed. Nomenclature follows the 1968 monograph by L.E. Codd. Easily accessible information for gardeners does not exist. The best reference once again is Phillips & Rix 'Perennials' Vol. 2, pages 160-163, where several of the following are illustrated, along with reliable, accurate information.

- 3.460.109 : KNIPHOFIA BAURII** \* Eastern Cape. No further data. (Distributed from the north of the E Cape through KwaZulu-Natal on moist, grassy slopes between 600m. & 1200m., this is a compact plant, about 50cm. high. Clumps of soft, rather glaucous leaves & dense, globose heads of dull red buds opening to pendant, greenish yellow flowers.) . . . . . (15+) C
- 3.460.209 : KNIPHOFIA BRACHYSTACHYA** Lesotho, Drakensberg. No more data. (A strange, dwarf plant of moist, montane grassland in the Lesotho, Cape & Natal Drakensberg, up to about 2400m. Only about 30cm. high with erect, stiff, narrow leaves & a dense, cylindrical inflorescence of stubby, dull yellow flowers opening from brownish buds.) . . . . . (15+) C
- 3.460.309 : KNIPHOFIA BREVIFLORA** \* KwaZulu-Natal. No further data. (Another little plant, about 50cm. high, in a group of allied whitish-flowered species, including *K. buchananii* & *K. albescens*. Stubby spikes of cream flowers from yellow-green or red-tinged, buds. From damp mountain grasslands of the N Drakensberg & Harrismith area, up to 2000m.) . . . (15+) C

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

- 3.460.409 : KNIPHOFIA BUCHANANII** \* KwaZulu-Natal. No further data. (Closely allied to *K. breviflora* & generally similar but with shorter flowers & a more eastern distribution in the KwaZulu-Natal midlands up to 1200m.) . . . . . (15+) C
- 3.460.503 : KNIPHOFIA CAULESCENS** E Cape, NW of Rhodes. 2600m. Open marshy areas. (A splendid species of a proven very long-lived, indestructible nature & garden worth in the UK. It grows at up to 3000m. in the high mountains of the E Cape, the Stormberg & Winterberg, up through the Drakensberg of Lesotho & KwaZulu Natal, usually in rocky, seepage areas or on wet cliffs. Clumps of fine blue-grey foliage send up stout stems with dense inflorescences of pale greenish yellow to cream flowers from coral to flame buds. More variable in colour in nature than we have seen it in gardens but its caulescent habit tends to be more developed in cultivation, where it forms expanding *Yucca*-like clumps.) . . . . . (20+) C
- 3.461.109 : KNIPHOFIA ENSIFOLIA** (subsp. *ensifolia*) \* Eastern Cape. No further data. (A robust plant with long, glaucous leaves and stout stems up to 1.8m. high carrying dense heads of white to greenish-white flowers opening from pink-tinted buds. Distributed, usually in rich clay soils in wet areas, W of the Drakensberg from the E Cape into Mpumalanga.) . . . (15+) C
- 3.461.409 : KNIPHOFIA FIBROSA** \* KwaZulu-Natal, Drakensberg. No further data. (A somewhat obscure species from the moist grasslands of the Drakensberg up to around 2000m. A grassy leaved species with stems of about 50cm., related to & resembling cream-flowered *K. breviflora* but with longer, pendant, pale yellow flowers.) . . . . . (15+) C
- 3.461.900 : KNIPHOFIA HIRSUTA** \* E Cape, Drakensberg, ESE of Ben Macdhui. 2750m. Among grasses on open, moist slope. (Virtually endemic to Lesotho but we're right on the border here. A wet-growing alpine, immediately identifiable by its solitary crowns of broad-based foliage, distinctly hairy along the nerves on both sides. Dense heads of pendulous buds in shades of dull orange, coral or salmon open to greenish yellow flowers, a rather lurid combination. About 50cm. high.) . . . . . (20+) C
- 3.462.014 : KNIPHOFIA ICHOPENSIS from YELLOW FORM** \* No data. A grassland plant of central KwaZulu-Natal reaching about 2000m. in the Drakensberg. Long heads of widely spaced, arcuate, cylindrical flowers, varying from cream to salmon, on stems of 1m. or less. In a group including *K. laxiflora* & *K. angustifolia*, unfamiliar in gardens. From an outstanding form grown at Denver & given to us by Panayoti Kelaidis as having "superb, *Aloe*-like, yellow flowers." . . . . . (15+) E
- 3.462.212 : KNIPHOFIA LAXIFLORA** \* No data. Allied to *K. ichopenensis*, this variable species is widespread from the N of E Cape, through KwaZulu-Natal into Mpumalanga. Worth trying in a well-drained, sunny site in the UK. Erect buds deflex as the long, tubular, widely spaced flowers open in shades of pale-yellow, coral, salmon or orange. . . . . (20+) B
- 3.462.509 : KNIPHOFIA MULTIFLORA** \* Mpumalanga, near Wakkerstroom. Ex a R. & R. Saunders coll. (A strange, tall, northern species with short whitish flowers from greenish buds, carried in long, narrow spires, up to 80cm. in length on stems of 2m. or more. From wet sites, up to about 1800m. in eastern Free State, Mpumalanga & Swaziland.) . . . . . (15+) D
- 3.462.600 : KNIPHOFIA NORTHIAE** \* E Cape, Drakensberg, WSW of Ben Macdhui. 2750m. Open sites along margins of streams. (Certainly the most arresting foliage-plant in the genus, distinct from all others in its very broad, grey-green, leathery, arching, shallowly channelled leaves without a distinct keel, forming a large, evergreen rosette. Described by G.S. Thomas as "very rare" in cultivation, the name has been misapplied in UK gardens to *K. caulescens*. Stout stems, anything from 20cm to 1.5m. high, carry very large dense inflorescences early in the summer. Flowers are likely to be cream from pale red buds in this E Cape race. A very hardy, high altitude plants distributed here & there in the Cape & Natal Drakensberg at up to 3000m., always in wet peaty places along fast-flowing mountain streams or down seepage lines.) . . . . . (20+) C
- 3.462.709 : KNIPHOFIA PARVIFLORA** (syn. *K. modesta* - not the hybrid *K. "modesta"* of gardens) E Cape. No further data. (Unique in the genus in its one-sided racemes of sweet-scented, short, tubular, green-cream flowers from brownish buds on stems of about 50cm. A demure species of wet sites in the E Cape & KwaZulu-Natal, up to about 2400m.) . . . . . (15+) C
- 3.462.900 : KNIPHOFIA PORPHYRANTHA** \* Free State, Drakensberg, Mont-aux-Sources. 2800m. Steep, moist, grassy, SW-facing slope. (A superb, little, midsummer flowering, high altitude species which must be hardy anywhere in the UK. Short, yellow-green leaves & 30-60cm. stems with stubby heads of pendulous, lemon-yellow flowers from buds often tipped with orange. Illustrated in Rix & Phillips page 162. Colorado cultivated seed from our 1996 coll.) . . . . . (10+) E
- 3.463.300 : KNIPHOFIA RITUALIS** Lesotho, Drakensberg, Mont-aux-Sources. 3000m. Among rocks at base of cliffs. (Possibly the highest alpine in the genus. From the Lesotho border-ranges, usually in sandstone crevices. Closest to the western *K. sarmentosa*. At 40-80cm., taller than *K. porphyrantha* with longer, glaucous leaves & ovoid heads of pendulous yellow-green flowers opening from coral to orange buds. Illustrated in this area in Rix & Phillips. Certainly as hardy as any S African but used to being dry & frozen all winter so may be vulnerable to wetness then & need a very well-drained site.) . . . . . (15+) D
- 3.463.600 : KNIPHOFIA SARMENTOSA** W Cape, SE of Sutherland, Komsberg. 1800-2000m. (A distinct species found along mountain streams in the arid ranges of the W Karoo. Introduced to the UK in 1789 but not recorded again until it was found in the Roggeveldberge 130 years later. Jane Taylor considered it "worth growing for its good glaucous foliage & easy temperament alone...a thoroughly good garden plant." Codd describes the flowers as "pendulous, salmon" & the buds as "coral-scarlet with a greyish bloom." The 60cm. flower stem has the longest bracts in the genus.) . . . . . (15+) C
- 3.463.800 : KNIPHOFIA STRICTA** \* E Cape, Drakensberg, SW of Rhodes. 1700m. Among rocks. (A species from the little-collected ranges E of the Karoo into the Cape Drakensberg & SW Lesotho, at up to 2500m. Like no other in its narrow, rigid blue-grey foliage, U-shaped in cross-section. About 1m. or less high with dense pokers of pale yellow tubular flowers, opening from coral-red buds. This needs a much drier site than most in UK gardens but do not doubt its hardiness.) . . . . . (15+) C

---

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

- 3.464.060 : KNIPHOFIA THOMSONII var. SNOWDENII** \* No data. South African cultivated seed of this elegant species from wet grassland at up to 3900m. on the highest mountains of Uganda & Kenya. Distinct in its stoloniferous habit and 60cm. stems of large, pendulous, curved, spaced flowers in soft tangerine-orange over a long period in late summer. . . . . (15+) C
- 3.464.110 : KNIPHOFIA TRIANGULARIS** (subsp. *triangularis*) \* No data. A widely distributed but very local, dwarf species, recorded northward from the E Cape to the eastern Free State, growing in moist, montane grassland in peaty soils up to 2000m. altitude. Clumps of soft, narrow, grassy leaves and 60cm. tall stems carrying dense heads of concolorous coral red to soft orange coloured flowers in late summer, too late to set good seed in the UK : cultivated Colorado-grown seeds . . . . . (15+) D
- 3.464.310 : KNIPHOFIA TYPHOIDES** \* No data. A bizarre species from moist grassland on clay soils in northern KwaZulu-Natal & Mpumalanga. Clumps of glaucous, distichous leaves, sometimes spirally twisted, produce tall stems, 1m. or more high, carrying dense, cylindrical pokers of many, short, purple-brown, scented flowers . . . . . (15+) D
- 3.464.409 : KNIPHOFIA TYSONII** (subsp. *tysonii*) Eastern Cape, Amatole Mts., W of Stutterheim. (Distributed from here up through KwaZulu-Natal at altitudes up to 1200m., this is a spectacular, robust species up to 2m. tall. Big clumps of distinctively folded, yellowish-green leaves and dense inflorescences of greeny-yellow flowers from spreading, red buds.) . . . . (10+) D
- 3.510.210 : LEONOTIS LEONURUS** \* No data. A grassland perennial distributed from the E Cape to Mpumalanga & the most spectacular species in this small genus in *Labiatae*. Often a success in the UK on a S-facing wall. Pictured at Sissinghurst in Rix & Phillips, Vol. 2. About 2m. high with narrow leaves & whorls of scarlet-orange velvet flowers. . . . . (20+) B
- 3.512.500 : LESSERTIA PERENNANS** KwaZulu-Natal, E of Howick. 1500m. (This exclusively African genus in the *Leguminosae* includes one or two summer-growers from higher altitudes. This is a beautiful species from grassy gulleys & boulder beds up to 2400m. in the Drakensberg. About 60cm. high with narrow leaves & a multitude of cerise flowers. Essentially shrubby, this would doubtless break satisfactorily from the base annually, if frosted in the UK.) . . . . (10+) C
- 3.520.500 : LOBELIA PRESILII** E Cape, Witteberg, E of Lady Grey. 2200m. Among rocks at base of diorite cliffs. (Perennial, basal clumps or mats of little, toothed leaves send up many erect, wiry stems with 2-lipped flowers in deep gentian-blue with white, yellow-ridged throats. Distributed locally up to 2400m. in the E Cape & Natal Drakensberg.) . . . . . (50+) D
- 3.540.620 : MASSONIA aff. ECHINATA** Lesotho, Drakensberg, NE of Sani Pass. 2900m. Gravel-filled depressions on rock-slabs. (Listed in Hilliard & Burt as an unidentified species, "perhaps a small form of *M. echinata*", growing in "seasonally wet silt patches over rock sheets...2800-3000m., summit plateau only." Elsa Pooley's recent field-guide illustrates *M. echinata* as the only Drakensberg species but the leaves of this Sani Top plant are smooth. A tiny summer rainfall alpine bulb with sessile heads of white, starry flowers between 2 flat, ground-hugging, oval leaves. For a trough or alpine-house pan, exposed & kept wet outside in summer, dry & cold in winter. Our 1996 coll. was listed under our field-number 15710.) . . . . . (20+) E
- 3.545.201 : MELIANTHUS MAJOR** W Cape, near Hermanus. 100m. (One of the most spectacular foliage-plants it is possible to grow in British gardens. In mild areas of the UK this is a 2-3m. high, spreading shrub, as it is in nature. Although a winter-rainfall plant, in colder gardens, such as ours, it will generally survive being cut to the ground by frost annually, making over 1m. of growth each summer. Huge, deeply cut & serrated, grey leaves. Deep crimson flowers.) . . . . . (10+) B
- 3.545.709 : MELIANTHUS VILLOSUS** KwaZulu-Natal, Drakensberg, Cathedral Peak.. (A shrubby species, up to 2m. high, from stream-sides and forest margins up to 2000m. in Natal & Lesotho. Arresting, grey, hairy, pinnate leaves overtopped by stems of purplish-black flowers followed by inflated, pale-green fruits. Unlike the preceding, a plant from the summer rainfall area which is hardier in the UK. If cut to the ground in the winter, it usually regenerates from the base.) . . . . . (10+) C

### Moraea : the diverse African irises climb high

Restricted to Africa S of the Sahara, *Moraea* mirrors the northern hemisphere genus *Iris* but its underground rootstock is a corm & its closest northern relatives are in the small genus *Gynandriris*. While the majority of the 100 or more species are concentrated in the winter-rainfall region of the SW Cape, a considerable number occur in the summer-

rainfall areas, several climbing to the highest elevations, up to well over 3000m. in the Drakensberg. Many of these summer-growers are of proven hardiness and should suit open garden conditions, in cool temperate areas with wet summers, such as the UK. Nomenclature follows Peter Goldblatt's sumptuous monograph on this genus (1986).

- 3.550.300 : MORAEA ALTICOLA** (Subgen. *Grandiflora*) Lesotho, NW of Sani Pass. 2900m. Moist, grassy slope. (Characteristic of the summit plateau of the Drakensberg, between 2200m. & 3000m., & by far the largest, most robust species. Unique, netted cataphylls enclose the leaf & stem bases. Imposing, 1m. high clumps of broad, leathery leaves & stout erect stems of large, pale-yellow flowers with deeper yellow nectar-guides. Hardy & easily grown in UK gardens.) . . . (15+) C
- 3.552.600 : MORAEA DRACOMONTANA** (Sect. *Vieusesuxia*) \* Lesotho, Drakensberg, NW of Sani Pass. 2900m. Among grass tussocks along stream. (A little-known species from an altitude which few others reach. Fine stems about 30cm. high, with blue-purple flowers with yellow guides. Now established in the UK from our 1996 collection.) . . . . . (15+) D

- 3.554.310 : MORAEA HUTTONII** (Subgen. *Grandiflora*) \* No data. Clump-forming with a wide distribution from the Amathole Mts. of the E Cape northward to SE Mpumalanga, usually growing in moist sites along upland streams and rivers. Up to 1m. in height with a succession of large, sweet-scented, bright yellow, iris-like flowers. Hardy in the UK . . . . . (20+) **B**
- 3.554.409 : MORAEA INCLINATA** (Sect. *Polyanthes*) KwaZulu-Natal, Drakensberg, Loteni. 1500m. (A slender plant, occurring among grasses on wet slopes up to 2500m. in the Drakensberg. Branching stems, about 50cm. high, with violet-blue flowers, blotched with yellow & white on the falls. This montane, wet-grower should be growable in the UK.) . . . . . (15+) **C**
- 3.557.609 : MORAEA RETICULATA** (Subgen. *Grandiflora*) Eastern Cape, Amathole Mts., W of Stutterheim. Steep, grassy slopes. (Near to the tall *M. alticola* with similar netted cataphylls but it is not clump-forming, has narrower, channelled leaves & a very limited southern distribution. Bright yellow flowers with orange nectar-guides on 50 cm. stems.) . . . . . (15+) **C**
- 3.557.800 : MORAEA ROBUSTA** (Subgen. *Grandiflora*) Free State, Drakensberg, Mont-aux-Sources. 2700m. Among grasses on open slopes. (This occurs locally, in mountain-grassland, from SE Mpumalanga into KwaZulu-Natal & Lesotho. Near *M. alticola* & with similar large flowers but in very pale-yellow or cream but on a much dwarfer plant, about 30cm. high. This will be perfectly hardy & we have high hopes of it proving an outstanding plant for UK gardens.) . . . . . (15+) **C**
- 3.559.100 : MORAEA TRIFIDA** (Sect. *Vieusseuxia*) KwaZulu-Natal, E of Howick. 1500m. (A plant of moist grassland in the Drakensberg to 2500m. Wiry, 30cm. stems with a thready leaf & creamy flowers, marked brown or green.) . . . . . (15+) **B**
- 3.559.510 : MORAEA UNIBRACTEATA** (Subgen. *Grandiflora*) No data. A comparatively little-known species of limited distribution at lower altitudes in the eastern Drakensberg foothills of central KwaZulu-Natal. It is the smallest member of its subgenus with a single leaf & pale-yellow flowers on 20-30cm. stems. . . . . (10+) **C**
- 3.600.600 : ORNITHOGALUM LONGIBRACTEATUM** E Cape, Amathole Mts., SW of Cathcart. 1300m. A tall species with erect stems rising from large bulbs to more than 1m. in height & carrying a dense raceme of pale green flowers. Linear leaves in a basal rosette. Widely distributed in moist habitats from the E Cape northward into Mpumalanga. . . . . (15+) **B**
- 3.605.000 : PAPAVERACULEATUM** \* E Cape, Drakensberg, NE of Rhodes. 2200m. Disturbed areas in loose, sandy clay. (The only S African in this genus, this ascends to almost 3000m. Annual or monocarpic but sows itself. Rather like the Spanish & Moroccan taxa around *P. rupifragum*. A many-stemmed, bristly plant, usually about 50cm. high with lots of orange flowers, which, where suited in the UK, makes "massive clumps" with stems rising to more than 1m. in height.) . . . . . (100+) **B**
- 3.630.010 : PHYGELIUS AEQUALIS** \* No data. Distributed in wet, montane sites from central Natal N to E Mpumalanga, this woody-based, 1.5m. high, perennial has inflorescences of curved, tubular flowers in a delightful shade of dusky strawberry-pink. Hardy almost anywhere in the UK in well-drained soil in sun, with plenty summer moisture.) . . . . . (30+) **A**
- 3.630.012 : PHYGELIUS AEQUALIS from YELLOW FORM** \* KwaZulu-Natal, Mahwaqa hills, E of Underberg. c. 1500m. Ex a B.L. Burt coll. (From the distinct pale-yellow clone grown as 'Yellow Trumpet'. Reliably hardy in the UK.) (30+) **B**
- 3.630.151 : PHYGELIUS CAPENSIS** E Cape, Witteberge, E of Lady Grey. 2000m. Among grasses on steep, wet, stony slope. (Absent from the Natal Drakensberg, this is native to the E Cape & Lesotho, attaining higher altitudes than *P. aequalis*, along mountain streams & on wet slopes up to 2900m. Beautifully illustrated in Phillips & Rix, Vol. 2, page 114. An excellent hardy plant for the UK with woody-based, 2m.tall, pyramidal inflorescences of scarlet, tubular flowers.) . . . . . (30+) **B**
- 3.610.600 : PELARGONIUM ALCHEMILLOIDES** \* No data. Widely distributed in African mountains, this occurs on moist grassy sites up to about 2500m. in the Natal Drakensberg. About 30cm. high with airy umbels of small, pink-white, mauve-blotched flowers. One of about 12 species (out of about 250 in this mainly S African genus) from higher altitudes in the summer rainfall area, which might have some potential in sunny, well-drained sites in cool-temperate gardens. . . . . (10) **B**
- 3.611.960 : PELARGONIUM MULTICAULE** \* No data. Trailing stems with deeply cut, lacy foliage & many, little, magenta flowers with darker markings on stems rising to 30cm. Distributed from the mountains of eastern Mpumalanga to the borders of Western Cape, this attains almost 2000m. in the Drakensberg. . . . . (10) **B**
- 3.650.500 : PROTEA DRACOMONTANA** KwaZulu-Natal, Drakensberg, W of Oliviershoekpas. 1500m. *Themeda*-grassland on open NW & NE-facing slopes. (The vast majority of this famous genus from subsaharan Africa, with over 100 species, is concentrated in the winter-rainfall area of the SW Cape. Although there have been attempts to cultivate some of the higher altitude, winter-rainfall species in the UK, these really need a Mediterranean-type climate to succeed. The few high altitude, summer-rainfall species, realistically, are the only ones which might be possible in the UK. This & the next are the dwarfest of these, low shrubs 30-60cm. high with large, leathery leaves & a fire-resistant, subterranean stock, which should also ensure regeneration if the top-growth is damaged by severe frost. Both have enormous, complex flower-heads. This colony varies from pale pinks & lilacs to deeper, rosy shades. Recorded up to 2400m., always on thin, stony soils overlying Cave Sandstone, it could be tried in a very well-drained, low-nutrient, lime-free soil in full sun. None is easy to germinate.) . . . . . (10) **C**
- 3.658.000 : PROTEA SIMPLEX** KwaZulu-Natal, N of Himeville. 1500m. Gravelly places & crevices on rock outcrops. (Similarly dwarf at about 60cm., this is a local species of the Cave Sandstones up to about 1800m. in KwaZulu-Natal.) . . . . . (10) **C**
- 3.658.500 : PROTEA SUBVESTITA** KwaZulu-Natal, Drakensberg, SE of Sani Pass. 2400m. Open, rocky slopes. (The highest collection at about the altitudinal limit for the species but, like the remaining Drakensberg species, a large shrub or small tree. Distinct from the others in its more elongated not widely cup-shaped, white flower-heads with red anthers.) . . . . . (10) **C**

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

- 3.707.600 : ROMULEA THODEI** Lesotho, Drakensberg, NE of Sani Pass. 2900m. Gravel-filled depressions on rock-slabs. (Bright-pink, crocus-like flowers, striped with buff and purple outside & with white or yellow throats. One of only 3 summer-rainfall, Drakensberg species. Some seed of the remaining one, yellow-flowered *R. lueoflora* var. *sanisensis*, which only grows in this locality, may be included but we saw only pink flower-remains on our early visit.) . . . . . (15+) **C**
- 3.704.150 : ROMULEA MACOWANII** var. **ALTICOLA** (*R. longituba* var. *alticola*) \* Lesotho, no further data. (Ex the H. Milford type-collection, totally hardy outdoors in UK gardens. Long-tubed flowers (the longest in the genus) in yellow, shading to orange-yellow inside & tinged with brown or purple externally. Known only from this & one other coll.) . . . . . (15+) **B**
- 3.750.600 : SCILLA NERVOSA** KwaZulu-Natal, E of Howick. 1500m. (A wide ranging, 20cm. tall, bulbous species of the E African mountains. Rosettes of erect leaves with raised veins and pyramidal racemes of white flowers on long pedicels. Often growing in shallow soil over rock-sheets, it reaches altitudes of about 2000m in the Natal Drakensberg.) . . . . . (15+) **C**
- 3.765.809 : SEBAEA REPENS** \* Lesotho. No further data. (This mainly African, herbaceous genus in the *Gentianaceae* is now becoming more familiar to UK alpine-plant specialists and being seen at shows. This is a most desirable, high-alpine, mat-forming perennial with a profusion of large, bright yellow flowers on its cushions of bright-green, glossy leaves. A wet-grower recorded up to 3000m. from the marshy turf of the summit plateau and the vertical banks of streamlets.) . . . . . (50+) **E**
- 3.766.009 : SEBAEA SEDOIDES** var. **SCHOENLANDII** \* Lesotho. No further data. (The Lesotho race of a variable species distributed down through the summer-rainfall ranges of E Africa, attaining about 2500m. on the wet, high, Drakensberg grasslands. A very compact version about 15cm. high with the profuse, typical, brilliant yellow flowers.) . . . . . (50+) **D**
- 3.772.009 : SENECIO MACROSPERMUS** KwaZulu-Natal, Drakensberg, S of Sani Pass. 2850m. (This is rated as "a great border perennial" by Panayoti Kelaidis at Denver. It needs a cool, moist site in Colorado so should do well in full sun in the UK. Stems about 1m. tall carry heads of large yellow daisies above striking clumps of big, grey leaves. Endemic to the Drakensberg & adjacent ranges on steep scree or grass slopes between 2300 & 3000m. Wild, 2004 seed.) . . . . . (15+) **D**
- 3.772.509 : SENECIO POLYODON** var. **SUBGLABER** \* Lesotho. Ex a P. Kelaidis coll. (An excellent little daisy, about 30cm. tall, with branching stems carrying lots of small heads with bright purple rays (the type-race, *S.p.* var. *polyodon*, is rayless & of no garden-value). Like many Drakensberg plants this will keep flowering through late summer until frosted, as long as it is cool and moist. It grows up to 3000m. & is hardy in Denver. A plant of marshland and seasonally wet seeps, it should tolerate the wet winters of W Europe & the Pacific North-west. Sows itself with us.) . . . . . (30+) **B**
- 3.790.400 : STREPTOCARPUS GARDENII** \* KwaZulu-Natal, Drakensberg, SW of Njesuthi valley. 1400m. In moss on boulders in deep shade. (Endemic to shaded rocks & mossy tree trunks, in the high Natal woodlands, going up to about 1800m. A beautiful, little plant with rosettes of narrowly ovate leaves & pale violet flowers, with pale-green tubes & purple-lined lobes, on 10cm. stems. Well-suited to such alpine-house treatment as accorded to the hardy European & SE Asian *Gesneriaceae*. Moist & shaded in summer, cool & dryish in winter. Seed from our 1996 coll., established in the UK.) . . . . . (50+) **D**
- 3.820.510 : SUTHERLANDIA MONTANA** (*S. microphylla*) \* Some years ago, this spectacular perennial attracted considerable publicity in the UK. It was illustrated in 'The Plantsman' of September, 1992, & featured in the 'The Garden' of September, 1994. We have not heard much of it since & suspect that, like so many good things, it needs a little effort to keep it going. This is more than justified. Certainly the hardiest of this genus & temperature-hardy in the UK but it does need a very well-drained sunny site to overwinter. It is not very long-lived but does set seed, so there are no excuses. The soft, shrubby stems, clad in pinnate leaves, reach about 30cm. at high altitudes in the wild (1m. in cultivation). The display of scarlet pea-flowers in summer is arresting, as are the large, inflated, pale-green, red-tinged seed-capsules which follow them. UK grown seed ex S. Hannay 1991 colls. collected as *S. microphylla* (SH56 made in Lesotho & SH61 at 2600m. in E Cape) . . . . . (10) **C**
- 3.841.010 : TRITONIA DISTICHA** subsp. **RUBROLUCENS** \* No data. Distributed through the summer-rainfall mountains S from Mpumalanga into the Eastern Cape & climbing up to 1900m. in the Natal Drakensberg, on grassy slopes or sometimes in sandstone crevices. We have grown this for many years. It is perfectly hardy both in W England & W Wales, in spite of our wet winters. A pink "Montbrieta" with late-summer flowers in a soft, warm shade of salmon-pink. . . . . (15+) **B**
- 3.850.660 : TULBAGHIA GALPINII** \* No data. A little-known, very dwarf species in this small, mainly S African, genus of about 20 species in *Alliaceae*. From comparatively high altitudes in a small area on the southern edge of the Karoo, in the E Cape, S of Queenstown. Very fine, grassy leaves & rose-pink flowers with a distinct, 6-lobed corona on 15cm. stems. Dwarf enough for a trough or the alpine-house & temperature-hardy with us, if kept dryish in winter. . . . . (10+) **D**
- 3.850.710 : TULBAGHIA LEUCANTHA** \* No data. A handsome montane plant, distributed from the E Cape N into Zimbabwe, occurring in the Drakensberg between 1800m. & 2500m. on wet cliffs & steep, rocky sites. Grassy leaves & flowers with brilliant orange-yellow coronas, surrounded by green-white outer-segments, on stems about 25cm. high. . . . . (15+) **C**
- 3.850.750 : TULBAGHIA LUDWIGIANA** KwaZulu-Natal, E of Howick. 1500m.. (It is surprising that we have not seen this summer-rainfall species grown in the UK. It must be one of the hardiest, recorded up to 1900m. Altogether *Allium*-like, with 30cm. stems of pendant flowers in which green-white segments surround a fleshy yellow corona.) . . . . . (10+) **C**

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

# Watsonia : spectacular summer-growers from the grasslands

While a large & important genus of the *Iridaceae*, *Watsonia*, with just over 50 species, is not so daunting as *Gladiolus* or even *Muraea*. Their clumps of sword-like leaves & spikes of showy, somewhat *Gladiolus*-like flowers place them among the most striking of South African plants. All the 21 summer-

growers are worth trying. Although remarkably few species have made their homes in the Drakensberg, many come from cold areas elsewhere & should prove reasonably hardy garden-plants. Nomenclature follows Peter Goldblatt's 1989 revision of the genus.

- 3.950.400 : WATSONIA ANGUSTA** W Cape, Cederberg, 1000m. (Unusual in that it grows in both winter & summer rainfall areas, extending N well into the E Cape. The paradox is explained by the fact that it grows in permanently wet habitats : marshes, seeps & along streams. Lax spikes of scarlet flowers with black-purple anthers on 1-2m. stems.) ..... (15+) **B**
- 3.951.310 : WATSONIA DENSIFLORA** KwaZulu Natal, E of Howick. 1500m. (The central species of a group of summer-growers from the grasslands of Natal with dense spikes of pink flowers appearing from between imbricate, brown bracts. Clump-forming & up to 1.5m. high, this is the low altitude member of the group, often below 1000m. but at similar elevations in the same area as *W. pillansii* of proven hardiness in the UK, so well worth trying.) ..... (15+) **C**
- 3.952.100 : WATSONIA GLADIOLOIDES \*** KwaZulu-Natal, N of Himeville to Mkhomazi. 1200m. Among grasses on open, rocky slope. (A dwarf plant, 30-40cm. high here, apparently related to the pink-flowered *W. densiflora* group, in spite of its bright red, long-tubed flowers in spikes of up to 25, on unbranched, single stems. A species from the mountains of southern Lesotho & Natal, up to 2200m., maybe closest to the other dwarf species, *W. lepida*, which has a range to the N of Lesotho. Seed from plants raised from our 1996 coll., grown outside in Hampshire, UK.) ..... (10+) **D**
- 3.952.709 : WATSONIA LATIFOLIA** KwaZulu-Natal, near Utrecht. (A distinct summer-grower from a small area in SE Mpumalanga, adjacent W Swaziland & N Natal, usually at altitudes above 1800m., in open grassland on thin, stony soils around the bases of granite outcrops. Like no other in its very broad foliage & its long-tubed, dark maroon-red flowers, up to 25 on stems to 1.5m. high. An exciting plant which should be hardy in a well-drained, sunny site in the UK.) ..... (15+) **D**
- 3.952.800 : WATSONIA LEPIDA** KwaZulu-Natal, Drakensberg, W of Oliviershoekpas. 1700m. *Themeda*-grassland on open, NW & NE-facing, sandstone slopes. (This should be in theory the hardest species in the genus, from between 2000m. & 2500m. in the N Natal Drakensberg & Lesotho. In the *W. densiflora* complex & sometimes growing with another member, *W. confusa*, which tends to be a taller, clump-forming plant of wetter habitats. Usually with solitary 20-60cm. stems carrying dense spikes of pink flowers. Possibly best tried in a sunny rock-garden or scree-bed in the UK.) ..... (15+) **D**
- 3.952.850 : WATSONIA LONGIFOLIA** Eastern Cape, near Grahamstown. (Considered by Goldblatt to have originated as a hybrid between *W. knysnana* and *W. pillansii*. Individual clones may have inherited the hardiness of *W. pillansii*, as well as its liking for damp sites. Varies in colour through oranges, pinks and reds. Between 1m. and 2m. in height.) ..... (15+) **C**
- 3.953.609 : WATSONIA PILLANSII** (*W. beatricis*, *W. socium*, etc.) Eastern Cape. (The only summer-grower generally cultivated in the UK & also the only *Watsonia* of proven reliability. Distributed widely through the E part of S Africa, usually in moist grassland, from the S Cape in a curve through Natal into the Drakensberg, at low to middle elevations, it varies little. Spikes of 30 or so, bright orange-red, long-tubed flowers on 50-120cm. stems in late summer or autumn.) ..... (15+) **B**
- 3.953.809 : WATSONIA PULCHRA** Mpumalanga, Saddleback Mts., near Barberton. (Distributed from NE KwaZulu-Natal northwards through the Swaziland border-ranges, usually in moist, montane grassland. Clumps of broad foliage with distinctive, thick, hyaline margins send up stems, 60-120cm. high, with up to 60, pink to purple flowers.) ..... (15+) **C**
- 3.955.109 : WATSONIA WATSONIODES** Mpumalanga, Saddleback Mts., S of Barberton. (A most distinct plant, unlike any other. Up to 1m. high with close spikes of as many as 50, narrow, somewhat bell-shaped flowers, usually in pale yellow but varying to cream or maroon. First described by Baker as a *Tritonia*, hence its odd specific name, & limited to stony grassland between 1300m. & 1800m. in a comparatively small area in SE Mpumalanga & adjacent Swaziland.) ..... (15+) **C**
- 3.955.200 : WATSONIA WILMANIAE \*** W Cape, Groot Swartberge, S of Prince Albert. 1500m. Seeps on rocky slopes & along stream. (A tall wet-grower endemic to streamsides & marshes in the Swartberg & Kamanassie ranges of the S Cape. Flowering in late summer with spectacular spikes, up to 1.5m. high, of large flowers. According to Goldblatt, the Swartberg populations range from deep red to orange, pink & cream. UK-grown seed from plants raised from our 1996 coll. This seems to be at least as hardy as *W. pillansii* and should be just as successful in the UK as other S African wet-growers.) ..... (15+) **D**
- 3.980.050 : WURMBEA BURTTII** Lesotho, Drakensberg, NW of Sani Pass. 2900m. Seasonally flooded, shallow, gravel-filled depressions on rock-slabs. (A member of a small S African genus of about 12 species, somewhat *Scilla*-like & in *Liliaceae* (*Colchicaceae*). A corm, about 10cm. high with narrow leaves & starry, white flowers. Crimson-brown scales on each segment give these a most distinct appearance & it will be well worth alpine-house cultivation (kept dry in winter), though it will be totally hardy. Tentatively identified. *W. angustifolia* and *W. pusilla* inhabit similar habitats at this altitude.) ..... (20+) **D**
- 3.991.000 : ZALUZIANSKYA PULVINATA** E Cape, Drakensberg, SW of Rhodes. 1700m. Among rocks. (A cushion-plant of rock-sheets with tight clumps of ground-hugging rosettes. Erect, 5-8cm. stems with crowded inflorescences of large, white, red-backed flowers on long tubes, opening at dusk or in low light conditions and beautifully scented.) ..... (20+) **D**

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



## A few winter-growers from the West

As our southern hemisphere list is both later and sparser than we had hoped for, we have included seeds from a few winter-growers from the western, winter rainfall areas of the Cape. The UK grown, cultivated seed is from the 2004 flowering and the South African seed from the 2003 flowering. The latter has been stored warm. Some of these seem to germinate best given a short warm period after sowing. Sowing by September, in the northern hemisphere, should give germination by early winter. Many of these Cape species, especially those from higher altitudes and those from the high plateaux of the Northern Cape, grow perfectly happily along

with the Mediterranean & Middle Eastern species in our unheated glasshouse. There are many of these mountain-plants, distributed through the ranges spreading from Namaqualand in a great curve to the S & W, along the borders of the Northern Cape & of the Great Karoo, with many narrow endemics & an extraordinary explosion of species locally, particularly in the Nieuwoudtville area. We are at present only tentatively investigating the temperature hardiness of a fraction of these but there is considerable potential to add to the range of 'bulbs' growable with only the protection of an unheated glasshouse in the UK.

- 3.022.200 : ARISTEA MAJOR** \* W Cape, near Citrusdal. Ex a T. Hatch coll. (One of the finest among the 40 or so winter-growing species of these blue-flowered *Iridaceae*. Raised from a coll. made in quite a cool, inland area of the W Cape, at the foot of the Cederberg. Best protected under glass in the UK but may be possible outside in a sheltered place.) ... (20+) C
- 3.109.009 : DAUBENYA AUREA from RED FORM** \* N Cape, Roggeveldberge. (Our UK grown seed of this unique Roggeveld endemic, possibly closest to *Massonia* with a similar pair of ovate, fleshy, glossy green leaves flat on the ground. Between them sits a stemless, 'water-lily' head of brilliant scarlet. Though slow & a little temperamental, this has proved both growable & perfectly temperature-hardy our unheated greenhouse. Our original stock was raised from Californian seed from the late Stan Farwig & Vic Girard in Concord, where it tolerated considerable frost in the more continental climate of their garden. They believe they grew it successfully because of their colder winters. Seed sown by October germinates within a month with us. Sown later, it will wait till the following year but comes up reliably then in our experience.) ..... (10) F
- 3.230.709 : EUCOMIS REGIA** Northern Cape, Nieuwoudtville area. (The only winter grower among the pineapple lilies. An impressive species but only likely to be successful under glass in the UK.) ..... (8) C
- 3.250.850 : GLADIOLUS ALATUS** Western Cape, Franschoekberge. (One of the most spectacular dwarves, a widespread species on thin, stony soils in the SW part of the Cape. Ribbed foliage & about 5, large, orange-scarlet flowers with lime-green lower segments tipped with orange on 15cm. stems. Safest with minimal frost-protection.) ..... (15+) B
- 3.254.810 : GLADIOLUS CARDINALIS** \* No data. A famous & glorious species, endemic to a small area in the mountains near Worcester & Paarl in W Cape, where it hangs out its large scarlet flowers, with white diamond-markings on the 3 lower segments, in midsummer, on moist cliffs near waterfalls or streams, at altitudes up to 1400m. Though a late-flowering, winter-grower, with new growth appearing in autumn, it grows outside in the several southern UK gardens..) ..... (15+) C
- 3.256.409 : GLADIOLUS CERESIANUS** Northern Cape, Roggeveldberge. ("One of the most diminutive species", 15cm. high, from clay soils in the arid mountain-ranges of the western Karoo. Allied to *G. uysiae* and *G. watermeyeri*, both of which are temperature-hardy with us. Proportionately large, elegant, sweet-scented flowers with erect, narrow, upper segments, cryptically coloured in purple-brown to grey-green with complex veining & markings in dull purple and yellow) ..... (15+) D
- 3.267.710 : GLADIOLUS MERIDIONALIS** \* No data. Previously listed by us as a subsp. of *G. maculatus*, this has now been reinstated at specific level in Goldblatt's revision. Of limited distribution in two disjunct, sandstone areas on the southern Cape coast. An elegant, narrow-leaved, wiry-stemmed plant about 50cm. high with large, clear salmon-pink flowers. ... (10+) C
- 3.270.210 : GLADIOLUS ORCHIDIFLORUS** \* No data. A variable species, widespread, especially in the N & W of the Cape. "A particular favourite" comments Brian Mathew. Like its relatives in Series *Hebea* (*G. uysiae*, etc.) it is exquisitely scented & has complex "flowers to be looked at". In our parent stock, these are basically grey-green with bright-green & dull, dark purple marks & stripes, 10 or more carried on branching, 30cm. stems. Temperature-hardy with us. .... (10+) D
- 3.279.710 : GLADIOLUS TRISTIS** \* Comparatively hardy in much of the UK The species is quite widespread in the winter-rainfall area of W Cape at up to 1800m. Large, fragrant creamy white flowers on stems of 50cm. or more. .... (20+) B
- 3.280.110 : GLADIOLUS UYSIAE** \* No data. A dwarf winter growing species, 7-20cm. tall, distributed through the mountains of the western Karoo. Complex flowers with erect upper segments in dull red-purple & yellow, intricately veined with purple, banded with dark green on the elongated lowest tepal & strongly freesia-scented. Perfectly temperature-hardy here under glass without artificial heat over several years & flowers about April with us. Our own UK grown seed. .... (10+) D
- 3.410.250 : HESPERANTHA BACHMANNII** \* A winter-growing, W 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+) B

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

- 3.555.300 : MORAEA LOUBSERI** \* Western Cape, Langebaan, Olifants Kop. (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 an unheated glasshouse.) ..... (15+) **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 : winter-growers from the cold-desert ranges

- 3.700.200 : ROMULEA AMOENA** N Cape, Bokkeveldberge, near Nieuwoudtville. 1300m. (One of the local species of the high stony plateaux of the Nieuwoudtville area, where it can carpet the ground in spring with its huge carmine to deep rose crocus-flowers, blotched purple-black in their throats. Should be as hardy & growable as most *Crocus* spp.) ..... (20+) **C**
- 3.700.400 : ROMULEA ATRANDRA** (var. *atrandra*) N Cape, Roggeveldberge, W of Middlepos. 1800m. (Large flowers in an intense magenta-rose, blotched with violet or blue-black above the yellow-cupped centres.) ..... (15+) **D**
- 3.701.800 : ROMULEA DIVERSIFORMIS** \* N Cape, Komsberg, SE of Sutherland. 1800-2000m. (2004 UK-grown seed of this very local species from 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.) ..... (15+) **C**
- 3.703.401 : ROMULEA HIRTA** \* N Cape, near Nieuwoudtville. 1500m. (A temperature-hardy species from the continental climate of the inland plateaux, S of the Great Karoo, SE from around Nieuwoudtville to the Klein Roggeveld. Distinct, winged, ciliate leaves & pale yellow flowers, marked internally with a transverse brown band.) ..... (20+) **B**
- 3.703.700 : ROMULEA KOMSBERGENSIS** N Cape, Komsberg, SE of Sutherland. 1800-2000m. (Only recorded from sandy soils on the high Komsberg plateau & inured to low winter-temperatures. Near *R. atrandra* but the big, rosy flowers are usually tipped with violet-blue & the buttercup-yellow cup, below a bluish band, has a brown base.) ..... (10+) **C**
- 3.704.001 : ROMULEA LUTEOFLORA** Northern Cape, near Nieuwoudtville. 1800m. (More or less a yellow version of *R. atrandra* but distinct in colour & chromosome number. A plant of high, cold habitats, mainly in the Cedarberg & Bokkeveldberge. Big, brilliant-yellow flowers, strikingly blotched internally with mahogany-brown.) ..... (20+) **B**
- 3.704.600 : ROMULEA MONADELPHA** N Cape, near Nieuwoudtville. 1300m. (Another endemic of the Nieuwoudtville area, considered by De Vos to be "one of the rarest & most beautiful" species. Brilliant satin flowers in deep claret-red, with black markings in their throats & distinct, shiny, black filament tubes. May prove to be one of the hardiest.) ..... (15+) **D**
- 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.) ..... (20+) **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.) . (20+) **C**
- 3.705.200 : ROMULEA NEGLECTA** (*R. oliveri*) Northern Cape, Namaqualand, Kamiesberg. 1500m. (A 15cm. high Kamiesberg endemic, originally described from a "moist, W-facing, sandy slope" & distinct in its "large, bright rosy-magenta flowers", marked inside with purple & orange & purple-feathered outside on a yellowish ground.) ..... (20+) **D**
- 3.706.110 : ROMULEA SALDANHENSIS** \* No data. Very local in the wild but an excellent, reliable species in cultivation. From sandy clays near the Atlantic coast, both N & S of Saldanha Bay. We have grown it unheated but it is safest frost-free. Big, bright-yellow flowers, darkly pencilled inside & marked brown outside. .... (20+) **B**
- 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, Roggeveldberge, near Middlepos. 1800m. (A most distinct plant, possibly not close to any other, though placed in Section *Hirtae* with *R. hirta*. Like it in its winged, hairy leaves but quite unlike it, however, in its corms & violet-rose to lilac-pink flowers with dark anthers.) ..... (20+) **B**
- 3.707.701 : ROMULEA TORTUOSA** (subsp. *tortuosa*) Northern Cape, Roggeveldberge. (A species from the cold, dry, western ranges, the Hantamberge, Bokkeveldberge, Komsberg & Roggeveld. Fascinating, flexuose, spiralled leaves twist on the ground. Striking, big, yellow to orange flowers with spade-shaped black blotches on each segment.) ..... (15+) **B**
- 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.) ..... (20+) **B**

---

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

- 4.162.550 : CAMPANULA PUNCTATA f. ALBIFLORA** \* No data. The white-flowered form of this excellent 60cm. tall, rhizomatous perennial species from Japan. Lots of big, pendant bells over a very long period in summer. . . . . (100+) **A**
- 4.169.960 : CARDIOCRINUM CORDATUM** No data. The Japanese version of this giant woodland lily with creamy white, trumpets. Distributed in moist woods on Honshu, Shikoku & Kyushu, at between 1m. & 2m. tall, this is dwarfer than the Himalayan *C. giganteum*. It is particularly notable for the crimson tints of the young, cordate foliage but is not so accommodating in the UK as *C. giganteum*. Fresh, 2004 New Zealand grown seeds . . . . . (20+) **C**
- 4.169.970 : CARDIOCRINUM CORDATUM var. GLEHNII** No data. The northern race from N Honshu, Hokkaido & Sakhalin. A stouter plant with broader leaves and up to 20 flowers in a more elongated raceme. 2004 NZ seed. . . (20+) **C**
- 4.201.810 : CLEMATIS NAPAULENSIS** \* No data. A winter-flowering climber up to about 10m. high, occurring from N India into SW China and related to the Mediterranean *C. cirrhosa*. Clusters of flowers with cream-white sepals surrounding purple stamens, all winter under glass, where it is happiest in the UK. In growth in winter ; deciduous in late summer. . . (20+) **B**
- 4.250.610 : DAPHNE GIRALDII** \* No data. A beautiful, deciduous shrub, about 60cm. high, from W China, in Shaanxi & Gansu. Terminal clusters of fragrant, rich yellow flowers in late spring. Can thrive on soils from limy clay to acid sand but can also be rather temperamental in our experience. Fresh, 2004 seeds.. . . . . (8) **C**
- 4.390.108 : FRITILLARIA CAMTSCHATCENSIS** \* Russia, Sakhalin, near Tomari. (A tall, vigorous, markedly stoloniferous form from the southern part of this island between the Russian mainland & Japan. Up to 6, virtually black flowers on stems which can reach 60cm. in height. This grows well outside with us in our gravelly peat-bed.) . . . . . (15+) **D**
- 4.390.250 : FRITILLARIA CIRRHOSA** \* No data. Widely distributed from W Nepal to SW China between 3000m. and 4000m., this highly variable East Himalayan species is one of the least well-known in cultivation. It has long been the preserve of Scottish growers, whose cooler summers and colder winters seem to suit it, and this seed is from Mike and Polly Stone in Inverness-shire. A slender plant, between 15cm. and 50cm. tall with narrow foliage, often with the curled leaf-tips which give it its name, and pendant bells, in this form yellow-green with brownish chequering. It flowers late and will be better kept drier in winter than in summer, when it might be best grown outside, as cool as possible, in warmer gardens. . . . . (20+) **E**
- 4.392.109 : FRITILLARIA USSURIENSIS** \* China. No further data. (From material received as *F. maximowiczii*, this does not key-out satisfactorily in the 'Flora of China' account as either species. Martyn Rix, on seeing our stock in flower, feels it is closest to *F. ussuriensis* & its wingless capsules confirm this. Slender 50cm. tall stems with linear leaves, the uppermost with cirrhose tips, carry about 5, nodding bells in purple-brown, chequered with yellow. A species distributed in moist, shady places through the Russian Far East to Korea, just entering three of the northernmost provinces of China. Do not dry out the dormant bulbs. Should be growable outside in the UK but it is still little-known in cultivation.) . . . . . (10+) **F**
- 4.392.609 : FRITILLARIA YUMINENSIS** \* China, Xinjiang. (The famous 'blue frit.', endemic to NW Xinjiang at 1700-2800m. From a form in a delicate shade of pale slate-blue though it can vary to darker shades, pinks & more lilac-blue tints. Always very beautiful with 10 or more untessellated, nodding bells on stems of about 50cm. whorled with linear-lanceolate, cirrhose-tipped leaves. Possibly allied to the true, sympatric *F. verticillata*, this grows in the same area as *F. pallidiflora* & needs similar conditions in cultivation. Root growth starts early so do not dry it out in summer.) . . . . . (10+) **F**
- 4.480.739 : IRIS DECORA (I. nepalensis) (Subgen. Nepalensis)** \* Nepal, SW of Amijilassa. 2500m. On grassy banks & rocky cliffs. Ex KEKE 256. (An attractive pale lavender-blue form of this most distinct Himalayan species. Grassy leaves and 20cm. tall stems of flat, orange-crested flowers. Recorded up to 4300m., this is temperature-hardy but needs a very dry winter rest when it dies back completely to its swollen rootstock. Cool, moist summer-growing conditions are best.) . . . . . (10) **D**
- 4.516.825 : LILIUM CONCOLOR var. PULCHELLUM (L. buschianum)** \* Russia, Ussuri. (Scarlet. 50cm.) . . . . . (15+) **D**
- 4.517.608 : LILIUM DUCHARTREI** \* China, Gansu. Ex Cox 5103. (A glorious, stoloniferous, W Chinese species. Brownish, 1.5m. stems with up to 12, pendant, scented, white flowers. Recurving segments spotted with deep purple & reddening with age. This seed is from a recent coll. by Peter Cox, one of the first made since the 1915 Farrer coll. in S Gansu, where he wrote that 'its cold bone-white turkscaps have a glacial beauty.' Moist but well-drained, humus-rich soil in light shade.) . (20+) **D**
- 4.520.009 : LILIUM MACKLINIAE** \* India, Manipur, Sirhoi near Ukhrul. 2300-2450m. Steep, grassy slopes. (While all cultivated stock stems from the collections made by Frank Kingdon-Ward on this one mountain in 1946 & 1948, over 50 years of cultivation have resulted in variation. This seed from Mike & Polly Stone is from what they consider to be the "original, smaller form." An exquisite species approaching *Nomocharis* with nodding, white, bowl-shaped flowers, flushed with rose-pink outside. Perfectly hardy with us : enjoys an acid soil & the cool, moist summers of the N & W of the UK.) . . . . . (15+) **D**
- 4.520.609 : LILIUM NEPALENSE** Sikkim. 3000m. J. Shipton coll. (Wild seed collected in April 2004 by John Shipton from overwintered capsules. Identity not absolutely confirmed but should be this striking, 1m. tall species with large, pendant, funnel-shaped flowers (not the turkscap shape of allied *L. primulinum*) in yellow-green with a burgundy-purple central area and orange anthers. The true plant has a stoloniferous habit and is better planted out than pot-grown.) . . . . . (10) **E**

A : \$2.00 ; £1.50 ; €2.-  
 B : \$3.00 ; £2.00 ; €3.-

C : \$4.00 ; £2.50 ; €4.-  
 D : \$5.00 ; £3.50 ; €5.-

E : \$7.00 ; £4.50 ; €7.-  
 F : \$9.00 ; £6.00 ; €9.-

- 4.520.410 : LILIUM NANUM** \* No data. From an established form, probably originating in N India, of this charming dwarf species, about 30cm. high. Described as a *Fritillaria*, it has oscillated between *Nomocharis* & *Lilium*. Distributed from the Garhwal Himalaya to NW Yunnan at altitudes between 2700m. & 5000 m. Lilac to purplish, drooping, bells. . . . . (20+) C
- 4.520.415 : LILIUM NANUM from SIKKIMESE FORM** \* Sikkim : no further data. Ex an AGSES coll. (More outward-facing flowers with heavily speckled pink interiors are often carried 2-3 on each 30cm. stem on mature plants.) . . . . . (15+) D
- 4.520.420 : LILIUM NANUM from BHUTANESE FORM** \* Bhutan : no further data. A distinct race. Somewhat taller & more robust than the preceding two, with flowers, tending to lavender shades, on striking mahogany-coloured stems. . . (15+) E
- 4.520.460 : LILIUM NANUM var. FLAVIDUM** \* No data. The pale yellow phase of this little Himalayan species. It was first described as *Fritillaria flavida*. Rather like *L. oxypetalum* but with much narrower leaves. . . . . (15+) E
- 4.520.810 : LILIUM OXYPETALUM var. INSIGNE** \* No data. The form with dusky pink bells, ageing to maroon shades. This dwarf, usually yellow, species from the NW Himalaya, between 3000m. & 4000m. is about 20 cm. high with a single, nodding, campanulate flower with pointed segments. Close to *L. nanum* & to the genus *Nomocharis*. . . . . (15+) D
- 4.521.520 : LILIUM PRIMULINUM var. BURMANICUM** \* China, Yunnan. (From material recently received from China. One of the most striking representatives of a group of very confusing, very variable lilies distributed through N Burma, Thailand & adjacent SW China. This race is one of the more tender taxa and definitely needs protection in the UK though it has grown and flowered well in our unheated polytunnel. Stems of about 1.2m., with broader leaves than *L.p.* var. *ochraceum*, carry up to about 12 pendulous flowers with a fruity orange-peel scent and strongly reflexed segments, astonishingly coloured with bright greenish yellow tips contrasting with the dark, brownish purple throats. A marvellous thing.) . . . . . (15+) E
- 4.550.310 : MECONOPSIS BETONICIFOLIA** \* No data. Seeds from a fairly reliably perennial strain of this incomparable herbaceous plant for cool, moist conditions in very rich soil. Huge blue poppies on 1m. tall stems. . . . . (50+) A
- 4.550.312 : MECONOPSIS BETONICIFOLIA from 'HENSOL VIOLET'** \* A lovely strain with flowers of pale, lucent, violet-purple. It comes fairly evenly from seed if the stock is kept segregated, which ours is. . . . . (50+) C
- 4.551.210 : MECONOPSIS GRANDIS** \* No data. "One of the classic garden plants worth any effort, a perennial with breathtakingly blue flowers" writes James Cobb in his monograph. He adds "nearly all seeds offered as *M. grandis*...are in fact *M. betonicifolia*." These are from authentic parents grown by Mike and Polly Stone in Inverness-shire, Scotland . (30+) D
- 4.552.449 : MECONOPSIS NAPAULENSIS from RED FORMS** \* No data. The colour variants attributed to *M. napaulensis* are derived from introductions from Nepal, 50 years ago, by Stainton, Sykes and Williams. At first the red-flowered plants were identified as *M. regia* but now all have been subsumed into a complex of *M. napaulensis*-like hybrids with superlative evergreen rosettes of golden-haired, dissected foliage, which send up 2m. tall stems massed with flowers. . . . . (50+) B
- 4.552.450 : MECONOPSIS NAPAULENSIS from YELLOW FORMS** \* No data. Soft-yellow cups. 2m. . . . . (50+) B
- 4.576.100 : NOMOCHARIS MAIREI** \* China, Yunnan. Ex CLD 1490. (Endemic to SW Sichuan & N Yunnan between 3000m & 4000m. Up to 7, almost flat, drooping flowers with white segments, the inner 3 of which have fringed margins & are evenly spotted all over with crimson & have crested, purple-red nectary glands. A glorious & distinct plant.) . . . . . (20+) D
- 4.643.210 : PRIMULA WALTONII (Sect. Sikkimensis)** \* No data. A plant of damp river-meadows in Tibet, Sikkim & Bhutan. Though its name appears from time to time applied to garden-hybrids, the genuine species is rare and has proved difficult to maintain in cultivation in the UK. It was last introduced from Sikkim in 1983. Umbels of up to 30, pendant bells in deep pink to wine-red shades on mealy stems, up to 50cm.tall. Seeds from authentically named parents grown by Mike & Polly Stone in Inverness-shire, Scotland, but the species appears to cross readily with other members of its section. . . . . (50+) E

## Rheum : 2004 seeds from the finest giant rhubarbs

- 4.699.600 : RHEUM PALMATUM from RED-LEAVED FORM** \* One of the most imposing of herbaceous perennials but it needs space for its very large, deeply cut leaves, which in the parent are crimson, flushed with scarlet, as they emerge in spring, remaining crimson-tinted below well into summer, when an erect, narrow panicle of brilliant cerise flowers soars to about 3m. high. This is seed is from 'Red Herald', selected, when we were at Buckshaw Gardens, as the best out of hundreds of seedlings from the variable plants circulated as 'Atrosanguineum', 'Bowles' Variety', etc. These clones tend to flower every other year with us. Sow the seed promptly, select the best but please don't call them 'Red Herald' or 'Green Knight'. . . . . (20+) B
- 4.699.601 : RHEUM PALMATUM from GREEN-LEAVED FORM** \* From our other selected clone 'Green Knight', raised from a plant we had as *R.p.* var. *tanguticum*. Green-leaved but, if anything, larger & more spectacular in its soaring stems of vivid cerise-red flowers. The very fine, jaggedly cut foliage tends to remain in better condition in recent hot summers &, on the whole, we prefer it in West Wales. Anyway, the two will probably have crossed. The last time we listed these, they "germinated in 5 days" according to a New Zealand customer ! . . . . . (20+) B
- 4.930.410 : VERATRUM MAACKII** \* No data. A very variable species, widely distributed from the moist, mountain woodlands of Japan, N into Korea, the Russian Far East & northern China. Broadly linear, glabrous, mainly basal leaves and branched, 1m. tall panicles of many little, starry flowers which can be either green or dark purple. Possibly closest, among the better known species, to *V.nigrum*, under which it has been included. Fresh 2004 NZ-grown seeds. . . . . (15+) C

---

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

- 5.010.209 : ACIPHYLLA AUREA** NZ, Otago, Old Man Range. Tussock grassland on open, stony slopes. (One of the arresting, tall, South Island species in this, often bizarre & aggressively armoured, genus in *Umbelliferae* (*Apiaceae*). A big tuft of stiff, yellowish-edged, spine-tipped foliage sends up an erect flower stem, about 1.5m. high, foaming with greenish cream flowers, especially spectacular in the more showy male form.) ..... (20+) C
- 5.013.009 : ACIPHYLLA SCOTT-THOMSONII** NZ, Canterbury, Torlesse Range, Porter's Pass. (Stiff, dissected, spine-tipped, glaucous, yellow-margined leaves up to 1m. long. Armed flowering stems up to 3m. tall clustered with thousands of greenish cream flowers. Both of these are mountain-plants & absolutely hardy in the UK.) ..... (20+) C
- 5.065.106 : ARTHROPODIUM CIRRATUM** from **MATAPURI BAY FORM** \* From a fine form of this large New Zealand, rhizomatous perennial in *Liliaceae* (*Anthericaceae*). Tufts of fleshy, evergreen, pale-green, strap-shaped leaves & panicles of white flowers held just above the foliage. This will only take a few degrees of frost. .... (15+) B
- 5.125.001 : BLANDFORDIA PUNICEA** (*B. marginata*) Tasmania, Cockle Creek. M. Harvey coll. (Endemic to Tasmania & possibly the hardest member of this small Australian genus in *Liliaceae*. Reputedly difficult, but no trouble in sandy, peaty soil in our unheated greenhouse & worth trying outside in milder parts of the UK. Racemes of up to 25, tubular flowers, in scarlet tipped with orange-yellow, on stems of about 60cm. from tufts of narrow, leathery, dark-green leaves.) ..... (30+) C
- 5.160.000 : BULBINELLA ANGUSTIFOLIA** NZ, Canterbury, N of Hanmer Springs, above Jack's Pass. Moist, peaty depressions. (Tufts of grassy foliage send up colourful, *Kniphofia*-like spires of bright yellow starry flowers on stems of about 50cm., in summer. Maybe best in an acid soil in sun but generally easy if it is not too hot & dry in summer.) .... (15+) C
- 5.172.000 : CAREX TENUICULMIS** \* No data. One of the most attractive New Zealand sedges we have seen, forming large bronze-tinted tussocks. Of more obvious architectural value than the others we know ..... (20+) B
- 5.175.050 : CARMICHAELIA APRESSA** NZ, Canterbury, Banks Peninsula. Sea-level. Loose shingle-bank. (One of the smallest members of this New Zealand genus of shrubs in *Leguminosae* (*Fabaceae*). Minute, congested & prostrate with virtually leafless, green branches and tiny, violet-veined flowers. Confined to this specialized coastal habitat and clipped by the Pacific gales, this is unlikely to tolerate British winters but will be best fully exposed outside in summer.) ..... (10+) D
- 5.175.150 : CARMICHAELIA CARMICHAELIAE** (*Notospartium carmichaeliae*) \* No data. A 2-3m. tall, leafless, rush-like shrub with masses of small pinkish purple pea-flowers in summer. A lovely plant, very local on South Island, New Zealand, this used to thrive in the garden of our late friend, Bert Hopwood, in Devon, UK. Protect when young. .... (10+) C
- 5.180.600 : CELMISIA ASTELIIFOLIA** Tasmania, Mt. Anne near Strathgordon. 1100-1300m. Felmark cushion-plant communities. M. Harvey coll. (An Australian with white, gold-centred daisies from tufts of grey-green leaves.) .. (10+) D
- 5.183.450 : CELMISIA MACKAUII** \* NZ, Canterbury, Banks Peninsula. (Low altitude but has been successfully grown outside in the UK. One of the larger species with big, white daisies & distinctive, soft-green foliage without tomentum.) . (10+) D
- 5.184.700 : CELMISIA SAXIFRAGA** Tasmania, Rodway Range, Maydena. 800m. Alpine moraine. M. Harvey coll. (ATasmanian endemic. Spreading, ground-hugging rosettes of silver-green foliage with white daisies on 20cm. stems.) ..... (10+) D
- 5.184.800 : CELMISIA SEMICORDATA** NZ, Canterbury, N of Hanmer Springs, above Jack's Pass. Moist, peaty depressions on open slope. (The largest species in the genus and a spectacular plant by any standard. Big tufts of leathery, lanceolate leaves, silvery green above and white tomentose below, with woolly flower stems, 10 or more to each tuft & about 40 cm. high, each with a huge, many-rayed daisy, up to 10cm. across, in pure white with a yellow disc.) ..... (10+) C

### Clematis : the Australasian species

All the New Zealand species belong to Section *Novae-Zelandiae*. They are all evergreen and dioecious with the male and female flowers on separate plants. Male flowers are usually larger but females produce flowers in greater numbers. Most are of borderline hardiness in the UK but even the most tender only need minimal frost-protection in an unheated glasshouse. The other Australasian species from Australia, Papua New Guinea & parts of Indonesia belong to Section *Aspidanthera* & are also dioecious.

- 5.250.010 : CLEMATIS AFOLIATA** No data. A unique, virtually leafless species with interlacing, rush-like, green stems, which can reach 3m. in height. The pale, greenish yellow, bell-shaped flowers are notably fragrant. .... (20+) C
- 5.250.050 : CLEMATIS ARISTATA** Tasmania, Mt. Wellington foothills. M. Harvey coll. (A comparatively hardy climber, found up to about 700m. on Mt. Wellington, where "its cascades of creamy blossoms are a delight.") ..... (15+) B
- 5.250.910 : CLEMATIS FOETIDA** No data. A vigorous woodland species reaching 4m. with pale yellow flowers. Native to both the main islands and, in spite of its specific name, sweetly scented ..... (20+) C
- 5.250.959 : CLEMATIS FORSTERI** No data.. Large panicles of nodding, lemon-scented, palest yellow flowers on climbing stems up to 3m. tall. Native to forest margins in both North Island and northern South Island. .... (20+) C

- 5.251.009 : CLEMATIS GENTIANOIDES** Tasmania, Chimney Pot Hill near Hobart. 300m. Dry sclerophyllous scrub. M. Harvey coll. (An attractive, dwarf herbaceous species with undivided leaves & starry, white flowers on 30cm. stems.) . . (15+) C
- 5.251.950 : CLEMATIS MARATA** No data. A small climber with purplish stems and lobed, leathery leaves. The spicily scented yellow-green flowers have only 4 sepals. Only grows in South Island, NZ, where it extends far south. . . . . (20+) C
- 5.252.200 : CLEMATIS PANICULATA** (*C. indivisa*) No data. A very beautiful, vigorous New Zealand endemic climber, found in all the main islands. It can reach 4m. with panicles of white flowers, up to 10cm. across, often with pink anthers on males. Usually marginally hardy in the UK but this seed is from a Southland form which should be the hardiest. . . . . (20+) C
- 5.252.300 : CLEMATIS PETRIEI** No data. Quite close to *C. forsteri* and sometimes included under this but with thinner, untoothed leaves. Restricted to the NW of South Island, NZ. Masses of little, yellow-green, elfin bells. . . . . (20+) C
- 5.254.008 : COPROSMA ATROPURPUREA** NZ, Crimea Range, Mt. Southey. 1600m.. Gravelly areas. (A dwarf, montane member of quite a large Malaysian and SW Pacific genus in *Rubiaceae* with many species in New Zealand. Deep purplish red fruits on tight, creeping mats of woody stems set with tiny, linear leaves.) . . . . . (10+) C
- 5.280.500 : DESMOSCHOENUS SPIRALIS** NZ, Canterbury, Banks Peninsula. Sandy & gravelly sites. Sea-level. (A most attractive and intriguing sedge, which we have not seen grown in the UK.) . . . . . (20+) B
- 5.300.100 : DIANELLA TASMANICA** Tasmania, Cockle Creek. M. Harvey coll. (A *Phormium*-relative from moist woodland hardy in the UK in a sheltered, shady place. Stoloniferous clumps of tough, leathery, bright-green foliage about 1m. tall with panicles of pale-blue flowers, which later develop into the most striking, glossy, violet-blue berries.) . . . . . (15+) C
- 5.320.500 : DRACOPHYLLUM MILLIGANII** Tasmania, Mt. Sprent above Strathgordon. 1000m. High moorland. M. Harvey coll. (One of two Tasmanian endemics in this Australasian genus of the *Epacridaceae*. A clump-forming shrublet, about 30cm. high, with clusters of white flowers among reddish bracts. Will be hardy in the UK in moist peaty soil.) . . . . . (30+) D
- 5.421.050 : GEUM TALBOTIANUM** Tasmania, Mt. Sprent above Strathgordon. 1200m. Shaded crevices & between boulders in summit area. M. Harvey coll. (Quite recently described & only known from a few small colonies on the tops of a few mountains in cold, wet, windy SW Tasmania, where it "often ascends vertical cracks in rocks for several metres". Ken Gillanders writes that it "must rank as one of our most beautiful and difficult alpine plants." Clumps of wrinkled, kidney-shaped foliage, matted with hairs above & below, send up 15cm. stems with large, pure-white flowers, 5cm. across, "the outer rows of stamens being reddish brown and greatly enhancing the flower." Definitely a plant which should be grown partially shaded, outside in UK summers ; alpine-house in winter only. A few fresh, wild-collected seeds again.) . . . . . (10+) E

### Isophysis : glossy red Tasmanian alpine endemic

- 5.470.000 : ISOPHYSIS TASMANICA** Australia, Tasmania, Mt. Sprent above Strathgordon. 1200m. Crevices & between boulders in summit area. M. Harvey coll. (A spectacular Tasmanian endemic alpine, usually placed in *Iridaceae*, sometimes in *Liliaceae*, sometimes in its own family, *Isophysideae*. Densely tufted, 15cm. fans of stiff, grassy basal leaves send up stems of about 20cm. carrying terminal flowers, wide open stars up to 8cm. across with glossy, deep purple-red, equal segments surrounding the yellow anthers. We suggest a lime-free, peaty, sandy compost with plenty water in summer (this area has a very high rainfall), when it might be best grown outside. Possibly it will be better with alpine-house protection in winter. Apparently it is locally quite common above 800m. but it is a real challenge to collect a little seed : "the wallabies eat the flowers and seed pods so that only on the most precipitous crags can good seed be found." . . . . . (20+) E
- 5.620.000 : MILLIGANIA DENSIFLORA** Tasmania, Mt. Anne near Strathgordon. 1100-1300m. Wet rocks. (The most widespread in this small genus in *Liliaceae* (*Asteliaceae*) with 5 species all endemic to Tasmania. All are alpine from wet, peaty, acid soils & are hardy in the UK. Attractive tufts of narrow, evergreen leaves with panicles of many, starry, creamy-white flowers on branched, silver-haired, 50cm. tall stems. These are choice plants deserving of attention.) . . . . . (10+) D
- 5.620.300 : MILLIGANIA STYLOSA** Tasmania, Mt. Sprent near Strathgordon. 1100m. Wet summit rocks. . . . . (10+) E
- 5.631.900 : MYOSOTIS TRAVERSII** NZ, Nelson, Crimea Range, Mt. Southey. 1600m. Partially stabilised, greywacke scree. (Worthwhile and desirable for alpine-house growers but no doubt a somewhat difficult species, localised on the scree of the northern part of S Island. Close clumps of thickish leaves covered with adpressed white hairs send up pinkish stems to about 15cm. carrying tight, rounded heads of white or creamy flowers, sometimes with yellow eyes.) . . . . . (10) E
- 5.690.100 : NOTOTHLASPIROSULATUM** NZ, Nelson, Crimea Range, Mt. Southey. 1600m. Mobile, greywacke scree. (Surely one of the world's great alpines, the penwiper plant tends to occupy slightly more stable areas of talus than some of its specialised compatriots. It shares their camouflage colour in its exquisitely formed, flat rosettes of overlapping leaves in grey, tinged with brown. When mature, after several years, these send up a mound, or even a stout column up to 25cm. high, packed with large, beautifully fragrant, creamy flowers. Very little seed-set in 2004.) . . . . . (20+) E
- 5.730.700 : PATERSONIA FRAGILIS** (*P. glauca*) Tasmania, Cockle Creek. Coastal heathland. M. Harvey coll. (A Tasmanian species in this attractive genus of the *Iridaceae*. Iris-like clumps of foliage & purple-blue flowers opening flat with 3, showy segments on stems of about 30cm. high. Should succeed in mild parts of the UK. No trouble if protected.) . . . . . (20+) C

---

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

- 5.820.050 : RICHEA CURTISII** Tasmania, Mt. Sprent. 1000m. Alpine sedge. M. Harvey coll. (The genus *Richea*, almost wholly Tasmanian, is in *Epacridaceae* but some resemble *Cordyline* in their foliage. *R. scoparia* is the only one of proven hardiness in the UK. There is no reason why these high colls. should be less hardy. All are worth trying in milder, wetter areas, in full sun in a moist, lime-free soil. This is about 90cm. high with distinctly structured inflorescences.) ..... (30+) **D**
- 5.830.100 : RICHEA DRACOPHYLLA** Tasmania, Mt. Wellington. 700m. M. Harvey coll. Wet scrub. (A large shrub, near *R. scoparia*, with leaves to 30cm. long & huge, branched panicles of creamy white flowers.) ..... (30+) **B**
- 5.830.200 : RICHEA PANDANIFOLIA** Tasmania, Hartz Mts., Esperance. 800m. M. Harvey coll. (The tallest of the genus, up to about 9m. high with heads of arching, 1m. leaves & huge, branched panicles of creamy white flowers.) ..... (30+) **B**
- 5.830.302 : RICHEA SCOPARIA** Tasmania, Maydena, Rodway Range. 800m. Alpine moraine. M. Harvey coll. (Ascending to over 1300m., this is the only species of proven hardiness in the UK : it grows well on the rock-garden at the RBG Edinburgh. Most British stock seems to be derived from the H.F. Comber coll. of 1930. We seem to have but one colour-form but Comber described the flowers as varying in "white, pale or deep pink, red or maroon." It can form wide dense hummocks about 1m. high in exposed montane sites. Short, rigid, linear leaves cover the stems and the flowers are close-packed into stiff, terminal racemes. An extraordinary & arresting plant for, well-drained, low-nutrient, acid soil in full sun.) ..... (30+) **C**
- 5.890.000 : TELOPEA TRUNCATA** Tasmania, Lake King William, Tarraleah. 600m. Wet, sclerophyll forest. (A Tasmanian endemic, the hardiest member of this small E Australian genus in *Proteaceae* & related to *Embothrium*. In the wild it can vary from a low shrub to an 8m. tall tree. A specimen grown at Wakehurst Place (Sussex, UK) for over 50 years is recorded as having reached 18ft. Usually recommended for acid soils in high rainfall areas of the British Isles, our fondest recollection of this is of a plant only about 1m. tall, grown in full sun on the rock garden at the RBG Edinburgh, where it flowered regularly (and may still do so). A stiffly branching shrub with oblanceolate, leathery evergreen foliage and terminal heads, about 10cm. across, densely packed with many, curved, bright crimson flowers, in summer.) ..... (10) **C**

### Hellebores : 2004 seed from named clones & colour categories

It was was an extremely poor year in 2004 for seed-set on our hellebore hybrids, so we have a much depleted range this season.

- 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**
- 6.564.070 : HELLEBORUS from 'SIRIUS'** Large, green-tinged primrose-yellow flowers. .... (15+) **D**
- 6.564.080 : HELLEBORUS from 'TITANIA'** Jenny's favourite hellebore. *A.H. torquatus* hybrid with little, rounded, cup-shaped flowers, creamy green inside but covered with tiny reddish dots outside to give a misty mushroom-colour. .... (15+) **D**
- 6.564.130 : HELLEBORUS from H.O. GUTTATUS HYBRIDS** Whites with a basal zone of crimson speckles. ... (15+) **C**
- 6.564.140 : HELLEBORUS from UNMARKED CLEAR-PINKS** Shades from soft-rose to shell-pink. .... (15+) **C**
- 6.564.151 : HELLEBORUS from SELECTED PURPLES** From unnamed clones many better than their parents. ... (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 this season as we have included seeds from many named clones and more recent selections from which we had too little 2004 seed for separate listings. .... (20+) **C**

Extra large packets of hybrid seed (all colours mixed only) ..... (80+) **F**

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

- 6.027.960 : ALSTROEMERIA LIGTU HYBRIDS** Thriving in British gardens from Cornwall to Aberdeen : even here in our wet garden. Every shade from pink to orange, flame & biscuit. By all accounts, derived from *A. ligtu* subsp. *simsii* (coll. by Clarence Elliott in 1927 as *A. haemantha*) & *A. ligtu* subsp. *incarnata* (coll. by Harold Comber in 1926 as *A.l. angustifolia*). The Comber plant may have been *A. presliana*, explaining the dwarf, deep pinks which sometimes appear. . . . . (20+) **A**
- 6.720.001 : MECONOPSIS X SHELDONII** The beautiful hybrid, *Meconopsis grandis* x *M. betonicifolia*, is usually sterile. This is from the fertile 'Lingholm' strain. Outstanding, perennials about 1m. tall with intense-blue poppies. . . . . (50+) **B**
- 6.750.100 : PENSTEMON from 'RONDO'** Seeds from a strange hybrid, possibly a *P. barbatus* cross, which produces both pink and blue flowers on the same plant. We are uncertain how reliably this comes from seed. . . . . (30+) **B**
- 6.750.110 : PENSTEMON from 'ROSE ELF'** Seeds from one of the 'Prairie Hybrids' derived from the breeding programme initiated by Glenn Viehmeyer at the University of Nebraska in the 1950's. These were based on the mysterious *Penstemon* 'Flathead Lake', a naturalized hybrid resembling a dwarfed, pink-flowered *P. barbatus*. Seedlings may vary. . . . (30+) **B**

### Visit us at [www.JJaseeds.com](http://www.JJaseeds.com)

More information on many of the main genera covered in this list is available on our web-site. We have individual pages for Helleborus, Kniphofia, Penstemon and Pulsatilla. The complete range of our 2003 and 2004 seeds is also available online, where you have the opportunity of referring to and printing-out previous lists as well as this one. Visit us at [www.JJaseeds.com](http://www.JJaseeds.com)

### Our next list of seeds

Our next list of seeds, mainly from summer-dormant bulbs, corms and tubers, is almost ready. Seeds from most species are harvested & cleaned. They are being packeted now. Lists will be sent out & our web-site will be updated in August. Though it has not been a vintage year for our home-produced

seeds & many species will be in short supply, we should be able to maintain our usual comprehensive range of species from such genera as Colchicum, Crocus, Cyclamen, Fritillaria and Iris. In addition there will be some 2004 wild collections from Iran, Jordan & Turkey.

### 2004 List of Bulbils, Offsets & Seedling Bulbs for EU customers only

In order to produce our own seeds, we have to grow a wide range of bulbs and corms. Many of these increase vegetatively. We do not have the time, space nor, indeed, the need to continually increase our parent stocks. We also sow seeds to keep our stocks vigorous and healthy and sometimes have more seedlings than we need for growing on. We have decided this year to attach a list of some of this surplus young stock for customers in Britain and elsewhere in the European Union, where we can send living material without the expense of phytosanitary certification. We are only including material small enough to go into our standard seed-packets so that it can be included with seed orders in our usual padded envelopes (with a little extra bubble-wrap if necessary). There will be no extra postage or packing charge. We have used precisely the same price per packet as for a packet of seeds of the same species. The only species listed as seeds elsewhere

in this list are the Ipheions & Tecophilaeas. So, if ordering these, please make it clear if you want bulbs or corms. In the absence of any stated preference, we shall assume seeds should be sent. All items listed will need growing on for between one and three years to reach flowering-size but, at the very least, will represent a saving in time of one year from growing them from seed. We are strong advocates of the advantages of growing from seed as the most reliable way to acquire vigorous, disease-free, virus-free stock, which will represent a range of interfertile clones to yield further seeds and establish a species in cultivation. However, apart from saving a little time, vegetative increase does mean you have the original wild clones. The field-numbers we have given can be applied without "ex", as you are obtaining material from the actual wild collection, which, for instance, Paul Furse made in Iran over 40 years ago.

For more mature bulbs, you can contact our good friends, with whom we collaborate closely and who collect seeds for us :

Norman Stevens at Cambridge Bulbs, 40 Whittlesford Road, Newton, Cambridge, UK, CB2 5PH. (EU sales only)

Rannveig Wallis at Buried Treasure, Llwyn Ifan, Porthyrhyd, Carmarthen, Wales, UK, SA32 8BP. (EU sales only)

Janis Ruksans at Bulb Nursery, Rozula, Cesu raj., LV-4150, Latvia. (Phytosanitary certification & worldwide shipping)

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



## Bulbils, Offsets & Seedling Bulbs available summer 2004

- 240.100 : BRIMEURA FASTIGIATA** France, Corsica, Pointe de Revellata. Sea-level. Among moss & stones. JCA 36. (A sweet, little, late-flowering bulb, only a few cm. high. Dense racemes of wide-open, lilac-pink bells.) . . . . . 5+ offset bulbs : **C**
- 1.151.500 : CALOCHORTUS ARGILLOSUS** California, San Luis Obispo Co., NE of San Luis Obispo. 180m. Among grasses in heavy clay on open slope. JJA 12770. (Extremely 'growable' with us. A lovely, rather dwarf Mariposa. White flowers, more or less flushed lilac, with variable dark basal stains & markings, several on each wiry, 20cm. stem.) . . . . . 5+ bulbils : **C**
- 1.179.500 : CALOCHORTUS UNIFLORUS** California, Lake Co., NE of Middletown. 290m. Heavy clay. JJA 11665. (Dwarf, lilac flowered member of Subsect. *Nudi*. Easily grown, it fits in well with Mediterranean bulbs.) . . . . . 5+ bulbils : **B**
- 311.800 : COLCHICUM BOISSIERI** Greece, Viotia, Parnassos. 1500m. Gravelly areas. JJA 5107. (A sweet little species with long stoloniferous corms. Lilac-pink flowers in autumn, before the few linear leaves.) . . . . 5+ offset corms or stolons : **D**
- 352.099 : CROCUS SEROTINUS** subsp. **SALZMANNII** Spain, Granada, Sierra Nevada below Penones de San Francisco. 2300m. Turf in NW-facing depression. JJA 12146. (A strongly stoloniferous race. We have not seen any other quite like it but the *C. serotinus* group is complicated.. Profuse, pale lilac flowers in autumn.) . . . . . 5+ offset corms or stolons : **C**
- 354.002 : CROCUS VELUCHENSIS** Yugoslavia, Serbia, Kosovo, above Vratnica. 800m. *Fagus* woods. JJA 7424. (Large, lavender-blue flowers shading to darker, violet tips, in spring. Likes it cool & not too dry.) . . . . . 5+ offset corms : **C**
- 1.308.300 : DICHELOSTEMMA IDA-MAIA** California, Humboldt Co., NNE of Orleans. 180m. Woodland margin. JJA 12868. (Pendant, tubular flowers in pure glowing red with greenish-cream segments & white staminodes.) . . 10+ offset corms : **C**
- 490.000 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) Turkey, Antalya, NW of Antalya. 800m. Among scrub. JJA 9792. (A fine form with round-shouldered, elegantly waisted bells, in yellow-green with brown shading.) 10+ bulbils : **B**
- 490.100 : FRITILLARIA ACMOPETALA** subsp. **WENDELBOI** Turkey, Antalya, S of Madenli. 1900m. Pockets of black soil & limestone talus. JJA 14650. (The high altitude race. Large flowers with angular, 'shoulders' in chocolate and a luminous, lime yellow-green, most eye-catching and utterly distinct in general appearance from the type-race.) . . . . . 10+ bulbils : **E**
- 491.003 : FRITILLARIA AMANA** Turkey, Hatay, E of Belen. 1250m. Among *Quercus* scrub. JJA 14722. (A splendid form with very large, elongated green bells, shaded with purple-brown & with clear green fascia.) . . . . . 10+ bulbils : **C**
- 491.201 : FRITILLARIA ARMENA** Turkey, Erzurum, Kop Dag. 2550m. Exposed, gravelly areas. JJA 6439. (The small, dark, snow-melt endemic of the E Turkish mountains. Nodding bells, purple-black inside & out.) . . . . . 10+ bulbils : **D**
- 492.201 : FRITILLARIA BUCCHARICA** Tajikistan, Hissar range, N of Duschanbe. 2100m. N. Stevens coll. (The 30cm. stems carry 10 or many more, green-tinted, white, wide-open bells with dark nectaries.) . . . . . 5+ 2<sup>nd</sup> year seedling bulbs : **C**
- 492.406 : FRITILLARIA CARICA** (subsp. *carica*) Turkey, Mugla, SE of Fethiye. 850m. In humus beside boulders in deep shade of *Pinus*. JJA 14505. (Clear yellow bells. A pretty, little form, growing here with *F. forbesii*.) . . . . . 10+ bulbils : **C**
- 494.000 : FRITILLARIA DAVISII** Greece, Lakonia, NW of Pargos Dirou. Low, limestone hills. (Shiny bright-green leaves & no green stripes on its variable, tubby, brown-purple chequered bells.) . . . . . 5+ 2<sup>nd</sup> year seedling bulbs ex wild seed : **B**
- 495.004 : FRITILLARIA ELWESII** Turkey, Icel, Findikpinar above Mersin. P. Davis 26500. (Very elegant with greyish, linear foliage and narrow, purple-black bells, striped with grey-green, on 30cm. stems.) . . . . . 10+ bulbils : **C**
- 495.750 : FRITILLARIA FRANKORUM** Syria, Kassab. 700m. Flooded fields. R.& R. Wallis 96-11. (Originally thought by Bob & Rannveig Wallis to be a "giant form" of *F. assyriaca* but described by them as a new species in 2003. This is a distinct, elegant plant, in foliage resembling *F. assyriaca* but with wider, yellow-green bells.) . . . . . 10+ bulbils : **F**
- 497.000 : FRITILLARIA HERMONIS** Syria, NW of Rankous. 1850m. Scree. R.& R. Wallis 96-39. . . . . 10+ bulbils : **D**
- 497.001 : FRITILLARIA HERMONIS** Syria, Bludan. 1900m. Scree. R.& R. Wallis 96-43. . . . . 10+ bulbils : **D**
- 497.610 : FRITILLARIA INVOLUCRATA** No data. From Mike & Polly Stone's stock. . . . 5+ 2<sup>nd</sup> year seedling bulbs : **C**
- 497.760 : FRITILLARIA** aff. **KOTSCHYANA** Iran, Gilan/Ardabil, E of Khalkhal. 1900m. Alpine turf & moist gulleys. JJA 16737. (Collected in the Talesh range, near the border with Azerbaijan., close to the locality for *F. grandiflora*. Broad, glossy green foliage & big, pendant, pale-green bells with a variable, ghostly brown chequering or tinge.) . . . . . 10+ bulbils : **E**
- 500.101 : FRITILLARIA MINUTA** Turkey, Bingol, Kuruca Pass. 2000m. E.M. Rix 1625. (Little, narrow, terracotta-coloured bells. A neater, dwarfer form than more recent collections from the Van area.) . . . . . 10+ bulbils : **D**
- 500.801 : FRITILLARIA OLIVIERI** Iran, Kurdistan, E of Sanandaj. 1800m. Damp meadows beside stream. P. Furse 2057. (The Paul Furse, 1962 coll., not relocated in recent years. Big soft-green & brown bells on 20cm. stems.) . . . . 10+ bulbils : **D**

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

- 502.102 : **FRITILLARIA PONTICA** var. **SUBSTIPELATA** Greece, Lesbos. H.& I. Barton coll. (Tall & slender. Long, waisted, pale-green bells blotched with purple-brown at the tips. A very fine thing, rare in cultivation.) . . . 10+ bulbils : **D**
- 1.371.700 : **FRITILLARIA PUDICA** Idaho, Butte Co., NE of Carey. 1520m. E-facing slopes of stony ridge. JJA 11542. (A very good, dwarf form. Nodding, clear-yellow bells, maturing to orange-red shades, on 15cm. stems.) . . . . . 10+ bulbils : **C**
- 502.701 : **FRITILLARIA RUTHENICA** Russia, (formerly Mordovskaya ASSR), Saratov district. (Closest to the equally obscure *F. orientalis*, from which it is distinguished by the curled, cirrhose tips of the upper leaves. A very elegant thing with narrow leaves & dark maroon-red, chequered bells. A very hardy plant.) . . . . . 5+ 2<sup>nd</sup> year seedling bulbs ex wild seed : **D**
- 503.208 : **FRITILLARIA STENANTHERA** Uzbekistan, Tashkent, W of Chimgan. 1900m. (Widely flared flowers with dark nectaries, in pearly white to quite rich pink on grey-leaved, 20 cm. stems.) . . . 5+ 2<sup>nd</sup> year seedling bulbs ex wild seed : **D**
- 503.500 : **FRITILLARIA STRIBRNYI** Turkey, Canakkale, Gelibolu (Gallipoli). V. Horton & N. Stevens 2067. (Elegant, about 20cm. high with linear, greyish foliage & narrow, glaucous, untesselated, purple & green bells.) . . . . . 10+ bulbils : **E**
- 504.700 : **FRITILLARIA WHITTALLII** Turkey, Antalya, SW of Elmali. 1600m. Opening among *Cedrus*. JJA 14585 (Exceptionally local. Elegant with linear leaves & wide pale-green bells, tessellated with purple.) . . . . . 10+ bulbils : **D**
- 504.705 : **FRITILLARIA WHITTALLII** Turkey, Isparta. Ex a N.Stevens coll. . . . . 10+ bulbils : **D**
- 2.469.999 : **IPHEION 'ALBERT CASTILLO'** Argentina. Ex an A. Castillo coll. (Like a very large, 20cm. tall, pure-white version of *I. uniflorum*. Superb. As with the others here, hardy with us in an unheated glasshouse.) . . . 5+ offset bulbs : **B**
- 2.470.010 : **IPHEION DIALYSTEMON** Argentina. Ex an A. Castillo coll. (Hardy with us in an unheated glasshouse. Prostrate, narrow, glossy-green foliage & profuse, brilliant-yellow, upward facing flowers on 5 cm. stems.) . . . 5+ offset bulbs : **E**
- 2.471.412 : **IPHEION UNIFLORUM 'CHARLOTTE BISHOP'** Attractive, lilac-pink clone. . . . . 5+ offset bulbs : **C**
- 2.471.420 : **IPHEION UNIFLORUM 'ROLF FIEDLER'** May be a clone of *I. pedunculata*. Masses of well-formed flowers in pure sky-blue over a long period. Clean stock of the true clone : many commercial stocks mixed. . . . 10+ offset bulbs : **A**
- 630.480 : **LEUCOJUM TINGITANUM** Morocco, Rif, above Chaouene. J.W. Blanchard 88-02. (A very fine, spring-flowering species, recently rediscovered & introduced. Large white bells on 20cm. stems.) . . . . . 5+ offset bulbs : **D**
- 689.300 : **MUSCARI DISCOLOR** Turkey, Sivas, Ziyaret Tepe. 2100m. Exposed, limestone-gravel ridges. JJA 6686. (A tiny, high-altitude plant only a few cm. tall. Dark blue flowers. Not easy to grow and flower well.) . . . . . 5+ offset bulbs : **C**
- 689.450 : **MUSCARI GRANDIFOLIUM** Morocco, Middle Atlas Mts., above Ifrane. 1700m. Limestone. JJA 4357. (A handsome species, hardy but best with some protection. Blue-black flowers from china-blue buds. 20 cm.) . . . . 5+ offset bulbs : **B**
- 696.400 : **NARCISSUS BULBOCODIUM** subsp. **OBESUS** Portugal, Serra de Arrabida. J.W. Blanchard 90-13 (Big, horizontal, deep-yellow hoop-petticoats on 10cm. stems. Dark-green, sinuous, prostrate leaves.) . . . . . 5+ offset bulbs : **B**
- 696.600 : **NARCISSUS BULBOCODIUM** var. **PALLIDUS** Morocco, High Atlas, Tizi Gourane above Amizmiz. 1800m. Schist fissures. JJA 4661. (Cream hoop-petticoat, named *N. jacquemondii* by Fernandez Casas.) . . . . . 5+ offset bulbs : **C**
- 696.700 : **NARCISSUS BULBOCODIUM** subsp. **PRAECOX** Morocco, High Atlas Mts., below Asni. 1000m. JJA 4656. (Fine, distinct race. Big, soft-yellow flowers with rather narrow, funnel-shaped trumpets in late winter.) . . . 5+ offset bulbs : **C**
- 705.100 : **NARCISSUS ROMIEUXII** (subsp. *romieuxii* var. *romieuxii*) Morocco, Middle Atlas Mts., above Ifrane. 1700m. Mixed woodland. JCA 805. (Extremely variable in form & colour from cream to deeper yellows.) . . . . . 10+ offset bulbs : **B**
- 705.405 : **NARCISSUS ROMIEUXII** subsp. **ALBIDUS** var. **ZAIANICUS** Morocco, Zaian Mts., near Oulmes. Ex J.W. Blanchard 89-23. (An amazing range of forms in a diversity of creams & soft citron yellows.) . . . . . 5+ offset bulbs : **B**
- 705.600 : **NARCISSUS RUPICOLA** subsp. **MARVIERI** Morocco, Middle Atlas, S of Ksar-el-Ksiba. 1700m. N-facing, limestone slope with *Quercus* & *Cedrus*. JJA 4414. (The yellow race endemic to Morocco.) . . . . . 5+ offset bulbs : **C**
- 705.701 : **NARCISSUS RUPICOLA** subsp. **WATIERI** Morocco, High Atlas Mts., above Tizi-n-Tichka. 2300m. Rocky slopes. JJA4518. (The incomparable, dwarf, crystalline-white daffodil from the central High Atlas.) . . . . . 5+ offset bulbs : **C**
- 873.650 : **SCILLA GREILHEUBERI** Iran, Mazandaran, S of Chalus. P. Furse 1064. (Delightful, soft violet-blue flowers with reflexed segments. Hardy in the UK but early flowers are better protected from winter-weather.) . . . . 5+ offset bulbs : **B**
- 2.940.010 : **TECOPHILAEA CYANOCROCUS** The famous blue Chilean crocus, whose crocus-like flowers in spring have no equal in the purity & intensity of their gentian-blue. . . . . 3+ offset corms : **E**
- 2.940.011 : **TECOPHILAEA CYANOCROCUS 'LEICHTLINII'** Slightly paler blue form with a large white centre, considered by many to be the most beautiful variant. It is also the most vigorous form with us. . . . . 3+ offset corms : **D**

These will be sent in similar packets to our seeds

They can be sent with seed orders until mid-September, 2004 only.

---

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