

# IRAN 2000

## no coca cola and no mcdonald's but strawberry jam for everyone ?

Jim remembers a conversation with Paul Furse, many years ago, about the pleasures and problems of travelling in Iran. In the 1960's, it was the fashion for plant-collectors to drive out from Britain in their own Land Rovers, in which they slept and worked for the duration of the trip. It was essentially self-contained and rather insular travelling. Everyone took much of the food they would consume along with them. "Was there anything from home you really missed? Did you ever get a great, insatiable desire for anything?" asked Paul. Jim replied that a good quality bar of chocolate would not have been unappreciated from time to time. "With us it was strawberry jam," said Paul. "We dreamed about pots of home-made strawberry jam." Nowadays, you can obtain strawberry jam in Iran. It comes in individual portions, in those miniature plastic containers with peel-back foil tops, just like in Britain. Perhaps not quite what Paul Furse saw in his dreams. It has been a long time since Jim spent a whole collecting season in Iran. Thirty-four years to be precise. The world has moved on frenetically and, contrary to western perceptions, Iran has, in its own ways, moved on as well.

At the start of the 21<sup>st</sup> Century, you can drive around Iran on modern, surfaced roads and stay in tolerable accommodation. Perhaps not always accommodation, which would meet the more demanding western standards but at least as acceptable as that to be found in eastern Turkey. The plant-hunter can accomplish in a few weeks what would have taken months decades ago.

In 2000, Jim made a flying-visit to the north-west corner of this vast country, as a back-seat passenger on a trip shared with our friends Norman Stevens and Bob Wallis. We focussed on collecting 'bulb' seed and some of the fruits of the journey are available in this present list. The visit also enabled us to initiate breeding-stocks of some of the *Oncocyclus* Irises, which we hope will yield cultivated seed in the future. If the present official attitude towards western visitors continues, we shall certainly return.

The Iranian people themselves have not changed. They are as courteous, delightful and hospitable as ever. "We are a very friendly people. We want to be friends with the world. Why do you call us terrorists?" In this age of the internet and satellite television, many are well-informed about world

affairs. There may be no CNN, no Coca Cola and no McDonald's but there is BBC World News and 'Inspector Morse'. The latter so expertly dubbed in Farsi that you could be convinced that John Thaw was, in fact, Iranian & might encounter some difficulty if he wished to visit the USA.

## It's a hard world

being a plant (hunter). During 2000 we have visited :

### New Zealand

"I have to tell you that this has been the worst season for flowers and seed since I started looking at them over twenty years ago" (Joe Cartman)

### Iran

"This is the second year of the worst drought in Iran for thirty years." (Newspaper report)

### Western USA

"forest-fires rage throughout the west during an exceptional dry season" (Newspaper report)

# Ordering from this list could not be easier

We shall accept your cheque in US \$ or £ sterling, with two qualifications : cheques in US \$ must be on a US bank account - charges on negotiating cheques on foreign accounts are very high in the USA (foreign banks can sometimes sell you a US \$ cheque drawn on one of their US branches) ; please do not send Eurocheques made out in US \$ - these are unfamiliar to the US banking system. Payments from France & more recently Germany have caused us problems. While we continue to price in both DM & FF, we must ask French & German customers **not** to send cheques in DM nor in FF. A Eurocheque made out in £ sterling is excellent ; a Giro payment in sterling is used by many French customers. When the € settles into place we hope these temporary problems will go. You can price in DM or FF and have the current equivalent total sent to us in £ sterling or US \$. DM or FF in cash sent by registered letter are also no problem. If fluctuations in exchange rates mean that it is advantageous to price in a currency other than your own, please do so. It

makes little difference to the operation of our business. Apart from personal cheques, payments can be made in bank-notes for any of these currencies (please send by registered mail) or by a bank draft or International Money Order in US \$ or GB £. We do not operate a Giro account to enable direct transfers nor do we accept credit card payments at present. If remitting by personal 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 and old customers please read this

As our many long-standing and understanding customers are aware, there may be a delay of some weeks before you receive your order. Most orders come in during the first few weeks after we send out a list. We receive orders very 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, write to us immediately. For some years we have pointed out that 'one or two items are lost or delayed each year', that 'such problems are very rare' and that 'postal services are, on the whole, very reliable.' Up until the past year, this has been the case. However, we have failed to receive several orders and

have had an exceptional number of the completed orders which we have sent out fail to arrive. While the incidence of problems is still very small in proportion to the number of orders received and despatched, this increase is disconcerting. We are glad to say we have had no problems so far regarding orders placed from our August list. However, please let us know now and in future if you have any difficulties at all in ordering seeds from us. We shall do our best to put them right and you can be assured that they will be resolved at no disadvantage to yourself. While we can make mistakes ourselves, we do try to be reasonably reliable & run this small personal business to your satisfaction. In the event of any irregularity, you will find us totally sympathetic.

## Our population reference numbers . . . . .

The species in our lists are divided into five distinct geographical areas. Within these areas they run in alphabetical order. The numbers run in numerical order. These numbers refer to particular populations, mainly in the wild. 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. The use of population references is to avoid seed 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, though they have an 0. before them on our records & you will see this on the seed-packets. 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 and 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 (\*) after the name. The field-data given in these cases refers to the parents. Much of this is hand-pollinated seed but it will not necessarily produce similar-looking seedlings.

. . . . . **welcome to our October, 2000 list**

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

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

The first and main section in the present list covers species from within the area of Europe, N Africa (N of the Sahara) and W Asia (W from Pakistan N through the Pamirs, the Tien Shan & the Altai), a distinct floristic area. Nomenclature follows the

basic floras, 'Flora Europaea', 'Flora of Turkey' & 'Flora Iranica' with a little editing and updating, if this is felt to be relevant & helpful to gardeners. Collections from the republics of the former USSR are usually listed under the names supplied.

- 118.510 : ADONIS VERNALIS** \* No data. One of the most beautiful of spring-flowering perennials. Distributed from central Europe through Russia, it is essentially a northern steppe-plant from severe continental climates, best suited to an open, well-drained site in the garden. Great, glossy yellow buttercup-bowls open with the unfurling, bright-green foliage, finely cut into linear segments, initially on short stems of about 10cm., gradually elongating to over 30cm. Irregular in germination & slow from seed. (15+) C
- 160.610 : ANEMONE CAUCASICA** \* No data. A delightfully dainty little plant, more or less a smaller, more delicate version of *Anemone blanda* with blue or white flowers in early spring. Distinguished not only by its more diminutive size but by its glabrescent involucre leaves. A plant of cliff-ledges and scrub-covered rocky slopes, centred on the Caucasus but extending into the Pontus Range of NE Turkey & the Elburz of N Iran, this is very seldom seen in cultivation. . . . . (20+) C
- 161.900 : ANEMONE PAVONINA** \* Greece, Lakonia, between Areopoli & Githio. 100m. Edge of scrub. (The epitome of spring in Greece. Brilliant, pure-scarlet flowers with a white central zone (var. *ocellata*). Seed grown outside in Dorset, UK.) (20+) B
- 162.050 : ANEMONE PETIOLULOSA** \* No data. An attractive, dwarf, tuberous-rooted species, widespread through the montane steppe of the Tien Shan, Pamir-Alai & other mountains of Central Asia but still little-known in cultivation. Finely cut foliage below pure yellow flowers, opening in spring from globular bronze or red-tinted buds. Not difficult in the alpine-house or bulb-frame but, like most of the small, tuberous anemones, not extremely long-lived and most easily maintained from seed. . . . . (10+) D
- 227.702 : BELLEVALIA DUBIA** \* Italy, Sicily, Castel Mola near Taormina. (Ex an A. Edwards coll. The most striking of the European species in a selected form with particularly brilliant, ultramarine blue young flowers. Electric.) . . . . . (15+) C
- 227.770 : BELLEVALIA FORNICULATA** \* Turkey, Agri, W of Eleskirt. 2300m. Hay meadows. (Outstanding with buds & flowers of penetrating turquoise-blue. Restricted to a few sites in the chilly Erzurum area, where its amazing blue mists the melt-water meadows. Choice but growable - maybe best outside in the UK. If in a pot, don't overdry it in summer.) . . . . . (10+) C
- 227.840 : BELLEVALIA KURDISTANICA** \* Turkey, Hakkari, Zab gorge at Bagisli. 1500m. Igneous scree. . . . . (10) C
- 227.900 : BELLEVALIA LONGIPES** \* Turkey, Van, NNW of Baskale. 3000m. Open, stony slopes. . . . . (10) C
- 227.950 : BELLEVALIA LONGISTYLA** \* Turkey, Van, E of Lake Van. 1800m. Heavy clay in moist, depression. . . . . (10) C
- 227.952 : BELLEVALIA LONGISTYLA** \* Turkey, Van. Ex Leep & Pasche 7044 . . . . . (10) C
- 228.081 : BELLEVALIA PYCNANTHA** Iran, Kordestan, ESE of Sanandaj. 1800m. Among long grass in wet meadow. (Near *B. forniculata* but with heads of strangely crumpled bells in deep, inky blue-black. Quite easily grown in the UK.) . . . . . (15+) B
- 228.130 : BELLEVALIA RIXII** \* Turkey, Van, NNW of Baskale. 2800m. Talus on open slopes. (Only known from around the type-locality. Falcate leaves & 5cm. stems of purple-brown flowers with violet anthers. Not easy. Best in an alpine-house pan.) (8) E
- 228.150 : BELLEVALIA ROMANA** \* Greece, Ioanina, Mitsikeli. 860m. Ledges on S-facing, limestone cliff. . . . . (15+) B
- 228.410 : BELLEVALIA WEBBIANA** \* No data. N Italian species near *B. romana* but with deep purple-brown flowers. (20+) B

## Bellevalia : unidentified collections from Iran

- 16847 : BELLEVALIA SP.** Iran, W Azerbayejan, between Agh Bolagh & Sangar. 1500m. Rocky limestone slope. . (10+) C
- 16930 : BELLEVALIA SP.** Iran, Hamadan, NE of Assadabad. 2200m. *Astragalus*-steppe on slate & schist. . . . . (10+) C
- 16973 : BELLEVALIA SP.** Iran, Lorestan, SE of Aligudarz. 2250m. Clay & shale slopes. . . . . (10+) C
- 231.900 : BIARUM ARUNDANUM** \* No data. Spanish race of the widespread, very variable *B. tenuifolium*. Dark chocolate, velvety spathes with projecting, black-purple spadices, appear near the ground, before the narrow leaves, in autumn. . . . . (8) C
- 232.101 : BIARUM CARRATRACENSE** \* Spain - no further data available. Ex M. Salmon & M. Fillan 235. (Most magnificent of this confusing genus of tuberous aroids. Huge maroon-black spathes open on the ground in early autumn.) . . . . . (8) D
- 236.001 : BONGARDIA CHRYSOGONUM** Iran, Kordestan, SW of Negel (between Sanandaj & Marivan). 1350m. Openings among *Quercus* scrub on shale. (Plants do not come more distinct than this weird, summer-dormant, tuberous-rooted member of the *Berberidaceae*, distributed sporadically from the E Aegean to W Pakistan. Glauous, basal, pinnatisect leaves & 50cm. high panicles of starchy, yellow flowers, followed by inflated fruits. Temperature-hardy but needs a summer-rest in the bulb-frame.) . . (8) D

- 240.000 : BRIMEURA AMETHYSTINA** \* France, Hautes-Pyrenees, Vallee d'Ossoue. 1500m. Limestone. (More or less endemic to the Pyrenees. Like a dainty, miniature, brighter blue bluebell - easy & not seen as often as it should be.) . . . . . (20+) A
- 311.301 : COLCHICUM ATTICUM** (*Merendera attica*) \* Turkey, Burdur, SSW of Tefenni. 1300m. Among scrub in clay over limestone. (Few linear leaves appear with dark-anthered white or pale pink flowers - in spring with this population.) . . (10+) B
- 311.501 : COLCHICUM BALANSAE** \* Turkey, Icel, NE of Gulnar. 1200m. Pockets of red clay on limestone. (A robust, S Turkish endemic. White to purple-pink flowers in autumn from amazingly long-necked corms.) . . . . . (15+) C
- 311.600 : COLCHICUM BAYTOPIORUM** \* Turkey, Antalya, Gulluk Da. 750m. Among limestone boulders in dense scrub. (Ex a type-locality coll. of this local, medium-sized species. Pink flowers in autumn, with narrow, recurving leaves later.) . (10+) C
- 311.702 : COLCHICUM BIVONAE** \* Greece, Pieria, Oros Olimbos above Vronidou. 1000m. N-facing slopes. (One of the finest of the larger species. Heavily tessellated rosy purple, broadly bell-shaped flowers. Very satisfactory outside in the UK.) . (20+) B
- 313.010 : COLCHICUM CORSICUM** \* No data. A dwarf species from lowish altitudes in S Corsica. Lilac-pink flowers in autumn, followed by narrow, 10cm. high leaves. Reputedly uncommon in nature but easily grown & maintained in the UK. . . . (20+) B
- 314.603 : COLCHICUM HUNGARICUM** \* Croatia, Velebit Planina, Mali Halan. 800m. Exposed, gravelly areas on limestone. (A diminutive species flowering, as the leaves appear in very early in spring, with white or pale pink flowers.) . . . . . (10) E
- 314.754 : COLCHICUM KOTSCHYI** \* Turkey, Gaziantep, W of Gaziantep. 850m. Openings among scrub on limestone. (Medium-sized, species, distributed E through Iraq & Iran. The white or pale-pink flowers often appear in late summer.) . . . . . (20+) C
- 315.603 : COLCHICUM MACROPHYLLUM** Greece, Simi, NW of Simi. 40m. N-facing limestone slope. M. Denney 607. (One of the most splendid & distinct species, local in SW Turkey & on some E Aegean islands.. Very large, pleated, *Veratrum*-like leaves. Usually with big purple-pink & white chequered flowers in autumn. Best in the bulb-frame in the UK.) . . . . . (10+) C
- 316.400 : COLCHICUM PARNASSICUM** \* Greece, Viotia, Oros Parnassos. 1600m. Among grasses on stony, limestone slopes. (Pale purple-pink autumn flowers followed by narrow leaves. Endemic to Parnassus & adjacent Elikon only.) . . . . . (10+) B
- 317.803 : COLCHICUM SPECIOSUM** Iran, Mazandaran, Kandavan pass, north side. 2500m. Among grasses in wet-flush. (A spectacular, robust species from the wet mountains along the Black Sea coast of NE Turkey across the Caucasus to the Caspian ranges of Iran. Huge, deep-pink goblets in autumn. The best one for outdoor cultivation in UK gardens.) . . . . . (15+) B
- 318.355 : COLCHICUM TROODII** \* Turkey, Hatay, between Antakya & Yayladagi. Ex R. & R. Wallis colls. (A neat, white to pink autumn-flowering species. In 'Flora of Turkey', Chris Brickell includes the Turkish plants which can be called *C. decaisnei* under *C. troodii*, described from Cyprus. This coll. is from near the type-locality for *C. decaisnei*.) . . . . . (10+) C
- 318.802 : COLCHICUM VARIEGATUM** \* Turkey, Antalya, N of Akseki. 1400-1600m. Limestone slopes with *Quercus*, *Pinus* or *Abies*. (An arresting and choice autumn-flowering species from SW Turkey & some adjacent E Aegean islands. Neat, thick-textured flowers with purple-black anthers & precise chequering in rich red-purple and off-white. Tidy, undulate leaves.) . . . . . (8) D
- 331.810 : CORYDALIS INTEGR** (*C. wettsteinii*) \* No data. "A splendid garden-plant...wholly hardy in the open", comment Liden & Zetterlund in their 1997 monograph. Distributed through the mountains of SE Europe, the Aegean islands & NW Turkey, this is a robust perennial with branching flower-stems up to 30cm. high. Beautiful, divided, very glaucous foliage & long racemes of spurred white or palest pink flowers strikingly set-off by the black-purple tipped inner petals . . . . . (20+) C
- 331.950 : CORYDALIS NOBILIS** \* No data. A sturdy, long-lived, tap-rooted perennial about 50cm. high and rated by Liden & Zetterlund in their monograph as "probably the most conspicuous & eye-catching species in the genus." Dense heads of yellow, black-tipped flowers rise above the lush, deeply divided, glaucous foliage in late spring. By late summer the plant is dormant. An extremely hardy Siberian plant, distributed from the Altai to the Tien Shan. Seldom seen in UK gardens but perfectly growable. Seed normally stores well but it needs a significant cold period to germinate satisfactorily. . . . . (20+) C

## Corydalis solida : seed from the Transsylvanian Reds

The cultivated red selections of *Corydalis solida*, long grown as "*C. transsylvanica*" both in the UK & Germany have been included under *C. solida* subsp. *solida* in the recent Liden & Zetterlund monograph. They would all seem to have originated from an importation of tubers, wild-collected in Romania & listed by van Tubergen in 1925, though there have now been more recent collections from about 1500m. in the Paringului Mts. We grow British clones, like 'George Baker', without any trouble outside here but they set little seed ; they are really

happiest in a harder, drier climate than that of mild, wet West Wales. This is German-grown seed from woodland-plant specialist Hermann Fuchs, who has gone to a lot of trouble to store the seed of all these *Corydalis* in ideal conditions. It will not be likely to produce such even and reliable results as seed sown straight from the capsules in early summer but it should give a reasonable percentage germination much more irregularly over the next year or so. Full exposure to frost in a shaded site outside will help. Heat will inhibit germination entirely.

- 333.000 : CORYDALIS SOLIDA** from **SELECTED BLOOD-RED CLONES** Potentially outstanding parents . . . . . (20+) C
- 333.005 : CORYDALIS SOLIDA** from **'NYMPHENBURG'** From a "striking coral-red" (same as 'Munich Form'). . (20+) C

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A : \$2.00 ; £1.50 ; DM4,- ; FF14.-    C : \$4.00 ; £2.50 ; DM7,- ; FF23.-    E : \$7.00 ; £4.50 ; DM12,- ; FF41.-  
 B : \$3.00 ; £2.00 ; DM5,- ; FF18.-    D : \$5.00 ; £3.50 ; DM9,- ; FF32.-    F : \$9.00 ; £6.00 ; DM16,- ; FF55.-

## Crocus : 2000 : it' always a difficult year for seed!

To generalise, which we do not usually like to do, *Crocus* is the most difficult in cultivation, among the main genera of 'bulbs' we list. Because a few crocuses are familiar garden plants in Europe, many gardeners assume all are easy and turn to the imagined challenges of *Fritillaria* or some of the *Narcissus* spp. Many of the 'species' listed cheaply in less specialised bulb catalogues are of hybrid origin or are clones, often untypical of the species as a whole & selected for mass production. If you want good reliable garden-plants, these are for you. For the specialist grower, we are attempting to build up basic fertile parent-stocks, raised from wild material where possible, as a source of hand-pollinated seeds for our lists. This is less easy

with *Crocus* than with most other genera, as they have few seeds in a capsule & maintaining quite a large number of corms is necessary. Seed-collection is also quite critical & troublesome. Seed of most will always be expensive & in short supply. In our efforts to list a good range, we have been much assisted by several other growers, particularly David Stephens, who takes the National Crocus Collection in his care seriously. We have drawn attention to the few which are good plants in the open garden in the UK. Among the more reliable ones for the bulb-frame or alpine-house are *C. asumaniae*, *C. goulimyi*, *C. malyi* & *C. niveus*. Standard reference for the genus is Brian Mathew's model monograph 'The Crocus' (1982).

- 339.701 : CROCUS ADANENSIS** \* Turkey, Adana, above Kurt Kalesi. Ex a N. Stevens coll. (Typically pale lilac-blue with a white throat, in spring. Related to *C. biflorus* & only found in this very small area but not too difficult to grow and proving a very worthwhile plant under bulb-frame conditions in the UK. Norman's coll., made high up above Wolf Castle, has shown more variability than some earlier ones. Some are larger-flowered. Some have yellow throats with a diffuse white rim.) . . . . . (10) D
- 339.860 : CROCUS ALATAVICUS** \* Kirgizstan, Tien Shan. From several wild colls. grown by D.B. Stephens. (The most eastern member of the genus. White flowers, often speckled purple-black outside, in spring. Not too easy to grow & increase.) . (8) D
- 340.009 : CROCUS ANCYRENSIS** Turkey, Sivas, Seyfibel Gecidi. 1440m. Sandy clay along field edges. N. Stevens coll. (A coll. of this bright orange-yellow, spring-flowering, endemic of north-central Turkey, at the eastern extremity of its distribution. Growing here with *C. biflorus* subsp. *tauri*, so some seed of both may be included. Usually easy under glass in the UK.) . . . . . (10+) C
- 340.201 : CROCUS ANTALYENSIS** Turkey, Antalya, Bey Dag. Ex a N. Stevens coll. (A handsome robust species in Series *Flavi*, localised in several, limited, disjunct populations in W Turkey. Seldom-seen in cultivation and rather difficult in our experience, though Brian Mathew states it is easily grown. Though usually a plant of heavy clays, we find it resents excess moisture at any time. Pale to deep lilac-blue, yellow-throated flowers, sometimes buff or marked with violet outside, in spring.) . . . . . (10) D
- 340.351 : CROCUS ASUMANIAE** \* Turkey, Antalya, N of Akseki. 1200m. Limestone slopes among sparse *Pinus*. (Quite a local species in the wild, limited to the oak-scrub region around Akseki in the western Taurus range, but it has proved to be one of the best of the saffron group in cultivation. Possible outside in a sunny, dry site and an easy, satisfying species under glass in the UK. Delicately veined, white to palest lilac flowers with showy, scarlet styles, generously produced in autumn.) . . . . . (15+) C
- 340.510 : CROCUS BANATICUS** \* No data. A lovely plant, like no other *Crocus* and in a subgenus of its own. Resents hot, dry conditions & is best grown outside in the UK in a cool, humus-rich site. Autumnal, bluish lilac to purple flowers have big, feathery, lilac styles, surrounded by wideopen outer segments and shorter, erect, inner ones, giving them an iris-like appearance. (10) C
- 340.801 : CROCUS BIFLORUS** (subsp. *biflorus*) \* Italy, Puglia, between Altamura & Bari. 420m. Ex M. Oorgaard 95-28. (A rare plant in cultivation, the rarely seen type-race from the limestones of S Italy. Parent of the sterile hybrid 'Scotch Crocus', usually with white flowers, strikingly striped with 3, brown-purple bands on the exterior segments.) . . . . . (10) D
- 341.250 : CROCUS BIFLORUS** subsp. *ISAURICUS* \* Turkey, Antalya, Irmasan Gecidi N of Akseki. 1500m. Stony humus under *Abies* over limestone. (Spring-flowering race endemic to the W end of the Taurus. In particularly fine form here & variable in colour & markings. Usually lilac-blue with strong, purple feathering on the exterior. Satisfactory under glass in the UK.) . . . . (10) B
- 341.352 : CROCUS BIFLORUS** subsp. *MELANTHERUS* \* Greece, Arkadia, S of Tripoli. (Endemic to the Pelopponese & the only autumn-flowering race of this diverse species. Long confused with the similar spring-flowering *C. b.* subsp. *crewei*, also with striking purple-black anthers. Always white with variable dark exterior stripes or speckles.) . . . . . (10) C
- 341.456 : CROCUS BIFLORUS** subsp. *NUBIGENA* \* Turkey, Mugla, Gok Tepe N of Mugla. 1500m. Among sparse *Pinus* on limestone. (It is not possible to place this population comfortably under any taxon but as Brian Mathew & David Stephens include it under *C. b.* subsp. *nubigena* we follow. It appears to be this mixed or intergrading with *C. b.* subsp. *isauricus* (with some *C. chrysanthus* thrown in) & is mentioned by Brian on p.82 of his monograph. Expect variable, mainly lilac, spring flowers but not all with have the black-maroon anthers characteristic of *C. b.* subsp. *nubigena*.) . . . . . (10+) C
- 341.727 : CROCUS BIFLORUS** subsp. *TAURI* Turkey, Kayseri, N of Sariz. 1800m. Grazed turf. D. Stephens 98-17. (The eastern race in this complex group, usually a snow-melt plant of dryish, montane steppe, extending from central Turkey into NW Iran and Armenia. In theory, distinguished by its combination of numerous, erect leaves, thin corm tunics, usually unmarked lilac flowers and silvery bracts but really a variable and confusing entity : the only name available for plants from this area.) . . . . . (10+) C

- 341.801 : CROCUS BORYI** \* Greece, Messinia, S of Pilos. 200m. Open limestone slopes. (Big, creamy white goblets with orange styles in autumn. More widespread in S Greece than the sympatric *C. niveus* but not so easy to grow with us.) . . . . . (10) **D**
- 341.881 : CROCUS CAMBESSEDESII** \* Spain, Mallorca, Boquer valley near Puerto de Pollensa. Ex a D. Hoskins coll. (This little Balearic endemic flowers in early winter. Very variable from white to deep lilac-blue, usually purple-striped outside.) (10+) **D**
- 341.900 : CROCUS CANCELLATUS** (subsp. *cancellatus*) \* Turkey, Icel, SE of Arslankoy. 1100-1450m. Among sparse conifers in clay over limestone. (The type-race from S Turkey into Israel. Scented, soft lilac-blue flowers in autumn.) . . . . . (10) **C**
- 341.916 : CROCUS CANCELLATUS** (subsp. *cancellatus*) \* No data. From the old commercial stock originating in S Turkey & grown as *C. cilicicus*. Given how temperamental some forms can be this is a surprisingly good garden plant. . . . . (8) **C**
- 341.970 : CROCUS CANCELLATUS** subsp. **LYCIUS** \* Turkey, Antalya, NE of Hisarcandir. 750m. Stony clay in *Pinus* woodland. (A local SW Turkish race with yellow-throated, creamy white flowers & widely spreading, rich orange style branches.) (10) **D**
- 341.972 : CROCUS CANCELLATUS** subsp. **LYCIUS** \* Turkey, Antalya, Kemer to Ovacik. Ex D. Stephens 97-02 . . . (10) **D**
- 342.002 : CROCUS CANCELLATUS** subsp. **MAZZIARICUS** \* Greece, Evia, W of Halkida. 100m. E-facing limestone hills. (The attractive western race. Autumn-flowering with both white & lilac forms, often darkly veined. ) . . . . . (10) **C**
- 342.011 : CROCUS CANCELLATUS** subsp. **MAZZIARICUS** \* Greece, Argolida, SW of Ligourio. Ex a M. Harvey coll. (Most decorative of the five subspecies. It needs a warm, dry rest when dormant. The species, as whole, with its characteristic, very coarsely reticulate tunic, is a plant of dry habitats in nature, though it often grows in heavy, limestone clays.) . . . . . (10) **C**
- 342.050 : CROCUS CANCELLATUS** subsp. **MAZZIARICUS** \* No data. Interesting form from old cultivated stock. . . (8) **B**
- 342.802 : CROCUS CARTWRIGHTIANUS** \* Greece, Evia. Ex Christian, Elliott & Hoog 613. (Spectacular autumn-flowers, almost as often white as lilac with huge flopping, scarlet styles. A Greek island plant - keep it dry under glass in the UK.) . . . (10) **C**
- 343.000 : CROCUS CASPIUS** \* Iran, Mazandaran, Caspian coast W of Chalus. Among scrub, in sand. (From both our own and P. Furse 5035 colls. made below sea-level along the Caspian shore in the 1960's. A beautiful autumnal species, with yellow-throated, white to lilac-pink flowers. Quite hardy in the UK but seldom seen - it does not like being too hot & dry in summer.) . . (10) **E**
- 343.208 : CROCUS CHRYSANTHUS** \* Greece, Kozani, Oros Vourinos. Ex C. Lovell & P. Bird 97-188. (Wild forms tend to be small, dainty plants, often none too easy to grow well. Distributed from Serbia to central Turkey, it is essentially a yellow-flowered version of the *C. biflorus* complex and is similarly highly variable. The species may actually cover several taxa.) . . . . (10) **C**
- 343.405 : CROCUS CORSICUS** France, Corsica, NW of Porto-Vecchio. c. 1000m. (Bright lilac flowers usually with purple-striped, buff exteriors, in late spring. A higher altitude plant, reaching 2300m., than the only other Corsican species, *C. minimus*, whose more south-western distribution overlaps in this area, whence the occasional hybrid has been reported.) . . . . . (10+) **D**
- 343.600 : CROCUS CVIJICII** \* Greece, Imathia, Oros Vermio near Seli. 1500m. In turf under *Pinus* on N & W-facing slopes. (A very local, high altitude species, from the mountains where the Greek, Albanian & Macedonian borders meet. Scented spring-flowers in chrome-yellow to orange yellow. Tolerated our hot 1995 summer dry under glass but maybe best kept cooler.) . . . (15+) **E**
- 344.610 : CROCUS FLAVUS** (subsp. *flavus*) \* No data but the true wild plant - not the sterile 'Dutch Yellow'. Native to SE Europe into NW Turkey, its profuse fiery, orange-yellow flowers in spring make it one of the finest garden-plants in the genus. (15+) **B**
- 344.630 : CROCUS FLAVUS** from 'LACTEUS' (syn. *C. lacteus*) \* No data. From the old, long-cultivated stock, described in the early part of the 19th Century as *C. lacteus*, a cream coloured variant of *C. flavus*. A rather weak grower and not at all a common plant nowadays though a beautiful one, which is worth just as much effort to maintain as many newer species. . . . . (8) **E**
- 344.990 : CROCUS GARGARICUS** (subsp. *gargaricus*) \* Turkey, Mugla, Gok Tepe N of Mugla. 1500m. Heavy clay in openings among *Pinus*. (The type-race, only known from here & Kaz Da., is only very recently in cultivation. It has no stolons & a coarsely reticulate tunic. Seems tolerant of drying-off in summer. Very hardy & neat with rich orange-yellow flowers in spring.) (10+) **D**
- 345.200 : CROCUS GOULIMYI** \* Greece, Messinia, S of Kalamata. 300m. In humus among stones, under *Quercus*. (Local in nature but easy under glass in the UK. Prolific, distinct & beautiful pale lavender flowers on very long tubes in autumn.) . . . (10+) **B**
- 345.211 : CROCUS GOULIMYI** from 'MANI WHITE' \* From the fine white form of the type-race, which grows on the 'middle finger' of the Greek Peloponnese. This occurred in cultivation & is distinct from the wild *C.g. var. leucanthus*. . . . . (5) **D**
- 345.220 : CROCUS GOULIMYI** var. **LEUCANTHUS** \* Greece, Lakonia, SW of Monemvassia. Ex an S. Keeble coll. (From type-locality material of this recently described, geographically isolated race, which is evenly & consistently white-flowered.) (8) **E**
- 346.409 : CROCUS KOROLKOWII** \* No data. From a wide range of forms, derived from wild collections made by J. Ruksans & others in Uzbekistan and the adjacent republics. Varnished, pale yellow to deepest yellow flowers in spring, very variably marked outside with brown stripes, some with solidly mahogany-brown exteriors. Enjoys cold winters with a good summer rest. (8) **D**
- 346.900 : CROCUS KOTSCHYANUS** subsp. **CAPPADOCICUS** \* Turkey, Sivas, Ziyaret Tepe. c. 2000m. Open sites, in turf & among limestone rocks. (From type-locality colls. of the lovely central Anatolian race. Lilac, autumn flowers, beautifully veined with a darker shade. Not so vigorous as the type-race but not at all difficult & seldom seen.) . . . . . (10+) **C**

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

- 347.101 : CROCUS KOTSCHYANUS** subsp. **SUWOROWIANUS** \* Turkey, Rize, Ovit Dag. 2600-3000m. Dryish, stony ridges. (The most distinct, white-flowered race from high altitudes in NE Turkey into Georgia. Seldom seen in cultivation and not one of the easiest to grow. An alpine plant, adapted to considerable snow-cover in winter & to cold summers, it does not mind drying, as long as it is cool. Variable in size & markings, its creamy white flowers are usually delicately veined with violet) . . . . (15+) **D**
- 347.403 : CROCUS LAEVIGATUS** \* Greece, Evia, SE of Karistos. 200m. Among scrub in open, stony areas. (Endemic to Greece & its islands. Very variable autumn & winter flowers in white to lilac with diverse purple markings outside.) . . . . . (10+) **C**
- 347.500 : CROCUS LEICHTLINII** \* Turkey, Urfa, ESE of Siverek. Ex selected good turquoise forms of KPPZ 144. Limited to the volcanic area around Karaca Da. in SE Turkey : very cold in winter ; very hot & dry in summer. Spring flowers, usually in greyish blue, slatey outside, with deep yellow throats. A difficult, moisture sensitive plant & little known in cultivation.) . . . . . (5) **F**
- 347.601 : CROCUS LONGIFLORUS** \* Italy, Sicily, Madonie Nebrodi. Ex an A. Edwards coll. (Autumn-flowering from S Italy & Malta. Scented, pale to deeper purple flowers, often with dark veins on a buff ground outside. Quite easy under glass.) (10) **C**
- 347.610 : CROCUS LONGIFLORUS** \* No data. From a good, deep-coloured clone pollinated with one from Malta. . . . (10) **C**
- 347.800 : CROCUS MALYI** \* Croatia, Velebit Planina above Karlobag. 500m. Among limestone boulders. (A splendid endemic of the stark limestones of the Velebit range, rising sheer above the Adriatic coast. Certainly one of the finest of all species with big, pure-white flowers with yellow throats in late spring. A good grower, said to be excellent outside in sun in the UK.) . . (10) **C**
- 348.008 : CROCUS MEDIUS** Italy, Liguria, between Carcare & Ferrania. D.B. Stephens 98-47. (A very beautiful species allied to *C. nudiflorus* & *C. niveus*. Only known from a small area around the border of NW Italy & SE France, between 200m. & 1400m. Deep to pale lilac flowers, usually with darker, radiating lines, and much cut, scarlet styles in autumn.) . . . . . (8) **D**
- 348.800 : CROCUS NIVEUS** \* Greece, Messinia, S of Kalamata. 100m. Olive groves on limestone. (Magnificent, pure-white, autumn-flowering species of the S Peloponnese with gorgeous scarlet styles. A good grower in the bulb-frame or pots.) . . . . (10+) **C**
- 348.806 : CROCUS NIVEUS** \* Greece, Lakonia, N of Pigos Dirou. c.150m. N-facing bank. Ex D. Hoskins 98-2 (From a locality where the exquisite pale lilac-pink & bicoloured forms occur, so expect some fine variations.) . . . . . (10+) **D**
- 349.305 : CROCUS OLIVIERI** (subsp. *olivieri*) Greece, Arkadia, E of Tripoli. 750m. Ex a M. Harvey coll. (Spring-flowering & widespread (though, like many, rather local) at middle-altitudes through the Balkans & W Turkey. This type-race has bright orange-yellow flowers, usually without any exterior markings, other than some brown shading on the perianth-tube.) . . . . . (10+) **C**
- 349.610 : CROCUS OREOCRETICUS** \* No data. Autumn-flowers in mid- to deep lilac with purple veining & silvery to buff exteriors. A member of the *C. sativus* group from high up in the Cretan mountains. . . . . (10+) **C**
- 349.820 : CROCUS PALLASII** (subsp. *pallasii*) \* From several colls. made in SW Turkey & the Aegean islands. Pale lilac flowers with feathery, scarlet style branches, in autumn. Like others in the *C. sativus* group, it enjoys a hot, dry rest in summer.) (8) **C**
- 349.961 : CROCUS PALLASII** subsp. **TURCICUS** \* Lebanon. No further data. Ex C. Lovell & P. Bird 363 (The elegant but not well-defined, race from SE Turkey, Lebanon & Syria. More pointed segments & corms with long, fibrous necks . . . . . (8) **D**
- 349.962 : CROCUS PALLASII** subsp. **TURCICUS** \* Syria, Ras al Ma'Arra. 1700m. Ex R.& R. Wallis 96-40 . . . . . (8) **D**
- 350.001 : CROCUS PELISTERICUS** \* Greece, Pela, Kajmakcalan. 1700m. Wet mountain meadow on mica-schist. (Limited to a very few localities, usually above 1900m., on the Greek-Macedonian border. From a slightly lower altitude colony of this snow-melt alpine - may be more growable : keep it very moist all summer and dryish in winter. Near *C. scardicus* with striking flowers, described by Brian Mathew as having "an unusual intensity of colour, a deep rich violet with a very glossy surface.") . . (8) **E**
- 350.011 : CROCUS PESTALLOZAE** from **BLUE FORM** \* No data. Quite a strong-coloured form of this dainty, little species with bunches of small, neat, rounded blue-violet flowers with yellow throats, in early spring. Endemic to a comparatively small area around Istanbul in NW Turkey, this is usually white-flowered in wild populations. A good grower & a little sweetie. . (10+) **C**
- 350.800 : CROCUS RETICULATUS** (subsp. *reticulatus*) \* Croatia, Velebit Planina above Tucepi. 900m. Openings among scrub on limestone. (Local but widespread, spring-flowering species. Lilac, beautifully marked outside with very dark violet.) . . (10) **C**
- 350.809 : CROCUS RETICULATUS** (subsp. *reticulatus*) \* Moldova. Ex J. Ruksans colls. (A variable, very vigorous stock originally from Janis Ruksans' selections. Expect large, pale blue flowers strongly striped outside with deep purple.) . . . . . (10) **C**
- 351.000 : CROCUS ROBERTIANUS** \* Greece, Ioanina, W of Metsovo to Ioanina. 600m. Leafsoil under *Quercus* & *Ostrya* scrub. (Pale to deeper lilac-blue with a frilly, orange style. Brian Mathew rates it "one of the best of the autumnal species.") . (10) **D**
- 352.099 : CROCUS SEROTINUS** subsp. **SALZMANNII** \* Spain, Granada, Sierra Nevada below Penones de San Francisco. 2300m. Turf in NW-facing depression. (A strongly stoloniferous race from alpine-turf. We have not seen any other quite like it but the *C. serotimus* group is complicated. Small corms with couch-grass-like stolons. Profuse, pale lilac flowers in autumn.) . . . (15+) **C**

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- 352.400 : CROCUS SIEBERI** (subsp. *sieberi*) \* Greece, Crete, Hania, Omalos. Ex M. Jope 95-46. (The type-race, endemic to Crete and very rarely seen in gardens. Flowers in spring, always basically white but stained outside with purple brush-marks & with an orange or deep yellow throat - the invalid name *C.s. var. heterochromus* was apt. A rather difficult snow-melt plant.) . (10) D
- 352.455 : CROCUS SIEBERI** subsp. **ATTICUS** \* Greece, Atiki-Pireas, Pendeli E of Athina. c. 800m. Ex an M. Harvey coll. (A type-locality coll. of this race, seldom seen in cultivation & with a restricted distribution, almost confined to Attica. Distinct in its very coarse, *C. cancellatus*-like corm-tunics. Yellow-throated, pale to deep violet-blue flowers in spring.) . . . . . (10+) C
- 352.501 : CROCUS SIEBERI** subsp. **NIVALIS** \* Greece, Messinia, Langadas pass. 1600m. Moist areas under *Pinus*. Ex D.M. Hoskins 95-10. (The subspecies differs from *C. sieberi* subsp. *sublimis* in its glabrous, rather than pubescent throat.) . (8+) E
- 352.550 : CROCUS SIEBERI** subsp. **SUBLIMIS** \* Greece, Evia, Oros Dirfis. 1000m. Among bracken & in turf on open, limestone slopes. (From a type-locality coll. Lilac blue flowers with yellow throats as the snow melts in spring. The race from most of mainland Greece. Easier to grow than the Cretan type-race.) . . . . . (10+) C
- 353.120 : CROCUS SPECIOSUS** subsp. **XANTHOLAIMOS** \* Turkey, Sinop, SW of Kabali. 1350m. Ex AHEP 83-24 (Only known from *Abies* woodland in this wet area. More dainty than the type race with narrower leaves & smaller flowers, distinguished by their yellow, rather than white, throats, filaments & anthers. Otherwise, translucent, veined lilac-blue goblets in autumn.) . . (15+) B
- 353.413 : CROCUS TOMMASINIANUS** from 'PICTUS' \* Though this species, actually a rather local plant in the Balkans and not at all well-known botanically, can be a (usually welcome) weed in some British gardens, some of its variants are more restrained. This distinct form with white tips to the lilac flowers is both striking & not at all widely available commercially. . . . . (15+) B
- 353.420 : CROCUS TOMMASINIANUS** from A WIDE RANGE OF CULTIVARS \* Many richly coloured & rare . (15+) B
- 353.600 : CROCUS TOURNEFORTII** \* Greece, Rhodes. Ex an I. Barton coll. (A charming plant of the Greek islands. Ideal for the alpine-house. Lilac-blue flowers with yellow throats open flat & stay open at night during late autumn into winter.) . (10+) C
- 354.002 : CROCUS VELUCHENSIS** \* Jugoslavia, Serbia, Kosovo, above Vratnica. 800m. Leaf-soil over clay in dense *Fagus* woods. (A splendid, woodland form from the area where Albania, Kosovo & Macedonia meet. Large, lavender-blue flowers shading to darker, violet tips, in spring. Likes it cool & not too dry. Does well here in a pot but may be just as good outside.) . . (10+) B
- 354.205 : CROCUS VERNUS** (subsp. *vernus*) \* Slovenia, near Novo Mesto. Ex W. McLewin 98-03. (The wild, central European ancestor of many hybrids. The eastern populations, once distinguished as *C. scepusiensis* and *C. heuffelianus*, have their large, lavender flowers tipped with darker purple 'Vs', though some Slovenian colonies are mainly white.) . . . . . (15+) B
- 354.409 : CROCUS VERNUS** subsp. **ALBIFLORUS** \* Switzerland, Jura, Col du Marchzirug. 1400m. (Very much a snow-melt species from high-alpine turf. Usually with smaller, white flowers but sometimes purple or striped. Not easy to grow.) (15+) C
- 354.600 : CROCUS VERSICOLOR** \* France, Alpes de Haute Provence, Col de la Colle St. Michel. 1400m. Stony, S-facing slope. (Endemic to SE France, just crossing into Italy. Elegant white or pale lilac flowers, delicately feathered outside, in spring. Usually quite late with us, like the related *C. malyi*, but in 1998 it flowered very early - it all depends on the winter weather) . . . (8) C

## Cyclamen : a fine range of *C. repandum* forms this year

Few genera inspire such devotion as cyclamen. Their flowers & beautiful foliage can be enjoyed almost throughout the year, though, of course, their peak seasons for flowering are spring & autumn. We have again a reasonable range of seed available this season but many are in extremely small quantities, so please do not be disappointed if some sell out quickly. Seed from selected flower & leaf forms will be found at the end of the list in the section dealing with garden hybrids & selections. Only the basic wild species, if possible from material with field data, are here. *C. hederifolium*, *C. coum* & a few others are, of course, reliable garden-plants but the majority can be grown to perfection, in the UK, only under glass, safest kept frost-free. All, including *C. rohlfsianum*, will take very brief periods of

light frost but some measure to prevent prolonged or severe freezing is only common-sense. Likewise, regarding extremely high summer temperatures : shading & preventing dehydration when dormant are sensible also. Sowing seed straight from the capsule is a counsel of perfection. Reasonably fresh seed should be perfectly satisfactory. Like most of the species in this list, these germinate at low-temperatures & should be sown in late summer or autumn. Soaking seed in hot (not boiling) water & leaving for 24 hours at room-temperature before sowing appears to aid germination. Always keep pots of ungerminated seed (they will appear in time) and guard against mice, which love them as much as we do. The best references are C. Grey-Wilson's monographs on the genus (1988 & 1997).

- 358.500 : CYCLAMEN BALEARICUM** \* Spain, Mallorca, N of Andratx. 350m. In humus among *Quercus*. Ex a D.M. Hoskins coll. (Delicately pencilled, white flowers in spring. Likes a lot of shade, resents overdrying in summer & is best frost-free.) (15+) B
- 359.003 : CYCLAMEN CILICIUM** \* Turkey, Konya, NW of Bozkir. 1100m. Base of N-facing, limestone cliffs. (Dainty, autumn-flowering species with pale pink flowers & small, rounded leaves. Hardy in a well-drained, sunny site in the UK.) . . . . (15+) B
- 339.020 : CYCLAMEN CILICIUM : WHITE, PINK NOSE** \* No data. Ex a P. Davis coll., given to us by Ken Aslet. . (10) C
- 360.009 : CYCLAMEN COUM** (subsp. *coum*) \* Turkey, Yayladagi. (Southern race from near the Syrian border) . . . . . (8) E



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

- 360.509 : CYCLAMEN COUM subsp. ELEGANS** Iran, Mazandaran, Sari. 120m. Deciduous woodland. (New wild coll.) (8) F
- 361.009 : CYCLAMEN CRETICUM \*** Greece, Crete, S of Kolimbari. Ex a M. Jope coll. (We have not listed seed from this relative of *C. repandum* for a long time. Not easy to maintain and persuade to set seed, it needs a lot of shade & is safest grown frost-free in the UK. Cordate, dull grey-green leaves usually with a mottled band of silvery grey. White flowers in spring.) . . . . (10) E
- 361.510 : CYCLAMEN CYPRIUM \*** No data. Fragrant, white flowers with auricles & magenta blotches around their mouths, from late autumn into winter. Distinctive, grey-marbled, dull-green leaves, crimson below. Best grown frost-free in the UK.) (15+) C
- 363.003 : CYCLAMEN GRAECUM \*** Greece, Lakonia, Agios Nikolaos NW of Githio. 500m. Steep slopes under olives. (From several forms, originally selected in the wild for the outstanding patterns & shapes of their leaves.) . . . . . (15+) C
- 363.017 : CYCLAMEN GRAECUM \*** Greece, Messinia, SW of Hora. Ex an H. & I. Barton coll. (From two fine clones selected by Ivor Barton in 1980, both with excellent foliage and one with particularly richly coloured, carmine-pink flowers.) . . . (10+) C
- 363.018 : CYCLAMEN GRAECUM \*** Greece, Attiki, Imittos (Hymettus). (From another fine clone.) . . . . . (10+) C
- 363.020 : CYCLAMEN GRAECUM subsp. ANATOLICUM \*** Greece, Rhodes. Ex a C.C. Mountfort coll. (Originally from a much coveted, very dwarf form with exquisite, tiny leaves, grown by John Blanchard. Will vary somewhat from seed. Many growers are not comfortable about the inclusion of the variable Rhodes populations under this Turkish subspecies.) . . . . . (8) D
- 363.099 : CYCLAMEN GRAECUM \*** No data. From a very wide range of this magnificent, autumn-flowering species, variable in colour from carmine-pink to shell-pink, in time of flowering (from August to November in the UK) &, of course, in size, shape & markings of the leaves. Well worth growing for the last quality alone. Safest frost-free, with a warm summer-rest.) . . (20+) B
- 363.100 : CYCLAMEN GRAECUM f. ALBUM \*** Data as for 363.003. Pure white ex the original E. & R. Franke coll. . . (10) D
- 364.003 : CYCLAMEN HEDERIFOLIUM \*** Greece, Evia, W of Karistos. 200m. Among scrub on schist. (A distinct, large-leaved, large-flowered race, resembling *C. africanum*. Long, late flowering-season, well into November under glass with us.) (15+) B
- 364.009 : CYCLAMEN HEDERIFOLIUM** Greece, Lakonia, Oros Taigetos, Profitis Ilias above Paleopanagia. 1500m. Steep, rocky slopes in deciduous woodland. Ex D. Hoskins 95-14. (A hardy form from a high altitude Peloponnese locality.) . . . . (15+) B
- 364.099 : CYCLAMEN HEDERIFOLIUM \*** No data. From a wide range of cultivated forms of this incomparable, autumn-flowering species, the hardiest & best garden-plant of all, which will establish & sow itself in most of the UK. Pink flowers. . . . (20+) A
- 364.100 : CYCLAMEN HEDERIFOLIUM f. ALBUM \*** No data. From white-flowered plants. Variable foliage. . . . (20+) B
- 364.200 : CYCLAMEN HEDERIFOLIUM var. CONFUSUM** Greece, Crete, Topolia. Between limestone rocks, under *Pinus brutia*, on steep slopes. ex M. Jope 95-038. (Recently described. We listed seed from the the original discovery under *C. hederifolium*, population ref. 364.050, from Melvyn's, 1995 coll., before it had been seen in flower in 1996. This widespread species is extremely local in Crete and occurs in this very large-leaved, scented, tetraploid race. May not be so hardy as some.) . . . . . (10+) D
- 364.520 : CYCLAMEN INTAMINATUM \*** No data. Distinct variant with dark, unmarked leaves, like a plain-leaved *C. coum*. Dainty, delicately veined, white flowers in early autumn. Usually a more enthusiastic grower than other forms of this. (20+) B
- 365.010 : CYCLAMEN LIBANOTICUM \*** No data. Most sumptuous of the spring-flowering ones with large, pale-pink flowers, distinctively marked with crimson. We have seen it grown successfully outside in the UK but it is best under glass. . . (15+) C
- 366.500 : CYCLAMEN PERSICUM \*** Lebanon, S of Tripolis. (From material we collected in the 1960's in the Lebanese hills, where it fills the dry-stone walls of abandoned terraces with a profusion of white & pale pink, crimson-nosed flowers.) . . . . (15+) C
- 366.510 : CYCLAMEN PERSICUM \*** Greece, Rhodes. Ex an E. Sewell coll. (From an excellent form, dwarfer & altogether more compact than usual. This flowers profusely and always excites attention when exhibited.) . . . . . (10+) C
- 366.511 : CYCLAMEN PERSICUM \*** Greece, Rhodes, Filerimos, SW of Rodos. . . . . (10+) C
- 366.512 : CYCLAMEN PERSICUM \*** Cyprus, Paphos. . . . . (10+) C
- 366.551 : CYCLAMEN PERSICUM f. PUNICEUM \*** No data. From an exceptional crimson-pink form, grown by John Blanchard's father under the barely decipherable label 'Karpas'. It has been further selected by Peter Moore as 'Tilebarn Karpathos', though there was no other indication that the original came from that island. A lovely, deep, dusky colour.) . . . . . (10+) C
- 366.552 : CYCLAMEN PERSICUM f. PUNICEUM \*** No data. From a corm collected by Bertie Blount, almost certainly in Syria. Not quite the same shade as the preceding but a rich, deep rose-pink. Scented & with beautifully marked leaves. . . . (10+) C
- 367.909 : CYCLAMEN REPANDUM (subsp. repandum) \*** Italy, Sardinia, Monte Limbara. (Carmine-pink type-race.) . (10) D
- 367.990 : CYCLAMEN REPANDUM f. ALBUM \*** From pure whites without pink noses. . . . . (10) E

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- 368.000 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** \* Greece, Lakonia, Oros Taigetos, between Tripi & Langadas. 1000m. Leafsoil under *Platanus*. Ex D.M.Hoskins 93-20 . . . . . (10) D
- 368.002 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** \* Greece, Lakonia, Parori near Sparti. 250m. Beneath *Quercus* and *Buxus*, in humus. Ex a W.K.Aslet coll. . . . . (10) D
- 368.003 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** \* Greece, Lakonia, Oros Taigetos, above Paleopanagia. 1400m. In humus under *Platanus*, *Abies* & *Pinus*. (From a clone with foliage, speckled all over with white, but this population, from a much higher altitude than that usually recorded for this subspecies, has extremely variable leaf-markings, many like the type-race. Flowers, however, are consistently the pale-pink with red noses to be expected in most Peloponnese *C. repandum*.) . . . (10) D
- 368.010 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM** \* Greece, Kardamili. 30m. Ex D.Hoskins 93-28 (10) D
- 368.100 : CYCLAMEN REPANDUM subsp. PELOPONNESIACUM f. VIVIDUM** \* Greece, Lakonia/Arkadia, Oros Parnonas. c.500m. (Extremely variable in foliage & flower shape but in colour all are deep, carmine-pink.) . . . . . (10) E
- 368.200 : CYCLAMEN REPANDUM subsp. RHODENSE** \* No data. A distinct enough island-race, endemic to Rhodes. Leaves irregularly splashed with greyish white & white (or very pale pink) flowers with pink 'noses'. Not a vigorous plant. . . (10+) E
- 369.000 : CYCLAMEN ROHLFSIANUM** \* Libya, Cyrenaica, Benghazi to Jebel Akhdar. 200m. Among scrub in limestone pockets. (Pale to deep pink flowers with projecting cones of anthers in autumn. Beautiful rounded leaves. Must be frost-free.) . (10+) E
- 384.449 : DAPHNE OLEOIDES** (subsp. *oleoides*) \* Greece. No further data. Dwarf, grey-leaved evergreen shrubs with creamy flowers in spring, followed by bright orange-red fruits. Suited to a dry, sunny site on a raised bed or rock-garden. . . . (10+) B
- 385.050 : DAPHNE PONTICA** \* No data. Glossy evergreen foliage. Scented, spidery, yellow-green flowers in spring. . . . (8) A
- 414.005 : DIPCADI SEROTINUM** \* Spain, near Bornos. Ex an R.& R. Wallis coll. (A strange bulb of sombre attraction, locally distributed in dry, rocky sites in SW Europe & NW Africa. In early summer, stems, about 30cm high, carry one-sided racemes of pendant greenish bells flushed with peach and brown shades. Seldom seen but not difficult in the bulb-frame.) . . . . . (10+) C
- 424.127 : DRACUNCULUS VULGARIS** (var. *creticus*) Greece, Crete, W of Rodopos, Nopigia. M. Jope 2027. (A wild coll. from the Cretan form of this spectacular aroid, up to 1m. high, with pedately divided foliage & huge, fleshy, brown-purple spathes on maroon-spotted stems. This island race usually has the large divided leaves spectacularly marked with oblique silver slashes. Usually possible in the open garden in the S of the UK & arresting in a hot site but safest in a bulb-frame in cold areas.) . . . . . (8) D

## Fritillaria : an ever-expanding range of seeds

Possibly the genus most esteemed by the more specialised of British bulb-enthusiasts at present. Fashions change. Reginald Farrer, writing in 1913, after conceding it is a "lovely race", condemns them as "very miffy or mimpish or both, and the family all round has a bad character...not to mention that an enormous number have more or less stinking bells of dingy chocolate and greenish tones, which often appear transfigured by the enthusiasm of those who desire to get rid of them..." Perhaps they were beyond his capabilities as a grower. Their "miffiness" is one of their charms adding stimulation to the challenge of their successful cultivation. Most, in fact, are not at all difficult to grow in standard bulb-frame conditions or, perhaps better, in pots in a well-ventilated, unheated greenhouse in the UK. Few, however, are easy in the open garden in Britain. Of those listed here, *F. messanensis* subsp. *gracilis*, *F. pallidiflora*, *F. pontica*, *F. thessala ionica*, perhaps *F. acmopetala* & certainly the native *F. meleagris* should be growable outside in most UK gardens. Most species grow in comparatively small populations in very limited areas in the wild

and enthusiasts should make every effort to maintain fertile stock from seed in cultivation. As with *Crocus* & *Narcissus*, we are progressing towards our aim of establishing authentic parent-stocks of all species, if possible raised from wild seeds, for the production of hand-pollinated seed for our lists. This season almost all listed are cultivated and, with the help of several other enthusiasts, we have a more comprehensive range than ever before. While specialists await a modern monograph from Martyn Rix, it is possible that popular interest in this genus will be stimulated by the recent publication of "The Gardener's Guide to Growing Fritillaries" by Kevin Pratt & Michael Jefferson-Brown. This is primarily aimed at presenting some more widely cultivated representatives to the general gardener. It will doubtless achieve a broad circulation & may introduce the genus to many further growers. Some names in this book are not used here, as we generally follow the nomenclature of the Rix accounts in the standard floras for Europe, Turkey & Iran. "The Bulb Book" by Rix & Phillips provides a remarkably complete photographic record with brief, accurate notes.

- 490.000 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) \* Turkey, Antalya, Gullukdagi, NW of Antalya. 800m. Grassy & stony areas among scrub. (Round-shouldered, elegantly waisted bells, in yellow-green with brown central shading.) . . (15+) B
- 490.008 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) \* Syria, Djebel Nusairi. 950m. Ex R.& R. Wallis 96-24. (15+) C
- 490.009 : FRITILLARIA ACMOPETALA** (subsp. *acmopetala*) \* Syria, N of Qneyeh. 310m. Ex R.& R. Wallis 96-8. (15+) C
- 490.011 : FRITILLARIA ACMOPETALA from DARK FORMS** \* No data but mainly derived from material collected by Bob & Rannveig Wallis in Kahramanmaras, SE Turkey. Comes fairly 'true' from seed & should produce some fine things. . . . (15+) C
- 490.800 : FRITILLARIA ALFREDAE** subsp. *GLAUCOVIRIDIS* \* Turkey, Adana, above Hasanbeyli. 1100m. . . . . (15+) C

A : \$2.00 ; £1.50 ; DM4,- ; FF14.- C : \$4.00 ; £2.50 ; DM7,- ; FF23.- E : \$7.00 ; £4.50 ; DM12,- ; FF41.-  
 B : \$3.00 ; £2.00 ; DM5,- ; FF18.- D : \$5.00 ; £3.50 ; DM9,- ; FF32.- F : \$9.00 ; £6.00 ; DM16,- ; FF55.-

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

- 490.801 : **FRITILLARIA ALFREDAE** subsp. **GLAUCOVIRIDIS** \* Turkey, Kahramanmaras, N of Yenice kale. 600m. Openings in dense *Quercus* scrub under *Pinus*. (Seedlings raised from a single capsule we collected in 1994 have proved to be robust, vigorous forms of this, most graceful & beautiful species - elegant, yellow-green flowers with a glaucous sheen. Endemic to this corner of Turkey near the Syrian border & replaced there by *F.a.* subsp. *platyptera*. Not difficult in a bulb-frame in the UK.) . . . (15+) C
- 491.100 : **FRITILLARIA ARGOLICA** \* Greece, Argolida, near Ermioni. Ex an R. & R. Wallis coll. (Recently acknowledged taxon, supposedly a hybrid or intergrade between *F. graeca* & *F. rhodocanakis* & more or less intermediate in appearance.) (10+) D
- 491.101 : **FRITILLARIA ARGOLICA** \* Greece. Ex V. Horton 1415 (Originally collected as a hybrid between *F. graeca* & *F. rhodocanakis*, this appears to fit in here, though it is closer to *F. rhodocanakis* than to *F. graeca* or the 491.100 coll.) (15+) D
- 491.102 : **FRITILLARIA ARGOLICA** \* Greece, Argolida, Poros. 200m. Olive-groves. Ex a M. Harvey coll. . . . . (10+) D
- 491.150 : **FRITILLARIA ARIANA** Afghanistan, Herat, N of Herat. 600m. Grassy slopes. (A fine coll. by a Turkmen botanist from this NW corner of Afghanistan, bordered by Turkmenistan & Iran. A little-known species in subgenus *Rhinopetalum*, growing in sandy steppe, sometimes even in unstable dunes, which just enters Iran near here and extends NW to near Ashkhabad. Distinguished from *F. gibbosa* by its unspotted flowers, narrower basal leaves & largely glabrous stems. A small plant is illustrated in Rix & Phillips' "The Bulb Book" but it can grow up to about 20cm. high with about 12, flat, horizontal, dark-centred, soft-pink flowers with deeply impressed nectaries. A very beautiful & desirable species but most unlikely to be easy to cultivate.) . . . . . (10+) E
- 492.101 : **FRITILLARIA BITHYNICA** \* Greece, Samos, Ambelos. 700m. Under *Castanea* in leaf-soil on mica-schist. Ex a D.M. Hoskins coll. (A delightful little plant with big, glaucous, yellow-green bells, yellower inside. The island, Samos & Khios, races are little-known but this is very fine & compares very favourably with any we have seen from mainland Turkey.) . . . . . (15+) C
- 492.105 : **FRITILLARIA BITHYNICA** \* Turkey, Denizli, S of Denizli. 1700m. Sparse *Pinus* woods on limestone. Ex R. & R. Wallis 90-38. (Described as a good, dwarf, yellow form. Unwinged capsule but confirmed by Martyn Rix as *F. bithynica*.) . . (15+) C
- 492.106 : **FRITILLARIA BITHYNICA** \* Turkey, Mugla. Ex an R. & R. Wallis coll. (From a distinctly green form.) . . . (10+) C
- 492.200 : **FRITILLARIA BUCHARICA** \* No data. Beautiful Central Asian, distributed from NE Afghanistan to the Pamir-Alai at up to 2400m. Up to 10, open, green-tinted, white bells on 20cm. stems. No great trouble in the bulb-frame in the UK. (15+) C
- 492.200 : **FRITILLARIA BUCHARICA** \* Tadjikistan, E of Duschanbe, Romit. (From a particularly fine population of this very beautiful Central Asian, distributed from NE Afghanistan into the Pamir-Alai at up to 2400m. Stems of about 30cm. carry 10 or more, green-tinted, white, wide-open bells with dark-tinged nectaries. No great trouble in the bulb-frame in the UK.) (15+) C
- 492.400 : **FRITILLARIA CARICA** (subsp. *carica*) \* Greece, Samos, Ambelos. 950m. Under *Pinus* on mica-schist. Ex a D.M. Hoskins coll. (One of the most charming of this group. Greyish leaves & dark nectaries inside its clear-yellow bells.) (15+) C
- 492.401 : **FRITILLARIA CARICA** (subsp. *carica*) \* Turkey, Mugla, Gok Tepe. 1500m. Under *Pinus* on limestone. . . (10+) C
- 492.402 : **FRITILLARIA CARICA** \* Turkey, Burdur, W of Yesilova. 1280m. Loose serpentine talus of open slope. (A fine form, growing in a precisely similar habitat with the same serpentine-associates as *F. carica* subsp. *serpenticola*.) . . . . . (10+) D
- 492.405 : **FRITILLARIA CARICA** (subsp. *carica*) \* Turkey, Mugla, SE of Fethiye. 1250m. Under *Cedrus* on limestone. Ex R. & R. Wallis 90-21. (An intriguing little greenish yellow and brownish yellow variant from Baba Dag.) . . . . . (10+) C
- 492.700 : **FRITILLARIA CAUCASICA** \* Turkey, Kars, W of Sarikamis. 2000-2200m. Heavy, peaty soil in open, stony areas of coniferous zone. (Not often seen in cultivation, the species extends from this cold NE corner of Turkey across Transcaucasia into NW Iran. Seldom seen in cultivation but a fine thing with quite large, conical, glaucous purple-brown bells.) . . . . . (10+) E
- 493.000 : **FRITILLARIA CONICA** \* Greece, Messinia, S of Pilos. 200m. Edge of *Quercus* scrub on open limestone slope. (One of the more robust in the group of E Mediterranean, yellow-flowered species. Up to 25cm. high with large bells & rich-green, glossy foliage. Extremely local in nature but not at all difficult to grow in the alpine-house or bulb-frame in the UK.) . . . . . (15+) C
- 493.305 : **FRITILLARIA CRASSIFOLIA** (subsp. *crassifolia*) \* Turkey, Erzurum, Kop Dag. 1700m. Ex R. & R. Wallis 93A-17. (The type race has a wide but very local distribution across Turkey from Denizli in the W to Erzurum in the E. Always in isolated sites & always growing in steep, loose, unstable talus-slides. In general, a dwarf plant with fleshy, twisted, greyish foliage & big, greenish yellow, brown-chequered bells. This is a very fine form but the least easy to grow of the three listed here.) . . (15+) D
- 493.307 : **FRITILLARIA CRASSIFOLIA** (subsp. *crassifolia*) \* Turkey, Kahramanmaras, Ahir Dag. Ex R. & R. Wallis 93-25. (A southern population from well within the distribution of the allied *F. hermonis* subsp. *amana*, which oddly does not seem to occur on this mountain. A particularly dwarf form with somewhat yellower flowers than the preceding two. All are distinct.) (15+) D
- 493.500 : **FRITILLARIA CRASSIFOLIA** subsp. **KURDICA** \* Turkey, Van, NNW of Baskale. 2800m. Open, stony slopes. (In this site, very variable in the colour & markings of its plump, chequered bells, striped & tinted in red-brown to yellow-green. Seed from red forms, selected as R. & R. Wallis 87-27, & a fine, green-striped form selected by ourselves under 6526 in 1985.) . (15+) C

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- 493.503 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** \* Iran, Kordestan, S of Orumiyeh. 1980m. Rocky, S-facing slope. (An extremely robust form of this variable race with up to four, brown-chequered bells on each 20cm. stem.) . . . . . (15+) C
- 493.505 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** \* Turkey, Van, E of Bahcesaray. 2350m. Ex R.& R. Wallis 87-27. (From a fine, rich red form, selected in the wild in this Mecca for bulb-enthusiasts on the shoulders of Artos Dag.) . . . (10+) D
- 493.506 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** \* Turkey, Van, E of Bahcesaray. 1900m. Ex R.& R. Wallis 87-31. (From an outstanding dark form, selected in the wild in the same area of SE Turkey by Bob & Rannveig.) . . . . . (10+) D
- 493.507 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** \* Turkey, Hakkari, Esendere. 1700m. Ex a Z. Zvolanek coll. (From right against the Iranian border and showing a range of variation somewhat similar to the population 493.503.) . . . . . (15+) B
- 493.520 : FRITILLARIA CRASSIFOLIA subsp. KURDICA** \* Turkey, Siirt, W of Sason, Halkis Da. 1900m. Rocky summit area. Ex a N. Stevens coll. (An interesting collection from a long way to the W of the recorded range of this variable subsp. but it keys out as this & it seems best to place this under it for the moment. "Brownish, tessellated bells - not unlike *F. montana*", writes Norman. Rannveig Wallis, growing an E.& R. Franke coll. from this mountain, describes it as a "big, dark bell".) . . . . . (10) E
- 494.000 : FRITILLARIA DAVISII** \* Greece, Lakonia, NW of Pírgos Dirou. Low, limestone hills. (Endemic to the S tip of the Mani peninsula & close to *F. graeca* but with shiny bright-green leaves & no green stripes on its tubby, brown-purple chequered bells. Although one of the most localised species in nature, it has proved to be one of the easiest in cultivation.) . . . . . (15+) B
- 494.400 : FRITILLARIA DRENOVSKII** \* Greece, Drama, Falakro above Volokas. 1500m. Among sparse *Pinus* in subalpine meadow. (One of our favourite species. Slender & elegant, with thin, greyish leaves on 15-20cm. stems. Narrow brown bells, varying in this site from dark chocolate to honey-brown shades. Endemic solely to the Greek-Bulgarian border-ranges.) . . . . . (15+) E
- 494.604 : FRITILLARIA EDUARDII** \* Tadjikistan, E of Duschanbe, Romit. (Distributed at about 2000m. in & around Tadjikistan, this is a distinct, dwarfier relative of *F. imperialis*, flowering much earlier in spring. At about 40cm. (though we are told it can reach 1m.), it is generally even more compact than the more western *F. raddeana*. The pendant bells look outwards or upwards & are more open & broader than those of *F. imperialis*. They also reputedly lack the foxy smell. Their widespread segments are often in what Alan Edwards describes as 'barley-sugar' colour : a soft yellow-orange, though we believe they can vary to deeper reddish shades. We have never seen it in flower & it remains a rare plant in cultivation in the UK.) . . . . . (10) E
- 494.800 : FRITILLARIA EHRHARTII** \* Greece, Evia, E of Karistos. 200m. Seasonally damp, N & W-facing sides of gully on mica-schist. (A beautiful native of S Euboea & the neighbouring Kiklades. Big, bloomy, yellow-tipped, grape-black bells glow to ruby in the evening sun. Stout 20-30cm. stems can carry up to 6 flowers. Not often seen but easy enough here under glass.) . . (15+) C
- 494.811 : FRITILLARIA EHRHARTII from YELLOW FORM** \* Field data as above. From a single clear-yellow clone we found here in April, 1985. We have grown several hundred seedlings from this to flowering & so far have had two more yellows. These have been back-crossed with the original clone but we have not yet flowered these seedlings so can give no guarantees. (10) E
- 495.200 : FRITILLARIA EPIROTICA** \* Greece, Ioanina, Oros Smolikas E of Konitsa. 2300m. Loose, stony, E-facing, serpentine slopes. (Fat, purple-brown bells, dimly tessellated with yellow-green, sit almost on the ground, where the prostrate, thick, grey-green leaves twist & curl. From the type-locality, where the E.K. Balls 3434 coll. was made in 1937. This very dwarf, alpine species is almost exclusively endemic to the serpentine screes around the summit of Smolikas. One of the most desirable of all species, both exquisite and appropriate grown in an alpine-house pan, it is still little-known in cultivation & should be cherished.) . . (10+) E
- 495.700 : FRITILLARIA FORBESII** \* Turkey, Mugla, Baba Da. SE of Fethiye. 850m. Humus beside boulders in shade of *Pinus*. (From near Forbes' 1842 type-locality & a little different to the serpentine populations on the Marmaris peninsula. Lime-tinged, yellow bells. Near *F. carica*, with which it grows, but taller, at 20cm. or so, & with narrow, linear, bright-green leaves.) (10+) D
- 495.853 : FRITILLARIA GIBBOSA** Iran, Zanjan, NW of Zanjan. 1250m. Sandy clay & gravel hills in river valley. (A fresh coll. of this exquisite and desirable pink-flowered species which is such a challenge to grow well. Slower than some from seed & may be best started into growth later in autumn. It is an early-flowering plant of dry areas with an extreme continental climate : very cold in winter and very hot in summer, though its bulbs can grow deeply. Mottled pink-alabaster flowers on 20cm. stems.) . (10+) E
- 496.006 : FRITILLARIA GRAECA** (var. *graeca*) \* Greece, Attiki, Imittos (Hymettus). Ex a R.& R. Wallis coll. (Described by Rannveig as particularly good black form with a prominent green central stripe down the centre of the segments.) . . . (15+) C
- 496.020 : FRITILLARIA GRAECA** (var. *graeca*) \* No data. From several colls. on Parnes, etc. Most will have single, broadly campanulate bells on stems of about 15cm. Purple-brown segments with distinct, neat, yellow-green fascia. . . . . (15+) B
- 496.950 : FRITILLARIA HERMONIS** (subsp. *hermonis*) \* Syria, Mt. Hermon, NE slopes between Quatana & Barqash. 1450m. From selected clones under R. & R. Wallis 96-45. (From several selections, varying from mainly red with a slight green tessellation to grey-green with some red chequering. Before Bob & Rannveig's recent investigations, this dwarf type-race, only known from high on Mt. Hermon, was little-known botanically & unknown in cultivation. The range of variability illustrated by their collections may have made the botanical situation even muddier but it has certainly produced some horticulturally distinct plants.) . . . (15+) D
- 497.000 : FRITILLARIA HERMONIS subsp. AMANA** \* Syria, NW of Rankous to Sarghya (Antilebanon). 1850m. Scree. Ex R.& R. Wallis 96-39. (A few seeds available from these Syrian colls., which are distinct from the Turkish populations.) . . . (10+) D

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

- 497.001 : **FRITILLARIA HERMONIS** subsp. **AMANA** \* Syria, above Bludan. 1900m. Scree. Ex R.& R. Wallis 96-43. (10+) **D**
- 497.002 : **FRITILLARIA HERMONIS** subsp. **AMANA** \* Syria, near Rankous. 1800m. Ex R.& R. Wallis 95-7. . . . . (10+) **D**
- 497.003 : **FRITILLARIA HERMONIS** subsp. **AMANA** \* Turkey, Hatay, E of Belen. 1250m. Among *Quercus* scrub on steep, limestone slopes. (Very different to much Syrian & Lebanese material which must be assigned to this variable taxon - a group again in need of review. Large, elongated green bells tessellated or marked with purple-brown & with clear green fascia.) . . (10+) **C**
- 497.004 : **FRITILLARIA HERMONIS** subsp. **AMANA** \* Turkey, Kahramanmaras, SE of Goksun. 1550m. NE-facing limestone slope. (A clone ex Horton & Stevens 2333 has been named 'Goksun Gold' but we have now flowered a batch of seedlings from a small wild seed-collection made with Norman Stevens in 1994 on the same site & find they are all yellower than those we have seen in other localities. We are obviously dealing with a geographical variant so expect yellows to yellow-greens.) . . . . . (10+) **E**
- 497.005 : **FRITILLARIA HERMONIS** subsp. **AMANA** \* Lebanon, above B'Shari Cedars. 2000m. Terra rossa on limestone outcrops. (Ex ACW 963 & a W.K. Aslet coll. from the same area, distributed in the 1960's as *F. crassifolia*. A neat little plant with dimly chequered, green bells, closer to some Syrian populations than to the larger, northern, Turkish plants.) . . . . . (10+) **D**
- 497.020 : **FRITILLARIA HERMONIS** subsp. **AMANA** \* No data. From several colls. of this fine member of the *F. crassifolia* group, including the E.K. Balls type. Centred on the Amanus range in S central Turkey, S into Syria & the Lebanon, at about 1500m. Long, greenish or yellowish bells, tessellated with brown purple & with clear, green fascia. Stems of about 20cm. . . . . (15+) **B**
- 497.301 : **FRITILLARIA IMPERIALIS** Iran, Esfahan, SE of Khonsar. 2600m. Sandy clay slopes in steep-sided gully. (The beautiful Crown Imperial, the tallest & perhaps the most spectacular species in the genus, distributed from SE Turkey, where it is very local, through W Iran. Heads of huge, richly coloured, amber-orange bells on stems 1m. or more in height.) . . . . . (15+) **C**
- 497.310 : **FRITILLARIA IMPERIALIS** \* No data. From vigorous, old, cultivated stock. . . . . (15+) **A**
- 497.660 : **FRITILLARIA KARELINII** Turkmenistan, Kara Kum, N of Nebit Dag. 600m. Grassy hillsides. (We list this pink-flowered member of subgenus *Rhinopetalum* under the name received. The species is obscure & was originally described from N of the Caspian, extending in a curve into Turkmenistan. It may or may not be distinct from *F. gibbosa*, from which it is apparently distinguished by its narrower flower-segments &, most strikingly, by its wingless seed-capsules. We have a little, excellent wild-collected seed but no capsules! Unknown in cultivation & from a seldom-visited locality. Probably difficult.) . . . . . (10+) **F**
- 497.700 : **FRITILLARIA KITTANIAE** \* Turkey. Ex O. Sonderhausen 1310 & 1318. (From type-locality colls. made on Ole Sonderhausen's last trip. This is an odd, variable entity, like several recently described species doubtfully deserving specific status. Thought by some to be intermediate between *F. carica* & *F. pinardii*, Henrik Zetterlund thinks it may be derived from *F. carica* & *F. elwesii*, resembling the former in shape & size but with the latter showing in the green & brown stripes, which can be most striking in some clones. Well worth selecting from seed, though a proportion will be more or less plain *F. carica*.) . . . (10+) **E**
- 497.905 : **FRITILLARIA LATAKIENSIS** \* Turkey, Hatay, Yayladag. Ex R.& R. Wallis 93-17. (Mainly native to the oak scrub area of the adjacent NW corner of Syria, this species, considered to be allied to both *F. assyriaca* & *F. acmopetala*, is little-known in cultivation and in the wild. Slim untessellated purple-brown bells, yellow-green inside, on narrow-leaved, 20cm. stems.) (10) **E**
- 498.510 : **FRITILLARIA LUSITANICA** \* Spain, Granada, Sierra Nevada, below Penones de San Francisco. 2400m. Open dryish, NW-facing slope. (Seed from Norman Stevens of this superlative high altitude form. We first saw in the wild in 1970 but have never located it since, when we have been in the area to collect seed. In the 1970's, Paul Furse told us that the name "*F. nevadensis*" could be applied to this population but we have never been able to trace its origin or validity. Several, very large, elongated, grey-green bells variably striped & chequered with maroon on 15cm stems with narrow, curling, greyish leaves.) . . . . . (10) **E**
- 499.010 : **FRITILLARIA MELEAGRIS** \* No data. An elegant, easy garden-plant in the UK, often sowing itself. Native to S England across central Europe to S Russia, often in the flood plains of rivers. Seed from both purple-chequered & white forms. (20+) **A**
- 499.401 : **FRITILLARIA MESSANENSIS** (subsp. *messanensis*) \* Greece, Pieria, Oros Olimbos above Vrondou. 1000m. Steep, stony, limestone slopes. (The classic form of this species with the upper leaves in a whorl of 3 above the nodding bells, variably chequered with brown-purple & expanding below their elegant, pinched-in waists. Not nearly so easy to grow as the northern *F. messanensis* subsp. *gracilis*, this is the first time we have listed seed since our wild colls. of the 1980's.) . . . . . (15+) **D**
- 499.450 : **FRITILLARIA** aff. **MESSANENSIS** (subsp. *messanensis*) \* Croatia, Biokovo Planina, above Tucepi. 900m. Among limestone boulders. (A most intriguing plant raised from a small seed collection we made in 1990, under our field number 11944. Subsequently misidentified by us and listed once as *F. montana*, under the population ref. 500.301. This it certainly is not but neither is it quite right for anything else. It actually most resembles the stock we have of the Greek *F. mutabilis*. A fine thing, variable in the maroon chequering on its big bells with striking, brilliant green fascia of varying width on the outer segments.) . . . (10+) **D**
- 499.700 : **FRITILLARIA MESSANENSIS** subsp. **GRACILIS** \* Bosnia & Hercegovina, W of Trebinje. 500m. Among *Quercus* scrub over limestone. (Untessellated, chestnut-brown bells, edged with gold. Very hardy & one of the finest, most vigorous species with us, though never numerous in the wild. Definitely worth trying outside in the UK, in a sunny, well-drained site.) . (20+) **B**

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**B** : \$3.00 ; £2.00 ; DM5,- ; FF18.-    **D** : \$5.00 ; £3.50 ; DM9,- ; FF32.-    **F** : \$9.00 ; £6.00 ; DM16,- ; FF55.-

- 499.701 : **FRITILLARIA MESSANENSIS** subsp. **GRACILIS** \* Bosnia & Hercegovina, Bjelasnica (NE of Dubrovnik). (20+) **B**
- 499.906 : **FRITILLARIA MICHAILOVSKYI** \* Turkey, Kars, Sarikamis. 2300m. Ex R. & R. Wallis 93A-39. (From a fine, classic form of this arresting & growable species. Large, polished mahogany bells, broadly rimmed with yellow. This form is not so readily obtainable as the ubiquity of the name may suggest : many commercial stocks are now poor & very variable.) . . . . . (15+) **B**
- 500.300 : **FRITILLARIA MONTANA** \* Macedonia, Galicica Planina above Trpjeica. 1600m. Exposed, dry, limestone slopes. (A slender, dwarf form of this variable, widespread group. Globular, brownish bells & bulbs with a stoloniferous habit.) . . (15+) **C**
- 500.400 : **FRITILLARIA MUTABILIS** \* Greece, Fokida, Oros Giona SW of Kaloskopoi. 1800m. Among grasses on open, limestone slopes. (Kamari's name, in her 1991 account, for the populations from the N Peloponnese to the S Pindus, which do not fit into her concepts of *F. graeca* & *F. thessala*. These Greek mainland plants pose the same problem as the Iberian ones. 'Lumping' all under *F. graeca* obscures the utterly distinct nature of the extremes. 'Splitting', dubiously sustainable botanically, though it gives more names to gardeners, means that several 'species' may be found together in populations of 'hybrids' or integrades.) . . . (10+) **E**

## Fritillaria obliqua : authentic seed from the black fritillary of Attica

- 500.505 : **FRITILLARIA OBLIQUA** \* Greece, Attiki-Pireas. Ex O. Sonderhausen. (At last we can offer seed of this, one of the most local European species, of guaranteed authenticity. Some years ago Martyn Rix sent us seed from this Sonderhausen coll. We grew all of this on to flowering to provide a permanent, genetically diverse seed-source. Up till now we have not been comfortable about distinguishing stocks of this & *F. tuntasia*. This seed is from plants which are certainly distinct from what we list under *F. tuntasia*, though we are no nearer knowing the full range of variation within either species. Mainly 'keyed-out' on its fewer flowers with longer style-branches, *F. obliqua* has similar, bloomy, blackish bells to *F. tuntasia* but these are carried on shorter stems, with far fewer leaves, which lie mainly at the base of the 20cm. stem, where they are broad & glaucous.) . . . . . (10+) **E**
- 501.205 : **FRITILLARIA ORIENTALIS** \* No data but the genuine species from material originally from Martyn Rix. An obscure, little understood plant in the confusing *F. montana* group, where names have been much misapplied. The synonym *F. tenella* is appropriate : slender, 30cm. stems with many, linear leaves, the uppermost in a whorl of 3, incline (even in cultivation not only on its native cliff faces) to hang out up to 5 dark bells, densely chequered brown-purple outside & reddish inside. . . . . (15+) **D**
- 501.400 : **FRITILLARIA PALLIDIFLORA** \* Kazakhstan, Khrebet Tarbagatai. Ex a J. Ruksans coll. (From a coll. of this splendid Central Asian species, made in this seldom-visited range, on the Sinkiang border N of the Dzungarian Ala-Tau. About 30cm. high with broad, grey leaves & big pale-yellow bells. One of the finest & most satisfactory to grow outside in the UK.) . . . (15+) **C**
- 501.410 : **FRITILLARIA PALLIDIFLORA** \* No data. From the established, British, cultivated stock . . . . . (15+) **B**
- 501.501 : **FRITILLARIA PERSICA** Iran, West Azerbayejan, S of Silvaneh. 1600m. Steep, E-facing, clay slope. (Well-known in cultivation & quite frequent in the western Iranian mountains. This can reach 1m. in height, though usually about half that, with racemes of up to 20, grey-green to purplish bells. Iranian colonies can be very variable and the yellowish variant described as "eggeri" is not uncommon. Possible outside in good, well-drained soil in a sunny site in the UK.) . . . . . (15+) **C**
- 501.801 : **FRITILLARIA PINARDII** \* Turkey, Denizli, Honaz Dag. 1650m. Stony clay over limestone. (This is good : a very neat plant & an excellent grower with us. Dwarf with yellow bells, which mature to rust-red. Suspiciously like *F. carica* at first glance but the altitude & habitat seem wrong for this. Norman Stevens felt it best we keep it under *F. pinardii* (though we think he has changed his mind now) so we'll stick with this for the present. *Fritillaria* is not so clear-cut as many growers imagine.) (10+) **C**
- 502.010 : **FRITILLARIA PONTICA** \* No data. A plant of moist shade in the woodlands of Bulgaria & NE Turkey, so, not surprisingly, one of the best to grow outside in the UK. Big, soft-green, brown-tinged, round-shouldered bells. . . . . (20+) **B**
- 502.102 : **FRITILLARIA PONTICA** var. **SUBSTIPELATA** \* Greece, Lesbos, between Keramia & Agiassos. c.350m. In terra rossa on steep slope half-shaded by *Platanus*. Ex D.M. Hoskins 97-1. (An interesting island-race adapted to much warmer, drier habitats than the mainland type-race. In this coll., it is a taller, more slender plant with narrower foliage than the mainland ones. Longer, waisted, pale-green bells heavily blotched with purple-brown at the tips inside. A very fine thing, rare in cultivation.) . . (15+) **D**
- 502.310 : **FRITILLARIA PYRENAICA** \* No data. An excellent garden-plant in the UK. Endemic to the mountain meadows of the wet, W Pyrenees. Broad, dark purple-brown bells, opening at the mouths to show the greenish yellow interiors. . . . . (15+) **B**
- 502.400 : **FRITILLARIA RADDEANA** \* Iran, Gorgan, W of Bojnurd. 1200-1500m. Limestone valley. Ex P. Furse 8953. (From one of the seed & bulb colls. (PF 5162, etc.) made by Paul Furse in 1964 & 1966, in what was then the royal hunting reserve (now a national park) in Gulestan. Like a dwarf, primrose yellow version of *F. imperialis*. Small enough for a pot or the bulb-frame but growable outside in the UK though it starts & flowers early, so protection safeguards both flowers & seed-set.) . . . . . (10+) **C**
- 502.450 : **FRITILLARIA REUTERI** \* Iran, NW of Esfahan. From F. Baxter, P. Wendelbo & other colls. (Extremely local but locally numerous in a few, seasonally moist, stony meadows at 2500-3000m. Wide mahogany bells, broadly bordered with yellow, not unlike *F. michailovskyi* but taller & more delicate, both in habit & constitution. Not easy & scarce in cultivation, though several growers have found it takes well to life outside in N Europe. It certainly prefers not being too dried-out in summer.) . . . . . (10) **F**

A : \$2.00 ; £1.50 ; DM4,- ; FF14.- C : \$4.00 ; £2.50 ; DM7,- ; FF23.- E : \$7.00 ; £4.50 ; DM12,- ; FF41.-  
 B : \$3.00 ; £2.00 ; DM5,- ; FF18.- D : \$5.00 ; £3.50 ; DM9,- ; FF32.- F : \$9.00 ; £6.00 ; DM16,- ; FF55.-



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

- 502.601 : FRITILLARIA RHODOCANAKIS** \* Greece, Argolida, Idra. Ex an R.& R. Wallis coll. (Endemic to the island of Hydra, off the SE Peloponnese. Neat, about 10cm. tall, & usually with yellow-tipped, chocolate-brown, widely flaring bells.) (10+) **D**
- 502.700 : FRITILLARIA RUTHENICA** \* Russia, (formerly Mordovskaya ASSR), Penza district. (From a wild coll. of this seldom-seen, northern species in the Volga basin, SE of Moscow & N of the Caspian. In the *F. orientalis* group & closest to the equally obscure *F. orientalis* (q.v.), from which it is easily distinguished by the curled, cirrhose tips of the upper leaves. Though this name is sometimes misapplied to other members of this group in cultivation, we grew the genuine plant years ago from material given to us by Paul Furse but originating from Moscow Botanic Garden. A very elegant thing with narrow leaves & dark maroon-red, chequered bells. It should be a plant which is possible in the open garden in the UK.) ..... (15+) **D**
- 502.760 : FRITILLARIA SEWERZOWII** \* No data. An exciting, distinct Central Asian species, with affinities to *F. imperialis* & to *Lilium*. Split by some into the monotypic genus *Korolkowia*. We have always found it difficult but others grow it successfully. This seed is from Germany : it may enjoy a more continental climate. Like no other in its pendant, narrow bells with widespreading tips to the segments of brilliant yellow-green to blackish brown. About 30cm. or more high with broad, grey-green leaves.) (10+) **D**
- 502.805 : FRITILLARIA SIBTHORPIANA** (subsp. *sibthorpiana*) \* Turkey, Mugla, near Bozborun. Ex an R.& R. Wallis coll. (Described in 1809 & 'lost' for 185 years after Sibthorp's type-coll. (meanwhile its name was widely misapplied). Still only known from two localities on the peninsulas SW of Marmaris in the extreme SW corner of Turkey. Distinct from the others with bright yellow bells in its two, or occasionally three, broad, glaucous leaves, clasping the 20-30cm. stem.) ..... (10+) **E**

## Fritillaria sibthorpiana : first seed from a new subspecies

- 502.820 : FRITILLARIA SIBTHORPIANA** subsp. **ENGINEII** \* Turkey, Mugla, NE of Marmaris. 50-1450m. (Described in 1995 from the inland ranges on the opposite side of Marmaris from the type-race, exclusively a limestone plant, and easily distinguished by its 4 (rather than 2), shiny green leaves and dull-yellow to greenish yellow flowers. Originally thought to be a serpentine race, it has also since been found on shales & occasionally limestone. Both subspecies are extremely local plants confined to a few very small colonies & we hope they can now be maintained by specialists in cultivation.) ..... (10) **F**
- 503.209 : FRITILLARIA STENANTHERA** Afghanistan, Balkh, S of Mazar-i-Sharif. 2000m. Grassy hillsides. (A Central Asian species in subgenus *Rhinopetalum*, which has generally offered fewer problems in cultivation than some of its allies, though we have not listed seed from it for some years. Several widely flared flowers with dark nectaries, usually in pearly white, pink-tinged to varying degrees, on grey-leaved, 20 cm. stems. These Central Asian *Rhinopetalum* spp. have been successfully grown in the UK by keeping them dry through the winter and not watering until weather warms in spring. It can be risky with young stock.) (10+) **F**
- 503.500 : FRITILLARIA STRIBRNYI** \* Turkey, Canakkale, Gelibolu (Gallipoli). Ex V. Horton & N. Stevens 2067. (Extremely local in SE Bulgaria & adjacent European Turkey, just crossing the Bosphorus into Asia here. Elegant, about 20cm. high with linear, greyish foliage & narrow, glaucous, untesselated, purple & green bells. Slow, seldom available but not so difficult.) . . (10+) **E**
- 503.601 : FRITILLARIA THESSALA** (subsp. *thessala*) (*F. graeca* subsp. *thessala*) \* Greece, Trikala, below Katara. 1500m. Open W-facing slope with *Pinus* & *Juniperus*. (Quite an even population & a distinct enough species here in the central Pindus. Big, long bells, variably chequered with brown-purple hang below the topmost whorl of 3 broad, grey-green leaves.) ..... (15+) **B**
- 503.602 : FRITILLARIA THESSALA** \* Greece, Ioanina, Oros Smolikias above Agios Paraskevi. 1500m. Open pasture on limestone. Ex P. Christian & A. Hoog 880. (Very variable in its ghostly chequering on a subtle range of ground-colours. We have even a few yellows with soft-green chequering in this batch of wild seedlings. Seed of these in included but it is a long-shot.) . . . (15+) **B**
- 503.800 : FRITILLARIA TUBIFORMIS** (subsp. *tubiformis*) \* France, Hautes-Alpes, Pic de Gleize NNW of Gap. 1800m. Among *Helictotrichon* on steep, SE-facing limestone slopes. (One of the finest alpine species with huge, fat, chequered, brown-purple bells on short stems. Absolutely hardy & better grown cool in a frame or even a raised bed outside than cooked under glass, though this population from a summer-dry site seems more accommodating than those from moister, meadow-habitats.) ..... (15+) **C**
- 504.210 : FRITILLARIA TUNTASIA** \* No data but endemic to the islands of Kithnos & Serifos in the Kiklades, off the coast of Attica in Greece. A somewhat taller, more slender plant than the allied *F. obliqua* with more greyish leaves more evenly distributed up the 30cm. stems & up to 5 flowers. There seems confusion between concepts of these two in cultivation & it appears that this species is a very variable entity in the wild. We have no stock of *F. tuntasia* derived from wild material but you will find authentic seed of *F. obliqua* listed. The two stocks are most distinct & neither offer any great problems under glass in the UK. Some excellent seed this year of this strikingly beautiful plant, whose conical bells are virtually black with a glaucous bloom outside. . (15+) **C**
- 504.700 : FRITILLARIA WHITTALLII** \* Turkey, Antalya, SW of Elmali. 1600m. Opening among *Cedrus* in pocket of black soil mixed with limestone talus. (Exceptionally local, this appears limited to patches of humus-rich scree at about the tree-line of cedar-forest in Antalya & Isparta provinces. Elegant with linear leaves & wide pale-green bells, tessellated with purple.) . . . (15+) **D**
- 504.705 : FRITILLARIA WHITTALLII** \* Turkey, Isparta. Ex a N. Stevens coll. .... (15+) **D**

A : \$2.00 ; £1.50 ; DM4,- ; FF14.- C : \$4.00 ; £2.50 ; DM7,- ; FF23.- E : \$7.00 ; £4.50 ; DM12,- ; FF41.-  
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# Fritillaria : Unidentified Collections from Iran, May-June, 2000

- 16737 : FRITILLARIA SP.** Iran, Gilan, Talesh, E of Khalkhal. 2000m. Moist turf. 24.5.00 (The only two species recorded from the Talesh are *F. kotschyana* and *F. grandiflora*, an allied taxon described from immediately adjacent Azerbaijan.) . . . (10+) **E**
- 16773 : FRITILLARIA SP.** Iran, East Azerbayejan, SW of Ahar. 1820m. Montane steppe. 26.5.00 (The only species recorded from this area is the yellow and brown flowered member of the *F. crassifolia* complex described as *F. karadaghensis*.) (10+) **E**
- 16820 : FRITILLARIA SP.** Iran, West Azerbayejan, S of Salmas. Montane grassland . 28.5.00 (Almost certainly the recently described *F. chlororhabdota* with striped yellow & brown flowers & attributed to "*F. canaliculata*" in the 1960's.) . . (10+) **E**
- 16869 : FRITILLARIA SP.** Iran, Kordestan, NW of Divandarreh. 2000m. Gravelly clay slopes. 30.5.00 . . . . . (10+) **E**
- 16878 : FRITILLARIA SP.** Iran, Kordestan, WNW of Sanandaj. 2100m. Loose talus on steep slopes. 31.5.00 (The species recorded from this area are *F. crassifolia* subsp. *poluminii*, *F. chlorantha* and *F. straussii*.) . . . . . (10+) **F**
- 16897 : FRITILLARIA SP.** Iran, Kordestan, SW of Negel (between Sanandaj & Marivan). 1350m. *Quercus* scrub on shale. 31.5.00 (The only species recorded from this type of habitat, at this altitude, in this area is *F. straussii*.) . . . . . (10+) **F**
- 16904 : FRITILLARIA SP.** Iran, Kordestan, WNW of Sanandaj. 1600m. Loose, stony clay on W-facing slope. 31.5.00 (Species recorded from this area : *F. crassifolia* subsp. *poluminii*, *F. chlorantha* and *F. straussii*.) . . . . . (10+) **F**
- 16907 : FRITILLARIA SP.** Iran, Kordestan, ESE of Sanandaj. Steep, rocky slopes with diverse steppe-vegetation. 1.6.00 (Species recorded from this area are *F. olivieri* (a wet-grower for which we searched unsuccessfully) and *F. zagrica*) . . . . . (10+) **E**
- 16929 : FRITILLARIA SP.** Iran, Hamadan, NE of Assadabad. 2200m. *Astragalus*-steppe on slate & schist. 2200m. 2.6.00 (The only species recorded from this area is *F. zagrica*.) . . . . . (10+) **E**
- 16936 : FRITILLARIA SP.** Iran, Lorestan, WNW of Dorud, Razan pass. 2000m. Loose, sandy clay slope. 3.6.00 (Species recorded from this area : *F. chlorantha*, *F. zagrica* and *F. chlororhabdota*.) . . . . . (10+) **E**
- 16980 : FRITILLARIA SP.** Iran, Esfahan, SE of Khonsar. 2600m. Sandy clay. 5.6.00 (Species recorded from this area : *F. reuteri* (unlikely as wet-grower) & *F. zagrica*.) . . . . . (10+) **E**

- 507.300 : GAGEA FIBROSA \*** Turkey, Hatay, E of Belen. 1250m. Stony areas & fissures on limestone outcrop. ("One of the largest & most striking" writes Martyn Rix. Starry, bright-yellow flowers with long perianth segments, which persist in seed.) (20+) **B**
- 509.209 : GALANTHUS PLICATUS** (subsp. *plicatus*) Ukraine, Krim, near Yalta. (The type-race of this fine snowdrop has two main population centres, one in E Romania & the other here in the Crimea. This is the one which has given rise to fine garden cultivars like the wild-collected 'Warham', which reputedly came to England around 1855, during the Crimean War.) . . . . . (10+) **D**
- 509.609 : GALANTHUS WORONOWII** Russia, near Sochi, Black Sea coast. (Long confused with the allied Aegean *G. ikariae*, this splendid plant with broad, glossy, light green leaves has been recognized at specific level in the most recent account of this confusing genus. Distributed between 70m. & 1400m. in the forests to the E of the Black Sea from S Russia through Georgia.) . (10+) **D**
- 525.900 : GERANIUM LIBANI \*** Syria, Nusairi range, above Slunfeh. 1200m. Among deciduous *Quercus* scrub. Ex R.&R. Wallis 96-17 (A most distinct, very early-flowering plant, which goes dormant in summer. In Subsect. *Mediterranea*, the *G. platypetalum* group and rather like this, 40cm. high with large violet-blue flowers, but flowering with the early spring bulbs, before its Caucasian allies have started growth. Hardy & tolerant of open garden conditions in W Wales, in a sunny, well-drained site.) . . . (10+) **D**
- 531.902 : GLADIOLUS ANTAKIENSIS \*** Turkey, Hakkari, Zab gorge at Bagisli. 1500m. Among *Quercus* on stony slopes. (Confined in Turkey to the oak-scrub areas of the SE corner. Fine carmine-pink flowers, marked white. About 50cm. high.) . . . (15+) **B**
- 532.000 : GLADIOLUS ATROVIOLACEUS** Iran, Lorestan, W of Azna. 1900m. Fallow-fields & margins of cultivated land. (The splendid, 60cm. high species which stains the fresh green fields of the high Zagros valleys with its rich, dusky violet-purple flowers in spring. Seldom seen in gardens but an extremely hardy plant, suited to a well-drained site in full sun in the UK.) . . . (15+) **C**
- 532.601 : GLADIOLUS KOTSCHYANUS \*** Turkey, Van, NNW of Baskale. 2800m. Along seasonal, snow-melt stream. (A soft-lilac, 30cm., alpine-meadow form of this characteristic species of spring-wet, grassland habitats in cold E Anatolia.) . . . . . (15+) **B**
- 532.602 : GLADIOLUS KOTSCHYANUS \*** Turkey, Erzurum, Kop Dag. 2400m. Among *Salix* in wet-flush. (A good deep-crimson form, originally collected as a dwarf variant but it now reaches 40cm. in cultivation.) . . . . . (15+) **B**
- 532.810 : GLADIOLUS PALUSTRIS \*** No data. An attractive plant very seldom seen in UK gardens, though it is utterly hardy and well-adapted to the climate. Distributed, usually in moist meadows, here and there though central & E Europe, from SE France to the Ukraine. About 30cm. high with a loose, secund spike of up to 6 purplish red flowers in early summer. . . . . (15+) **B**

## Helleborus : last chance for 2000 seed

The Pyrenean seed was only collected in September ; other seed has been refrigerated. Seed sown late (after the weather has cooled down in autumn), may not germinate until the following winter. Soaking seed in hot (not boiling) water and leaving it at room temperature for a day before sowing may help

germination the first winter. Like almost all species in this list, these germinate at low-temperatures. For more information & accounts of each species, refer to 'Hellebores' by Brian Mathew or 'The Gardener's Guide to Growing Hellebores' by Graham Rice & Elizabeth Strangman.

- 560.010 : **HELLEBORUS ATRORUBENS** \* Slovenia, near Novo Mesto. (Cultivated seed from wild stock.) . . . . . (15+) C  
 560.628 : **HELLEBORUS CYCLOPHYLLUS** Macedonia, Bistra Planina. (Wild-collected) . . . . . (10+) C  
 561.018 : **HELLEBORUS FOETIDUS** Spain, Aragon, Benasque. 550m. W. McLewin 00-45. (Pale-green foliage.) . . . (15+) B  
 561.019 : **HELLEBORUS FOETIDUS** Spain, Aragon, Odesa. 650m. W. McLewin 00-44 (Neat, dark foliage.) . . . . . (15+) B  
 561.502 : **HELLEBORUS MULTIFIDUS** (subsp. *multifidus*) Croatia, Velebit Planina, near Krasno. W. McLewin coll. (10+) D  
 561.583 : **HELLEBORUS MULTIFIDUS** subsp. **BOCCONEI** Italy, Umbria-Marche, N of Perugia. W. McLewin coll. (10+) E  
 561.705 : **HELLEBORUS MULTIFIDUS** subsp. **ISTRIACUS** \* Croatia, Istria, Ucka. Ex a W. McLewin coll. . . . . (15+) D  
 562.006 : **HELLEBORUS ODORUS** Hungary, Mecsek Mts., near Pec. W. McLewin coll. . . . . (10+) C  
 562.405 : **HELLEBORUS ORIENTALIS** Georgia, N of Tblisi. Superb colony with rounded, cream-coloured flowers.. (15+) E  
 562.411 : **HELLEBORUS ORIENTALIS** Georgia, SE of Bordzhomi. Both creams & deep pinks with intermediates. . . (15+) E  
 562.621 : **HELLEBORUS PURPURASCENS** \* Romania. (Cultivated seed from a selected blue-grey clone.) . . . . . (15+) D  
 562.622 : **HELLEBORUS PURPURASCENS** \* Romania. (Cultivated seed from a selected deep purple clone.) . . . . . (15+) D  
 562.806 : **HELLEBORUS TORQUATUS** \* Jugoslavia, Crna Gora, N of Kolasin. 1100m.. (Cultivated seed.) . . . . . (15+) D  
 563.001 : **HELLEBORUS VESICARIUS** Turkey, Gaziantep, hills between Gaziantep & Sackagoz. c. 1000m. . . . . (10+) E  
 563.209 : **HELLEBORUS VIRIDIS** (subsp. *viridis*) Spain, Aragon, near Zuriza. 1300m. W. McLewin coll. . . . . (10+) D

## Hepatica nobilis : seed from selected colour forms

*Hepatica nobilis* is one of the loveliest plants in early spring both in its native woodlands & in the garden. Its clumps of short rhizomes with overwintering, trilobed leaves, often purplish beneath, send up their flowers with the unfolding, silky new foliage soon after the snow melts. Distributed throughout most of central, continental Europe from the Pyrenees eastwards into Russia & north to Sweden, it is a variable plant, especially in flower colour. The small Pyrenean forms are especially distinct with complex white patterns on their little, dark leaves. Hermann Fuchs in Germany has been collecting together these variants for many years and this is seed from him. Like several other genera

in this list, *Hepatica* seed is best sown as soon as possible after ripening. It drops while it is still green in summer and, if sown then & left exposed to winter temperatures, will germinate profusely the following spring. The logistics of collecting, cleaning, assembling, listing, packeting and distributing a range of such seeds at what is for us the busiest time of year both in the garden & in the field, precludes despatch at the 'ideal' period. With this *Hepatica* seed, we are trying to get round the problem by storing it under refrigerated conditions at about 5 C. We anticipate germination is likely to be more irregular and continue over a longer period. Let us know how you get on!

- 566.025 : **HEPATICA NOBILIS** from **BLUE FORMS** \* Classic pale to deep blues originally from the Western Alps. . . (20+) B  
 566.030 : **HEPATICA NOBILIS** from **SELECTED DEEP BLUE** \* Dark-blue with striking snow-white anthers. . . . (15+) C  
 566.035 : **HEPATICA NOBILIS** from **SELECTED PINK** \* Soft pink with central white stripe. Western Alps. . . . . (10+) C  
 566.040 : **HEPATICA NOBILIS** from **RED FORMS** \* Outstanding reds selected in the Western Alps. . . . . (10+) C  
 566.045 : **HEPATICA NOBILIS** from **LILAC FORMS** \* Selected in southern France. . . . . (10+) C  
 566.050 : **HEPATICA NOBILIS** from **PINK FORM WITH MOTTLED LEAVES** \* Bright-pink selected in S France. (10+) C  
 566.055 : **HEPATICA NOBILIS** from **PYRENEAN WHITES** \* White flowers & distinctive white-marked leaves. . . . (20+) C  
 566.060 : **HEPATICA NOBILIS** from **PYRENEAN PINKS** \* Similar foliage with strong-pink flowers. . . . . (10+) C

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- 567.020 : HERMODACTYLUS TUBEROSUS** \* No data. The irresistible, green & velvety-black iris of the Mediterranean. Tuberous-rooted & summer-dormant, this is easy enough to grow outside in the UK but needs a very hot, dry spot to flower well. (15+) **B**
- 570.950 : HYACINTHELLA ACUTILOBA** \* Turkey, Sivas, Ziyaret Tepe. 2100m. Thin, limestone gravel on exposed ridges. (Wiry, 10cm. stems with little pale to mid-blue bells rising from 2-3 distinctively broad leaves. A central Anatolian endemic in this delightful & interesting genus : all are on a similar pattern & ideal for the alpine-house in stature & requirements.) . . . . . (15+) **C**
- 571.000 : HYACINTHELLA ATCHLEYI** \* Greece, Evia, mainland hills opposite Halkida. 200m. Open limestone slopes with sparse scrub. (Lots of little, clear-blue bells on wiry, 10-15cm. stems in early spring. Only grows around here & Thebes.) . . . (15+) **C**
- 571.145 : HYACINTHELLA HELDREICHII** \* Turkey, Antalya, between Beysehir & Akseki. Ex R. & R. Wallis 90-50. (Sessile, deep violet-blue bells on wiry, 10cm. stems. Not quite so dark as the allied *H. lazulina* from further east.) . . . . . (15+) **C**
- 571.160 : HYACINTHELLA HISPIDA** \* Turkey, Nigde, E of Ulukisla. 1500m. Steep, exposed, limestone slopes. (Distinct, hairy leaves & 10cm. racemes of up to 30 blue-violet flowers. Like most in this dainty & neglected genus, a local plant.) . . (15+) **C**
- 571.201 : HYACINTHELLA LAZULINA** \* Turkey, Karaman, SSE of Karaman. c.1100m. Open steppe. (Recent 'split' from *H. heldreichii*, mainly from the area S of Karaman to Gulnar. Glaucous leaves & deepest blue, violet-shot flowers.) . . . . (15+) **C**
- 572.005 : HYACINTHOIDES ALGERIENSIS** (*H. hispanica* var. *algeriensis*) \* Morocco, Middle Atlas, ESE of El Ksiba, Tizi-n-Ifar. Ex JWB 89-18A (An attractive Moroccan bluebell, rather like *H. reverchonii* and, like it, often a plant of limestone-fissures. Worthwhile & easily grown under glass. We are enthusiastic about these neglected, disjunct, relict bluebells.) . . . . . (15+) **B**
- 572.201 : HYACINTHOIDES NON-SCRIPTA** UK, Wales, below Ffostrasol. 150m. Mixed, deciduous woodland. 12.8.98 (From our population of bluebells, most spectacular of native British bulbs, hardly in need of 'conservation' around here.) . . (20++) **A**
- 572.300 : HYACINTHOIDES REVERCHONII** \* Spain, Jaen, Sierra de Cazorla, above source of the Guadalquivir. 1400m. Red clay pockets on limestone cliffs. (An obscure, narrow-endemic but easy to grow here under glass. Alan Edwards grows it outside in Surrey & has had hybrids with *H. non-scripta*. Glossy leaves & distinct, wide-open, rich-blue flowers on 15cm. stems.) . . . . (15+) **C**
- 572.340 : HYACINTHOIDES VICENTINA** from **WHITE FORM** \* Only known from the Cabo S. Vicente in S Portugal. Ex a V. Horton coll. (White form of this disjunct relative of *H. italica*, distinguished by its yellow, instead of blue, pollen.) . . . (10+) **C**
- 572.600 : HYACINTHUS ORIENTALIS** subsp. **CHIONOPHILUS** \* Turkey, Sivas, Ziyaret Tepe. 2100m. Limestone crevices & among rocks. (Dwarf, few-flowered hyacinth - a snow-melt alpine from the high mountains in S Central Turkey. Pale slate-blue, waxy flowers with long perianth lobes, on short stems. Stays neat here under glass & has the most exquisite scent.) . . . . . (15+) **C**

## Iris : junos : both trouble-free and troublesome

The junos (Subgenus *Scorpiris*) include some of the most difficult of bulbs to challenge & frustrate the specialist. There are also comparatively easily grown ones which will be no trouble in a bulb-frame, in pots in the alpine-house or, in a few cases, the open garden. So, do read the comments about these & don't waste your money (& also the efforts we have made to

produce this seed) by trying to grow the difficult ones before you have grown the easier species. The bulbous 'reticulatas' (Subgenus *Hermodactyloides*) are here, as well as a few odd, dry-climate species but other groups, like the 'spurias' & most bearded irises, will be in a future list. The best reference for all the species is 'The Iris' by Brian Mathew.

- 584.307 : IRIS AUCHERI** (Subgen. *Scorpiris*) Iran, West Azerbayejan, between Agh Bolagh & Sangar. 1500m. In heavy clay on rocky, limestone slope. (An excellent Juno and one of the easier ones to grow in the UK. About 30-50cm. high with several blue flowers appearing successively from among papery bracts. Old flowers indicate a good deep-coloured form here.) . . . . . (10) **C**
- 584.320 : IRIS AUCHERI** (Subgen. *Scorpiris*) \* No data. Mainly from clones from the variable Diyarbakir, Leylek Station population pollinated with material from near Bahcesaray, Van. 15-30cm. high with flowers in shades from mid-blue to violet blue. (8) **C**
- 585.700 : IRIS CYCLOGLOSSA** (Subgen. *Scorpiris*) \* Afghanistan, SW of Herat. 1450-1700m. Seasonally moist, grassy places near streams. Ex Hedge, Wendelbo & Ekberg 7727. (A superlative & spectacular species, unlike any other Juno, or indeed any other *Iris*, & known only from the currently inaccessible type-locality. Slender, branching stems, about 30cm high, with up to 3, large, flat, violet-blue flowers. Shaded white & yellow-blotched on the falls. Not difficult in the bulb-frame or alpine-house but still needs some skill & care to maintain, though it is now being grown successfully by some in the open garden in the UK.) . . . . . (10+) **E**
- 586.410 : IRIS FILIFOLIA** (Subgen. *Xiphium*) \* No data. Native to SW Spain & NW Africa in dry, stony places, usually on limestone. "A very beautiful" bulbous iris about 30cm. high with very narrow, linear leaves & long-tubed flowers in rich red-purple, slashed with yellow on each fall. Not a high altitude species so it will be best in the bulb-frame or a cold greenhouse in the UK . . . (10+) **D**
- 588.809 : IRIS HISTRIOIDES** (Subgen. *Hermodactyloides*) \* No data. From the clone 'Lady Beatrix Stanley', which according to Brian Mathew is fairly typical of the wild plant but seed has been open-pollinated in the UK and may produce some hybrids. One of the most sumptuous of dwarf, bulbous irises. Its large violet-blue flowers, heavily spotted on the falls, push through the bare earth in early spring. The species is endemic to a small area of Samsun & Amasya provinces in NW Turkey at between 1300 & 1750m., in the coniferous forest zone of a much moister area than *I. histrio* & most of its relatives. Growable outside in the UK.) (8) **D**

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

- 599.625 : IRIS LINEATA** (*I. karategina*) (Sect. *Regelia*) \* Tadjikistan. No further data. (Raised from seed received via Hungary by Bob & Rannveig Wallis as *I. stolonifera* from material collected in Tadjikistan. The resulting plants are unlike any of the commercial forms of *I. stolonifera* we have ever seen : stoloniferous it certainly is but the rhizomes are small & thin ; the blue-bearded, darker segments of the flowers on 30cm. stems are more pointed. We are not at all satisfied that this interesting plant is correctly placed under *I. stolonifera* and, from the description & locality, would seem likely to be much closer to *I. lineata* (merged with the allied *I. darwasica* by Dykes but not by Brian Mathew). These species are both obscure and all three may run into each other in the wild but our knowledge of them all in nature is extremely thin. We shall try to get confirmation of the name in 2001 but, even if it ends up as a form of *I. stolonifera*, you may be assured it is unlike anything you are likely to be growing already.) . . . . . (5) F
- 590.651 : IRIS LOCZYI** (Ser. *Temuifoliae*) Kyrgyzstan, Terskey Alatau, S of Barskoon. 2930m. A. Dickerson 00-21 (A fresh coll. of this dwarf, tufted species, widespread on the mountains of Central Asia. Leaves 15-30cm. high from tussocks of persistent leaf-bases & almost stemless, long-tubed, blue-purple flowers, the falls veined with purple on a creamy ground.) . . . . . (8) E
- 590.803 : IRIS LYCOTIS** (*I. iberica* subsp. *lycotis*) (Sect. *Oncocyclus*) Iran, West Azerbayejan, S of Silvaneh. 1600m. Ledges on rock outcrops on steep, E-facing slope. (A robust form of this magnificent iris from the eastern foothills of the border-ranges. Huge flowers densely veined on both standards and falls with a netting of maroon-black on a grey-white ground & with a big, dark, velvety signal-patch are carried on comparatively short stems. These dark-veined irises extend from the type-locality in Nakhichevan, where they intergrade with *I. iberica*, down the western mountains of Iran, along the Turkish & Iraqi borders southwards to the ranges behind Esfahan, Shiraz and beyond. This is the first fresh material from this area to be available for over 30 years.) . . . . . (5+) F
- 590.900 : IRIS MAGNIFICA** (Subgen. *Scorpiris*) Uzbekistan, Agalik, Seravschan. (A wild coll. from Janis Ruksans of this splendid Central Asian, which we hope may show some variation on the following, more generally cultivated, form.) . . . . . (10+) C
- 590.910 : IRIS MAGNIFICA** (Subgen. *Scorpiris*) \* No data. A splendid Central Asian, possibly the easiest Juno to grow (even outside in a sunny bed) in the UK. Large pale lavender flowers & glossy, green leaves on stout stems of 60cm. or more. . . . . (10+) B
- 595.350 : IRIS REGIS-UZZIAE** (Subgen. *Scorpiris*) \* Jordan, near Ras el-Naqb. Ex a D.B. Stephens coll. (A recently described Juno with short, 15cm stems, packed with curved leaves at the base & carrying up to 3 flowers, in the parents of cool, blue-tinged yellow with yellow ridged falls thought it can apparently vary to pale lilac-blues. Only known in Jordan from around this area but described from the Negev of Israel. So far, it has responded quite well under glass with minimal, careful watering.) . . . . . (5) F
- 600.910 : IRIS VICARIA** (Subgen. *Scorpiris*) \* No data. Central Asian, sometimes confused with *I. magnifica* : almost as robust & growable as it is. About 50 cm. high with pale blue-violet flowers, crested with white & blotched with yellow on the falls. (8) C
- 601.110 : IRIS WILMOTTIANA** (Subgen. *Scorpiris*) \* No data. From the Pamir-Alai but described originally from material grown in the UK in 1901. Very rarely seen today : the plant grown as "*I. willmottiana alba*" appears to be a form of *I. bucharica*. 15-20cm. high, with glossy leaves & white-crested, soft-lavender flowers, blotched with white & deeper purple on the falls. . . . . (5) F

## Iris (Section Scorpiris) : Unidentified Junos from Iran

While *I. acheri* is easily distinguished in seed, the dwarf Junos are less easily identified, so we list these under field-numbers only. As an indication of what might be expected, the species recorded in the areas visited are *I. caucasica* subsp. *caucasica*, *I. pseudocaucasica* & *I. hymenospata* subsp. *leptoneura* with various intergrades between these mentioned. The last is an interesting little-known plant, currently unknown in cultivation. It is more restricted to the Hamadan & Kermanshah areas into E Iraq & is almost certainly represented by 16928. The two later more southern colls. may be examples of this grading into *I.h.* subsp. *hymenospata*.

- 16783 : IRIS SP.** (Sect. *Scorpiris*) Iran, East Azerbayejan, SE of Tabriz, Shibli pass. 2020m. Degraded steppe. 26.5.00 (5) E
- 16791 : IRIS SP.** (Sect. *Scorpiris*) Iran, East Azerbayejan, SE of Marand. 1750m. Open stony slopes. 27.5.00 . . . . . (5) E
- 16806 : IRIS SP.** (Sect. *Scorpiris*) Iran, West Azerbayejan, N of Khoi. Open, stony slopes. 28.5.00 . . . . . (5) E
- 16835 : IRIS SP.** (Sect. *Scorpiris*) Iran, West Azerbayejan, Disaj to Agh Bolagh. 1870m. Gravelly clay. 29.5.00 . . . . . (5) E
- 16928 : IRIS SP.** (Sect. *Scorpiris*) Iran, Hamadan, NE of Assadabad. 2200m. Steppe on slate & schist. 2.6.00 . . . . . (5) F
- 16965 : IRIS SP.** (Sect. *Scorpiris*) Iran, Lorestan, W of Azna. 1900m. Open clay slope. 4.6.00 . . . . . (5) F
- 16974 : IRIS SP.** (Sect. *Scorpiris*) Iran, Lorestan, SE of Aligudarz. 2250m. Clay & shale slopes. 5.6.00 . . . . . (5) F

- 625.001 : LEONTICE LEONTOPETALUM** (subsp. *leontopetalum*) \* Turkey, Mardin, W of Kiziltepe. 700m. Fallow fields. (One of the odd tuberous members of the *Berberidaceae* (or the *Podophyllaceae*, depending who you follow) from the E Mediterranean & Central Asia. Branched terminal inflorescences of many yellow flowers rising to about 50cm. above the fleshy, glaucous, cut & lobed foliage & are followed by inflated, balloon-like, pink tinted capsules before the plant goes dormant in summer.) . . (5) D

A : \$2.00 ; £1.50 ; DM4,- ; FF14.- C : \$4.00 ; £2.50 ; DM7,- ; FF23.- E : \$7.00 ; £4.50 ; DM12,- ; FF41.-  
B : \$3.00 ; £2.00 ; DM5,- ; FF18.- D : \$5.00 ; £3.50 ; DM9,- ; FF32.- F : \$9.00 ; £6.00 ; DM16,- ; FF55.-

- 625.070 : LEONTICE LEONTOPETALUM subsp. EWERSMANNII** Iran, Kordestan, ESE of Sanandaj. Steep, rocky slopes with diverse steppe-vegetation. (The dubiously separable, eastern race with narrower leaf-segments and the fruiting pedicels angled upwards. All these are very handsome, summer-dormant plants, which are suited to bulb-frame conditions. They do not increase vegetatively and must be grown from seed, so they remain unobtainable in commerce & virtually unknown in gardens.) . (5) **D**
- 625.100 : LEONTICE MINOR** Iran, Kordestan, WNW of Sanandaj. 2100m. Loose talus on steep slopes. (A sweetie & the dwarfest in the genus with unbranched stems of about 15cm. carrying compact inflorescences of bright yellow flowers, held just above the ground-hugging, lobed, fleshy, bluish leaves. Definitely small enough for the alpine-house. Supposedly synonymous with *L. armeniaca*, which Coode places under *L. leontopetalum*. We do not believe it is close to *L. leontopetalum* (the two can grow on the same hillside with no intergrades) and retain the (possibly incorrect but attractive) name *L. minor* for the present.) . . . . . (5) **E**
- 630.120 : LEUCOJUM AUTUMNALE (subsp. autumnale) \*** No data. Delightful & dainty with little white, pink-tinged bells dancing on dark stems before the leaves appear, in autumn. Possible in a sunny, well-drained site outside in the UK . . . . . (20+) **B**
- 630.410 : LEUCOJUM NICAENSE \*** No data. Only known from the corner of SE France near the Italian border & all but extinct in the wild. Spring-flowering with wide, white bells on stems of 15cm. at most. Not difficult in the alpine-house. . . . . (15+) **B**
- 630.450 : LEUCOJUM ROSEUM \*** France, Corsica, Pointe de Revellata NW of Calvi. Pockets on granite. (Delicate, tiny, fairy-like autumn-flowering bulb. Shell-pink bells dance on thready stems. Best under glass in 'cyclamen conditions' in the UK.) (15+) **C**
- 630.480 : LEUCOJUM TINGITANUM \*** Morocco, Rif, above Chouene. Ex the J. Blanchard (JWB 88-02) & T. Norman colls. (A fine, spring-flowering plant, considered a doubtful species by many, until recently rediscovered & introduced. Large white bells on 20cm. stems. May be closest to *L. nicaense* & proving as easily grown in similar conditions in the alpine-house.) . . . (10+) **D**
- 632.600 : LILIUM CANDIDUM \*** Greece, Lakonia, W of Sparti. 500m. Steep, limestone slopes among *Euphorbia*, *Phlomis*, etc. (Incomparable, pure-white lily. Older cultivated stock is sterile & full of virus. This is from stock maintained here by hand-pollination from our 1983 wild seed coll. It survives outside in our wet climate but we grow it under glass for seed.) . . . . . (10+) **D**
- 634.401 : LILIUM POMPONIUM \*** France, Alpes-Maritimes, Montagne de Maurel, NE of La Mure. 1000m. Among scrub in steep-sided limestone gully. (Perhaps the most restricted & local of the European lilies in the wild. Its purplish stems set with many, twisting, linear leaves rise only to about 50cm. and can carry up to 10 scarlet flowers. As Woodcock & Stearn remark, "no-one who has suddenly come across this jewel in the Maritime Alps, flaunting its brilliant little sealing-wax-red turkscap blooms, with minute black spots, like fairy lamps, is ever likely to forget that moment." A well-drained, sunny site in clay with plenty of limestone chips in raised bed or the rock-garden is ideal. It is no problem to raise from seed sown in the autumn.) . . . . . (10+) **D**
- 687.950 : MUSCARI ANATOLICUM \*** Turkey, Konya, Sultan Dag. 1760m. Exposed limestone ridgetop. (Appears to be this tiny, recently described species, rather like *M. discolor* in its open-mouthed, white-tipped flowers but easier to flower here.) (15+) **C**
- 688.002 : MUSCARI ARMENIACUM \*** Turkey, Gaziantep. Ex a N. Stevens coll. (From a fine, royal-blue form.) . . . . . (20+) **A**
- 688.101 : MUSCARI AUCHERI \*** Turkey, Bolu, near Abant Golu. 1000m. Ex N. Stevens 2541 (A striking bicoloured form of this easily grown species. Mid-blue and white flowers over short, neat foliage. From a cool, moist part of Turkey.) . . . . . (20+) **A**
- 688.205 : MUSCARI AZUREUM (Subgen. Botryanthus) \*** Turkey, Kahramanmaraş, S of Goksun. 1240m. Ex R. & R. Wallis 93-28 (A very local plant in the wild, occurring sporadically in central Turkey, mainly in the eastern Cilician Taurus. Close to *M. pseudomuscari* & *M. mcbeathianum* with dense, ovoid racemes of open-mouthed, sky-blue bells on 10cm. stems. Usually represented in cultivation by atypical clones. The true wild species does not proliferate vegetatively and needs some care.) . . . . . (15+) **D**
- 688.500 : MUSCARI BOURGAEI \*** Turkey, Denizli, Honaz Dag, SE of Denizli. 1700m. Gravelly areas on exposed, limestone ridge. (W Turkish, alpine endemic, only recorded above 1500m. Glaucescent foliage & very dense heads of globular flowers, in mid-blue to violet-blue, with paler lobes, on 10 cm. stems. Not too easy but settling down with us under glass.) . . . . . (15+) **C**
- 688.600 : MUSCARI CAUCASICUM \*** Turkey, Kars, SSW of Sarikamis. 1800m. Stony, igneous slopes. (Very handsome *Leopoldia*, extending across Transcaucasia to NW Iran. About 30cm. high in this form. Striking, amethyst-violet sterile flowers.) (15+) **A**
- 688.602 : MUSCARI CAUCASICUM (Subgen. Leopoldia) \*** Turkey, S of Karaman. 1100m. Open steppe. . . . . (15+) **A**
- 689.050 : MUSCARI aff. COMOSUM \*** Greece, Ioanina, N of Konitsa. 800m. Clay over shale. (Will not key-out as *M. comosum* as the bulb tunics are not pink. We successfully dissuaded Kit Tan from describing it as a new species.) . . . . . (15+) **A**
- 689.210 : MUSCARI CYCLADICUM \*** No data. A distinct *Leopoldia* endemic to the Kiklades off the Greek coast. 30cm. high with cylindrical racemes of brown fertile flowers with bright tawny-yellow teeth and sterile flowers on pale-violet pedicels. (10+) **C**
- 689.450 : MUSCARI GRANDIFOLIUM (Subgen. Botryanthus) \*** Morocco, Middle Atlas Mts., above Ifrane. 1700m. Red clay on limestone. (Not unlike a large version of *M. latifolium*, but best with some protection as flowers & foliage can be damaged outside, though the bulbs are totally hardy. Fine heads of blue-black flowers from china-blue buds. 20-30cm.) . . . . . (20+) **B**
- 689.704 : MUSCARI INCONSTRICUM (Subgen. Botryanthus)** Syria, Rankous. 1800m. Windswept, barren, rocky hillside. Ex R. & R. Wallis 96-37. (A seldom-seen species, just entering Turkey in Hatay but occurring locally from W Syria to N Iraq & Iran. Loose racemes of up to 30, very dark blue tubular flowers, not pinched in at their mouths, topped by a few sterile ones.) . . . (15+) **D**



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

- 689.800 : MUSCARI LATIFOLIUM** (Subgen. *Botryanthus*) \* Turkey, Balikesir, Kaz Da. 1200m. Openings in coniferous woodland. (A very local species but an easy garden-plant in the UK. Racemes of deep violet-black flowers from pale-blue buds). (20+) **B**
- 689.901 : MUSCARI LONGIPES** \* Turkey, Sivas, WSW of Hafik. 1300m. Calcareous hills. (Distinct *Leopoldia* with a big tassel of violet, sterile flowers. The pedicels elongate greatly in fruit & the dry stem blows away tumbleweed-fashion.) . . . . . (10) **B**
- 689.040 : MUSCARI MCBEATHIANUM** \* Turkey, Adana, ENE of Tufanbeyli. 1200m. Open areas among *Pinus* in moist, fine sand. (Racemes of open-mouthed, ice-blue to white flowers from porcelain-blue buds on 10cm. stems. A charming, delicate and none-too-easy little species we discovered in 1985 and which was named by Kit Tan in 1988 in honour of our old friend Ron McBeath, at that time responsible for growing *Muscari* at the RBG Edinburgh. Needs careful watering in the alpine-house.) . . . . . (20+) **D**
- 690.150 : MUSCARI MIRUM** (Subgen. *Leopoldia*) \* Turkey, Mugla, SE of Altinyayla. 1650m. Open, stony slope on serpentine ridge. (Recently described & distinct in flower, foliage & seed. Subtle rather than spectacular in dull gold & purple. Not an easy species to maintain and grow well in our experience, it needs care in watering and must be hand-pollinated to set seed.) . . . . . (10) **E**
- 690.201 : MUSCARI MUSCARIMI** \* Turkey, Burdur, W of Yesilova. 1280m. Loose, serpentine talus on open slope. (Local, SW Turkish endemic, always on serpentine in our experience. Grey-green leaves & racemes of greyish-ivory flowers opening from purple-brown buds. Famously scented (deliciously different to *M. macrocarpum*) & esteemed for this for over 200 years.) . . (10+) **C**
- 690.700 : MUSCARI PSEUDOMUSCARI** (Subgen. *Botryanthus*) \* Iran, Mazandaran, S of Chalus. 1500m. Ledges on limestone cliffs. (A lovely endemic of the Chalus gorge on the wetter, Caspian slope of the Elburz, described as *M. chalusicum* in the 1960's, though *M. pseudomuscari* has priority. Refined heads of china-blue bells, open at the mouths, not pinched in.) . . . . . (15+) **B**
- 691.202 : MUSCARI TENUIFLORUM** \* Turkey, Antalya, S of Bakaran. 1200m. Among sparse scrub on limestone slope. (To 50cm. high & distinct from *M. caucasicum* & *M. comosum* in the black teeth of the fertile perianths. Violet sterile flowers.) . (15+) **A**
- 691.250 : MUSCARI aff. TENUIFLORUM** (Subgen. *Leopoldia*) \* Turkey, Hakkari. Ex a N. Stevens coll. (A distinct taxon, which merits recognition at some level and a name. It seems to be confined to both sides of the ranges of Kurdistan, along the border of Turkish Hakkari & Iran, possibly extending S into N Iraq. Paul Furse dubbed it the 'bluehot poker' & we still grow an Iranian bulb, collected in the 1960's, which is self-sterile. The tallest of all, almost up to 1m. in the wild & at least 60cm. here, this can be keyed-out to *M. longipes*, as the lower pedicels elongate in seed & it is then intermediate between these two species.) . . . . . (10+) **C**
- 691.250 : MUSCARI aff. TENUIFLORUM** (Subgen. *Leopoldia*) Iran, Kordestan, SW of Negel (between Sanandaj & Marivan). 1350m. *Quercus* scrub on shale. (A fresh wild coll. from the original site of Paul Furse's 1m. high 'bluehot poker'.) . (10+) **D**

## Narcissus : wild daffodils from Wales to the edge of the Sahara

Unlike most of the main genera of 'bulbs' in this section (*Colchicum*, *Crocus*, *Fritillaria* and so on), which have the centre of their diversity & distribution in Turkey, *Narcissus* is very much a western genus, spread S from Britain to NW Africa and centred on Spain. Many species from higher rainfall areas or moist, montane habitats in Spain & Portugal grow well outside in UK gardens. Some, however, from drier areas, especially the Moroccan ones, need a dry, summer rest. These are ideal alpine-house or bulb-frame plants, especially valuable as many flower during winter & very early spring. A great many of the original wild collections from which the following cultivated seed has been grown, were made by John Blanchard (JWB), whose lifetime's work with this genus is unrivalled. We follow the nomenclature used in his monograph, 'Narcissus - A Guide to Wild Daffodils', the best reference work on the genus. It can be described as an informed gardener's compromise as far as names

are concerned. A thorough botanical revision of the genus would appear to be badly needed but it would be very unlikely to suit both botanists & gardeners, so it is perhaps better unwritten. Many species are both extremely variable & ill-defined. We have to deal with a diversity of taxonomic concepts. The leading current 'splitter', the Spanish botanist Fernandez Casas, whose work recalls that of Pugsley with the trumpet daffodils, has now moved on to the Moroccan populations, where previously we had only Maire's 'lump'n'split' names (which required very long labels). Most descriptions are wholly inadequate to define the taxon concerned and distinguish it from others, in any case. Keys just do not work when applied to wild populations. Gardeners, however, will find the sum of characteristics in most populations distinct enough. 'Splits' are shorter to write out but it is very much a question of 'take your pick' concerning the name you stick on them.

- 693.800 : NARCISSUS ASSOANUS** (*N. juncifolius*, *N. requienii*) \* France, Haute-Pyrenees, Vallee d'Ossoue. 1500m. S & W-facing limestone cliffs & slopes. (Beautiful, little, clear yellow jonquil. A delight in a pot but accommodating in the garden.) . (15+) **B**
- 694.100 : NARCISSUS ATLANTICUS** \* Morocco, High Atlas, above Amizmiz. 2000m. Among scrub, in soft, moist loam. Ex the 1936, E.K. Balls type coll. (A very local plant in the wild &, after over 60 years, still rare in cultivation, where it is by no means easy to grow. Sweetly scented, creamy white jonquils carried singly on 15cm. stems. Distinct from the *N. rupicola* group in its deeper, cup-shaped corona & in the arrangement of the anthers, it most resembles a white version of *N. cuatrecasii*.) . . . . . (10+) **E**

**A : \$2.00 ; £1.50 ; DM4,- ; FF14.- C : \$4.00 ; £2.50 ; DM7,- ; FF23.- E : \$7.00 ; £4.50 ; DM12,- ; FF41.-**  
**B : \$3.00 ; £2.00 ; DM5,- ; FF18.- D : \$5.00 ; £3.50 ; DM9,- ; FF32.- F : \$9.00 ; £6.00 ; DM16,- ; FF55.-**

- 694.800 : NARCISSUS BUJEI** \* Spain, Cordoba, Sierra de Cabra. Ex JWB 87-13. (An unexpected trumpet-daffodil quite recently described from southern Spain. Thought by some to be a race of the mysterious *N. hispanicus* but maintained at specific level in one of the latest Spanish floras. About 30cm. high with concolorous yellow flowers.) . . . . . (10) **D**
- 695.110 : NARCISSUS BULBOCODIUM var. CITRINUS** \* No data. The cool lemon yellow race of hoop-petticoats, mainly prevalent in N Spain & often quite late-flowering. Usually among the best for growing outside in UK gardens, the seed listed this year is from the vigorous colony thriving & self-seeding in Peter Chappell's Hampshire garden, 'Spinners'. . . . . (15+) **B**
- 696.250 : NARCISSUS BULBOCODIUM var. NIVALIS** \* Spain, Avila, Sierra de Gredos, NE of Pico Almanzor. 1800m. In turf on steep, open slopes. (A miniature alpine hoop-petticoat with small, bright-yellow flowers. Utterly different to the preceding not only in flower but in its thready, upright foliage. Delightful in a pan.) . . . . . (15+) **B**
- 696.410 : NARCISSUS BULBOCODIUM subsp. OBESUS** \* No data. From a very fine, free-flowering form grown by D. Batterham. Dark leaves & rich soft-yellow flowers with large, satisfyingly obese, horizontal coronas. Good outside in UK gardens. (10+) **C**
- 696.600 : NARCISSUS BULBOCODIUM var. PALLIDUS** \* Morocco, High Atlas, Tizi Gourane above Amizmiz. 1800m. Schist fissures. (Cultivated seed from our 1982 coll. Recently named *N. jacquemondii*, (q.v.), by Fernandez Casas.) . . . . . (10+) **C**
- 696.700 : NARCISSUS BULBOCODIUM subsp. PRAECOX** \* Morocco, High Atlas Mts., Moulay Brahim gorge below Asni. 1000m. Humus-filled pockets on limestone boulders. (A fine, robust & distinct race. Big, soft-yellow flowers with narrower, more funnel-shaped trumpets than similarly coloured *N. romieuxii* forms, in late winter or earliest spring. Alpine-house in UK) (10+) **C**
- 696.701 : NARCISSUS BULBOCODIUM ssp. PRAECOX** \* Morocco, Atlas, Tizi-n-Test. Ex R. & R. Wallis 88-26 . . . . . (10+) **C**
- 698.251 : NARCISSUS BULBOCODIUM var. TENUIFOLIUS** \* Portugal, Oliveira do Hospital. Ex Salmon & Blanchard 185. (Vigorous, floriferous, very deep yellow, dwarf hoop-petticoat with dark, thready leaves. Excellent alpine-house plant.) . . . . . (15+) **B**
- 699.500 : NARCISSUS CALCICOLA** \* Portugal, Algarve, Benafin. Ex JWB 90-09. (A tidy, little relative of *N. scaberulus* in Sect. *Apodanthe*, endemic to Portugal & of very restricted distribution in the wild. Glaucous keeled leaves & 15cm. stems with 2-5 flowers with cup-shaped coronas & entirely of a rich, deep yellow. A choice species seldom seen in cultivation.) . . . . . (10+) **E**
- 699.806 : NARCISSUS CANTABRICUS (subsp. cantabricus)** \* Spain, Malaga, near Estepona. Ex a B. Corneille coll. (A reliable & free-flowering form with profuse, pure-white hoop-petticoat flowers in early winter to brighten the alpine-house.) . . . . . (10+) **C**
- 699.807 : NARCISSUS CANTABRICUS (subsp. cantabricus)** \* Morocco, Djebel Zerhoun. Ex a T. Norman coll. . . . . (10+) **C**
- 699.819 : NARCISSUS CANTABRICUS (subsp. cantabricus)** \* No data. Seed from several forms flowering all winter. (15+) **C**
- 699.830 : NARCISSUS CANTABRICUS var. FOLIOSUS** \* No data. Seed from Ivor Barton's stock, long-cultivated under this name. A fine plant for the alpine-house, flowering in late winter with profuse white hoop petticoats. Dry these off in summer. (15+) **C**
- 699.845 : NARCISSUS CANTABRICUS subsp. MONOPHYLLUS** \* Spain, Sierra de los Filabres. Ex JWB 86-14 (John is convinced that this is distinct : flowers "uniformly icy sparkling white" & "single leaves, threadlike, sinuous & prostrate." . . . . . (15+) **D**
- 699.850 : NARCISSUS CANTABRICUS var. PETUNIOIDES** \* Selfed seed from the original clone of this spring-flowering taxon, described by Fernandes from material grown by John Blanchard's father. (It should have had a *clonal* name.) All will be white but some will have the distinct, flat, round corona of the parent. The name can be applied legitimately only to these . . . . . (15+) **E**
- 700.000 : NARCISSUS CORDUBENSIS** Spain, Malaga, Serrania de Ronda, SW of Ronda. J.W. Blanchard 99-15. (Wild seed of this fine, scented, deep yellow jonquil, near *N. fernandesii* Up to 3 flowers on 20-30cm. stems. Pots or the bulb-frame.) . . . . . (10+) **C**
- 700.002 : NARCISSUS CORDUBENSIS** \* Spain, Cadiz, Grazalema to Ubrique. Ex a J.W. Blanchard coll. . . . . . (15+) **B**
- 700.200 : NARCISSUS CUPULARIS** \* Italy, Sardinia. 800m. Ex a T. Norman coll. (Dwarf, pale yellow to cream tazetta, 15-20cm. high. Listed in the past as *N. tazetta* subsp. *caureus* (it would be this in 'Flora Europaea') & *N. bertolonii primulinus*.) . . . . . (8) **B**
- 700.310 : NARCISSUS CYCLAMINEUS** \* No data. Little-known in the wild & thought to be all but extinct but well established in UK gardens, where it can sow itself when suited in rather heavy, acid loam. Grown before 1608 but 'lost' for 300 years until rediscovered in Portugal in 1885. Parent of a multitude of larger hybrids, the wild plant is still unrivalled - an irresistible, little, brilliant yellow daffodil, like no other in its extraordinarily long, narrow trumpet and fully reflexed perianth segments. . . . . (20+) **B**
- 700.321 : NARCISSUS DUBIUS** \* Spain. Ex M. Salmon 528. No further data. (Smallest of Section *Tazettae*, sometimes separated into its own Subsection *Dubiae*, & thought to have originated from a hybrid between *N. papyraceus* & *N. assoamus*. An attractive little, white-flowered plant, smallest of the tazettas, which seldom sets much seed & remains little-known in cultivation.) (10+) **D**
- 700.980 : NARCISSUS EUGENIAE** \* Spain, Teruel, Montes de Tarascon above Valdolinales. 1500m. In turf. Ex JWB 87-14 (From a type-locality coll. of this dwarf, snow-melt trumpet daffodil, opening its yellow flowers on very short stems. Currently included as a subsp. of *N. pseudonarcissus* & beautifully illustrated on p. 73 of John's monograph.) . . . . . (10+) **E**
- 701.004 : NARCISSUS FERNANDESII** \* Puebla de Don Rodrigue. Ex JWB 86-01. . . . . . (10+) **C**
- 701.020 : NARCISSUS FERNANDESII** \* No data. From several colls. of this yellow jonquil, distributed locally along the drainage of the Tagus. A poorly defined species in a confusing group but all variations are worthwhile. . . . . . (20+) **B**

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

- 701.850 : NARCISSUS JACQUEMONDII** (see also 696.600 : *Narcissus bulbocodium* (subsp. *vulgaris*) var. *pallidus*) Morocco, High Atlas Mts., between Asni & Amizmiz. Ex a J.W. Blanchard coll. (From a type-locality coll. by John of this recently named little hoop-petticoat, which appears to be the same taxon we have listed under Maire's name. Suit yourselves. A good alpine-house plant with pale to deeper primrose flowers in early spring (much later than *N.b.* subsp. *praecox*). About 10cm. high.) . . . . . (15+) D
- 701.870 : NARCISSUS JEANMONODII** (*N. bulbocodium* subsp. *nivalis* as applied by Maire in 'Flore de l'Afrique du Nord') \* Morocco, High Atlas Mts., above Tizi-n-Tichka. 2000m. In turf. (Previously listed under 696.200. We have long said 'this needs a new name' but we did not anticipate anyone describing it at specific level. We fear that we are all now stuck with this legitimately published epithet from the Spanish 'splitter' Fernandez Casas. An excellent & distinct race with broad, prostrate, glossy foliage & brilliant yellow, upward-facing flowers with much exerted anthers. An easy grower & possible outside in the UK.) . . (15+) B
- 701.910 : NARCISSUS JONQUILLA** \* Spain, Cordoba, Sierra de Cabra. Ex JWB 87-12. (An excellent yellow jonquil, which grows well outside in the open garden with Dinah Batterham (Dorset, UK). Rewarding under glass as well, of course.) . . . . (10+) C
- 701.980 : NARCISSUS JONQUILLA** var. **MINOR** \* Spain, Ciudad Real, SE of Almaden. Ex J.W. Blanchard 86-03 (Previously listed by us under 701.050 as *N. aff. fernandesii*, this is a splendid plant, which both John & Mike Salmon are agreed should be placed under *N. jonquilla* var. *minor*, previously considered a rather obscure entity. This was originally from an isolated colony mentioned on p.83 of John's monograph. Mike Tucker (Somerset, UK) writes "stunning" - up to seven large flowers.) (10+) D
- 701.981 : NARCISSUS JONQUILLA** var. **MINOR** \* Spain, Cordoba, N of Andujar. Ex a T. Norman coll. . . . . (10+) D
- 702.100 : NARCISSUS LONGISPETHUS** \* Spain, Albacete, Sierra de Alcaraz. Ex JWB 86-17 (This & *N. nevadensis* differ from all other trumpet daffodils in having 2-4 flowers per stem. In a wet, rich site in nature, this has been recorded approaching 2m. in height but expect much less in cultivation. It will possible be happiest outside in the UK. Ascending yellow trumpets.) (10+) D
- 702.102 : NARCISSUS LONGISPETHUS** \* Spain, Jaen, Sierra de Cazorla. Ex JWB 86-16 (Pale form.) . . . . . (10+) D
- 702.450 : NARCISSUS NEVADENSIS** \* Spain, Granada, Sierra Nevada, upper Rio Monachil valley. 2200m. Wet-flush on W-facing slope. (Isolated, very local Sierra Nevada endemic, much easier to grow than *N. longispethus* & generally best outside in the UK. Differs from *N. longispethus* mainly in its white & pale yellow, bicoloured flowers. Usually about 30cm. high.) . . . . (15+) C
- 702.472 : NARCISSUS NOBILIS** \* Spain, Leon, Puerto de San Glorio. Ex an A. Edwards coll. (A splendid, bicoloured trumpet-daffodil from N Portugal & N Spain, where it can occur in extensive colonies. Ascending flowers with white segments surrounding deep-yellow coronas on 50cm. stems. Differs in several characteristics from *N. bicolor* and is seldom seen in cultivation.) (8) B
- 702.500 : NARCISSUS OBVALLARIS** UK, Wales, below Ffostrasol. 150m. Open grassland & deciduous woodland. (Our lovely, local Welsh trumpet daffodil. Really an imaginary taxon but generally, if not consistently, different to eastern British colonies of *N. pseudonarcissus* in its horizontal to upward-facing flowers which tend to be concolourous rather than bicoloured.) . . (20+) B
- 702.702 : NARCISSUS POPYRACEUS** \* Cyprus. Ex a C.C. Mountfort coll. (A fine, vigorous tazetta, long grown by John Blanchard as *N. pachybolbus*. Possibly most safely labelled *N. papyraceus* Cyprus form. Clusters of scented, white flowers.) . . . . (8) B
- 703.705 : NARCISSUS PSEUDONARCISSUS** \* France, Auvergne. Ex J.W. Blanchard 94-01 (From the stunning population illustrated on the dust jacket of John's monograph. For what it is worth, the general current consensus is that these should be placed under *N. bicolor* but the French populations have been called *N. pseudonarcissus* for so long that we stick with this for the present. Don't get bogged down with names, these are really super little wild daffodils for the open garden in cool areas.) . . . (10+) C
- 705.100 : NARCISSUS ROMIEUXII** (subsp. *romieuxii* var. *romieuxii*) \* Morocco, Middle Atlas Mts., above Ifrane. 1700m. Leafsoil over clay in mixed woodland. (From a splendid colony, as numerous as bluebells in a British wood, from which we first collected in 1962, best-known under the field-number 805. Extremely variable in form & colour from cream to deeper yellows.) (20+) B
- 705.200 : NARCISSUS ROMIEUXII** var. **RIFANUS** \* Morocco, Rif Mts., Iguermalet. Ex J.W. Blanchard 89-28 (From authentic material of this delightful, pale-yellow hoop-petticoat, proving to be a good grower under glass in the UK.) . . . . . (15+) B
- 705.405 : NARCISSUS ROMIEUXII** subsp. **ALBIDUS** var. **ZAIANICUS** \* Morocco, Zaian Mts., near Oulmes. Ex JWB 89-23. (Wild collected seed from this moist, lower altitude locality has produced an amazing range of forms, including some really splendid clones - possibly a group of hybrids or intergrades, like the Ifrane *N. romieuxii* population. The name is probably not worth much botanically - pick out a pale yellow one to call *N.r.a.* var. *zaianicus*! A diversity of creams & soft citron yellows.) . . . (15+) B
- 705.500 : NARCISSUS RUPICOLA** (subsp. *rupicola*) \* Spain, Avila, Sierra de Gredos, NE of Pico Almanzor. 1800m. In turf on open slopes. (A very neat member of Sect. *Apodamithae* with flat, clear-yellow flowers & glaucous leaves. A plant of acid soils in nature, this is a rather choice, small, high altitude race and one of the last *Narcissus* to flower with us.) . . . . . (10+) C
- 705.520 : NARCISSUS RUPICOLA** (subsp. *rupicola*) \* No data. Derived from stock grown by John Blanchard's father. Its origins are unknown but it has always been designated as 'Early Form'. Flowering at least a month before the preceding, this is a slightly larger plant and increases vegetatively more than the preceding. It may have a more southern or lower elevation origin. (10+) C

A : \$2.00 ; £1.50 ; DM4,- ; FF14.- C : \$4.00 ; £2.50 ; DM7,- ; FF23.- E : \$7.00 ; £4.50 ; DM12,- ; FF41.-  
 B : \$3.00 ; £2.00 ; DM5,- ; FF18.- D : \$5.00 ; £3.50 ; DM9,- ; FF32.- F : \$9.00 ; £6.00 ; DM16,- ; FF55.-

- 705.600 : NARCISSUS RUPICOLA subsp. MARVIERI** \* Morocco, Middle Atlas, S of Ksar-el-Ksiba. 1700m. N-facing, limestone slope with *Quercus* & *Cedrus*. (The yellow race endemic to Morocco. Larger & earlier here than the preceding but not quantifiably different. Not easy in our experience. Needs careful watering & appreciates a warmer, drier rest in summer.) . . . . . (10+) C
- 705.701 : NARCISSUS RUPICOLA subsp. WATIERI** \* Morocco, High Atlas Mts., above Tizi-n-Tichka. 2300m. Moist or shaded sites on rocky slopes. (One of the most beautiful of wild daffodils. The incomparable, crystalline-white race from the great massifs of the central High Atlas. We have only found it on acid soils. Grow it cool & never bake it when dormant.) . . . . . (10+) C
- 707.320 : NARCISSUS TRIANDRUS (var. triandrus)** \* No data. A delightful species with up to 6 elegant white flowers, their tepals reflexing back from the cup-shaped coronas, on 20-30cm. stems. The sole member of Section *Ganymedes* & not very satisfactorily divisible into subspecific taxa. The pure-white, broader leaved type-race seems confined to NW Spain & perhaps adjacent N Portugal. Not always the easiest to grow : a cool site outside in acid, sandy soil seems the ideal in the UK. . . . . (15+) B
- 707.700 : NARCISSUS VIRIDIFLORUS** Morocco, W of Tetouan. M. Jacobi coll. (The first time we have been able to list seed of this unique green, autumn-flowering jonquil : not many seed-collectors are around in Morocco in mid-winter. Almost always flowering without leaves, the umbels of up to 5, heavily scented, rather bluish, olive-green flowers open on 20cm. stems, which elongate greatly after flowering. A low altitude, coastal plant of heavy soils distributed from here in Morocco, S to near Agadir on the Atlantic, it is not easily grown, under glass of course, in the UK, possibly due to low light intensity in winter. It needs a long, warm summer rest and plenty water when in growth. A very rare opportunity to acquire wild seed coll. Dec., 1999.) . (10+) E
- 709.010 : NECTAROSCORDUM SICULUM (subsp. siculum)** \* No data. Tall, handsome *Allium*-relative from the W Mediterranean area. Stems of about 1.2m. carry umbels of drooping creamy bells, tinged with green & flushed with pink. Easy. . . . . (15+) A
- 738.100 : ORNITHOGALUM ARCUATUM** \* Turkey, Van, W of Yukari Narlica. 2200m. Stony alluvium in dried river bed. (A tall, handsome species, in effect a giant version of *O. narbonense*, distributed from E Turkey into NW Iran & N Iraq. Cylindrical racemes of many white flowers, with green fascia outside, on 1.5m. stems. Restrained but quite easy outside in the UK.) . . . . . (20+) B
- 709.502 : PANCRATIUM ILLYRICUM** \* France, Corsica, Venaco SSE of Corte. c.500m. Ex an A. Edwards coll. (A few seeds of this splendid bulb in *Amaryllidaceae*, endemic to the W Mediterranean islands of Corsica & Sardinia. Its spectacular umbels of exquisitely sweet-scented, white 'lilies' on 30cm. stems never fail to draw the attention of all who see it.) . . . . . (5) E
- 809.500 : RANUNCULUS ABNORMIS** \* Spain, Avila, Sierra de Gredos, NE of Pico Almanzor. 1800m. Among rocks in melt-water gulleys. (A beautiful, tuberous-rooted species, which goes dormant as the ground dries in summer. Branching, 10cm. stems with many varnished, lemon-gold buttercups, each with up to 10 'petals', from tufts of grassy foliage. Choice & delicate but not difficult with some care - it fits in well with alpine-house 'bulbs', though it will resent complete dehydration in summer.) . . . . . (20+) D

## Romulea : neglected cousins of Crocus

- 827.109 : ROMULEA BULBOCODIUM** \* Morocco, High Atlas Range, Tizi-n-Test. Ex an R. & R. Wallis coll. . . . . (15+) B
- 827.150 : ROMULEA BULBOCODIUM** \* No data. The form grown in the garden at Knightshayes in Devon. A very fine, vigorous, comparatively hardy form of this widespread, extremely variable, Mediterranean species. Grassy leaves & big rich-violet crocus-like flowers with yellow throats in spring. Good outside, in the S of Britain at any rate, it even does quite well here . . . . . (20+) B
- 827.151 : ROMULEA BULBOCODIUM** \* No data. A excellent, late-flowering form, which, as far as we can ascertain, was originally passed round by that excellent plantsman Cedric Morris and continues to circulate among a few enthusiasts. . . . . (15+) B
- 827.310 : ROMULEA CLUSIANA (R. bulbocodium complex)** \* Gibraltar. Ex a J. Hulme coll. (The wide-ranging *R. bulbocodium* defies attempts to divide it up into races & the current botanical fashion is one of despair. Almost all are thrown together. Nevertheless some plants from SE Spain, which have been called *R. clusiana*, are particularly splendid & desirable horticulturally with large flowers in rich violet with extensive yellow-orange centres. This is from an extremely fine form of the best of these. Not likely to be so good in the garden as the preceding two but the one for the alpine-house.) . . . . . (15+) C
- 827.410 : ROMULEA CROCEA (R. bulbocodium var. crocea)** \* Turkey, Antalya. 1100m. Among scrub in damp meadow. Ex a R. & R. Wallis coll. (From Bob & Rannveig's award winning form of this spectacular race, usually from below 900m. on sandy soils in small areas of SW Turkey & W Syria. Exceptional among the northern hemisphere representatives of this genus in its wholly yellow flowers and in this respect more like some of the S Africans.) . . . . . (15+) C
- 827.610 : ROMULEA LEICHTLINIANA (R. bulbocodium var. leichtliniana)** \* No data. A race of sporadic distribution in the E Mediterranean region, usually below 600m. in oak scrub. Most frequent in Greece and the Aegean islands but extending E to Hatay in Turkey. White flowers, usually marked externally with purplish shading and with yellow throats, over a long period. (15+) C
- 829.505 : ROMULEA LINARESII subsp. GRAECA** \* Greece, Evia. Ex Christian, Elliott & Hoog 620. (The Aegean race with pointed segments to the concolourous, violet, crocus-like flowers. The type-race is endemic to Sicily.) . . . . . (20+) B
- 830.300 : ROMULEA REQUIENII** \* France, Corsica, W of Calvi, Pointe de Revellata. 10m. Hard, dry, gravelly areas among low, coastal maquis. Ex an A. Edwards coll. (The first species in this genus we saw flowering (a very long time ago in early April, 1962, in this very site) and one of the most attractive Europeans. Short prostrate leaves & almost stemless flowers wholly in a most intense violet, except for the bright yellow anthers. "A super little plant, much admired", writes Rannveig Wallis.) . . . . . (15+) D

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Scilla : the best of the bulbous blues

- 872.100 : *SCILLA AMOENA* \* No data. A somewhat mysterious plant, always stated to be of "unknown origin" but reputedly "naturalized" in SE Europe, as well as France. While the 'Flora Europaea' states it is "widely cultivated", it is actually seldom seen in gardens! The leaves are developed before the upward-facing, bright-blue flowers, about 5 on 15cm., open in spring. (15+) B
- 872.305 : *SCILLA ARMENA* Turkey, Erzurum, S of Ispir, Golyurt Gecidi. 2360m. Sandy clay slopes. N. Stephens coll. (Not seen in flower but possibly more likely to be this than *S. monanthos*, which has similar seeds. Very much smaller & more delicate than *S. siberica*. Pale, penetrating, electric blue more intense on the dark blue midribs. A very little seed still available.) . . . (15+) D
- 872.602 : *SCILLA AUTUMNALIS* \* Turkey, Balikesir, NE of Ayvalik. 100m. Among *Cistus* on igneous rock. (Conical racemes of bluish lilac flowers on 15cm. stems appear before the leaves in early autumn & continue over a long period.) . . . . . (15+) B
- 873.210 : *SCILLA BITHYNICA* \* No data. An attractive plant for the open garden, which sows itself here in our heavy, acid clay. Native to low altitudes along the wet, Black Sea coasts of Bulgaria & NW Turkey, with 20cm. racemes of starry, blue flowers in spring. Seed from both pale-blues & whites with navy-blue anthers. They look well intermingled.) . . . . . (20+) A
- 873.510 : *SCILLA CILICICA* \* No data. The *Scilla* species at the eastern end of the Cilician Taurus range in southern Turkey are confusing in the wild, sometimes growing in apparently mixed colonies. They can be sorted out in seed but this also tends to differ from *S. melaina* in having about twice as many paler, lavender-blue flowers in the 20cm. high racemes. . . . . (15+) D
- 873.650 : *SCILLA GREILHEUBERI* \* Iran, Mazandaran, S of Chalus. (Previously listed as the allied *S. hohenackeri*, research by Brian Mathew indicates that the name was misapplied to these 1960's collections. This is Paul Furse's 'Caspian Bluebell'. Early-flowering with delightful, soft violet-blue flowers with reflexed segments. Often grows in quantity in the crevices of large, limestone boulders in the Caspian woodlands. Hardy in the UK but the flowers are better protected from the winter-weather.) . . (15+) B
- 873.800 : *SCILLA HYACINTHOIDES* \* Turkey, Siirt, between Kurtalan & Besiri. 500m. Wet meadows & streamsides. Ex a N. Stevens coll. (Seldom seen in gardens but a tall handsome species, occurring locally & sporadically through southern Europe to N Iraq. Stout stems up to 1m. high carry cylindrical racemes of about 100, starry, pale-margined, violet-blue flowers.) . (15+) B
- 874.400 : *SCILLA LILIO-HYACINTHUS* \* France, Hautes-Pyrenees, N of Col du Pourtalet. 1500m. Deciduous woodland. (A distinct plant, especially in its loosely scaled bulbs, distributed from SE France into N Spain. An easy garden-plant in the cool climate of the UK. Its lush, glossy leaves always attract attention, even without the 30cm. racemes of soft-blue stars.) . . . . . (15+) A
- 874.800 : *SCILLA LITARDIERI* \* Bosnia & Hercegovina, above Dubrovnik to Trebinje. 500m. Fragmented limestone. (Heads of starry, pale-blue flowers on 20cm. stems. A lovely plant, local in nature but hardy in a sunny site in the UK.) . . . . . (15+) A
- 875.000 : *SCILLA MELAINA* \* Turkey, Hatay, E of Belen. 1300m. Fissures on & at base of limestone cliffs. (More or less endemic to the Amanus Mts. Little known but excellent & trouble-free under glass here. Seems quite hardy in the UK & may even prove a fine garden-plant. Possibly closest to *S. mischtschenkoana* (*S. tubergeniana*) but with prussian-blue flowers.) . . . . . (15+) C
- 875.200 : *SCILLA MESSENIACA* \* Greece, Messinia, S of Kardamili. 30m. In shade, among limestone rocks. (Very local & confined to the tail-end of the Taigetos but seems totally temperature-hardy here. Racemes of pale-blue, starry flowers. 20cm.) (15+) B
- 875.605 : *SCILLA MORRISII* \* Cyprus, Paphos district. 700m. Moist, shaded crevices & banks, under *Quercus*. Ex D. Meikle 4015. (A very local Cyprus endemic. About 10 cm. high with erect racemes of 3-5, campanulate flowers in milky-white tinged with lilac & with pale-blue anthers. We hope to see this attractive & genuinely rare species well-established in gardens.) . . . . . (15+) D
- 876.501 : *SCILLA PERSICA* \* Turkey, Batman, between Catakkopru & Sason. Sandy clay. Ex a N. Stevens coll. . . . (15+) C
- 876.502 : *SCILLA PERSICA* Iran, Kordestan, ESE of Sanandaj. 1800m. Wet hay-meadow. (A fine plant, little known in gardens but which should be very hardy & growable outside in the UK, as it usually inhabits subalpine meadows which are very wet in spring. It contributes to a magnificent spectacle, growing in huge numbers in marshy areas with species like blue-black *Bellevalia pycnantha* & purple *Gladiolus* & *Dactylorrhiza* species. Up to 50cm. high with racemes of up to 50 soft-blue flowers.) . . . . . (15+) C
- 876.810 : *SCILLA PERUVIANA* \* No data. A very handsome, variable, low-altitude W Mediterranean species, usually quite hardy & easily grown in any good soil in a warm, sunny border in the UK. Big, wide racemes of rich violet-blue flowers carried on stout, 50cm. stems in late spring from basal rosettes of broadly lanceolate leaves. . . . . (15+) A
- 878.000 : *SCILLA VERNA* \* Spain, Avila, Sierra de Gredos, SW of Hoyos de Espino. 1700m. Moist turf on open slopes. (Racemes of starry, lilac-blue flowers with blue-purple anthers. A montane, snow-melt form of this W European species.) . . . . (15+) A
- 933.000 : *STERNBERGIA CANDIDA* \* Turkey, Mugla, SE of Fethiye. 1100m. Limestone crevices, ledges & talus on steep slopes with sparse *Cedrus*. (A unique plant in this otherwise yellow-flowered genus, discovered by Oleg Polunin in 1976 & described in 1979. Robust with narrowly, strap-shaped, grey-green leaves & large, scented, pure-white flowers on 10cm. stems in winter to early spring. Not difficult if protected by a bulb-frame or alpine-house in the UK, though fully temperature-hardy.) . . . . . (8) D

- 969.252 : TULIPA ARMENA var. LYCICA** \* Turkey, Antalya, N of Akseki. 1400m. Steep, limestone slopes with *Quercus* & *Pinus*. (The western race, separated from the the eastern type-race & *T. julia* mainly on the characters of the hairs of the bulb-tunics These three are all highly variable in the external colours of their flowers & the internal markings. Expect this to have absolutely stunning red flowers with central black blotches & glaucous, undulate leaves. 15cm. Quite reliable with us under glass.) . . . . . (15+) **B**
- 969.460 : TULIPA BIFLORIFORMIS** \* No data. Originally from the Gothenburg Botanic Garden stock of this Central Asian species. Distinct, dwarf, dainty & attractive with multi-flowered stems carrying many, starry, white, yellow-centred flowers. . . (15+) **C**
- 969.600 : TULIPA CRETICA** \* Greece, Crete, Hania, Akrotiri NE of Hania. 100m. Terra rossa. Ex a P. & P. Watt coll. (A tiny tulip, endemic to Crete, best appreciated in an alpine-house pot. Its diminutive stature easily separates it from other Cretan tulips. Starry white flowers, tinged with pink & grey-green outside & with yellow bases, on stems less than 10cm. high. . . . . (15+) **C**
- 969.601 : TULIPA CRETICA** \* Greece, Crete, Mt. Dikti, E face. (Norman Stevens' pale-pink, non-stoloniferous form of this dainty Cretan endemic, much coveted by those who have seen it. You have to grow this form from seed for a good increase.) (15+) **D**
- 969.901 : TULIPA HETEROPHYLLA** Kazakhstan, Tien Shan. 2900m. H. Fuchs coll. (A 1999 coll. of this member of a group of Central Asian tulips with long, beaked capsules & untuliplike seeds, which have been separated into both *Orythia* & *Eduardoregelia*. Very dwarf with yellow flowers with dark exteriors. Illustrated in this locality in Rix & Phillips p. 117.) . . . . . (10+) **E**
- 969.902 : TULIPA HETEROPHYLLA** Kyrgyzstan, Terskey Alatau, S of Barskoon. 2870m. A. Dickerson 00-42. . . . . (10+) **E**
- 970.220 : TULIPA HUNGARICA** \* No data. Seed from a plant grown as the S Bulgarian *T. urumoffii* (which is probably the same as *T. rhodopea*) but which seems a little robust for this and may come nearer to *T. hungarica* (a name which some botanists consider should cover all these Balkan taxa anyway), so its seems best to include it here. These SE European tulips, like others in the *T. gesnerana* group, are a confusing lot. This is about 25cm high with fine yellow flowers, sometimes with a red fleck. . . (10+) **D**
- 970.300 : TULIPA ILIENSIS** \* No data. A neat, little tulip from the Pamir-Alai, in the group around *T. kolpakowskiana*. Smaller even than *T. cretica*. Flowers with greenish-rimmed, rosy-carmine exteriors open to flat, yellow stars. . . . . (10+) **C**
- 970.400 : TULIPA JULIA** \* Turkey, Hakkari, Zab gorge at Bagisli. 1500m. Loose, igneous scree. (Differs technically from *T. armena*, the other truly wild, E Anatolian red tulip, in the matted, woolly hairs inside the bulb-tunics but it usually also has more pointed outer segments. May or may not have the central, black blotch rimmed with yellow but usually eye-burning, orange-scarlet.) (10+) **C**
- 970.401 : TULIPA aff. JULIA** \* Turkey, Hakkari, Zab gorge S of Hakkari. 1300m. Steep stony slope below NE-facing cliffs. (Raised from seed collected in 1986 under our field number 7673, this does not match the *T. julia* populations higher up the Zab at Bagisli. The scarlet tulips are such a taxonomic nightmare that it seems most appropriate to place it under this species, which differs technically from *T. armena*, the other truly wild, E Anatolian red tulip, in the matted, woolly hairs inside the bulb-tunics. It usually also has more pointed outer segments. May or may not have the central, black blotch rimmed with yellow.) . . . . . (10+) **C**
- 970.710 : TULIPA POLYCHROMA** \* No data. From several forms of this dwarf species, 'lumped' under *T. biflora* by some. A finer plant than commercial *T. biflora* with big yellow-centred white flowers, usually pink-backed, on short stems. . . . . (15+) **B**
- 971.410 : TULIPA SPRENGERI** \* No data. Found last century near Amasya in N Turkey & now thought to be extinct in the wild. Very much alive in cultivation. The best garden-plant in the genus for the UK, often sowing itself freely. Likes a good, heavy, slightly alkaline soil but is accommodating. Elegant, scarlet-orange, olive-green-backed flowers in June, later than any other. . . (20+) **A**
- 971.950 : TULIPA SYLVESTRIS** \* No data. Usually shy-flowering & of limited fertility. This form flowers profusely & sets seed well. About 30 cm. with large, scented, clear yellow flowers, greenish outside. Good soil in a very sunny site. . . . . (15+) **B**

## Tulipa : unidentified collections from Iran, Kyrgyzstan & Syria

- 16702 : TULIPA SP.** Iran, Qazvin, S of Lowshan. 600m. Stony clay on open slopes. 22.5.00 . . . . . (10+) **D**
- 16711 : TULIPA SP.** Iran, Zanjan, NW of Zanjan. 1250m. Sandy clay & gravel hills in river valley. 23.5.00 . . . . . (10+) **D**
- 16776 : TULIPA SP.** Iran, East Azerbayejan, SW of Ahar. 1820m. Montane steppe. 26.5.00 . . . . . (10+) **D**
- 16848 : TULIPA SP.** Iran, West Azerbayejan, between Agh Bolagh & Sangar. 1500m. Rocky slopes. . . . . (15+) **D**
- 16868 : TULIPA SP.** Iran, Kordestan, NW of Divandarreh. 2000m. Gravelly clay slopes. . . . . (15+) **D**
- 16891 : TULIPA SP.** Iran, Kordestan, SW of Negel (Sanandaj to Marivan). 1350m. *Quercus* scrub on shale. . . . . (15+) **D**
- 16911 : TULIPA SP.** Iran, Kordestan, ESE of Sanandaj. Steep, rocky slopes with diverse steppe-vegetation . . . . . (10+) **D**
- R. & R. Wallis 96-46 : TULIPA SP.** \* Syria, between Qatana & Barqash. 1400m. Serpentine scree. (Red flowers.) . . (10+) **D**
- A. Dickerson 00-41 : TULIPA SP.** Kyrgyzstan, Kyrgyz Alatau, S of Kara Balta, Too Ashuu pass. 2855m. . . . . (10+) **D**
- A. Dickerson 00-43 : TULIPA SP.** Kyrgyzstan, Talas Alatau, S of Klyuchevka, Kara Bura pass. 3215m. . . . . (10+) **D**
- A. Dickerson 00-44 : TULIPA SP.** Kyrgyzstan, Kyrgyz Alatau, S of Bishkek, Ala Archa. 2270m. . . . . (10+) **D**



Allium, Brodiaea, Calochortus, Dichelostemma, Tritoleia, etc. will be in our next list

## Erythronium : an unrivalled range of the westerners

We list here an unprecedented range of seed from the western members of this fashionable genus. Most grow in well-drained habitats usually in light shade. When areas are hot & dry in summer, the corms are likely to be growing deeply among stones, where soil-temperature & moisture remain constant. Their preference for serpentine areas is marked : singularly inhospitable, infertile soils, deficient in nitrogen, phosphorous & calcium, with high concentrations of magnesium. We suggest caution in attempting these in pure peat : a mix of half granite chippings and half sphagnum peat or leafsoil might be more appropriate. Species from warmer, drier summer habitats might be best in well-drained sites in full sun in cool, wet climates. These may need a summer-rest. All seem remarkably temperature-hardy and many grow surprisingly well in the open garden in wetter climates. Seed of most of the species from California & Oregon will come up easily after a sufficient cool

period. Early experience with *E. klamathense*, *E. pusaterii*, *E. pluriflorum* & *E. purpurascens* showed them to be extremely difficult to germinate. (The following comments may also apply to various races of *E. grandiflorum*, *E. idahoense*, *E. nudopetalum*, etc. & other cold-climate taxa, like *E. taylori* & *E. citrinum* var. *roderickii*.) They appeared to require a very long cold period or repeated freezing. This was verified, wholly independently, in 1996 by John Andrews in California, Art Guppy in British Columbia & Norman Stevens in the UK. They all germinated *E. pluriflorum* & *E. pusaterii* after subjecting imbibed seed to long spells in the refrigerator. What would appear to be required is a period of about 6 months at a temperature around 0 C or 32 F. We have, however, since received several reports from growers who have germinated such species successfully by conventional treatment outdoors in the UK. Life is never simple.

- 1.350.200 : ERYTHRONIUM CALIFORNICUM** Cal., Humboldt Co., SSW of Willow Creek. 1580m. Stony serpentine areas in openings among conifers. (The lovely species of the N Californian Coast Ranges distributed S from here almost to the Bay area. A plant of foothill woodland & pine forest. Beautifully mottled leaves. Creamy white flowers with yellow throats.) . . . . (15+) C
- 1.350.400 : ERYTHRONIUM CITRINUM** Oregon, Josephine Co., SW of Selma. 550m. Steep slopes with sparse conifers. (Mottled leaves & white to cream flowers with lemon bases. Restricted to the Coast Ranges on the California-Oregon line.) . . . (15+) C
- 1.350.401 : ERYTHRONIUM CITRINUM \*** Cal., Del Norte Co., ENE of Gasquet. 450m. Coniferous woodland. . . . (15+) C
- 1.350.500 : ERYTHRONIUM CITRINUM var. RODERICKII** Cal., Trinity Co., Scott Mts., between Tangle Blue Creek & Bear Creek. 1250m. Openings in coniferous forest. (Round the mountain from the type locality, where it is shy-flowering. Listed in 1989 as a form of *E. californicum* with purple filaments (11018). Nearest recorded populations of *E. citrinum*, *E. hendersonii* & *E. californicum* are all about 35km. distant. This may have something to do with all or any of them. It is not recognized as a valid taxon in "Jepson" but the name covers quite a large population and is definitely worth retaining by gardeners.) . . . . . (15+) D
- 1.351.000 : ERYTHRONIUM GRANDIFLORUM** (var. *grandiflorum*) Utah, Cache Co., above Tony Grove Lake. 2400m. Open slopes with *Artemisia*. (Montane, snow-melt plant with a northern & eastern distribution. Outstanding bright yellow flowers and plain green leaves. Here with red-brown anthers - so far S, it usually has yellow-anthers (subsp. *chrysanthrum*)). . . . (15+) C
- 1.351.100 : ERYTHRONIUM GRANDIFLORUM var. CANDIDUM** Washington, Whitman Co., Steptoe Butte. 1020m. N-facing slope with sparse *Pinus*. (From the 1906 type-locality of this white-flowered plant. May or may not be the same as *E. idahoense*. Isolated here on top of a quartzite butte rising above intensively cultivated palouse country on the Idaho line.) . . . . . (15+) E
- 1.351.101 : ERYTHRONIUM GRANDIFLORUM var. CANDIDUM** Washington, Whitman Co., Kamiak Butte. 1020m. In mixed coniferous woodland on N-facing slope. (No early records from here but a twin, quartzite butte habitat.) . . . . . (15+) E
- 1.351.201 : ERYTHRONIUM HELENAE** Cal., Lake Co., SE of Middletown, Butt's Canyon. 450m. Among *Arctostaphylos* chapparal on serpentine slope. J. Andrews coll. (A beautiful, very local species only known from around Mt. St. Helena, in Napa, Lake & Sonoma Cos., quite a densely populated and cultivated area, where few colonies are accessible. With mottled leaves, it is quite near *E. californicum* but has yellow anthers and a definite capacity to increase vegetatively. This has settled down well from our 1989 coll. in this site with pot-cultivation under glass & seems to enjoy a drier summer rest than others.) . . . . . (15+) D
- 1.351.300 : ERYTHRONIUM HENDERSONII** Oregon, Jackson Co., N of Medford. 400m. Openings among scrub in *Quercus* woodland. (Limited to the Oregon-California borders, a superlative, robust species with dark-mottled leaves. Lavender-pink flowers with dark anthers & a purple base, surrounded by a white or yellow zone. Quite easy in a well-drained site in the UK.) (15+) C
- 1.351.301 : ERYTHRONIUM HENDERSONII** Oregon, Jackson Co., Siskiyou Mts., 1030m.. Wooded slope. . . . . (15+) C
- 1.352.302 : ERYTHRONIUM HENDERSONII \*** Oregon, Jackson Co., Jacksonville. 500m. Among *Quercus* scrub. . . (15+) C

- 1.352.303 : ERYTHRONIUM HENDERSONII** \* Oregon, Josephine Co., SE of Murphy. 350m. Beneath *Quercus*. . . (15+) C
- 1.351.500 : ERYTHRONIUM HOWELLII** Oregon, Josephine Co., E of Takilma. 670m. Among conifers on open, turfey, stony slopes. (Nearest to *E. citrinum* but with no basal appendages. White flowers turn pink as they age. Mottled leaves.) . . . . . (15+) C
- 1.351.501 : ERYTHRONIUM HOWELLII** Oregon, Josephine Co., above Waldo. 650m Among *Arctostaphylos* scrub & in shade of deciduous *Quercus*. (A type locality of this local plant : from where the Illinois valley meets the Klamath Ranges.) (15+) C
- 1.351.700 : ERYTHRONIUM KLAMATHENSE** Cal. Siskiyou Co., SW of Castle Lake. 1750m. Among scrub & grasses on steep, stony slopes. (High altitude species, rarely extending below 1500m., & closest to *E. purpurascens*. Yellow-centred, milk-white flowers with creamy anthers. Plain bright-green leaves. A local, mountain-plant, mainly of S central Oregon) . . . . . (15+) D
- 1.352.000 : ERYTHRONIUM MULTISCAPOIDEUM** \* Cal., Butte Co., N of Magalia. 600m. Under *Cupressus* on serpentine. G. Greger coll. (Mottled leaves White flowers with pale, greenish yellow centres & white anthers. No close affinities and the only species with stoloniferous corms. These are much dwarfer plants (in the wild) than the next. Best dryish in summer.) . (15+) C
- 1.352.100 : ERYTHRONIUM MULTISCAPOIDEUM** (*E. "cliftonii"*) \* Cal., Butte Co., S of Pulga. 420m. Steep, open, serpentine scree. (More or less a giant form (in the wild) of the species only known from this one site. Never described botanically but grown in the UK as *E. "cliftonii"*. Proving a good grower. Adaptable and reputedly accommodating in the open garden.) . . (15+) D
- 1.352.400 : ERYTHRONIUM OREGONUM** subsp. **LEUCANDRUM** Oregon, Douglas Co., S of Tiller. 460m. Among *Pinus* on steep serpentine slopes. (Race with white anthers, of more limited distribution towards the SE of the range. The white flowers, often maturing to pink, have markings in orange, dark-red or brown around the yellow bases. Superlative.) . . . . . (15+) C
- 1.352.489 : ERYTHRONIUM OREGONUM** \* No data. From a fine cultivated English garden-form, originally from 'Nymans' in Sussex, where it appears to be the only species established in any quantity. It keys out as 'pure' *E. oregonum* . . . . . (15+) C
- 1.352.700 : ERYTHRONIUM PLURIFLORUM** Cal., Madera Co., Shuteye Peak (Sierra Nevada E of Merced). 2310m. NW-facing granite ledges. J. Andrews coll. (Described in 1990, though the first coll. was made in 1907 & misidentified by Applegate & others as *E. purpurascens*. It is allied to this with plain green leaves but the 30cm. stems carry up to 10 (exceptionally to 20) nodding, bright yellow flowers, maturing to bronze or pinkish. Isolated high on Chiquito Ridge between Shuteye & Little Shuteye Peaks, it flowers as late as July. It seems to need prolonged cold to germinate but many growers have written telling us of their successes and it was listed in the trade as young plants raised from John's original coll. for the first time in 1999.) . . . . . (15+) E
- 1.352.802 : ERYTHRONIUM PURPURASCENS** Cal., Plumas Co., N of Greenville. 1100 m. G. Greger coll. (Plain green leaves & yellow-centred white flowers, purple-tinged with age. The most widespread of this trio, most numerous around the upper drainage of the Feather River, reaching to almost 2500m. A collection made more or less in the type-locality, at a comparatively low altitude for the species, where colonies are more sparse but may be more growable.) . . . . . (15+) D
- 1.353.000 : ERYTHRONIUM PUSATERII** Cal., Tulare Co., Jordan Peak (Sierra Nevada ENE of Porterville). 2774m. Granite rock-falls. J. Andrews coll. (Again described in 1990 - the Purpus coll. of 1895 was placed under *E. purpurascens* & Pusateri's later colls. in *E. grandiflorum*. Like a large *E. purpurascens* with well developed appendages on the segments & a larger yellow centre. The most southern of the westerners, confined to a small area at the sources of the Tule & Kaweah Rivers.) . . . . . (15+) E
- 1.353.105 : ERYTHRONIUM REVOLUTUM** Cal., Del Norte Co., near Gasquet. c.400m. P. Gustafson coll. (An extremely interesting coll. from one of the few Californian colonies of this splendid species, which extends N to Canada. Growing here in the same area as *E. citrinum* with several others not too far distant. The more southern, early flowering colonies near Ukiah appear to have been largely eliminated & we are told are less attractive forms. Mottled leaves and sumptuous rose-pink flowers.) (15+) C
- 1.353.120 : ERYTHRONIUM REVOLUTUM** \* No data. Fresh 2000 seed from the vigorous stock in Peter Chappell's Hampshire garden at 'Spinners'. These will be in varying shades of pink & may show some hybrid influence. A species of the wet Pacific NW with beautiful, brown-marbled, lush, green foliage. If you are not a specialist & just want some good, hardy garden-plants for the moist, mild climate of the UK, where this will usually sow itself in shady conditions, this is what you should have. . . . (15+) B

## Another new Erythronium from the high Sierra Nevada

- 1.353.250 : ERYTHRONIUM TAYLORI** Cal., Tuolumne Co., Pilot Ridge (Sierra Nevada E of Oakdale). 1340m. Steep, NE-facing metamorphic rock outcrops in conifer-oak forest. (The most recently described (in 1997) among the new species from the Sierra Nevada. These are all allied to *E. purpurascens* and may need similar treatment in cultivation. Locally numerous but so far only known from the type-locality, this can have up to 8, nodding, fragrant, bicoloured flowers, white at the tips and yellow at the bases, on stems of about 30cm. It is distinguished from bicoloured *E. purpurascens* by its much larger flowers with appendages at the bases of the inner segments and from the closely related *E. pusaterii* by its white anthers. It is a lower altitude plant than the latter and apparently shares with the plain yellow *E. tuolumnense*, a capacity to increase vegetatively, forming clumps. A modest coll. has been made in the hope that we can see this extremely local species firmly established in cultivation.) . . . . . (10+) E
- 1.353.300 : ERYTHRONIUM TUOLUMNENSE** \* Cal., Tuolumne Co., NE of Columbia. 750m. Steep slopes in deciduous woodland. (Plain green leaves & up to 5, bright-yellow flowers. A low altitude relic, amazingly hardy & easy in European gardens. It is also of limited distribution in the wild, though much more locally abundant than was once thought.) . . . . . (15+) C

A : \$2.00 ; £1.50 ; DM4,- ; FF14.- C : \$4.00 ; £2.50 ; DM7,- ; FF23.- E : \$7.00 ; £4.50 ; DM12,- ; FF41.-  
 B : \$3.00 ; £2.00 ; DM5,- ; FF18.- D : \$5.00 ; £3.50 ; DM9,- ; FF32.- F : \$9.00 ; £6.00 ; DM16,- ; FF55.-

## Fritillaria : specialists of serpentine scree, granite and adobe clay

Names here mostly follow the account in Jepson, which is itself derivative from work done by Roger MacFarlane, whose names are largely in use in the UK. Individual populations of species like *F. affinis* (*F. lanceolata*) and *F. biflora* can look more distinct than many Mediterranean populations given specific status. For gardeners, the articles written by Dr. Sylvia Martinelli in the March & June 1992 AGS Bulletins are the

most useful references available. Some still pose problems but successful cultivation of these plants is much more widespread now than in the past. Use well-drained, lime-free, low nutrient composts and, in the UK, give them their first winter watering quite late. Excess nitrogen should be avoided, especially for serpentine species - please note our comments about the chemical characteristics of this under *Erythronium*.

- 1.370.002 : FRITILLARIA AFFINIS** \* Cal., Stanislaus Co., above Adobe Creek. 490m. Among *Arctostaphylos* in stony clay over serpentine. (Nodding bells mottled in brown-purple & pale yellow. Up to 20cm. here. One of the easier ones.) . . . . . (15+) **B**
- 1.370.050 : FRITILLARIA AFFINIS** Oregon, Josephine Co., SW of Selma. 450m. Among volcanic debris on open, S-facing slopes. (Illinois Valley form, 15-20cm. high, often single-flowered & usually yellowish green with just a few brown lines.) . . . (15+) **C**
- 1.370.200 : FRITILLARIA AFFINIS** (*F. lanceolata*) Idaho, Kootenai Co., ESE of Worley. 750m. *Pinus* woodland. (A giant from the NE extremity of distribution : 60cm. or more high, with broadly lanceolate leaf-whorls & up to 8 flowers..) . . . . . (20+) **C**
- 1.370.301 : FRITILLARIA AGRESTIS** \* Cal., Alameda Co., ESE of Livermore. 450m. Among grass on clay slopes. (An adobe-clay plant, the valley-grassland version of *F. biflora*. Once widespread in the Central Valley but now very localised as most of its habitat has been destroyed by agriculture & development. Green-cream bells, purple-brown inside. Up to 50 cm.) . . . . . (15+) **C**
- 1.370.403 : FRITILLARIA ATROPURPUREA** Cal., Plumas Co., N of Greenville. 1100m. G. Greger coll. (Creamy bells mottled in purple-brown on stems of about 20cm. More or less an alpine or steppe version of *F. affinis*, distributed in an interior parallel arc E to S. Dakota - here temperatures can go down to -20 F. Narrower-leaved than *F. affinis* with more open bells.) . . . (15+) **D**
- 1.370.500 : FRITILLARIA BIFLORA** \* Cal., San Luis Obispo Co., above San Simeon Bay. 10m. Coastal grassland in sandy clay. (In fine form here, 20-30cm. high with darkest, brown-purple, green-striped bells. Always a coastal plant extending S to around the Mexican border - maybe best grown frost-free but the coast is cool in summer so do not bake it when dormant.) . . . . . (15+) **C**
- 1.370.650 : FRITILLARIA EASTWOODIAE** (*F. phaeantha*) \* Cal., Shasta Co., S of Shingletown. 1000m. Openings in mixed woodland. (A dubious 'species', apparently a stable, recent hybrid between *F. recurva* & *F. micrantha*. Dr. Martinelli describes the elegant bells here as from all red or all apricot to brown-orange edged with yellow and orange with yellow inside.) . . (20+) **C**
- 1.370.800 : FRITILLARIA GLAUCA** \* Cal., Humboldt Co., SSW of Willow Creek. 1580m. Unstable, serpentine talus on steep, N-facing slope. (Very dwarf, serpentine-endemic of the NW Coast Ranges, not unlike the Turkish scree-forms of *F. crassifolia*. Thick, glaucous leaves & nodding bells in yellow through to red-browns in this site. Not difficult to grow with us : we can offer cultivated, hand-pollinated 2000 seed from selected seedlings. The browns are rare in cultivation and the yellows are daintier plants than the Mendocino Pass yellow with heavier brown speckles. If you want these, please specify 'brown' or 'yellow'.) . . . . . (10+) **D**
- 1.370.802 : FRITILLARIA GLAUCA** \* Cal., Mendocino Co., Mendocino Pass. 1500m. Serpentine. (Selected yellow) (10+) **D**
- 1.371.100 : FRITILLARIA LILIACEA** Cal., Marin Co., NW of Nicasio. 15m. Among scrub on low, grassy, coastal hills. J. & G. Robinett coll. (A beautiful species with a very limited distribution in the coastal mist-belt, N & S of San Francisco. Perhaps best kept frost-free in winter & cool in summer. Pendant, creamy white bells on 30cm. stems.) . . . . . (10+) **D**
- 1.371.201 : FRITILLARIA MICRANTHA** Cal., Tuolumne Co., ESE of Groveland. 950m. Mixed woodland. (Robust species of the Sierra Nevada foothills. Up to 10 nodding bells, usually purplish or in paler, greener tones, sometimes mottled.) . . . (20+) **B**
- 1.371.520 : FRITILLARIA PINETORUM** Cal., Tulare Co., Jordan Peak. 2770m. J. Andrews coll. (Not seen in flower. These local, very high altitude plants from the granites of the Sierra Nevada are particularly obscure & have never been grown.) . . (15+) **D**
- 1.371.600 : FRITILLARIA PLURIFLORA** Cal., Lake Co., Walker Ridge. 600m. Open, grassy areas in heavy clay. (One of the most distinct & beautiful in the genus, 10-30cm. tall with up to 7, conical bells in a rich, pure unmarked pink. A classic adobe-clay plant from soil that is wet & glutinous in spring but dries like concrete later. A challenge but it has been grown well.) . . . . . (15+) **D**
- 1.371.700 : FRITILLARIA PUDICA** Idaho, Butte Co., NE of Carey. 1520m. E & SE-facing slopes of stony ridge. (Unlike any other N American. Nodding, clear-yellow bells, sometimes maturing to orange-red shades, on stems of 20cm. Usually a plant of montane steppe, N into Canada & SE to Colorado. Often well-grown in cultivation but not always easy : likes a cold winter.) . . (20+) **C**
- 1.371.800 : FRITILLARIA PURDYI** \* Cal., Trinity Co., S of Bear Creek Trailhead. 960m. Open, stony, serpentine slope. (Local on the N Coast Ranges (here at its NE limit). Leaves crowd on the ground & 10cm. stems carry wide, waxy, nodding bells, described by Martinelli as "the shiniest, most delectable fritillaria flowers," brown veined & tinted on a green-white ground.) . . . (20+) **C**

- 1.371.906 : FRITILLARIA RECURVA** \* Cal., Trinity Co., N of Junction City. 500m. Serpentine (One of the the most striking in the genus : incomparable & unique with pendant, orange-scarlet trumpets on stems up to 50cm. high, whorled with narrow leaves. We do not find this a great problem if it is not kept too hot & dry in summer : our own hand-pollinated seed.) . . . . . (15+) **D**
- 1.372.050 : FRITILLARIA RODERICKII** (possibly *F. grayana*, lost under *F. biflora* in "Jepson") \* Cal., Mendocino Co. Among grass in open woodland on clay. From an original Wayne Roderick coll. (Known from one or two vanishing sites away up on the NW Pacific coast. Obtuse segments in brown tipped with white. Dwarf & one of the easiest for UK growers.) . . . . . (15+) **C**
- 1.372.100 : FRITILLARIA STRIATA** \* Cal., Kern Co., Greenhorn Mts., NE of Bakersfield. 760m. (Pendant bells with recurved tips. Described by Alan Galloway, the discoverer, as "white to creamy with purplish dotted striae" - appearing pink - and "with the most delicious fragrance". An adobe-clay species, extremely difficult but definitely not impossible, as these few UK grown seeds from that brilliant grower Alan Edwards demonstrate. We do try to grow it but have never flowered it nor induced it to set seed.) . (5) **F**
- 1.372.150 : FRITILLARIA VIRIDEA** Cal., San Benito Co., above Clear Creek W of San Benito Mt. 970m. J. Andrews coll. (An obscure, narrow endemic of serpentine-barren. Nodding bells only on one side of the 30-50cm. stem. According to Martinelli, variable in green, brown & yellow tones. Ness in 'Jepson' says it is "pale green to almost black, not mottled.") . . . . . (15+) **E**

## Trillium : keep trying to solve the problems with us

Problems over seed germination of this fashionable & beautiful genus remain unsolved. As the Cases state in their monograph, "published experimental documentation of the germination phenomena is surprisingly skimpy." *T. rivale* we know can be

safely dried. The following 2000 seeds have been stored dry at about 5 C. Let us know the results, whether positive or negative. With conventional methods, you may not have any germination before spring 2002. A project for the millenium.

- 1.919.520 : TRILLIUM ALBIDUM** \* No data. Described by Case as "one of the showiest of the western sessile trilliums ... a very distinct and splendid species." Distributed through NW California & SW Oregon. Robust & about 50cm. tall, carrying broad leaves, blotched with dark grey-green, surrounding the sessile flower with upright or slightly spreading creamy white petals.) . (20+) **D**
- 1.919.830 : TRILLIUM CERNUUM X ERECTUM** \* No data. Hybrids between these in the wild. As the *T. erectum* parent is the red form, expect "all possible combinations of form, structure and color" heavy on reds & pinks rather than the white of typical *T. cernuum*. Both species grow in acid, humus-rich soils in wet woodlands, in the NE of the USA & in adjacent Canada. . (15+) **D**
- 1.920.120 : TRILLIUM CUNEATUM** \* No data. One of the largest & most vigorous of the sessile eastern species. A plant of wooded hills from Kentucky & Tennessee into Alabama & N Carolina, especially on limestone. Clumps of stems up to 50cm. high with mottled leaves. Green, purple-tinged sepals surround the upright petals in shades of maroon, yellow, green or brown. . (15+) **D**
- 1.920.520 : TRILLIUM ERECTUM** \* No data. An exceptionally variable species widespread through NE America from Quebec to Georgia moist woodlands on acid soils. Elegant, outward-facing or slightly declined flowers with pointed segments in stems about 30cm. high. Seed from a wide range of colour forms, some of which may have resulted from natural hybridization. . . (15+) **D**
- 1.920.521: TRILLIUM ERECTUM var. ALBUM** \* No data. White flowers with dark maroon ovaries . . . . . (10+) **D**
- 1.920.525 : TRILLIUM ERECTUM from BICOLOURED FORM** \* No data. Yellowish white with a violet edge. . . (10+) **D**
- 1.920.530 : TRILLIUM ERECTUM from PINK FORM** \* No data. Delicately pink-flushed form. . . . . (10+) **D**
- 1.920.532 : TRILLIUM ERECTUM from RED FORM** \* No data. The 'typical' velvety dark-red. . . . . (10+) **D**
- 1.920.535 : TRILLIUM ERECTUM from YELLOW FORM** \* No data. The most frequent variant in soft-yellow. . . (10+) **D**
- 1.920.950 : TRILLIUM GRANDIFLORUM f. ROSEUM** \* From the exquisite pink form of this superlative, well-known species with large, full-petalled flowers on 30cm. stems. These open pale pink and deepen as they age. . . . . (10+) **E**
- 1.921.010 : TRILLIUM KURABAYASHII** No data. German-grown seed received under this name, applied in Freeman's 1975 classification which we are not happy, in the absence of cytological evidence, to apply to cultivated material without provenance. This taxon, recorded from NW California, Curry Co. Oregon & the N Sierra Nevada, It may be the same as the plant as we grow as a red form of *T. chloropetalum*. Distinguishing such garden material of unknown origin is neither simple nor easy.) (20+) **D**
- 1.922.301 : TRILLIUM RIVALE** Oregon, Josephine Co., SW of O'Brien. 550m. Among moss on level, stony areas under *Pinus*. (An exquisite little endemic from both sides of the serpentine ranges dividing Josephine Co., Oregon, & Del Norte Co., California.. No more than 15cm. high. White or palest pink flowers, speckled with purple. Quicker to flower from seed than most,) . . (10+) **D**
- 1.922.820 : TRILLIUM SULCATUM** \* No data. A "robust and splendid plant" according to Case. Of comparatively limited distribution in the wild, along the Cumberland Plateau from SW Virginia to NE Alabama. Allied to *T. erectum* & *T. flexipes*, this is one of the largest leaved pedicellate species with stems up to 70cm. carrying rich maroon-red flowers. . . . . (15+) **E**
- 1.923.120 : TRILLIUM VASEYI** \* No data. Another pedicellate species of fairly restricted distribution in nature. Mainly a plant of steep, sheltered, wooded slopes on the western mountains of the Carolinas, progressing south into the neighbouring states. Flowers with thick-textured, crimson petals, with impressed veins, on stems about 50cm. high. . . . . (20+) **D**

## Alstroemeria : it's just right for sowing seed now!

Featured at some length in our last list, we include those species, which we still have available, briefly again now, as it is an excellent time to sow seed. Refer to our last list for more detail. The names follow those in 'Die Gattung *Alstroemeria* in Chile' by E. Bayer (1987).

- 2.026.400 : ALSTROEMERIA AUREA** \* Chile, VIII, Nuble, SW of Termas de Chillan. 1500m. Open banks in *Nothofagus* woods. (From an outstanding population : its coppery reds & orange-scarlets approach *A. ligtu* subsp. *simmsii*.) . . . . . (10+) **C**
- 2.026.410 : ALSTROEMERIA AUREA** \* Chile, IX, Cautin, W of Vilcun. 200m. Among scrub at woodland margins. (The more widespread bright yellow race from the colder, wetter south. A hardy & easy garden-plant in the UK.) . . . . . (15+) **B**
- 2.026.900 : ALSTROEMERIA EXSERENS** \* Chile, Reg. Metro., La Parva to Valle Nevado. 2800-3100m. Steep, loose, stony slopes. (A high altitude species with about the largest flowers in the genus on the dwarfest of plants. Rich pink, darker tips.) . . . . . (10+) **E**
- 2.026.950 : ALSTROEMERIA aff. EXSERENS** \* Chile, VI, Cachapoal, NE of Coya. Ex an A. Brinck coll. (as *A. exserens*) (Much taller, about 60cm., than the alpine type-race. Big heads of rose-pink flowers, neatly banded bright yellow.) . . . . . (10+) **B**
- 2.027.110 : ALSTROEMERIA HOOKERI** (subsp. *hookeri*) \* No data. A beautiful dwarf species, 15-20cm high, & one of the best for pot-cultivation in the alpine-house. Green-tipped, pastel pink flowers, blotched with gold & lightly speckled.) . . . . . (10+) **D**
- 2.027.520 : ALSTROEMERIA aff. KINGII** \* Chile, III, Atacama. Ex an A. Brinck coll. (Received as an unidentified coll., this does not key-out satisfactorily but it is closest to this little desert species. Pure, rich yellow, streaked on the upper segments.) (10) **E**
- 2.027.800 : ALSTROEMERIA LIGTU** subsp. **INCARNATA** \* Chile, VII, Cerro de los Cipreses (Rio Teno valley E of Curico). 1500m. Ex an A. Brinck coll. ( About 1m. high, always with a pink ground-colour. "Gorgeous...sumptuous...!") . . . . . (10+) **C**
- 2.028.300 : ALSTROEMERIA MAGNIFICA** subsp. **MAXIMA** \* Chile, IV, Choapa, Pichidangui. Ex an A. Brinck coll. (Indeed magnificent with very large, flat, lilac flowers heavily marked on the two upper segments with dark red.) . . . . . (10+) **C**
- 2.028.500 : ALSTROEMERIA PALLIDA** \* Chile, Reg. Metro., Lagunillas, ENE of San Jose de Maipo. 2200m. Steep, stony slopes. (Alpine remaining 20cm. or less high. Palest pink to white, the upper segments gold-blotched & crimson-streaked.) . . . . . (10+) **C**
- 2.028.609 : ALSTROEMERIA PATAGONICA** \* Argentina, Santa Cruz, Guer Aike. 30-50m. Among low scrub on steep, SW-facing banks of consolidated sand. Ex S. Pern & J. Watson 6226 (Orange-yellow. Slightly taller & more slender than the next.) (8) **D**
- 2.028.610 : ALSTROEMERIA PATAGONICA** \* Chile, XII, Magallanes, near Punta Arenas. Ex an O. Magen coll. (Broader, twisted, blue-grey foliage & small, upward-facing, orange-yellow flowers on stems under 10cm. high. Absolutely hardy.) . . . . . (8) **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. Very large, beautiful, pure white flowers. . . . . (10+) **D**
- 2.029.100 : ALSTROEMERIA PRESLIANA** subsp. **AUSTRALIS** \* Chile, IX, Malleco, Cordillera de Nahuelbuta, W of Vegas Blancas. 1200m. Openings in woodland, often in shade. (Upper segments, streaked with crimson. Intense, deep-pink.) (10+) **C**
- 2.029.410 : ALSTROEMERIA PULCHRA** (subsp. *pulchra*) \* Chile, V, Valparaiso, Con Con. 115m. In heavy, red soil on W-facing banks in cultivated, littoral area. Ex Beckett, Cheese & Watson 4762 (White or pale lilac, streaked with crimson.) . . . . . (10+) **C**
- 2.440.000 : HERBERTIA LAHUE** (subsp. *lahue*) \* Argentina, Buenos Aires Prov. Ex an A. Castillo coll. (Hardy with us in an unheated greenhouse. A delightful little corm in *Iridaceae* with a long succession of violet flowers on 10cm. stems.) . . . . . (20+) **B**
- 2.659.000 : NOTHOSCORDUM OSTENII** \* Uruguay. No further data. Ex a J.A. Castillo coll. (This is a choice, little 'sweetie' and apparently extremely scarce and local in nature. Alberto Castillo sent Brian Mathew a few wild-collected seeds in 1987. Brian grew these and gained a PC for the species in April, 1992. He kindly sent us seed the following year & we have been growing it under unheated glass along with our other winter-growing bulbs. It has proved temperature-hardy and comparatively trouble-free. 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. "An excellent little bulb" comments Brian. We agree and we are sure you will as well.) . . . . . (20+) **E**
- 2.940.011 : TECOPHILAEA CYANOCROCUS 'LEICHTLINII'** The famous blue Chilean crocus, supposedly extinct in the wild but well established in cultivation. This is the 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. We do not find it at all 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. . . . . (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 S American 'brodiaea', a fascinating bulb for the alpine-house or bulb-frame.) . . . . . (10+) **D**

## Some winter-growers from the cold Namaqualand mountains

Unlike the summer rainfall species in our last list, these winter-growers are active with all the other better-known northern hemisphere, summer-dormant 'bulbs'. The perception is that South African 'bulbs' need to be kept frost-free. This is true of the multitude of low-altitude species from the Western Cape. There are however numerous species in the colder mountain-ranges of the Northern Cape & along the perimeter of the Karoo, untried & little-known, which should succeed in the bulb-frame or alpine-house alongside their northern hemisphere relatives. We have sifted through collections made by Rachel & Rod Saunders to try to bring some of these to you.

- 3.010.300 : ANDROCYMBIUM CILIOLATUM** N Cape, Namaqualand. 1500m. (*Colchicum*-relative with prostrate, fringed foliage surrounding a stemless cluster of white flowers. This & the next should tolerate a lot of cold in winter.) . . . . . (15+) C
- 3.012.000 : ANDROCYMBIUM PULCHRUM** N Cape, near Nieuwoudtville. 1300m. (A beautiful, very local Namaqualand endemic with paired prostrate leaves & a central flower cluster with reddish bracts in spring.) . . . . . (15+) C
- 3.109.000 : DAUBENYA AUREA** from **RED FORM** N Cape, Roggeveldberge, W of Middlepos. 1700m. (An unique Roggeveld endemic. Possibly closest to *Massonia* with a similar pair of ovate, fleshy, glossy green leaves flat on the ground. Between them sits a stemless, 'water-lily' head of brilliant scarlet. We flowered it from seed in our unheated glasshouse last spring.) . . . . (10+) E
- 3.230.709 : EUCOMIS REGIA** Northern Cape, Nieuwoudtville area. (The only winter-grower among the pineapple-lilies. Should tolerate quite a few degrees of frost but it is large for the alpine-house. Dense cylindrical heads of greenish flowers.) . . . (8) C
- 3.250.850 : GLADIOLUS ALATUS** Western Cape, Franschoekberge. (A widespread, Western Cape species unlikely to tolerate much frost but it is such a stunning little plant that we list it for those who can give minimal frost-protection. About 15cm. high with several, big, hooded flowers : orange-scarlet upper tepals & narrow, elongated yellow-green lower tepals, tipped with scarlet.) (15+) B
- 3.255.400 : GLADIOLUS CARMINEUS** Western Cape, near Hermanus. (A beautiful hysteroanthous winter-grower known only from a few sandstone cliffs near the coast in the Caledon & Bredasdorp districts of W Cape. Up to 6 flowers on a 30cm. stem before the leaves in autumn. Rich carmine-pink with a cream median stripe, edged with purple-pink, on the lower segments. Safest grown frost-free but it tolerated frosts with friends in California & may well be no trouble in an unheated greenhouse in the UK.) . (10+) D
- 3.256.409 : GLADIOLUS CERESIANUS** Northern Cape, Roggeveldberge. ("One of the most diminutive species", 15cm. high or less, from clay soils in the arid mountain-ranges of the western Karoo, the Roggeveld, Komsberg, Cold Bokkeveld, etc. Allied to *G. uystiae* and *G. watermeyeri*, both of which are temperature-hardy with us, this will also almost certainly be growable under glass without heat in the UK. Proportionately large, fascinating, elegant, sweet-scented flowers with erect, narrow, upper segments, cryptically coloured in purple-brown to grey-green with complex veining & markings in dull purple and yellow.) . . . . . (15+) D
- 3.410.250 : HESPERANTHA BACHMANNII** \* A winter-growing, W Cape species, successful with our friends in California but will probably be safest grown frost-free in the UK. About 30cm. high with elegant white flowers with darker markings. English seed from John Blanchard, who raised it from our earlier listing, grows it without heat and rates it as a 'super plant') . . . . . (20+) B
- 3.540.500 : MASSONIA DEPRESSA** N Cape, Namaqualand, Kamiesberg. 1500m. (A winter-grower, like most in this small genus of liliaceous bulbs, with about 8 species recognized currently (though almost 40 have been described), mostly in the SW Cape. This is a sweet little plant with dense, shaving-brush heads of white flowers sitting between the 2 flat, fleshy leaves. No trouble in a pan under glass, this high altitude coll. should be used to plenty frost but it will do no harm to keep it just frost-free.) . . . (15+) B
- 3.541.000 : MASSONIA HETERANDRA** N Cape, Kamiesberg. 1500m. (A pan raised from seed we distributed a few years ago (as *Massonia pustulata* ref. 3.541.300) caused quite a stir at an October, 2000, AGS show, gaining a Certificate of Merit, a Preliminary Commendation & a Botanical Certificate from the RHS Joint Rock Garden Plant Committee for Terry Smale (Surrey, UK). Terry has keyed the plant out as the little-known, montane, early flowering *M. heterandra* not *M. pustulata*. The coll. was made by a friend of Rachel & Rod Saunders & we cannot ascertain the precise locality nor can it be repeated. We have a very little stored seed from the same wild collection as Terry's plant. It could, of course, crop up in the preceding coll. made in the same area.) . . (10+) E
- 3.553.009 : MORAEA FALCIFOLIA** Northern Cape, Nieuwoudtville. Unlike any other. (Very dwarf, no more than 5cm. high, with a sessile rosette of falcate leaves, in the centre of which the cream-white flowers with intricate purple and yellow markings appear. Distributed sporadically across the Karoo, from Namaqualand into the W Transvaal, in steppe on stony clay flats.) . . . (15+) C
- 3.555.809 : MORAEA MACRONYX** Northern Cape, Roggeveldberge. (An amazing plant from high altitudes in a few of the interior ranges. In appearance, as near as you can get to a Juno *Iris* in S Africa. Three, channelled, falcate leaves, hug the membranous cataphylls at the base of the inflorescence, where the fragrant, pale-yellow or white flowers, with deep yellow nectar-guides, rise to about 15cm., on long-tubes. Should be possible without heat, certainly only with bare frost-protection, in the UK.) . . (15+) D
- 3.557.010 : MORAEA PAPILIONACEA** \* No data. A sweet little plant, widespread in the western mountains of the Western Cape, north to the Cedarberg. Only 10-15cm. high with branching stems, carrying a long succession of sweet-scented flowers, which can be either salmon-pink or pale-yellow. Probable best with minimal frost-protection under glass in the UK. . . . . (15+) B



## Romulea : winter-growers from the high plateaux

In the *Iridaceae* & almost certainly derived from the same ancient ancestor as *Crocus*, this genus has its centre of diversity in South Africa with a secondary centre in the Mediterranean area of the northern hemisphere. Though there is a great variation in characters, the general pattern is of corms with crocus-like flowers, carried severally on stems of about 10-20cm. Many of the montane ones will open their flowers at about 5cm. There are many such 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 in the Nieuwoudtville area. We have little doubt that many collections, made at high altitudes, will be perfectly temperature-hardy in much of Europe & N America. Remember we are dealing with winter-growers from a dry, continental climate. They will need a summer rest. Treat them precisely as you would the majority of such N Hemisphere genera, as *Crocus*, *Fritillaria* or *Tulipa*, with which they will fit in perfectly in the bulb-frame or alpine-house. Names follow the 1972 monograph by M.P. De Vos.

- 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 Mediterranean *Crocus* spp.) . . . . . (20+) C
- 3.700.400 : ROMULEA ATRANDRA** (var. *atrandra*) N Cape, Roggeveldberge, W of Middlepos. 1800m. (A stunning thing, distributed more widely than most on the stony clays of the inland plateaux.. Large crocus-flowers in an intense magenta-rose, blotched with violet or blue-black above the yellow -cupped centres.) . . . . . (20+) B
- 3.701.800 : ROMULEA DIVERSIFORMIS** N Cape, Komsberg, SE of Sutherland. 1800-2000m. (Very local in the desert-ranges of the Sutherland region, along the southern margin of the Great Karoo. Clean, bright, buttercup-yellow flowers, distinct in the absence of dark internal markings. Treat it like a bulb from S central Turkey or inland California.) . . . . . (15+) C
- 3.702.001 : ROMULEA EXIMIA** Western Cape, near Wellington. (A beautiful low altitude plant, confined to the Malmesbury area, inland & N of Cape Town. Dusky rose flowers, blotched with deep crimson in their throats, above a pale yellow cup. A superb thing & possibly needing only minimal protection, just frost-free, under glass in the UK.) . . . . . (20+) B
- 3.703.401 : ROMULEA HIRTA** N Cape, near Nieuwoudtville. 1500m. (Another, almost certainly temperature-hardy, species from the continental climate of the inland plateaux, S of the Great Karoo, SE from around Nieuwoudtville to the Klein Roggeveld. Distinct, winged, ciliate leaves & pale yellow flowers, marked internally with a transverse brown band.) . . . . . (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 its colour & chromosome number. Like it, a plant of high, cold habitats, mainly in the Cedarberg & Bokkeveldberge, W of Nieuwoudtville. 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. Close to better-known *R. sabulosa* but with even more brilliant satin flowers in deep claret-red, with different black markings in their throats & shiny, black filament tubes.) . (15+) C
- 3.704.700 : ROMULEA MONTANA** N Cape, S of Nieuwoudtville, near Moedverloor. 1300m. (Distributed at high altitudes S from the Bokkeveldberge to the Cedarberg. Shiny, buttercup-yellow flowers, usually blotched with dark brown & tinted or feathered red-brown outside. The name of the locality means 'lost hope' but we have high hopes for this.) . . . . . (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
- 3.705.500 : ROMULEA PEARSONII** N Cape, Namaqualand, Kamiesberg. 1500m. (A Kamiesberg endemic, not unlike the more widespread *R. luteoflora* but distinct from this in its corm & fruiting habit. Lemon-yellow flowers, usually tinged or veined red-brown externally. Though from quite far N, it grows high enough for temperature-hardiness.) . . . . . (20+) C
- 3.706.800 : ROMULEA SLADENII** \* W Cape, Gifberg, S of Vanrhynsdorp. 1000m. (Endemic to the sandstone of the Gifberg plateau. Very crocus-like with its white, yellow-centred flowers, usually purple-stained externally.) . . . . . (15+) D

- 3.707.320 : ROMULEA SYRINGODEOFLORA : WHITE FORM** Northern Cape, Roggeveldberge. (Endemic to the high plateaux near Sutherland NW to the Roggeveld. The only member of the Sect. *Lomurea*, with flattened leaves, listed. Normally magenta-pink, this has long-tubed white flowers with spreading segments, striped with yellow on a dark-red ground externally.) . . . . (15+) **B**
- 3.707.500 : ROMULEA TETRAGONA** (var. *tetragona*) Northern Cape, Roggevelddberge, near Middlepos. 1800m. (A most distinct plant, possibly not close to any other, though placed in Section *Hirtae* with *R. hirta*. Like it in its winged, hairy leaves but quite unlike it, however, in its corms & violet-rose to lilac-pink flowers with dark anthers. Hardy under glass with John Blanchard.) (20+) **B**
- 3.707.701 : ROMULEA TORTUOSA** (subsp. *tortuosa*) Northern Cape, Roggeveldberge. (A species from the cold, dry, western ranges, the Hantamberge, the Bokkeveldberge, the Komsberg & the Roggeveld. Fascinating, flexuose, spiralled leaves twist on the ground. Striking, big, yellow to orange flowers with spade-shaped black blotches on each segment.) . . . . . (15+) **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**

**Species from Eastern Asia : Seeds from Jim & Jenny Archibald**

- 4.275.511 : DICENTRA PEREGRINA f. ALBA \*** No data. From the rare white form of one of the world's most beautiful alpiners. Exquisite blue-grey, fleshy, filigree-foliage topped by 10cm. stems with big, pendant, bleeding-heart flowers, pink in the usual form but, in this case, in crystalline, icy white. In Japan, it grows on the mountains of Hokkaido, Honshu & the Kuriles but it also extends NE to Sakhalin & E Siberia. One Japanese grower recommends full sun in a compost of 1 part leaf-mould to 4 of grit with copious liquid fertilizer : "there being no fear of overfeeding." In the UK, similar treatment will suit provided that the clay-pot is plunged and it has a lot of water when in growth. In winter, it should be kept 'just moist' (difficult in too Spartan a compost) : too dry and the overwintering crown will shrivel & degenerate ; too wet and it will rot. We grew this well in Dorset & remember E.B. Anderson exclaiming 'It's a triumph! It's a triumph!' over a fine plant . Fresh seed from John Dixon, cold-stored since collection. (10+) **F**

**Species from Australasia : Seeds from Jim & Jenny Archibald**

**Clematis : fresh uk seed of the only nz alpine species**

- 5.252.005 : CLEMATIS MARMORARIA \*** No data. Quite recently discovered & described, this little suckering alpine subshrub is only known from marble-crevices between 1280m. & 1460m. on Mt. Crusader & Mt. Hoary Head in the Arthur range of NW Nelson in S Island, NZ. Spreading stems up to 30cm. long with dark-green, deeply divided leaves & profuse, creamy white flowers. This has settled in as an excellent alpine-house or trough plant in the UK and is now the parent of several larger hybrids. You need both male and female plants to get viable seed so this is seldom available. Freshly collected seed, kept refrigerated. . . . . (10+) **E**

**Garden hybrids & selections : Seeds from Jim & Jenny Archibald**

- 6.360.003 : CYCLAMEN COUM** from **PLAIN LEAVES, WHITE FLOWERS** . . . . . (15+) **C**
- 6.360.010 : CYCLAMEN COUM** from **PLAIN & PATTERNED LEAVES, ALL COLOURS**. . . . . (15+) **A**
- 6.360.050 : CYCLAMEN COUM** from **SILVER & PEWTER LEAVES**. . . . . (15+) **D**
- 6.360.055 : CYCLAMEN COUM** from **NYMANS STRAIN** Silver-banded leaves. Intense carmine-pink flowers. . . . . (10) **E**
- 6.364.050 : CYCLAMEN HEDERIFOLIUM** from **APOLLO STRAIN** Intricately silver-patterned leaves. . . . . (15+) **C**
- 6.364.051 : CYCLAMEN HEDERIFOLIUM** from **WHITE APOLLO** (also now distributed as 'Artemis'). . . . . (15+) **D**
- 6.364.100 : CYCLAMEN HEDERIFOLIUM** from **RUBY GLOW** Phil Cornish selection in rich magenta-purple. . . . (10+) **D**
- 6.364.160 : CYCLAMEN HEDERIFOLIUM** from **SILVER & PEWTER LEAVES** Very wide range of leaf-forms. . (10+) **D**
- 6.366.010 : CYCLAMEN MIRABILE** from **'TILEBARN NICHOLAS'** Superlative Peter Moore foliage selection . . . (10) **E**

**A : \$2.00 ; £1.50 ; DM4,- ; FF14.- C : \$4.00 ; £2.50 ; DM7,- ; FF23.- E : \$7.00 ; £4.50 ; DM12,- ; FF41.-**  
**B : \$3.00 ; £2.00 ; DM5,- ; FF18.- D : \$5.00 ; £3.50 ; DM9,- ; FF32.- F : \$9.00 ; £6.00 ; DM16,- ; FF55.-**