FROM : JIM & JENNY ARCHIBALD, 'BRYN COLLEN', FFOSTRASOL, LLANDYSUL, DYFED, SA44 5SB, WALES, U.K.

The following list has been compiled during January, 1990, to include seed we have available from our seed-bank. As we have no plans for further extensive collections in Europe or Turkey during the 1990-91 period, this list will remain valid until the second half of 1991. Although we have reasonable quantities of all items listed here, some collections will obviously be insufficient to cover demand over such a long period. The object of this listing is to ensure the wide-est possible distribution of these collections and to reduce our seed-bank. This will be a final opportunity to obtain the majority of collections listed. In spite of statements we have read to the contrary, we do not believe seed-viability can be preserved indefinitely and we have no intention of offering seed for its antique value. Our seed-bank was instituted in 1984 and the storage procedure is similar to that used by commercial seed-producers and the centres involved in extensive seed-banks, such as at Kew in England and Fort Collins in Colorado. Seed is stored in silica gel at about 0°C. Under such conditions of low temperature and humidity, viability of many seeds can be greatly extended. While it is not possible to run germination tests on all material stored we have received generally favourable reports and experimental sowings of some of the older seed, particularly Campanula, made in 1989 produced excellent results. In all cases, the precise date of collection is given for all wild-collected material so that an informed decision can be made.

CULTIVATED MATERIAL is almost wholly of 1989 seed. Where it is possible, 1990 seed will be substituted for these if and when it becomes available. An updated section on availability of seed harvested in the 1990-91 period and information on items listed here which become depleted during this period will be included with future main-lists.

REFERENCE NUMBERS in this list, which constitutes what has formerly been Section II of our composite lists, are our permanent references for particular populations within the area of Europe, SW Asia and N Africa. If we recollect a species from a particular locality, it is listed under the same reference number as previous collections. Seed packets will carry only this reference number. These numbers offer simple and rapid access to identities and field data.

NOMENCLATURE in general follows the 'Flora Europaea' and the 'Flora of Turkey' but a certain amount of editing has been done to keep these accounts in line, usually with a bias towards the latter account, which tends to be more in keeping with current concepts. Where there has been doubt about the identity of a collection, our dried herbarium material has usually been determined at an appropriate centre of work on a particular region or by a worker specialising in a particular genus. We make considerable efforts to distribute only correctly named seed but it is impossible to be fully accurate in every case. The status of many taxa will always remain a matter of opinion rather than of legitimacy.

ABBREVIATIONS used to compress more details into the available space are as follows:

- \* : indicates seed from cultivated plants of known wild origin. Field data applies to the original collection.
- Da. : Dag or Daglari, Turkish for mountain or mountains, pronounced 'dah' or 'dahlari'. The 'g' is silent.
- Coll. : collected/collected by/collection R.F. : Reginald Farrer, in 'The English Rock-Garden'

## FOR INFORMATION & COMMENTS ON ORDERING & DESPATCH PLEASE REFER TO CURRENT MAIN LIST

PLEASE NOTE DATE OF SEED COLLECTION. ALL SEED COLLECTED PRIOR TO THE CURRENT YEAR HAS BEEN STORED IN SILICA GEL AT c. O'C

- 134.100 ALLIUM NARCISSIFLORUM France, Hautes-Alpes, Pic de Gleize. 2000 m. Loose, unstable, limestone screes along S-facing side of summit ridge. 11.8.88 (Barely known in cultivation, where the name is commonly applied to the related A. insubricum from N Italy. Only known from the limestone massifs S of Grenoble, where R.F. rates is as "the glory of its race, not only in our European mountains but in all the ranges of all the world."

  15 cm. stems carry umbels of erect (not drooping as in A. insubricum) sugar-pink flowers.) (15+ seeds) I
- 143.200 ALYSSUM LYCAONICUM Turkey, Konya, S of Karaman. 1100 m. Open steppe. 12.7.88 (Quite large, soft-yellow flowers with distinctive, inflated calyces, on greyish, Draba-like cushions. Has germinated well but, like many steppe species, is difficult to maintain in character in wet, dull climates.) (10+ seeds) D
- 155.000 ANDROSACE ALPINA Austria, Salzburg, Hohe Tauern, Hochtor. 2600 m. Stable areas of mica-schist detritus on open, N-facing slopes. 12.9.88 (One of the most beautiful European high alpines, here forming compact tight little hummocks with the stemless flowers reputedly in white, as well as the usual "royal rose-pink splendour" (R.F.). Best outside in summer, copiously watered in a gritty, lime-free mix. Protect from winter-wet.) (15+) E
- 174.200 AQUILEGIA PYRENAICA France, Pyrenees-Atlantiques, E of Gourette. 1600 m. Among grass and scrub on steep limestone slope. 22.8.88 (Quite dwarf at less than 30 cm. with the most beautiful, large, nodding flowers of rich blue. Not difficult in open rock-garden conditions in moist climates, though local in nature) (20+ seeds)
- 174.400 AQUILEGIA THALICTRIFOLIA Italy, Lombardia, Valvestino below Magasa. 900 m. Ledges on overhanging limestone cliffs. 7.9.88 (Narrowly endemic to the mountains NW of Lake Garda. 20 cm. stems of blue-violet flowers.

  Nearest to A. einseliana but rated by R.F. as "a prettier thing...full of a grace and beauty of its own.(20+) D
- \* 195.004 ARUM CONOPHALLOIDES Turkey, Kayseri/Kahramanmaras, S of Pinarbasi. 1989 hand-pollinated seed from Horton & Stevens 2322 coll. at 1980 m. As we know it here, on limestone at 1200-1500 m. Ex hort. M. Tucker. (8 seeds) C
  - 195.030 ARUM CONOPHALLOIDES var. CAUDATUM Turkey, Konya, S of Beysehir. 1100 m. Stony clay among limestone rocks.

    11.7.88 (Not seen in flower and may prove to be an inland form of A. dioscoridis but we are fairly confident it will prove to be this SW race with both spathe and spadix coloured purple-brown and very large.)(10 seeds)
  - 195.351 ARUM DIOSCORIDIS var. SPECTABILE Turkey, Mersin, Silifke. 50 m. Stony clay on hot, limestone slopes. 13.7.88 (Exceptionally robust with large spathes with confluent marcon-purple blotches and black-violet spadices.

    The species is usually a lower altitude or even coastal plant and unlikely to be as hardy as others.) (10+)
- \* 195.352

  ARUM DIOSCORIDIS var. SPECTABILE Turkey, Antalya, S of Akseki. 800 m. Humus-filled limestone pockets. Hand-pollinated, 1989 seed from M. Tucker, who grew this from a single tiny tuber mixed with a few Dracunculus vulgaris tubers we collected here in 1984. The habitat is heavily shaded by planted conifers and both plants were in a highly depauperate condition. This has proved to be "superb and striking" with "very large spathes appearing almost black". Also from a colder, inland area than frequented by many colonies of this.) (8 seeds) D
  - PRICE CODE A : \$1.50 ; £1.00 ; DM3, ; FF10. PRICE CODE D : \$4.00 ; £2.50 ; DM 7,50 ; FF25. -
    - B : \$2.50 ; £1.50 ; DM4,50 ; FF15. E : \$5.50 ; £3.50 ; DM10, ; FF35. -
    - C : \$3.50 ; £2.00 ; DM6, ; FF20. F : \$7.00 ; £4.50 ; DM13, ; FF45. -

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* 196.500 ARUM NIGRUM Jugoslavia, Bosna i Hercegovina, above Dubrovnik to Trebinje. 500 m. Holes & crevices in
             limestone, usually among oak scrub. (A very fine, hardy species with marcon-black spathes, which in our
             experience sets little seed in nature. Hand-pollinated from living material coll. Brian Mathew)
             ASPERULA ARCADIENSIS Greece, Korinthia, S of Lake Stimfalia. 500 m. N-facing limestone cliffs. 14.6.86
  201.100
             (Exquisite chasmophyte for the alpine-house. Fragile, downy-leaved stems bear soft-pink tubes.)
                                                                                                                                    (20+ seeds)
             ASPHODELINE BREVICAULIS Turkey, Adama, Nur Da. above Hasanbeyli. 1100 m. Shale slopes among deciduous
  204.700
             Querous. 15.7.88 (Elegantly branching stems, 20-50 cm. high, with wide-spaced, pale-yellow, starry flowers, apricot-orange in bud and on the reverse. More or less summer-dormant - for a hot, dry site.) (10+ see
                                                                                                                                   (10+ seeds)
             ASTER ALPINUS Turkey, Gumushane, Kop Da. 2600 m. Exposed gravelly area on open limestone slope. 28.7.88
  208.051
             (A very dwarf race with mats of little, hairy leaves and lilac-blue 'daisies' on short, 5 cm. stems - could
             possibly be placed under var. cylleneus but this widespread, variable species defies classification.)
                                                                                                                                                   C
             ASTRAGALUS DEPRESSUS Andorra, above Port d'Envalira. 2500 m. Exposed gravelly area around limestone outcrop
  213.320
              19.8.88 (Herbaceous with prostrate, 5 cm. stems on flat rosettes. Usually white but can be blue.) (15+ seeds)
                                                                                                                                                   В
             ASTRAGALUS LAGURUS Turkey, Van, SW of Ercek Golu. 1850 m. Open slopes among steppe vegetation. 20.7.88
  215.340
             (This and the following 2 colls. belong to Section Hymenostegis with striking, fluffy, flower-heads, like rabbit-tails. from dwarf. spiny cushions. This has dense, oblong, lemon-yellow spikes. 15 cm.) (10 seeds)
             rabbit-tails, from dwarf, spiny cushions. This has dense, oblong, lemon-yellow spikes. 15 cm.)
             ASTRAGALUS SONAMARENSIS Turkey, Agri, between Tutak and Hamur. 1700 m. Very steep, igneous slopes. 21.7.88
  218.750
             (May be this or the equally obscure A. hymenocystis or something else entirely - all these members of Section
             Hymenostegis grow in local, isolated colonies. Sumptuous, long, fluffy, yellow racemes. 15 cm.)
                                                                                                                                     (10 seeds)
             ASTRAGALUS TRIFOLIASTRUM Turkey, Van, SW of Ercek Golu. 1850 m. Open, gravelly slopes. 20.7.88 (Quite small
  219.570
             woody tufts, rather than shrubs or cushions, send up dense, downy, white spikes on 15 cm. stems.)
                                                                                                                                    (10 seeds)
             ASTRANTIA CARNIOLICA Jugoslavia, Slovenija, Julijske Alpe, below Mangrt. 1500 m. Among shaded rocks and on limestone cliff ledges in mixed woodland. 16.9.88 (An airy, ethereal, little species - it bears no likeness to the form of A. major cultivated as A. "carniolica rubra" - most resembling A. minor but a little taller at
  220.200
             40 cm. with shorter bracteoles and an overall pinker tinge to the flowers. Local in the SE Alps.) (20+ seeds)
             ASTRANTIA MINOR France, Alpes-Maritimes, Vallon de la Gordolasque. 1700 m. Among grasses & Rhododendron scrub on open, acid slopes. 30.8.88 (The dwarfest species, about 30 cm. or less, with deeply cut and toothed
  221.002
             dark-green foliage and dainty, lacy, parchment-coloured heads on branching, wiry stems.)
                                                                                                                                   (20+ seeds)
             AUBRIETA CANESCENS Turkey, Konya, NW of Bozkir. 1100 m. Fissures & ledges on limestone cliffs. 12.7.88 (This was a splendid sight when we saw it in Spring, 1985, with hanging mats massed with violet.) (30+ seeds)
  225.150
            BELLEVALIA FORNICULATA Turkey, Agri, Sac Gecidi W of Eleskirt. 2300 m. Hay meadow with Gladiolus, Primula, etc. 21.7.88 (A superlative bulb, about 20 cm. high, which, though restricted to the Erzurum area, can be so
  227.770
             locally abundant as to form huge pools of pure turquoise-blue in spring. Should be easy to grow.) (20+ seeds)
             <u>BELLEVALIA GRACILIS</u> Turkey, Sivas, Camlibel Gecidi. 1600 m. Exposed, stony areas. 1989 cultivated seed from material coll. 1986 (Anatolian endemic closest to the more widely distributed B. sarmatica.) (10 seeds
* 227.800
                                                                                                                                     (10 seeds)
                                                                                                                                                   C
             BELLEVALIA KURDISTANICA Turkey, Hakkari, NW of Semdinli. 1700 m. Steep, stony slopes. 19.7.88 (Tentatively
  227.841
             identified as this species, very seldom collected in Turkey and mainly known from N Iraq.)
                                                                                                                                     (10 seeds)
             BELLEVALIA RIXII Turkey, Van, above Cuh Gecidi. 2800 m. Loose, unstable scree on open slopes. 20.7.88
  228.130
             (Quite recently discovered by Martyn Rix and described by Per Wendelbo in 1980 and still only known from
             this area. Very dwarf and distinct with falcately recurving leaves and 5 cm. stems of purple-brown flowers,
             with violet anthers, opening from bright blue-violet buds. Worthy of a pan in the alpine-house.)
  245.001 BUPLEURUM ANGULOSUM France, Hautes-Pyrenees, Vallee d'Ossoue. 1500 m. Steep, loose, limestone scree on
             -facing slope (but also grows among shady rocks). 21.8.88 (Choice, slow-growing herbaceous perennial, irres-
             istible if you like green 'flowers'. Tufts of narrowly lanceclate leaves and 30 cm. branching stems. As with
             Astrantia, the attraction is in the petal-like bractecles but in this they are rounded, not pointed, and of a
             beautiful jade-green with a bluish sheen. Needs good drainage, some feeding and patience.)
             CAMPANULA. Although it is some time since some of the following Campanula seed was collected, we satisfied
             ourselves in 1989 that an adequate number of plants can still be obtained from standard packets. Seed sown in
             February-March 1989 gave excellent germination. Many of the following are now well-established in gardens.
             CAMPANULA ALPESTRIS (C. allionii) France, Vaucluse, Le Mont Ventoux. 1800 m. Loose, limestone scree. 12.8.88 (One of the most spectacular Europeans: "immense flowers...of the most gorgeous satiny purple") (20+ seeds)
  250,500
  251.702
             CAMPANULA BARBATA Italy, Veneto, S of Passo di Giau. 2200 m. Peaty soil in alpine turf on open slopes.
             10.9.88 (Big, soft-blue, bearded bells up 30 cm. stems. A lovely plant but not so easy to grow.) (50+ seeds)
             CAMPANULA BETULIFOLIA Turkey, Trabzon, Soganli Da. 2200 m. Rock crevices. 19.8.86 (Rosettes of dark-green, birch-like leaves and pendant stems of huge, white bells from pink tinged buds. Superlative endemic of the Coruh River drainage, here at an unusually high altitude and in a very fine form with long bells.)(50+ seeds)
  252,005
             CAMPANULA BORNMUELLERI Turkey, Van, W of Yukari Narlica. 2200 m. N & NW facing conglomerate cliffs. 5.8.86
  252.300
             (A magnificent narrow endemic, only known from the mountains S of Lake Van. Distinctive, rich-violet, angled
             bells from rock-hugging rosettes. This coll. was still germinating well in 1989. A challenge!)
                                                                                                                                   (20+ seeds)
* 252.700
             CAMPANULA CARPATHA Greece, Karpathos. Shady limestone crevices. 1988 cultivated seed from Helen & Ivor
             Barton's 1983 re-introduction. (Endemic to the island of Karpathos, introduced by Peter Davis in 1950 but lost within a few years. A lovely thing for the alpine-house, where its soft lilac-blue flowers appear over
             a very long period. Perennial but not very long-lived and well-worth maintaining from seed.)
                                                                                                                                    (50+ seeds)
                                                                                                                                                   C
             CAMPANULA CORIACEA Turkey, Van, W of Yukari Narlica. 2200 m. Shady conglomerate cliffs. 8.9.86 (Thick, grey
  253.800
             leaves and wide-open, blue-lilac bells. Possibly only for dryish, alpine-house conditions.)
                                                                                                                                   (50+ seeds
             CAMPANULA CRISPA Turkey, Mus, E of Malazgirt. 1700 m. Crevices on igneous outcrops. 3.9.86 (A spectacular
  253.901
             species, rather like C. versicolor in habit, with pure-white flowers packed on stiff, upright 20-30 cm.
             stems. Sometimes perennial but usually appears to flower itself to death. Has germinated well.)
            CAMPANULA FORMANECKIANA Greece, Imathia, Oros Vermio below Seli. 1300 m. W-facing limestone cliffs. 1988 seed from our 1984 coll. (Spectacular, monocarpic species - a 30 cm. eruption of pale-blue or white.) (
* 254.900
                                                                                                                                           (50+)
            CAMPANULA HAWKINSIANA Greece, Ioanina, Katara. 1700 m. Unstable, S-facing, serpentine scree. 8.8.85 (Wiry,
  256.001
             tiny-leaved, prostrate stems with wide bells in intense violet with electric-blue centres. A superb but some-
             -what difficult species. Still germinating well in 1989; variable and worth selecting.)
                                                                                                                                   (50+ seeds)
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PRICE CODE A : $1.50 ; £1.00 ; DM3, - ; FF10. - PRICE CODE D : $4.00 ; £2.50 ; DM 7,50 ; FF25. -

B : $2.50 ; £1.50 ; DM4,50 ; FF15. - E : $5.50 ; £3.50 ; DM10, - ; FF35. -

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- CAMPANULA INCURVA Greece, Magnisia, Oros Pilio above Portaria. 1200 m. Mica-schist cliffs. 1988 cultivated seed from our 1985 coll. (Widely radiating stems of huge, ice-blue bells. Stunning monocarpic sp.)(50+ seeds) B \* 256.800 CAMPANULA OREADUM Greece, Pieria, Oros Olimbos. 2000 m. Vertical limestone cliffs. 10.8.85 (The incomparable 259,700 but intractable endemic of Mt. Olympus. Aristocratic, long violet bells from tight rosettes.) Greece, Drama, Falakro. 2000 m. Exposed limestone areas on summit-ridge. 1988 garden \* 259.800 CAMPANULA ORPHANIDEA seed from our 1986 coll. (A superb violet-purple, grey-leaved species, little known botanically or in cultiv--ation and confined to a few mountains on the Greek/Bulgarian border. Possibly alpine-house only.)(20+ seeds) D CAMPANULA RUPESTRIS Greece, Viotia, Oros Parnassos, above Arahova. 1100 m. Fissures on S-facing limestone \* 262.300 cliffs. Cultivated seed from our 1985 coll. (Fine, prostrate, lavender-blue, monocarpic species.) (50+ seeds) B CAMPANULA RUPICOLA Greece, Viotia, Oros Parnassos. 1500 m. & above. N & NW facing limestone cliffs. 2.8.85 262.400 (Peter Davis considered that it "cannot have many peers among the alpine species" with "incredibly lovely flowers...of a glorious richness." Several good growers have now established and flowered this from this 1985 coll. and it is proving a choice alpine-house plant, somewhat easier than its close ally C. oreadum.) (20+) $\mathbf{E}$ CAMPANULA TRIDENTATA Turkey, Rize, Ovit Dag. 3000 m. Dryish, stony turf. 30.8.86 (Fairly typical represent-265.400 -ative of this confusing, intergrading group of alpines from NE Turkey, the Caucasus and N Iran. Big, short--stemmed, blue-purple bells, glabrous outside, from clumps of tight rosettes. Good garden-plant.) (20+ seeds) C CAMPANULA aff. TRIDENTATA Turkey, Rize, above Ikizdere to Ovit Dag. 2700 m. Fissures & ledges on vertical cliffs by stream. 26.7.88 (From the same area as the above but very different in size, habit and habitat. Enormous violet bells, 40 mm. across and as much in length (almost twice the normal size for this group), 265.401 elegantly hung-out on stems of about 10 cm. long. A sumptuous thing of which we have high expectations.)(20+) E 265.500 CAMPANULA TROEGERAE Turkey, Artvin, Barhal Valley, NW of Yusufeli to Sarigol. 600-700 m. Crevices in shady, igneous cliffs. 22.7.88 (Described in 1976, we doubt if it merits more than subspecific status under C. betulifolia. Horticulturally, however, of great importance as the huge, white bells of C. betulifolia are in this split down and opened out almost flat to form a stunning flower. The thicker, greyish, densely pubescent leaves are also very different to the almost hairless foliage of C. betulifolia.) (50+ seeds) CAMPANULA VERSICOLOR Greece, Lakonia, Oros Taigetos, W of Sparti. 500 m. N-facing limestone cliffs. 1989 cultivated seed from our 1985 coll. (A lovely, late-flowering, soundly perennial species, far too seldom seen. Stiff, upright, 30 cm. stems packed with starry, lilac-blue cups with striking purple centres.) ( 265.801 CAMPANULA WALDSTEINIANA Jugoslavia, Hrvatska, Velebit Planina, Mali Halan. 1100 m. Vertical limestone fiss-ures. 18.8.85 (Lots of rich-blue stars on erect, wiry, 10 cm. tufts. Exquisite in trough or pan.)(50+ seeds) 266.000 CENTAUREA UNIFLORA subsp. NERVOSA Italy, Veneto, Dolomiti, above Passo di Fedaia. 2000 m. Open stony slopes 287.000 among grasses. 10.9.88 (Splendid herbaceous perennial. Stiff, erect, 30 cm. stems carrying single, widely radiate heads of bright violet-pink with black-fringed bracts. Neat, toothed basal foliage.) COLCHICUM AUTUMNALE Jugoslavia, Hrvatska, Istria. 1989 cultivated seed ex hort. D. Hoskins. \* 311.401 (15+ seeds) COLCHICUM BIVONAE Greece, Pieria, Oros Olimbos, above Vrondou. Usually c. 1000 m. in open scrub or woodland. 311.702 1989 seed coll. Prof.P. & Dr. P. Watt (This is the taxon which has been described from Olympus as C. bowles-ianum but is better included under C. sibthorpii or the more widely distributed C. bivonae. Big, rosy purple chequered flowers before the leaves in autumn. This form grows well as a garden-plant in the U.K.)(15+ seeds) COLCHICUM CILICIUM Turkey, Adana, Nur Da. above Hasanbeyli. 1100 m. Open stony areas among deciduous Quercus scrub on W-facing slopes. 15.7.88 (A large, robust species with many showy, lilac to purple flowers in autumm. Not seen in flower here by us and C. kotschyi has been recorded for this area also.) (15+ seeds) B COLCHICUM KOTSCHYI Turkey, Van, Kavussahap Da. 2300 m. Open, stony slopes in steppe vegetation. 17.7.88 314.751 (A dwarf, early autumn-flowering species seldom seen in cultivation. Always white-flowered here.) (15+ seeds) COLCHICUM KURDICUM (Merendera) Turkey, Van, Kavussahap Da., below Karabel Gecidi. 2900 m. Open slopes in stony clay, around snow-patch hollows. 17.7.88 (Superlative endemic of the higher mountains in Van, Hakkari 314.780 and adjacent N Iraq. Pale to deep purple-pink flowers, around 7 cm. across, opening wide but not tending to fall apart like most Merenderas, appear after snow-melt in spring. Glossy bronze new foliage.) (15+ seeds) E 317.800 COLCHICUM SPECIOSUM Turkey, Gumushane, Zigana Da. 1900 m. Margins of Picea woods. 27.7.88 (One of the most showy and an excellent garden-plant. Huge goblets in pale to deep pink or purple in autumn.) (15+ seeds) COLCHICUM SZOVITSII Turkey, Trabzon, Zigana Da. 2100 m. Alpine turf on grazed slopes with Vaccinium, Daphne, 318.001 etc. 27.7.88 (Very fine form of this species, widespread but variable in Turkey, with pale to deep pink flowers in early spring. Dwarf with narrow leaves. Growable in U.K. if moist and cool when dormant.) COLCHICUM UMBROSUM Turkey, Artvin, Genya Da. 1700 m. Open meadow in Picea woods. 23.7.88 (White to purple-318,600 pink, starry flowers in autumn. Restricted to the N in Turkey so should be easy in wet climates.) (15+ seeds) COLUTEOCARPUS VESICARIA Turkey, Gumushane, Kop Da. 2500 m. Steep, open slopes in sparse steppe-vegetation. 321.001 28.7.88 (An extraordinary crucifer: tufts of Androsace-like rosettes; white or lilac-tinged Thlaspi-like flowers; inflated fruits, most resembling the N American Physarias - pale-green papery balloons shaded white or lilac. Germinated well from our 1986 coll. and has even produced its show-stopping fruits.) CROCUS KOTSCHYANUS subsp. SUWOROWIANUS Turkey, Rize, Ovit Da. 3000 m. Dryish stony ridges. 26.7.88 (Not at all well-known in cultivation but should prove a good garden-plant. In the high mountains of NE Turkey, this prefers drier slopes with C. vallicola and C. scharojanii in moister sites. Elegant, white in autumn.) (15+) 354.003 CROCUS VELUCHENSIS Greece, Pieria, Oros Olimbos. Usually c. 2000 m. in open sites. 1989 seed coll. Prof. P. & Dr. P. Watt. (The Olympus population of this characteristic snow-melt species of the Balkan mountains, tends to more pinkish lilac shades. Most forms of this are better if not dried out when dormant.) (15+ seeds) CYCLAMEN. Almost all 1989 seed from cultivated material. We hope to be able to replace this with 1990 seed where possible in due course. Cyclamen often set seed much more freely in cultivation, especially with hand-pollination, than in nature. Sowing seed in summer straight from the capsules is the counsel of perfection but, in our experience, drier seed can germinate well in due course. Soaking seed for about 24 hours in warm water immediately before sowing definitely seems to help and one customer reports even better results from mixing the seed with sharp grit and shaking during soaking, adding the benefit of light scarification. CYCLAMEN BALEARICUM Spain, Islas Baleares, Mallorca, N of Andratx. 350 m. In humus among Quercus. (Coll. \* 358.500 ex hort. D. Hoskins. Best kept frost-free in shade. Delicately pencilled, white flowers in spring.) (20+) C
- PRICE CODE A : \$1.50 ; £1.00 ; DM3, ; FF10. PRICE CODE D : \$4.00 ; £2.50 ; DM 7,50 ; FF25. 
  B : \$2.50 ; £1.50 ; DM4,50 ; FF15. 
  C : \$3.50 ; £2.00 ; DM6, ; FF20. 
  F : \$7.00 ; £4.50 ; DM13, ; FF45. -

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* 359.000 CYCLAMEN CILICIUM Turkey, Antalya, N of Akseki, Irmasan Gecidi. 1500 m. Stony humus under Abies on limestone
             (Hardy, pink, autumn-flowering species with well-marked, rounded foliage. From cold, inland areas in SW
            Turkey, this is completely hardy in the U.K. if grown in a rather dry, well-drained, sunny site.) (15+ seeds)
            CYCLAMEN CILICIUM Turkey, Konya, NW of Bozkir. 1100 m. At base of N-facing limestone cliffs.
* 359.003
  363.005
            CYCLAMEN GRAECUM Greece, Argolida, near Galatas. Sea-level. Open stony areas. 1988 seed coll. Melvyn Jope.
             (Pink autumn-flowering species, best kept dry under glass in U.K. Should give a wide range of leaves.) (20+)
* 364.003
            CYCLAMEN HEDERIFOLIUM Greece, Evia, above Metohi W of Karistos. 200 m. N & W-facing sides of gulleys (An
             interesting form coll. & ex hort. D. Hoskins, with large flowers and foliage, rather like C. africanum.)(15+)
                                                                                                                                          В
  364.004
            CYCLAMEN HEDERIFOLIUM Greece, Zakinthos, Katastari. Coll. May, 1989 by Melvyn Jope.
                                                                                                                            (20+ seeds)
* 368.003 CYCLAMEN REPANDUM subsp. PELOPONNESIACUM Greece, Lakonia, Oros Taigetos above Paleopanagia. 1400 m. In humus
            under Platanus, Abies & Pinus. (Although Chris Grey-Wilson states this grows to 800 m. in the Peloponnese, we
            have found it up to 1500 m. on the NE face of Helmos still in full flower in mid-June. So far our material of
            this lovely pale-pink Greek race, with its exceptionally variable and beautiful leaves, is living up to our
            expectations that these high altitude forms are much hardier than earlier, low altitude collections.) (15+)
* 368.005 CYCLAMEN REPANDUM subsp. PELOPONNESIACUM forma VIVIDUM Greece, Lakonia/Arkadia, Oros Parnonas, E of Sparti. c. 500 m. (While we are delighted to use Chris Grey-Wilson's names to distinguish both these horticulturally
            distinct Greek races, we doubt if the subdivision of C. repandum can really be upheld botanically. In our
            experience his criteria cannot be upheld in the field and it would be possible to find many clones which
            would not key-out. Nevertheless, this can be a distinct and extraordinary thing - the original material was
            coll. & given to us about 20 years ago by Eliot Hodgkin and has been maintained by Dave Hoskins. Dull purple-
            crimson flowers with very long, twisted petals and dark green leaves, often with no markings.)
            CYCLAMEN ROHLFSIANUM Libya, above Benghazi to Jabal Akhdar, above Tukrah. 200 m. Limestone pockets in maquis
* 369,000
            and under Pistacia scrub. 1989 seed ex hort. Helen Barton from material coll. in 1966 - JCA 944.
                                                                                                                           (10 seeds)
            DAPHNE GNIDIOIDES Turkey, Antalya, N of Akseki, Irmasan Gecidi. 1500 m. Exposed limestone slopes. 11.7.88
  382.400
             (A fairly high altitude locality - compact shrubs less than 50 cm. Cream flowers. Orange fruits.) (15+ seeds)
            <u>DAPHNE MUCRONATA</u> Turkey, Hakkari, Zap Gorge below Hakkari. 1300 m. E-facing limestone slope. 18.7.88
  384.200
            DIANTHUS HAEMATOCALYX subsp. PINDICOLA Greece, Ioanina, Katara. 1700 m. SE facing, serpentine scree. 7.8.85
  398.100
             (The dwarfest race with tight, hard cushions covered with pink flowers.)
                                                                                                                            (20+ seeds)
            <u>DIANTHUS PAVONIUS</u> (D. neglectus) France, Alpes-Maritimes, Vallon de la Gordolasque. 1700 m. Among grasses on open, acid slopes. 28.8.88 (A lovely species with rose-pink, blue-eyed flowers. 10 - 15 cm.) (20+ seeds
  401.502
                                                                                                                            (20+ seeds)
  405.000
            DICTAMNUS ALBUS Germany, Unter-Franken. S-facing, very steep, limestone slopes. 5.8.88 (Slow-growing but
             very long-lived herbaceous perennial. 1 m. spikes of veined, pale purple flowers. Aromatic leaves.)
            DIGITALIS LAMARCKII Turkey, Gumushane, Vauk Da. 1800 m. Open, stony slopes. 1988 cultivated seed. (Splendid
* 408.300
            perennial with baggy, soft-brown flowers, purple-veined inside, each with a huge white lip. In the wild,
            many stems rise to about 50 cm. from narrow-leaved clumps; has remained quite dwarf in cultivation.)
                                                                                                                                  (50+)
            DIGITALIS OBSCURA Spain, Soria, Puerto del Pinar. 1100 m. Open, limestone slopes in rock debris. 1989 seed from our 1984 coll. (Utterly distinct, shrubby based, Spanish endemic with dark, narrow foliage and amber-
* 409.402
            -orange flowers, yellow marked rust-red within. Reports indicate that colour can be variable in gardens, its
            native richness coming out more in sunnier climates and situations. About 60 cm. high)
            DRABA CAPPADOCICA Turkey, Kayseri, Erciyes Da. 1500 m. Fissures in NW facing igneous cliffs. 1989 seed from P. Kelaidis (Colorado, USA) from our 1984 coll. (Excellent cushion-plant. Alpine-house in wet areas.) (20+
* 419.500
                                                                                                                                 (20+)
            DRABA POLYTRICHA Turkey, Trabzon, Soganli Da. 2300 m. Crevices on outcropping rocks. 28.7.88 (Outstanding
  421.501
            alpine-house plant with profuse, short-stemmed, yellow flowers on cushions of woolly, grey rosettes.)
                                                                                                                                 (20+)
  422,000
            DRABA ROSULARIS Turkey, Van, Ispiriz Da., NNW of Baskale. 2700 m. Crevices on gneiss outcrops. 20.7.88
             (Pale yellow flowers on grey, downy cushions. Another first-class alpine-house plant.)
            EBENUS PLUMOSA var. SPECIOSA Turkey, Konya, ESE of Ermenek. 1200 m. Steep, clay slope over limestone.
  428,660
            13.7.88 (50 cm. high, woody-based, herbaceous perennial with 10 cm. oblong heads of bicoloured pale-yellow
            and sugar-pink flowers. A very narrow endemic described in 1965 and only known from the Ermenek area. The
            genus belongs to the tribe Hedysareae of the Leguminosae and is centred on S central Turkey.)
  443.100 EREMOSTACHYS LACINIATA Turkey, Hakkari, Zap Gorge at Bagisli. 1500 m. Among rocks and in loose, igneous scree on steep slopes. 19.7.88 (Clumps of dark-green, deeply cut, basal leaves. Stiff, erect, 1 m. stems clothed in dense, white wool from which the verticillasters of hooded flowers peep cut. Not seen in flower
            here but those we have seen in adjacent Van vilayet have been pure white - rather like a large, white Salvia and, as we know it in the wild in Turkey, unquestionably a most impressive and striking plant.) (10 seeds
           EREMOSTACHYS MOLUCELLOIDES Turkey, Gumushane, N of Bayburt. 1500 m. Clayey loam in fallow-field. 28.7.88 (Large, rounded, downy basal leaves and candelabra-like stems to 50 cm. The lemon-yellow, orange-lipped
  443.200
            flowers are surrounded by huge, campanulate, calyces to 4 cm. across, which are the most arresting feature and stay on the stems for a long time. Both these have germinated during 1989.)(5+ calyces, 1-4 seeds in each) D
            ERODIUM ABSINTHOIDES Greece, Larissa, Oros Ossa. Recorded from limestone crevices up to 1900 m. 1989 seed
  453.000
            coll. P. & P. Watt. (Extremely local, widely disjunct species, only known from 2 localities in Greece. Much-
            -cut, downy foliage. Umbels of lilac flowers on stems of about 15 cm. Very difficult to collect!)
                                                                                                                             (8 seeds) C
            ERYNGIUM SPINALBA France, Hautes-Alpes, below Col de Gleize. 1600 m. Exposed, stony, limestone slopes.
  462.201
            11.8.88 (Superb plant local in the SW Alps. Seldom more than 30 cm. with silvered, spiny foliage and stems
            with dome-like flower-heads in pale bluish green. Our 1984 coll. germinated well and has flowered)(20+ seeds) C
* 481.501
            EUPHORBIA RIGIDA Greece, Lakonia, N of Sparti to Tripolis. 500 m. Exposed gravelly areas. 1989 seed from
            David Glen (Victoria, Australia) from our 1984 coll. (Superlative and sought after Spurge (maybe still better
            known as E. biglandulosa) with whorled, blue-grey leaves and lemon-yellow heads in early spring. Possibly the
            best of Subsect. Myrsiniteae but needs a sheltered, well-drained site in full sun in the U.K.)
                                                                                                                           (20+ seeds)
            FRITILLARIA. While we have some excellent 1989 cultivated seed and are repeating a few 1988 colls., older
            Fritillaria seed germinates increasingly sparsely and erratically, so this may be the last listing we shall
            make of some of the earlier Turkish colls. Where possible we shall increase the numbers of seeds per packet
            of these. In any event, seed is unlikely to come up during the first spring after sowing under natural
            conditions i.e. seedlings should not be expected before spring, 1991, from a winter, 1989-90 sowing. When
            dealing with a small number of valuable seeds, it is worthwhile sowing the flat seeds on their sides to
            decrease the possibility of rotting. Further seed from cultivated material may become available later in 1990.
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PRICE CODE D : \$4.00 ; £2.50 ; DM 7,50 ; FF25. -

E : \$5.50 ; £3.50 ; DM10, - ; FF35. -

F : \$7.00 ; £4.50 ; DM13, - ; FF45. -

PRICE CODE A : \$1.50 ; £1.00 ; DM3, - ; FF10. -

B : \$2.50 ; £1.50 ; DM4,50 ; FF15. -

C : \$3.50 ; £2.00 ; DM6, - ; FF20. -

- FRITILLARIA ACMOPETALA Turkey, Antalya, Gullukdag NW of Antalya. 800 m. Grassy, stony areas at margin of 490.000 Arbutus & Quercus macchie. 10.7.88 (Extremely elegant, pale-green and chestnut-brown bells.) FRITILLARIA ALBURYANA Turkey, Erzurum, Palandoken Da. 2500 m. Bare patches of rock detritus on open slope. 22.7.86 (Incomparable flowers of rich, clear pink. Extremely local snow-melt species. A great challenge)(30+) 490.500 FRITILLARIA ALFREDAE subsp. GLAUCOVIRIDIS Turkey, Adama, Nur Da., above Hasanbeyli. 1100 m. Open, stony area on W-facing slope. 15.7.88 (A most graceful and beautiful plant with yellow-green flowers with a glaucous 490.800 sheen. Endemic to this corner of S Turkey near the Syrian border. Not difficult in a bulb-frame.) (20+ seeds) FRITILLARIA CRASSIFOLIA subsp. KURDICA Turkey, Van, Ispiriz Da., NNW of Baskale. 2800 m. Open stony slopes. 20.7.88 (Very variable here with globular bells in yellow-greens and red-browns, chequered and striped.)(20+) C FRITILLARIA EHRHARTII Greece, Evia, above Metohi, W of Karistos. 200 m. N & W facing sides of gulleys on talc-schist, among Erica & Quercus. 1989 seed from material coll. & ex hort. D. Hoskins. (Lovely, very local little species with bloomy, grape-black bells, ruby against the light. Alpine-house or bulb-frame)(20+ seeds) D \* 494.800 FRITILLARIA IONICA Greece, Kerkira, Pandokrator. 1989 seed ex hort. D. Hoskins from an original coll. by \* 497.700 E. Sewell. (Race confined to the island of Corfu and currently placed under F. graeca subsp. thessala but quite even and horticulturally distinct. Elegant, largely green bells. Not too demanding.) (15+ seeds) D FRITILLARIA MESSANENSIS Greece, Pieria, Oros Olimbos, above Vrondou. 1000 m. Steep limestone slopes. 18.6.86 499,401 (Beautiful, graceful, brown-chequered bells. The Olympus race is especially fine.) (20+ seeds) FRITILLARIA MESSANENSIS subsp. GRACILIS Jugoslavia, Bosna i Hercegovina, W of Trebinje. 500 m. Among Quercus \* 499.700 scrub on limestone. 1989 cultivated seed. (Untesselated chestnut-brown, gold-edged bells.) (15+ seeds) FRITILLARIA MINIMA Turkey, Van, Kavussahap Da. 2700 m. Steep, limestone scree. 17.7.88 (Yellow bells like 500.001 the N American F. pudica. Difficult snow-melt species little tried in cultivation.) (15+ seeds) FRITILLARIA MINUTA Turkey, Van, Kavussahap Da. 2900 m. Stony alluvial silt near snow-melt stream. 17.7.88 (Apricot and amber bells. Not so local as the preceding and easier to grow but still needs care.) (15+ seeds) 500,100 FRITILLARIA PONTICA Turkey, Bolu, near Abant Golu. 1000 m. Deep shade among conifers with Astrantia, etc. \* 502.000 1988 cultivated seed. (The easiest outside in wet climates. Pale green bells tinged with brown.) (20+ seeds) FRITILLARIA TUBIFORMIS France, Hautes-Alpes, Pic de Gleize. 1800 m. Steep, SE facing slope among grasses.

  11.8.88 (Marvellous species seldom offered by bulb dealers. Fat, chequered, brown-purple bells on relatively 503.800 short stems. Seed from this locality - rather hot, dry slopes over limestone - should present no problem under bulb-frame conditions or in pots. Often a plant of moister habitats which do not dry out.) (20+ seeds) GENTIANA ACAULIS France, Savoie, Col du Mont Cenis. 2000 m. Open, moist areas with diverse meadow-plants. 1.9.88 (The classic, great, blue trumpet-gentian of the Alps. A calcifuge species.) (50+ see 515.005 (50+ seeds) GENTIANA ANGUSTIFOLIA France, Hautes-Alpes, Pic de Gleize. 1900 m. Steep, exposed, stony limestone slopes. 11.8.88 (Distinct version of the above limited to the limestones of the SW Alps - very narrow leaves and its 515,400 huge, blue trumpets are on short stems. Dr. Hans Simon tells us the form here is especially fine.)(30+ seeds) ASCLEPIADEA Italy, Friuli-Venezia-Giulia, below Passo di Predil. 1100 m. Mixed Picea & Fagus woods. 515.602 16.9.88 (The elegant, deep-blue Willow Gentian, loveliest of autumn-flowering herbaceous plants.) (50+ seeds) CENTIANA BAVARICA France, Savoie, E of Col du Galibier. 2600 m. Damp, stony turf on level col. 1.9.88 (Very 515.801 deep blue, white-eyed, later-flowering relative of G. verna. Not an easy plant to grow well.) (30+ seeds) D <u>GENTIANA CLUSII</u> Italy, Lombardia, Monte Tremalzo, WSW of Riva. 1900 m. N & W facing limestone slopes. 6.9.88 (Another splendid member of the G. acaulis group - "glossy tufts...celestial goblets"(RF)) (30+ seeds) C 517.201 GENTIANA GELIDA Turkey, Gumushane, Kop Da. 2300 m. Meadows in moist to dryish turf (very wet in spring). 518,400 28.8.86 (Handsome, late-flowering plant, superficially like G. septemfida but with creamy yellow flowers, darker yellow, striped green outside. Not so easy as G. septemfida but worth every effort.) GENTIANA LUTEA France, Hautes-Alpes, below Col de Gleize. 1600 m. Stony, limestone slopes. 11.8.88 (The 518.803 statuesque Yellow Gentian with 1 m. stems whorled with flowers. Magnificent but very slow-growing)(30+ seeds) CENTIANA OLIVIERI Turkey, Hakkari, Zap Gorge, S of Hakkari. 1300 m. Limestone scree on steep, E facing slope 519.200 18.7.88 (Slow-growing, summer-dormant species - perhaps the only Gentian for the bulb-frame. Narrow-leaved rosettes with clusters of sapphire-blue, white-throated trumpets on wiry stems in spring.) (30+ seeds) CENTIANA FYMENAICA Turkey, Trabzon, Zigana Da. 2100 m. Alpine turf on grazed slopes with Vaccinium, Daphne, etc. 27.7.88 (Exquisite royal-blue trumpets. Cool, moist, acid, peaty conditions but very difficult.) (304 520.402 CENTIANA SEPTEMFIDA Turkey, Artvin, Genya Da. 1800 m. Dryish, open meadows. 1.9.86 (Robust, erect version, 520.900 possibly the one named G. cordifolia. Clusters of deep-blue trumpets in summer. Good grower.) (50+ seeds) GLADIOLUS ANTAKIENSIS Turkey, Hakkari, Zap Gorge near Bagisli. 1500 m. Steep, stony clay slopes among sparse 531.902 Quercus scrub. 19.7.88 (Not seen in flower here. Elsewhere in Hakkari we have seen rose-pinks with whitemarked lower segments; near Mardin, lavender-blues. A dry-grower maybe best in the bulb-frame.) (20+ seeds) GLADIOLUS KOTSCHYANUS Turkey, Agri, Sac Gecidi, W of Eleskirt. 2300 m. Hay meadow with Primula, Muscari, etc 21.7.88 (Dwarf, delicate, bright crimson form of this species widespread in moist meadows in E Turkey.) (20+) 532.603 GLADIOLUS KOTSCHYANUS Turkey, Hakkari, W of Yuksekova. 1400 m. Wet hay meadows. 19.7.88 (Delicate shades of 532.604 pale mauve and lavender-blue. From a very cold area - should be hardy almost anywhere.) (20+ seeds) C HEDYSARUM CANDIDISSIMUM Turkey, Malatya, WNW of Darende. 1500 m. Exposed shale slopes and clay banks. 30.7.88 (Stunning endemic of this small area of inner Anatolia. Procumbent, 10-20 cm. stems with pinnate leaves, densely clad in silky hairs, and oblong spikes of bright carmine-pink pea-flowers, arresting against the background of silver-blue foliage. As far as we know, not previously tried in cultivation.) HEDYSARUM HEDYSAROIDES subsp. EXALTATUM Italy, Lombardia, above Passo di Croce Domini. 1900 m. Stony alpine turf on steep slope over limestone. 6.9.88 (Singled out by A. Huxley as a "striking herbaceous perennial" and R.F. enthuses over its "loose spires of hanging pea-flowers...of rich reddish violet." 30 cm.) В HELLEBORUS ARGUTIFOLIUS France, Corse, SE of Calenzana. 1200 m. N-facing slopes in grassy scrub. 1989 wild coll. seed from Barbara McLewin. (It is a rare event to be able to list wild seed with field data of this 559.800 excellent Corsican endemic (H. corsicus, H.lividus subsp. corsicus). Beautiful evergreen, toothed foliage & massive branching heads of yellow-green bowl-shaped flowers in late winter. A fine, hardy plant.) (20+ seeds) B
  - B : \$2.50 ; £1.50 ; DM4,50 ; FF15. − E : \$5.50 ; £3.50 ; DM10, − ; FF35. − C : \$3.50 ; £2.00 ; DM6, − ; FF20. − F : \$7.00 ; £4.50 ; DM13, − ; FF45. −

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HELLEBORUS ORIENTALIS Turkey, Artvin, Genya Da. 1700 m. Open meadows and margins of coniferous woodland.
                 23.7.88 (The pure wild species is little-known in gardens; usually white tinged green.)
                                                                                                                                                                   (20+ seeds) C
                HELLEBORUS VESICARIUS Turkey, Adana, Amanus Da., above Hasanbeyli. 1100 m. Among deciduous Quercus scrub on W-facing slopes. 15.7.88 (Extraordinary relic only known from this area in S Turkey. Enormous inflated seed-capsules up to 15 cm. long. Seedlings from earlier colls. have now been flowered in the U.K. - germination
   563.000
                 can be irregular; true leaves are not produced until the second year; summer-dormant.)
                                                                                                                                                                   (15+ seeds)
                HYACINTHELLA HELDREICHII Turkey, Konya, S of Karaman. 1100 m. Open steppe. 12.7.88 (Dainty little bulb with
   571.142
                 deep blue-violet flowers on 10 cm. stems. Makes a delightful alpine-house pan.)
                                                                                                                                                                   (20+ seeds)
                HYPERICUM CAPITATUM Turkey, Gaziantep, WNW of Nizip. 600 m. Marl slopes between cultivated land. 15.8.86 (Sub-shrubby with 15 cm. high stems of flowers in an unique shade of penetrating, intense burnt-orange to
   574.500
                 scarlet. Difficult but not impossible in hot, dry conditions. This colony now destroyed by cultivation.)(15+) F
                IBERIS CANDOLLEANA France, Vaucluse, Le Mont Ventoux. 1800 m. Loose, limestone screes of various aspects, on summit ridge. 12.8.88 (The peak of refinement in this genus and the piece de resistance among the fascinating
   580.100
                flora of this isolated massif in Provence, where it grows "tucked in among the rocks, its leaves completely hidden by corymbs of lilac flowers" (Dwight Ripley in Bull.Alp.Gard.Soc. Vol.VI, p.224 (1938). It can be
                grown and prove a perfectly good perennial but is still a challenge to keep in perfect character.)(20+ seeds)
                IRIS CAUCASICA subsp. TURCICA Turkey, Gumshane, Kop Da. 2500 m. Among steppe vegetation on stony, igneous slopes. 28.7.88 (The dominant Turkish race of this Juno with translucent, yellow flowers.) (10 see
   585.600
                IRIS LATIFOLIA (I. xiphicides) France, Hautes-Pyrenees, Vallee d'Ossoue. 1500 m. Steep, stony limestone
   590.400
                 slopes. 21.8.88 (Bulbous but summer-growing with sturdy 60 cm. stems of violet-blue flowers marked with gold.
                 A splendid endemic of the Pyreneees and NW Spain seldom seen in its wild form in cultivation.)
                                                                                                                                                                   (15+ seeds)
* 591.350
                IRIS ORIENTALIS (I. ochroleuca) Greece, Lesvos. c.200 m. Damp meadows. 1989 seed from material coll. Helen &
                 Ivor Barton. (Stout 1 m. stems with large white flowers with yellow falls. Good garden-plant.)
                                                                                                                                                                   (15+ seeds) B
                IRIS SPURIA subsp. MUSULMANICA Turkey, Van, W of Guzelsu. 2000 m. Level meadow, possibly saline. 8.8.86 (Pale to deep blue flowers on 1 m. stems. Like the preceding in Series Spuriae.) (15+ se
   598,400
                                                                                                                                                                   (15+ seeds) B
                IRIS TAOCHIA Turkey, Erzurum, N of Tortum. 1600 m. Steep, open, stony, igneous slopes. 22.7.88 (Compact Bearded Iris, restricted to the upper Coruh & Oltu Valleys and virtually unknown in cultivation. About 40 cm.
   599.803
                high with flowers in either pale to deeper yellow or shades of red-purple. Hot, dryish site.)
                                                                                                                                                                    (10 seeds)
                JURINELLA MOSCHUS (Jurinea depressa) Turkey, Gumushane, Soganli Da. 2300 m. Loose, gravel banks in full sun. (Enthused over by John Watson as "spectacularly attractive" in the wild but never established in cultivation. A rosulate, tap-rooted perennial composite with lyrate leaves, lobed or pinnatiset but always white and
   610.500
                densely woolly beneath, lying flat and encircling a big, stemless head of lilac-pink, fragrant flowers.)(10+) E
                JURINELLA MOSCHUS Turkey, Erzurum, Kop Da. 2500 m. Steep, open, stony slopes. 28.7.89 (Another form, not listed before - the species covers a complex of high altitude scree plants from E Turkey to NW Iran.) (
   610,501
                                                                                                                                                                           (10+) E
                LALLEMANTIA CANESCENS Turkey, Erzurum, Kop Da. 2400 m. Dryish, stony clay among steppe-vegetation. (1988 cultivated seed from our 1986 coll. grown in both Victoria, Australia, and Colorado, U.S.A. A showy, dwarf
   614.000
                herbaceous perennial, superficially Salvia-like, with intense violet-blue spikes. Grey leaves. 30 cm.) (20+) C
                LEUCOJUM AUTUMNALE Morocco, Middle Atlas Range, S of Ifrane. 1700 m. Wet-flushes and shady, grassy ledges. (The Moroccan race of this exquisitely dainty little autumn-flowering bulb with dancing, pink-flushed white
* 630,200
                bells. We have used the name L.a. var. pulchellum for this but feel there is so much local and ecological
                variation that segregation of different taxa is barely justifiable. All make lovely pan-plants.) (20+ seeds) B
                LEUCOJUM AUTUMNALE Morocco, Middle Atlas Range, N of Ksar-el-Ksiba. 1200 m. S-facing limestone slope. (1989 seed ex hort. John Blanchard - seems quite distinct from the preceding with pure-white bells. Both these are
* 630.201
                from material coll. in 1982 under Archibald, Blanchard & Salmon numbers. Not listed previously.) (20+ seeds) B
                LEUCOJUM TINGITANUM Morocco, Rif Mts., above Xauen (Chefchaouen). (A 1989 coll. by John Blanchard of this
  630,480
                little-known species, which to our knowledge is not and never has been in cultivation. A most distinct plant
                apparently restricted to a very few localities in NW Morocco and seemingly synonymous with the equally obscure L. fontianum. Spring-flowering and much more robust than L. trichophyllum with much broader leaves.

John tells us that the stems are about 30 cm. high with up to 7 white flowers to 18 mm. across.) (15+ seeds) E
               LILIUM BULBIFERUM Italy, Friuli-Venezia-Giulia, below Passo di Predil. 1100 m. Open areas in mixed woodland. (Umbels of deep orange-red chalices - seldom seed in gardens and not so widespread in the wild as the var.
* 632.401
                croceum. Stem bulbils available in the dormant season from December until about March.)
                LILIUM CANDIDUM Greece, Lakonia, Oros Taigetos, foothills W of Sparti. 500 m. Steep limestone slopes among
* 632,600
                Phlomis & Euphorbia. (1989 hand-pollinated seed ex hort. D. Hoskins from plants raised from seed we collected
                in this locality on 7.11.83. It gives us particular pleasure to offer this cultivated seed derived from a
                seed-collection which was one of the more outstanding items offered in the first seed-list of this format we
                issued when we started collecting seed full-time in 1983. It gives us a pleasant feeling of continuity and
                achievement! In the intervening 6 years we have not been able to make a further wild collection of this splendid white lily. We hope this will give further gardeners the opportunity to raise fertile, virus-free
                material and to perpetuate a genuinely wild colony of this loveliest of European Lilies.)
                LILIUM CHALCEDONICUM Greece, Magnissia, Oros Pilio. 1500 m. Steep SW facing slope among Pteridium, Phlomis,
* 633,201
                Helleborus, etc. (Hand-pollinated 1989 seed ex hort. D. Hoskins. If L. candidum is unrivalled in purity, the
                pendant waxen flowers of L. chalcedonicum are unparalleled in brilliance - luminous scarlet.)
               LILIUM CHALCEDONICUM Greece, Viotia, Oros Elikonas. 1500 m. Margins of mixed Quercus & Abies woodland. (1989 hand-pollinated seed from D. Hoskins & M. Tucker. Though reputedly more difficult than L. candidum, seedlings
* 633,202
                from this wild material may well have far more vigour than old vegetatively propagated clones.)
               LILIUM POMPONIUM France, Alpes-Maritimes, Montagne de Maurel, NE of La Mure. 1000 m. Among scrub in steep-sided limestone gulley. (1989 hand-pollinated seed ex hort. M. Tucker. The French cousin of the preceding equally brilliant scarlet but generally dwarfer at about 40 cm. with much narrower leaves. Not too difficult colder, wetter climates if grown in limestone scree in sun. Unlike the N Americans, these European species
* 634.401
                all have epigeal germination, in which the cotyledon appears above ground, as in Fritillaria.)
  646.300 LINUM ARETICIDES Turkey, Izmir, Boz Da., above Odemis. 2000 m. Crevices on flaking schist with Juniperus and Acantholimon. 8.7.88 (The ultimate alpine development of Linum: "perhaps the most to be desired of all" (RF) and "the Perfect Linum" of Peter Davis, who considered this race "an even better form than on Baba Dagh, with more glaucous leaves and larger flowers." The tight, areticid mat or hummock you might imagine covered with stemless clear-yellow flowers. Unquestionably difficult to grow but deserves every effort.) (5+ seeds)
                                                                                                                                                                    (5+ seeds) F
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PRICE CODE D : \$4.00 ; £2.50 ; DM 7,50 ; FF25. -

\$7.00 **;** 

E: \$5.50; £3.50; DM10, -; FF35. -

DM13, -

FF45.

£4.50 ;

PRICE CODE A : \$1.50 ; £1.00 ; DM3, - ; FF10. -

C : \$3.50 ; £2.00 ; DM6, - ;

B : \$2.50 ; £1.50 ; DM4,50 ; FF15. -

FF20. -

- 648.103 LINUM HIRSUTUM subsp. ANATOLICUM (var. anatolicum) Turkey, Konya, NE of Beysehir. 1200 m. Open slopes among steppe vegetation. 11.7.88 (A delicate, woody-based perennial with 20-30 cm. stems, clothed in narrow, downy greyish foliage and producing a long succession of lovely, lilac-pink flowers.) 649.202 LINUM MUCRONATUM subsp. ARMENUM Turkey, Kayseri, S of Incesu. 1000 m. Stony clay banks. 30.7.88 (Somewhat stoloniferous, mat-forming perennial - masses of yellow flowers with a purple base to each petal.)(20+ seeds) MICHAUXIA CAMPANULOIDES Turkey, Konya, E of Ermenek. 1300 m. Loose, shale slopes. 13.7.88 (Branching stems "hanging most delicately out a peal of white flowers like small Martagon lilies." (R.F.) The flowers are in fact larger than L. martagon but the simile is apt. This and the following two are "gorgeous monocarpic 677.100 Campanulads from the Levant" (R.F.), all about 1.5 m. high with white flowers.) (100+ seeds) B MICHAUXIA LAEVIGATA Turkey, Hakkari, Zap Gorge below Hakkari. 1300 m. Open, stony slopes. 16.7.88 (Only 677.200 known in Turkey from this area - mainly an Iranian plant. Close-packed spires of flowers.) (100+ seeds) B \* 677.300 MICHAUXIA TCHIHATCHEWII Turkey, Adama, S of Feke. 800 m. Loose shale slopes. (1988 seed from our 1985 coll., grown in Colorado, USA, by P. Kelaidis - "really loved it" he comments. Near to M. campanuloides)(100+ seeds) MOLTKIA AUREA Turkey, Konya, S of Karaman. 1100 m. Open steppe. 12.7.88 (Clusters of brilliant yellow tubul-682,000 -ar flowers on 15 cm stems over mats of bristly, greyish foliage. An unique Turkish endemic.) (10+ seeds) E 682,202 MOLTKIA COERULEA Turkey, Konya, NE of Beysehir. 1200 m. Open slopes in steppe-vegetation. 11.7.88 (Almost a precise counterpart with flowers of intense deep blue. Peter Davis rated these as two of the five best Turk--ish Boraginaceae but seed has been reluctant to germinate well and seedlings difficult to grow.) (10+ seeds) \* 689.450 MUSCARI GRANDIFOLIUM Morocco, Middle Atlas, above Ifrane. 1700 m. Red clay among limestone cutcrops. (1989 seed from our 1982 coll. Handsome, distinct species with blue-black flowers from china-blue buds.)(15+ seeds) MUSCARI LONGIPES Turkey, Sivas, WSW of Hafik. 1300 m. Calcareous hills with varied steppe-vegetation. 689.901 29.7.88 (Subgen. Leopoldia. Distinctive Central Anatolian species with elongating pedicels. 20cm.) (15+ seeds) B NARCISSUS BULBOCODIUM subsp. NIVALIS (of Maire) Morocco, High Atlas, above Tizi-n-Tichka. 2000 m. In turf. (1989 seed from a 1982 coll. Variable dwarf, broad-leaved, snow-melt race of yellow hoop-petticoats, proving **\*** 696.200 an excellent, very hardy garden-plant in the U.K. Maire's use of this name may be incorrect but there is no other other available. We still prefer to use Maire's names for N African taxa at present.) NARCISSUS BULBOCODIUM subsp. VULGARIS var. PALLIDUS Morocco, High Atlas, Tizi Gourane above Amizmiz. 1800 m. \* 699.200 (1989 seed ex hort. J. Blanchard. Quite a distinct race with primrose flowers, proving a good plant grown in a pan under glass. Unlike the preceding, prefers a dry resting-period in summer. Early-flowering.)(15+ seeds) NARCISSUS PACHYBOLBUS Morocco, N of Taourirt, near Barrage Mohamet V. 380 m. 1989 seed coll. J. Blanchard under JWB 89-09 (Sect. Tazzetae. A distinct, winter-flowering N African Tazzeta with umbels of up to 20, 702.600 pure-white flowers. Barely, if at all, known in cultivation; closest to the obscure N. canariensis.) \* 705.701 NARCISSUS RUPICOLA subsp. WATIERI Morocco, High Atlas, above Tizi-n-Tichka. 2300-3000 m. Rocky, N facing slopes. (1989 seed ex hort. D. Hoskins. Exquisite, crystalline-white High Atlas endemic.) (10 seeds) ORIGANUM ACUTIDENS Turkey, Tunceli, NE of Pulumur. 1500 m. Gravelly places on steep, open slopes. 26.8.86 735,000 (Drooping spikes packed with creamy bracts. Likely to prove a worthwhile hardy perennial. 50 cm.) (20+ seeds) ORICANUM ROTUNDIFOLIUM Turkey, Artvin, Coruh Valley near Borcka. 500 m. Sunny sandstone cliffs. 31.8.86 736.300 (30 cm. high version of the above, endemic to the Artvin area. A garden-plant of proven value.) (20+ seeds) ORNITHOGALUM ARCUATUM Turkey, Van, W of Yukar Narlica. 2200 m. Stony alluvium in river-bed. 5.8.86 (Still . 738.100 giving good germination in 1989 - very fine, long spikes of white flowers on stems of 60 cm. or more. This is a wet-grower, not usually drying out till late summer, and should make a fine border-plant.) (30+ seeds) PAEONIA MASCULA subsp. ARIETINA Turkey, Gumushane, Soganli Da. 1800 m. Loose, igneous scree and among scrub 746.800 on steep slopes. 28.7.88 (Sumptuous, rich-pink, golden-stamened flowers. 60 cm. Breathtaking when growing en masse in the wild and a comparatively easy, very permanent species in good well-drained soil.) (10 seeds) PAPAVER BRACTEATUM Turkey, Hakkari, W of Semdinli. 1600 m. Steep, stony slopes. 19.7.88 (The Oriental 751.202 Poppies of gardens are derived from this and P. orientale. Enormous, stunning, crimson flowers.) (100+ seeds) PAPAVER LATERITIUM Turkey, Rize, above Ikizdere. 2000 m. Stony meadows and among rocks near stream. 26.7.88 (Only known from a small area around the watershed at the headwaters of the Coruh but an easily grown garden 752,100 -plant. Perennial, stoloniferous clumps with translucent, soft-orange poppies dancing on 50 cm. stems.)(100+) PAPAVER ORIENTALE Turkey, Kars, Aras Valley near Karakurt. 1500 m. Coarse igneous scree. (1989 cultivated 752.250 seed from our 1986 coll. Huge, glossy, scarlet poppies with black centres on 1 m. stems.) (100+ seeds) PAPAVER RHABTICUM France, Vaucluse, Le Mont Ventoux. 1800 m. Loose limestone screes in summit area. 12.8.88 752.500 (Cushioned tufts to 30 cm. across with lemon-yellow or coppery-orange flowers on 10 cm. stems.) (50+ seeds) PELARGONIUM QUERCETORUM Turkey, Hakkari, Zap Gorge S of Hakkari. 1300 m. Limestone scree on steep, E facing 758.100 slope. 18.7.88 (Discovered & described quite recently from adjacent N Iraq. Big, rounded, shiny green leaves with toothed lobes and 1 m. stems with umbels of butterfly-like, magenta-carmine flowers. Jean Godden (Dorset U.K.) has grown our 1986 coll. unprotected in a raised bed and it flowered very well during 1989.) (8 seeds) PETROCOPTIS PYRENAICA France, Pyrenees-Atlantiques, E of Gourette. 1700 m. Fissures on limestone cliffs. 22.8.88 (Dainty, pale-pink flowered Pyrenean endemic for the alpine-house or rock-garden crevice.)(20+ seeds) 760,190 PHYSOPLEXIS COMOSA (Phyteuma comosum) Italy, Lombardia, Monte Tremalzo. 1900 m. Fissures on N & W facing, limestone cliffs. 6.9.88 (Confined to the limestones of the SE Alps, it can be grown to a superlative stand-772.001 -ard in the alpine-house but usually survives happily in tufa, a trough or a choice crevice. "Among the scalloped leaves of sombre greenish-black unfold...amethystine heads of wild pale bottles...deepening to darker tones of translucent purple at their tip...from which the curly stigma goes frisking forth in manner weird and wild. It is indeed the strangest of all children of the cliffs..." (R.F.) (50+ seeds (50+ seeds) D PHYTEUMA GLOBULARIIFOLIUM Austria, Salzburg, Hohe Tauern, Hochtor. 2600 m. Stable areas of mica-schist 773,290 detritus on open, N-facing slopes. 12.9.88 (Minute rosettes produce almost stemless heads of tiny flowers, which look as if they were made of royal-blue glass. One of a group of high altitude, calcifuge species, which we have never seen in cultivation - probably more difficult to grow well than P. comosum.) (100+ seeds) D 775.230 PINGUICULA CRANDIFLORA France, Pyrenees-Atlantiques, E of Gourette. 1500 m. Wet rocks. 22.8.88 (100+ seeds) B
- PRICE CODE A : \$1.50 ; £1.00 ; DM3, ; FF10. PRICE CODE D : \$4.00 ; £2.50 ; DM 7,50 ; FF25. 
  B : \$2.50 ; £1.50 ; DM4,50 ; FF15. E : \$5.50 ; £3.50 ; DM10, ; FF35. 
  C : \$3.50 ; £2.00 ; DM6, ; FF20. F : \$7.00 ; £4.50 ; DM13, ; FF45. -

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783.950 POTENTILLA LIGNOSA Turkey, Van, Kavussahap Da. 2200-3000 m. Shady conglomerate & limestone cliffs. 5.8.86
           (Extraordinary relic surviving in a few localities in E Turkey & NW Iran. Dwarf, gnarled mats with pinnate
           grey, pubescent leaves and white flowers hug the rock-faces. Now established from this coll.)
                                                                                                                                   (20+ seeds)
          POTENTILLA NITIDA Italy, Veneto, Dolomiti, SE of Tre Cime de Lavaredo. 2300 m. Exposed gravelly slopes and
           dolomitic limestone crevices. 9.9.88 ("The glory of the race...small, trefoiled foliage, purely silver and grey...with a close constellation of vivid rose-pink dog-roses..." (R.F.). Limestone scree or trough.) (20+) B
           PRIMULA. We still have a fine, comprehensive range of European and Turkish species in storage. From all
           accounts, Primula seed keeps reasonably well but it may need a long cold period after it has taken in water
           to induce germination. If no germination occurs the first Spring after sowing, it should be kept to the next.
           PRIMULA ALGIDA Turkey, Van, Ispiriz Da. NNW of Baskale. 2800 m. Short turf in moist alpine meadow. 20.7.88
785.000
           (Section Aleuritia. Choice dwarf lilac-pink species in exceptionally fine form in this locality.) (50+ seeds)
           PRIMULA AMOENA Turkey, Rize, Ovit Da. 3000 m. & above. Cool slopes & cliff-ledges, usually in turf. 30.8.86
785.150
           (Sect. Primula. Intense red-violet form of this aristocrat of its section. A truly alpine species)(30+ seeds)
           PRIMULA AMOENA Turkey, Trabzon, Soganli Da. 2300 m. Turf-filled ledges on rocky outcrops. 28.7.88 (A most
785.152
           beautiful violet-blue here. Needs cool moist conditions in acid loam - a choice, worthwhile plant) (30+ seeds)
           PRIMULA AURICULA Italy, Lombardia, Monte Tremalzo. 1900 m. Fissures on N & W facing limestone cliffs. 6.9.88
785.301
           (Sect. Auriculastrum. The lovely yellow-flowered wild species seldom seen in cultivation.)
                                                                                                                                   (30+ seeds)
                                                                                                                                                   C
           PRIMULA AURICULATA Turkey, Van, Ispiriz Da. NNW of Baskale. 2800 m. Streamsides. 20.7.88 (Sect. Aleuritia.
785.600
           The most widespread species in E Turkey & Iran. Lilac-pink to red-purple flowers on 30 cm. stems.) (50+ seeds)
           PRIMULA ELATIOR subsp. PALLASII Turkey, Artvin, Genya Da. 1700 m. Open summit meadows and woodland margins. 23.7.88 (Sect. Primula. Eastern race of the Oxslip. One-sided umbels of pale-yellow flowers.) (30+ seeds
786,500
                                                                                                                                  (30+ seeds)
           PRIMULA FARINOSA France, Pyrenees-Atlantiques, E of Gourette. 1500 m. Moist turf. 22.8.88 (Sect. Aleuritia. Delightful little lilac-pink, yellow-eyed flowers on 10 cm. stems. Widespread but not so easy.) (50+ seeds)
786,600
           PRIMULA GLAUCESCENS Italy, Lombardia, Passo di Croce Domini. 1900 m. Turf on steep slopes over limestone.
786.800
           6.9.88 (Sect. Auriculastrum. Narrow, shiny, leathery leaves. Fine purple-pink heads of flowers.) (30+ seeds)
           PRIMULA INTECRIFOLIA France, Pyrenees-Orientales, SE of Las Planes. 2000 m. Ledges on wet shale cliffs.
787.502
           18.8.88 (Sect. Auriculastrum. Mounds of shiny leaves covered in rosy flowers. Pyrenean forms are good.) (30+)
           PRIMULA LATIFOLIA (f. cynoglossifolia) France, Alpes-Maritimes, Vallon de la Gordolasque. 2000 m. Fissures on
787.802
           W-facing granite cliffs. 30.8.88 (Sect. Auriculastrum. Small-leaved SW race. Rich red-purples.) (20+ seeds)
           PRIMULA LATIFOLIA (f. pyrenaica) France, Pyrenees-Orientales, SE of Las Planes to Puigmal. 2000 m. N-facing wet shale cliffs above stream. 18.8.88 (Sect. Auriculastrum. Magnificent, local race, very little-known in
788.100
           gardens. Broad toothed, sticky leaves. Huge umbels of intense, velvety red-violet flowers. 20 cm.)(30+ seeds)
           PRIMULA LONGIPES Turkey, Rize, Ovit Da. 3000 m. & above. Shady crevices & on rocks in melt-water streams. 30.8.86 (Sect. Crystallophlomis. Exquisite, lavender-blue Nivalid. Very difficult to impossible!) (30+ seeds)
788,200
788.403 PRIMULA MARGINATA France, Alpes-Maritimes, Vallon de la Gordolasque. 1700-2000 m. Fissures on N & W facing
           granite cliffs. 30.8.88 (Sect. Auriculastrum. Beautiful, toothed, farine-edged leaves & violet-blue flowers. Typically a limestone plant, granite populations may have some P. latifolia in their ancestry.) (30+ seeds
           PRIMULA MINIMA Italy, Veneto, Dolomiti, SE of Tre Cime de Lavaredo. 2300 m. Open, W-facing slope in turf on
788.900
           dolomite. 9.9.88 (Sect. Auriculastrum. Reputedly calcifuge. Comparatively enormous flowers with deeply notch
           -ed petals sit on tiny rosettes of wedge-shaped, serrate leaves. Usually in shades of rose-pink.) (30+ seeds)
           PRIMULA MINIMA Austria, Salzburg, Hohe Tauern, Hochtor. 2600 m. Stable mica-schist detritus on N-facing
788.901
           slopes. 12.9.88 ("...from pale blue-mauve to deep magenta-pink" here according to Lionel Bacon.) (30+ seeds) D
789.200 PRIMULA PEDEMONTANA France, Savoie, above Col du Petit Mont Cenis. 2200 m. Peaty, turf-filled ledges on
           granite outcrops. 2.9.88 (Sect. Auriculastrum. Calcifuge. R.F. awards it "the highest rank in the brilliant Erythrodose group." Local & rarely seen in cultivation. Typically deep pink with a white eye but here George Smith states P. x bowlesii (P. pedemontana x P. latifolia) "occurs in abundance", varying to deeper reddish violets. We have not seen this colony in flower but it showed great variability in size in seed.) (30+ seeds)
          PRIMULA SPECTABILIS Italy, Lombardia, Monte Tremalzo WSW of Riva. 1900 m. Stony N & W facing slopes. 6.9.88 (Sect. Auriculastrum. Calcicole. Endemic to the mountains around Lake Garda, "the most royal of the four royal Arthritic Primulas" (R.F.). Broad, shiny, leathery foliage; umbels of "enormous and comfortable"
789.400
           flowers in shades of pink to rose. Free-flowering clones might be selected from seedlings.)
                                                                                                                                   (30+ seeds) D
           PRIMULA VERIS subsp. CANESCENS France, Alpes de Haute-Provence, W of Col de la Colle St. Michel. 1300 m.
789.650
           Woodland margins. 27.8.88 (Sect. Primula. S European Cowslip with pendant, bright-yellow bells.) (30+ seeds)
          PRIMULA VULGARIS Turkey, Cankiri, Ilgaz Da. 1700 m. Abies woodland. 1.8.88 (This is the glabrous form, var. calva, not seen in flower here but likely to be both sulphur and white. An easy, much-loved plant)(30+ seeds)
790.203
           PRIMULA VULGARIS subsp. SIBTHORPII Turkey, Artvin, Genya Da. 1700 m. Picea & Fagus woodland. 23.7.88 (The
790.401
           Eastern race, from lilac-pink to magenta. Usually low altitude but climbs high here near the USSR)(30+ seeds)
822.000 RHODODENDRON CAUCASICUM Turkey, Trabzon, Soganli Da. 2300 m. Rocky outcrops in N-facing meadows. 28.7.88
           (from 1987 capsules). (Magnificent dwarf shrub less than 1 m. at maturity. Creamy-white flowers usually from pink-flushed buds over dark-green leaves, rust-red tomentose beneath. The true wild species is almost unknown
           in cultivation and deserves much more attention, especially in cold areas.)
                                                                                                                                  (100+ seeds) D
          RHODOTHAMNUS CHAMAECISTUS Italy, Veneto, Dolomiti, SE of Tre Cime de Lavaredo. 2300 m. Stony areas
           on dolomite. 9.9.88 (Difficult but lovely dwarf Ericaceous shrub with flat, pink flowers.)
                                                                                                                                   (50+ seeds) D
           SALVIA. Like many dry-climate seeds, germination of the SW Asian Salvia spp. can be irregular and sometimes
           sparse but we have had reports of almost all previous collections thriving somewhere : from California and
           Colorado to Australia and even Wales! In wetter climates, all the following are going to need as much sun and
           good drainage as can be arranged if they are to be grown outside. Several have been a success in the U.K.
           SALVIA ALBIMACULATA Turkey, Konya, ESE of Ermenek. 1200 m. Steep clay slopes over limestone. 13.7.88 (A very
842.052
           local plant: shrubby based; cut, greyish leaves; large royal-blue flowers neatly blotched white. 30cm.)(10)
          SALVIA AUCHERI var. CANESCENS Turkey, Konya, ESE of Ermenek. 1200 m. Steep clay slopes on limestone. 13.7.88 (Another local endemic of the Ermenek area: woody based perennial; narrow leaves, white-felted beneath;
842.351
           delicate, airy, 1 m. panicles of innumerable small pale and dark violet flowers, marked yellow to white.)(15) E
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PRICE CODE A : \$1.50 ; £1.00 ; DM3, - ; FF10. -

B : \$2.50 ; £1.50 ; DM4,50 ; FF15. -

\$3.50 : £2.00 : DM6. - : FF20. -

PRICE CODE D : \$4.00 ; £2.50 ; DM 7,50 ; FF25. -

E : \$5.50 ; £3.50 ; DM10, - ; FF35. -

F : \$7.00 : £4.50 : DM13. - : FF45. -

PRICE CODE D : \$4.00 ; £2.50 ; DM 7,50 ; FF25. -

E: 85.50; £3.50; DM10, -; FF35. -

\$7.00 : \$7.50 : DM13. - : FFA5. -

PRICE CODE A : \$1.50 ; £1.00 ; DM3, ~ ; FF10. -

: \$2.50 ; £1.50 ; DM∠,50 ; FF15. -

\$3.50 : £2.00 : DM6. - : FF20. -

844.002 SALVIA CRYPTANTHA Turkey, Konya, S of Karaman. 1100 m. Open steppe. 12.7.88 (Grey-leaved mats with 30 cm. stems of pink or white flowers surrounded by large, pale-green, bell-shaped calyces.) (15+ seeds) SALVIA CYANESCENS Turkey, Bolu, W of Goynuk. 800 m. Loose, exposed, shale slopes. 1989 seed from P. Kelaidis grown in Golorado, USA, from our 1985 coll. Flat, felted rosettes send up branching, diffuse stems with many \* 844.201 pale violet flowers with yellow-marked lips. About 60 cm. high & a good perennial in the wild.) (20+ seeds) SALVIA EUPHRATICA Turkey, Malatya, E of Gurun. 1600 m. Shale slopes. 30.7.88 (Very distinct, local species 844.450 forming wide shrubby clumps with rounded, wrinkled, greyish foliage and 20-50 cm. stems of flowers, here in pale-pink to lilac, surrounded by striking campanulate calyces, sometimes purple-tinged.) SALVIA FRIGIDA Turkey, Sivas, Camlibel Gecidi. 1600 m. Open slopes among grasses & Juniperus. 1989 seed from our 1985 coll. (Single-stemmed pyramidal heads of many small white or pale lilac flowers.) (20+ seeds) \* 844.700 (20+ seeds) SALVIA HELDREICHIANA Turkey, Icel, NNE of Gulnar. 1200 m. Stony areas among limestone boulders. 13.7.88 845.051 (60 cm. high, pinnate-leaved shrub with deep lilac-blue flowers among purple-tinged bracts.) SALVIA HUBERI Turkey, Erzurum, N of Tortum. 1600 m. Steep, open, stony slopes. 22.7.88 (Smaller, more dainty 845.101 version of S. rosifolia, endemic to this area. Pink to pale-blue and violet. 15-20 cm. high.) (15+ seeds) SALVIA HYPARGEIA Turkey, Adama, N of Saimbeyli. 1200 m. Open, rocky areas. 1989 seed from our 1984 coll. \* 845,201 grown by P. Kelaidis in Colorado, USA, where it is now proving an excellent garden-plant. (Low tufts of grey narrow, wool-backed foliage. Stiff, 50 cm. herbaceous stems encircled with lavender-blue flowers.)(15+ seeds) SALVIA KRONENBURGII Turkey, Van, NW of Gurpinar. 1900 m. Loose, shale scree on W-facing slopes. 18.7.88 (Striking SE Turkish relative of S. euphratica only known from this area. White flowers emerge from thick, 845.500 greenish-yellow, bell-shaped calyces - like Euphorbia robbiae with a white Salvia in each cup!) (8 seeds) SALVIA MACROCHLAMYS Turkey, Hakkari, Zap Gorge near Bagisli. 1500 m. Loose, igneous scree on steep slopes.

19.7.88 (Isolated, eccentric species, rated by Ian Hedge as "very handsome & distinctive". Procumbent, leafy stems rise to 50 cm. with large heads of papery, green-white bracts, almost enclosing the pink or white flowers with their lower lips intricately marked with violet. Our 1986 coll. has flowered in California.) (8) E 846.000 SALVIA MICROSTEGIA Turkey, Adana, NNE of Saimbeyli. 1200 m. Open slopes with sparse Juniperus. 1989 seed from our 1985 coll. (Herbaceous with wide, single-stemmed panicles of small, white flowers. 1 m.) (20+ seeds) B SALVIA MULTICAULIS Turkey, Van, SW of Ercek Golu. 1850 m. Open slopes in stony clay. 20.7.88 ( E Anatolian 846.201 counterpart of S. cryptantha. Larger, broader-leaved, with violet flowers in purple-tinged calyces.) (15+) SALVIA POTENTILLIFOLIA Turkey, Burdur, SE of Tefenni. 1200 m. Open, stony slopes. 9.7.88 (One of the shrubby 846.900 group with trisect or pinnatisect leaves. Can be lilac or pale yellow. 30 cm.) SALVIA RECOGNITA Turkey, Nevsehir, between Saraycik & Boyali. 1200 m. Light deciduous Quercus scrub on volcanic tuffs. 30.7.88 (Woody based perennial with pinnate leaves and widely spaced rose-pink flowers on 847,050 elegant, sparsely branched, very sticky stems, to 1 m. high. Growing well in Victoria, Australia.)(15+ seeds) SALVIA ROSIFOLIA Turkey, Kars, NW of Kagizman. 1600 m. Open, gravelly slopes. 11.7.86 (Cut-leaved, shrubby species to 30 cm. Variable from bright rose to violet-blue. More widespread version of S. huberi.)(15+ seeds) 847.250 SALVIA SCLAREA Turkey, Adana, Amanus Da., below Hasanbeyli. 800 m. In scrub at margins of fields. 15.7.88 847.400 (Giant form with 1.5 m. stems of lilac and white flowers amid huge, bright-pink bracts.) (20+ seeds) SALVIA TARAXACIFOLIA Morocco, High Atlas, NE of Azegour. 1500 m. Among rocks in limestone gorge. 1989 seed from the only surviving 1962 Salvia coll. (Herbaceous with roughly cut greyish leaves, whiter beneath and \* 847.700 branching stems of about 30 cm. Usually pale pink but sometimes white. Good in a hot, dry site.) (15+ seeds) SALVIA WIEDEMANNII Turkey, Eskisehir, SW of Sivrihisar. 1000 m. Steppe vegetation on low hills. 7.7.88 (Most western of the cut-leaved, shrubby group. Upright to about 20 cm. with lilac-blue flowers.) (10+ seeds) 849.001 SAXIFRAGA AQUATICA France, Pyrenees-Orientales, Puigmal above Las Planes. 2100 m. Crevices on very wet, 856.080 shale cliffs. 18.8.88 (Striking endemic of the E Pyrenees. A giant 'Mossy' forming huge cushions with erect stems to 60 cm. bearing pure-white flowers. An excellent plant for a wet place.) (100+ seeds) B SAXIFRAGA BIFLORA France, Savoie, E of Col du Galibier. 2600 m. Loose scree below snow-patches. 1.9.88 856.301 (Loose, prostrate mats. A strange, snow-melt relative of S. oppositifolia with red-purple stars.) (50+ seeds) SAXIFRAGA CRUSTATA Italy, Veneto, Dolomiti, S of Passo di Giau. 2200 m. Rock fissures & at base of dolomite 858,600 cliffs. 10.9.88 (Sect. Aizoonia. Beautiful rosettes with "a brilliant beading of silver" (R.F.)) (50+ seeds) SAXIFRAGA FERDINANDI-COBURGI Greece, Drama, Falakro. 1800 m. Limestone fissures. 20.6.86 (Sect. Porophyllum. 860,200 A lovely 'Kabschia' with bright yellow flowers on dense, grey cushions. A local plant in nature.)(100+ seeds) SAXIFRAGA FLORULENTA Italy, Piemonte, NW of Colle della Finestra. 2600 m. N & W facing fissures on cliffs. 860.300 29.8.88 (Farrer's Ancient King - "in sombre splendour of the rosette alone, the most exciting spectacle of those or any other Alps." Not at all easy but we have seen fine plants from our earlier colls.) (50+ seeds) SAXIFRAGA HOSTII subsp. RHAETICA Italy, Lombardia, Passo di Croce Domini. 1900 m. Stony alpine turf over 861.000 limestone. 6.9.88 (Sect. Aizoonia. Local race with dark green, lime encrusted rosettes. White sprays.) (50+) 861.400 SAXIFRAGA KOTSCHYI Turkey, Van, Kavussahap Da. 2200 m. N & NW facing limestone & conglomerate cliffs. 17.7.88 (Sect. Porophyllum. Compact cushions with yellow flowers. Local in Turkey & Iran.) SAXIFRAGA LONGIFOLIA France, Hautes-Pyrenees, Vallee d'Ossoue. 1500 m. W & SW facing limestone cliffs. 21.8.88 ("...one of the grandest in the race...the huge silver star-fish rosette...is superb...even without those dominating regal fox-brush spires of white..." Seldom seen pure unless grown from wild seed.) (50-861,600 SAXIFRAGA OPPOSITIFOLIA subsp. RUDOLPHIANA Austria, Salzburg, Hohe Tauern, Hochtor. 2600 m. Stable mica-schist detritus on N-facing slopes. 12.9.88 (The ultimate development of Sect. Porphyrion. Hard, tightly 862,550 packed pads of minute rosettes with large, brilliant carmine-purple flowers. One of the finest alpines in Europe, indeed in the world, but never successfully tamed. Deserves every possible effort.) (50+ seeds) SAXIFRAGA PEDEMONTANA Italy, Piemonte, NW of Colle della Finestra. 2600 m. Fissures on cold, N-facing, 862.850 granite cliffs. 29.8.88 (Very handsome but difficult high-alpine relic. Fine white sprays.) SAXIFRAGA STRIBRNYI Greece, Drama, NW of Drama. 300 m. N-facing rock-fissures. 20.6.86 ( Sect. Porophyllum. 864.400 Endemic to the border area between Greece and Bulgaria. Distinctive with branched, hairy, red stems.) (100+) B

- SCABIOSA GRAMINIFOLIA France, Hautes-Alpes, Pic de Gleize. 1600-2000 m. Stony limestone slopes. 11.8.88 867,600 ("...a pure joy in a hot sumny place...flower-heads of lilac-lavender...above the silver mass.") (30+ seeds) B SCABIOSA PSEUDOGRAMINIFOLIA Turkey, Sivas, W of Gurun. 1700 m. Gravelly limestone slopes. 30.7.88 (Neat, 869.000 tufts of linear, silvery leaves and violet-blue heads. Not likely to be as easy as the preceding.)(15+ seeds) SCILLA LITARDIERI Jugoslavia, Bosna i Hercegovina, W of Trebinje. 500 m. Fragmented limestone. 1989; seed \* 874.800 from our 1984 coll. (Handsome 20 cm. heads of pale flowers, like a miniature S. peruviana.) (20+ seeds) B SCORZONERA SERICEA Turkey, Gumushane, Kop Da. 2600 m. Exposed areas of limestone gravel on open slope. 28.7.88 (A local endemic of high limestones in E Turkey, forming hard, silver cushions, rather like Euryops acraeus hammered into a hummock. Almost stemless yellow flowers. As far as we know, untried in cultivation 883.000 but will probably demand year-round alpine-house treatment, unshaded in summer.) (About 15+ seeds) SCUTELLARIA ALPINA France, Hautes-Alpes, below Col de Gleize. 1600 m. Stony limestone slopes in full sun. 884.001 11.8.88 (Creeping mats with blue-violet flower-heads. A good, trouble-free garden-plant.) (20+ seeds) 886.502 SCUTELLARIA SALVIIFOLIA Turkey, Konya, S of Beysehir. 1100 m. Loose, igneous scree among sparse Quercus.

  11.7.88 (Mat-forming, perennial, Turkish endemic. Wide clumps with little, wrinkled, velvety, grey-green leaves and stiff, upright stems packed with lemon-yellow, skullcap flowers. 10-15 cm.) (20+ seeds) SENECIO LEUCOPHYLLUS France, Pyrenees-Orientales, Puigmal above Las Planes. 2300 m. Slate & gneiss scree & 906.000 detritus on steep slopes. 18.8.88 (Famous endemic of the acid screes of the E Pyrenees. Exquisitely lobed & frilled foliage and stems clothed in pure-white velvet. Needs considerable care but always attracts much attention when it appears at AGS shows in foliage classes. Had become rather rare in cultivation.)(20+ seeds) E SILENE ELISABETHA Italy, Lombardia, Monte Tremalzo WSW of Riva. 1900 m. Stony, N & W facing limestone slopes in turf, rock-fissures & stable scree. 6.9.88 (Like the above, a temperamental aristocrat standing out from a 917.100 large and largely weedy genus. "Stems of downy claret-coloured velvet...unfold one or two of those enormous ragged flowers of flaming magenta-rose...so much more tropical in the look than alpine." (R.F.). An isolated endemic of the mountains between Lakes Como & Garda. Not easy to grow to perfection.) (20+ seeds) D SOLDANELLA ALPINA Italy, Veneto, Dolomiti, above Passo di Fedaia. 2200 m. Base of N-facing dolomite cliffs. 10.9.88 (Fringed amethyst-violet bells above mats of rounded leaves. One of the loveliest alpines)(30+ seeds) 922,000 943.000 TCHIHATCHEWIA ISATIDEA Turkey, Erzurum, NW of Ask e. 2000 m. Loose, eroded, shale slopes. 28.7.88 (Of all the distinct Turkish endemics, this is perhaps the most extraordinary. A monocarpic, monotypic genus of the Cruciferae, not obviously close to anything else. The rosette of dark-green leaves, bristly with white hairs erupts into a stout, pyramidal head, as much as 30 cm. high, packed with stunning pink flowers, famous for their sweet scent. For long a feature of the now-demolished bulb-frame at Wisley, where its roots had free--range in the very gritty soil. Don't try to clean the indehiscent fruits & sow on their sides.) (5 fruits) D TULIPA BIFLORA Turkey, Van, Ispiriz Da. NNW of Baskale. 2800 m. Gneiss scree, on rock ledges & steep slopes. 20.7.88 (This race, aggregated into a widespread and variable group, is a delight with large, white flowers rising singly from between two, greyish, basal leaves. Pinkish-brown outside and with a yellow basal blotch 969.400 which can cover most of the tepals. Local in Turkey, where it is endemic to Van vilayet.) VERATRUM ALBUM France, Alpes-Maritimes, Vallon de la Gordolasque. 1700 m. Moist meadows on open slopes. 979.004 30.8.88 (Huge, pleated basal leaves. 2 m. spires of green stars. Very slow-growing & permanent.) (20+ seeds) <u>VERBASCUM ARCTURUS</u> Greece, Kriti, Rethimno, limestone gorge near Selia. 1988 seed from a 1983 coll. by Alan \* 980.200 Edwards. (Handsome, Cretan endemic chasmophyte. White-felt leaves & yellow flowers with violet filaments (50+) VERBASCUM DUMULOSUM Turkey, Antalya, Gullukdagi. 1000 m. Crevices on ruins. 10.7.88 (Woody based mounds of 980.850 felted rosettes cover themselves with stubby, 15 cm. spikes of yellow flowers. The finest dwarf, saxatile member of the genus, outstanding as an alpine-house or dry-stone wall plant. Only known from the ruins of Termessos, the original Peter Davis introduction has crossed to some extent with others in gardens.) (50+) D VERBASCUM WIEDEMANNIANUM Turkey, Gumushane, WNW of Bayburt. 1600 m. Stony clay in fallow fields. 27.7.88 982,950 (An outstanding exception to the 200 or more, yellow-flowered species of this genus in Turkey. Stout, narrow spires, almost 2 m. high, packed with rich violet-purple flowers with purple-haired filaments. Plants found in European gardens under this name are most likely to be the more widespread V. phoeniceum. This is a very local Turkish endemic without any close relatives, an incredible, eye-catching, monocarpic species.) (100+) D

  - VERONICA CINEREA Turkey, Sivas, Ziyaret. 2000 m. Limestone crevices. 30.7.88 (An excellent, compact, 10 cm. 983.400 high shrublet with narrow grey leaves and azure-blue flowers. Not difficult in a sunny place.) (20+ seeds) B
  - <u>VERONICA MACROSTACHYA</u> Turkey, Konya, S of Karaman. 1100 m. Open steppe. 12.7.88 (Shrubby based with grey, pinnatifid leaves and pale-blue racemes, about 15 cm. high, with stiffly upright stems.) (204 see 983.980 (20+ seeds)
  - 991.900 VIOLA NUMMULARIIFOLIA Italy, Piemonte, NW of Colle della Finestra. 2600 m. Part-stabilised granite scree. facing ESE. 29.8.88 (Local and rather inaccessible high-alpine, like a miniature V. cenisia in foliage and its stoloniferous habit but the little, round flowers are "of a quite peculiar shade of clear and brilliant periwinkle blue...with a diversity of deep violet-black lines...one of the race's choicest jewels." (R.F.)
    Limited in the wild to the highest screes of the Maritime Alps and very difficult to cultivate.) (15+ seeds)

This list will remain valid during 1990 through 1991 and is intended to supplement lists of seeds collected in other areas during this period. At the time of compilation, January, 1990, it supplements our main list of North American species collected during 1989. If for any reason you do not have access to this list of North American material, please tell us and we shall be glad to send a copy so that information on the full range of seed currently available from us is in your hands. Provisional dates for the issue of other lists during this period are July, 1990, and April, 1991. These lists will contain supplements which update information on the availability of seed from this section and include details of any fresh seeds which come to hand during this period from the areas concerned here. All lists are sent to those who request seed from us. If you are in doubt as to whether you have all valid lists, please write to us.

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