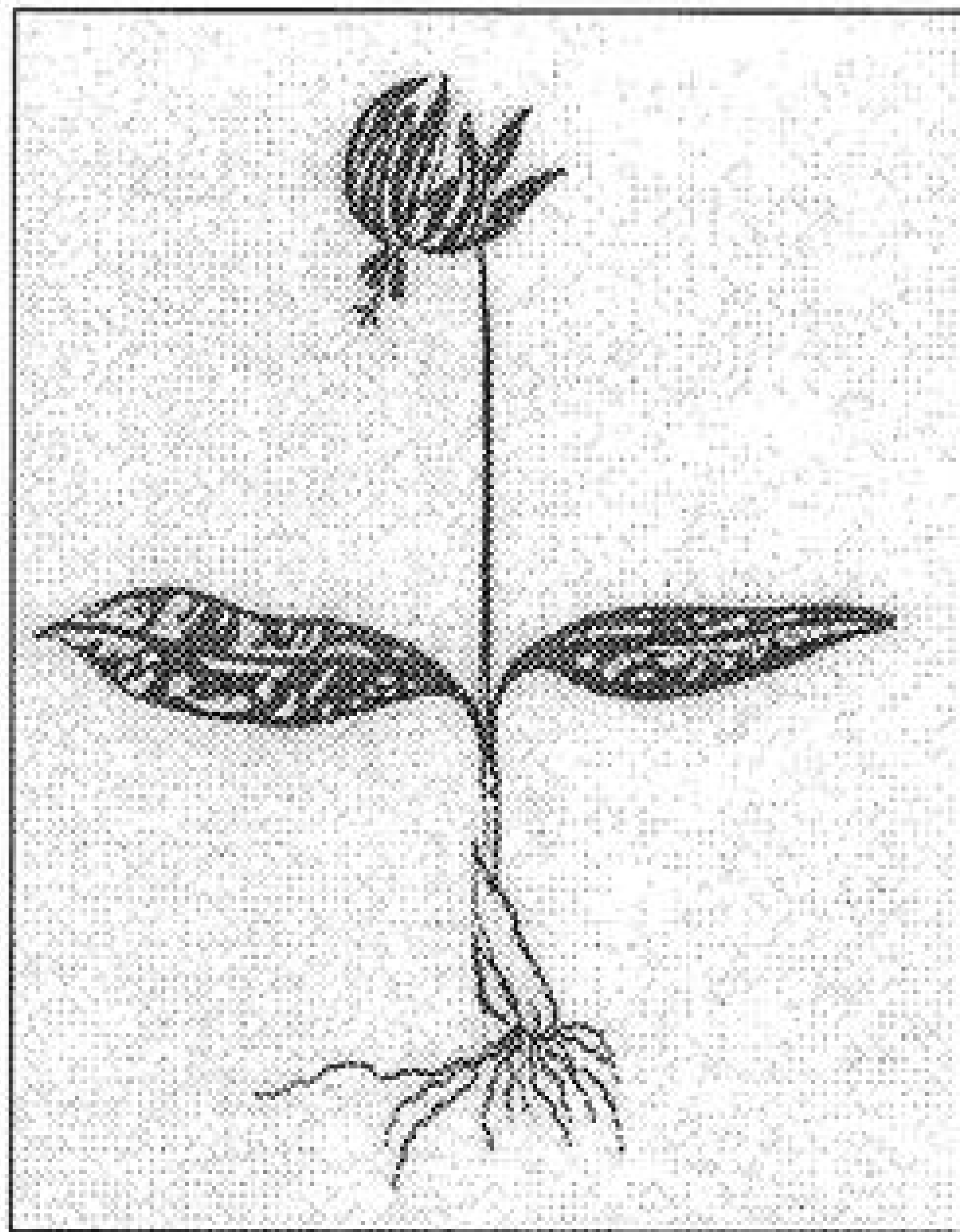


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NEWSLETTER



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The Bulb Newsletter No. 22

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An E. A. Bowles Crocus marches on - but only just!

We have Alan Edwards to thank for the following item. He writes:
Following the sad and untimely death of Primrose Warburg, several of her unusual forms of various spring flowering bulbs were distributed among devotees, with the agreement of her family. Her garden at South Hayes, Oxford, contained many treasures and for galanthophiles and crocophiles in particular it was a place of delight and enchantment with many rare items waiting to be found tucked away in secluded corners. Among the multitude of crocuses that flourished in the open garden at South Hayes was an arresting form of *C. olivieri* subsp. *balansae*, known to the cognoscenti as 'Chocolate Soldier'. The heavily feathered 'Zwanenburg' form of this subspecies is very choice, but even this is eclipsed by the dramatic uniform of this little warrior. Picture if you will the ultimate in bicoloured crocuses; a flower endowed with fiery orange inner segments (RHS Colour Chart 21A) masked when closed by a shroud of outer segments that appear as if dipped in cooking chocolate (200A or darker).

Reference to Bowles' *Handbook of Crocus and Colchicum* pp. 106-107 provides us with reliable evidence that 'Chocolate Soldier' probably originated in the *Crocus* frames or beds at Myddelton House [Bowles' residence]. Whether it arose as a seedling from his own stock of subsp. *balansae* or was introduced among wild material collected in western Turkey by one of his many overseas contacts, remains obscure. Again, mystery surrounds its arrival at South Hayes, and who first applied the name. From enquiries made thus far it seems most likely that Primrose's husband, the late Prof. E.F. ('Heff') Warburg acquired the corms directly from Bowles and applied the highly appropriate name himself.

I would be pleased to hear from anyone who is growing 'Chocolate Soldier' as it appears to be a *Crocus* on the brink of extinction. Only three corms were recovered from South Hayes. I have two which, thankfully, at the time of writing, are manifestly doubling in number. The third went to a new home in Yorkshire. Perhaps we should take comfort from Bowles' remark that 'it seeds freely in most seasons', but unfortunately he fails to indicate whether the resulting progeny were 100% pure. It is certainly strange that 'Chocolate Soldier' should have declined so alarmingly since orthodox forms of the

subspecies present few problems in cultivation. Meanwhile, I shall not stand at ease until my two little guardsmen have at least become a platoon!

Alan Edwards.

Daffodils and Tulips 1997-1998, and a new wild hybrid Narcissus

A curious title, one might think, since there is very little connection between the two, other than that they are bulbs, and very popular ones. However, that's the way it is, and this is a most useful publication, brought to us from the Royal Horticultural Society once a year.

Items of interest this year include a newly described - and only fairly recently discovered - hybrid between *Narcissus assoanus* and *N. panizzianus*. The former is a small yellow jonquil, the latter a much larger cluster-headed paperwhite of the Section *Tazettae*. The hybrid is named and described by John Blanchard as *N. x christopheri* after the late Christopher Stocken who did so much to encourage interest in the wild flowers of Spain in the 1960s and may well have been the first to record this plant in his book *Andalusian Flowers and Countryside*. John relates how he and Tom Norman came across the hybrid in 1991 in Andalusia, growing in a mixed population of the two parent species, but they could not get near enough to observe it more closely.

In 1994 Henry and Margaret Taylor visited the area and did manage to reach it so that photographs and herbarium specimens were procured. This gave John the necessary information to go ahead and describe the plant. It is 10-15 cm in height with 2-3 leaves per bulb, only 3 mm wide, and flower stems to 15 cm tall bearing up to 4 fragrant flowers; these are pale primrose yellow, fading to white as they age, and are 21-30 mm across with a cup 4-6 mm deep and 5-7 mm wide with a crinkled rim; the accompanying photograph shows that the perianth segments are conspicuously pointed (mucronate) at the apex. Several individuals were seen and it is, not surprisingly, noted as being slightly variable; John says that, 'at its best it is most attractive.'

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On the same theme, also in this volume of *Daffodils and Tulips* is a useful article by Wendy and James Akers enumerating some of the wild daffodil hybrids of Spain and Portugal that they have seen on their travels; this includes some interesting comments about inter-sectional crossing in the genus *Narcissus*.

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As well as these articles, there is a feature by Anna Pavord on the early history of the tulip as a florist's flower and much news from around the world in breeding, cultivation, shows, etc., concerning both genera.

Daffodils and Tulips 1997-1998 is published by the Royal Horticultural Society, 80 Vincent Square, London SW1P 2PE, at £9.95.

Alatavia - or maybe Iridodictyum - or maybe Iris?

A long-standing but always rare inhabitant of bulb collections is *Iris kolpakowskiana*, a dwarf bulbous species which was introduced to cultivation in the 19th century. It was illustrated in 1880 in the *Botanical Magazine*, just a few years after it had been discovered in Central Asia and described by Eduard Regel. Traditionally it has been included in the 'Reticulata Group' [i.e., *Iris* subgen. *Hermodactyloides*] because of its possession of a bulb with a netted coat, although that is just about the extent of the similarities. The Russian *Iris* specialist, Dr. George Rodionenko, removed all the reticulatas from *Iris* and placed them in another genus, *Iridodictyum*, which consisted of two sections, sect. *Iridodictyum* and sect. *Monolepis*. The first of these two housed all the 'normal' species which were known to him (*I. reticulata*, *I. histrioides*, *I. danfordiae*, *I. histrio*, *I. winogradowii* and *I. vartanii*), while the other, section *Monolepis*, consisted of the one shown here, *I. kolpakowskiana* and the mysterious, but clearly closely related, *I. winkleri*. Whatever one's view about genera: to accept either an all-embracing genus *Iris* or several smaller genera, these two species together



Iris kolpakowskiana from Botanical Magazine, Pl. 6489 (1880)

form a pair which cannot be lumped in with any others. In the classification of the 'Reticulata group' which I proposed in *The Davis & Hedge Festschrift*, 1989, I followed Rodionenko in giving them sectional status as Sect. *Monolepis*, but maintained within the genus *Iris*.

Further studies by George Rodionenko have led him to believe that these two species are even more distinct than he thought and that they should be classified in a genus of their own, distinct from both *Iris* and *Iridodictyon* and to be called *Alatavia* after the Alatau Mountains. This has now been published in the *New Zealand Iris Society Bulletin** 143: 11-14 (1997) and the appropriate new combinations are made: *Alatavia kolpakowskiana* and *A. winkleri*. In this interesting paper, Rodionenko gives an account of the history of the two species, the reasons for segregating them from the other groups of bulbous irises (sorry to use this word, they are not irises now!), their distribution in the wild and cultural information. At the time of writing there was little information about *I. winkleri*, other than that it had been seen on only a few occasions between the 1880s and 1977. However, as our next item shows, it has now been found again and introduced into cultivation by Arnis Seisums and Janis Ruksans.

* For those interested in contacting the very active New Zealand Iris Society, the address is: Mr Hec Collins, 6 Pyes Pa Road, Tauranga, New Zealand. NZ Membership is \$16, Overseas \$18.

Iris [or Alatavia] winkleri

We have extolled the virtues of the nursery catalogue of Janis Ruksans on several occasions, including a preview in BN 21:19. The full printed version has now arrived and it is even more readable than usual, not least of all because of an article on a bulb-hunting expedition to Central Asia. In an extract from the 1997 expedition report, Janis describes many of the fascinating bulbs which were encountered, but the item of particular interest was *Iris winkleri*; in fact he says that the expedition might have been called the "Iris winkleri Expedition", such was the excitement of finding this plant which has tantalised so many over the years.

The species was first described in 1884 by Regel, and it was cultivated in Russia for a time but was subsequently lost and has been a bit of a mystery plant ever since. Some regarded it as a distinct species, others that it was really based on a poor specimen *I. kolpakowskiana*. There have been other sightings over the years, and Dr Rodionenko (see item above) lists several such records following on from the original in the 1880s, in 1945, 1962 and 1977. Janis Ruksans and his colleague Arnis Seisums set out to find this elusive plant and find it they did, on 26 June 1997. From the comments made so far it appears that *I. winkleri* is similar to *I. kolpakowskiana* but has distinct

differences. The bulb, for instance is white, not yellow, and is covered with membranous tunics, not netted as in *I. kolpakowskiana*. Also, it is a subalpine meadow plant whereas the latter is found at lower altitudes in the foothills, and it flowers much earlier.

Many other interesting bulbs were found, and the whole account makes fascinating and colourful reading: *Iris (Juno) zenaidae*, *Allium backhousianum*, *Allium fedtschenkoanum*, *Gymnospermium albertii*, *Eremurus*, etc., etc. but, most importantly, *Iris winkleri* has been reintroduced to cultivation and its true characteristics can now be ascertained.

For those who haven't yet discovered the delights of this Latvian nursery, the address is: Jānis Rukšāns, Bulb Nursery, Rozula, Cesu raj. LV-4150 Latvia.

Theropogon - a modest little woodlander visits Thailand



Theropogon pallidus

For many years we have grown this quiet but pleasant, tufted, grassy-leaved member of the Liliaceae, or rather the Convallariaceae if one accepts the current 'splits' of the lily family. It is a native of the Himalayan region, in Kumaon, Nepal (from where it was first described), eastwards to Sikkim, Bhutan, Assam, Khasia, Tibet and into Yunnan. It grows over a considerable range of altitude up to 4000 m so it is not surprising that it is a little tender and we need to keep it in a frost-free glasshouse. It would certainly grow outside in the dappled shade in sheltered places where the temperature stayed just a degree or so above freezing for most of the winter.

The range of *Theropogon pallidus* has now been extended by its discovery in northern Thailand. In the *Journal of Japanese Botany* 71:305-309, Noriyuki Tanaka of Tokyo University reports that although there are some differences between the plants from Thailand and those from the rest of its range, they are considered to be insufficient to recognise it as a separate species. The differences listed are: the flower colour which is white with pale yellow central lines on the perianth segments in the Thai plants (normally white, pink or purplish), shorter pedicels, and styles only 2.1-2.6 mm long (shortest recorded in non-Thailand plants, 4.3 mm). The Thai plants are also smaller in stature. It was collected in Chiang Mai, at Chiengdao, 2075 m, on a limestone peak. This latter fact may be of interest to growers of the species; it has never grown very vigorously here but I have always planted it in a humus-rich soil. A little lime will now be added to see if it makes any difference.

That wandering Ipheion again

In the last BN, 21: 5, we mentioned *Ipheion* 'Rolf Fiedler' and the possibility that it might be the same as the plant P.F.Ravenna's *Tristagma peregrinans*. At the Royal Horticultural Society's show in London on 17 March a very fine pot full of 'Rolf Fiedler' was exhibited by Tony Hall on behalf of Kew and there was some discussion about the plant again. It seems that growers here in Britain do find it much more frost-tender than the forms of *I. uniflorum*, and also that it is definitely stoloniferous. This of course does not in itself prove that it is the same as *peregrinans* and, as I commented last time, we still need some wild-source plants of the latter from the type locality to see if they are identical or not. An interesting point made by Tony Hall is that seed-raised stocks from 'Rolf Fiedler' do not necessarily come the same lovely blue colour, they vary to almost white. The collection of 'Rolf Fiedler' shown to the Committee came from Uruguay, collected by Rolf Fiedler in the Province of Maldonado.

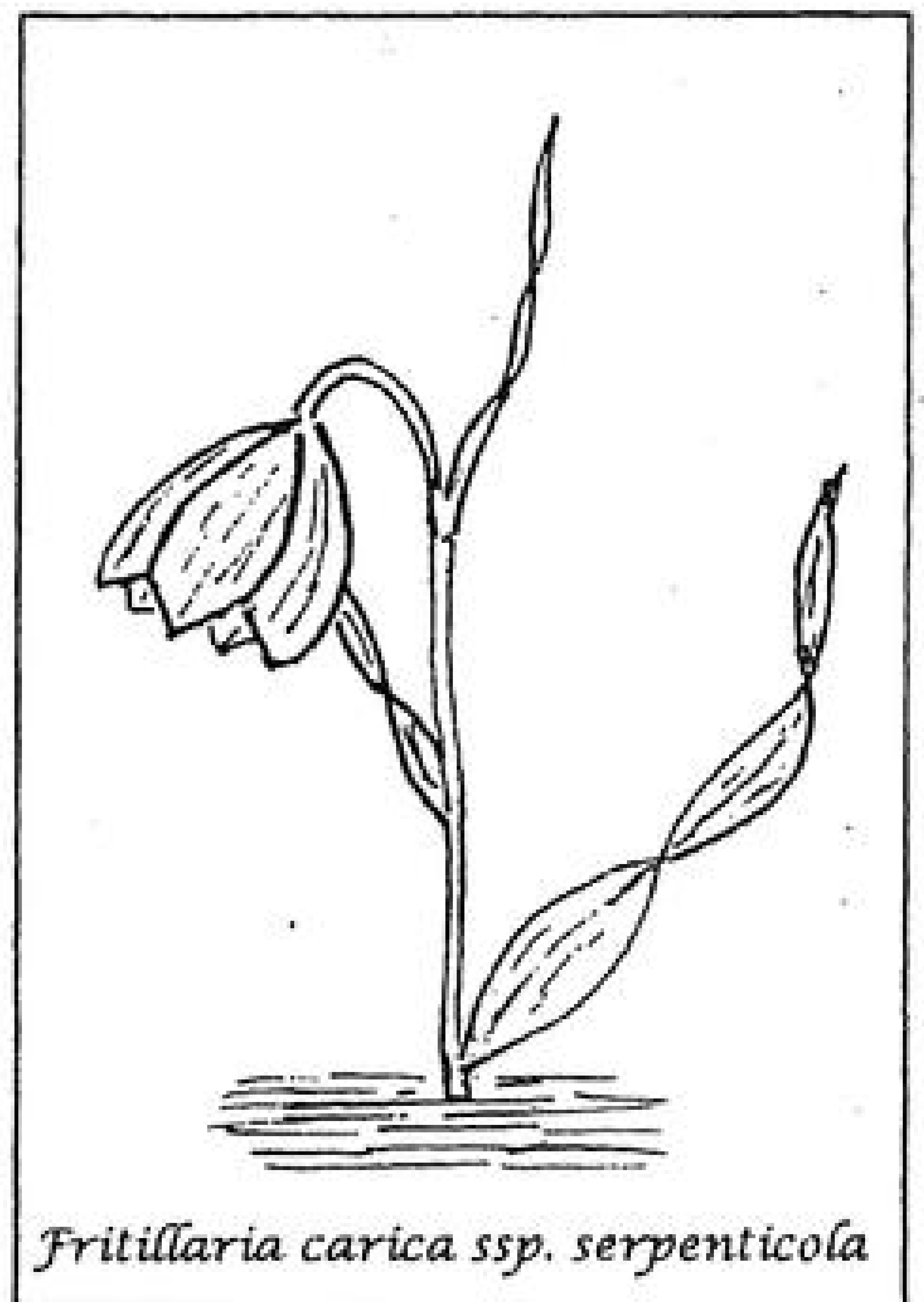
Some new sites for Turkish bulbs, and protection for another

A recent visit to Turkey for the Cyclamen Society with Trevor Wiltshire and Vic Aspland (involving a field study of *C. trochopteranthum*) reminded me once again of the richness of the monocot flora of this fascinating country. It has often been said that when the excellent 10-volume *Flora of Turkey* was completed, it was not the last word but just the beginning, and in many ways this is true, certainly with regard to the bulbous plants. Flowering as they do, very early or very late in the year, they tend to be less well-known than the summer flora. Travelling in the mountains is much more troublesome at these inclement seasons, and there are far fewer species in flower, so botanist-collectors have tended to concentrate on the times of year when the pickings

are richer. This is the reason so many interesting plants avoided detection for so long - extraordinary discoveries such as *Sternbergia candida*, *Crocus baytopiorum*, *C. antalyensis*, *C. mathewii*, *C. paschei*, *C. kerndorffiorum*, *Muscari mirum*, *Galanthus peshmenii*, *G. koenenianus*, *Fritillaria carica* ssp. *serpenticola*, *F. alburyana*, *Iris pamphylica*, and so on, all described comparatively recently. Many of these 'new discoveries' are, for a time, known only from their type localities - and remain so in some cases - but slowly, as explorations proceed, further sites are found and a better picture is built up of their distribution, frequency, etc.

So, it was with great excitement that this year's visit came across two more sites for *Iris pamphylica*, a species which was thought to be quite restricted but is now known to occur in areas some 90 km apart in the Toros Mountains of southern Turkey. Of course, what is not known is whether it occurs on the mountains between the extremities of its known distribution and until someone takes a few weeks or months to back-pack through the mountains we shall not know - and this applies to most of the species in Turkey; for obvious, practical reasons, the distribution maps of plants reproduce the road maps quite well!

Cyclamen trochopteranthum grows in a very rich region of south-western Turkey (covering some 900 square miles) so, in pursuit of our aims, the fieldwork took us to some excellent areas, including the serpentine mountain pass where the little *Fritillaria carica* subsp. *serpenticola* grows - once thought to be confined to the area, but last year we did see it elsewhere. When I first saw this plant in 1988, it was clear that at least part of the population was doomed because of road-widening and a tree-planting scheme. So, it was with great pleasure that we heard from Neriman Özhatay of the University of Istanbul and Sema Atay of the Turkish Society for the Protection of Nature (DHKD) that they have succeeded in getting the tree-planting halted, just short of the bare wind-swept summit areas of the pass where *F. carica serpenticola* inhabits rocky slopes, together with the curious, broad-leaved *Muscari mirum* (see BN 7:15) and turquoise-blue *Crocus baytopiorum*. The area has also been designated as one of special interest, requiring protection - a noteworthy success!



Fritillaria carica ssp. *serpenticola*

'Yellow' Galanthus on the increase?

Snowdrops with yellow markings and a yellow ovary instead of green have been around for a long time - for instance *G. nivalis* 'Lutescens' (now known as 'Sandersii'). However, it does seem that more and more are cropping up all the time and there are now several around in cultivation - is it just because snowdrops are in fashion (and expensive!) and more people are keeping their eyes open for mutations? Recently, at an RHS Joint Rock Garden Plant Committee meeting in Dunblane, Perthshire, Jim Jermyn exhibited *G.* 'Spindlestone Surprise' which received an Award of Merit. This was found in a wooded area of a garden in a mixed patch of *G. plicatus* and *G. nivalis* 'Sandersii'. This could well be the result of a cross between the two since it has narrow leaves, rather narrower than those of *G. plicatus*, but they are plicate (pleated) at the margins, as in that species.

Other 'yellows' which are about in specialist collections are 'Primrose Warburg' and 'Wendy's Gold', and I have no doubt that others will appear.

CROCUS OF CHIOS

George Sfikas, who organises *Anthophoros*, the Center for the Protection of the Greek Flora, has sent us details, a specimen and a photo of a *Crocus* seen on the Aegean Island of Chios. In the absence of a corm tunic it is difficult to be certain what it is since this feature has such a great bearing on the classification and identification of crocuses but, from the information I do have, it appears to be *C. pulchellus*. Not a rare species by any means, but this would be a new distribution record for the species, as far as I am aware. However, there are problems over this identification. George says that it is white-flowered (there are white forms of *C. pulchellus*, but occurring only as occasional mutations) and the leaves start to appear after the first flower has opened. In *C. pulchellus* the leaves are decidedly hysteranthous, appearing long after flowering. So, what is it? Only further study of a complete specimen will reveal the answer, but this observation does serve to remind us, yet again, as we approach the 21st century, how little we know about the basic distributions of plants, apart from many other facts which are much more difficult to ascertain such as natural variation, precise habitat details, pollination mechanisms, etc.

For the *Crocus* enthusiasts, the specimen and notes on this Chios *Crocus* provide us with the following information: autumn-flowering, flowers pale (?white) with darker longitudinal veining; throat yellow, anthers white with yellow, hairy filaments, stigma orange, dissected into more than three slender branches.

Fritillaria lusitanica and its four subspecies

Benito Valdés, in *Lagasalia* 18(2): 327 (1996), has proposed that *Fritillaria oranensis* and *F. macrocarpa* should be treated as subspecies of the western Mediterranean *F. lusitanica* and has made the necessary formal combinations. There was already a subsp. *stenophylla*, recognised as such long ago (in 1913)

by Coutinho and so, along with the 'typical' subspecies, *lusitanica*, there are now four subspecies.

Valdés gives the distinguishing characters as follows:

subsp. lusitanica - lower leaves up to 15 mm wide, the upper up to 5 mm wide; perianth segments 2-3.5 cm long, usually with a well-defined green band in the centre. Widespread in the Iberian Peninsula (except the NW) and in the Rif Mts.

subsp. stenophylla - leaves very narrow, the lower up to 4 mm wide, upper up to 2 mm wide. SW Iberian Peninsula from Estremadura in Portugal to Cádiz in Spain.

subsp. oranensis - leaves wide, as in subsp. *lusitanica*; flowers generally smaller with segments usually 2-2.5 cm long and without a green band in the centre. North Africa: Morocco to Tunisia & Cyrenaica.

subsp. macrocarpa - lower leaves very wide; flowers several and large; capsules 3-4 cm long, c. 2 cm wide, much larger than in the other three subspecies. Morocco, in the High Atlas.

STAMPS

There is a very nice bunch of mixed flowers on a 41 cent stamp from Australia (thanks, Ken & Lesley Gillanders!). With a lens I can find four monocots - an *Anigozanthos*, a *Blandfordia*, a blue-flowered *Dianella* and another blue one with sharply reflexed segments, possibly a species of *Stypandra*.

A series of British stamps devoted to endangered species (not only plants) includes a very nice illustration of the famous lady's slipper orchid, *Cypripedium calceolus* (26 p).

Catalogue-browsing

This is not such an idle and fruitless occupation as one might think, for there is much useful information to be gleaned from the experiences of past and present nurserymen; and it is very often highly entertaining, for nurserymen are doing their very best to sell you something!

A treasured set of catalogues from the past are those of Ralph Cusack, who had a bulb nursery in County Wicklow, Ireland, in the 1950s. I was checking the other day for various references to bulbs which were in cultivation at that time and came across the following entry to the Mexican *Milla biflora* (Liliaceae/Themidaceae):

"It would be impossible for me to praise highly enough this wonderful plant-----it is difficult to

compose oneself sufficiently to describe it, but here goes! In form it is the acme of perfection: six petals, three of a surpassing elongated symmetry, the intervening ones different in shape, with a beautiful kink near the base. The whole flower, in form a lovely star and reminiscent of microphotographs of snow crystals, is also of a brilliant snowy

white: the petals look almost succulent, like white satin, and the bloom is about 3 ins. across. On top of this they have the most glorious scent-----I must strongly urge you to try a few."

At 15 shillings per dozen, I would be happy to try a lot of this most attractive Mexican bulb! However, I do not find it at all easy in our climate - maybe just a little too cold for it to thrive here; it does well enough in the warmer, moister parts of the south-west of Britain.

Anyone who would like to try out *Milla biflora* can find it in Sally & Tim Walker's seed catalogue - Southwestern Native Seeds, Box 50503, Tucson, Arizona 85703, USA. It does not appear in the latest edition of *The Plant Finder* but it is around in some specialist collections so one might be able to acquire it from a generous friend.

Tecophilaea - again!

The Chilean blue crocus, *Tecophilaea cyanocrocus*, receives a lot of publicity because of its undoubted beauty and the fact that it is considered to be extinct in the wild; if it were small and drab with a terrible odour problem I very much doubt that its demise would be causing anyone loss of sleep. However, beautiful it is and none of us would like to see it disappear altogether. There have been at least three plans to re-introduce it into the wild and the latest of these is likely to be the one most likely to succeed. The Royal Botanic Gardens, Kew, is working with Chilean conservationists to repatriate it to its homeland through its 'Threatened Plants Appeal', along with nine other rare plants which have been identified as being under threat in the wild.*

Tecophilaea was named in 1862 by the Italian botanist Carlo Luigi Guiseppi Bertero after Tecofila, the daughter of his friend Professor Colla of Turin; she is reputed to have been a good flower painter. The species had been discovered by the Bavarian naturalist Friedrich Leybold in 1862 at Penquenes en la Dehesa at the headwaters of the Mapocho in the Cordillera de Santiago. There are few precise records that I can trace, but one collection by Elwyn C. Reed came from Las Condes, about 10 km to the north-east of Santiago. Habitat notes show that it grew in damp porphyritic soil at nearly 3000 metres, and that it flowered in October or November in the wild.

Tecophilaea cyanocrocus was reputedly introduced into cultivation in Europe by Haage & Schmidt of Erfurt in 1872. Whether or not collection of bulbs was the main reason for its demise is not known, but it must have played a part. Grazing certainly also contributed, for C.H.Grey in Vol. 2 of *Hardy Bulbs* records that "A nurseryman in Valparaiso who knew its habitat well wrote to me three or four years ago [i.e. 1934-35] that cattle were on the uplands just before the flowers appeared and that there was not a trace of it to be found."

We wish the re-introduction programme well. Presumably a site where it used to grow must be chosen, and secured in some way so that the right sort of equilibrium is achieved - insufficient grazing of the turf by wild animals is almost as bad as too much, as we have seen in the case of some of the orchids on our chalk downlands in Britain. There are also other potential problems. Many generations of *Tecophilaea* have now been grown from seed in Europe, over a period of well over 100 years. Each time a batch of seedlings is raised, the survivors are those most suited to the local conditions, usually our low altitude, comparatively mild, gardens; will the stocks now available for re-introduction to Chile be suitable for the climate. Is the insect which pollinated the plant in its Andean home still there? Clearly only time will tell, but I am sure that all these aspects will have been fully addressed.

* Anyone interested in supporting this project can obtain more information from Threatened Plants Appeal, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AB

Another Chinese 'Frit' One wonders how many more fritillarias are lurking out there in the literature! We reckon on doing a fairly good job at scanning botanical and horticultural periodicals for signs of species we have not heard of, but another one has just been found, published in the old pre-newsletter days of 1991. It is *F. qimenensis* from Anhui Province of China, described by Zhang Ding-cheng and Shao Jian-zhang in *Acta Phytotaxonomica Sinica* 29: 474-476 (1991) [and a new lily as well, see next item].

There is a line drawing accompanying the description, showing that *F. qimenensis* is a plant with whorled leaves and widely flared bell-shaped flowers in the upper leaf axils, described as being yellow with purple tessellations. A shortened version of the description is as follows: Height 15-35 cm; lowest leaves opposite, the middle and upper sets of leaves whorled (3 or rarely 4 in a whorl), lanceolate, 8-12 cm long and 1.5-3 cm wide, not tendril-like at the apex; the upper-most ones (leaf-like bracts) subtending the flowers are paired, or occasionally 3 in a whorl; flowers 1 or 2, bell-shaped, on pedicels 1-2 cm long; perianth segments yellow, tessellated purple, 4-5.5 cm long, elliptical, the outer slightly narrower than the inner; although the nectary at the base of the segments is not described, it appears from the drawing to be smallish and oblong; stigma deeply 3-lobed, each of the lobes 6-8 mm long. The specimen from which the species was described was collected by Chen Jiong-li on 29 March 1988 at 850 m altitude in the district of Qimen at Dahongling, Anhui Province.

And the overlooked lily

In the same publication [see above item], there is a new species of white trumpet lily, *Lilium anhuiense*. This is up to 120 cm in height with sparsely-arranged linear-lanceolate glabrous leaves 8-14 cm long and 7-11 mm wide with 3-5 veins; the tips are rolled over, almost like tendrils. There are two, funnel-shaped fragrant white flowers c. 16 cm long, with the outer segments 3-4 cm wide and the inner 4-5.5 cm wide. One feature which is obviously thought to be significant is the fact that the style is hairy in its lower half, and this is one of the characteristics by which the new species is said to differ from *L. brownii*. The other point of difference concerns the foliage, all the leaves having a curled tip and the upper ones more or less equal in length to those lower down. This latter point is of interest, since this is stated by Woodcock & Stearn (*Lilies of the World*) to be a feature of *L. brownii* var. *brownii* which has always been somewhat of a mystery plant of unknown origin. In the other varieties of *L. brownii*, var. *viridulum* and var. *australe*, which are known as wild plants, the upper leaves are much smaller than the middle ones. It seems that there is still much work to be done on the taxonomy of the white trumpet lilies of China. *Lilies of the World* was published in 1950 but there does not seem to have been much published since that time which substantially alters the classification proposed there.

Lilium anhuiense is described from Guniujiang, in the Shitai district of Anhui Province at 800 metres and was seen by Shao Jian-zhang in flower on 18 June 1983.

Alleged Threat to a Bulb Paradise

The plant conservation magazine, *Plant Talk** (Issue 10, July 1997) is reporting a possible threat to a wonderful mountain in south-western Turkey, Baba Dag. This is the home of a number of beautiful bulbous plants including the endemics *Chionodoxa forbesii* and *Sternbergia candida*. It is becoming a popular spot with paragliding enthusiasts - and very graceful they looked when we saw them in 1997, drifting their way back to the tourist beaches from the rocky mountain slopes above!

In moderation, as it is now, this would probably do little harm but if the alleged plans to install a cable-car on the mountain come to fruition, hotels will no doubt follow and problems could be created for the future. No doubt Turkish conservationists and botanists are monitoring these plans and we wish them all the best, for this is a very special place.

* *Plant Talk* gives news and views on conservation worldwide and is published quarterly at £15 per annum. Contact: The Botanical Information Co. Ltd, P.O. Box 500, Kingston upon Thames, Surrey KT2 5XB, UK.

Christophii or *Cristophii*?

The natural inclination of English authors is to put an 'H' into the spelling of the well-known *Allium christophii*, but is this correct? In botanical and gardening literature there is a good spread of opinion, some with and some without. The *European Garden Flora* and the *New RHS Dictionary of Gardening* put it in, *The RHS Plant Finder* leaves it out, and so on. However, I can remember the late Per Wendelbo looking into this when he was preparing the account of *Allium* for *Flora Iranica*, published in 1971; he maintained that the correct spelling was *A. cristophii*, and I have no reason to question his decision. As a final check, one can always go back to the original publication of the name, in this case by E.R. von Trautvetter in *Acta Horti Petropolitani* 9: 268 (1884); we find that he did, in fact, spell it *A. cristophii*, and repeated the name so it is unlikely to have been a slip of the pen.

Some people still think of this species as *A. albopilosum* but this is another name for the same species, published a few years later in 1903 by C.H. Wright and it therefore becomes a straightforward synonym of *A. cristophii*.

MIYABEA

The latest issue of this Japanese journal has recently appeared through the post and has some interest for bulb and alpine enthusiasts. It is a serial publication on the flora of Hokkaido, northern Japan, intended to introduce the reader to the plants of the region. This part, is devoted to the 'Ecology and Life History of Early Spring Woodland Flowers in Hokkaido' and contains reproductions of colour paintings of several monocots: *Erythronium japonicum*, *Gagea lutea*, *Lysichiton camtschaticense* and *Symplocarpus foetidus* var. *latissimus*; also *Corydalis ambigua* and three *Anemone* species which tend to be treated as 'honorary bulbs' by bulb enthusiasts!

The watercolours, by Japanese botanical artists, are very accomplished, and there are accompanying articles about the plants giving varied and interesting information on a range of subjects. For example, in the case of *Erythronium japonicum*, we find that it takes seedlings six or seven years to reach maturity in the wild and that vegetative reproduction (i.e. bulb offsets/division) is rare. Carpenter bees, bumblebees and butterflies are observed to be the pollinators.

Corydalis ambigua is reported to be visited exclusively by overwintering queen bumblebees. Unfortunately for the plant the bees often take the nectar by cutting through the spur - 'nectar-robbing' - rather than through the mouth of the flower which is what is required for effective cross-pollination. The watercolour of *C. ambigua* shows a bright blue form as well as a good pink, and it is noted in the text that white forms also occur.

This is Part 3 of *Miyabea*. Part 1 dealt with *Trillium* (30 pages, 7 colour plates) and Part 2 covered *Primula* (27 pages, 9 plates). The Editorial Office is at the Botanic Garden, Faculty of Agriculture, Hokkaido University, Sapporo 060, Japan.

Calochortus reviewed

In *Fremontia, A Journal of the Californian Native Plant Society* 25(1): 20-25 (January, 1997) Hugh P. McDonald provides us with a tour of the genus *Calochortus* in California. This is not so much descriptive of the plants but of their whereabouts and the habitats in which they can be found, which is an interesting and refreshing approach. He also provides lists of the species according to their perceived cultivation requirements, breaking the species into groups: those for mild moist climates, for mild dry conditions, for cold dry areas and cold moist regions. This is Part 2; dealing with the *Mariposa* and *Cyclobothra* sections; Part 1, dealing with section *Calochortus*, appeared in Vol. 24(3): 25-28 (June, 1996).

Hugh has chapters on 'Growing Mariposas' and the 'Landscape Uses of *Calochortus*' but I think that, in the British climate at least, we are a fair way off using them in drifts for display purposes. However, Wim de Goede in Holland seems to have found the way to propagate and cultivate them in quantity - we have only seen the photos, but there seem to be more on his nursery than we have ever seen in the United States!

It might be of interest to those who are just being bitten by the *Calochortus* bug to have a list of the Californian species described in the article and to see how they are arranged in sections:

Section *Calochortus*

albus, amabilis, amoenus, coeruleus, elegans, greenei, longebarbatus, minimus, monophyllus, nudus, persistens, pulchellus, raichei, tolmiei, umbellatus, uniflorus, westonii,

Section *Mariposa*

argillosus, bruneaunis, catalinae, clavatus, concolor, davidsonianus, dunnii, excavatus, flexuosus, invenustus, kennedyi, leichtlinii, luteus, macrocarpus, palmeri, simulans, splendens, striatus, superbus, syntrophus, venustus, vestae

Section *Cyclobothra*

obispoensis, plummerae, vestus, weedii.

C. tiburonensis is an oddity, yet to be satisfactorily placed in a section.

The Newsletter of the *Calochortus* Society - *Mariposa* - is edited by Hugh McDonald and K. Stokkink and contains much detailed information about the genus - plant hunting, descriptions, conservation matters, cultivation, and so on. It is available from: P.O. Box 1128, Berkeley, California 94701-1128, USA.

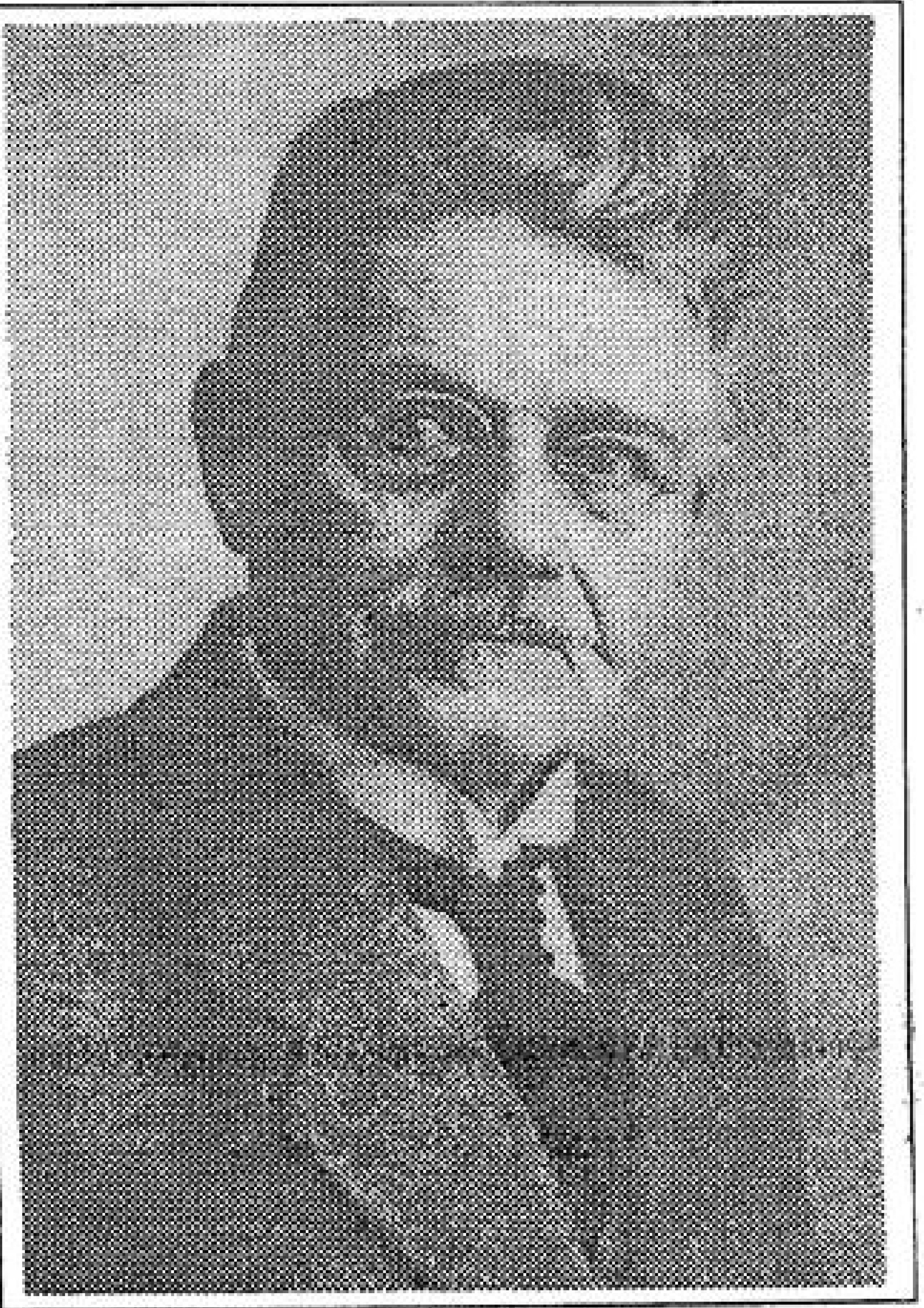
Grape Hyacinth Honoured

On the 14th of April, *Muscari* 'Valerie Finnis' received a P.C. - a Preliminary Commendation - from the Joint Rock Garden Plant Committee at the RHS Show in London.

This is a most attractive variant of *M. armeniacum* which has a very dense raceme of pale lavender blue flowers, a welcome colour break from the rather vivid blue of the form we see most often, 'Blue Spike'. The plant has done a fair amount of touring in its history. Valerie Finnis (Lady Scott) found it in her garden at The Dower House, Boughton House, near Kettering in Northamptonshire, some time after the death of her husband, Sir David Scott. Whether it had been acquired by him or was a self-sown seedling in the garden is not known. Valerie gave it to Wayne Roderick who took it back to California where it was seen by a visiting friend, the Dutch nurseryman Wim de Goede. Wim brought it back to Holland, propagated and named it and sent some bulbs back to Valerie who exhibited it in London on April 14th. It is a good garden plant, increases well and is very hardy, so this will be a welcome addition to the range of grape hyacinths available.

Personalities in the Bulb World - 8

Walter Erdmann **Siehe** is almost wholly associated with the bulbous plants of Turkey, and his name is commemorated in several endemic species - *Crocus sieheanus*, *Colchicum sieheanum*, *Chionodoxa siehei* and *Fritillaria sieheana*. In view of the amount of work he carried out on the flora it is surprising that there are so few, but he did describe and name many of his own discoveries, including the Juno irises *I. tauri* [now *I. stenophylla*], *I. galatica* and *I. haussknechtii* [a variant of *I. persica*], the Oncocyclus irises *I. sprengeri* and *I. elisabethae* (which is named after Elisabeth, Siehe's wife) *Colchicum hydrophilum* and *C. hygrophilum* (both regarded as variants of *C. szovitsii*), *C. tauri*, *Fritillaria syriaca* [which is a syn. of *F. elwesii*] and *Scilla cilicica*.



Walter Siehe was born in Berlin in 1859 and was educated at the Königlichen Gärtnerlehranstalt and the universities of Berlin and Jena. Clearly he fell in love with Turkey on his first visit in 1895, for two years later he bought some land at Findikpinar near Mersin where he set out to grow native bulbs and fruit. He made many field trips to collect plants and sent both dried specimens and living bulbs to many herbaria and botanic gardens throughout Europe. The 'Inwards Book' of the Royal Botanic Gardens, Kew, for instance, shows consignments of bulbs purchased from Siehe; his list of 'Oriental Flower Bulbs' contained about 100 species. In the 1914-1918 war, Siehe was employed by a railway company in southern Turkey but when the French occupied the area he was detained in prison for nearly two years, during which time his house and belongings were destroyed. Sadly, this included all his plant collections, books and hundreds of illustrations which would presumably have been used in the book he was planning to produce on the Turkish flora.

Undoubtedly Walter Siehe did much to popularise the bulbs of Asia Minor and is a key figure in the early days of their collection and classification. Clearly, he collected a great many bulbs [it is not known to what extent he propagated these, if at all] and today he would be criticised for this; however, many other hunters and collectors were engaged all over the world in similar activities involving both animal and plant life; the natural resources must have seemed almost limitless to these early travellers and the word 'conservation' was very rarely used in the context of the living world. Siehe died of malaria in the American Hospital at Adana in 1928 and was buried in Mersin.

'To plant a seed is a noble deed' - the gospel according to Norman Deno

Those who delve into the science of growing plants from seed will, I am sure, already be aware of Norman C. Deno's work on the germination of seeds. Even those whose seed-sowing technology amounts to putting them in a pot, covering them with grit, and standing them outside to take the weather as it comes, should know of his work since it makes one think, and that is always a good thing. By way of explanation, I can do no better than to quote from the cover of his *Seed Germination Theory and Practice*:

"Every species has some mechanism for delaying germination until after the seed has been dispersed. The science of seed germination is the discovery and description of such mechanisms and the development of procedures for removing them so that seeds can germinate."

The second edition of this work was published in 1993, and a Supplement in 1996; another Supplement is planned, probably coming out later this year. The information contained in the work is based on experiments on 145 flowering plant families, 805 genera and 2500 species. There is an enormous amount of

information contained in the 242 pages (another 107 in the first Supplement) so it is possible to give only a hint of what is involved. After the initial chapters on the principles and definitions there is a section describing the design of the experiments, details of inhibitors and their destruction, the effects of light on germination, effects of chemicals and the stimulation of germination by gibberellins, the collection and storage of seeds and a short chapter on 'Endangered species and Conservation'. There is an interesting statement here that will amuse some, bring applause from others and cause fury among yet another group! On the subject of endangered species, and the fact that it is illegal to distribute them or their seeds in some cases, Prof. Deno comments that "This policy and the laws designed to enforce this policy can only serve to speed up the extinction of the species by discouraging propagation." He advocates re-writing the laws to encourage propagation, especially from seed. However, I must not stir this particular pot as I really set out to describe this manual on seed germination!

The main bulk of the book is the A-Z list of genera and species describing the results of the experiments and, of course there are many bulbs included in this list. The data shows the treatment and percentage germination achieved. The First Supplement gives further lists of species and also includes information on topics such as fire and smoke treatment and there is a section which will interest *Iris* enthusiasts on the arillate-seeded irises.

As I said above, many amateur enthusiasts will look at this and think that it is too much trouble and that popping them into a pot and forgetting about them is good enough. Others will be stimulated to try for themselves, experimenting and adapting the techniques described in this fascinating publication.

Seed Germination Theory and Practice is available at US\$20 (incl. postage to anywhere) from Norman C. Deno, 139 Lenor Drive, State College, PA 16801, USA. The First Supplement is \$15. The author asks that the payment is either made in dollar bills or by cheque [but only if drawn on a U.S. bank, since there are high charges to negotiate cheques from other banks].

More *Corydalis* from China

With *Corydalis* at the height of popularity it is a good time to be describing more new ones from China; unfortunately I think that most of them are not in cultivation, so this will only serve to tantalise those who cannot get enough of these fascinating little plants. In the *Edinburgh Journal of Botany* 54(1): 55-84, Su Zhi-Yan and Magnus Lidén have named and described 29 species previously unknown to science. Most of these are non-tuberous, hence they will be of rather less interest to the bulb enthusiasts, but some belong to the fleshy-rooted section *Fasciculatae* which contains many of the choice Himalayan and Chinese species. The paper starts with some interesting statistics about the

genus as a whole: There are c. 440 species, divided for practical purposes into 33 sections, and there are c. 300 Chinese species, many of them known only from the type specimen on which the name and first description were based.

I will not repeat the details of all of the new ones here, but just to tantalise I have picked out a few which might have considerable ornamental value.

For instance there is *C. rockiana* from north-eastern Tibet, which is described as having dense racemes of up to 20 white flowers 1.7-2 cm long which have blue tips to the inner petals. *C. glaucissima* has up to 10 blue flowers and fleshy leaves which are extremely glaucous on both sides with three rounded leaflets. *C. oreocoma* is said to be 'a very elegant species' with up to 20 brilliant blue flowers in long, lax racemes. But enough of the torture; by the way, this is Part 1 of the paper '*Corydalis* in China' - there are more?!

Requests

During a recent visit to Wisley Garden in Surrey, Michael Burrell saw and coveted two *Lachenalia* species, *L. gillettii* (a handsome one with white flowers stained and tipped purple) and *L. mathewsii* (bright yellow), so he contacted us to ask where he might obtain them. Well done, for showing restraint - some people would have acquired them without further ado! *The Plant Finder* shows that a number of species are on offer, but not these two. However, *Lachenalia* species are becoming quite popular among bulb enthusiasts so I am sure that someone has some spares. Please contact: Michael Burrell, Eagle Cottage, High Street, Angmering, Littlehampton, West Sussex, BN16 4AH, UK.

Homeria hantamensis and The Flowering Plants of Africa

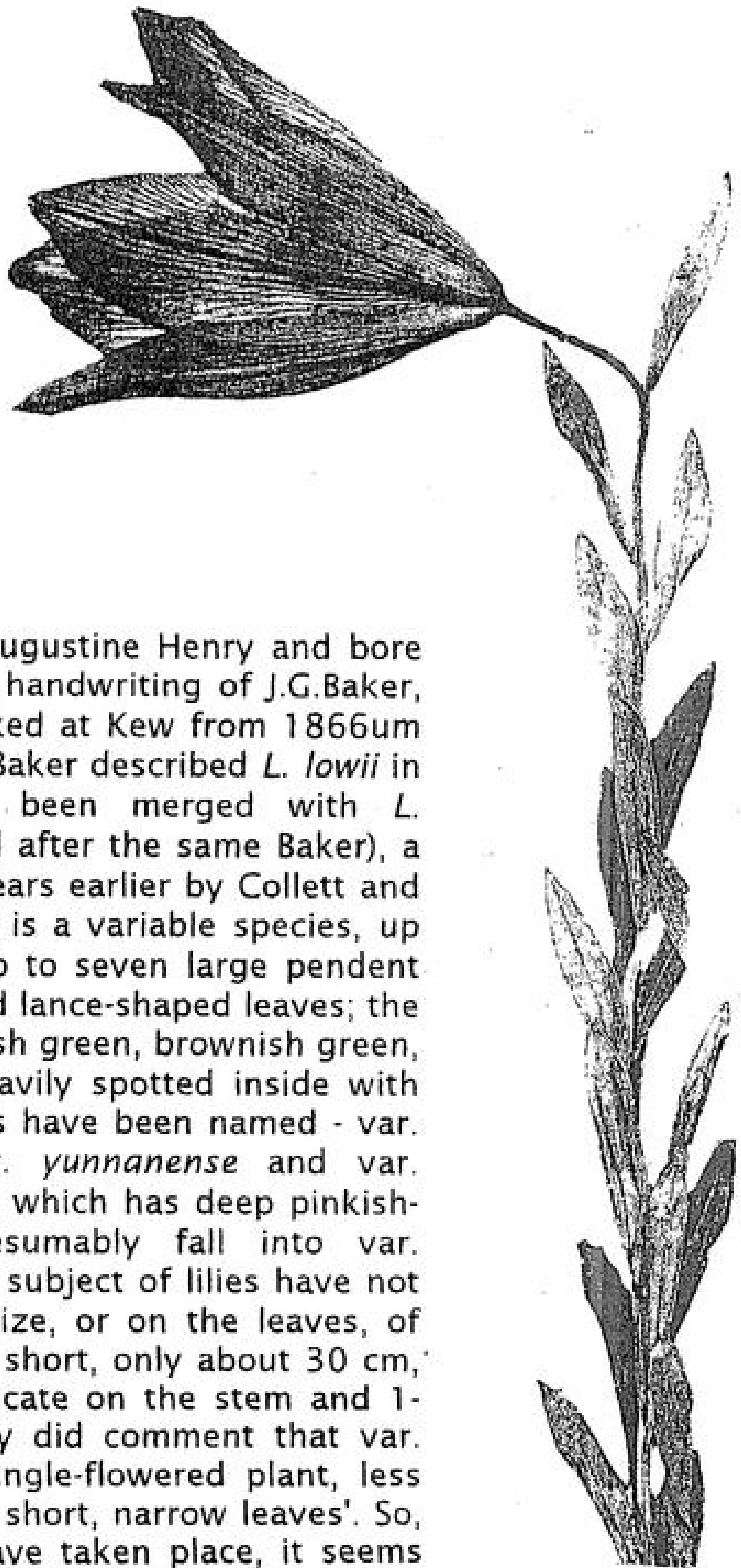
Peter Goldblatt and John C. Manning have recently described a new species of *Homeria*, *H. hantamensis*, in *The Flowering Plants of Africa* 55: 40-46 (1997). This is related, and very similar in many ways, to *H. marlothii* which is one of the better-known species in cultivation. The plant grows to between 70 and 110 cm in height, with one long basal leaf 1-2 cm wide and a wiry tough stem bearing several flowers in succession. These are about 3-3.5 cm across when fully open, at which stage they are pendent but with the perianth segments sharply reflexed in cyclamen fashion. They are described as sweetly scented and pale clear yellow with a darker yellow zone near the centre, this zone speckled with green. For those who have grown *H. marlothii* this description will sound familiar, but the authors explain that there are marked differences in the flower structure, most notably in that the new species has nectaries only on the outer segments whereas in *H. marlothii* all six segments possess nectaries at their bases. At present *H. hantamensis* is known only from an isolated mountain, the Hantamsberg, near Calvinia in the Cape Province.

The Flowering Plants of Africa is a splendid publication, rather like *Curtis's Botanical Magazine* in publishing watercolour portraits and descriptions of a miscellany of interesting plants, in this case confined to the African continent. Anyone interested in this periodical should contact the National Botanical Institute, Private Bag X101, Pretoria, 0001 South Africa.

A Chinese Lily Puzzle

Last year Philip Cribb brought along a colour transparency of a small reddish-purple lily taken in China on one of his recent visits. At first this was a puzzle since I had seen nothing like it in cultivation. Some further investigations at Kew in the Herbarium showed that similar plants had been seen before, and one of these specimens is shown on the right.

This one was collected by Augustine Henry and bore the name *Lilium lowii* in the handwriting of J.G. Baker, monocot specialist who worked at Kew from 1866 to 1906 (see Personalities, BN 11:8). Baker described *L. lowii* in 1892 but this has since been merged with *L. bakerianum* (which is named after the same Baker), a species described just two years earlier by Collett and Hemsley. *Lilium bakerianum* is a variable species, up to a metre in height with up to seven large pendent bell-like flowers and scattered lance-shaped leaves; the flower colour may be yellowish green, brownish green, yellow, white or reddish, heavily spotted inside with deep purple; several varieties have been named - var. *delavayi*, var. *aureum*, var. *yunnanense* and var. *rubrum*. Phillip Cribb's plant, which has deep pinkish-purple flowers, would presumably fall into var. *rubrum*. Most writers on the subject of lilies have not commented on the overall size, or on the leaves, of this variety - Philip's plant is short, only about 30 cm, with the leaves almost imbricate on the stem and 1-flowered. However, J.R. Sealy did comment that var. *rubrum* was 'commonly a single-flowered plant, less than 60 cm high with rather short, narrow leaves'. So, until further field studies have taken place, it seems that this very distinctive and desirable little lily must be regarded as one of many variants of *L. bakerianum*.



Catalogues

A delightful catalogue arrived from Michigan a while ago - in fact it looked so readable that I took it straight back to the U.S.A. and read it at Detroit airport while waiting for a flight on to Toronto and the NARGS Eastern Study Weekend! It is Scott Kunst's **Old House Gardens** catalogue of 'antique bulbs', bulbs, that is, with a bit of history introduced between the 1500s and 1940. The whole list is designed as if from a previous century, illustrated with drawings taken from old catalogues and other literature. Each bulb has a descriptive text giving the history, date of introduction, etc.

Many familiar bulbs are there of course, but there are some rather unusual ones as well - for example a selection of the old Duc van Thol tulips and some *Crinum* varieties I have not seen in catalogues before - 'Cecil Houdyshel' (rich pink), 'Ellen Bosanquet' (burgundy-crimson) and 'Gowenii' (striped white and pink). Unfortunately for those outside the United States there is no shipment abroad at present. Catalogue \$2 from: **Scott Kunst, Old House Gardens, 536 Third Street, Ann Arbor, Michigan 48103-4957.**

A new variety of *Tulipa sylvestris*

The mention of 'old bulbs' reminded me that I had seen a reference to a newly identified variety of *Tulipa sylvestris* which is certainly a very old species in terms of how long it has been around in cultivation. The new variety, var. *mauriti* originates from North Africa and is compared with var. *australis*, the variant of *T. sylvestris* which one is most likely to encounter in Mediterranean regions. It is said to differ from this in having larger flowers, up to 5.5 cm long, with the interior perianth segments abruptly truncate, and longer anthers to 10 mm long. The type locality is Mt Tidiquin in Morocco. The paper is published in *Logoscalia* 18(2): 326 (1996).

Mike Smith's **Hythe Alpines** catalogue is always full of choice items for the alpine enthusiast and contains quite a lot of monocots, but in spring he puts out a separate bulb list for bulbs which are despatched dry in late summer. There is plenty of interest in the 1998 list for the most sophisticated of collectors: *Arum cyrenaicum*, *Colchicum peloponnesiacum*, *Corydalis conorhiza* (grow that if you can - I once kept it for several months!) and many other tuberous *Corydalis*, *Crocus caspius*, *C. banaticus* 'Albus' + lots more unusual ones, many *Fritillaria* including the superb, vigorous *F. pudica* 'Richard Britten' and lovely, rare, *F. striata*-----to mention but a few. **Hythe Alpines, Methwold Hythe, Thetford, Norfolk, IP26 4QH.**

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