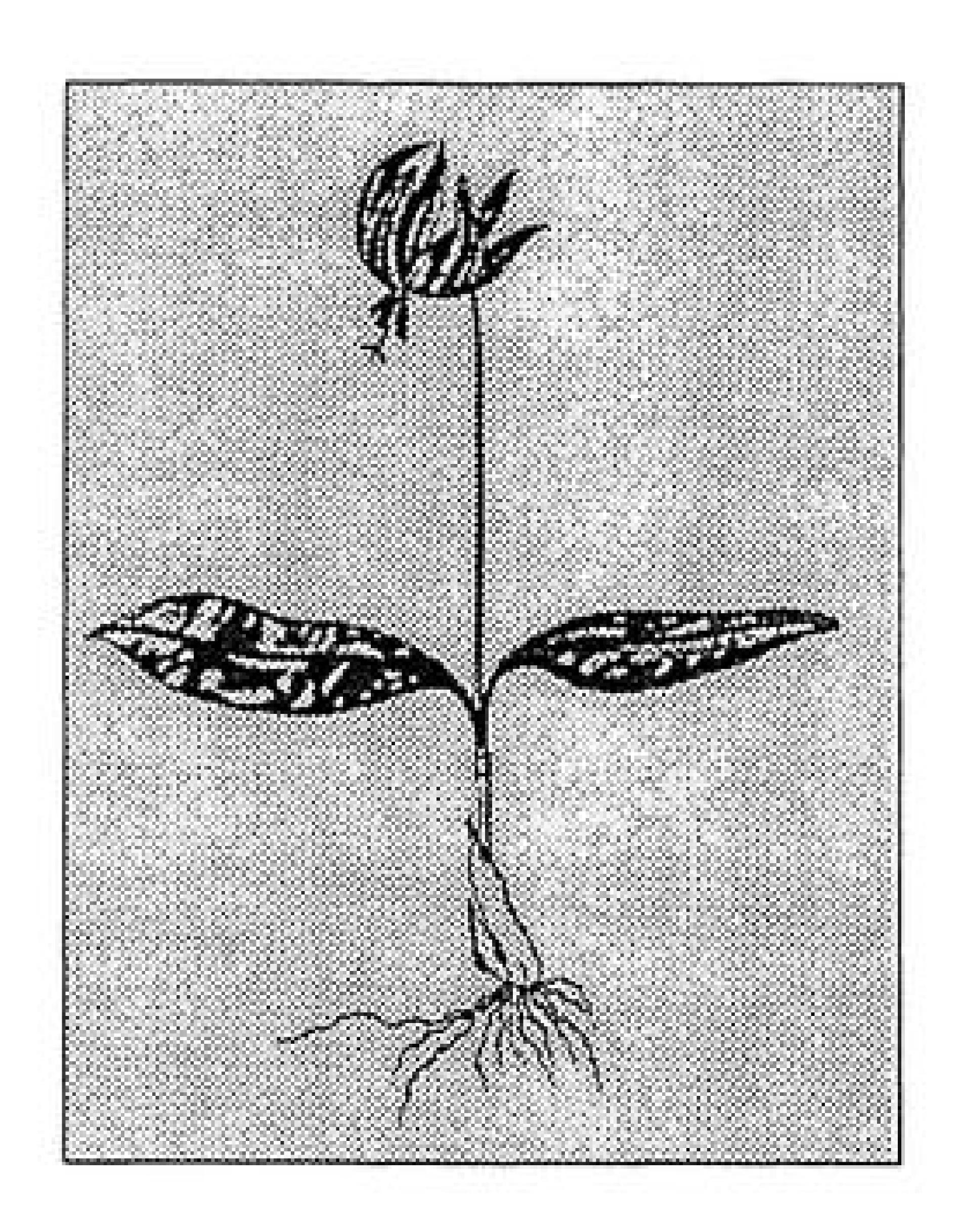
# THE BULB NEWSLETTER



Number 28

October-December

1999

# The Bulb Newsletter No. 28

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# Tricyrtis viridula, a new species discovered

The small but interesting eastern Asiatic genus Tricyrtis, which belongs to the Liliaceae or Convallariaceae (or even a separate family of its own) depending upon whose view you follow, has just been increased by one. This brings the total number of species to between 15 and 20. The reason for this vagueness is that some of those described as species in the past are still little-known and may be just variants of others - some of those from Taiwan, for example.

The latest species to be described is from China and is quite widespread, in the temperate forests of the south and south-east of the country in Zhejiang, Jiangxi, Guizhou, Guangxi and north-eastern Yunnan provinces. It was described and named by Hiroshi Takahashi in Acta Phytotaxonomica et Geobotanica 48: 123-127 (1997, publ. in 1998) with a further paper about it (with Xiang-Kun Qin, Si-jun Hao & Fumihiro Konta) in the Bulletin of the National Science Museum, Tokyo 24: 53-59 (1998). The authors compare it with T. affinis, T. macropoda, T. pilosa, T. setouchiensis, T. latifolia and T. suzukii, all members of section Tricyrtis to which T. viridula also belongs. These species all have branched flower stems with the flowers facing upwards and, in most species, more or less flat because the perianth segments spread out horizontally; however, in T. macropoda the segments are strongly reflexed from the horizontal and in T. suzukii from Taiwan they form a funnel-shaped flower. Of the 'flatflowered' ones, T. setouchiensis has yellow roots - a characteristic that is given some importance by Takahashi - whereas the roots of the others contain no pigments and are white. Of the remaining species mentioned above, the flowers of T. latifolia are yellow with reddish spots and those of T. affinis are white with purple spots, while T. pilosa and T. viridula have a greenish ground colour spotted and blotched purple. The feature distinguishing between the last two, shown in the identification key, is the marked hairiness of the leaves and stem, and a few-flowered inflorescence, in the case of T. pilosa whereas T. viridula has many more flowers and is almost hairless.

The author also discusses the 'nectar guides' in these species; in the case of *T. setouchiensis* there is an orange blotch on the perianth

segments at the point at which it bends outwards; in *T. viridula* there are several small purple spots in this position, often accompanied by a large pale orange spot; *T. affinis* has a large purple blotch at the same point. There are differences also in the structure of the inflorescences and in the root systems - these are all explained in the paper, as is the chromosome complement and structure.

It is possible that *T. viridula* is already in cultivation, for it has in the past been confused with, and identified as, either *T. pilosa* or *T. macropoda*.

# A White Gloriosa

In a previous issue (BN 27:14) we asked: "Has anyone seen a white Gloriosa superba?", which we hadn't. It is often the way, that just after you write something some more information comes in that would have made the piece more informative; a good reason to never write anything at all, it's much safer that way!

I was searching through some back numbers of Herbertia/Plant Life for references to alliums when my eye fell upon an article entitled "A white Gloriosa from Africa" by Sydney Percy-Lancaster writing from the National Botanic Gardens, Lucknow, India (in Plant Life Vol. 23, 1967). He was giving an account of a visit to Africa and describes (in this and previous volumes of the journal) how he had introduced to India some unnamed varieties of Gloriosa (probably from Zimbabwe or adjacent South Africa) but notes that only one of them proved worth waiting for while it became acclimatized. It was given the cultivar name of 'White Queen' and described as follows:

### Gloriosa 'White Queen'

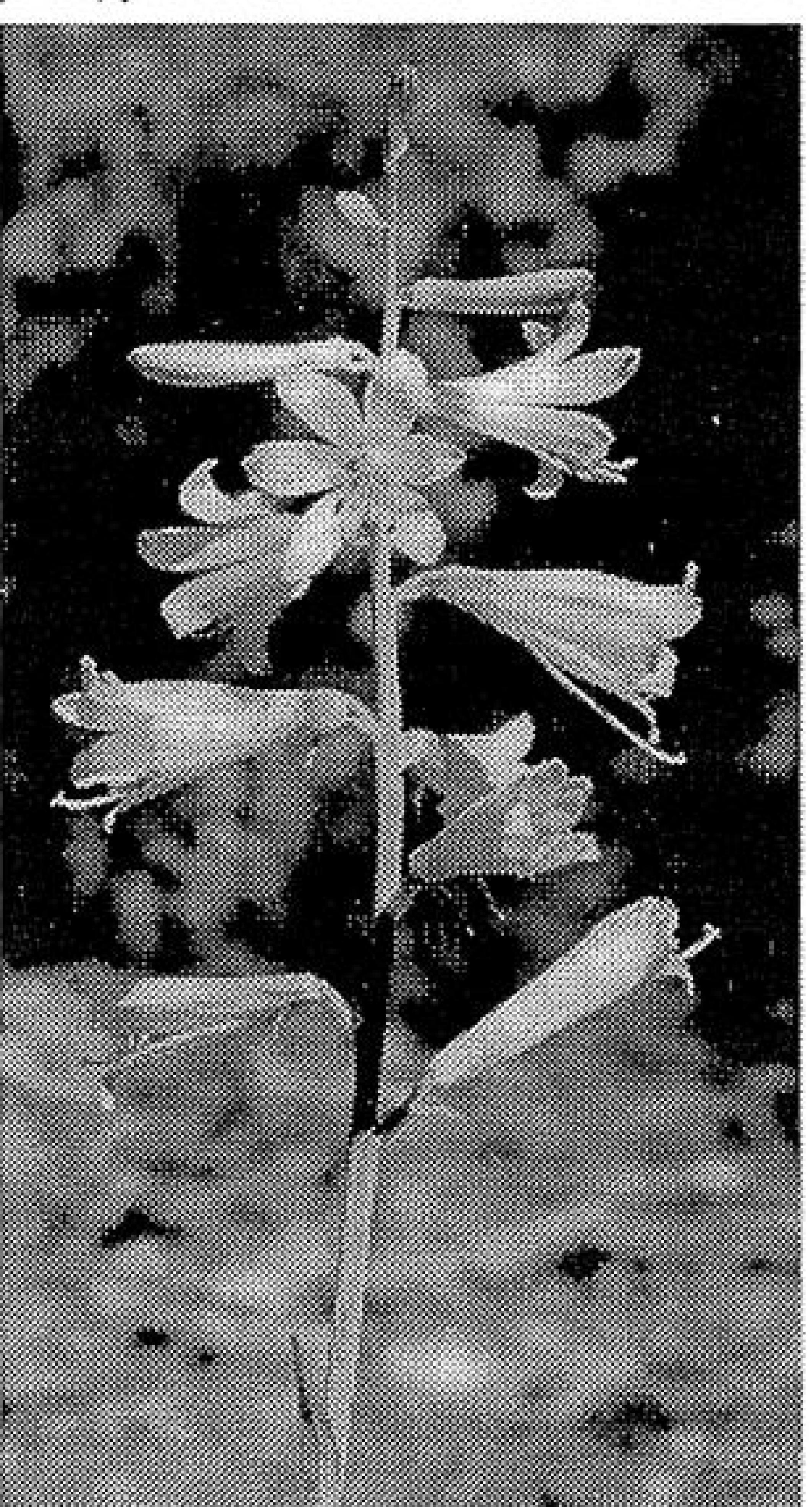
Stem. Length - 15 feet; first basal leaf - 2 feet from the ground. Foliage. Arrangement - irregular and occasionally alternate; leaf 5" by 1¼", including a 1" tendril, some leaves on main stem up to 6½" by 2"; leaf colour - dull green with a shiny underside; leaf shape - oval, acute.

Flower. Bud - yellowish-green, opening at the base; flower size - petals 2" long, 5/8" wide, with undulate edges; colour - palest creamy white, with greenish base and dark maroon dots, fading to white with yellowish flush on the backs of the petals, and to dead white on the second day; pistil 1½" long, stamens 1¼" long; number of flowers to the plant - 25; flower stalk (pedicel) 5"-7".

A further more recent and very useful reference to the genus was located in *Herbertia* 44(1) 1988, where Prakash Narian of the Lucknow National Botanical Research Institute gave an account of the cultivars and species of *Gloriosa*. Although 'White Queen' is not mentioned, there are some very pale yellow cultivars (e.g. 'Lemon King') and apparently some

other exciting colours - 'Lavender Lady', 'Lilac Lady' and 'Mauve Beauty'. They would certainly make a change from the red, yellow-margined one that does almost too well in the conservatories around here; they increase so rapidly that people are giving them away.

As we said before, if anyone knows of a source of the white-flowered plant, please let us know - either via BN or direct to:



Paul Shirley, Juliana Straat 16, 2771 DX Boskoop, The Netherlands.

# ##Notholinion##

William Waterfield of Menton-Garavan, France recently brought to our notice a somewhat neglected genus, in horticultural terms. The photograph shown on the left was taken in the garden that Major Lawrence Johnston established at Menton, Serre de la Madone. This depicts a bulb that was unfamiliar to William, and probably to many others as well since it is not seen very often in collections. It is Notholirion thomsonianum, a lily relative that occurs in the western Himalaya - from Afghanistan eastwards to Kumaon.

Notholirion is a small genus of 5 species, differing most obviously from the true lilies in having a monocarpic bulb - that is, one that dies after flowering - and long narrow leaves that are mostly basal rather than scattered or

whorled up the stem. The short-lived bulb may appear to the gardener to be of nuisance value only, but help is at hand in the form of offset bulblets to carry the generation on; in fact in this respect it behaves more like *Cardiocrinum*, but of course the leaves of the latter are broad and heart-shaped so the two genera look very different.

Notholirion is unusual in its distribution for it occurs in both the winter rainfall regions of western and central Asia and the summer rainfall, monsoon region of the central-eastern Himalaya eastwards into China. This is worth knowing from the point of view of cultivation since the western ones need treating more like the bulbs of the Mediterranean and Middle-Eastern, drying them off in summer after they have died down, whereas the more easterly-occurring ones need cooler treatment with more water during summer - in fact more like Nomocharis and Chinese lilies. The five species are:

Iran and W. Himalaya: N. koeiei and N. thomsonianum.

Central & eastern Himalaya to China: N. bulbuliferum (syn. N. hyacinthinum), N. campanulatum and N. macrophyllum.

The first two are rather similar to each other and are said to differ in the length of the anthers (about 1 cm in *N. thomsonianum* and only about 5 mm in *N. koeiei*), and in the posture of the flowers - slightly pendent to horizontal in the former and suberect in the latter. As can be seen from the photo of *N. thomsonianum* on page 3, the flowers are funnel-shaped with fairly narrow segments, pale pinkish lilac in *N. thomsonianum* and allegedly reddish-lilac in the latter, although few people seem to have seen it alive; it reputedly occurs in Iran, in the western region of Luristan, but most of the specimens recorded were in cultivation there. Whether or not it is really distinct from *N. thomsonianum* is a question that must remain open until someone makes further investigations in the field.

The three species from farther east are quite easy to distinguish; *N. campanulatum* has up to 20 drooping bells of a deep wine red, while in *N. bulbuliferum* (hyacinthinum) there are up to 30 pale lilac, horizontal, funnel-shaped flowers, more like those of *N. thomsonianum* but with wider segments (1-2 cm wide, but only about 4-6 mm in *N. thomsonianum*) giving a more substantial appearance. The third, *N. macrophyllum* is generally a smaller plant with up to 6 pale lavender flowers spotted darker inside; they tend to open more widely than in the other species, ending up as widely funnel-shaped. It lacks green tips to the segments which the other species possess. Another point worthy of comment is that the western species *N. thomsonianum* flowers early in the season (presumably *N. koeiei* as well), in spring or early summer; the more easterly ones do not come into bloom before mid to late summer.

With regard to cultivation here in the south of England, we have no difficulty at all in growing *N. thomsonianum*, although it does best in a deep pot in a cool greenhouse; the plants are watered from autumn through to late spring then dried off for the rest of the season until the following autumn. The eastern Himalayan/Chinese species are less easy, appearing to require cooler growing conditions that are difficult to achieve here. Moister northern and western climates seem more suitable.

# More to beware of

Brian Halliwell's comments on pestiferous bulbs ('Beware of these', BN 26:4) obviously struck a chord with Graham Simpson of East Grinstead, Sussex. He writes: "I was very interested in Brian Halliwell's comments on this topic because it is right and proper that we should be told about plants which, though inherently attractive in themselves, have personal behavioural problems. I could have benefited in my earlier days of gardening from advice such as this.

My pet hate is a plant purchased about ten years ago which has subsequently caused me a great deal of trouble. It is *Nectaroscordum siculum*. It is currently 'fashionable' according to gardening correspondents in the National Press, and is a much admired plant for dried flower arrangements. With me it has proved the most pernicious weed of all time. In the past two years I have removed, and consigned to the bonfire, over 2000 bulbs.

The plant is much featured in bulb lists but curiously expensive at £1.35 to £1.65 a bulb; there is even one 1999 list that prices it at £3.25. For a plant that is so easy to grow, and so quick to reproduce itself from seed, is the price not somewhat deceptive? What are the commercial prospects for *Crocus tommasinianus* if it were offered for sale at the same price?

My original plants came in two colour forms. Both with flowers with a prominent green marking but in one the basic colour was reddish-purple, and in the other it was yellow-brown. The subsequent stock, from seed, showed a high percentage of intermediates, and even a few with a basic colour of white.

I have now realized that if you intend to grow plants like this you need to 'know your onions'. For myself, I think that I shall confine myself to Allium sativum because at least it has a good culinary use."

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Graham Simpson did not mention the disgusting smell that this plant emits if bruised; the aroma from most alliums tends to make one think of the stomach - stews and wonderful Mediterranean cooking, but Nectaroscordum (maybe it should have been spelled <u>sickulum</u>) has a really pungent, nauseous smell that rivals some of the aroids.

# Lilium nepalense - suggestions, please

Mary Randall has experienced a reluctance on the part of *Lilium nepalense* to produce seeds; have any other BN subscribers found this to be the case? Are two needed for cross-pollination, or is it perhaps a question of the achieving the correct temperature or humidity at flowering time. Also, what about the big brown ants that are chewing the edges of the perianth segments? We don't know - but please keep them away from Claygate!

## Another Zantedeschia

Our apologies go to Pauline Perry for omitting Zantedeschia odorata from the short review of the genus in the last BN (No. 27: 17, 1999), a new species which she described in the South African Journal of Botany 55(4): 447-451 in 1989.

This is a native of the Nieuwoudtville Wild Flower Reserve in Cape Province and, as such, occurs in the winter rainfall region. It has a spathe which is white internally with a green point at the apex and it is thus a little like Z. aethiopica in this respect, but it has the very useful characteristic of being fragrant, like the scent of freesias according to the author; it is also different from this very well-known species in that it is deciduous, the unspotted light green leaves dying away in the summer. The particularly interesting point about this one is that it has characteristics that bridge those of the two groups of species; one group (consisting of Z. aethiopica only) is normally evergreen, has sterile 'flowers' - staminodes - mixed in amongst the female flowers and fruits which turn orange and become soft and 'mushy' at maturity; the second group comprises winter-dormant species which have no staminodes among the female flowers and the fruits remain green and firm until they break up and rot away on the ground. The new species does have staminodes in between the female flowers (and so resembles Z. aethiopica) but the fruits remain green throughout their life so in this it is more like the winter-dormant species; on the other hand, however, Z. odorata is summer-dormant.

The author gives much greater detail than this of course, especially concerning the ecology of this geographically restricted species, and there is a table comparing it with two other white-flowered species, *Z. aethiopica* and *Z. albomaculata*.

## Crocus vilmae

David King telephoned recently with a small query that brought back memories of a little crocus and some very good friends. Herbert and Molly Crook used to travel widely in southern Europe, essentially on holiday but they did like to have a specific reason for their meanderings. They travelled 'freelance' and were very flexible in where they went, so before each excursion they would phone to see if there was anything they could do that would help in a particular piece of research. At that time, mostly in the 1970s, I was well into the monograph of *Crocus* and various other bulbous genera, as well as being involved in an on-going study of hellebores. Herbert and Molly visited a lot of places for me, recording locations of *Crocus* species, habitats, variations, measuring, observing and collecting a few living samples for chromosome counts. They always

kept a few for themselves as well and some of these survive to this day having been passed on to friends, fortunately with their collecting numbers still attached. David King's query involved *C. vilmae* with a number 3206 on the label. This immediately rang a bell, for the combination of this name with numbers of that order suggested a Crook collection. This *Crocus* is a Balkan variation on the *C. vernus* theme and when the Crooks were collecting in the former Yugoslavia their range of numbers had reached the three thousands. Turning to their field notes revealed that this was seen on 9 May 1978 on Mt Vlasic, a range to the north-west of Sarajevo.

Crocus vilmae was described in 1890 by Franz Fiala from Lukavica near Sarajevo, but his new species had a short life. It was 'sunk' in 1903 by Dr Günther Beck into C. albiflorus forma violaceus Beck, in his account of the flora of the region: Flora Bosne, Herzegovine i Novipazarskog Sandzaka. As well as f. violaceus, Beck recognized f. typicus and f. coerulescens, presumably differing mainly in flower colour. So, although this little crocus is a variation on the C. vernus theme, it is nice to know that some of Herbert & Molly's stock is still surviving after a 21-year period.

STAMPS A recent second-class
British stamp (probably Welsh,
in fact) depicts the culinary
leek, Allium porrum. Doubtless
if we had been alert we would
have noticed the adverts for it
which might have provided an
explanation as to why the
illustration shows dark brown
leeks rather than the usual
green & white. Artistic, maybe?

# What, never? Well, hardly ever.....

Monocots don't always have three of everything but it is rather unusual to find plants that have their flower parts in multiples of any other number - except for the occasional freaks. However, just a few do, and we can think of Nothoscordum (Ipheion) sellowianum and N. dialystemon which frequently have some number other than 6 perianth segments. Terry Smale has written to us about a quadri-petalled Empodium that he saw earlier this year in

South Africa. He writes:

"Jennifer and I found on the Pakhuis Pass (E of Clanwilliam) in April a whole colony of several hundred *Empodium* sp. [Hypoxidaceae] that had four petals and stamens. In the marvellous world of monocots we sometimes see odd individuals with the wrong number of flower parts, but these are usually freaks which revert in the following season. A genetically stable 4-petalled monocot was a surprise to me. In correspondence with South African contacts I have learnt that plants of *Spiloxene* and *Empodium* with four petals are not uncommon, but a whole colony of such plants does not seem to have been recorded." Terry suggest that a possible explanation is that the gene responsible for petal number is constructed in such a way that a single mutation can lead to the 4-petalled characteristic; then a couple of seeds carrying the gene would need to have been transported to a new site and a whole distinctive colony created by the 'founder effect'.

# A startling discovery in the Richtersveld

We are now used to new species turning up with great regularity in the amazing Cape flora of South Africa, but this one has to be among the most surprising at the end of the millenium - a new Amaryllis!

Since the time that Linnaeus named Amaryllis belladonna in the eighteenth century there has been a lot of tedious argument as to whether the name should apply to the familiar South African plant or to the South American amaryllids now known as Hippeastrum. That matter, at least, was finally laid to rest some time ago and it is now accepted that Amaryllis is a genus of one South African species - or was, until 1998 when Deidre Snijman described a second one from the Richtersveld National Park in the northern Cape at a place called Paradyskloof. In view of the locality, she has called it A. paradisicola - 'existing in paradise'.

In a paper published in *Bothalia* 28: 192-196 (1998), she and G. Williamson relate that the species had been seen in leaf, and some bulbs collected, about 20 years ago, but that these have so far failed to flower in the Kirstenbosch Botanic Garden, thus remaining unidentified. It was seen in flower by a Richtersveld Park ranger in 1996 and again in 1997 by G. Williamson; from these observations it was realized that here was a new *Amaryllis*, an extraordinary discovery - it 'engendered a great deal of surprise' is how the authors put it.

The new species is geographically quite separate from the more southerly-occurring A. belladonna, the nearest locality for which is some 500 km away. Like the more well-known species it flowers in autumn without leaves, the latter emerging during the winter rainfall period, and it has a tall flower stem with an umbel of pink flowers that are described as being uniformly pink without any obvious veins or other colour in the throat - unlike those of A. belladonna which have an obvious yellowish or white throat; the shape is funnel-shaped, flared out at the mouth, and they are about 6.5-8 cm long.

It is the leaves that the authors pick out as being very distinct from those of A. belladonna; certainly from the photographs reproduced with the article, they do look very different, being very wide (70-130 mm) and 'tongue-shaped', whereas in A. belladonna they are much narrower and strap-like. In addition, the foliage is hairy on both surfaces and, when a leaf is broken, it produces a brown sap and fine threads like some of the Crinum species. The overall aspect of the mature leaves is different too, since they appear to form a rosette on the ground; those of A. belladonna are arranged distichously - that is, in one plane. Although the leaves of A. paradisicola are distichous when they first emerge, it looks as if they then spread out in all directions forming a whorl.

With up to 21 flowers in the umbel, this must be a very showy plant, but whether it will be the equal of the lovely and ever-popular A. belladonna

must be in some doubt. Hopefully it will eventually come into cultivation by legitimate and ethical means - by propagation and controlled distribution - but from its habitat in an arid, mountainous region it seems unlikely that it will be, to use that well-worn phrase, a 'good garden plant' in cooler, more humid climates.

## A Sunken Scilla

"One of the least well-known bulbous species in Europe is Scilla beirana Samp., an Iberian squill of doubtful affinities." This is the statement made in a recent paper published in the Anales del Jardín Botánico de Madrid 56 (2): 253-260 (1998). The authors (R.M.Almeida Da Silva, F.B. Caldas & J.A.Rosselló) set out to ascertain the status of this Portuguese species that was described in 1931 by Sampaio from Beira Alta province in the northwest of the country.

Scilla beirana has been compared with S. peruviana and was regarded by some as a smaller version, less vigorous with glabrous leaves and blue anthers. Others treated it as a subspecies of S. ramburei which is, in turn, a S. verna relative (rather larger in all parts) from Spain & Portugal. Flora Europaea gave S. beirana species status but placed it next to S. peruviana, thus implying a close relationship. The authors of the above paper set out to study S. beirana in detail and ascertain its true alliance; the study involved morphology, cytology and leaf anatomy. They compared a wide range of collections, both dried herbarium specimens and living plants from Spain, Portugal and North Africa of S. beirana, S. peruviana and S. ramburei. The conclusion they reached was that S. beirana was not closely related to S. peruviana but very similar to S. ramburei, in fact too similar to separate. To quote their final remarks: "In conclusion....the distinction of S. beirana and S. ramburei, even at the infraspecific level, has no sound basis. Not a single character or combination of consistent characters can be used to differentiate between them throughout their range. From a taxonomic point of view, S. beirana is a mere synonym of the older name S. ramburei.

# Bulb Newsletter Subscriptions

For 7 years we have kept the BN subscription rate steady at £10 (UK), £12(Europe) and \$20 (rest of world). Unfortunately, over this period the cost of production has crept up through increases in paper prices, printing and postage, so for the year 2000 we are raising the sub rates to £12.50, £15 and \$30 for overseas including air mail postage.

Subscriptions for 2000 are now due and you will find a slip enclosed. We hope that you will continue to support and enjoy the Bulb Newsletter.

# The Quarterly Allium

We have commented before that every issue of the Bulb Newsletter seems to contain a report of a new species of Allium. Number 28 is no exception.

In Willdenowia 28: 69-75 (1998), Cristina Salmeri has described one from the island of Astypalea. Before you disappear to check on the gazetteer, let us assist - it is in the East Aegean region, one of the Dodecanese group of islands to the north-west of Rhodes. It is A. brulloi, named after Salvatore Brullo, Professor of Botany at Catania University, who has carried out a considerable amount of work on the genus Allium in the Mediterranean region.

Interesting as it no doubt is, being a very local endemic to this island and the neighbouring islet of Kounopia, this little *Allium* will not set the horticultural world humming. It is another member of the *Codonoprasum* section to which *A. paniculatum* and *A. flavum*, along with many others, belong. It is said to be most closely related to *A. sipyleum* from western Turkey. Extracting some of the points from the detailed description we find that it is about 10-25 cm in height with up to 30 flowers in a loose umbel; these are narrowly bell-shaped, about 5 mm long and nodding on pedicels up to 2.5 cm long, pink with darker purple veins along the centre of the segments. The flowering time is in June. Its ornamental value must be about the same as *A. cupanii* - pleasant enough for the enthusiast, but a rather acquired taste.

# Another island endemic - this time an Iris

Nigel Service, who is involved in a long-standing study of the species of bearded *Iris* has taken a close look at *Iris pseudopumila* on Malta and Gozo islands. He has concluded that the plants from Gozo are sufficiently distinct from those on Malta and elsewhere (it occurs also in Sicily and on the Italian mainland) to be recognised as a separate subspecies.

This, he has described as *I. pseudopumila* subsp. *gozoensis* in *The New Plantsman* 6,3: 186-188 (1999). Nigel discusses the plant in some detail, and compares it with examples of the species from other parts of its range.

Extracting the basic information, it is, in effect a variant that is generally larger in all its parts - longer stems and leaves, a longer ovary but with a shorter perianth tube. The flower colour is also noted as being slightly different and less variable than on the mainland, described as a dark violet-purple.

A note at the end of the article adds the information that Harald Mathes of Gladbeck, Germany has located what appears to be the same plant on Malta itself, and that cytological work suggests that it may be more distinct than was at first thought.

# What's in a name? - Dichelostemma ida-maia

Chatting over a meal with Wim and Hanny de Goede recently, we got around to talking about that amazing red flowered 'Brodiaea'. Dichelostemma ida-maia, the Californian Firecracker. Wim has propagated a good stock of it in Holland. We knew the story, that it was named after the daughter of a stage-coach driver, but why did the botanist who first described it choose to do so? Was there a romantic relationship that could be unearthed? A short visit to the Kew library provided the answer quite quickly.

It was given its first formal description by Alphonso Wood, as Brevoortia idamaia, in the Proceedings of the Academy of Natural Sciences of Philadelphia in 1867. He had, apparently, been on a stage-coach journey in Shasta County, California, on route from Shasta to Yreka. Being a good botanist he stopped the coach and collected a specimen, but his attempts at acquiring a living plant were unsuccessful; he



Dichelostemma ida-maia. Botanical Magazine t 5857

comments: 'Unfortunately I found no specimen in fruit, neither did I secure a bulb, so deeply buried were they, and so impatient of delay were my fellow passengers' (we have all experienced that, I'm sure- ed!).

Deciding that this was a new genus - which he named Brevoortia - Wood went on to explain his choice of name for the species:

'This plant was first noticed by Mr. Burke, stage driver, in his daily route, and by him my own attention was first called to it. He had given it the name of 'Ida May, in affection for his little daughter." - a name quite

appropriate, moreover, as on the Ides (i.e. the 15th) of May, the plant begins to flower. Mr. Burke was confident that this was its only locality. Probably, however, it may be found in many other places in northern California.'

On the generic name *Brevoortia*, he explained: 'We dedicate this genus to J. Carson Brevoort, of Brooklyn, a Regent of the University of the State of New York, himself an earnest naturalist, and a liberal patron of science.'

The species was described again the very next year by Asa Gray as Brodiaea coccinea, with the full knowledge of Wood's earlier name, but Gray obviously disliked it:

'we may venture to discard the objectionable double-headed specific name, given by the stage-driver, Mr. Burke.'

The code of botanical nomenclature, under which the oldest name takes priority, had not yet arrived, but nowadays under current rules, ida-maia takes precedence.

The name Brevoortia ida-maia did not last for long, for it was transferred into the genus Brodiaea and then to Dichelostemma ida-maia and it is under this last name that it is usually referred to now.

Although Alphonso Wood failed to collect any living plants, it was not long after his first naming of the plant that someone did, for it was featured in *Curtis' Botanical Magazine* in 1870 from plants sent to Kew by Henry Bolander. Walter Fitch's drawing is shown on p.11, although this reproduction scarcely does justice to Ida May's brilliant Firecracker.

# Iris subgenus Nepalensis in China

The small Himalayan/Chinese subgenus of *Iris* known as subgenus *Nepalensis*, which contains the comparatively well-known *I. decora*, has been the subject of a study by X.D.Dong, Y.T.Zhao and H.Hie.

In a paper in the Bulletin of Botanical Research (China) 18(2): 149-151 (1998), they recognise three species within China - I. decora, I. collettii and I. daliensis. The last of these was described in 1997 and was mentioned in BN 21:14 (1998); it is the same plant as that described in 1995 by Henry Noltie of Edinburgh Botanic Garden as I. collettii var. acaulis (in The New Plantsman 2(3): 136, and see BN13:12, 1996); it is doubtful that it is worth recognising it as a distinct species. Curiously there is no mention in the paper of I. barbatula, also described by Henry Noltie and belonging to this group, but maybe the authors were unaware of its publication. Neither is I. latistyla included, in spite of having been described by Y.T. Zhao in 1980; from its description it sounds very like I. decora so should also belong to subgenus Nepalensis.

They do describe a white form of the normally violet *I. decora*, collected by D.X.Dong at Zhongdian on 15 May 1996, as *I. decora* var. *leucantha*.

# Yet another species added to the Narcissus bulbocodium lot

The name *Narcissus hesperidis* caught my eye whilst scanning some journals for tasty morsels of news the other day. How exciting, I thought, but having read the paper I find that it just another variation on the *N. bulbocodium* theme - an unfair comment as I haven't seen it, but I have no great hopes that this will be a really distinct one that stands out as being remarkably different from the rest!

In Fontqueria 53:5-11(1999), Narcissorum Notulae IV - "Loose notes about the genus Narcissus", J. Fernández Casas provides a basic description of the plant and its localities in Morocco - it was found by the author at "Agadir, between Tafraoute and Aït Baha, above Tifhalt, 1500m", and at "Marrakech, between Asni and Tizi-n-Test at 1000m", flowering near the end of February. The following scant information appears in the description: Flowers medium to large, horizontal or suberect, concolorous yellow or the tube sometimes green-striped; corona longer than the perianth segments; stigma much exserted and stamens included [i.e. in relation to the corona]; leaves erect, subcylindrical, channelled, longer than the scape.

Maybe those Narcissus enthusiasts who are familiar with 'bulbocodiums' from this area would like to comment on the latest addition to the clan?

# A feast for Cape bulb enthusiasts

Flowering Plants of Africa is a journal not unlike Curtis's Botanical Magazine but is devoted to African (mainly South African) plants; it contains plates based on high class botanical water-colours with descriptive texts to accompany them, providing a diverse and interesting account of the species depicted. There are usually several monocots involved in each part - after all, southern Africa is very liberally sprinkled with them - and the latest part (Volume 56) is no exception. There are three Lachenalia species, L. duncanii, L. nervosa and L. convallarioides (that name will make temperate northern hemisphere gardeners twitch!), two crinums, C. macowanii and C. acaule, and a giant Albuca rejoicing in the name of A. clanwilliamigloria, described as 'the tallest and also one of the most attractive species in the genus'. This comment was enough to tempt one into a look at the description: up to 2.5 m high with a raceme of pendent golden yellow flowers, each up to 3.6 cm long - so, quite a dramatic one and the painting by Fay Anderson suggests a plant that is equal in showiness to some of the yellow hot pokers. Don't get too excited about Lachenalia convallarioides, though, it is not one of the best, but is classed as an endangered species. On the other hand, Gill Condy's water-colour of Crinum acaule shows a mouth-watering plant.

Flowering Plants of Africa is an excellent publication that appears irregularly but is a delight when it does. It is obtainable from the National Botanical Institute, Private Bag X101, Pretoria 0001, South Africa.

Crocus nagabensis from Jordan The book referred to on page 17 of this BN - Wild Flowers of Jordan contains a photograph and a short description of a Crocus that is new to us. As yet we have seen no formal publication of this species (i.e. in Latin) but this will presumably appear in a botanical journal at some stage, or maybe we have missed it. The name is self-explanatory - the plant comes from the Ras an-Naqab area of southern Jordan, and the photo shows a lilac, strongly darkveined autumn-flowering Crocus, leafless at flowering time. The corm tunic is said to be membranous with parallel fibres, and the style divided into three red branches. Without more details it is not possible to say to which species it is most closely related - C. pallasii or C. hermoneus, perhaps - interesting!

# Attention all Snowdrop lovers

October or November should see an exciting new publication on Galanthus, the first devoted to the whole genus to appear since Stern's Snowdrops & Snowflakes in 1956. Aaron Davis studied the genus for a Ph.D. and has now developed this into a Botanical Magazine Monograph, to be published for Kew by Timber Press. This is a formal taxonomic study of Galanthus with full descriptions of all the species, a key to their identification and many other botanical details, together with recommendations for their cultivation and propagation including 'chipping' and 'twin-scaling' (by Ronald Mackenzie); there is also a section with brief descriptions of a wide range of cultivars. The book is well illustrated, all the species being represented by a set of 19 beautiful water-colours by Christabel King, and there are 37 colour photographs,

mostly showing the plants in their natural habitat. The book will retail at £29.99, but for those who belong to the Alpine Garden Society there is a special pre-publication price if ordered before the end of November.

# Catalogues

Kath Dryden's list 'Manavlins 32' has become the place to find all sorts of unusual bulbs, in the very widest sense of the word - bulbs, corms, tubers, rhizomes and even a few fleshy roots - for example the mandrake, Mandragora, three of the fascinating rhizomatous North American Clintonia species (no, not named after that Clinton) and Scoliopus hallii, a smaller and less aromatic (a wet dog smell) version of S. bigelowii. Many of the bulbs on offer are scarce, but some are very seldom-seen at all; just a few examples: the yellow-tipped Galanthus plicatus 'Wendy's Gold', the autumn-flowering Turkish G. peshmenii, several rare Oncocyclus Iris, Scilla rosenii which has its perianth segments reflexed in Cyclamen fashion, the delightful small, nodding trillium, T. catesbaei. There are lots of Corydalis, Crocus, Fritillaria, Narcissus and Erythronium (incl. E. elegans) - quite a feast for those who have got into the bulbous habit. Berries, 30 Sheering Lower Rd, Sawbridgeworth, Herts, CM21 9LF, UK.

The French nursery Ellebore, owned by our friends Nadine Albouy and Christian Geoffroy, does have a lot of hellebores (both species and some very nice H. x hybridus forms) but there are, amid the other hardy perennial plants, some monocots worthy of mention. Irises feature quite prominently and among those that caught my eye were I. unguicularis 'Rosea', I cycloglossa, the Yunnan-collected form of the bamboo iris, I. confusa 'Martyn Rix', the splendid I. unguicularis relative I. lazica that does not need a sun-baked spot like its Mediterranean cousin, and the very attractive cultivar of I. sibirica known as 'Flight of Butterflies'. At the weirder end of the scale there is *Pinellia cordata*, a little green aroid with wonderful leaves rivalling Cyclamen in their metallic texture and markings. It is good to see some named cultivars of the foxtail lilies, Eremurus, rather than the usual un-named mixtures. They also have one of the most choice hybrid lilies, the speciosum-henryi hybrid 'Black Beauty' - such a beautiful plant and so easy to grow - and Notholirion thomsonianum (see this BN, page 3). Finally, one for Graham Simpson (see p. 5) - Nectaroscordum siculum! Ellebore, La Chamotière, 61360 St Jouin de Blavou, France.

Tony Dickerson of Westonbirt Plants concentrates on three of the most delectable of bulbous genera - Iris, Erythronium and Fritillaria.

The range of irises offered is a wide one, encompassing some of most groups within the genus. Especially interesting of course are the juno irises which include *I. baldschuanica, kuschakewiczii, maracandica, nicolai, parvula, tadshikorum, tubergeniana* and *zenaidae*; expensive, but these are great rarities in cultivation and not that easy to grow and propagate. Although not nearly as remarkable and appealing it is good to see some of the species of the Spuria group; the species of tend to get overlooked by many nurseries amid the huge rash of bearded cultivars, but there are some excellent garden plants among them - such as the clear yellow *I. monnieri* and the darker yellow *I. crocea* from Kasmir. The bearded irises are not forgotten and I am delighted to see one of the most striking of all iris species, *I. variegata*, which has been grown from wild source seeds.

Fritillaria on offer include the yellow form of F. camschatcensis F. stenanthera, F. tuntasia, F. meleagroides, F. stribrnyi and F. ussuriensis (there are over 40 altogether) and among the 22 Erythronium are E. multiscapoideum 'Cliftonii', E. sibiricum (a lovely one, but it is not the easiest to please, here in the dry south-east), E. albidum and the white Balkan variant of E. dens-canis that is known as var. niveum.

Tony Dickerson, Westonbirt Plants, 9 Westonbirt Close, St. Peter the Great, Worcester WR5 3RX, UK.

# Iris aitchisonii - and a new record

One of the most easterly-occurring, and unusual, species of 'Juno' Iris is 1. aitchisonii, a tall, slender, branching plant that exists in two basic colour forms, yellow or purple (but there is also variation within these two variants). The species was described long ago, in 1875 by J. G. Baker, and little more was known about it until 1973 when a Mr Ecker working on the Turbela Dam collected some seeds of the yellow one and sent them to Kew. Tony Hall grew these on to flowering and the species was illustrated by Christabel King for Curtis's Botanical Magazine. If names are to be attached to these two broad colour variants, there are existing ones; the yellow variant was described by Baker as var. chrysantha and, since the type collection had purple flowers, that automatically becomes var. aitchisonii. There is a problem in that some of those that are basically yellow have a bronze suffusion on the falls and thus appear bicoloured; however, it is probably best to regard these as falling within the scope of var. chrysantha, otherwise one will end up with a whole string of names for very slight colour variants. In the write-up to accompany the Botanical Magazine plate, I looked into the distribution of the species but found that there were not that many records to go on. The position, as it could be ascertained at the time, was that it occurred in Pakistan to the north-west and south of Rawalpindi, and that the yellow ones appeared to be in the former area and the purple ones in the latter, especially in the Salt Range. However, as I pointed out in the article, if yellow variants are also found in the Salt Range there is, unfortunately, a question mark over their natural occurrence there. Dr Aitchison, who made the original collection in 1874 informed Michael Foster that he had planted bulbs of the yellow form on Mt Tilla, which is the type locality of the species [i.e. where the purple ones grow]. This is an act that would today be considered vandalism by some purists!

A year or two ago, some specimens of an *Iris* were sent to Kew by some Indian botanists and these were determined by Jill Cowley and myself as the purple variant of *I. aitchisonii*. A report of this record has now been published in the *Indian Journal of Forestry* 21,2:164-166 (1998) by H.S.Kirn, B.K.Kapahi and T.N.Srivastava. The localities given are all in Jammu and Kashmir State, in Rajouri District at Thanda Pani, Saleri, Channi Prat and Bagnoti - none of which I have been successful in finding on any of our maps of the area, but maybe that is a reflection of the quality of our map collection! The authors describe *Iris aitchisonii* as being 'common on open grassy slopes, associated with *Tulipa stellata*'. It flowers in February and is in fruit in April.

Anyone who is in the Kew area in the early spring should look out for this unusual *Iris* in the Alpine Section, where Tony Hall and his staff are growing it very well, both under glass and outside next to the Alpine House.

## Bookends

Saffron - Crocus sativus edited by Moshe Negbi, published by Harwood Academic Publishers, 1999. ISBN 90-5702-394-6.

This is the latest volume in a series published under the generic name of Medicinal and Aromatic Plants - Industrial Profiles, a series devoted to wide-ranging profiles of genera or species that have economic value of a medicinal nature. Other 'bulbous' subjects being covered are Narcissus and Allium (garlic). With nearly 20 authors from differing fields of research the Saffron volume presents a very comprehensive treatment of the subject. The coverage includes a history of cultivation of Saffron (past and present), separate accounts of commercial production in Italy, Azerbaijan, Morocco and Greece (including some very nice colour photos of the Saffron fields and harvesting at Krokos in northern Greece), the technology associated with its production and harvesting, in vitro propagation, investigations into the genetics and possible improvements of C. sativus, reproduction biology of C. sativus and related species, taxonomy of the C. sativus group, the chemistry of Saffron and the role of Saffron in biological and medical research - in the latter case especially its anti-tumour properties. This is an interesting publication showing that, although this is such an ancient crop plant, there is a resurgence of interest in it, with recent research in a wide range of countries: India, USA, France, China, Japan, Mexico, Greece, Azerbaijan and Spain are listed as areas in which investigations into various aspects of the biology of Saffron have been carried out in the last 5 years.

Field Guide to the Wild Flowers of Jordan by Dawud M. H. AL-Eisawi. Although this new book contains many plants other than monocots, the 'bulbous' plants are a very important element in the country's flora so they do feature quite prominently - including the front cover. The author is Professor of Botany at the University of Jordan, Amman and has studied the flora for many years so is well qualified to prepare the text, and has also provided most of the 488 colour photographs.

The introductory sections give details of the vegetation in general and the geographical regions within the country, its rainfall patterns, temperatures and soil types. The bulk of the book is devoted to the plant portraits and descriptions of the plants (duplicated in English). Bulb enthusiasts will find much of interest. There are illustrations of plants we rarely see: some of the blackest of aroids (Eminium spiculatum, Biarum eximium, etc.), the wonderful blackish Oncocyclus irises and rare Junos I. regis-uzziae and I. edomensis), 8 Crocus including a new species, C. nagabensis, a new Romulea (R. petraea) and a new Colchicum (C. shemperi), none of these not yet formally described.

We have not yet ascertained the price or how to obtain it, but the address given inside is P.O. Box 13500, Amman 11942, Jordan.

Mike Park is always a very good source of secondhand gardening/botanical books and his current catalogue number 74, the 'summer sale' list, contains 1118 titles, a few of which might be of interest to bulb growers. A quick zip through revealed some classics such as E.B. Anderson's Dwarf Bulbs for the Rock Garden, a first edition of E. A. Bowles's Handbook of Crocus and Colchicum, Frederick Doerflinger's The Bulb Book and Paul Schauenberg's with the same title, the late Anthony Huxley's copy of W. R. Dykes A Handbook of Garden Irises and C. T. Prime's Lords and Ladies. There is also a bargain collection of 11 bulb books sold as a collection for £35.

Although there is nothing very rare in this particular list - this is, after all, a 'shelf clearance' sale - it is worth keeping in touch with Mike since he does have an ever-changing collection and often has some really choice items. Mike Park, 351 Sutton Common Road, Sutton, Surrey SM3 9HZ, UK.

The CITES Bulb Checklist by Aaron P. Davis. Published by the Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, UK. 134 pp. 1999. ISBN 1-900347-39-3. £10.00.

This is a checklist of three major 'bulbous' genera that are included within the CITES appendices: *Cyclamen*, *Galanthus* and *Sternbergia*. The information is presented in three main parts, for each of the three genera.

Part 1 lists all the names and synonyms within these genera showing what is the accepted name in each case, for example:

Amaryllis aetnensis = Sternbergia colchiciflora.

Cyclamen clusii = Cyclamen purpurascens forma purpurascens

Galanthus globosus = Galanthus elwesii

The list presented here is a very comprehensive one and should include any name that anyone is ever likely to come across.

Part II presents the taxa (i.e. any rank - species, subspecies, varietas, forma) currently recognized in the three genera, showing their accepted names with their synonyms and includes the authors and distribution, for example:

Cyclamen repandum Sm. subsp. rhodense (Meikle) Grey-Wilson Cyclamen repandum Sm. var. rhodense Meikle Cyclamen rhodium R.Gorer ex O.Schwarz & Lepper Distribution: Greece (Rhodes, Cos). Part III is a most useful 'country checklist'. For each of the countries where representatives of these three genera are known to occur there is a list of taxa, e.g.:

#### ARMENIA

Cyclamen coum Mill.

Cyclamen coum Mill. subsp. caucasicum (K.Koch) O.Schwarz

Galanthus alpinus Sosn.

Galanthus lagodechianus Kem.-Nath.

Galanthus transcaucasicus Fomin

Sternbergia colchiciflora Waldst. & Kit.

Sternbergia fischeriana (Herb.) M.Roem.

Following these three parts there are six annexes. Annex 1 is a list of all names (accepted and synonyms) with author and place of publication - a very useful reference list. Annex II is also valuable - three identification keys to the species. Annex III contains all the bibliographical references, again a useful resource for enthusiasts. Annex IV is a list of extra synonyms for *Galanthus nivalis* since there are many, and quite a lot of them were garden plants that were described in the 19th century as species - the system of naming new species was rather looser than it is today; for example *G. poculifomis* was named as a species but is just an aberrant variant (although a very interesting one to gardeners) of *G. nivalis*. Annex V is a summary of all the accepted names in the three genera and Annex VI is the validation of a new combination in *Cyclamen*. This is *C. graecum* subsp. *mindleri* (replacing *C. graecum* subsp. *candicum*, since the former name for this west Cretan variant was published earlier than *candicum*).

Since everything seems to be in threes or sixes in this book - very appropriate in view of the fact that it concerns monocots - it is no great surprise that the text is presented in three languages: English, French and Spanish.

The CITES Bulb Checklist is available from The Mail Order Dept., Royal Botanic Gardens, Kew TW9 3AB, UK.

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The Bulb Newsletter is published quarterly and is obtainable from:
Brian Mathew, 90 Foley Road, Claygate, Esher, Surrey KT10 ONB, U.K.
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