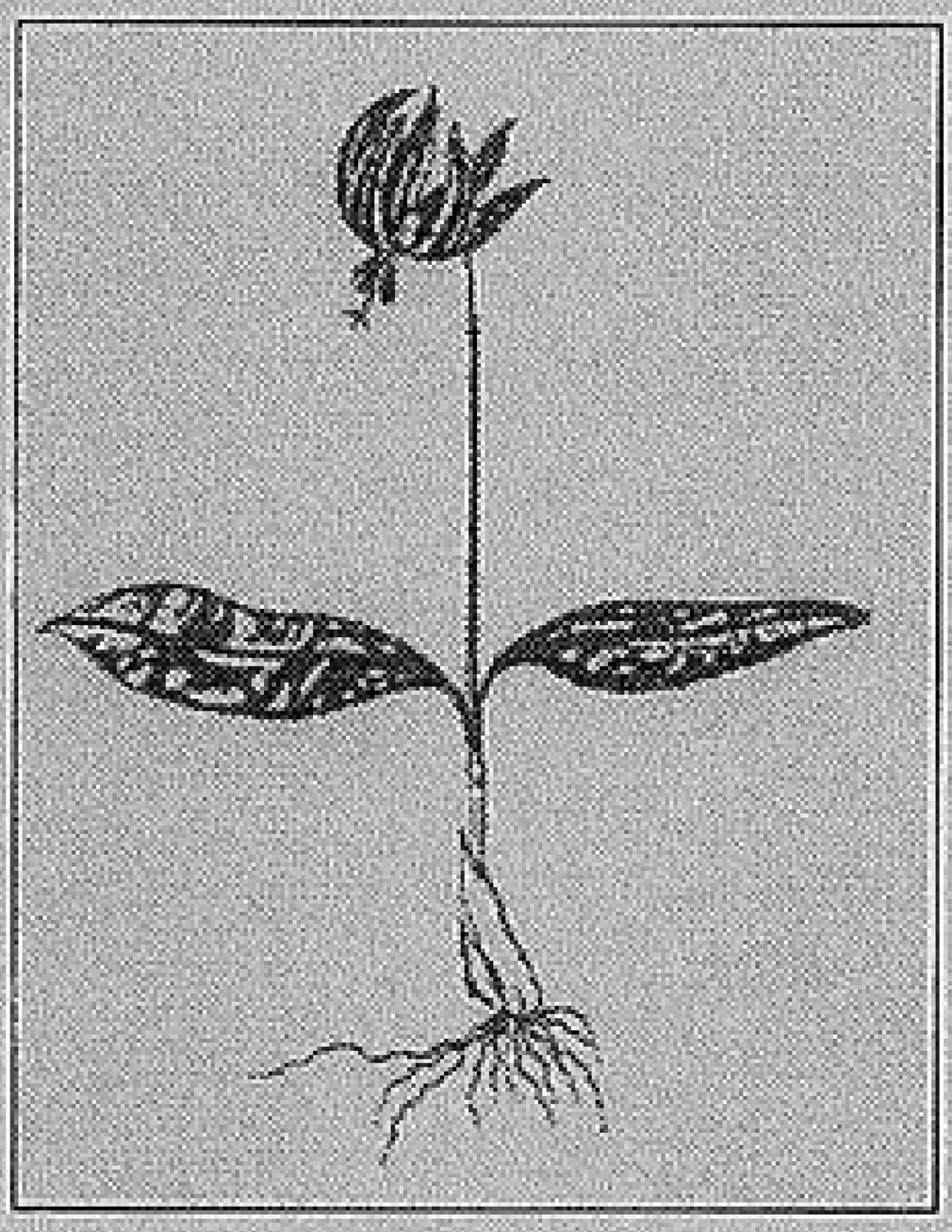
THE BULB

NEWSLETTER



Number 1 January-March

1993

A Happy, Healthy and Successful Bulb-Gardening Year!

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Welcome to The Bulb Newsletter

This is a new venture, not connected with any particular horticultural or botanical institution or society, although its instigator does have close links with the Royal Botanic Gardens, Kew and the Royal Horticultural Society, having studied and worked at Wisley for 6 years and as a botanist at Kew for 25 years; he is also a keen member of the Alpine Garden Society, Cyclamen Society, British Iris Society, Crocus Group, Lily Group, Indigenous Bulb Growers of South Africa and the International Bulb Society. The Bulb Newsletter does not set out to compete with any of these. It is not a society and will not be publishing extensive articles as do the excellent Bulletins, Journals and Yearbooks of these worthy groups of enthusiasts. It will contain news items from the world of bulbs. detailed notes on the cultivation of specific items, information on newly described species and other taxa, nomenclatural changes, surveys of literature relating to individual genera, book reviews, mini-biographies of past and present personalities in the bulb world, conservation matters, interesting bulbs seen at shows, in private collections and in catalogues and notes on the economic and medicinal uses of bulbs through the ages. It aims to keep those of us who have a severe case of 'bulbitis' (Chris Brickell's word, not mine!) in touch with the world of bulbs, and perhaps with each other, four times a year. After the first trial year it will be necessary to review whether the content and format are appropriate, whether colour should be introduced etc., so please bear with us through any teething troubles during this first year, for I am sure there will be plenty!

This first part contains a considerable amount of introductory material which we hope you will excuse and find of some value.

The Bulb Newsletter team: Brian & Margaret Mathew

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Coverage of the Newsletter

For the purposes of this newsletter, the term bulb will be taken in a very loose sense to include most petaloid monocotyledons, that is, those monocotyledons which have flowers with petals, or perianth segments as I will refer to them in future, as opposed to the non-petaloid monocots such as the grasses, sedges, palms etc. The main families to be covered will, of course be the Iridaceae, Amaryllidaceae and Liliaceae (in its very widest sense-more about that another time!), but other families will come within its scope such as the Tecophilaeaceae, the hardier gingers (Zingiberaceae), Commelinaceae (Spiderworts) etc., At least for the time being it is not intended to include the largely tropical families such as the Bromeliads, Musaceae (Bananas) and the related Marantaceae. Aroids, although not petaloid monocots, certainly do interest a lot of bulb enthusiasts so there may be notes on the hardier ones from time to time, but the tropicals are a specialised subject and are dealt with adequately by their own followers, The orchids, too, will largely be excluded since there are already many publications devoted to them, although here again, depending upon future demand, it might be appropriate to include notes on the hardy terrestrials, which tend to be cultivated more by bulb enthusiasts than by orchid fanciers. A few tuberous 'non-monocots' will also fall within the scope of this newsletter - nurserymen's bulbs, I like to call them (ie., anything which can be dug up, dried and sent through the post!); these include Eranthis, some Anemones, Corydalis, and Leontice. Cyclamen also, of course, but as far as possible I intend to avoid encroaching on the territory of other newsletters and any material of importance will be fed to the appropriate group, such as the Cyclamen Society. Symbiosis is my aim, not Darwinian survival of the fittest!

Name Changes

The Bulb Newsletter will attempt to keep you up to date with any name changes as they are published, and explain why they were considered to be necessary. Changes in nomenclature,

particularly when associated with a commonly cultivated plant, are extremely irritating but there are often very good reasons for the changes. No-one, I am sure, would dispute the need for an internationally accepted set of rules, for without them the whole system of naming would be in disarray and we would lose the main tool with which we communicate about the plants we love. The fact that the plant world does have an international Code which functions is a great tribute to those who have worked hard, and still do so, to make sure that all the possible snags are ironed out. Having laid down a set of guidlines and recommendations it is necessary for everyone to adhere to them, or they are not worth the substantially-sized book they are written in, and I have no doubt that the majority of the world's thousands of botanists do attempt to seek the correct names for the plants they are studying, by the application of the international Code of Botanical Nomenclature. Horticultural researchers have an equivalent in the Int. Code of Nomenclature of Cultivated Plants.

Obviously this subject could fill several Newsletters and I do not propose to do that, but a few words about the reasons for name changes might be useful. There are basically three reasons for such changes:

a) If a plant has at some stage been incorrectly identified and subsequently its true name is determined; it is necessary to correct such mistakes but can be annoying if the plant has become well-known under its incorrect name. If I may take an example from 'non-bulbs', *Helleborus atrorubens* is a distinct species from the Balkans and has never been very common in cultivation. A quite different plant, also with purple flowers, was distributed in gardens and the trade as "H.atrorubens". When I was preparing my Hellebore book I had to address this problem and found that the plant in cultivation as *H.atrorubens* was in fact a variant of *H.orientalis* (subsp. *abchasicus*) from the Caucasus, so a name change for this "H.atrorubens of gardens" was necessary since it had nothing to do with the true H.*atrorubens* of Waldstein & Kitaibel (1812), some 40 years

before *abchasicus* was named by A.Braun.

b) Changes can be for purely nomenclatural reasons, because of the requirements of the Code. For example, for reasons of priority. For flowering plants the presently accepted system of nomenclature takes 1753 (Linnaeus, Species Plantarum) as its starting point and from that date the earliest epithet for any particular plant is considered the correct one, providing that it satisfies all the other conditions of the Code. It frequently happens that a researcher finds an older name for a plant which is already well-known under its later name. Another case is when, within one genus, two botanists have independantly used the same epithet for different species; the later one has therefore to be changed to clarify matters and this is a nuisance if that later name refers to the more well-known of the two species.

c) Changes for taxonomic reasons are made when a researcher decides that for botanical reasons the classification is in need of change: for example, it might be considered that two or more species (or any other rank) are in fact variations of the same 'thing' and they therefore need to be merged. Such a case concerns *Crocus banaticus* J.Gay (1831). *C.iridiflorus* Reichenbach (1847) is now considered to be identical with *C.banaticus*, which takes priority because of date. It might also be that a plant is considered to be incorrectly classified and we can use this lovely autumn crocus as our example again. The botanist Schur (1853) considered it to be so distinct that he removed it from the genus and housed it in a newly described one, as *Crociris iridiflora*. Current taxonomic opinion, however, has reversed this and the species now resides in the genus *Crocus* once again! Other examples include the species of *Chionodoxa* being placed within the genus *Scilla*, *Merendera* merged with *Colchicum* and *Amana* 'sunk' into *Tulipa*, actions which all result in name changes. Others arise when a researcher decides that, for example, a particular plant has been given the incorrect status or rank. Thus, *Fritillaria imperialis* var. *chitralensis* should probably (to me, at any rate!) be treated as a species in its own right, *F.chitralensis*. Conversely, it is almost certainly best to regard *Iris elegantissima* as a variety or subspecies of *I.iberica*

rather than as a separate species since they are so very similar. My comments will have made it clear that name changes for taxonomic reasons are often very much based on personal opinion whereas the others are brought about by the application of a set of nomenclatural rules or recommendations. When personal views play a part in the classification there is a problem, since some people are naturally 'splitters', others are 'lumpers' and some are inconsistent, so it is a case of choosing whose classification seems the most useful!

The above is an over-simplification of the whole matter of course, but I hope that it will help to explain some of the apparently (at times) rather whimsical behaviour of botanists with regard to the naming of plants. We can deal with any of these matters in more detail later on if it seems necessary, or if there is a popular demand!

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Conservation policy of the Newsletter

This topic will be dealt with in later numbers when there is less introductory material, but I will make a few remarks to indicate what the general policy will be with regard to giving the wild locations of bulbs. I deplore unnecessary over-collecting by anyone, whether they are botanists, gardeners, holidaymakers or locals trying to make some extra money, but it is not my intention to keep the locations of plants a personal secret, although neither will I be publishing details right down to the last kilometre! I believe that the place in which a plant has evolved in the wild is as much a part of its overall make-up as any of its structural features, and the subject of plant distribution is a fascinating one which should be shared and discussed. I have collected bulbs, for I could not have done the research work necessary for the various books and papers I have written without doing so, and sometimes I have collected purely for the purposes of introduction into gardens. I can only ask that people who do wish to collect do so with as much restraint as possible, and only within the laws of the country of origin and of the

importing country. If possible collect seeds rather than bulbs since this does far less harm and is likely to give better results, and, of course, can lead to greater numbers being introduced. Remember that the 'I only take one or two' argument is only applicable if you are the only one doing it; when dozens of people visit the same site of some rare local endemic the effect may be damaging- far more damaging than the large-scale removal by trade collectors of, for example, the widespread and common *Cyclamen cilicicum* in Turkey; this would be almost impossible to eradicate from its mountainous home territory, except by habitat destruction, whereas it would be a relatively simple matter to exterminate more restricted plants such as *Sternbergia candida* or *Iris histrioides*.

Some 25 years ago when Paul Furse made his large collections in the Near and Middle East there were very few people in the field but now there are a lot from many countries, all converging on bulb-rich areas such as Turkey and the effect on the local rarities, which are the ones of interest most plant enthusiasts, could be serious, and already has been in some cases. It is now actually illegal to collect plants and export them from many countries (including Turkey) without official documents and I think that this is fair; after all, we would be most indignant if dozens of plant hunters came to Britain to dig up our *Fritillaria meleagris*. As with most things, common sense and restraint should prevail for if there is too much collecting it will without doubt eventually lead to a total ban on all plant collecting and that would I feel be a sad day for plantsmen and botanists alike.

I would guess that the most frequent type of letter I have received is about bulb localities. 'I am going on holiday to X,Y,Z, (usually Turkey or Greece), could you please tell me what time of year and where to go to see bulbs'. I have never refused because in my botanical career I have benefitted enormously from information gathered by friends on holiday, covering a far greater area than I could ever have achieved on my own. Let us be rational about all this: we need plant collectors, but not greedy ones.

A bulbous calendar!

The 1994 Kew Calendar is to be devoted to monocots and, in particular, some attractive bulbous plants. It will be on sale in mid 1993 to coincide with the International Symposium *"Monocotyledons: Classification & Evolution"* which is to be held at Kew in July 1993. The illustrations for the Calendar are taken from the Botanical Magazine and include *Crocus, Iris, Colchicum, Sprekelia, Veltheimia, Arisaema, Narcissus, Lachenalia* and *Trillium.*

The Bookshop at the Royal Botanic Gardens, Kew will be selling it, as well as some other retail outlets.

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And while on the subject of calendars- - - - -

It is not too late to acquire the British Iris Society's "Irises in Art" 1993 Calendar which is illustrated with watercolours by the RHS Gold Medallist Pauline Dean. This is obtainable from Neville Watkins, BIS, 31 Larkfield Rd., Farnham, Surrey. GU9 7DB. Cost £3.75 (UK), £4.25 (Europe) incl. p.p.

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Good news from the Flora of North America project.

This important project is well under way although no volumes have been published to date. Monocots (excluding grasses) come towards the end of the family sequence, in Volume 11, but the good news from the latest FNA Newsletter is that the manuscripts for the various families involved were due in from the authors on 1st January and that the whole volume will be submitted to the publishers, Oxford University Press, in May 1994. Not too long to wait for the definitive taxonomic treatment of all those delicious N.American bulbs! The Flora covers the whole continent north of Mexico, is edited by Nancy R.Morin and Judith M.Unger, and is centred on Missouri, although the many botanists involved in the preparation of the floristic accounts might be said to be rather more widespread.

A New Summer-Rainfall Calochortus from Mexico.

Some years ago a colleague at Kew collected dried specimens of a yellow Calochortus in Mexico which had enormous globular flowers, rather like a large version of *C.amabilis*, although clearly more akin to *C.barbatus* in being a summer-grower rather than a winter-grower like the more northerly-occurring species from the United States.

I thought at the time that this must surely be an unknown species, and a rather exciting one as well, but unfortunately no living material was introduced and the specimens have remained in the Herbarium at Kew labelled 'species nova'.

In 1992 I became aware of a paper by A.Garcia Mendoza, describing *Calochortus balsensis* from the Sierra Madre del Sur in the States of Oaxaca and Guerrero. This appears to be the same species, with pendent yellow globose flowers some 3.5-4.5 cm long and 50-100 cm stems carrying bulbils in the leaf axils, as do many of the Mexican species. Garcia-Mendoza notes that it differs from all members of the section *Barbati* (*C.barbatus* and its kin) by having very large flowers. The large inner segments are hairy all over the inside and the much smaller outer three, the 'sepals', hairless. In the wild, this flowers in October and occurs at an altitude of about 2200 metres. By a curious coincidence I seem to have acquired some bulbils of this from a Dutch nursery friend, Wim de Goede. He was given some bulbils of an unidentified *Calochortus* by a friend who had brought them from Mexico, and the colour photo which accompanied them represents, I am fairly certain, *C.balsensis*.

Crocus rujanensis. Several people have asked about this mysterious Crocus which is not referred to in my book. The reason for this is that it is a newly described species (1990) from Serbia, taking its name from the Rujan Planina mountains. It is related to *C.sieberi* and is somewhat similar to it, and to *C.dalmaticus*. The authors are Randjelovic & Hill. I will give more details in a future Newsletter.

How many 'rr's?

Some time ago, during a discussion in front of a stand at an RHS show, the question was raised as to how many 'rr's to put into the middle of words such as polyrhiza, conorhiza etc., and I admit that I did not know the correct answer at the time. The pages of Prof. William T.Stearn's Botanical Latin, as usual, came to the rescue, although in this case the outcome is not as satisfactory as one would like! Stearn writes: 'The initial *ρ* of a Greek word transliterated as rh, e.g. *rhiza* (root,rhizome), should have an additional r added to it when preceded by a vowel' -as in *leptorrhiza* etc. Clear-cut it seems, but he goes on to say that 'as many reputable authors, Linnaeus among them, have omitted this additional r, it is best regarded as optional and an author's original spelling, as in *Lemna polyrhiza*, should be accepted'. The only examples relating to our bulbous plants which I can think of at present are *Iris leptorhiza* and *Corydalis conorhiza*. I have checked these back to the original publications and the spellings given above are the correct ones. The well known genus to which the marsh orchids belong is *Dactylorhiza*. The above epithets can be translated as 'many roots' (polyrhiza), 'slender-roots' (leptorhiza) and [presumably] 'cone-shaped roots/tubers' (conorhiza).

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Iris albomarginata & I.caerulea. This lovely blue Scorpiris (Juno) varies somewhat and I was asked some time ago if perhaps *I.albomarginata* could be different from *I.caerulea*. The answer to this particular question is that they are absolutely identical since this is not a matter of taxonomy at all, purely nomenclature. *I caerluea* was described by Boris Fedtschenko in 1904, unaware that Spach had earlier used *caerulea* for a different Iris, not a Juno. Under the Code of Nomenclature a new name for the later *caerulea* must be provided, and R.C.Foster did just this in 1936, using *albomarginata* because of the white leaf margins. Whether the variations are worthy of recognition is another problem altogether, for another time!

If you go down to the woods----

And see a peculiar Bluebell with long green bracts it is a curious mutation which crops up occasionally and has been named *Hyacinthoides non-scripta* var. *bracteata*, although it should at most be given the rank of 'forma' since it is just an oddity within populations of normal plants; something else I must attend to, to publish an article formally transferring it from varietas to forma. I suppose I have seen on average one or two of these each year from various parts of the country when people send them in for comment. The last one to arrive came from Don Stead of Glasgow, but this was cultivated by him, origin unknown, and he tells me that it is clump-forming. Although not a plant of great beauty it is nevertheless interesting and we do grow a lot of bulbs for interest's sake rather than glamour; after all, some people like Bellevalias and compared with some of these, the bearded Bluebell is positively gorgeous!

Interest in the Cape bulbs on the increase?

At the autumn RHS shows this year it was encouraging to see more of the tender bulbs appearing, hopefully a trend which will continue, for there are many superb and easily-cultivated species suitable for a frost-free glasshouse or conservatory. Many of them originate from Southern Africa and those from the South-West Cape are 'winter-growers', like most of our northern hemisphere bulbs, so they fit into the same cycle of behaviour: after a dryish summer dormancy period, repot in autumn & start into growth for flowering in autumn, winter or spring, then allow to die down again for the summer.

Rupert Bowlby was showing the interesting little autumn-flowering *Polyxena ensifolia* (see also next page) which is one of the earliest, pushing up only a short while after the first watering. It is extremely variable in leaf width and colour, the one on show being a broad-leaved type with a greyish bloom. There are also variants with broad shiny green leaves and ones with very narrow foliage; some have many white to pale pink flowers clustered together, while others have just a few larger ones, but all are nice compact plants only a few centimetres in height.

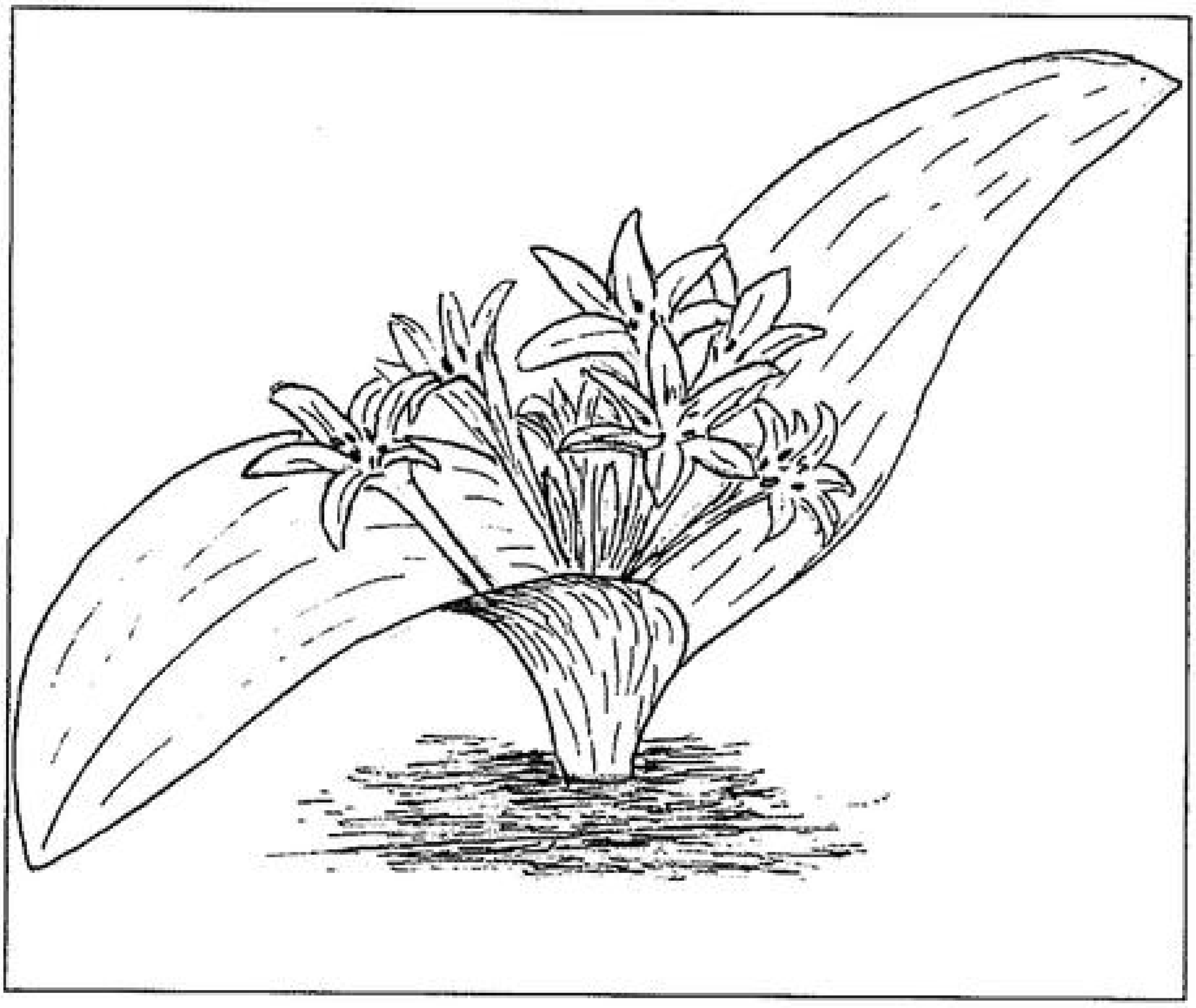
Other plants exhibited were *Tulbaghia violacea pallida*, a bright orange *Ornithogalum dubium* (no, they are not all white-with green stripes!) and two forms of *Oxalis hirta*, a pink and the superb deep rich carmine-flowered cultivar, 'Gothenburg'.

Lilies and Related Plants 1992-3.

Dr. Tony Hayward, Editor of the above has asked me to mention that this is available from Harris Howland, The Martins, Harrietsham, Maidstone, Kent, ME17 1HH. Price incl. postage:£6.70(UK), £7.60(Europe), £7.60(rest of world, surface mail, £8.60(air mail). As always it is superb; there are articles on Lilies at Lake Baikal and in Latvia, on Liliaceae in S.Africa, Camassias, Fritillaries, hybridisation, the Hindu Kush and lots more, as well as 24 superb colour photographs. Congratulations to the Group on its 60th Anniversary!

More about Polyxena.

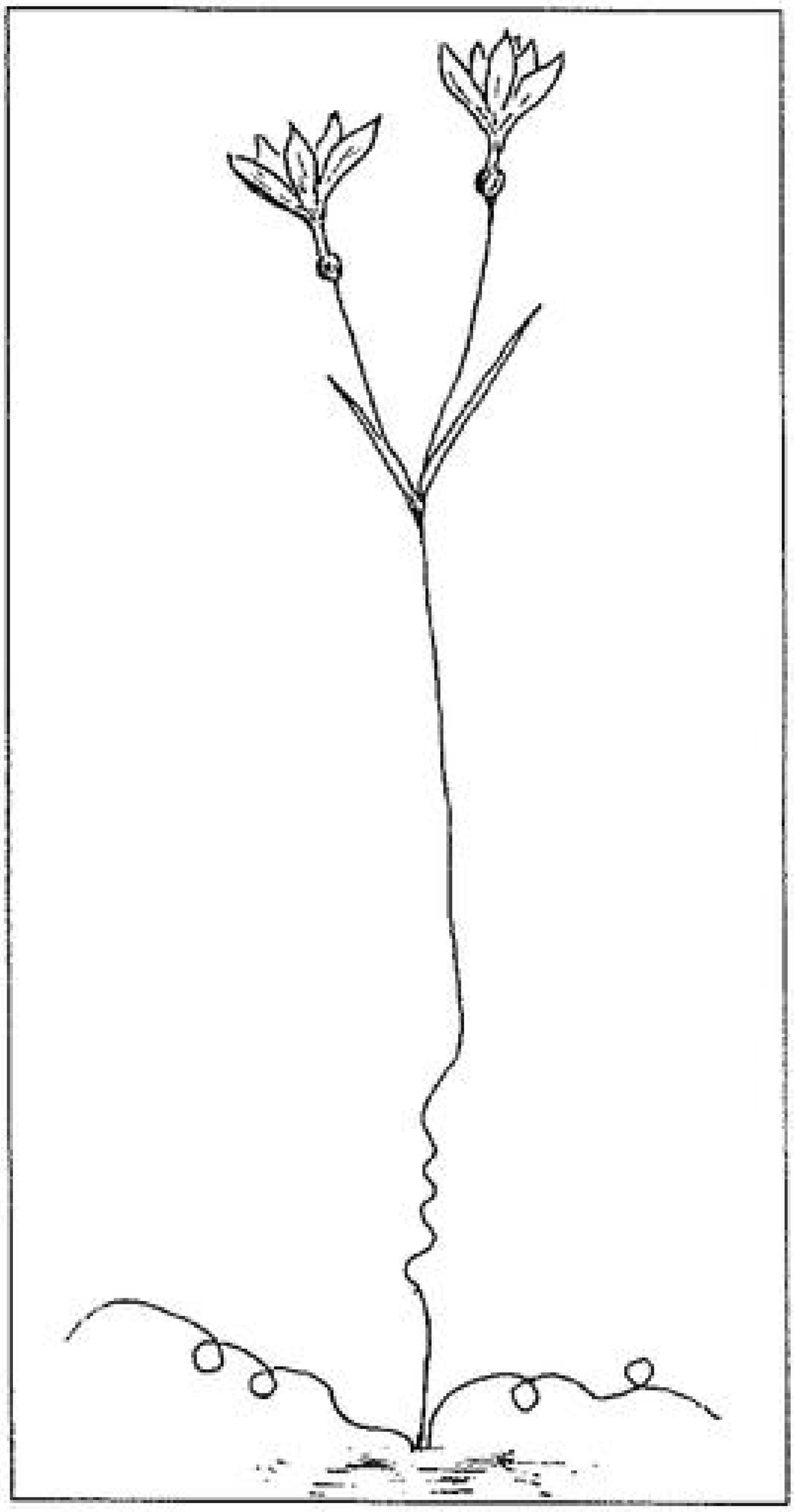
Only 2 species of *Polyxena* are recognised, *P.corymbosa*, which does not vary very much, and *P.ensifolia* which is greatly variable. *P.corymbosa* has a small spike of unscented short-tubed flowers in shades of pinkish-purple, and 4-6 leaves per



bulb, whereas *P.ensifolia* (see sketch) has only 2 leaves which vary from 3 to 35 mm in width and have long-tubed fragrant white to pinkish flowers clustered together down in among the leaves. *P.odorata*, *P.pygmaea* and *P.maughamii* are said to be synonyms of *P.ensifolia*. Other species which were originally described as Polyxenas are now regarded as belonging to the related genus *Massonia*. *P.angustifolia*, *P.burchellii*, *P.haemanthoides*, *P.marginata*, *P.namaquensis* and *P.rugulosa* are all referred to *Massonia angustifolia*, *P.bakeri* is *Massonia echinata* and *P.comata* is *Massonia comata*.

Carpolyza spiralis

This tiny winter-growing South African Amaryllid has been in flower for about 2 months now, from November to January, and although there is nothing spectacular about it, it does provide interest over a rather dull time of the year. It has a small umbel of white cup-shaped flowers, often only 2 per stem which is wiry with a 'corkscrew' twist just above ground level, in common with several other Cape bulbs. The only reason for this that I can suggest is that it provides a shock-absorber effect in its windy habitat. Without it the slender stems might break, or at least become loosened by the 'rocking effect' which we know as a problem with newly-planted shrubs in gardens.



This is one of the easiest of bulbs I have ever cultivated; it never fails to flower, never needs repotting and is happy if kept just frost-free. It was sent to me many years ago and the friend who sent it said that the Cape Flats area where it used to be common had in fact largely become flats of a different type! The sketch is life-sized.

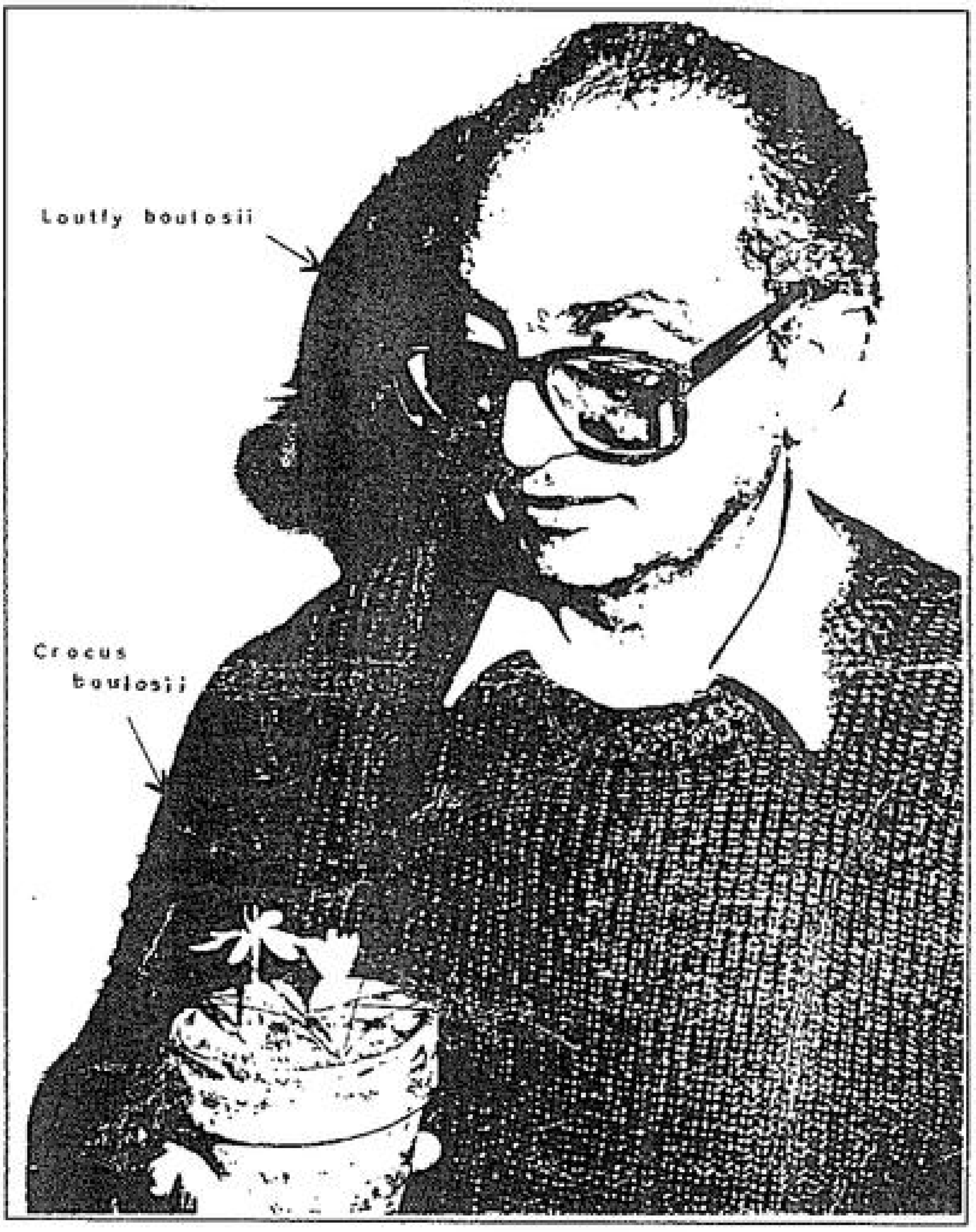
Those narrow-leaved Nerines.

The small species Nerines with narrow leaves are well worth growing, not quite frost-hardy but they only require minimal heat to keep out the frost and are delightful for brightening up the dull autumn months in the greenhouse. But there are several which are confusingly similar to each other. I haven't the time just now to go into them in any detail, and it probably requires some critical fieldwork before all the answers are known. I did have one to identify last year which was exhibited at an RHS show as Nerine sp. This proved to be *N.filamentosa*, but this is very like *N.filifolia* and has been 'sunk' into that species by some authorities. It is said to be distinguished from *N.filifolia* by its larger deeper pink flowers which have the perianth segments rolled back leaving the stamens protruding very prominently. I will have another look at these, and others such as *N.masonorum* & *N.angustifolia* and devote some time to them in a future number. Some good news for *Nerine* enthusiasts is that Tony Norris has told me that he will have some available for sale again soon, from May 1993. Some of you will remember the tempting catalogues which his Nerine Nurseries of Welland, Malvern, Worcs. produced a while ago.

The Australian Monocots

South African bulbs are promoted in this Number, but there are also many interesting petaloid monocots, mostly rhizomatous, in Western Australia. Like the Cape bulbs they do not require much heat to get them through the British winter, probably a minimum of about 5 deg. C would be safe. One of the Kangaroo Paws, *Anigozanthus flavida*, survived for many years in a just-frost-free greenhouse and surprised the neighbours with its curious hairy flowers, and the purple Iris-like *Patersonia glauca* had formed a huge clump until I set light to it in an experiment to simulate an Aussie bush fire! There is a superb photo by Muriel Hodgman in the latest Bulletin of the Alpine Garden Society (Dec.1992) of one of the smaller *Anigozanthos*, showing what attractive plants they are.

The Libyan *Crocus boulosii* has flowered again this year- a not very impressive small white Crocus, very like the Syrian *C. aleppicus* and the Cyprian *C. veneris* which flowered at about the same time. I must have another look at these three to see what the differences really are, if any, now that they are all in cultivation. Its flowering coincided with a visit by the botanist Loutfy Boulos after whom it is named, so I was able to get a photograph of the two together. This was a nice reunion since it was the first time he had seen the species since he first collected it in 1967.



Loutfy is currently based in Kuwait but has no Herbarium. Its entire contents were stolen during the invasion and all efforts to secure the return of the thousands of dried specimens from Baghdad have so far failed.

Bookends

Ornamental Bulbs, Corms and Tubers by A.R.Rees.

C.A.B. International, Wallingford, Oxon., OX10 8DE. £14.95.

For the more technically-minded enthusiast this is a most interesting publication by Alun Rees, formerly of the Glasshouse Crops Research Institute, who is renowned for his in-depth studies of the physiology and cultivation requirements of ornamental bulbous crop plants .(This was one of the first places I wrote to for a job many moons ago!). The book mainly covers those bulbs which are of large-scale commercial interest, although many others are also considered to a lesser degree, and deals with their origins, breeding & selection; morphology; physiology; propagation; bulb, corm and tuber production; flower production; pests, diseases and disorders, ending with some forecasts for the future developments within the industry. Very good value- for those who think that books are rather expensive, this is equivalent to a fill-up for a small car at the petrol station.

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Useful bulbs.

A recently-seen book on the medicinal plants of China notes that *Corydalis remota* (one of the blue-flowered tuberous group) is cultivated in sandy areas for its tubers, which are used in a dried state for headaches, abdominal pains and menstrual cramps; also it is said that it stops uterine bleeding, dispels stagnant blood and improves blood circulation. I'd like a kilo or two, please, but <u>before</u> they are dried, they are <u>not</u> for eating!

And finally---

During a talk to an NCCPG group recently I was told that Alliums planted among Roses keep them free from Black Spot. Seems highly unlikely, but someone who grows bulbs and Roses might like to experiment; don't forget the control plot, though, or no-one will believe the results.