



IXIAS

FOR POT AND GARDEN

by *Graham Duncan, Kirstenbosch*

For brilliance of colour and variation of flower, the genus *Ixia* ranks very highly among our South African cormous plants. It consists of about fifty species which belong to the large and diverse family Iridaceae. Endemic in the western and southern parts of South Africa, its wide distribution extends from Namaqualand to the south-western Cape, where the species are concentrated, eastwards to the Karoo, southern Cape and southern part of the Eastern Cape. Ixias are exclusively winter-growing, summer-dormant plants that flower in spring and early summer. *Ixia* species found their way to England and Europe as far back as the mid 1700s where they were cultivated and hybridized, and many were beautifully illustrated in the great floral tomes produced during the latter part of that century. Today, it is mainly *Ixia* hybrids that are propagated in large numbers for corm and cut-flower production for commercial trade, while cultivation of true species is restricted to avid collectors. Many of them can be cultivated provided that their three basic requirements are met: a sunny location, a sandy growing medium with good drainage and a completely dry, dormant period in summer.

Ixias for the pot

All *Ixia* species are suitable for cultivation in deep pots, while only certain species are recommended for garden cultivation. Plant the corms in autumn (April-May) in a spot that receives sun for at least half the day. The tall-growing *I. polystachya* var. *polystachya* is the only species that can be grown in dappled shade. Plant the smaller species like *I. lutea*, *I. campanulata* and *I. leipoldtii* in a 20 cm diameter plastic pot, and the medium sized species like *I. rapunculoides*, *I. flexuosa* and *I. maculata* in a 25 cm pot. The taller species like *I. polystachya*, *I. viridiflora* and *I. paniculata* do best in pots with a diameter of 30 cm. Place a layer of

crocks or stone chips over the drainage holes at the bottom of the pot, and fill three quarters of the pot with a freely-draining soil mix (such as equal parts coarse river-sand and fine compost). Plant the corms in a 1 cm layer of pure river-sand, and place another 1 cm layer of mixed river-sand and fine compost on top. Water thoroughly straight after planting, and once growth becomes visible, I recommend a good watering every ten days. The taller species like *I. viridiflora* and *I. polystachya* may need to be carefully staked to prevent falling over in windy conditions. Although the flowers of most *Ixia* species only open fully on hot, still days, they are well worth waiting for.



Above *Ixia campanulata*.
Right *Ixia curta*. Far right. *Ixia lutea*
var. *lutea*. Photos: G.D. Duncan.

After flowering, watering must be withheld until the growing medium is absolutely dry, and pots can then be stored in a cool dry place for the summer.

Ixias for the garden

Most *Ixia* species are not well suited to garden cultivation because of the rather delicate nature of many of them, their susceptibility to fungal diseases, the depredations of mole rats and their need for a completely dry summer dormant period. There are however a few which are tougher than the rest and can do well in the garden if planted in sunken plastic bulb planting trays surrounded with stones, and if kept completely dry during the dormant summer period. These include *I. maculata*, *I. polystachya* var. *polystachya*, *I. flexuosa*, *I. lutea*, *I. curta* and *I. dubia*. Alternatively, pots of less easily grown ixias like *I. viridiflora* (see cover illustration), can be plunged into the garden for the flowering period and removed for the dormant period. Very few cormous plants can beat *I. viridiflora* for sheer brilliance of flower when seen in full bloom in a garden on a hot, still day in early summer. Unfortunately, the corms of this dark-eyed beauty are relatively short-lived and this species constantly needs to be re-propagated from seed. Ixias in the garden are most pleasing when seen flowering with low-growing members of the family Rutaceae, such as agathosmas and acmadenias. (See page 85.)

Propagation

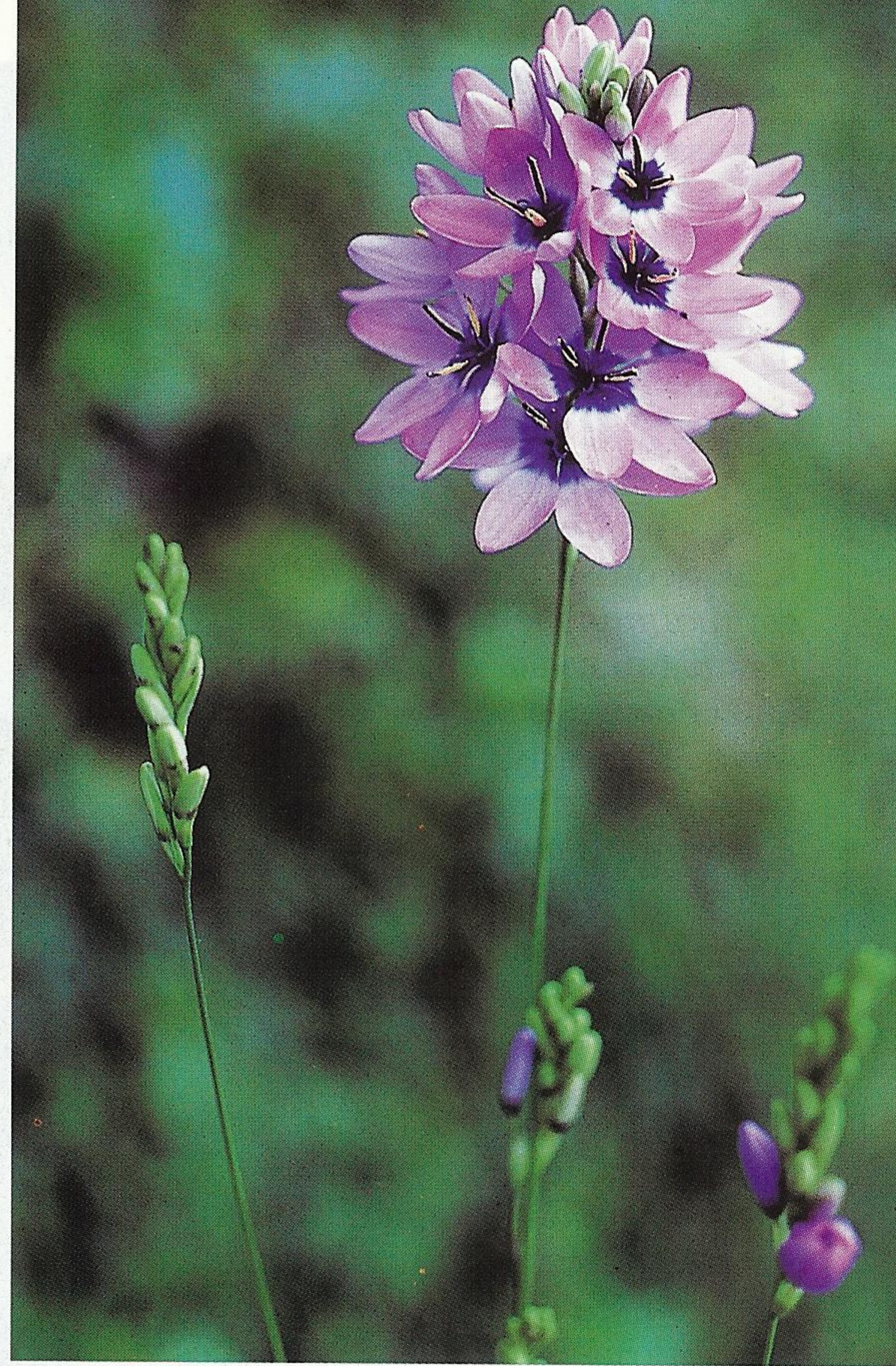
Ixia species are propagated by seed, offsets and cormels. Sow seed in autumn (April-May) in a sunny location at a depth of 3-5 mm in a well-drained medium such as equal parts fine compost and river-sand. Take care to sow thinly in order to allow good ventilation and reduce

the risk of loss due to damping-off fungi during the winter months. In areas where damping-off is prevalent, seed can be dusted with captab (e.g. Kaptan) prior to sowing. Deep seed-trays, pots or raised seedbeds are recommended, and the medium should be kept moist by careful watering with a fine rose. Germination of fresh seed takes place within three to four weeks and is followed by rapid growth which in certain species such as *I. viridiflora* can result in flowers being produced in as little as seven months, under ideal conditions. Young corms can be lifted after their second season of growth, and be planted into permanent pots or into the garden at the beginning of their third season. A few corms of many species will flower for the first time during their second season, but most species produce their first good crop of flowers during their third season from seed.

Offset corms are produced by most *Ixia* species and these can be removed during the summer dormant period when large enough, and replanted in autumn. Several species such as *I. maculata*, *I. polystachya* and *I. paniculata* also reproduce by the formation of subterranean cormels produced at the tips of long or short stolons, and these can also be removed during the dormant period, when large enough, and be replanted in autumn.

Pests and diseases

The corms of all *Ixia* species are very susceptible to attack by mealy bug when grown in containers. Mealy bug multiplies in between the corm tunics, sucking the sap and eventually killing the corm. The best method of treating affected corms during the growing period is to drench the container with chlorpyrifos (which is partially environmentally compatible). *Ixia* corms are particularly susceptible to attack by mealy bug during dry storage following lifting, and should be dusted with Bexadust to prevent attack. The foliage and developing flower-buds of ixias are occasionally subject to attack by red spider mite and aphids, respectively, but seldom warrant the use of insecticides. The corms of several species such as



Ixia polystachya var. *crassifolia*. Photo: G.D. Duncan.

I. viridiflora, *I. patens*, *I. scillaris* and *I. paniculata* are very susceptible to attack by the Botrytis and Fusarium fungi, which can be controlled by thoroughly dusting the corms prior to planting with a 50:50 mix of environmentally compatible captab (e.g. Kaptan) and iprodione (e.g. Rovral). The developing flower-buds of *Ixia* are sometimes subject to attack by the Botrytis fungus, causing malformation, which can be controlled by spraying preventatively with iprodione (e.g. Rovral). When grown out in the garden, *Ixia* corms will often be taken by mole rats and porcupines, so plant corms in plastic bulb planting trays and 'plunge' into the soil, placing stones on the surface around each tray. Very little can be done to suppress the blind determination and voracious appetite of a hungry porcupine apart from not planting its favourite meal of *Zantedeschia* rootstocks anywhere near your *Ixia* corms! 🌿

Seeds of *Ixia* species are frequently available free to members of the Botanical Society via their annual seed catalogue, and seeds and corms are available from some of the specialist seed and bulb nurseries that advertise in *Veld & Flora*.

Further reading

- De Vos, M.P. 1988. Three new species of *Ixia* L. (Iridaceae) from the Cape Province, South Africa. *South African Journal of Botany* 54(6), 596-602.
Duncan, G.D. 1989. *Ixia*. In Du Plessis, N.M. & Duncan, G.D. *Bulbous plants of southern Africa*. Tafelberg, Cape Town.
Lewis, G.J. 1962. The genus *Ixia*. *Journal of South African Botany* 28(2), 45-195.



Left. *Ixia leipoldtii*.
Photo: G.D. Duncan.