

## Recommendations for Propagation and Cultivation of *Agapanthus*<sup>®</sup>

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### INTRODUCTION

The blue African lily, sometimes called lily of the Nile, was introduced to Europe from the Cape of South Africa in the 17th century. It was the evergreen, more tender species that were cultivated first, grown in containers and placed outside on the terrace from May onwards, or plunged into the flower beds for the duration of the summer and returned indoors for the winter. This gave the whole genus a reputation for being tender, or hardy only in the very warmest gardens near the sea. In fact it is in the warm coastal gardens of Britain where *Agapanthus* thrive and can be seen at their best from the Scilly Isles and Cornwall, to as far north on the west coast as Inverewe, the National Trust for Scotland's garden in Wester Ross.

During the 1970s, *Agapanthus* featured in garden trials conducted by the Royal Horticultural Society (RHS) at Wisley, Surrey (Bond 1978), helped to promote wider interest in the genus. Today most garden centres will stock at least the commonly grown Headbourne Hybrid strain and one or two named cultivars. But discerning gardeners look for the more flamboyant, exotic large-flowered evergreen forms and hybrids which when planted out or container grown and given time, develop into some of the most imposing garden perennials.

The genus is a member of the Agapanthaceae. The name is from the Greek *agape* meaning love and *anthos* which refers to the flower, so you could call it "Flower of Love". The first comprehensive monograph was *The genus Agapanthus* by Frances M. Leighton in 1965 which describes 10 species and 10 subspecies. Most of these she collected together in the National Botanic Garden of South Africa at Kirstenbosch, where they proved their worth as attractive ornamental garden plants.

*Agapanthus* are herbaceous perennials, some hardy and some tender but essentially producing a rootstock with an abundance of thick fleshy roots and mainly tight crowns of buds. Not strictly bulbous but rhizomatous, they have for a long time been featured in bulb catalogues.

From a horticultural point of view, *Agapanthus* are in two main groups, deciduous and evergreen. The evergreen ones come from the parts of South Africa where winter rains predominate. They appear to be more tolerant of summer drought and make the wiser choice for the Mediterranean-type planting schemes on dry exposed slopes and in containers, and will withstand lack of water for long periods. The deciduous species are mainly from the summer rainfall areas. Winter wet in U.K. gardens seems not to bother them at all. In this group the leaves die by late autumn and the crown of buds remains hidden below the surface of the soil. Most of the deciduous plants in cultivation will be derived from *A. campanulatus* and possibly hybrids with *A. caulescens*.

The leaves, produced annually vary greatly. Those of *A. campanulatus* and its offspring, for example, are usually narrow and grass-like, but the broader strap-shaped and arching leaves of *A. praecox* are more typical. Some stronger-growing forms have very sumptuous, almost succulent foliage. Leaf colour varies from grey-

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blue to apple green and darker green. Fine quality leaves add much to the overall appearance of a plant and should always be given consideration. Some cultivars, such as 'Luly', 'Midnight Star' and 'Lilac Time' have very distinct deep violet colouration at the base, which is a useful guide in identification. There are also a number of variegated cultivars.

The numerous flowers are produced from late June to the end of September, August being the main month, but flowers can appear as late as November. Stout flower stalks arise from amid the leaves with a single bud, which opens out into a flattish or rounded umbel-like inflorescence with copious flowers often lasting for a month or more. These may be tubular or open with spreading perianth segments. The height varies from 30 cm to more than 2 m though a stake is not necessary. The colour varies from good pure white to various off-white shades, grey-blue, pale blue, to mid and deep violet blue shades, with a number of bi-coloured cultivars having a mixture of white to pale blue and dark blue.

### PROPAGATION

Named cultivars must be propagated vegetatively. Increasing numbers are being produced by tissue culture. Although initially slow, the resultant propagules are healthy with several young shoots. Division of 3 to 4 year old clumps is still the main method on many nurseries. Some of the Dutch nurserymen growing forms of *A. praecox* sever the growth buds from the crown with a short portion of rhizome, these resemble bulbs and after planting may take a long time to recover from such harsh treatment. A similar bad practise is lifting and dividing the crowns into small portions which are then sold to the public in poly bags with a few wood shavings. If they survive at all they take a long time to get established and produce flowers.

After lifting clumps this author prefers to divide carefully from the side in order to avoid damaging the terminal buds, especially the large *A. praecox* types. The best time for this is from the spring to early summer, although immediately after flowering is another option, in fact the evergreen *Agapanthus* especially, appear very tolerant of disturbance even during midsummer, when divisions may be taken off with great success. However, avoid this operation late in the year, as small portions of large established clumps may render such plants more susceptible to frost damage.

Seed may be sown fresh in the autumn or, as this author prefers, early spring. Any ordinary seed compost will suffice. Cover the seed lightly and keep in a warm greenhouse or frame and keep moist. Germination takes about 5 to 8 weeks at a minimum temperature of 15°C. Sow seed thinly and leave for 1 year, or as this author prefers, prick out into plug trays or small pots soon after germination. Plants raised from seed should flower by their third year depending on parentage and time of sowing.

### CULTIVATION

*Agapanthus* are not difficult to grow and seem happy in most soils with reasonable drainage in an open sunny position or with a little shade for only part of the day. Light sandy loam, if treated with generous applications of organic matter, produces the very best results, but they will grow almost as well in heavy silty loam. In fact *Agapanthus* will grow in rather poor even stony, gravelly soil conditions. This is seen in nature, when they frequently colonise what appears to be impoverished soil in so many of the warmer countries of the world. They are even regarded as weeds, colonising banks and ditches by roadsides even spreading in woodland situations. They will grow on soils of varying pH but *A. africanus* and *A. walshii* prefer acid

soil. The dense foliage produced by mature clumps of the evergreen ones provide good groundcover effect, suppressing other plant life.

### HARDINESS AND WINTER PROTECTION

The drooping *A. inapertus* and its various forms and subspecies is not reliably hardy. And indeed, deep penetrating frost will kill all but the toughest species. Also tender is *A. praecox* but large established clumps will survive the low temperatures, although the crowns may not survive unscathed and will take a little time to break into growth from subterranean rhizomes. Away from the more favoured west coast climate, it is recommended that in late autumn an insulating mulch be applied to all plantings, applied generously over the crowns of deciduous ones and tucking it among the leaves of the evergreen types. Move most containerised plants inside and keep them cool but frost free and with just enough moisture and air to keep the leaves crisp. In the colder parts of the UK stick with *A. campanulatus* and its numerous offspring.

### PESTS AND DISEASES

Given good growing conditions, there are few major pests in the U.K. but virus diseases are often evident in older clones. Impatiens necrotic spot virus, which is spread by western flower thrips, is a particular worry. *Botrytis* has been a problem this year due to the long wet spells on and off through the growing season. This causes spotting on the leaves and many flower stems may be badly infected, causing the flower to die off. Slugs and snails may be a nuisance in seedling plants and under damp straw mulches feed on the young emerging leaves.

### SPECIES AND CULTIVARS

#### Deciduous Species.

- *Agapanthus campanulatus* grows up to 1 m or more producing a flattish umbel with open-faced flowers.
- *A. campanulatus* subsp. *patens* from the mountains of the Drakensburg in Lesotho has flowers which are more widely flared, open faced with a shorter tube. Colour varies from pale to deep blues.
- *Agapanthus caulescens* has characteristic leaves which clasp together forming a short stem similar to that of a leek. I believe this species may well be involved in many of our garden hybrids as it is so similar to others. The subspecies *angustifolius* does exceptionally well in cultivation and is one of the most attractive groups of all the deciduous *Agapanthus*.
- *Agapanthus coddii* is available in the trade and has a similar distinct stem with broad leaves which terminate in fairly blunt tips. The flowers are fairly open faced again pale to darker blue.
- *Agapanthus dyeri* is regarded as rare in cultivation. The flowers are somewhat open faced and become rather drooping in habit.
- *Agapanthus inapertus*, the 'drooping agapanthus', is a very distinctive species especially the subspecies *pendulus* which has pendulant tubular dark violet blue flowers on upright stems, to 1.5 m tall. The subspecies *hollandii* is grown in gardens and several good forms are gradually being introduced from South Africa. The white form is also very desirable.

- *Agapanthus nutans* has dark green or greyish leaves with slightly flared nodding flowers.

### Evergreen Species.

- *Agapanthus africanus* from the western cape has relatively short leathery leaves. Flowers are open-faced with short tube, the colour range is from white, which is rare, through pale to deep blue. The true species is probably rare in cultivation but has certainly been involved in many named hybrids down the centuries. *Agapanthus praecox* is sometimes misidentified as *A. africanus*.
- *Agapanthus comptonii* is one of the dwarf species with dark green grass like recurving leaves from the Eastern Cape. I suspect it to be rather tender. The flowers, in loose open heads, vary from pale to deep blue. It is probably the parent of the dwarf cultivars 'Peter Pan' and 'Streamline'.
- *Agapanthus praecox* is very variable, with three subspecies. It is the ancestor of most of the large evergreen cultivars. Generally the leaves are broad and arching, forming handsome clumps. The flower heads are the largest of all. These make excellent container plants but winter protection is advised.
- *Agapanthus walshii* is a rare plant both in cultivation and in the wild where it frequents a smallish area in the South West Cape and flowers best after fire. The leaves are upright, the flowers are tubular and pendulous pale to deep blue.

**Some Recommended Cultivars and New Hybrids.** In the RHS trials of 1972 to 1977, 32 cultivars were highlighted, many are still around in gardens today. All are worth cultivating, especially those awarded First Class Certificates (FCC). Most of them were raised by Lewis Palmer including 'Anthea', 'Cherry Holley', 'Delft' (a lovely pale blue), 'Luly' (another fine upstanding pale blue) and 'Sybil Harton'. Also awarded the FCC were 'Ben Hope', raised at the Great Park Windsor, and 'Zella Thomas' from Hyden Nurseries.

Of the remaining 25 in those trials, mention should be made of 'Loch Hope', a strong growing hybrid with azure blue flowers of good form and much in demand; and 'African Moon', a strong upright pale blue.

New Zealand breeders have produced many named cultivars in the past few years. 'Blue Skies', 'Purple Cloud', 'Peter Pan', 'Streamline', 'Sea Coral', 'Sea Foam', 'Sea Spray', 'Sea Mist', 'Timaru', 'Crystal Drop' and 'Jack's Blue' are among those in cultivation in the U.K. Many other named cultivars have been developed at Raveningham Hall including 'Sky Star', 'Midnight Star', 'Ice Blue Star', 'Evening Star' and 'Bethlehem Star'. In Northern Ireland, Gary Dunlop at Ballyrogan Nurseries has introduced several good forms.

Here at Pine Cottage Plants work with the National Collection has resulted in many new hybrids. In selecting and naming new clones, it was obviously important to look for distinct, quality plants with full heads and strong stems, in a range of colours and which would prove a useful addition to those already in cultivation. Of those chosen and named the following are among the best. However these will have no known hardiness rating until they have been tested by a cold winter with penetrating frost.

***Lilacs.***

'**Lavender Girl**'. Flowering into September with large heads of lavender-blue flowers. Deciduous 140 cm.

'**Lilac Bells**'. Stout stems up to 80 cm with a hint of lilac in the flowers. Late.

'**Lilac Time**'. A very desirable cultivar with distinct lilac-coloured flowers up to 95cm. Late.

***Mid-deep Blue.***

'**Beatrice**'. Mid to deep blue flowers with flared tube of elegant shape, evergreen, mid-season, 120cm.

'**Blue Steel**'. A vigorous, tall, erect *A. inapertus* hybrid with steel blue pendant more tubular flowers.

'**Dorothy Kate**'. Strong growing with good foliage, mid to deeper blue with bold stripe. Evergreen, 70 cm.

'**Gem**'. Mid to dark blue flowers of good substance in globular heads, mid-season, evergreen, 100 cm.

***Dark Blue.***

'**Blue Velvet**'. Another distinct hybrid with deep lavender-blue flowers on tall, 105 cm, stems.

'**Jodie**'. A very tall plant for a large garden. Dark blue heads, mid/late season, deciduous. 140 cm.

'**Nikki**'. Should prove to be one of the better dark blues.

***Pale Blue.***

'**Angela**'. A strong, sturdy plant, pale blue, with good leaves. Deciduous.

'**Autumn Mist**'. Good pale blue, late flowering, 70 to 80 cm.

'**Becky**'. Pale, stocky, mid-season, 65 cm.

'**Blue Gown**'. An evergreen, larger grower with distinct powdery blue flowers.

'**Far Horizon**'. Stocky plant up to 70 cm with pale blue-grey flowers. Mid-season.

***Silver, Grey, and White.***

'**Silver Mist**'. A very good new hybrid with silvery-grey to pale blue flowers. Late season.

'**Bicton Bride**'. A quality upstanding white. Mid-season.

'**Mercury**'. Flower colour is between grey and white, an unusual silver-mercury shade. Mid-season.

'**Yellow Tips**'. A distinct white with yellow stamens and yellow-tipped tepals in bud.

**LITERATURE CITED**

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**ADDITIONAL READING**

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