

Dendrobium kingianum growing in the Riverina region of NSW

- the Pink Rock Lily (*Thelychiton kingianus*)

This hardy Australian native orchid is found along the coastal strip from the Hunter River in New South Wales to Rockhampton and the Carnarvon Gorge in Queensland (1,6).

Due to its wide distribution there are many clonal types that vary in length of pseudobulbs, flower colour and size (2).

It is found growing almost exclusively as a lithophyte on rock faces in warm temperate rain forests and wet sclerophyll forests (3) up to an altitude of 1200m. It can also grow on trees and in shady gullies (1).

It has recently been renamed *Thelychiton kingianus* (3), but for the purpose of these notes the older name will be used.



It has 2 to 7 lanceolate leaves up to 13cm long on each cane with the pseudobulbs ranging from 10cm to 45cm in length (6). Pseudobulbs or canes tend to be shorter in the southern forms and become taller further north in the range (6). The exception is *Thelychiton carnarvonensis*, the Carnarvon Gorge form, that has short canes and is now regarded as a separate species (6).

Each pseudobulb can produce up to 3 racemes with flower colour ranging from pink to white and purple (1). The buds typically first appear in late June in the Riverina with blooms being present from September through to October-November.

D. delicatum is a naturally occurring hybrid of *D. speciosum* and *D. kingianum* whereas *D. suffusum* is a natural hybrid of *D. gracilicaule* and *D. kingianum*. There are also a number of man made hybrids including *D. Bardo Rose* (*D. kingianum* x *D. falcorostrum*) and *D. Ella Victoria Leaney* (*D. kingianum* x *D. tetragonum*) (1).

Temperature requirements.

These orchids are very hardy and will tolerate temperatures between 0°C and 42°C but must be protected from frost as its very susceptible (5). They require temperatures in autumn-winter down to 10°C or less to flower well.

Light

They prefer bright light (3000-4500fc) similar to Cymbidiums (2), with perhaps 30-50% shade in summer in the Riverina but no direct sunlight (1) in very hot weather. They will, however, take full sun in autumn through to spring with good light encouraging flowering. They may not flower if kept too shaded.

Humidity and air movement

They need good air movement and moderate humidity during the growing season but need lower humidity in winter.



Misting is beneficial during very hot periods in summer (>40°C) or where humidity is very low. If misting, plant leaves should be dry by evening.

Water

They like regular watering over the hotter months, two to three times a week in the Riverina, but less in spring and autumn and infrequently over winter when they should be kept relatively dry. They like to dry out between waterings. Keeping plants too wet can promote keiki development at the expense of flowers (2).

They can be grown under shade cloth but in regions receiving a lot of winter rain they can be grown under a polycarbonate roof to keep them drier (5) and protect them from frost.

Potting medium

The plants can be grown in a pot, in the forks of trees, on a slab or in a hanging basket. They should be grown in a well-drained, medium to coarse bark potting mixture. Some growers add about 25% small river stones to the bark mix (5). They can be allowed to grow quite large and only need to be subdivided when they become too large to handle. Growers often use squat shaped pots as the roots are relatively short and they don't need a deep pot (2). Repotting is best carried out after flowering.

Fertilizers

Liquid low N fertilizers should be applied at quarter to half strength regularly during the growing season, about every 2 to 3 weeks until April-May when fertilizing should stop. No nitrogen should be applied after February (5). Some growers recommend stopping all fertilizer in early March possibly to reduce keiki development. A fortnightly high potassium fertilizer application is recommended between November and April to promote flowering.

No fertilizer should be applied while the plants are dormant and wait until new growth is about 50mm long before fertilizing. As canes mature, switching to a high potash fertilizer assists flowering. Slow release fertilizers are not recommended as they may release fertilizer during the winter rest period.

Keikis

Some clones of this species are very prone to producing aerial growths called keiki (2). There are number of reasons why plants may produce a lot of keikis in addition to genetics. Possible causes include if roots are damaged, they receive too much water or fertilizer during their winter rest period, particularly nitrogen fertilizer, or are in too much shade (5). Keikis can be removed and potted once they have developed roots with green tips, preferably once



roots are at least 6 cm long. Plants produce keikis at the expense of flowers so it is not something to be encouraged. Plants genetically inclined to produce keiki should be replaced by clones more likely to produce flowers.

Varieties.

There is a large range of forms and colours available. The Santa Barbara Orchid Estate web site listed below gives a detailed description of 26 different varieties of *D. kingianum* that are commercially available (4).

Acknowledgements and further reading:

This fact sheet has drawn on information by local growers and the references listed below.

1. Growing Dendrobium kingianum in Adelaide 1983 and now.
<http://nossa.org.au/tag/australian-orchids/>
2. American Orchid Society. Dendrobium kingianum.
<https://www.aos.org/Default.aspx?id=169>
3. Australian National Herbarium. Thelychiton kingianus.
<https://www.anbg.gov.au/gnp/interns-2003/thelychiton-kingianum.html>
4. Dendrobium kingianum. Santa Barbara Orchid Estate.
http://sborchid.com/sboe_collection.php?collection_genus=Dendrobiums&collection_short_name=kingianum&collection_name=Dendrobium%20kingianum
5. How I grow Australian Dendrobium by Brian Milligan.
<http://www.oscov.asn.au/articles2/dend.htm>
6. Growing Orchids in Cool Climate Australia. (2nd edn) Eds M Fraser, J Wright and W Ferris.

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These notes are intended as a guide only and are composed from available information and local experience. The Wagga Wagga Orchid Society and its members are not responsible for any loss or damage.