

Australian Native Orchid Cultivation



Den monophyllum

GENERAL

Australia has more than 600 species of native orchids which can be classified into more than 70 genera. The plants have a large and varied distribution being found in some form or other in all Australian states. Orchids can be divided into two major groups as follows:

Epiphytic orchids

These are found growing on the trunk and limbs of trees or on moss and humus covered rocks. These orchids are not parasites as they use the tree or rock merely as a host on which to grow. Any crevices and fissures on the surface of the host serve as channels to direct rainfall and humus to the roots of the plant where water and its mineral contents are absorbed into the plant.

This group of orchids depends on its root system to extract moisture from the air and is usually confined to the eastern coastal ranges and areas of relatively high rainfall and high humidity.

Terrestrial orchids

As the name suggests terrestrial orchids grow in the ground from either a tuber or rhizome and usually have an annual growth cycle. These orchids live in association with fungi called mycorrhizal fungi which act as nutrient gatherers for the plant. This group has an active growing season in which new tubers and flowers are produced which in the majority of cases commences in autumn and extends through to spring. After flowering the plant goes into dormancy during the hot summer months and is reduced to a live but dormant tuber underground with all other parts of the plant drying out and dying back. During the next growing season the dormant tubers shoot and the cycle begins again. This group occurs mainly in the southern and more temperate areas of Australia with largest numbers occurring in Western Australia, South Australia and Victoria.

CULTIVATION OF NATIVE ORCHIDS

As mentioned above our native orchids can be grouped into two basic groups, the cultures of which are entirely different. A brief description of the type of cultures applicable to each of the groups follows below.

Cultivation of Epiphytic Species

The majority of our epiphytic species can be easily grown in cultivation if the correct cultural requirements are provided. Some species are best suited to pot culture whereas others are best mounted on strips of cork or on pieces of native timber (ie. paperbark, etc). Various mixtures have been adopted over the years for pot culture of epiphytic orchids. Most of these comprise differing proportions of well aged bark chips, sieved decomposed granite (5mm-10mm in size) and charcoal. Many growers now use, as the major component in their mixture, one of the processed barks which are available in a range of grades to suit the size and culture of the plants being grown.



Den lichenastrum

To the mixture, a small amount of dolomite, blood and bone, and superphosphate may be added to promote plant growth. It is essential that the mixture remain properly drained and even though most epiphytes require a continuous moisture supply, one of the best ways to kill plants is to grow them in a wet ill-drained mushy mixture!

Plants should be grown in a well drained mixture frequently watered and fertilised regularly with one of the commercial fertilisers at half strength (Aquasol, Nitrosol, Field Pack, etc) and placed in a position where they get light and air circulation. Plants best suited to this type of culture include *Dendrobium kingianum*, *Dendrobium gracillimum*, *Sarcochilus hartmannii* and numerous man made hybrids (Dendrobium Ellen, Bardo Rose, Hilda Poxon, etc). Plants best suited to being mounted include those with pendulous habit such as *Dendrobium teretifolium*, *temiessimum*, *pugioniforme*, those with a creeping type growth such as *Dendrobium cucumerinum* *lichenastrum*, *linguifonne*, most Bulbophyllum species and those which resent having their root system covered such as most *Sarcochilus* and allied species.

Cultivation of Terrestrial orchids

Terrestrial orchids grow in a variety of situations and in general require a well drained mix as a heavy mixture causes rotting of the tubers. A basic mix developed contains the following. 2 parts coarse sand; 1 part scrub soil; 1 part wood chips; 1 part leaf mould. A small amount of blood and bone approx. one dessertspoon per 10 litre bucket should be added to the mix. This mixture may require some variation to suit different species. Plants should be watered regularly to maintain a constant moisture deposit during the growing period but during the dormant period the mix must be allowed to dry out as warm wet soils lead to the rotting of tubers. At this time watering must be reduced to no more than once a week to prevent desiccation of the tubers.

Garden Culture



For those orchid enthusiasts who don't have access to a bush house or who don't wish to be bothered with the more complex needs of some orchid genera, there are a large number of 'low maintenance' native orchid species and hybrids available. These will grow and flower quite well in the outside garden environment provided some thought is given to the basic growing requirements of the plants ie. light, watering and fertilising. Many species (ie. *Dendrobium speciosum*, *gracilicazile*, *tetragonum*, *teretifohum*, *Sarc. falcatus*. etc) will grow well if attached to suitable host trees which do not shed their bark.

Other species and hybrids can be grown in pots placed in an outdoor rockery environment in dappled shade areas (ie. not full sun or full shade). Further details of plants which can be adapted to this type of culture can be obtained from your local Native Orchid Society or orchid nursery

Thanks to the Native Orchid Society of Toowoomba

These notes have been used at our Cultural and New Grower's Meetings. They are from various sources and we thank the authors. All articles are supplied in good faith and the Bribie Island Orchid Society and its members will not be held responsible for any loss or damage.