

General

Growing these beautiful orchids in Toowoomba and areas surrounding it certainly has its challenges. I have heard it said that it is equivalent to asking a penguin to live at the Equator, just simply in reverse. The climate locally does not necessarily match those of the natural habitat of countries such as: Thailand, Philippines, Bangladesh, India, Nepal, Sri Lanka and Laos. There are some fairly obvious differences, including temperature, humidity and rainfall. Also the seasonal changes in our area are far greater than those of the previously listed countries due to the geographical positions relative to the equator.

It is, however, important to note that there are many different genus within the Vandaceous family of orchids and the conditions required to grow them varies accordingly. As with most orchids of any genus, the trick is to attempt to simulate their natural conditions and emulate nature the best we can. With a little effort we can achieve this allowing the orchid to grow well and supply us with their magnificent flowers which we all appreciate.

There are a number of major factors to consider including, but not necessarily limited to, light, temperature, growing medium, fertiliser, water, humidity and air movement. In this article I will cover only the Vanda orchids.

Species

There are 66 Vanda species within the genus, most of which have been used to create hybrids. The five most used species in creating hybrids are: *V. sanderiana*, *V. coerulea*, *V. tessellata*, *V. tricolor* and *V. denisoniana*.

V. sanderiana is the most widely used species in hybridisation. Originating from the Philippines, *V. sanderiana* requires warm to hot temperatures, with high humidity all year and heavy rainfall.

V. coerulea originates from Thailand, Southern Central China and the East Himalayan areas and requires lower temperatures and lower humidity particularly in winter and spring. When looking for a Vanda to grow in Toowoomba climates *V. coerulea* hybrids should be favoured as they can withstand much cooler temperatures.

V. tessellate are found naturally in Bangladesh, Central-Southern China, East Himalayas, India, Nepal, Sri Lanka and the Western Himalayas. This is another hot growing species and requires high humidity in summer and autumn, decreasing through the remainder of the year.

V. tricolor originates from Java, Laos, Australia and the Philippines. This species is again cooler growing and should be favoured in hybrids for the Toowoomba area.

V. denisoniana is naturally found in Central-Southern China, Laos, Thailand and Vietnam. *V. denisoniana* is a warm growing species requiring high humidity through summer decreasing gradually until winter.

Light

All Vanda family members require relatively strong bright light to enable them to flower freely, however most will not tolerate direct sunlight during the middle of the day, particularly during the summer months. Growing them in a shade house covered with 80% shade cloth seems to work well. If the light is insufficient flowering will be decreased or not occur at all. Too strong and the leaves will show signs of yellowing or burning.

Temperature

Most Vanda orchids require warm to hot conditions; *Vanda sanderiana* grows best with temperatures of 22°C - 31°C all year round and this species is behind many of the hotter growing hybrids around today. On the opposite end of the scale is *Vanda coerulea* which only requires 18°C - 25°C to be happy. This beautiful large and showy

blue/purple species is behind many of the cooler growing Vanda hybrids. In general Vanda plants require heating during the cooler autumn and winter months. Night time temperatures should not be allowed to drop below 10°C. Plants will cease growing and go into hibernation if temperatures are too low. While they will, in the main, survive the lower temperatures they will definitely be set back and take time to recover once the warmer weather returns.

Humidity

All the Vanda orchids enjoy high humidity particularly during the warmer months. Humidity is a key element in growing these beautiful orchids, in my opinion, and should be maintained around 80-85% while the plants are actively growing. *V. sanderiana* requires particularly high humidity all year round. The remainder of the main species listed above should have humidity reduced during cooler months to around 60-65%.

Fertiliser

Vanda orchids are heavy feeders and enjoy being feed all year round. I find that using ½ the recommended strength of advertised fertiliser strength, weekly works well. I would suggest that if time permits fertilising every day with a weak solution during the growing season may even work better. Unfortunately I have not had the time to confirm my suspicions.

Rest Period

Most Vanda plants with the exception of *V. sanderiana* have a distinct slowing in growth during cooler months; however they do not completely stop growing. As usual there are always exceptions to the rule and *V. sanderiana* is that exception as it grows continually all year around.

Media

Vanda orchids enjoy having their roots hang openly in the breeze and should not be contained in pots. Vanda plants do not take well to having their roots disturbed and if they can be left alone they will grow better and flower with greater frequency. In general hanging slatted or basket type pots work well with a very open course mixture being all that is required.

Rainfall

Vanda orchids come from areas of heavy rainfall during the monsoonal seasons. In our nurseries we need to simulate these conditions by watering heavily in the late afternoon and maintaining high humidity. Water can be reduced in cooler months and should be moved to mornings rather than later in the day thus allowing them time to dry the roots prior to becoming too cool. The roots should not be left hanging directly into water.

Air Movement

I consider air movement to be the most important aspect, excluding humidity, when growing Vanda orchids. A constant light breeze, stronger enough to move the hanging roots, will solve many fungal issues. Air movement is required constantly throughout the entire day and night and in all seasons as Vanda orchids mainly grow in the high canopies when found in nature.

Overall some basic care and a little effort can produce great results in growing these amazing orchids. Good luck and happy growing.

Disclaimer: These notes are supplied in good faith and Toowoomba Orchid Society Inc and its members will not be held responsible for any loss or damage.

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