



The Orchid Society of W. A. (Inc.)

Vandas

The Vanda Alliance (including *Vanda*, *Angraecum*, *Rhynchostylis*) is made up mostly of warm-growing orchids with colourful, sometimes fragrant flowers. They originated in humid, tropical Asia, where they are easily grown outside year round, in full sun or light shade. In Perth where summers are hot and dry and winters are cold and wet, vandas can be grown outside with protection from the intense summer sun and cold winter rains, or year round in a greenhouse. Because our climate is quite dry, vandas grown here require some special care to ensure that they receive sufficient humidity.

GROWTH HABIT

Vandas are *monopodial* ('single-footed'), which means they grow upwards and have a single stem that produces leaves, flowers, and aerial roots. In nature, these orchids are *epiphytes*—they use their thick roots to cling to the bark of trees for support as the stem grows upwards. This stem can get very long, easily a metre or more. Consequently, vandas in cultivation typically need some sort of staking to support the stem, or are grown in a hanging pot or basket and tied to the hanging wire. Because the vanda stem can grow quite tall, it may be tempting to prune the stem, but since the plant only grows from the top of the stem, if the stem is cut off the plant will usually die. Dead flower heads should be cut off, but the aerial roots or the stem itself should never be pruned. Occasionally vandas produce growths off the main stem that produce their own roots, and when these new growths develop four or more healthy roots, they can be carefully cut off the main stem and potted separately.

LIGHT

Light is a crucial factor in blooming most vandas plants. Consequently, vandas need to be grown outdoors, under 50% shade cloth in a shadehouse or glasshouse, or under a tree in a position that gets bright filtered light. In very hot weather, an additional layer of shade cloth may be necessary to prevent leaf burning.

WATERING and HUMIDITY

Water should be applied copiously during the warmer months when the plants are growing strongly, but the roots must dry quickly. If their situation is warm and sunny, they may need daily watering, perhaps even twice daily during heat wave conditions. Frequency of watering will depend on the type of potting mix used, position of orchid, temperature and humidity. Water sparingly in the winter or during cool cloudy weather. In winter, watering on a sunny morning once or twice a week should be sufficient, ensuring that water does not remain in the crown or leaf axils overnight. When watering, thoroughly saturate the aerial roots and the potting mix and ensure water runs out of the pot, to flush out any excess salt and fertilizer. The roots of vandas should always be thick and fleshy, not shrivelled and desiccated. Leaves should be green and should stay attached to the stem for many years. Shrivelled roots or loss of leaves from the bottom of the stem upwards are signs of insufficient humidity. Relative humidity of 80 % is ideal, but this level of humidity can be difficult to maintain in Perth, especially during summer. An evaporative cooler can be used in an enclosed greenhouse, but in a shadehouse misting may be required. Air movement must be strong to allow the roots and leaf axils to dry out between waterings.

FERTILIZING

A liquid orchid fertiliser such as Strikeback for Orchids Liquid should be applied over the aerial roots, leaves, and potting mix at least once a week during the warmer months while the orchid is growing strongly, and less frequently during the cooler months when growth slows. Many growers apply very weak liquid fertiliser at every watering. It is important that the fertiliser is not applied too strongly, to avoid burning of the roots. Because the potting mixes typically used for vandas are very coarse, slow release pellets tend to fall through the pot and may not be an efficient way to fertilise.

POTTING MIX

The potting mix must be open and free draining to allow the roots to dry out between waterings. For large vandas with large thick roots, a very coarse bark potting mix should be used, while finer mixes can be used for smaller vandas with thinner roots in smaller pots. Vandas should be potted into pots with good drainage holes, or in slatted wooden baskets.

REPOTTING

Potting should be done in the spring. Plants in baskets do not need to be repotted unless the potting medium breaks down. Set the plant, with the old basket intact, into a container of water to make the aerial roots more pliable, and then set the plant and basket into a larger basket. For plants in pots, repot into a slightly larger pot, positioning the plant in the centre. Use a coarse bark, and work it around the roots. Keep shaded, humid, but drier at the roots until new root tips grow. Do not overpot.

DISEASES

Scales and mealy bug, especially in leaf axils, can be a problem with vandas, and attention should be given to yellowing leaves to identify and treat issues early. Fungal problems can occur if adequate air movement/ventilation is not provided. Any fungicide can be used, but improving airflow is a better long term solution. Don't apply liquid insecticides or fungicides to flower buds, as these agents can deform the flowers—it is better to use a powder.



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