

Fair Orchids Repotting Vandaceous orchids



There are more than 1000 species, and 9,000+ hybrids in this orchid family of almost exclusively epiphytes. This is a family, where growers have strong and highly divergent opinions about growing media.

Some proclaim empty baskets (with stick mounting for the smaller plants) as the only way. That is indeed how plants are grown in Thailand & Singapore, and to some extent also Florida & Hawaii - in high humidity and with daily rain/waterings.



Home growers in most parts of the world, have a very hard time duplicating those conditions - unless they have a bathroom with skylights and can hang the plants in their shower!

If you want to grow Vandaceous plants under more generalized conditions, it is necessary to grow the plants differently. There are at least three schools of thought on this subject:

1. Mounted on a stick, cork or tree-fern. This option requires high humidity, so it is primarily utilized in wardian case, wintergarden & greenhouse growing, though some under lights growers do it as well.



Please refer to **How to Mount Orchids**.

1. In a vase, usually with a few rocks in the bottom to prevent it from becoming top heavy. Plants can be watered and excess water poured out. This appears to be an option primarily for plants grown 'in the house', including those who take plants outside in the summer.
2. In a net pot or basket (sometimes a regular pot), filled with a medium to hold moisture & provide humidity. A variety of mediums can be used, depending upon the watering schedule you can provide.

2. Vandas in a Vase

Vandaceous plants require high light, and ideally 80% relative humidity. The latter is the hardest part to satisfy in the house. One way to solve this, is a variation on the empty basket growing method:

Grow the plants in an empty vase*, with only the leaves sticking out. Growing this way, you have to fill the vase with water (& light dose of fertilizer), and allow the roots to soak up as much as they can. After 15-30 min pour the water out, so that the roots do not drown.



Photo curtesy of Justin Cameron, UK.

This should be done twice a week in summer, once a week in the spring and fall, and probably just a heavy misting twice a week during the winter.

The vase should be wide enough that the base of the plant can fit inside the rim, and tall enough to allow the roots to grow. Some growers place a water retentive material in the bottom, to improve on the humidity inside the vase.

This growing method is most practical for small to mid size plants. For full size Vandas, it is less practical, and the plants easily become top heavy.

* = One grower reports using empty 2 or 3 liter soda bottles of clear plastic. This requires placing a couple of rocks or other ballast in the bottom, to prevent the plants from toppling over.

3. Baskets & Net Pots

This is the most common approach. For smaller plants net pots are recommended, while larger plants do better in a basket (either wooden or plastic).



Net pots come in a variety of types, with openings of varying sizes. I have not found any significant differences in how the plants grow from one type to another.

While wooden baskets are attractive, I favor the **octagonal plastic baskets**. It is easier to extract plants from these, when it is time to repot. I use primarily 6" size, and 8" only when it is absolutely



necessary. I try to avoid the 4" size, as these dry out too fast compared with the larger baskets.

In a pinch you can use **water lily pots**. Plants grow fine in these, but once the roots penetrate the walls, you have to cut them free when repotting, so these cannot be reused.



For those with time on their hands, you can construct baskets out of metal cloth (they look better when filled with mix and a plant).

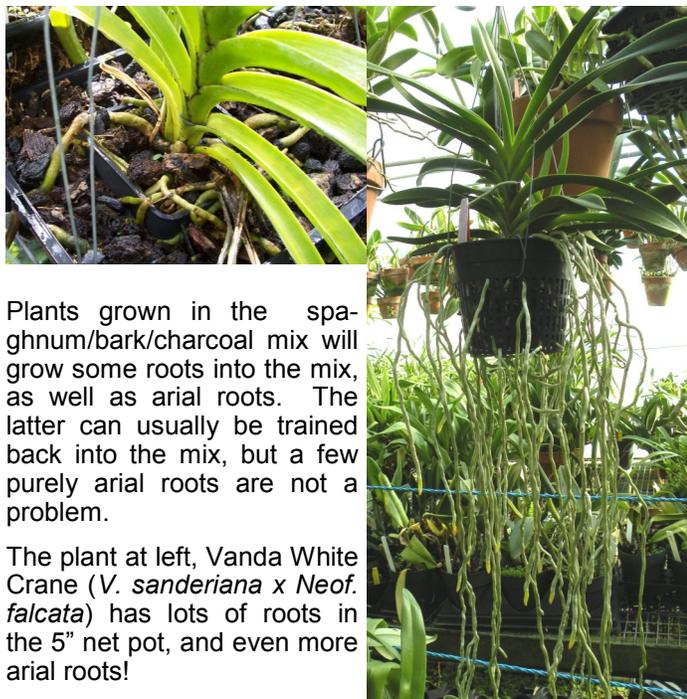
For the watering schedule that I can provide (twice weekly), I use a sphagnum, bark & charcoal mix for all my Vandaceous plants, with ratios depending upon pot/basket size:

	<u>Spagh.</u>	<u>Bark⁽¹⁾</u>	<u>Charcoal⁽¹⁾</u>	<u>⁽¹⁾ nugget size</u>
2"-3" net pots:	70%	20-25%	5-10%	Seedling
3½"-5" net pots:	60%	25-30%	10-15%	Fine
4" baskets:	60%	25-30%	10-15%	Fine/Medium
6" baskets:	50%	35-40%	10-15%	Medium
8" baskets:	35%	45-50%	15-20%	Medium

Wet dry roots thoroughly before repotting. Pack the mix in between the roots as firmly as you can with your fingers.

For **Rhy gigantea**, which is a semi-succulent, I am testing a group of plants in all medium/large bark nuggets. Some of the plants are doing well, others seem to be a little desiccated, so I may have to go back to the sphagnum mix.

I have seen Vandas grown in all clay pot shards, and also in wine bottle corks. Neither material holds any significant moisture, so these are primarily materials for the roots to anchor to. Watering schedule should be very similar to that for plants grown in empty baskets.



Plants grown in the sphagnum/bark/charcoal mix will grow some roots into the mix, as well as arial roots. The latter can usually be trained back into the mix, but a few purely arial roots are not a problem.

The plant at left, Vanda White Crane (*V. sanderiana* x *Neof. falcata*) has lots of roots in the 5" net pot, and even more arial roots!

One special case is the revered *Neofinetia falcata*. In Japan these are grown in decorated clay pots, with a carefully sculpted mound of long fibre sphagnum, with the plant carefully mounted on top of the mound.



Photo courtesy of Ernest Shin, Jersey City, NJ



This traditional presentation is cosmetic, and not mandatory. The plants grow just fine in standard net pots or small baskets.

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Vandaceous plants are monopodial (single stem, with growth point on top). The growth point releases a hormone, which inhibits formation of basal keikis (*Neofinetia falcata* is a notable exception to this).

Once the plant reaches a certain height, the hormone can no longer reach the bottom of the stem, and basal keikis start to form. In some plants, that height can be 3-4' or more. When basal keikis start to grow their own roots, they can be separated from the mother plant. I recommend that they be left on the mother plant till they are close to blooming size, as they grow faster while attached to the larger plant.



A healthy plant has leaves starting at the medium, and extending all the way to the top. Older plants may eventually lose some of the bottom leaves, getting to look a bit gangly. Whether the plant has lost leaves or not, once it reaches 2' or more in height, it becomes a candidate for dividing via a **top cutting**; which produces:

- One blooming size plant with min 2-3 good roots. Remove enough of the lower leaves, so that the stem section with roots can be seated in a basket with mix.
- One base, with min 3-4 leaves, which should produce 1 or 2 keikis, once the hormone producing top has been removed.



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