

How to Repot

By Dr Fred

Spring is an ideal time to divide and repot your plants once flowering has finished and new growth has started. It is the easiest time to inspect the plants and clean them up for benching. Most occasional orchid growers worry unduly over this simple task, but one successful grower I know divides his Cymbidiums with an axe!

Preparation:

Withhold water for a week before repotting. This usually makes the orchid easy to knock out of the pot. However if it's very pot-bound, soak it in water for a few hours to free up the roots.

Ensure that you have on hand a range of suitably sized pots and potting mix. If you get caught out in the middle of a job, don't panic because most orchids will survive for days in moist newspaper under shade or even bare-rooted under cover in winter.

There are many commercial potting mixes, usually appropriately labelled. I use a medium coco-chip mix for most orchids but a good rule of thumb is fine mix for fine roots, coarse mix for thick roots. Coarser mixes dry out faster which is good for the Cattleya alliance and colder winter conditions.

If you only have a few orchids, get together with a friend to make the potting exercise a worthwhile social event. Instead of dreading repotting, make it fun and expand your collection by sharing the product of your labours.

As your collection expands, you will find that you are repotting through much of the year but try to avoid doing so in mid-winter and mid-summer.

Buy some new pots. It is chancy and not cost-effective to sterilize old pots although we all do it from time to time. If you must, scrub them well with an old paint brush dipped in a Nappy San solution and leave to soak for at least 20 minutes.

Plant hygiene:

It is very important to avoid spreading virus and other infections. Wash your hands between plants or use disposable gloves. Cover the potting table with several sheets of newspaper and change it completely for each plant. Between plants, disinfect all cutting implements. Twenty minutes in a bleach solution such as sodium hypochlorite is cumbersome. A very hot blue flame from a butane torch is much easier and not expensive. Do not re-use old potting mix except to fill the holes in your lawn (for which it is excellent).

Inspect the orchid closely for disease:

If there is any sign of mosaic virus put the plant, pot and all in the green otto bin. Otherwise, if the plant is potbound, cut the plastic pot if necessary. Don't worry about losing a few old roots but try not to damage the new roots appearing beneath the new shoots. Do the roots have healthy green tips?

Remove any brown husks, dead roots and empty back-bulbs which provide shelter for pests. The bracts are the dead brown coverings on either side of the pseudobulb. They can be difficult to remove unless you split it down the middle and tear off each half separately. Wipe off any scale with a tissue or soft toothbrush. If the plant has scale be prepared to spray the entire plant including the roots with your favourite insecticide. At least two more treatments 10 days apart will be needed and gloves are essential.

After repotting I spray the orchid with eco-oil to discourage pest attack.

Don't over-pot:

This is a common cause of orchids languishing or even dying. Choose a pot which is comfortable for the root system and allows for a year or two of growth. The root ball should fill at least half to two thirds of the pot and the roots should reach the bottom of the pot.

Potting-on (slip potting):

To do this, take the plant out of the original pot and drop it straight into a slightly larger pot. Then back fill leaving most space in front of the new shoots with the old bulbs up against the wall of the pot. Take care when handling the brittle roots of *Paphiopedilum*.

Dividing:

Establish where the natural plane of cleavage is by trying to pull the bulbs apart. Then divide using a sharp sterilized instrument. I don't treat the cut surfaces, but many do. Simple division into two approximately equal halves will give the best chance of early flowering. Two or three mature bulbs with one or two new shoots is a good minimum combination.

Place in a suitable pot with the roots at least 2cm below the rim. Scale will take up residence if you cover the bulbs or rhizomes. The trick is to ensure that you fill all the spaces between the roots and cover them, shaking the mix down as you go without packing it down tightly. Significant air spaces are soon infested with insects.

Some commercial growers strip the leaves from the older bulbs which will soon become back-bulbs (swingers). This will open up the centre of the plant to light and chemical sprays. This also encourages the plant to set spikes in the centre.

If you are planning to enter the plant in competitions where they are judged on a single spike of flowers, you may consider pruning away all but one of the new shoots so that the plant diverts all of its energy into producing a single lead and later a single spike.

Adding a slow release fertilizer such as blood and bone to the bottom of the mix is a good idea if the orchid is entering a rapid growth phase. Remember to add some dolomite lime if using calcium poor coco-based mixes

Stabilize the plant:

Plants which wave loose in the breeze will have trouble establishing their roots. Satay sticks can be used for staking smaller plants. Avoid ties on the new shoots as these will cut into them as they grow. Cut stakes off below the top of the plant so that you don't poke your eye when later tending the plant. Remove stakes once the plant is established as they may make the pot unstable. Plants in hanging pots can be tied to their hangers. A handy trick for small or odd shaped plants or those with poor roots is to introduce a tie loop through the bottom holes of the pot to keep the plant stable in the mix. Again, tie around a back bulb rather than a leading shoot.

The top of the mix should now be about 2cm below the pot rim to allow watering, but water sparingly for the first two weeks. Add more mix if necessary after watering.

Place in a sheltered position (morning sun, afternoon shade) and orient the plant so that the leaves are toward the sun. Water as the mix begins to dry out and feed with a liquid fertilizer as the new shoots develop. Don't necessarily expect flowering for a year or so after division but watch for rapid new root growth.

Final tasks:

If you have any left-over firm, plump back-bulbs, remove the roots and stand them in a shallow tray of potting mix. Three or four bulbs joined together will do much better than single bulbs. With warmth and a little shade they will eventually shoot and grow but you will need patience.

Carefully identify each pot with a durable plastic label. In general, pencil outlasts most garden markers.

Exchange your duplicate orchids with a friend to expand your collection. Alternatively, try duplicates in different positions in the garden or shade house and see how they respond. You can learn a lot about micro-climates this way.