

# Breaking Up Is Hard To Do

By Ken Slump

Tackling the Big Job of Dividing Overgrown Orchids Has Its Rewards

SOONER OR LATER, ALL SUCCESSFUL orchid growers will be faced with the task of dividing a thriving plant that, for various reasons, cannot be moved to a larger container. For the purposes of this discussion, we are talking about dividing orchids with sympodial growth habit, such as cattleyas, dendrobiums and others that produce new growths or leads along a rhizome or creeping stem. Even so, orchids with monopodial growth habit (such as *Vanda* or *Angraecum*) sometimes branch between the leaves and form growths that can be cut with a sterilized tool from the mother plant, which is a rather different situation.

Tackling the job of dividing a large mature orchid plant can be daunting, and most of us postpone these big jobs as long as possible, even though we would not hesitate to repot a smaller plant every year. The best advice is to find an ample workspace, assemble a few basic tools, have some clean pots and fresh growing medium at hand, and dive into the chore.

**TO BEGIN** Extracting the plant from its pot or container is usually the most difficult part. Orchid roots often cling tenaciously. Watering down or soaking the root mass may help you to free the plant, but sometimes your only option is to destroy the container to accomplish the task. Slats in a wood basket can be pried apart, while a clay pot can be rolled inside several sheets of newspaper, which are then taped before hitting the paper bundle with a hammer. Once the paper and tape are removed with care, the pieces of the pot can be pulled away.

Next, remove all of the old growing medium from the root mass. While this



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can be time consuming, a thorough job makes subsequent tasks easier. As with routine repotting, a bucket of water can help you loosen vigorous roots from the medium. A friend of mine advocates employing a garden hose with a good spray nozzle for this task. She notes that it helps clean away scale and other insect pests too. My personal circumstance of keeping primarily an indoor collection has not allowed me to try this technique, but it sounds quick and easy.

After the root mass is clean, it is fine to cut away long, dangling roots, as they are not likely to survive and rebranch, and they tend to get in the way as you divide and repot the divisions anyway. Also, cut off any dead roots (which are usually dry or

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**BREAKING IT APART** Now it is time to examine the plant carefully and determine how it should be taken apart. While each complete pseudobulb has the potential to produce new leads and roots, it will take several years for a plant from such a small division to grow to flowering size. It usually requires a strong new growth with the support of several mature growths behind it for an orchid plant to flower, so each flowering-size division must contain a minimum of three, or preferably four, pseudobulbs with healthy foliage. The

## LINKS

<http://www.geocities.com/orchidsnzculture/repot.htm>

In Phil's Orchid World, dividing and repotting orchids is a much less daunting prospect for new growers — step-by-step instructions are provided, illustrated with diagrams and photographs. Cymbidiums are used as the example plant, but the information is easily applied to any sympodial orchid.

[http://www.bbc.co.uk/gardening/basics/techniques/propagation\\_divide\\_orchids.shtml](http://www.bbc.co.uk/gardening/basics/techniques/propagation_divide_orchids.shtml)

From the British Broadcasting Corporation comes an introduction to dividing and repotting, covering the basics of care including when to divide and repot, the correct medium for your orchid, a step-by-step how to, and the care your orchid requires while it becomes established in its new home.

choice of whether to create several large divisions or a number of smaller ones is up to you. Be sure to label each division with the name of the plant and the repotting date.

You will find that some orchids are vigorous growers that frequently produce two leads. Such plants can require frequent dividing. You will have others that seldom produce more than one lead annually, and you may wonder how you will ever be able to have a division of such a plant.

If the plant has seven, eight or more healthy pseudobulbs (with or without leaves) you can easily divide it into at least two healthy parts. First, cut and repot the three- or four-pseudobulb section behind the youngest lead. Then do the same with the other half. If the back division lacks living roots, it is often advisable to cut off all but the youngest leaf to avoid desiccation. A dormant bud from the front pseudobulb of the older division will likely grow and form a new lead for that part of the plant. You can often encourage these dormant buds to sprout by partially cutting through the plant's rhizome between pseudobulbs; you can do this months before you plan to divide the plant.

When repotting the divisions, choose a container large enough to accommodate the remaining healthy root mass of each division. Orchids grow better when their roots are rather crowded. Backbulb divisions may not have much of a root system, so pot clips or staking may be necessary to hold the plant in place until new roots develop.

As with routine repotting, the best time to divide a large orchid plant is when you notice that its root system is beginning active growth. This is true even if the plant is in bud or flower. Dividing and repotting during the period of time when roots are active ensures that each division will reestablish itself quickly.

**STERILE TOOLS** Sanitation is extremely important when cutting orchid plants and roots. Virus and disease are easily spread if cutting tools are not sterilized between uses. Some growers dip their knives and pruning shears in sterilizing liquids between cuts, while others sear the cutting surfaces over open flames. I have tried both and have come to find either option inconvenient at best. There are also debates about the temperature required or length or treatment necessary, whether by heat



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you will likely have more space in your collection for other orchid plants, providing you share the divisions you produce with your orchid-loving friends.

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or chemical, to satisfactorily cleanse cutting blades.

For those reasons, I now use single-edge razor blades for all orchid pruning. Every blade is used on just one plant and then thrown away. They are quite inexpensive when purchased in boxes of 100 or more at hardware, paint or home-improvement stores. The blades deliver predictably sharp, clean cuts. The handling and disposal of these blades must be done with extreme caution. Donning leather gloves would provide a margin of safety in handling them. Single-edge razor blades have provided a good solution for a rather small collection such as mine, and my concerns about pruning tools spreading disease problems through my orchid plants have vanished.

Division is, of course, an example of vegetative propagation, so each plant produced by this method will be identical to the one from which it was taken.

**KEIKIS** In addition, some orchids produce offsets or plantlets from their canes or flower stems that can also be divided from their parent plant to grow into an identical plant. The genera *Phalaenopsis* and *Dendrobium* immediately come to mind. Such a plantlet is often called a *keiki*, which is the Hawaiian word for baby. Depending on the stature of the parent plant, the plantlet should have several strong roots of at least two or three inches in length before it is cut from the parent plant and put into a small pot of its own.

Tackling the division of a large orchid plant is often a bittersweet task, perhaps because of the many years it can take to grow an orchid to specimen size, and the bit of sadness that comes with cutting it apart to begin the process anew. On the positive side,

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OPPOSITE *Dendrobium* Spring Dream 'Apollon' (Constance Wrigley × Thwaitesiae) is a compact, fragrant-flowered *Den. nobile*-type hybrid with a sympodial growth habit.

ABOVE Clay pots are among the many options to consider when repotting orchids. The orchid pots shown here have slits in their sides to help facilitate drainage as well as promote air circulation around the roots.