May 2003
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Orchid Growing Tips

May is the perfect time to disturb your orchids by repotting them. Cool nights and warm, long, sunny days promote root growth. A good fertilizer with the middle number highest such as 9-45-15 will help stimulate new root growth in newly repotted orchids, but is not necessary this time of year. Here is a list of what you should be doing with your plants.

Evaluate each orchid's relative health. Did it flower last year? Is the new pseudobulb or leaf bigger than last year? How long has it been in its pot? If your plant is newly purchased you must use the powers of observation that have come with your orchid growing experience. If the medium remains moist or the pot stays heavy between waterings, chances are it needs to be repotted. Most orchids purchased from retail outlets also should be repotted as they are likely potted in a medium that is designed to last until flowers are finished and not much longer. What medium should you use? If you have had success with a particular medium for one type of orchid keep using it for that type of orchid. If you have not enjoyed the success you think you should get try a few plants in what other growers in your area use until you find one that works well for you. Remember that as plants get bigger and require larger pots, the medium used must be coarser so that oxygen can penetrate to the center of the pot. This principle holds whether you use plastic or clay pots.

Terrestrial orchids prefer a fine mix that stays damp, while epiphytic orchids must dry between waterings. A general rule of thumb is that the larger the root of the orchid, the larger the size the medium should be. If you are a novice, be sure and ask members of your local society that bring orchids to the show table what they use for repotting different groups of orchids. Remember to ask them their growing conditions and how often they water their plants. Most experienced growers have determined whether they over- or under water their plants and have adjusted their medium to accommodate that tendency.

Paphs are the easiest to repot. They generally have fine, softer roots so care must be taken in repotting. Squeeze the pot carefully until the plant is clearly loose. If they are in clay, lay the pot on the side and gently tap the pot on a table until it loosens in the pot. Carefully slide the plant with its medium onto a clean piece of newspaper being sure that the medium and root are always in contact with the newspaper. If you do not, the weight of the medium can break roots from the plant. Gently remove the medium from the roots and once the material starts to fall off the plant can be shaken a little to remove the remaining material relatively easily. Repot in a fresh pot. How big should the pot be? Just large enough to hold the roots, no bigger no matter how large the leaves. Over potting is a major cause of death following repotting. For paphs, fill the medium to around the base of the new growth or a quarter inch above. Do not sink the plant in the medium so that leaves are buried.

My preference is to use dry medium during repotting, which prevent s wounds from becoming infected by bacteria. This also stimulates the growth of new roots because the plant responds to the lack of water by growing more roots. This works best in spring or when orchids are getting new growth. For paphs, I put 1/2 teaspoon of dolomite lime on the surface of the medium after repotting. Phalaenopsis also prefer a finer medium, but not as fine as paphs. Add coarse Perlite (sponge rock) if you wish to use the same basic medium to increase drainage. My preference is to remove flowers and wait a week or so before

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repotting. Removal of flowers usually stimulates the development of a new leaf along with its associated roots. When the new roots begin to grow, repot. Phal roots are much stronger than those of paphs and do not break as easily during repotting. It still pays to avoid breaking them as much as you can.

Cattleyas prefer an even better drained medium and need to dry out quickly. The medium should be relatively dry before you water again so adjust the type of medium to accommodate your ability to water. If you are home every day and can water you can even mount this group and avoid having to repot every few years. Most growers use some type of bark mix, usually fir, but this frequently is mixed with large sponge rock, charcoal, and redwood bark. Redwood bark is highly acidic and should never constitute more than 5% of the volume of a mix. Miniature cattleyas, especially those having Sophronitis in the background require different conditions as they have finer roots. Again roots indicate preference for moisture. Many area growers pot these in New Zealand sphagnum, which is very acidic and holds large quantities of both nutrients and water. These can be repotted annually if the sphagnum degrades, a common occurrence when high levels of fertilizer are used.

Last among the general types of orchids grown are those in the Vanda Alliance. Some members of this group have roots as big as a man's thumb and hate to be covered by any medium. Nevertheless, many commercial growers successfully use very coarse bark, charcoal, or lava rock. Most though grow this group in open baskets with little or no medium. They require lots of water, but must be dry by the end of each day or risk the loss of roots from a variety of rots.

Pests may go unnoticed until a plant is repotted. Keep an eye out for scales and mealybugs under leaves. Snails and slugs tend to be in the medium or under pots.

Slime trails give slugs away, while tiny bites in new roots can tell you that pill bugs and snails are in the medium. Next month's tips column will get you started.