April 2003

by Dr. Courtney Hackney, hackneau@comcast.net Orchid Growing Tips

Folks used to claim that my mother talked to her plants because they always grew so large and beautiful, winning blue ribbons at every flower show. While she did not literally "talk" to her plants, she did listen to them. Plants, including orchids, emit a variety of signals that can tell us what they want or when conditions are not right. Leaf color can indicate a lack of nitrogen and subtle differences in colors of flowers and shape indicate various other nutritional problems. Look at orchids at the end of a cold, gray day and one can almost "feel" their distress. Orchids emit gases as well as take them in so a day with no sun limits photosynthesis, raising carbon dioxide levels. You can detect these subtle changes, but only if you learn to listen to your orchids.

No matter how many books one buys on the subject of growing orchids, each grower must learn to listen to your plants. Plants under stress eventually produce more obvious symptoms, but the trick is to recognize the problem before there is damage. Often, there will be just one or two plants out of the collection that seems to be struggling. Check these plants for insects, especially scale.

Recently, one Phal seemed to be slightly different in color or vigor despite repotting at the same time as its neighbors. Each week it seemed to be more different. Only when it finally started loosing leaves did I remove it from the pot to find that a perfectly round piece of potting material had blocked the only drainage hole in the pot causing the loss of most roots. I could have prevented severe damage to the plant if I had only listened.

Longer days are here with days now longer than nights and your orchids are telling you that they are ready to begin to take advantage of the more intense light by putting out new leaves and growths, new roots, and even flowers for spring blooming forms. Repotting is in order for plants that need it. Vandas hate repotting and seldom need it if they are in baskets or rock. Baskets will eventually rot, especially if you have anything besides roots in them. If a plant is in a decaying basket it can be repotted by simply soaking the plant for 30 minutes so that roots become supple. Then carefully separate roots from wood. If the wood is totally decayed just remove what comes off easily and replace the entire plant in a new basket. In some cases, the vanda will have grown too tall and unstable even in its new basket. If this is the case, wait to repot when there are new roots. Cut the stem of the plant so that there are at least three old roots plus one or more new ones. Usually the old stem will develop a new lead and you will have two plants. If space is a problem put both the old stem and new one in the same basket to produce a basket that will have twice as many flowers each year once the cut stem matures and the lead stem re-grows some roots. While vandas need infrequent repotting, the other end of the spectrum is the terrestrial orchids notably paphs.

Most paphs cannot tolerate degraded media, especially when it becomes soggy and acidic. Different media and watering regimens can lengthen the time between repotting, but semi-annual repotting is not uncommon with this group. Generally the smaller the pot, the more frequently they must be watered, which leads to more frequent repotting. Other terrestrials may vary, but generally require moist media that in turn, degrades faster.

Cattleyas are a mixed lot with most doing well if repotted now, even if they are coming into flower. The best time is always just before they begin to grow new roots. Repotting will

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stimulate root growth in most hybrids and species, but avoid repotting bifoliates until new root growth begins no matter what time of year. This group can easily be lost if repotted at the wrong time. This general rule applies to hybrids as well. Every good Cattleya grower knows that the best flowers are produced when new growths are outside the pot. This has less to do with being out of the pot and more to do with the fact that such a plant has developed a large root mass to support larger flowers.

Phals should be repotted as soon as they finish flowering. If you use one of the peat-based media, such as ProMix, repotting is an annual affair. Bark mixes may last two years, but that is usually the limit. If you want a large plant next year do not wait for every flower to drop, as most will keep putting out new flowers for months unless the spike is removed. Once the spike is removed the plant will initiate new leaf and root growth, which is the perfect time to repot. It is best if the plant is reestablished in its new pot before summer's heat arrives. Seedlings are a special case, no matter what type, and generally need more frequent repotting. Phal seedlings may be repotted three times in a year going from com-pot, to 3" pot, to 6" pot (flowering size) all in one year.

Other genera vary, but seldom last more than a year in a seedling size pot. Fertilizer and water are applied more frequently to seedlings thus causing media to degrade quickly.

Determining when to repot an orchid is difficult for beginners and expert growers alike, but listening to your orchids will help you. know when it is time.