

July 2006 - Repotting

A monthly growers advice column by Courtney Hackney. Hackneau@comcast.net

Your repotting should be almost complete for most orchids now. Potting is the time when you learn how good your culture has been the past year or so. For me, it is also a time when I evaluate different media and the many experiments always ongoing in my greenhouse. I often have orchids that must be repotted that were purchased growing in different media. These orchids are examined more carefully than those in my medium because I am always interested in better ways to grow orchids. What type of medium was it? Was it in a clay or plastic pot? How many roots does the orchid have? Are there lots of dead roots? These are just some of the things I look at.

One medium that periodically surfaces in various forms is cypress mulch. This is the same stuff that can be purchased at Lowes, Home Depot or any of the large hardware/lumber stores that carry garden supplies. It is usually from Florida and made entirely of chopped pond and bald cypress. Some of the most accomplished orchid growers use this medium and their plants are reported to grow extremely well. Beginners and sometimes commercial growers often fail miserably with this product, usually, because they do not use it properly. Also, beware of products labeled as cypress mulch that are cypress mixed with other kinds of bark. Several hobbyists and commercial growers have shown me plants potted in cypress mulch that were near death because the roots had rotted. In one case, a commercial grower had planted several genera (phals, cattleyas, and oncidiums) in cypress mulch with disastrous results.

Epiphytic orchids growing in the wild use their roots for more than just getting nutrients and water. Roots are also used to attach the orchid to the bark of a tree or a rock. Roots squeeze between ridges in the bark and even under bark, if possible, to better hold the orchid in place during strong winds. While there are also occasionally roots hanging free in the air, most roots seek out a hard surface to grow into.

That is a key point that the early 19th Century European growers finally figured out. Unfortunately, the importance of this has been lost on most orchid growers today. Now, the emphasis is on fast growing genera, and media that are designed to be easy to use. Easy to use does not mean best when it comes to flower quality or growth.

The best growers of the 19th Century used osmunda fiber, the dense fibrous root mats of common European and American ferns. Most growers today that try to use

this product are very disappointed. While finding quality osmunda is a problem today, that is usually not the main problem. The problem is in how the plant is placed in osmunda. It must be packed so densely that it resembles a solid piece of tree fern. This is difficult to do. Experienced 19th Century orchid potters could pot only 6 or 7 cattleyas in an hour and used heavy potting sticks to pack chunks of osmunda around the roots. The orchid had to be so tightly packed that one could pick the orchid plant up and the pot would remain attached. New roots emerging from new growths would quickly force their way into this dense environment.

The hard-packed osmunda had few spaces that could fill with water. Any water remaining in the osmunda after watering was bound directly to fibers where orchid roots could absorb them. The acidity of the osmunda fiber limited bacteria and fungal growth even if it remained moist. After repotting, orchids in osmunda do not need to be watered as frequently, at least until new roots grow into the medium. Cattleyas potted this way rarely send roots outside the pot.

Growers successfully using cypress mulch follow almost the same principle, i.e. dense packing of the cypress mulch around roots. Initially, plants may be watered only once every 3 or 4 weeks until roots penetrate the medium. The key is that new roots must encounter a dense medium. The acidity of the cypress also inhibits bacteria and fungi just as osmunda does. Reportedly, cypress is far easier to use and pack than the sponge-like osmunda.

If you decide to try cypress mulch remember that the frequency of watering must be reduced or altered to fit the new medium. The real lesson is not to switch to a new medium until you have learned how to use it. Second is to understand the necessity of being sure the medium you use appears to be dense to new roots so they will grow into it, rather than away. Many growers interpret roots that grow away from the pot as an indication that there is not enough water or fertilizer or that the medium has soured. It can also be that the medium does not offer the proper surface for new roots.

Jacksonville Orchid Society member Dr. Courtney Hackney, Retired Emeritus Professor of Biology at the University of North Florida, is a noted author and acknowledged "orchid expert." He published a column of orchid advice that ran for many years, and we are presenting select articles with his permission.

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