

## Clay vs. Plastic Pots December 2006

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

In the latest issue of Orchids magazine, there was an article on pots that got my attention. It was not the article itself, but comments from several new orchid growers. For them, this was all new, which reminded me how important it is to review the basics every now and then. Containers used to grow orchids all have one thing in common. They are meant to simulate the environment in which an orchid evolved. Even hybrids have ancestors that grew in the wild. Traditionally, orchids were grown in clay pots because that was all there was. Now, all types of plastic pots are available, which makes the decision on type of pot more difficult. The article emphasized the fact that the pot chosen was as dependent on the grower and their propensity for over watering as it was on the type of orchid grown.

Clay pots breathe, so those that over-water are better advised to choose this type of pot. Most clay pots designed for orchids have additional holes or slots to allow more drainage and air flow. Orchids potted in a course medium in shallow orchid pots are almost impossible to over-water, especially if the medium is inert such as Aliflor, Lava Rock, or Stalite.

At the other end of the spectrum are plastic pots that do not allow air to pass through them except where there are holes, slits or grates. Plastic pots come in all sizes and colors, even clear. Clear pots are usually treated with a UV blocker to prevent the plastic from degrading and have the advantage of letting light hit the plant roots. This is more typical of the life style of wild orchids, as they have lots of roots growing attached to rocks or trees. Best of all, clear pots allow the grower to tell if the medium is wet before watering. Plastic pots are best for growers that forget to water or travel a lot and neglect their orchids. Most novice growers fail to notice that their orchids grow better in certain types of pots and assign good or poor growth to the medium or the orchid plant itself. While a good medium and a healthy plant are necessary, the type of pot in which most of orchids in a collection are growing best can indicate something about the grower.

One important caveat is that water quality may also dictate the type of pot used. Water high in dissolved salts, hard water, generally dictates that clay pots will not be as effective at allowing roots to get oxygen because these dissolved salts tend to accumulate and clog the pores of the pot. So much salt may accumulate that the pots become toxic to roots. Clay pots may appear white or even a shiny red-brown if calcium or iron is in the water. Once impregnated with salts, clay pots should be discarded as it is very difficult to return the pot to its original condition. Plastic pots do not accumulate salts and any dry salts are washed away with the next watering. Note that some types of medium, e.g. Aliflor, Lava Rock, etc may also accumulate salts.

Lastly, remember that different kinds of orchids prefer different environments. At one end of the spectrum are vandaceous orchids, which must dry quickly, followed by cattleyas, dendrobiums, the oncidium alliance, then Phalaenopsis and, finally, the almost-terrestrial paphs. It is hard to over-water two major orchid groups, phrags and



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dendrochilums. Sort these different types of orchids and determine if they are telling you anything about how you water or what types of pots should be used.