

Phalaenopsis and Potting Mixes February 2002

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

It can't be winter without at least one month's column about Phalaenopsis. Phals are now the most popular orchid in the world thanks to the mass production of this group as a pot plant. The growing of Phals has been left to the commercial growers by most that enjoy their flowers, but there are still a few of us that prefer to grow our own. Opinions as to the best media in for growing Phals is about as changing as the weather.

Many growers attempt to use the same media as pot plant growers. If you have had success or not with these media, remember that commercial growers have the luxury of discarding plants that do not grow and are able to carefully control water and fertilizer to maximize growth. At the slightest hint of disease, plants are given a potent treatment. One of the most important elements of commercial culture is the ability to get plants into and out of a specific pot size in months instead of years. This allows the grower to use media that degrade quickly, especially when high levels of fertilizer are used; media such as ProMix and other peat based mixes.

For many years a wide variety of media have been used on Phals in my greenhouse with varying degrees of success. Each year has included an evaluation of what worked and new ideas for next year's efforts. This year there will be very little new media experimentation because my Phals seem to have maximized both flowering and growth with my present media, fertilizer, and light regimen. For those still searching for the right media here is my current technique that has worked well in a greenhouse with no summer cooling and high heat. It has even done well during this year's drought when well water was used. What is my reason for stopping and not doing additional experiments? Plants as now as large as I have ever obtained, with more, larger flowers coupled with almost no rot problems for the entire year.

Species are all grown differently. Hybrids with Phal violacea and Phal lueddemanniana-like species are grown in baskets or mounted. Phal schilleriana hybrids are grown in higher light and allowed to dry thoroughly before watering. They are also grown in 50% coconut chips and 50% sponge rock. Phal gigantea and its hybrids are grown even drier and brighter receiving light levels designated for Cattleyas. They are potted in clay pots with bottom 1/3 of the pot filled with lava rock and the remaining part filled with a mix of half lava rock and half coconut chips. Plants are allowed to dry thoroughly before watering. Phal amabilis and other large flowered species are grown as hybrids except they have extra sponge rock in their mix.

Hybrids in 4" pots or less are potted in 50% ProMix and 50% #3 sponge rock and put in plastic pots. All larger plants are placed in standard clay pots. Air and water can move through clay pots preventing stagnation of the media. In each clay pot, the bottom one inch is covered with lava rock. After the plant is placed in the pot, roots are covered with the same 50/50 ProMix sponge rock combination as above, but not all the way to the final level. The final ½ to 1 inch is covered with either medium fir bark or coconut chips. The presence



Phalaenopsis and Potting Mixes February 2002

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

of bark or coconut at the surface facilitates the entry of roots into the media and prevents the ProMix from being splashed out. Phals in 4" pots must be repotted within a year, usually by the end of nine months, even if they are not ready for larger pots. When plants in 4" pots stop growing repot, even if it is less than nine months. ProMix has a good dose of fertilizer that lasts 6-9 months under these conditions.

Phals in larger pots can go longer without repotting. Roots were still in good shape after 15 months when they were repotted. Most of the ProMix washes through after a year leaving just sponge rock and bark from above. Most of these plants were repotted last spring, but a few just had additional bark added on top to determine if they could go another year without repotting.

Large plants benefit greatly from the extra drainage of both the lava rock and sponge rock, but like the extra moisture and fertilizer in the ProMix as they grow new roots. The bark at the surface seems to allow the whole pot to dry at about the same time, even when the pot size was 10". Best of all, the weight of the clay pot and lava rock kept the pot from falling over when in full flower. When repotted, Phal roots were tangled all around the lava rock indicating that roots were living and growing all the way to the bottom of the pot.