

by Sue Bottom, sbottom15@gmail.com

It's July in St. Augustine. The spring chores have been completed, the plants have been moved to their summer homes and all the repotting has been completed, except for those bifoliate cattleyas that haven't yet initiated root growth. You learn a lot during the repotting process. If you inspect the roots carefully you will be able to tell what worked well and what did not work so well.

The cattleyas benefited from all the Styrofoam in the bottom third to half of the pot. Although this did not leave much room for potting mix, the roots thrived. There was plenty of air in the bottom of the pot and they got the moisture from the mix above it. The bottom center of the pot is always the last to dry out, and in prior years the roots from this area have been a rotten, sodden mess. Styrofoam peanuts work, but even better are coarse chunks of the soft Styrofoam from packing materials. You can break these into whatever size works in the size pot you are using.



1. Fill the bottom third or half of the pot with Styrofoam chunks, then a little potting mix. Roots won't get soggy in the bottom of the pot, even if you are a serial overwaterer.



2. Your spring blooming phalaenopsis should all be repotted before Independence Day, even if it means cutting off the blooms. The phals are actively growing in June and will reestablish quickly.

On the negative side, the phalaenopsis really suffered this year based on the almost nonexistent root mass found while repotting. In retrospect, they were potted too late last year, it was well into July when they were all potted up and the stress of the repotting plus the heat made them slow to reestablish. They were also overdosed with Purely Organic fertilizer that was added directly to the ProMix while repotting. This year all the phals were repotted by mid-June with only a little timed release fertilizer added on top. We'll save the Purely Organic for top dressing in the fall when the root system is reestablished and healthy.

Now it is summer. If you are growing in a greenhouse or other enclosed structure, heat is your enemy. Many orchids do not like temperatures above 85F, and even the tough ones



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struggle with temperatures above 95F. You will have to find ways to increase ventilation and fresh air movement, with removable panels, retractable curtains, top vents, exhaust fans, etc. Underbench misting or spraying the walkways and outside of pots can also help cool temperatures. Overhead misting during midday can be problematic, causing rots and fungal problems.

Growing outside under trees or other shade is great for the plants. They love the fresh air and day/night temperature change. Being watered by Mother Nature is wonderful, up to a point. The pure rainwater is a refreshing break from our well water containing so many soluble salts. Even many of the public water supplies have an excessively high soluble salt level, particularly those using water supplied by JEA or by the main plant of the St. Johns County Water Department. Daily thunderstorms can result in excessive leaf wetness conducive to roots and fungal infection so good air movement is critical. Too much moisture, or more accurately too little air, can also be a problem for roots. If you cannot control the water your plants receive, baskets with no or very little media may be a good choice.





3. Scale infestation can be treated with a isopropyl alcohol and a Q-tip or spray with the home remedy 1 part alcohol, 1 part Formula 409 and 2 parts water.

 Black rot, hot humid weather and moisture favor this cattleya killer. You must quickly cut away infected tissue in order to save the plant.

This time of year, you must be vigilant about pests and diseases. If you grow cattleyas, scale is Public Enemy #1, hiding under papery sheaths, in leaf axils and on rhizomes. Mealybugs seem to gravitate to tender new growths on all types of orchids. Thrips can damage flower buds before they even open. Mites are attracted to thin leaved orchids, and catasetums, grammatophyllums and many dendrobiums are often targeted. You must be able to recognize these pests and the damage that they cause. Be prepared to respond quickly when an invader is detected. There are home remedies and various chemicals that can be used. Check the SAOS website for help in learning how to detect and eliminate pests from your growing area.

Precautionary sprays are typically not recommended for pests, but may be highly desirable during periods when disease pressure is high. Fungicides and bactericides typically do not cure a problem, but provide a protective coat of armor on the plant to prevent the disease from gaining entry. Hot humid weather, excessive leaf wetness and gray gloomy



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days are all danger periods during which you should be on the lookout for blackened or softened leaf tissue. The <u>SAOS website</u> has lots of images to help you identify diseases and help prevent their recurrence. Tropical storms and hurricanes are always a concern for our plants. The article <u>Hot Humid Summers and the Tropical Storm Season</u> has some additional suggestions you may find helpful.

Summer challenges aside, there are many orchids blooming through the summer. Vandas love the heat, humidity and fresh air of summer. This is the blooming season for many of the bifoliate cattleyas, that torment us by blooming at the same time as initiating root growth making repotting a challenge. Brassavola nodosa and its hybrids seem to bloom several times throughout the summer. There are also those summer blooming phalaenopsis that enchant us with their fragrant blooms. Enjoy your plants, that is why we grow them!