



St. Augustine Orchid Society

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Try New Things

by Sue Bottom, sbottom15@gmail.com

Orchid growers are always tinkering with their growing regimens and experimenting with different approaches. Courtney Hackney likes to see how newly purchased orchids growing in different commercial mixes will fare in his greenhouse. He watches the plant carefully of course, to see whether the mix will get thumbs up or thumbs down under his growing conditions. Some cattleyas he has purchased in cypress mulch have had a fabulous root system and growth response, so the search is on for a reliable source of high quality cypress mulch (a product that unfortunately is quite variable in quality based on our local experiences). Some of the plants he has gotten in sphagnum moss were found to have compromised root systems. Whether the moss was too old, of low quality or just stayed too wet, the experiment was terminated and the plants repotted into his mix of choice.

Catasetum Heresy. Today's *Catasetum* growers are told repeatedly that *Catasetums* require a dry winter, and that all water should be restricted during dormancy. I have generally followed this advice except for the couple of plants that refused to drop their leaves like *Ctsm. discolor*. This year the resting *Catasetums* were put in a dryish section of the hoop house, but they did receive some overspray from the overhead misting system. Not only did they not suffer any negative consequences from the misting, the bulbs remained plump showing no signs of winter dessication. For some interesting observations on winter watering, take the time to reread Stephen R. Batchelor's 1983 [article](#) on *catasetum* culture as a function of growth cycle (*Orchids*, 52:11, 1163-1169).



1. The white, plump roots on the left are healthy and ready to fuel this year's growth, this plant was slip potted. The plant on the right has some healthy roots and some not so healthy, these roots were cut away so the plant could regenerate fresh roots.



2. Some of the *catasetums* with healthy root systems were slip potted, dropped into larger pots with a little extra moss. This means the pots are larger than in prior years, but the plants do not seem to mind as long as there is enough Styrofoam at the bottom.

The new growths began to appear in December and January so it was time to start repotting. The root systems were so robust that it was difficult to get the bulbs out of the pot, even with a knife. Time for *Catasetum* heresy #2, each pot was set in a bucket of water so the roots could absorb moisture allowing the plants to be removed more easily from the pot. With a little urging from the knife, they popped out of the pot without too much damage to



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the roots. This clearly violates the rule about no watering of plants until the new roots/growths are 4 or 5 inches tall.

Then it was decision time, cut away all the old roots and pot up the bulbs as has been my practice for so many years? After hydrating the root mass, it was easy to tell whether the roots were healthy or distressed. When there was a dense mass of white, thick roots throughout the pot, this pot was simply dropped into a larger pot with a little extra sphagnum moss. Grayish, dry looking roots were removed, often to the base of the pseudobulbs. Sometimes there was a very healthy section of roots in one area of the pot and not so healthy roots in other sections, for these a hybrid approach was used in which only the viable roots were maintained and surrounded with fresh sphagnum. The lesson learned from this experience is you should know the rules as well as understand the reason behind the rules. After that, trust your instincts. Do not be afraid to break the rule if it seems like the right thing to do.

There are some new products we will be trialing this year, as well as some new ways of using old staples from the potting shed.



3. Tired of your shears getting dull and rusted after a few months of torching? Try a more heavy duty shears sold for trimming sheep hooves. They are thicker, stronger and more resistant to dulling. Hat tip to Keith Davis.



4. Lubber grasshoppers are attracted to the bran at this bait station. You can use NoLo bait early in the year to infect them with a pathogen, or poison them with EcoBran later in the year. Hat tip to Linda Stewart.

Sheep Hoof Trimming Shears. Christmas arrived early when I received a package from Keith Davis containing two sets of shears and along with a catalog from the Mid-States Wool Growers. The shears are tough, sharp and durable, designed for cutting sheep hooves. One of the shears is the ARS Hoof Shear, described as being “made of a high carbon steel, precision ground, and hardened for strength. Because of the thickness and strength of their blades, they can be sharpened many times over”. The second was a Saboten Hoof Trimmer described as “lightweight, easy action, very sharp, making for easy cutting”. I am hoping this will solve my shears dilemma where I buy five or six pairs each year and the torch dulls them



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quickly. Even though Terry sharpens them, they have to be replaced at the end of the year. So far, these shears are great. Only Keith would come up with the idea of using these on orchids. Of course, this is the same guy that gets iron filings from the shop that turns brake drums as a supplement for his rupicolous laelias and uses a clothespin to train his flowers to display properly.

Bran Flakes for Lubbers. Grasshoppers, and more particularly, lubber grasshoppers, can do quite a bit of damage to your orchid plants and flowers. Lubber control used to consist of “capture and stomp”, until one of my friends in my Orchid Club told me about NoLo bait, also sold as Semaspore Bait. Linda spreads the bait around her property in the spring when the lubbers first emerge from the ground. They are attracted to the bran and consume the *Nosema locustae*, a target specific pathogen that infects and kills 90 species of grasshoppers, locusts and crickets. The Arbico Organic website states “Death may occur in 1 to 3 weeks in juvenile grasshoppers. Third instars or older may take more time to die. The insect pathogen multiplies in infected grasshoppers and passes from grasshopper to grasshopper throughout the season.” The product is easy to apply, certified for organic production and reported to be harmless to humans, pets, birds, beneficial insects and other wildlife. I got the product midsummer after the lubbers were mature, so also ordered some EcoBran from Planet Natural. This bran bait is treated with Carbaryl, the active ingredient in liquid Sevin, and is intended for a quick grasshopper and cricket kill. Next year the applications will start much earlier, with hopefully even better results.



6. Using seaweed and rooting hormones is not new, but spraying a root stimulant on the cattleya pseudobulbs and roots during repotting is a novel approach. Hat tip to John Stanton via Courtney Hackney.



7. Orthene is a very affordable systemic pesticide that has been used by orchid growers for ages. Try applying it as a drench to eliminate damage to your flowers and buds from thrips. Hat tip to Ben Oliveros.



8. If you are looking for something to mash up the plant tissue in the mesh bag when testing for virus, keep a hammer in your potting area. Hat tip to Plato Matthews.

Dip 'n Grow Liquid Rooting Hormone. There are many different substances that orchid growers use to stimulate root growth; from natural products like kelp that contain rooting hormones to synthetic products of various formulations and strengths. Dip 'n Grow is a synthetic auxin formulation containing 1.0% indole butyric acid (IBA) and 0.5% naphthalene acetic acid (NAA) dissolved in an isopropyl and ethyl alcohol solution. The IBA in alcohol-based products is designed to be readily absorbed into the plant tissue. John Stanton of the



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Orchid Trail in North Carolina told Courtney his trick for applying the auxin to get the best response. He uses the midrange 1:10 dilution rate and places the liquid in a spray bottle. When he has prepared the plant for repotting, he sprays the forward part of the rhizome to encourage root growth and then repots it, letting it dry slightly before drenching the pot. This seems to be a more targeted approach than just drenching with a seaweed solution after repotting and letting much of the active ingredient be washed from the pot. This product in and of itself is not that unusual, it is the way in which it is applied that is so clever. We will be using this during the repotting season and will report on the results. We hope to get the profusion of roots in recently repotted orchids as John reports, particularly for those sometimes-difficult bifoliate orchids that are so sensitive to repotting mistakes.

Orthene Drench for Thrips. If you have been tortured by thrips ruining your buds and flowers, you might consider an Orthene drench. When sharing my thrips frustration with Ben Oliveros of Orchid Eros, he mentioned that he had tried everything to get thrips under control including some of the new, multi-hundred dollar insecticides. Then one day he decided to use an Orthene drench despite the oft-repeated admonition that many pests have become resistant to Orthene. He added Orthene to the Dosatron suction bucket at a rate equivalent to 1 tsp/gal (1.3 ml/l) and drenched his plants. The Orthene was absorbed up through the roots into the plant and prevented thrips damage for 4 to 6 weeks. I repeated his experiment with the same great results and seem to have broken the cycle of recurring thrips damage in the greenhouse. After mentioning this success story with George Hausermann, he laughed and talked about his experience when EFG first relocated to DeLand where there were many local fern growers for the florist trade. At that time, Orthene was ineffective in his greenhouse due to resistance problems. Many of these fern growers sustained damage after the hurricanes of 2004, and never rebuilt their operations. Now George can use Orthene again with great results, because his insects have not been exposed to it so they have not had a chance to develop resistance to the active ingredient Acephate.

Hammer for Virus Sample Prep. I continue to test for and find virus in my cattleyas. The good news is that the cattleyas exhibiting the symptoms of virus in their leaves are gone, but I continue to find color break and necrotic streaking/spotting in the flowers. At one of the Cattleya Symposiums, I overheard Plato Matthews talking about how he prepares the leaf sample for testing with the Agdia strip with a hammer. Hmm, much more effective than the meat tenderizer I had been using. I have yet to determine how the virus is being transmitted despite all my sanitation precautions. I haven't made the leap to using gloves during repotting. Perhaps I will this year or perhaps I'll just keep a spray bottle of Lysol General Cleaner handy and wash my hands between plants.

Do not be afraid to try new things. You do not want to be stuck in the "this is the way I have always done it" mindset, neither do you want to try out every new suggestion on your entire orchid collection. Approach the change as you would a scientific experiment. Consider what you are trying to achieve; think through what result would constitute a success and what would be considered a failure. After that, your powers of observation will tell you if it is time



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to cut your losses and end the experiment or expand it to a larger trial. Try new things, as my Sainted Mother used to recite, “Every day, in every way, I am getting better and better”.

Citations and Additional Reading

Batchelor, Stephen R. 1983. Beginner’s Series 30, *Catasetums and Cycnoches – Part 6 - Culture Influenced by Growth Cycle*, *American Orchid Society Bulletin*, 52:11, 1163-1169.

www.aos.org/am/images/pdf/beginners_series-ctsm6.pdf