



## St. Augustine Orchid Society

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### Summer Orchid Growing

July 2001

by Dr. Courtney Hackney, [hackneau@comcast.net](mailto:hackneau@comcast.net)

[Orchid Growing Tips](#)

Now is the time when many Orchids put on most of their growth. Those with pseudobulbs often have very discrete growth periods when they add new roots and leaves. Many vandaceous Orchids grow anytime there is an adequate amount of heat, light, and water, but again this happens mostly during summer in the Carolinas. Providing your Orchids with everything they require will maximize the quality and quantity of the flowers you will see later. Fertilize now just about every time you water with a weak solution of a growth-type fertilizer. My favorite is Peters Cal Mag 15-5-15. The Nitrogen is mostly in a useable form and the extra Calcium and Magnesium make hard growths. The ideal strength is 100 ppm Nitrogen. If you use pure water at 0 ppm and the addition of fertilizer raises the soluble solids to around 220 ppm then you have reached your maximum.

It is always better to add less than more when it comes to fertilizers. Too much fertilizer makes soft growth that is susceptible to rots and which is easy to damage. Over-fertilized Orchids do not produce good flowers even though the plant looks great. Well-grown Cattleyas have leaves that are slightly yellow. Phals and Vandas should have light green leaves that are relatively hard and thick. If you are not sure how much fertilizer to add, be cautious and use a quarter of what you think you need. Most fertilizers that recommend ½ to 1 teaspoon per gallon are best at 1/8 to ¼ teaspoon per gallon.

There are many tricks to adding fertilizer, some of which are useful for the hobbyist and some of which are not. One obvious one is to fertilize after the plant is wet. Dry Orchid roots shed water and any fertilizer it contains. Wet roots have already absorbed water and will not be damaged by fertilizer even if you add too much. How do you get the proportions just right when you fertilize? If you have a few plants a bucket of water or watering can is perfect for mixing fertilizer. Immerse the whole plant in the fertilizer mix. Plants will absorb fertilizer through leaves as well as through roots. When you remove plants be sure that you get all water from the crown of Phals and other soft-tissue Orchids. Soft tissues of Cattleyas and even Vandas can develop rots if fertilized water is left standing anywhere in the plant.

Most hobbyists are surprised at how infrequently many commercial growers fertilize. To fertilize in the ideal manner is a time consuming task so most commercial growers use stronger concentrations once a month or less. Others use Osmocote or some other slow release fertilizer. A new product from Japan, Nutricote, supposedly releases nutrients slowly enough that roots are not damaged. There are several plants in my greenhouse that are now getting this treatment. By next year it will be obvious if this is a product worth recommending. Carter & Holmes sells small amounts of this if you want to try some. Use it on plants that are not your favorites first. Many of my experimental plants never recover from the new, improved whatever.

Several companies make liquid fertilizers that add methanol to the mix, which causes the fertilizer to pass into tissues more quickly. There are many reports of improved growth with these fertilizers. In my experiments, they were no better than Peters Exel Cal Mag and



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actually seemed to damage seedlings that got too warm before their surfaces dried. Liquid fertilizers also tend to be more concentrated and so a mistake in dilution can have serious consequences. Remember, you are always better adding too little than too much.

Keep your eyes open for insects, snails, and slugs as they also grow quickly in summer's heat. They will slip into plants placed outside and get into the greenhouse without being seen. Keep a close eye on your plants and look for signs of damage. Slime trails on the sides of pots in the morning will tell you they are there. I was surprised at the number of slugs found among the crock in the bottoms of pots when I repotted this year. Plants that have not been repotted for a few years are the best place to find both slugs and other pests. Systemic pesticides work well when plants are growing. They are much less effective during times of the year when plants are not growing. In an ideal world, you would not use any pesticides, but be ready to recognize these pests early so you have to use them only occasionally.

At the beginning of this month's column, I noted that most Orchids are now in a growth mode. If you have any that are not, it may be time to take action before the growing season is over. Paphs are the ideal candidate to check because they suffer when they lose roots. Every Paph I checked this spring that was not growing well had lost most of their roots. I also repotted several that were doing well and they all had excellent root systems. Poorly growing Paphs and other Orchids repotted now will have a much better chance of surviving if repotted during the growing season rather than waiting until next spring.