

by Dr. Courtney Hackney, hackneau@comcast.net

Theoretically, it is spring, although outside temperatures argue otherwise. Your orchids know the date and are responding with new growth and roots as long as you have maintained appropriate minimum temperatures. This time of year, it is easy to forget about the dramatic fluctuations in outside humidity. This single variable is important when deciding whether to fertilize or water.



If your growing area is getting colder than the ideal it is best to keep your orchids drier than usual to avoid the bacterial and fungal rots. When the humidity is low, as is often the case in cold weather, orchids will dry faster. When cold weather is outside the door, it is better to err on the side of keeping orchids on the dry side. Very soon, both the angle of the sun and rising humidity will provide ideal growing the conditions for most orchids. Begin fertilizing lightly now, but increase the frequency once warm weather arrives. Should humidity remain low as light intensifies. add an additional

watering. My rate of watering at this time of year is twice what it is in mid-summer when humidity is high.

My rate of fertilizing is 1/16 of the recommended dose, but applied 3-4 times per month instead of one application. This time of year I like to alternate between organic fertilizers, such as fish emulsion, and inorganic types such as a balanced Cal Mag. Once greenhouse daytime temperatures exceed 90 F on a regular basis, I avoid using fish emulsion and other organic fertilizers. At those times, it is best to use a fertilizer that provides nitrogen in the form of nitrate or ammonia, instead of urea. Bacteria use urea and in the process degrade organic potting media and do so very efficiently under higher temperatures. Urea is found in many fertilizers and should be avoided, especially in the heat of summer.

Mature cattleyas complete their new growths quickly and then do not need heavy feeding. Seedlings, however, benefit from regular fertilizing as do many other orchid genera. Phalaenopsis, vandas, and any group from hot climates will grow better in the summer and



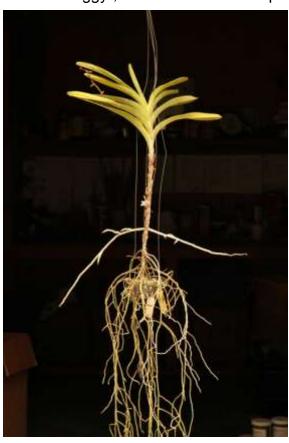
## Spring Watering and Fertilizing April 2013

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appreciate a constant addition of dilute fertilizer. Remember the phrase, water weakly, weekly.

If you have just a few orchids make fertilizing simple and apply the slow release Nutricote for most orchids now. That should last six months.

Vandas are one of the groups of orchids that love the heat. If you have a vanda that has become "leggy", i.e. leaves on the top of a long stem with roots at the bottom this is the



time to make it more manageable. Vandas that are moved in and out of a sunroom often develop this "leggy" characteristic. Besides being unsightly, vandas with this characteristic seem to slowly go downhill with respect to flower numbers and quality.

There is a solution and it is fairly straightforward. First, soak roots and stem until the stem including the base of leaves that have dropped off is soft. These often become very brittle and prevent new roots from emerging. Soak some sphagnum (Chilean or New Zealand) and wrap it around the stem two inches below the lowest leaf. A mesh bag or pantyhose should be wrapped around the sphagnum and stem to hold the sphagnum in place. Water normally and by the end of summer there should be a flush of big roots pushing out the sphagnum. Once roots are two or three inches long, cut the stem just below the bottom root and place the plant in a new basket. Be sure the roots are either staked in the basket or somehow firmly placed in the basket. Be careful with the new

roots in the process. The new roots should quickly attach to the basket and be ready for winter. There might also be a new sprout or two at the top of the stem you just cut, if so, do not throw it away. If you lack space, make a new friend with a gift.