

## May 2011 - Watering and Low Humidity

A monthly growers advice column by Courtney Hackney. [Hackneau@comcast.net](mailto:Hackneau@comcast.net)

Once again, I find that I have misjudged how quickly my orchids are drying out. While the humidity has been low for the past few months with lots of bright sunny days, it still surprises me how quickly pots dry each year. This year, the wakeup call occurred when I began to repot cattleyas from a crowded bench. Despite a heavy drenching earlier that morning, some of the pots were very dry. Clearly, I was not getting water into the interior of the bench.

Many years ago, an old-time commercial grower demonstrated how his growers were instructed to water. It seemed silly at the time, but his method of watering at a sharp angle really does work. When cattleyas are placed on a bench and allowed to grow, their leaves will cover the surface above the pot to maximize light capture. Watering directly onto these plants from above allows water to flow around the pot. A good drenching means that the water flows generously through the pot. Watering at an angle can accomplish such a drench and soak the medium.

This time of year, soaking orchids is necessary if you are going to deliver adequate water to the roots. Later in the year, when humidity is high, it is much easier to get pots soaked. The same is true for Vandas and other orchids hanging in baskets. It is necessary to water more frequently and to make two trips across the benches to really wet plant and their roots.

Watering at night or late afternoon is strongly discouraged in most "how to" books. However, this is what happens in Nature and is practiced by many commercial growers, especially in the tropics. It also works for me here in Florida if I can meet the following criteria. The daily humidity is relatively low, my greenhouse is open with great air movement, and night temperature is above 60 F. I water late afternoon and plants are still wet in the morning when I water again with a dilute dose of fertilizer. As soon as I began the practice this spring my orchids immediately perked up. Once humidity gets high again, usually in May or early June, the rate of drying declines and I begin the normal early morning soaking practice.

Obviously, if other media are being used, e.g. sphagnum, it is relatively easy to wet your medium. While it is easy to wet sphagnum, some media that hold water well most of the year may be hard to wet. Media (and soil too) become hydrophobic if they are dry too long under low humidity. Fir bark is vulnerable, especially if a white mold appears on the surface. Once this appears, it becomes almost impossible to adequately wet the bark and repotting becomes necessary.

Soaking all media is best, even if it wets easily. My experiments using sphagnum showed me that tightly packing sphagnum in the pot worked best for that medium. If packed properly, water will actually sit on the surface and only slowly drain through the medium. If you are growing in sphagnum, which is a common medium for pot plants, be sure you flush the pot at

least once a month or high levels of salts will accumulate. This may require two passes through the greenhouse or in your sink.

Air conditioning has or will become necessary throughout the South soon. If you grow inside under lights or in a window, you will experience what those of us growing in a greenhouse have been experiencing, low humidity and rapid drying of pots and plants.

If there are spikes with a few flowers left on your phals, consider cutting the spikes off. First bloomed orchids will appreciate this and start their growth cycle earlier.

You should already be applying fertilizer so that increased light levels can be converted into more roots and leaves by your orchids. Remember, fertilize weakly weekly, using just  $\frac{1}{4}$  the recommended fertilizer concentration. This remains one of the hardest things for most new orchid hobbyists. If you are using Nutricote, also known as Dynamite, no additional fertilizing is necessary, but continue to flush once a month.

*Jacksonville Orchid Society member Dr. Courtney Hackney, Retired Emeritus Professor of Biology at the University of North Florida, is a noted author and acknowledged "orchid expert." He published a column of orchid advice that ran for many years, and we are presenting select articles with his permission.*

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