

July 2012 - High Humidity & Rain

A monthly growers advice column by Courtney Hackney. Hackneau@comcast.net

It has finally begun to feel like summer here in Florida, not just because days are creeping into the 90s, but because humidity levels are now over 60% all day long. This is also a time when afternoon thunderstorms are common, followed by warm, humid nights. Some types of orchids are from just such a climate, but many more are not and prefer much cooler nights. Anytime an orchid is living under conditions that exceed what is normal for that species or its ancestors, it is time to watch for stress-related diseases.

Many hobbyists confine their orchids inside in windowsills or under lights until it is warm enough to put them outside. Orchids thrive under such conditions, but become susceptible to staying overly wet if afternoon rains occur every night. A medium that may be perfect inside the house requiring you to water once a week or so may be terrible if it is wet every afternoon. Often the orchid will look great with new roots emerging and spreading out of the pot, but later in the summer leaves can turn black and the orchid die. That is caused by roots staying too wet down in the pot.

I put some orchids outside that are in baskets or mounted. They can be wet every night and there is no danger that the roots will rot. Up until the past few weeks, the opposite was occurring; low humidity and no rain were causing leaves to shrivel. A couple of weeks of regular rainfall and humidity, however, has reversed the shriveled leaves and produced flushes of new roots on vandas, encyclias and even cattleyas growing in pots with lava rock as the medium. Notice that no phalaenopsis were listed as hanging outside. Unless they are mounted or potted in rock, they do not do well outside. Phalaenopsis can hold water in their crowns and after a couple of days of afternoon thunderstorms, suddenly rot.

Just because you have your orchids safely in a greenhouse or covered area does not mean there are no potential problems. If you have over-fertilized or purchased seedlings from nurseries that have pushed their seedlings to grow rapidly, you will likely have problems with various soft rots. Usually, rots begin in new growths, but can quickly spread to the entire plant and kill your prized orchid. The more valuable the orchid, the more likely it is to rot and die; it's a rule.

Increasing air movement is an easy way to limit rots, but most of us have more plants on our benches than is ideal, which limits air flow. If your growing area is enclosed at night, spores will also build up and potentially cause rots.

Every orchid will have rot problems at some time, but really good growers recognize and stop rots quickly or stop them before they start. You can spray the floor of your greenhouse with a 5% Clorox solution, which will destroy fungal and bacterial spores. It is a good idea to wet your orchids first in case you get any of the Clorox solution on them. There are also products like Dithane M-45 that has been around awhile that is available and effective on rots. Physan 20 is the same product that is used to sterilize food containers and effectively kills spores on non-living surfaces. There are a number of products that are approved for application to orchids that kill bacteria and fungi, but use them all with caution.

For small problems, keep a spray bottle filled with hydrogen peroxide, the same concentration you have in your medicine cabinet and a shaker of cinnamon powder handy. Usually, if you find a small problem with rot, you will soon see other plants nearby also become infected. Spray the infected plant and nearby ones with hydrogen peroxide and keep the area a little on the dry side. Add an extra fan directed at the area to keep spores from starting to grow. If that does not work you may need one of the more potent and registered products and treat all of the plants in the entire greenhouse.

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.

Citation - Hackney, C. (2012, July). July 2012, High humidity and rain. Retrieved from http://www.rose4art.com/Growing-tips/high_humidity_and_rain.html