

November 2010 - A "Greener" Greenhouse

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

Have you ever considered growing your orchids using natural controls for disease and pests. There are a number of articles in orchid growing magazines suggesting various ways to use natural mechanisms in managing an orchid collection, but they are difficult to use and certainly not 100% effective.

Commercial greenhouses typically go the other direction, trying to maintain as sterile a growing area as possible; no pests, weeds or disease. Their goal is to produce perfect looking plants that can pass any inspection when shipped. Most do a great job, but use many different control measures that are not always the best for the environment or people. They succeed largely because they only grow the orchids for a relatively short period of time and then they start over with new seedlings.

Those of us who maintain collections and plants, some of which may be a 100+ years old, do not have the luxury of starting out with pest or disease-free plants every season. We get whatever comes with the plant when we acquire these old clones and divisions. On the other hand, we are not in business to grow plants quickly or to produce perfect looking plants for sale to the public.

A few decades ago, farmers in the U.S. adopted a strategy of not using pesticides or herbicides until the problem reached the point where not treating cost more than letting the problem continue. As a result, pesticide and herbicide use declined and farmers made more money; a perfect win-win for farmers and the environment.

This has been my approach for many years. My greenhouse is home to several dozen anole lizards (brown and green), Mediterranean geckos (nothing like the GEICO one), hundreds of cricket frogs that are just a ½" in size, a few green tree frogs, 3 or 4 toads that frequent the damp areas under the benches, and a snake or two (which may explain where one of the toads went).

The fact that these predators seem to maintain a healthy population suggests that they have plenty to eat. When I visit my greenhouse at night, I find a few insects on the surface of the media, but not many. My predators feed on any small insect they find during the day and night. None of these predators impact cattleya scale at all, so

I use a hormonal pesticide (Distance) for control. This spray doesn't seem to impact any of my predators.

An orchid-growing friend asked me if I ever had problems with thrips. In the past, there have been one or two incidents, but the thrips just disappeared fairly quickly. I found some on a Camellia flower bud last week and decided to try an experiment I hope I do not regret. I placed the flower bud, thrips and all, in my greenhouse in a flower tube. When I came back in 15 minutes or so one of the Carolina anoles (green ones) was on the bud and not a thrip was to be found. The lizard looked happy too.

The only other pest problems my natural predators seem unable to handle are roaches (huge roaches, called palmetto bugs here in Florida) and slugs. While toads will eat slugs, toads tend to stay on the ground, while slugs love to get in the bottoms of pots. Both of these beasts love to eat new roots and flowers. Looks like I need to find just one more predator to add to my menagerie; one that is not afraid of palmetto bugs and slugs that feeds at night. Any ideas?

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. (2010, November). November 2010 - A "Greener" Greenhouse. Retrieved from <http://www.rose4art.com/Growing-tips/A%20greener%20greenhouse.html>