St. Augustine Orchid Society
www.staugorchidsociety.org

The Darwinian Approach to Orchid Collections

November 2009

by Dr. Courtney Hackney, hackneau@comcast.net

Orchid Growing Tips

Charles Darwin would be proud if he had seen my approach to selecting phals this past year. Just a few years ago many of the phals from the new breeding lines were fairly expensive and hard to find. Today, we are inundated with large numbers of excellent clones of all types of phalaenopsis. As a result, most of us have more phals than space; hence my need for "the Darwinian approach".

While flowers on many of these mericlones are spectacular with large flowers or spectacular spots and stripes, the plants that produce them can sometimes be difficult to grow in the home or greenhouse environment. In some cases, these phalaenopsis were never easy to grow except under very strict environments with lots of fertilizers. One recent email contact said that most of the clones he tested were virused, something I have noted in the past with many mericlones.

So how does one decide to keep some phals and discard others? This is not as easy as it sounds. Often, when store-bought phals are repotted there is a relatively long period of recovery as it gets new roots and leaves. This can take several months or even an entire growing season if the phal had lost its root system entirely. This period of recovery can mask the normal growth of a very vigorous phal.

At most commercial nurseries where these phals are grown, there is extensive use of fungicides and bactericides that can hide inherited susceptibility to disease. Unless a hobbyist has and uses some of the really effective, but restricted, products you are not likely to be able to provide the same level of protection.

Expose a bench of newly repotted phals from the pot plant trade to disease and many of these mericlones will be very susceptible to diseases that are common. Other clones rarely become infected, even

The Darwinian Approach to Orchid Collections

November 2009

by Dr. Courtney Hackney, hackneau@comcast.net

if their neighbor has become infected. Susceptibility to rots can be a genetic characteristic inherent in some clones, especially when they are grown in temperatures higher or lower than the ideal.

Instead of selecting phals based on the best flowers or because they have awards, I have discarded any that continually developed rots. Modern phal clones are all great, so little loss of quality resulted. There were clearly a number of breeding lines that were less susceptible to rots than others. These were selected and kept, while others were discarded with very similar genetic backgrounds.

The great advantage of having such a large supply of inexpensive phals with great flowers is the ability to discard those that do not grow well instead of spending lots of time and space taking care of weak phals. Years ago, phal hybridizers employed this approach and discarded weak seedlings. Now, however, disease control allows growers to mass-produce phal clones with great or unique flowers no matter how difficult the clone is to grow under normal conditions. In the past, I maintained these in my collection, but now have the ability to discard them since similar clones that grow better are available. This is a fantastic time to put together a great phal collection for what would have once cost a fortune.