

Summer Tips June 2002

by Dr. Courtney Hackney, hackneau@comcast.net Orchid Growing Tips

Summer officially arrives later this month along with the longest day and the most intense sunlight. Even the most sun loving Orchids now need protection from the midday radiation. Heat and light also mean that plants are using more water and growing at rates not seen for many months. No matter what kind of Orchids you grow, now is the time to increase water and fertilizer.

Most Cattleyas have new growths developing. Be careful as you apply fertilizer not to overuse Nitrogen, as it will lead to weak growth that is susceptible to rots later on. What is a high N fertilizer. Generally if the first number in a fertilizer formula is the highest of the three it is considered high N. For most fertilizers, the first number is deceptive because it describes total Nitrogen instead of useable N. If the formula says 30-10-10, the implication is that there is three times the available N compared to the second, which is Phosphorus. If, however, the N is composed mostly of Urea, then the number is lower because Urea is not directly available to Orchids and only becomes available if bacteria associated with the media convert it to other forms.

In the past, fertilizers I have used with even numbers have led to poor growth because they actually contained little available Nitrogen. Look for fertilizers that contain either Nitrate or Ammonia, as these are directly available to Orchids. The most important point is not to use fertilizers in concentrations too high and to flush thoroughly once a month, especially in the summer. Use fertilizer weakly, weekly for best growth.

Repotting can be safely done for most Orchid genera with the exception of a few tricky species. The ideal time to repot is always when plants are growing so that they will be reestablished with fully functional root systems when fall arrives. Some Orchids flower in summer, leaving novice questioning if they should repot. A healthy plant can be repotted while flowering and may need to be repotted then. *Cattleya bicolor* is usually in bloom when it begins to grow new roots. This and most other bifoliate Cattleyas must be repotted when they get new roots, even if in flower.

Last year, I had several Paphs in flower when repotting was done. Several were repotted while in flower and others left in the pot and were repotted when they finished blooming. A third group was left in the pot and a teaspoon of lime added on the surface of the media. The first two groups were similar in growth and flowering a year later, while the last was clearly harmed by being left an additional six months in the same media. Different media may yield different results, but clearly repotting when in flower did no harm.

Vandas and similar genera are in their glory now with high temperature and humidity. Several years ago, I discovered that Rhynchostylis species and hybrids close to these species preferred to be shaded more than their vandaceous cousins during the heat of the summer. Other cool loving genera can also stand more heat if light levels are reduced.



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Spider mites have ceased to be a problem unless you grow inside where air conditioners reduce humidity. Unfortunately, scale, mealybugs, and other pests reproduce rapidly and need to be controlled. Rusts (related to fungi) affect a few genera of Orchids and appear on thin-leaved orchids such as members of the Catasetum group. It can be controlled with sprays, but is less of a problem if good air circulation and water low in solids are provided. It is important to address problems quickly this time of year as pests multiply rapidly along with your Orchids.

Orchid growers, like many others, are interested in using less pesticides and continually looking for natural ways to control pests. Greenhouses contain an array of insects and other animals, some of which are pests and others that are simply enjoying greenhouse conditions. The presence of frogs and toads suggests that there is an adequate food supply of insects. Are pill bugs an important pest? What about roaches? Most insects have some potential to cause damage and must be watched, but the presence of a greenhouse totally free of animal life is more disturbing than the pests themselves. The trick is to find that happy medium.

Almost every year a "new" treatment emerges that is theoretically less harmful to the environment. One year it was light oil, the next Neem oil and so on. The introduction of each new product initiates a flush of excitement that becomes tempered with reality within a year or so. Each new product seems to work well under certain circumstances, but none has proven to be the "magic bullet" that will solve all orchid growers problems. No matter what new product comes along, the best approach is to maintain healthy conditions with good air circulation, adequate spacing, appropriate humidity, and constant vigilance.