



St. Augustine Orchid Society

www.staugorchidsociety.org

Temperatures for Orchids

October 2002

by Dr. Courtney Hackney, hackneau@comcast.net

[Orchid Growing Tips](#)

One of the most frequently asked questions is "What temperature does this orchid like?" Many catalogs specify a temperature for species offered for sale usually classifying them as Cool, Intermediate, or Warm loving. These descriptions can be deceptive as some warm loving species may do poorly under hot conditions while intermediate species do great under these same conditions. There is much more to growth of an orchid than just average temperature. Hobbyists must understand the natural habitat of a species, which includes extremes, in order to interpret stated temperature preferences.

Equitant oncidiums are considered by many hobbyists to be difficult to grow. These beautiful miniature orchids are found primarily on islands in the Caribbean where it is always warm. Most books on growing these species and their hybrids suggest putting them up high in the greenhouse close to the glass where they get lots of light. The suggestion is that they also be grown mounted and avoid letting the plants be wet at night. While the Caribbean may be closer to the equator than most of the U.S., temperatures are usually milder than those in the Southern U.S. in summer. Constant trade winds tend to moderate the high temperature and as a consequence, equitant oncidiums are not tolerant of the "hot" mid-day conditions in a greenhouse. Night temperature also tends to be moderated by cool ocean breezes. The natural condition for these species is a very small change in temperature during each 24-hour period with just a slight seasonal temperature change.

Visitors to the islands in the summer learn quickly how showers come and go, even in the evening. Equitants are frequently wet from tropical rain at night. They also get soaked by dew each night. Being wet at night does not kill them despite everything you may read. In nature though, there is always air movement and plants dry quickly.

In winter, conditions change in the Caribbean. While the wind still blows, rains are infrequent but humidity is still high. Emulate this environment and you will be a successful equitant grower. Small variations in daily temperature, never cold, never hot, constant air movement and high quality water delivered very early in the morning or at night. Because most equitant species come from a similar climate, their hybrids typically respond to the same conditions. As with most orchid groups, hybrids usually are more tolerant than are the species from which they were derived.

Unfortunately, that is not always the case. For years I avoided paphs because most books listed them as preferring intermediate or even cool conditions. Imagine my surprise when Paphs such as *Paph rothchildiana*, thrive in my hot greenhouse when equitant oncidiums suffer. Had I known more about the natural conditions in which this species is found I would not have been surprised. Its reputation for requiring cooler temperatures relates to flowering, not growth.

Most of the time hybrids are not classified according to temperature preference. While hybrids generally grow better than the species from which they came, their temperature preference may be difficult to determine without some knowledge of species in their backgrounds. *Paph charlesworthii* is considered a cool loving species. As a consequence, hybrids many generations removed from cool loving species such as *Paph charlesworthii*, may grow best under cooler conditions despite other species in the background.



St. Augustine Orchid Society

www.staugorchidsociety.org

Temperatures for Orchids

October 2002

by Dr. Courtney Hackney, hackneau@comcast.net

[Orchid Growing Tips](#)

Recognition of the requirements of an orchid do not mean that they cannot be grown in your greenhouse, only that you recognize the daily conditions in your growing area and place plants with different climatic conditions in a suitable location. More constant temperatures are always found lower in the greenhouse, cooler temperatures near fans, etc.

Most hobbyists do not have the luxury of a growing space where specific conditions are maintained for all types of orchids. That does not mean that you should give up growing one group because your conditions match another group better. Many area growers leave orchids outside in fall to stimulate growth and flowering. Cymbidiums that are supposed to be cool growing grow well in the heat as long as they are provided lots of shade. These same species and hybrids also flower well if left outside until just before frost. Some growers claim that the best flowers come during years in which they have light frost on their leaves. Look into the natural habitat of the species behind a hybrid and the reason these practices work will be obvious. The great thing about orchids is that there is always something new to learn about them.

It is now definitely time to begin the change in cultural practices from a growth mode to something else, no matter what kind of orchids you have. The day length is now less than 12 hours and the sun is getting ever lower on the horizon. This means less time to grow so water and fertilize less. Go back over the orchids in your collection and do the same as last year for those that flowered well. For the ones that did not, spend some time with books or ask your orchid growing friends what to do. Blooming an orchid that would not bloom for you has rewards beyond the flowers.