January in Your Orchid Collection

V. Indigo 'Indigo' HCC/AOS

January Climate Data
Average high: 76.5
Average low: 59.6
Average mean: 68.1
Average rainfall: 1.88"

January is somewhat like December but in reverse, with each succeeding day bringing longer hours of sunlight until days are long enough that afternoons return at the end of the month with extra sunshine to warm us after the extra sharp cold snaps. January, like December, is cold and dry, in fact even colder and drier. Dry is good, cold can be very bad. We need to accentuate the positive by especially careful watering in January. By keeping our plants as dry as possible and spacing our waterings as far apart as possible, we conserve our potential to use water to protect our plants from the cold, keeping our powder dry, as it were. In January water early, water thoroughly when you do and do so sparingly. The cooler overall temperatures of January are much less dehydrating even to plants which have received less water. Remember, many of our orchids come from seasonally dry and cool climates not so different from South Florida. Many orchids are equipped already to handle the drier cooler conditions of our Florida January. A good strategy is to "top-up" the light watering that our plants

receive with the passing showers that each successive cold front brings. This slight additional artificial irrigation may prove to be all the watering that many genera need. Such parsimony with watering preserves the possibility of using water on truly cold nights to warm our plants.

Water is the only feasible source of heat available to plants grown in the open, under trees, in shade houses or on patios in South Florida. Ground water here (and in most of the rest of the world is about 63 F. (16C). Water out of municipal systems is not far different. On truly cold nights turning on the water can be of great benefit to our plants, provided that they have not been over-watered in the days and weeks preceding, thus inviting the ever present fungi to do more damage than the cold. For this reason as well, in general, orchids are better off dry until temperatures approach frost or freezing. The logic for maintaining plants dry is not only to minimize fungal problems but also because cold air is typically very dry air. If plants are wet in very dry and rapidly moving air say 10 or more mph, evaporative cooling can take place, chilling our orchids further and faster than they would if dry. When the water goes on it needs to be in heavy volume and it needs to stay on to keep the plants thoroughly bathed in its warmth. Very still air on the other hand, presents a different danger as frost is possible at temperatures higher than is commonly realized. In calm air frost can form at higher elevations and settle in on plants while the surface temperature is only in the upper 30's (4C). The best forecast for nights when the temperature will hover near 40 is a light wind of 2-5 miles per hour. This light wind mixes the warm air near the surface and draws warm from the earth. Clear, cloudless, still nights with bright shining stars elevate the spirit but harbingers frost.

Forecasts of temperatures below 40 F should stimulate us to action. If it is not practical to bring all the *Phalaenopsis,* vandas and hard cane dendrobiums into the house or garage, think of using water to help protect them. Shade cloth or even patio screen like a lacy Mantilla holds in a surprising amount of heat. Under screen, a fine mist head (1/2 gal. per minute) attached to a hose and left running beneath the bench or plant rack will provide several degrees of additional warmth that will often sufficiently temper the chill and ward off any light frost settling in. Growers with swimming pools frequently turn on the re-circulating pump to keep a supply of warm water near the pool's surface where it can add heat to the ambient environment. A few degrees of warmth frequently make all the difference to our sensitive orchids. In more open areas not protected by a permanent irrigation system, an oscillating sprinkler at the end of a garden hose is very effective. These are readily available at Home Depot and garden shops for a few dollars. On frosty nights, start the water at bedtime and let it run until the sun is up. The extra water once or twice in a month will do no harm to orchids that have been properly and judiciously watered the remainder of the month. In fact, these occasions present the opportunity to be sure that excess fertilizer salts have been leached from the pots and medium. A good work can be borne of necessity!

Remember that Himalayan dendrobiums and "warm growing" *Cymbidium* hybrids will positively relish temperatures down to 32F and a light frost is just the ticket for great bloom. Keep the water off these!

In the drought of January, mites, that affect nearly all genera of orchids, continue to be a serious problem that will only get worse. Mite populations will reach a crescendo

in March and April but January is a good time to scotch them. *Paphiopedilum* and other softly leaved genera are particularly susceptible but no genus is free of them. One theory on why deciduous genera such as *Catasetum, Calanthe* and others lose their leaves hypothesizes that this totally rids them of mites.

Being totally rid of mites is a good thing! Sometimes this is easier said than done because mites reproduce with such voluminous speed. Their life cycle from egg to reproductive adult being is as short as twelve days. In order to control mites one must achieve as total a kill of the population as possible. Total control can only be achieved with two successive sprays. After spraying for mites initially, one *must* spray again in 7 - 10 days. No single spray is totally effective in killing both adults and eggs and a second spraying is necessary to kill any survivors before they can reproduce. Oil as recommended in the December chapter at 1.5 oz per gal followed in7-10 days by soap at the rate of 2 oz per gallon is very effective. These treatments are also quite effective against scale and mealy bugs which thrive on drought as well. Be sure your plants are well watered the day before applying both oil and soap and be sure that you cover thoroughly all leaf surfaces especially the lower ones which are mites favorite hide outs. For those who wish to be more aggressive, the University of Florida IFAS recommended chemicals for mite control are: Kelthane T/O, Mavarik Aquaflow, and Talstar Flowable. Always follow label instructions for use. Any of these chemicals can be alternated with the soap or the oil in the 7-10 day cycle.

Controlling mites pays huge dividends! You'll be surprised at the extra vigor your plants display.

Tasks for January

- Water judiciously only early in the day
- Run plants on the dry side to preserve the possibility of using water for cold protection
- Check irrigation system in anticipation of cold
- Flush excess fertilizer salts from cattleyas and other sympodials
- Spray for mites, then spray again in 7-10 days