

October in Your Orchid Collection

By Dr. Martin Motes



Vanda Karnda 'Mary Motes' HCC/AOS

October Climate Data

Average high: 85.4

Average low: 72.2

Average mean: 78.8

Average rainfall: 6.19"

October is a month of change in South Florida. If the Romans had lived here where we do, they would have named this month for their two faced god Janus. Usually around the middle of the month, and certainly by the end of the month, the first strong cold front pushes into South Florida bringing to a close the monolithic heat and damp of summer and ushering in weather as most of the continent knows it, alternating periods of warmer and cooler.

Although warm temperatures will persist for another month or so until the technical end of the hurricane season, the tropics are in retreat and the temperate zone in the ascendancy. Each successive cold front foreshadowed by ever lessening rain storms will progressively cool our temperatures and dry our air. But days are shortening too, providing less hours of sunlight to heat the air and slowing the drying process. Nights are longer and cooler which produces the same effect, slower drying. Now we must start to move into the consciousness of winter and take greater care to insure that our

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plants are thoroughly dry before we water them again. The shorter days of October dictate that we rise even earlier to water if necessary. Each extra hour of daylight is to be cherished by us as well as our plants.

Most of our orchids are well aware of this sea change. The shortening days of late summer have told many genera to finish their growth and prepare to rest. We need to listen too. And look! The last smallest leaves of these highly seasonal plants will have unfolded at the tips of their new growths telling us that their growth cycle is finished for this year. Himalayan dendrobiums of the nobile type and of the section Callista (*D. aggregatum* et al.) now begin their five months of carefree existence in South Florida. They should be put in a bright spot and given no more water and above all, no more fertilizer until after they have bloomed in spring. *Catasetums*, *mormodes*, *cycnoches*, *calanthes* and other deciduous types should be treated the same way. Whatever moisture nature provides in the increasingly heavy dew and the passing rains that usher in most cold fronts will be adequate for these plants whose native environment is a seasonally monsoon one like ours. Benign neglect suits these genera just fine and what a relief to the conscience of the ever busy orchidist! The truly devoted will group these genera together, preferably at the edge of the growing area and high up where they will receive the maximum of light and air circulation. Grouped thus, the chance of an accidental watering of these, while taking care of the more thirsty genera, is minimized. Another strategy is to tip the pots of these dormant genera on their sides thus eliminating much natural rainfall and avoiding a misdirected hose spray. Some growers even remove plants that have finished both growing and flowering from their pots entirely. When new growth begins in the spring they will receive a fresh start in new medium.

Many *cattleyas*, *laelias*, *oncidiums* and *phalaenopsis*-type *dendrobiums* will be finishing their growths and should be hardened off with reduced water and fertilizer but not the Spartan regime of the deciduous type. Lower nitrogen fertilizer applied at a lower rate and with less frequency will make these genera happy and prevent them from breaking into unwanted off-season growth that frequently hampers flowering as well. Many growers tend to use higher phosphorus, lower nitrogen fertilizers of the "Bloom Booster" type during the cooler weather. But less frequent applications of the recommended 15-5-15 is a better strategy. These applications should be spaced further apart as well, at ten to twelve day intervals. Less frequent watering will also do for these genera. When the frontal rains pass through, check to see that the pots are thoroughly wet by giving them the "heft" test and if they are not heavy enough "top them up." Let them dry 'hard' before watering again. In cool weather especially, less is more.

Monopodial orchids like *vanda* and *phalaenopsis* which want to grow continuously, feel the change too. The broad swing of day to night temperature stimulates flower spike initiation in these genera. You can spur them on to greater excitement by giving them a shot of high phosphorus 'Bloom Booster' fertilizer just before or just after the sudden drop in night temperatures precipitated by the passing of a cold front. For most of the year "Bloom Booster" fertilizer appears to be in fact "Bloom Blocker" but (perhaps from faith rather than science) high phosphorus seems to have the desired effect (perhaps from shock) when the first cold snaps are also halting vegetative

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growth. We like Miller's Solugro (12-48-8) because it contains none of the ugly blue flower, clothes and hand staining dye. Other brands (with or without dye) are equally effective. Look for a very high middle number and a relatively low first number or ask at your garden center for a 'starter solution' which is the moniker for these fertilizers when used in planting out vegetable or annual seedlings. Because the nitrogen level is lower, you can use a full tablespoon of these or more, per gallon.

Cooler weather calls our attention to our plants' needs for trace elements. Chief among these is magnesium, often described as the 'major' minor element. Magnesium deficiency shows up in orchids as a reddening of the foliage particularly when the plant is stressed. This color change is frequently attributed to cold as it occurs following spells of cooler weather. This observation is the fallacy of post hoc, ergo propter hoc; cold is merely the efficient cause: the material cause is lack of magnesium. Hopefully the new fertilizer regimen outlined in the July chapter will minimize or eliminate the reddening by keeping the magnesium level up in the plants. Epsom salts ($MgSO_4$) is the best and most readily available source of magnesium. This can be applied with Potassium Nitrate (KNO_3) at the rate of one tablespoon each per gallon. Potassium Nitrate has the formula 13-0-46. The missing number in the middle is Phosphorus. In combination with our highly alkaline water phosphorus tends to react with magnesium and the other metals of the trace element group. Never apply magnesium and the other trace elements in combination with fertilizers containing phosphorus. A general purpose trace element mixture can be added to the mix of magnesium sulfate and potassium nitrate at the rate recommended on the label. (Concentrations vary). Goodbye red, Hello green!

Tasks for October

- Space plants to increase air circulation
- Water as early as possible in the day
- Move Himalayan dendrobiums, catasetums, calanthes and other seasonally dormant plants to dry bright locations
- Reduce general fertilizer
- Apply extra magnesium and potassium