July in Your Orchid Collection

By Dr. Martin Motes



Vanda Mary's Dimity 'Mary's Dimity' HCC/AOS

July Climate Data Average high: 90.9 Average low: 76.5 Average mean: 83.7 Average rainfall: 5.79"

Although it mostly passes unnoticed to millions locked in their air-conditioned bubbles, July in South Florida is quite different from June. While the pattern of afternoon showers built from the moisture of the morning's sea breeze persists in July, the thunder-storms are sharper and shorter. The clouds linger less and the foliage dries more quickly. Less quantity of rain falls in July than in June and periods of several days typically pass without a drop. This is good news for orchid growers. July (and August) allows orchidists to focus on the first essential of orchid growing, drying the plant out.

Frequently, neophyte growers ask "What if I go away for several weeks in the summer and there is no one to water the plants?" The response is "That's wonderful". Experienced growers use the break in the rainfall during July and August to dry their plants "hard". Depriving orchids of water for several days until they and the media or baskets they grow in are bone dry is essential to good orchid culture. By drying the plants hard, one deals a severe blow to orchid's natural enemy, fungus. Orchids have evolved to withstand drought because fungus cannot. During severe drought fungus' only defense is to cease all growth and retreat into a spore stage. Hopefully (and with

July in Your Orchid Collection

By Dr. Martin Motes

good cultural management) these pathogens will not be aroused from this slumber until the first drizzle of September sets in, allowing our plants two months to mature and harden their growth making them less vulnerable to the September conditions which give some advantage again to the fungi.

Careful watering and judicious drying will do more than any other practice to ensure healthy plants. Drought is the orchid plants armor against disease. Be sure that your plants dry as completely as the weather of July permits. Nonetheless, as our plants are in full growth they need adequate water in July therefore after a hard drying, orchid plants need a thorough rehydration. If the next rain fall is insufficient to saturate pot, roots and media, the grower should add to the natural moisture until he is sure both roots and media are saturated, using two or three applications of water spaced a few minutes apart. When the plants stop dripping is the time to apply the next dose of water. Don't stop watering until the "heft" of the pot tells you that it is holding as much water as it can.

More typically in July, orchidists should use these opportunities when more moisture is required to substitute fertilizer for water and saturate the roots and the media in the same thorough manner. In July typically think of fertilizing rather than watering. Weekly application of a commonly available balanced fertilizer (20-20-20 or 18-18-18) at two teaspoons per gallon will supply the nutrients that our plants require in this period of lush growth. This balanced formula should be alternated every other week with potassium nitrate and Epsom salts (one tablespoon each) to supply the extra magnesium and potassium we now know are plants need on a regular basis. Even better (although not so readily available) lower phosphorus fertilizers containing extra magnesium and calcium with a formula like Peter's Excel (15-5-15) have been shown to be the precise fertilizer our plants need. This formula is recommended year round. Hopefully such orchid specific fertilizers will become more widely available.

Lowering the phosphorus intake of our plants is particularly important in South Florida because of our alkaline water. Always apply fertilizer in the same way as water, in two to three doses spaced a few minutes apart. Apply the fertilizer to the point of "run off", i.e., when the solution starts to fall off the plants; stop and move on to the next plant. Repeat the application a few minutes later when the plants stop dripping. In July more than ever, never, never follow the frequently heard and disastrously bad advice of watering before fertilizing. Always substitute fertilizer for water: now and at every season. Roots saturated with water cannot absorb fertilizer but the plant's foliage and roots more often or longer than necessary. Careful watering is especially important throughout the rainy season.

The wise orchidist will have long since finished all of his potting of sympodials and the top working of his vandas but for the rest of us this is the eleventh hour. Autumn is closer than we think and vandas will need at least three months to settle in to their new baskets or pots before the first chill of October tickles their root tips. Unless you can protect them thoroughly from cold, Vanda top cuttings and keikis should not be made after the end of July. If you do take cuttings remember the "3 root rule". Count down from the crown and make the cutting beneath the third or fourth root. Keep as many

July in Your Orchid Collection

By Dr. Martin Motes

leaves as possible on the stump and you will be rewarded with a greater abundance of offshoots. Always slip the sterile knife or shears down between the stem and the leaves and then cut transversely to save as many leaves as possible. Be sure to anchor the cutting firmly in its new lodging. Tie them up and tie them down! There is no time for mistakes in July.

Thrips are much less of a problem in July as the rain tends to wash them away and doubtless there is an abundance of other lush fodder for them elsewhere in our yards. They can reappear in a prolonged patch of dryness, so if you need to think of watering in July it may be dry enough to worry about thrips. A prophylactic spraying for thrips in July will also put a damper on scale crawlers. If a second spraying with soap follows the first by seven to 10 days, the population of mites will be scotched as well.

Tasks for July

- Dry plants hard once or twice
- Apply liquid fertilizer instead of water during dry patches.
- Watch for thrips when rain has been sparse for several days.
- Finish top cutting and planting of vandaceous genera.