## TREATING STORM DAMAGED ORCHIDS IN FLORIDA AFTER HURRICANES

Post storm activity is important. First, be prepared to quickly replace shade either on the structure itself or by jury-rigging shade cloth until the structure can be rebuilt. The plants themselves will have been severely stunned, bruised or nicked by buffeting winds. Often the plants will have been dark and wet for many, many hours. These conditions are the most highly conducive for fungal and bacterial development. While the plants are still wet they can be sprayed with a tertiary ammonia product Physan, Consan, or Greenshield (pool algicide contains the same chemical). This has the advantage of blending with the water on the plants to provide some immediate protection. Once the plants are dry again, they can be sprayed with a broad spectrum fungicide/bactericide. Cupric hydroxide (Kocide, Champion) mixed with Mancozeb (Manzate, Dithane M45) at 1 tbs per gallon of each should do a good job.

Again, a spreader sticker is highly desirable here. The strategy for all the next few weeks post storm is to keep the plants as dry as possible (most will be moving toward more dormant states in September and October, in any case). Close monitoring for disease development and excising damaged tissue as disease develops are essential. This should be done with a clean instrument that is disinfected between cuts, preferably with a supersaturated solution of tri-sodium phosphate, Clorox, pool algicide or by flaming the cutting edge. Much wet weather can still be forth-coming after a hurricane and disease control and prevention will be a long term task post storm. We all hope that none of us ever again need to know these things we old Florida hands have learned across the years, but hurricanes are a price of living in paradise. The wise children make preparations early for all the other storm needs; buying supplies, filling gas tanks, trimming trees, removing debris so that at the eleventh hour all efforts can be concentrated on what is truly important; protecting our orchids and other equally beloved family.

## TREATING STORM DAMAGED PLANTS

Hurricane or even tropical force winds are not kind to vegetation. Orchids that have weathered the storm in our gardens are very likely to have sustained some damage. Frequently leaves or stems are broken. Even more frequently the plants have been scraped by rubbing against themselves or some object in the buffeting winds. Wind blown debris can also cut or scrape exposed plants. Careful examination of those plants which could not be brought in out of the storm will usually reveal numerous cuts, scrapes and bruises, particularly on leaf margins. These wounds are unfortunately the potential points of entry for bacterial and fungal infection. Our plants need help in warding off these potential problems. As with all else in good orchid management the first defense is to be sure to dry the plants as thoroughly as possible. After a storm one should not even think of watering orchids. The rains of the storm will have been more than enough, if not too much. Most sympodial orchids are at the end of their growth cycles and are slowing down to a rate requiring less water. Vandas and Phalaenopsis are luxuriating in the extra heavy humidity (that the air conditioned populous loves to hate) and hence require a good deal less water as well. Water such monopodial orchids only when a rare few days pass without any rain. Drying storm-damaged orchids will allow those nicks and scratches to heal to a naturally resistant toughness. Often the weather of September and October is not kind enough (even when we have already suffered) to permit sufficient drying to cure the ravages of the storm. The persistent damp characteristic of late summer usually dictates more active intervention. Painting wounded spots with fungicide can often prevent infections. Many growers adverse to chemicals use ground cinnamon for this purpose. A bolder and surer treatment is a combination of equal parts cupric hydroxide (Kocide) and mancozeb (Manzate or Dithane M45). This should be made into a slurry and painted on wounded places.

Never, never, apply chemicals as a dust. The potential to inhale pure forms of agricultural chemicals is too, too, dangerous. Indeed, it is recommended that when handling chemicals to make a slurry, a respirator or paint mask be worn to avoid inhaling the air borne particles. Rubber or vinyl gloves are advised when actually applying this mixture. Cupric hydroxide and mancozeb can also be applied as a spray at the rate of one tablespoon each per gallon of water. Spraying the entire collection will go a long way toward preventing isolated problems from becoming epidemic. If the weather is so unremittingly wet that spray cannot be applied, a quaternary ammonium product (Physan, etc. or pool algicide) can be sprayed as recommended elsewhere.

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