



**St. Augustine Orchid Society**

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## **Treating Cold Damage in Orchids**

### **Orchid Alert**

Courtesy of Dr. Martin Motes, Motes Orchids

The extraordinarily prolonged cold of the last weeks has caused damage to orchids that would not have been affected under more normal circumstances. Cold damage appears on orchids as whitening of the foliage and stems. The white gradually turns to brown as the affected tissue dies. Often this dead tissue simply dries and the damage is limited to the unsightly patches that are left. Frequently, however, the damaged tissue is infected with bacterial rot which can spread in the plant and cause further damage.

Softening of the edges of the cold damaged areas or oozing of brown fluid indicates bacterial infection. Removal of the leaf or stem is a drastic but simple solution. If one is loath to lose so much of the plant or if the damage is not too extensive, the most effective treatment for bacterial infection is treatment with cupric hydroxide (Kocide or Champion) which should, if possible, be combined in equal parts with mancozeb (Manzate or Dithane M45).

This combination is packaged, pre-mixed as Junction. By adding a small amount of water to the chemicals in a jar, one can make a slurry that can be brushed on the lesions with an old toothbrush. Any leftover slurry can be placed on a high shelf (brush and all) and re-hydrated later. This stuff is also the cure for those soft spots that appear on phalaenopsis leaves in summer.

For large collections with extensive damage, one tablespoon per gallon of cupric hydroxide and mancozeb can be sprayed. Mix the two and wait an hour or more before spraying. Do not apply this mixture to dendrobiums or bromeliads that are hyper-sensitive to copper. As with all chemicals, always read and follow the label instructions and wear the prescribed personal protective equipment.

