



Red date scale (photo by Reeves above). Severely infested pygmy date palm in Naples (August, 2007).



## Scale Insect Killing Pygmy Date Palms

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We have had some serious flare-ups of a scale insect on one of our relatively pest-free *Phoenix* species, the pygmy date palm (*Phoenix roebelenii*). This *Phoenix* is originally from the river banks in Vietnam and southern China and thrives in our environment, unlike some of the other *Phoenix* species, which are more adapted to desert environments.

The scale causing death of the pygmy date palms is the red date scale (*Phoenicococcus marlatti*) and has been reported in Florida for about 15 years. We probably got it from California, where it was introduced in the late 1800s or early 1900s on date palm offshoots from the Middle East. We then got it from California palms shipped here. It seems that palms in shady areas or in lanai plantings are suffering the most. Those in full sun don't seem to be bothered as much by this little scale. The mature scale is about 1.5 mm long, spherical, red or reddish brown. An infestation appears embedded or nested in white wax with occasional gaps that reveal the red coloration of the body, like an exposed raisin. It tends to congregate on the white tissues at base of newly emerging fronds and is on exposed roots and the trunk.

The red date scale doesn't make a true scale waxy covering or hard shell, but simply produces a lot of flocculent material in which it appears "nested", like mealybugs. It is difficult to manage for several reasons: #1) it has repeating generations, that means there are new scales being produced all year long. It may only need sixty days to complete a new population from egg to adult. Also, #2) it is hard to spot the early

infestations as they are in tight crevices of the newly emerging fronds, it seems that once the scale insects get a toehold they get out of hand rapidly.

**What To Do.** This scale is difficult to control. Because these insects are concealed, contact sprays won't provide long lasting results, as many will be missed by the spray. There isn't any research to show which product (insecticide) will do the best job. My best bet is imidacloprid as found in Merit™ for professionals or Bayer Advanced™ Tree & Shrub Insect Control for homeowners. These products are applied per label directions as a root drench and will move via the root system throughout the internal plumbing (vascular pipelines) of the plant. It is a slow acting chemical and it may take a few weeks to see results. This systemic approach will not directly harm the beneficial insects that are attacking the scale. I usually see a few lady beetles on the scene helping to reduce this pest. Take a closer look at your pygmy date palms, especially those planted in shady areas, hopefully you won't find the red date scale on your palms! Also see: [www.sel.barc.usda.gov](http://www.sel.barc.usda.gov)



Lady beetle adults and pupal cases (top) help reduce scale populations, but may be too slow to save plants.

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