

# Deadly Scales Attack Sago Plants

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Snow on your Sago in July? It is most likely covered with the **Cycad Aulacaspis Scale** (*Aulacaspis yasumatsui*), also called the Asian Cycad Scale. This is an invasive exotic pest insect which completely covers Sagos and other members of the Cycad family, and eventually kills them. These small white scale insects come in two different shapes. One is male and the other is female.

This pest insect infests the fronds, the entire trunk, and the roots as far down as twenty-three inches deep in the soil, resulting in a Sago which is covered in a white crust from top to bottom. July and August are prime months for their populations to explode and infestation to occur. Two beneficial insects have been introduced in an effort to help control these pest insects.

## Control Method:

- 1) Treat with oil.** Spray the entire plant (top and bottom of fronds and entire trunk) with horticultural oil (such as in UltraFine Oil) or fish oil (such as Organocide). Fish oil seems to work the best.
- 2) Remove dead scale insects.** A few days later, or the day before re-treatment, remove dead scales which are still clinging to the plant. This can be done with a strong water blast (from a hose-end spray nozzle) or by physically removing the scales from the fronds and trunk with a brush. If the layer of dead scales remain on the plant, then newly hatched scales (crawlers) will be protected from treatment by the dead scales and the crawlers will simply re-infest the plant. Check to see if the scales are dead by scraping the scales: if they smear, they are still alive; if they flake off they are dead.
- 3) Re-treat with oil.** Seven to ten days following the first application, make another application of horticultural oil or fish oil. It will take several weeks to control the scale.
- 4) Repeat Steps 1-3** as necessary until the pest is controlled. Once established, persistence will be required to keep populations managed. A systemic insecticide may help, but will not work by itself.
- 5) Monitor** the Sago on a weekly basis to catch future infestations early, then practice steps 1-3 to prevent total take-over by the pest.

Avoid using high rates of nitrogen fertilizer on the Sago and the surrounding landscape or lawn. Nitrogen encourages growth flushes which attract the pest and speed up infestation. If fertilization is required, use a light application of slow-release, low-nitrogen fertilizer. Fertilize only if needed.

Fronds can be removed initially to get the insects under control. Continual removal of the infested fronds will NOT manage this pest, it will only hasten the decline and death of the Sago due to starvation. Plants produce food in their leaves. Using systemic insecticides alone to control this pest will usually fail. This scale travels on the wind, so it will re-infest from neighboring yards, as well as from the upper root system of infested plants.

To learn more about this pest, visit the University of Florida's Publication website at <http://edis.ifas.ufl.edu/IN474>, or call the Manatee County Extension Service at 722-4524 Monday thru Friday from 9 AM - 4 PM and ask to speak to a Master Gardener.