

Cycad Scale: The White Dust Killer

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Do you have white “dust” on your sago palm? The “dust” is often a collection of scale insects, called Asian cycad scale, that suck the juices out of the plant and eventually kill it within a couple of years if left untreated. The problem often goes unnoticed until it is quite infested and looks like your sago has a bad case of dandruff. This article will provide you details of the pest and what you can do about it.

The Asian cycad scale (*Aulacaspis yasumatsui*) is also referred to as cycad aulacaspis scale, cycad scale, sago scale, and Asian scale, and originates in Thailand and southern China. It is an armored scale found only on cycads, primarily king and queen sago palms, which are not true palms. The pest was discovered in the 1990's in Miami and has continued to spread throughout Florida.

In the early stages of infestation, you may see yellow spots on the leaves and white scales underneath the fronds. The damaged leaves eventually turn brown. The scales can eventually completely cover the entire frond, as well as all other parts of the plant. Once it reaches the bud and roots, it may be too late to save the plant.

This is such a serious pest for several reasons. First, it has few predators. A tiny parasitic wasp and a predator beetle were released for biological control, but they are not aggressive enough to control the pest and I haven't seen them around here, probably due to our cooler winter temperatures.

Next, this insect is a reproduction machine. Their generations overlap reinvading the fronds with mobile crawlers (baby scale insects) every 4 to 6 weeks starting in spring. With the females producing about 100 eggs each, the population grows rapidly.

Finally, the crawlers can go where many homeowner pesticides can't reach. They may be found 6 to 24 inches below the soil as they invade the roots of the plant. They also can land under the scales of the plants, especially on sago palm pups.

Although the pest cannot fly, the crawlers can travel on the wind to new plants or crawl to nearby fronds. My neighborhood is heavily planted in sago palms and I have noticed this white menace on at least two of my palms recently, as well as a large one at the beginning of the street.

If I want to save my palms or even protect my other three, I must start treating my plants. These are some of the strategies for managing the pest. First, cut off the fronds of heavily infested plants and sago palm pups in early spring and place them with the yard waste for removal. This makes treatment of the trunk and crown easier. Second, wash off the scales with a strong stream of water. This will dislodge some live scales and remove dead scales.

Third, apply horticultural oil (Organocide, SunSpray oil, or Ultra-Fine oil) over the entire plant every week for a month, starting in early spring. Avoid spraying the oil during the heat of the day. The best time is before dusk since oil can fry a plant. Remember to spray water before each treatment, cover all parts of the plant with oil, and repeat if you see the scales coming back.

There have been some articles about using coffee grounds for control, but research has not been conducted on this technique.

You may need a professional to treat your sago since the oil technique is difficult and not always effective, especially if the scale is below the ground. The most effective pesticides currently on the market are dinotefuran (Safari™) and pyriproxyfen (Distance®). Safari™ only requires two treatments a year – in the spring and fall.

If you are tired of battling the pest or if the plant dies, you can substitute the plant with other plants to attempt to achieve a similar shape. These plants include the Mexican cycad (*Dioon edule*), cardboard palm, coontie, or pygmy date palms. Other plants include crinum lilies or agaves.

Sago palms are a neighborhood favorite, but there are options for battling this prevalent pest. If you have a sago palm, check it to see if you have the pest. You can always email me a photo or bring in a sample to the extension office for a quick identification. For more information on this topic, visit <http://edis.ifas.ufl.edu/in253>.