



The caterpillars of the *Io* caterpillar are a tad prickly and feed on hibiscus, ixora and oaks. The *Io* moths have a three inch wing span with an eye-spot on each hindwing. The female moths (right) are reddish-brown and larger than the lighter colored, yellowish male moths.

Io Caterpillars are Munching on Local Shrubs and Trees

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I have been pretty disappointed with the paucity of chewing insects since I moved to south Florida. We have had some bright spots lately (early August) with some reports of *Io* moth caterpillars, pink-striped oakworms and my favorite and the most tropical looking, the frangipani caterpillar. Apparently the snowbush caterpillar population has retreated from its outbreak proportions of 2005 and 2006. The oleander caterpillar populations seem pretty light, but some neighborhoods have more than others.

The *Io* caterpillar (*Automeris io*) is one you tend to remember if you ever touched it accidentally. It is one of the few with urticating (stinging) spines. It is an attractive light green and is decorated with a red and white racing stripe down each side. When fully grown it is 2.5 inches long. With over 1000 stinging spines this species is the porcupine of the caterpillar world! These spines are not designed like a bee stinger. Bee and wasp stingers are attached to a venom gland in the abdomen. Rather, caterpillar defensive spines are like hollow glass pipettes which break when touched and the irritating substance inside the "pipette" is released into the wound, causing a burning sensation. The *Io* caterpillar has whorls of these pipettes or "spears" on each tubercle and four to six tubercles on each of its 13 body segments. As it crawls it reminds me of a Roman phalanx on the march, spears at the ready. The "sting" is roughly of the same intensity as stinging nettle but longer lasting. Slight dermatitis may result but it should fade in a few hours. Personally, after I had collected 20 or 30 of these large caterpillars in October last year for a 4-H class, I found the stinging sensation more effective than a cup of coffee for a quick afternoon perk-up. Maybe this could develop into some sort of caterpillar therapy? "Feeling drowsy? Pet your urticating *Io* caterpillar and snap out of it!"

But seriously, two types of urticating (irritating) spines are found. The chemical nature of the urticating solution is not fully known. Some caterpillar glands have been found to contain formic acid and related groups have a histamine as the irritant.

There are several generations each year in south Florida, The Io caterpillar has over 100 hosts in North America. We commonly find it on hibiscus, ixora, rose, orchid tree and oak.

Io moth larvae are gregarious in early instars, then solitary feeders as they grow. After several weeks of feeding, they make a simple, paper-like cocoon away from the host plant. The moths are pursued by collectors. The wings of the female are reddish to brown; on the male, the wings are yellow-orange. The males have large, feathery antennae which help them in locating the scent of a mate when the females release the “come-hither” perfume-like pheromones. The most striking feature is revealed when the front wings are pulled aside and the bluish-black bull’s-eye or eye-spot is exposed. This supposedly startles predators as when the moth flashes the eye-spots it scares the would-be predator. They sort of look like owl eyes to me.

First Aid (UF/IFAS SP-107 recommendation): Place Scotch tape over the affected area and strip off repeatedly to remove embedded spines. Apply ice packs to reduce stinging sensation and follow with a paste of baking soda or papaya tenderizer and water. If there is a history of hay fever, asthma or allergies or if allergic reactions develop, contact a physician immediately.

If large numbers are causing significant defoliation you may either prune the caterpillars off the foliage when they are small and in a group or use selective caterpillar pesticides containing B.t or spinosad. Various contact sprays are available too. See pesticide references and fact sheets about other local landscape pests at: <http://collier.ifas.ufl.edu/CommHort/Insect%20Photo%20Gallery.shtml>

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