

Before you Spray, IDENTIFY!

**by Kim Gabel, Environmental Horticultural Agent
UF/IFAS/Monroe County Extension Services**

Do you know what that bug is that is crawling on your plant? Is it damaging your plant by chewing the leaves or sucking the sap out of the leaves?

In the Florida Keys, common insect pests are aphids, mealybugs, scales, and whiteflies. These insects have needlelike mouthparts to pierce plant tissues and feed on plant sap. Most plant pests with piercing-sucking mouthparts are smaller than the head of a pin, and secrete a sugary product known as honeydew. It is common for foliage infested with these insects to be covered with sooty mold and ants that feed on this sugary secretion.

To control pest insects, inspect your yard for insect problems regularly for signs of infestation. When inspecting (scouting) look for conditions that favor a pest or pest outbreak, signs of the pest (plant damage, droppings, discarded skins), and the actual pest.

Signs of aphids:	leaves become twisted or distorted; ants; sooty mold
Signs of mealybugs:	white wax deposits; sooty mold on foliage; and lots of ants
Signs of scales:	yellow spots on the upper leaf surface from scale feeding underneath; honeydew, ants and sooty mold

Signs of whiteflies: top sides of leaves become pale or spotted. Ants, sooty mold, or adult whiteflies that look like white specks or gnats flying around plants; larvae on undersides of leaves.

After identifying the pest and reviewing the severity of the pest problem, determine your course of action. All pest populations can be effectively controlled by a variety of methods, such as, beneficial insects or by using the least toxic pesticides.

Control of aphids: Fertilize and water moderately to avoid excessive new growth. Flush aphids from branch tips with a garden hose. Avoid shearing shrubs. Insecticidal soaps are a good choice to control aphids because they do little damage to aphid enemies. A few aphids should be tolerated because they are a good food source for beneficial insects.

Control of mealybugs: Horticultural oils and insecticidal soaps may be applied as a spray. Control can be difficult, because mealybugs like to hide in tight, hard-to-reach places and protect themselves with wax deposits.

Control of scales: Tiny parasitic wasps pierce the covering of the scale. These sometimes appear on their own. Horticultural oils applied weekly for four weeks are also effective.

Control of whiteflies: Yellow boards smeared with oil or petroleum jelly will trap many of these insects. Some whiteflies have developed tolerance to pesticides. Insecticidal soaps and horticultural oils are effective and environmentally-friendly.

Try the above approaches for controlling pest problems first before using the stronger broad-spectrum insecticides that kill "good" and "bad" bugs. You'll notice more birds and butterflies in your Florida Keys yard.

Learn to accept some insects in your garden. Having a few insect pests does not indicate a need for control. Dropping leaves, off-color foliage, and other abnormalities are often associated with environmental causes that cannot be corrected with pesticides.