

Pink Hibiscus Mealybug

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

The Pink Hibiscus Mealybug (PHM) was first discovered in 2002 in Broward County, and then in Miami-Dade County. During November 2004, the first positive identification of the PHM was found in Key Largo, Ramrod Key, and Marathon. As of January 2006, the Pink Hibiscus Mealybug has been found Keyswide with recent outbreaks at Bay Point, Lower and Upper Sugarloaf Key, and Cudjoe Key.

The Pink Hibiscus Mealybug attacks hibiscus and Florida Trema, its preferred hosts in the Florida Keys. But it will feed on fruit trees, vegetables plants, native plants, weeds, and ornamental plants. For the latest listing of plants that Pink Hibiscus Mealybug attack, go to <http://mrec.ifas.ufl.edu/iso/PinkMealybug.htm>.

Adult mealybugs are small (approximately 1/4 inch in length) and pink in body color but covered with a cotton candy coating. When adults are crushed, their body fluids are pink in color. Female mealybugs lay up to 600 orange colored eggs, becoming pink just before hatching. They are referred to as crawlers due to their mobility to be dispersed by the wind and then walk distances to find a suitable food source. Pink Hibiscus Mealybugs spend the dry season in bark crevices, leaf scars, under bark, in the soil, in tree holes, inside fruit clusters, and inside crumpled leaf clusters.

Pink Hibiscus Mealybug sucks the sap out of plant leaves and injects a toxin that causes the following variety of plant damage symptoms:

- Crinkled or twisted leaves and shoots
- Bunched and unopened leaves, similar to a wadded up piece of paper
- Distorted or bushy shoots
- White fluffy mass on buds, stems, fruit, and roots
- Presence of honeydew, black sooty mold, and ants
- Unopened flowers which often shrivel and die
- Small deformed fruits

If the Pink Hibiscus Mealybug is left uncontrolled, it will kill plants and even trees. Management options include the use of chemical and biological controls. Using pesticides to control the Pink Hibiscus Mealybug is difficult because of its candy cotton coating that protects the mealybugs and their eggs from chemical exposure. Biological control offers the safest, most economical and long-term solution to the problem. This strategy relies on producing sufficient numbers of tiny wasps (parasitoids) that attack and kill the PHM. These wasps lay their eggs inside an individual mealybug. When the parasitoid egg hatches, it feeds on the mealybug. After 2-3 weeks, an adult wasp will emerge, find a mate and then start to lay her eggs in many more mealybugs. These

tiny wasps DO NOT ATTACK plants, other animals, or people. In fact, they don't even attack other mealybugs. They are so small most people will never see them. The problem with using this biological control method is that it takes time for the natural enemies to develop into sufficient numbers to reduce the mealybug population to a tolerable level. If you suspect that you have the Pink Hibiscus Mealybug, then do the squish test. If the insect juice is pink, it could be the Pink Hibiscus Mealybug.

Most pesticides sold in retail garden centers will kill any natural enemies that come in contact with the treated plants. This effect can last for months. The mealybugs are much less sensitive and will begin to build up damaging populations soon after application. The homeowner must choose the correct pesticide or they will make their mealybug problem worse.

If they choose one of the insecticidal soaps or oils available through their local garden center, they should apply it once prior to the release of natural enemies. Care should be taken to apply the soap or oil or combination of soap and oil to only one of a small portion of a test plant and observe the plant for damage. If the soap/oil mixture was too strong, or the temperature too high, the leaves will turn brown within two to three days. Another pesticide option is available to the homeowner: Bayer Advanced Tree & Shrub Insecticide. The active ingredient is used to manage mealybugs in nurseries. This material should be mixed and applied to the soil exactly as described on the label. Do not treat all of your infested plants! At least one infested plant should be untreated so that wasps can be released on it. The wasps will establish on this plant which will then serve as a source for control agents that will search your property for other mealybugs.

Another option would be to physically remove most of the infested plant material. Disposal for infested plant material should follow USDA-APHIS and DPI guidelines! Natural enemies will then be released into the remaining population and serve as a source for control agents that will search your property for other mealybugs.

Information for this article came from the following University of Florida/IFAS Web sites:

<http://mrec.ifas.ufl.edu/Iso/PinkMealybug.htm>

<http://creatures.ifas.ufl.edu/orn/mealybug/mealybug.htm>