

Florida Department of Agriculture and Consumer Services, Division of Plant Industry Charles H. Bronson, Commissioner of Agriculture

Pink Hibiscus Mealybug, Maconellicoccus hirsutus (Green)

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Pink Hibiscus Mealybug (PHM) was first detected in Broward and Miami-Dade counties in June 2002. Since that time, PHM has been detected in many other Florida counties.

PHM: What is it? The pink hibiscus mealybug is a sap-sucking insect which is typically observed as clusters of small soft-bodied insects in cotton-like masses covering buds, stems, fruit and roots, and in extreme cases the entire plant. The insect has a life cycle of 24 to 30 days. The female mealybug produces more than ten (10) generations per year in colonies of 500 eggs or more.

What it does: This mealybug attacks more than 125 plant species. It feeds on the plant sap and releases toxic substances causing injury and death. It is spread by wind, ants, stuck on clothing, on the hair of animals, or the movement of infested plants.

Signs of attack are easy to recognize: One or more of the following symptoms may be seen:

- · Crinkled or twisted leaves and shoots
- · Bunched and unopened leaves
- 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

Fruit trees attacked:

Papaya	Carambola	Avocado	Citrus
Sugar-apple	Soursop	Mango	Breadfruit
Golden Apple	Cherry	Plum	Guava
Pigeon Pea	Passion Fruit	Grape	Banana

Vegetables attacked:

Tomato	Cucumber
Pumpkin	Peppers
Okra	Dasheen
Lettuce	Cabbage
Beans	Squash

Ornamentals attacked:

Hibiscus	Bougainvillea	
Croton	Oleader	
Allamanda	Ixora	
Anthurium	Ginger Lily	
Heliconia	Schefflera	
Lantana	Ficus	
Seagrape	Numerous Weeds	

The U. S. Department of Agriculture in cooperation with the Florida Department of Agriculture & Consumer Services seek your assistance to prevent the spread of the pink hibiscus mealybug.

Chemical control: Chemical (pesticide) control of the PHM is difficult because the waxy covering protects the mealybugs and eggs from chemical exposure. **Do not apply pesticides without first contacting your local county extension agent.**

Biological control works! Fortunately, several natural enemies of the PHM exist which have been used successfully in biological control programs in other countries. Since July 2002, two species of small, wasp-like parasites (*Anagyrus kamali* and *Gyranusoidea indica*) have been released in areas of Broward and Miami-Dade counties where PHM has been detected. A third predator, 'mealybug destroyer' is already active in Florida and has been observed at several residential sites. Parasites will continue to be released in infected areas until the PHM population is controlled.

PHM biocontrol is not harmful: Neither the biocontrol insects nor Pink Hibiscus Mealybug will harm humans, animals or any other insect species.

You can help!

- 1. **Do NOT cut or trim the plants you think have PHM!** PHM spreads most easily by the wind and the movement of infested plants.
- The use of pesticides on your plants should be avoided. Pesticides will kill the biocontrol insects used to attack PHM.
- 3. Please provide our inspectors access to your property. All state and federal agriculture inspectors carry proper identification and drive vehicles with state/federal emblems.
- 4. If plants are already cut, double-bag in plastic all plant cuttings (leaves, branches, flowers, etc.) and put them out with regular household garbage, NOT yard trash.
- 5. Lawn/landscape companies in Broward and Miami-Dade counties are required to COVER ALL CUTTINGS while transporting; though businesses should also NOT cut or trim suspected plants. Lawn/landscape companies in Broward and Miami-Dade counties are required to COVER ALL CUTTINGS while transporting; though businesses should also NOT cut or trim suspected plants. (South Florida Lawn/Landscape Brochurch ~ pdf: http://www.doacs.state.fl.us/pi/enpp/ento/images/PHM-brochure-landscaper-2002.pdf)

HELP US PREVENT THE SPREAD OF THIS TERRIBLE PEST THROUGHOUT THE UNITED STATES.

For further information call the PHM Hotline toll-free at (888) 397-1517.

Or contact your local office of:

The United States Department of Agriculture Animal & Plant Health Inspection Service

Miami: 305-526-2825 Orlando: 407-648-6856

PHM Homeowner brochure ~ pdf (http://www.doacs.state.fl.us/pi/enpp/ento/images/PHM-brochure-homeowner-2003.pdf)

More Pink Hibiscus Mealybug Information (http://www.doacs.state.fl.us/pi/plantinsp/phm.html)



Size reference



Male PHM



Female PHM



Heavy PHM infestation on hibiscus plant in South Florida.



Severe hedge damage caused by PHM.



Maconellicoccus hirsutus (Green)-on Florida triema.



Maconellicoccus hirsutus (Green)-'bunchy top' damage.



Wasp-like parasite, Anagyrus kamali.



'Mealybug destroyer'.

Photo credit: Jeffrey Lotz, and Ru Nguyen, FDACS-DPI and USDA.