

Pink Hibiscus Mealybug

A New Pest in Texas

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The pink hibiscus mealybug (*Maconellicoccus hirsutus*) is an exotic pest. It first appeared in the U.S. in Florida in 2002, and has been recently found in Nueces County, Texas.

This insect is a potentially serious pest in many ornamental and agricultural crops. It feeds by sucking plant sap and attacks more than 300 species in 74 plant families. Texas Cooperative Extension and the Texas Department of Agriculture are working hard to contain the spread of and potential damage by this pest. You can help by knowing how to identify it and what to do if you find it on crops or ornamental plants.

Pink hibiscus mealybug (PHM) adults and nymphs look much like those of other mealybug species. Adult females have no wings and are covered with white wax. Adult males have wings and two long, waxy tails. Females deposit eggs in waxy ovisacs, or egg masses. After hatching, young nymphs look for new feeding sites, especially in tender, new plant growth. They disperse in wind currents, by crawling from plant to plant, and by sticking to clothing. They are also dispersed when infested plant material is moved from one place to another.

Like other mealybugs, PHM excrete honeydew as a byproduct of their feeding. This substance turns leaves shiny at first, and then black as sooty mold grows on the honeydew.

Despite the similarities, there are several ways to distinguish PHM infestations from those of other species.

- The feeding of the PHM causes new leaves to curl and young stems to stop elongating and become thick. This gives the plant a “bunchy top” appearance (Fig. 1).

This damage is caused by a toxin the PHM injects into a plant as it feeds. None of the other common mealybugs in Texas cause this type of damage.

- PHM form very dense colonies with heavy wax accumulations.
- The PHM has a reddish or pinkish body. When pierced, the PHM bleeds a reddish-brown fluid. Eggs are bright pink to red (Fig. 2).



Figure 1. Bunchy-top damage by Pink Hibiscus Mealybug. (Photo: Edwin Myers)



Figure 2. Pink Hibiscus Mealybug infestation, eggs, nymphs and adult. Note pink-colored eggs. (Photo: Jeffrey W. Lotz, Florida DOACS)

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- While most other mealybugs have a fringe of wax filaments surrounding their bodies, the PHM has only one or two pairs of lateral wax filaments on the posterior end of the body and two “buttons” of white wax on the abdomen (Fig. 3).



Figure 3. Pink Hibiscus Mealybug adult. Note lack of wax filaments. (Photo: D. Hall, USDA-ARC)

If you find a mealybug infestation, use the information above to compare damage symptoms and the insects’ appearance. If you suspect the pest is PHM or are not certain, contact your county Extension agent or the regional representative of the Texas Department of Agriculture. You may be asked to submit a sample of the infested plant or a good digital photograph for identification.

Fortunately, the U.S. Department of Agriculture has identified a number of predators and parasitoids that can reduce PHM populations. A species of parasitic

wasp is especially effective. After the wasps are released, populations of PHM in landscapes are reduced to very low numbers and even wild host plants are protected from heavy PHM infestations.

Biological control is the best way to manage this pest. Mealybug colonies and egg masses are protected from contact insecticides by their wax coverings. Systemic insecticides are not always effective either, because eggs and nymphs can escape exposure.

The Texas Department of Agriculture is working to release beneficial insects in the areas where PHM infestations are confirmed. If PHM is confirmed in your area, do not use any broad-spectrum insecticides that could destroy beneficial insects. Instead, prune off the most heavily infested (damaged) plants or plant parts, double bag them in sealed plastic bags, and discard them in the garbage. If necessary, treat the remaining infested plants with insecticidal soaps and horticultural oils to avoid further damage. DO NOT move infested plants or plant material, as this may spread the infestation to new areas.

PHM colonies may be guarded by ants that feed on the honeydew. These ants often prevent parasitic wasps from attacking their prey. It may be necessary to control fire ants in the area to facilitate PHM control by natural enemies.

For more information about PHM, visit the following Web site at the University of Florida: <http://mrec.ifas.ufl.edu/LSO/PinkMealybug.htm>

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