



## Pink Hibiscus Mealybug (PHM) **A-Rated**

### Classification

Scientific Name: *Maconellicoccus hirsutus*

Order: Hemiptera (True bugs)

Family: Pseudococcidae (Mealybugs)

### Origin and Distribution

Native to Southeast Asia, PHM is now found in tropical and subtropical areas around the world. First U.S. detection was in Hawaii in 1983, followed by California in 1999, Florida in 2002, and Louisiana 2006. Since then, Georgia, South Carolina and Texas have been added to the list.

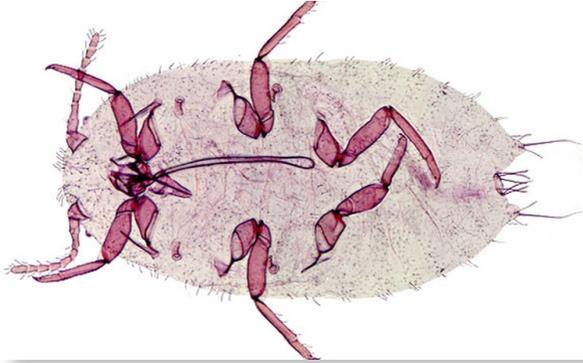


Fig. 1. Top) Adult female PHM cleared of body contents, stained, and slide-mounted for identification. Bottom) Live adult female (largest) with smaller immatures and exposed eggs (upper right).

### Description

Adult females are about 3 mm (~0.1 in.) in length, with a pinkish body thinly covered in white powdery wax (Fig. 1, bottom). Elongated waxy side filaments, typical of many other mealybugs, are missing, replaced instead with short filaments clustered at the rear end (Fig. 2). Nymphs go through 3 development stages (instars) with each looking much like the adult, but with reduced or missing rear filaments. Females produce white waxy egg cases with 150-600 eggs each and die soon after egg laying..

Males (Fig. 3) develop through 2 nymphal instars that look nearly identical to early female instars, a prepupa and a pupa before becoming an adult. Adult males have two wings (like true flies), long antennae, two long white waxy filaments on the rear end, and are slightly smaller than adult females.



Fig. 2. Adult female showing rear wax filaments.



Fig. 3. Adult male.

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Fig. 4. PHM infested Hibiscus.



Fig. 5. PHM feeding causing “bunchy top.”

### Hosts

At least 78 different plant families are attacked, including nearly all crop and ornamental plants grown or sold in Arizona.

### Damage

All post-egg stages of PHM, except adult males, feed on the soft tissues of the host, including the roots. Populations can build rapidly, forming large clusters of individuals (Fig. 4). During feeding, PHM injects a toxic saliva that causes host tissue deformation often referred to as “bunchy top” (Fig. 5). Heavy infestations can produce copious amounts of honeydew, which attracts mold and mildew, sometimes leading to complete defoliation and death of the host.

### Field Detection

Visually inspect the host for white clusters of individuals and egg cases. Pay particular attention to stems and branches. Also look for the characteristic leaf deformation on young developing leaves (Fig. 5). If possible, also inspect the roots.

### Sample Submission

Mealybugs should be submitted live and on their host following standard methods outlined in our current sample submission guidelines.

