

## Pink Hibiscus Mealybug What Should Homeowners Do?

### At a Glance

- Pink hibiscus mealybug (PHM) (*Figure 1*) feeds on the soft tissues of many plant species and injects a toxic saliva that causes curling and contortion of leaves.
- Very high mealybug populations can kill plants.
- The entire plant may be stunted and the shoot tips develop a bushy appearance. Buds may not flower and stems may twist. Fruit may also be deformed. *Figures 2,3,4*
- Excretes honeydew, which encourages the development of black sooty mold.
- Attacks more than 200 plant species, such as hibiscus, citrus, mango, avocado, tomato, cucumbers, and others.
- Infestations are spread by wind, on infected plant material, also by ants or other small insects.



PHM Female and Nymphs\*\*  
Figure 1

### Description and Life Cycle

- Adult mealybugs are small (about 3 mm long) and pink in body color but covered with a waxy secretion.
- Females are usually obscured by this white mealy wax.
- Adult males are smaller than females, reddish brown and have one pair of wings.
- Males have two long waxy "tails".
- When adults are crushed, their body fluids are also pink.
- Females die shortly after depositing eggs.
- Freshly laid eggs are orange, becoming pink before they hatch.
- Eggs are found in egg sacs
- The life cycle takes about 23 to 30 days.
- High reproductive rate (females can deposit up to 600 eggs) and produces up to 15 generations per year



Deformed buds and leaves\*\*  
Figure 3

### Status as of October 2006

- Biological control program efforts under way in more than 30 Florida counties are proving successful in controlling the destructive pink hibiscus mealybug (PHM).
- The parasites are now being reared at the Department's Division of Plant Industry in Gainesville at a rate of 16,000 per week.
- Two parasitic, gnat-sized wasps *Anagyrus kamali* and *Gyranusoidea indica* only attack the PHM and cause no harm to other insects, plants or animals.
- Another natural enemy that is helping to control PHM numbers is lady beetle is a mealybug predator and already well established in Florida. (*figure 6*)
- Two-thirds of these wasps reared in Gainesville are being released in the Sarasota and Manatee County.



Deformed shoot tips\*\*  
Figure 2



Deformed flower and leaves\*\*  
Figure 4

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- Once enough parasitic wasps have been released in an area, and the wasps have reproduced and been detected, it may not be necessary for the State Inspector to check individuals yards.

### Florida DACS\* Control Recommendations

- If homeowners think their plants may have PHM, they can call the state helpline: The Pink Hibiscus Hot Line: 1-888-397-1517
- The Department is asking that homeowners and lawn maintenance companies control PHM damage to plants by cutting away damaged areas.
- Double-bagging plant debris and disposing of it with their household garbage, not their yard trash. *(figure 5) Yard trash is often composted and spread back into the environment.*
- The state is also asking homeowners in areas where the PHM parasites are being released to avoid using pesticides on their landscape plants because the insecticides will kill the beneficial parasites that are being released to control PHM. *(figure6)*



Double Bagging  
Figure 5

### “Why not Chemical Control?”

- Most pesticides sold in retail garden centers will kill any natural enemies that are exposed to the treated plants. This effect can last for months.
- Mealybugs are much less sensitive to these pesticides giving them more advantage over the natural predator enemies.
- If you choose to use a pesticide, it must be applied prior to the release of natural enemies. **DO NOT TREAT ALL OF YOUR INFESTED PLANTS!** Leave 25% or more untreated. In so doing, it allows natural enemies to exist and multiply in population.
- “The tiny parasitic wasp is about 97 percent effective at controlling pink hibiscus mealybugs; much more effective than any approved pesticide.” (B.Odom)



Mealybug Destroyer Larva\*\*  
Figure 6

### Information Cited

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\*Florida DACS– Department of Agriculture and Consumer Services

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