

CONTROL STRATEGIES TO LIMIT THE SPREAD OF THE PINK HIBISCUS MEALYBUG FROM FLORIDA NURSERIES

On June 14, 2002, the first report of the pink hibiscus mealybug (*Maconellicoccus hirsutus*) in Florida was confirmed by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry from samples submitted from two hibiscus plants at a residence in Miramar, Broward County.

As of June 28, 2002, surveys revealed that the pink hibiscus mealybug (PHM) was established in 16 square miles of south western Broward County and in 3 square miles of north western Miami-Dade County. In the short term, we expect this pest to continue to spread into new areas.

On June 21, 2002, the first release of the most important natural enemies currently used to manage the PHM, *Anagyrus kamali*, and *Gyranusoidea indica* was initiated at several infested sites in Broward and Miami-Dade Counties. The major thrust of the PHM Biological Control Program is to distribute parasites of this plant pest throughout the infested area as soon as possible.

Five months after the release of *Anagyrus kamali*, the population density of PHM at study sites in the Caribbean was reduced by 80 percent and after one year of parasite releases, the population density was reduced by 95 percent.

At the present time, PHM has been detected in the following counties:

- Miami-Dade
- Broward
- Brevard
- Hillsborough
- Palm Beach
- Martin
- St. Lucie
- Indian River
- Pinellas
- Hillsborough
- Collier
- Lee
- Orange
- Monroe

In an effort to limit the distribution of this prolific pest, the Division of Plant Industry (DPI) has developed the following guidelines for controlling this pest in PHM infested nurseries and stock dealer establishments:

- In order to limit the spread of this pest, PHM infested nurseries and stock dealer establishments will be placed under quarantine.
- PHM infested nurseries and stock dealer establishments may elect one of the following control options in order to be released from quarantine:

1. Destruction of PHM infested nursery stock under the supervision of a DPI representative, followed by treatment of all remaining plants with IFAS recommended pesticides labeled for control of mealybugs (See attachment for chemical control recommendations).

2. Chemical treatment of all plants (infested and non-infested) until all plants are free of the PHM.

- Following a negative inspection for PHM by representatives of the Division of Plant Industry, the nursery or stock dealer establishment will be released from quarantine.

Nurseries and stock dealer establishments should keep in mind that under the best circumstances, chemical control is difficult because the waxy covering protects the mealybugs and eggs from chemical exposure. Consequently, control through the use of pesticides may prove to be costly and very time consuming.

Once successful control of the PHM is obtained through the release of natural enemies, (approximately 6 mos. to 1 year) the Division of Plant Industry will re-evaluate our PHM nursery quarantine procedures. For additional information, nursery and stock dealer establishments should contact their local DPI representative.

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