Pink Hibiscus Mealybug (PHMB)

PHMB infestation on the susceptible hibiscus host plant

Have you seen the leaves of your plants wilting away or bunching up, black sooty mold overtaking the leaves, or a white substance sticking to the limbs of the plants? If so, you may be experiencing the attack of the Pink Hibiscus Mealybug (PHMB), *Maconellicoccus hirsutus* (Green), in your garden.

A hibiscus hedge loses its foliage as a result of PHMB infestation

The pest was first reported in Jamaica in June 2007 and is known to infest over 125 tropical plants – from ornamentals to fruit trees to vegetables to weeds. The PHMB have been found in the parishes of Portland and Kingston.Severe infestation by PHMB leads to defoliation, deformation of the fruits, and death of the infested plant material. A plant health surveillance and pest response system has been initiated to contain PHMB infestations within these Eastern parishes and reduce populations below economic levels.

Management Initiatives

1. Surveillance Activities
Surveys were conducted by extension officers from the Rural Agricultural Development Authority (RADA), along a 5 km radius of the initial find to identify other areas infested by the bug. PHMB infestations have been contained within the boundaries of Portland and a one km radius within Kingston. The pest has mainly affected hosts located in urban residential areas.

2. Introduction of Natural Enemies
The parasitoid wasp *Anagyrus kamali* Moursi was sourced through the United States Department of Agriculture (USDA) and released at all infested sites. To determine the effectiveness of the wasp introduction within the infested parishes, sites were monitored before and after the release to see the impact they had on the numbers of PHMB.

Local natural enemies observed include species of ladybird beetles, a predatory reduvid bug and a parasitoid wasp.

3. Public Awareness

Information on the biocontrol programme has been disseminated to the public via print and electronic media. The Plant Health Coordinating Committee has hosted several community meetings in target areas providing the residents and farmers with information on how to identify the pests and details to contact the pest control agencies.

PHMB field training in Portland

Are we winning the battle?
Within three months of the programme, reduction in PHMB populations was observed. After eight months, PHMB population has decreased by 75-100% as result of the wasp release. The parasitoid wasp has also been seen following the movements of the pest and increasing their population as well, greatly hindering the spread of PHMB to other parishes.

In January 2008, resurgence in PHMB populations was observed at several sites, however, not at alarming levels. The response programme has proven effective to date by containing and reducing the PHMB population in the affected parishes. PHMB remains only as an urban pest with little or no impact on agriculture and natural areas.

How do you prevent the spread of PHMB?
Never remove plants suspect of infestation from your garden to another location. Cut the infested shoots and burn, or place in an air-tight plastic bag in bright sunlight for at least one day. You need to protect your farm as well as those of others, to avoid re-entry on your premises.

If you suspect that Pink Hibiscus Mealybug (PHMB) is on your premises, please contact the:
Research and Development Division
Bodles Agricultural Research Station
Old Harbour
983-2281
983-2267
bodlesresearch@moa.gov.jm

Rural Agricultural Development Authority (RADA)
Hope Gardens (6)
977-1158
977-1161
(or visit the nearest RADA office to you)