

## Melon Aphid (*Aphis gossypii* [Glover])

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The adult melon aphid or cotton aphid (*Aphis gossypii* Glover) is yellow to dark green with a black head and black cornicles. Often the melon aphid is light green mottled with darker green, but under crowded conditions and high temperatures it can be yellow or nearly white. Adult aphids range from 0.9 to 1.8 millimeters (mm) long. Females can bear two or more live young each day, rather than laying eggs. Adults live two to three weeks.

The melon aphid feeds on the shoots or undersides of leaves of many plants. Over 70 hosts are listed for Hawaii alone. Some of the common plants attacked in the Pacific region are cucurbits, citrus, eggplant, peppers, taro, and okra. Other hosts include banana, cotton, coffee, cocoa, *Piper*, tomato, beans, sweet potato and potato.

The melon aphid can develop in large numbers on taro causing wilting and downward curling of the leaves. Heavy infestations on cucumber, melon and other plants result in small, distorted leaves. Often these severely wrinkled or curled leaves form a cup shape and may dry and drop prematurely. The melon aphid also transmits at least 50 viruses. These include nonpersistent viruses of beans, peas, crucifers, celery, yardlong beans, cucurbits, papaya, and sweet potato. On taro it transmits dasheen mosaic virus which causes a mosaic symptom on the leaf but does not appreciably reduce yield. On papaya it transmits ringspot virus which causes the young leaves to be severely stunted and chlorotic. Older leaves have yellow or tan rings.

### Control

Generally if large populations develop, coccinellid beetles, parasitic wasps, lacewings and syrphids clean up the infestation fairly rapidly but usually too late to prevent damage to the plant. Papaya should not be grown in close proximity to cucurbits as the latter are a reservoir for ringspot virus. For cucurbits and papaya, immediately remove and destroy any plants infected with virus to keep the aphid from moving the virus to healthy plants. Small parasitic wasps have been introduced to the Mariana Islands that specifically attack and kill



Melon aphids on cucumber leaf

aphids, including melon aphid. These wasps are highly sensitive to chemical sprays. Care should be taken not to use sprays that would disrupt this biological control in areas where natural enemies have been introduced.

If virus is present or aphids are causing damage and the use of chemicals is required or if additional information is desired, consult an Extension Agent at your local land grant institution. On Guam, you may also consult the Guam Fruit and Vegetable Pesticide Guide for current recommendations and permissible uses.

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