

Melon Thrips

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SCIENTIFIC NAME: *Thrips palmi* Karn

CLASS: Insecta

ORDER: Thysanoptera

FAMILY: Thripidae



Melon thrips (Merle Shepard, Bugwood.org)



Melon thrips (J. Guyot, INRA, Pointe-à-Pitre, Bugwood.org)

Description

Adults

Melon thrips have a clear yellow body without darker blotches but with thick, blackish body setae. Antennal colors variable. The pronotum has two pairs of major setae and posterior angles and antennal segments 3 and 4 each have a forked sense cone.

Eggs

No description available.

Larvae

No description available.

Pupae and prepupae

No description available.

Biology

Distribution

The melon thrips was first established in the United States in Hawaii around 1982. An established field

population was first discovered in the continental United States in 1991 in Florida. It has been distributed in South and Southeast Asia, Pacific Islands, and Caribbean Islands.

Host Plants

The melon thrips has an extremely wide range of host plants, including nearly all kinds of vegetables, many fruit trees and weeds, and several flowering plants such as chrysanthemums and carnations. They quickly build up heavy infestations causing severe injuries.

Damage

Immature thrips and adults feed on leaves, (first along midribs and veins), stems (near growing tip), flowers (all parts), and fruits (on the surface). Severe damage results from sucking plant sap leaving silver scars from empty cells. Heavy feeding results in a silvered or bronzed appearance and will kill the plant.

Life Cycle

The melon thrips eggs are deposited within plant tissues singly. Larvae have two stages that feed on plant tissues. The second instar larvae, when mature, fall to ground, where they molt to prepupae and pupae in the soil. After emergence, the adults move to the growing parts of the plants such as young leaves, flowers, or young fruits, where they feed and lay eggs. Adults are usually found on young leaves, while larvae are found on lower or older leaves. Few thrips are found on flowers or fruits. At higher temperatures generation times are shorter. The average development times are: 80.2 days at 15° C, 40.7 days at 20° C, 24.8 days at 25° C, and 20.5 days at 30° C. The reproductive rate reaches maximum at 25° C. The adults reproduce sexually and parthenogenically.

Management Strategies

Chemical insecticides have not been consistent in controlling this pest. None cause more than 80 percent mortality. Several predators attack the melon thrips, including predaceous mites in the genera *Amblyseius* and *Phytoseiulus* (Acari: Phytoseiidae), insidious flower bugs, and several species of predaceous thrips, ants, and rove beetles.

