

FACT SHEET

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THRIPS

What are Thrips?

Thrips are common pests found on plants throughout Trinidad and Tobago. The insect can be found in vegetables, herbs, ornamentals and even on trees. The two most common species of thrips found in Trinidad and Tobago are *Toxoptera aurantii* and *Aphis gossypii*. They are serious pests in melongene, pepper, cassava and in many ornamental plants.

Adult thrips are very small, slender insects; 1 - 2 mm in length, with two pairs of wings. While they are difficult to see with the naked eye, it is easy to detect the presence of thrips from the damage they do to flowers, fruits and leaves.

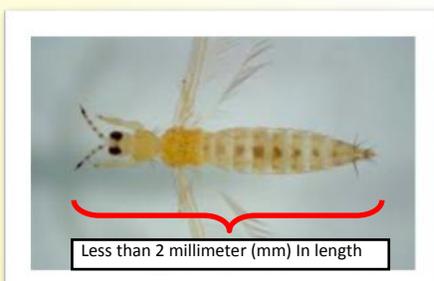


Photo 1: Adult thrips

Photo Courtesy : extension.unh.edu



Photo 2: Thrips damage to leaves

Photo Courtesy : entnemdept.ufl.edu

Signs and Symptoms of Thrips

Thrips feed by scraping the surface of plant tissue and sucking the juices (cell contents). As the wounds heal, brown scars can be seen on flowers, fruits and stems.

A very characteristic sign of thrips damage is silvery coloured leaves. Severe attacks can also cause twisting and curling of leaves, petiole elongation, flower drop, and even stunting of the entire plant.

Flowers that remain can become scarred and unattractive. Damaged fruits are still quite safe to consume but the unattractive scars make them unmarketable.

Management

Thrips multiply very rapidly in warm climate, quickly growing to overwhelming numbers that cause severe damage to plants. Usually by the time damage is seen, the responsible thrips may have already left. They are difficult to control since they are very active and quickly fly away when disturbed. Thrips are easily spread long distances floating on the wind.

Females lay eggs on plants; eggs hatch into larvae (nymphs) which feed on the plants before dropping to the soil to develop into adults (pupate).

When the adults emerge from the soil they fly up to the plant to repeat the cycle. It is therefore recommended to manage the populations using the following:

Use Dried Mulch:

Using a thick layer of dried mulch on the soil will prevent the larvae from easily entering the soil to pupate.

Field Sanitation:

This is critical in managing all insect pests, including thrips. Removal of debris from the previous crop, improving drainage in the field and weed control can all help in reducing the pests population.

If crop debris is still green it can still contain eggs and larvae or attract egg laying females, all of which will cause an upsurge of thrips in the garden. Weed control is essential in managing thrips since the insects can live and multiply in many weeds.

Use Overhead Irrigation:

Overhead irrigation can wash the insects off the plants. It also interferes with the ability of thrips to fly freely through a field.

Use Sticky Traps:

Thrips are attracted to the colours yellow and blue. Commercially available yellow and blue sticky traps placed as near to the crop as possible even within the canopy attract the adults which stick onto the traps and eventually die.

Systemic insecticides work in the system of the plants.



Did you know?

- The petiole is the short stem that attaches the leaf to the branch. Thrips typically cause a lengthening of the petiole and a narrowing of the entire leaf; this symptom is called *petiole elongation*.
- *Mulches* are usually dried material spread under the plants. They conserve moisture, suppress weeds, and prevent insects from pupating in the soil. Saw dust, bagasse, wood chips, dried grass and dried leaves can all be used as mulch.



Photo 3 : Thrips damage on melongene fruit

Photo Courtesy : pestnet.org



Photo 4 : Mulch around tomato plant

Photo Courtesy: the spruce.com.png

Layout and graphic work by Carla Washington-McLean (Illustrator MMU)

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