

PEST THREAT

Tuta absoluta (Tomato Leafminer) An Invasive Plant Pest

Pest Description

Tuta absoluta is a destructive small moth that feeds on tomato plants and fruit but may also attack other plants in the Solanaceae family.



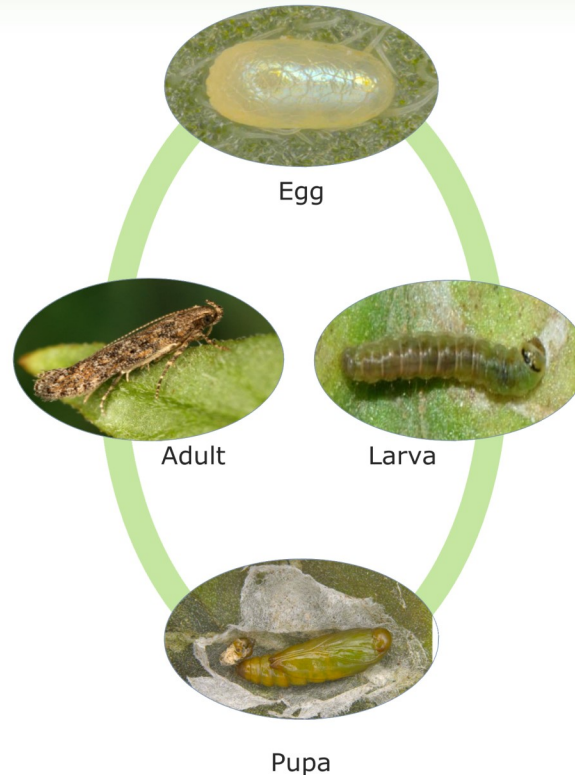
Tuta absoluta may spread through wind, infested host material such as seedlings and tomato fruits as well as soil, farm equipment and transport vehicles from infested areas.

Damage & Economic Impact

Tuta absoluta is considered to be one of the key pests that can cause serious yield losses of 50% to 100%.



Life Cycle



Origin & Geographic Distribution

The pest originates from South America.

Distribution



Tuta absoluta is currently **not present** in the Cayman Island but has been reported in Haiti it is however, recognized by the Caribbean Plant Health Directors (CPHD) forum as one of the top 10 priority pest threats to the Caribbean region.

Tuta absoluta in Haiti



From March to June 2018, we performed an insect survey in four tomato fields located in the South Department of Haiti. Although crop rotations and insecticide applications are regularly performed on these fields, insect pests repeatedly cause damage to plants and fruits. Leafminer larvae and adults were captured and further identified as *Tuta absoluta* Meyrick (Lepidoptera: Gelechiidae).

This is the first record of this important tomato pest in Haiti. Early conversations with growers suggest that the insect is experiencing a year of unprecedented outbreaks. We expect growers to increase the frequency and doses of insecticide treatments, accelerating the development of insecticide resistant populations. The presence of *T. absoluta* in Haiti will probably result in a fast expansion to the neighbouring Dominican Republic, and could serve as additional reservoir for dissemination to American countries.

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Tomato (*Lycopersicon esculentum*)

Threat– Tomato leafminer, *Tuta absoluta* Meyrick, has become one of the most important pest constraints to tomato production. It is a serious pest of both outdoor and greenhouse tomatoes. The insect deposits eggs usually on the underside of leaves, stems and to a lesser extent on fruits. After hatching, the young larvae penetrate into tomato fruits and leaves on which they feed and develop creating mines and galleries.



Importance to Food Security– Tomato (*Lycopersicum esculentum*) is among the most economically important vegetables globally, with an estimated annual production of 182 million tonnes, worth an estimated US\$ 87.9 billion.

Management strategy– Monitor plants for the presence of this pest. Use approved chemicals that are sold locally to help with managing the pest. Report suspected cases to your local extension officer for verification.

