



Tomato Leaf Miner

Tuta absoluta

This species is distributed throughout Africa, Europe, and Central and South America where it is considered a pest that occurs regularly and can cause an economic loss if left untreated. It has not been found or established in the United States to date but it could enter the state when tomatoes or plants from areas that are known to inhabit these moths are imported into the U.S. The larvae develop inside the plant making it hard to detect or control at this stage. High crop losses can occur if introduced in both the fields and greenhouses. Other host crops include potatoes, peppers and other agricultural crops.



Adult *T. absoluta*. Photo by Patrick Clement



T. absoluta leaf and tomato damage. Photo by Shakir Al-Zaidi-Russell IPM

Damage:

The larvae feed mainly on the stems, buds, leaves and calyx of the plant, but will feed on the fruit also. These targeted areas disrupt the plants photosynthetic capability which then yields low fruit development. When larva feed on the fruit, pathogens are able to invade the tomato which causes rotting. During heavy infestations, losses can be between 50-100% for tomato crops. This species prefers tomato plants but can feed on the plant parts of potatoes but not the tubers themselves.

Description:

Eggs are cylindrical and are a creamy white to pale yellow in color. Females lay eggs on the aerial parts of host plants and can lay up 260 eggs during her short lifespan. Larvae are creamy in color, later turning greenish to light pink as they develop. Depending on environmental conditions, pupation can occur in the soil, on leaf surfaces, or in mines wrapped in a cocoon of silk. Adults are small and body length is $\frac{1}{4}$ inch in average and is nocturnal. Coloration is brown or gray, mottled with dark grey and yellowish orange spots. Antennae are long and ringed with black and brown.

Photos:

Al-Zaidi-Russell, Shakir. *Tuta absoluta*. Tuta absoluta Information Network. August 2009. April 2015. Photo: *T. absoluta* leaf and tomato damage.

<http://www.tutaabsoluta.com/gallery?p=7>

Clement, Patrick. *Tuta absoluta*. Tuta absoluta Information Network. February 2011. April 2015. Photo: Adult *T. absoluta*.

<http://www.tutaabsoluta.com/gallery?p=1>

Information: Cooperative Agricultural Pest Survey. Solanaceous Hosts Commodity-based Survey. April 2015. <https://caps.ceris.purdue.edu/node/579>