



Pear Leaf Blister Moth

Leucoptera malifoliell

The Pear Leaf Blister Moth is a temperate pest of orchards throughout much of Europe and Asia. The most probable pathway for this insect's introduction into the United States is through commercial shipments of apples, nursery stock, and scion material from Europe and Asia. Some of the major hosts for this species include quinces, apples, sweet cherries, and pears. This insect species is not known to be present in the United States with the last interception at a port of entry being in 2008.



Adult (V.V. Neimorovets)

Description



Larvae (B. Smart)

Adults are an overall shiny metallic color with a tuft of hair along the vertex of the head. Female wingspan is between 7 and 8 mm with a body length of 2.6 to 3.0 mm and male wingspan is between 5.5 to 6 mm with a body length of 2.0 to 2.3 mm. The wings have a feathery appearance with yellow and black coloration toward the ends. The hind wings are a dark brown. The females can lay approximately 50 eggs, each laid individually on the underside of leaves. The brownish disk shaped eggs are 0.3 mm in diameter. The heads and prothoracic shield are yellow on the larvae, with the body starting greenish white and turning darker as they approach pupation. The full grown size of larvae are 4 mm. The pupae are brown to dark brown in color with a size of 3 mm. They typically are found clustered in flattened silk cocoons. Pupae overwinter in either bark crevices or leaf litter surrounding the host plants. The moth is multivoltine with up to 5 generations per year depending on the length of the growing season.

Damage

Larvae mine through the leaves producing tunnels up to 2 cm. These rings appear as circular blotches with concentric frass rings. The mines start brownish and then turn purplish brown and finally black. Infestations can lead to leaf loss occurring prematurely, which will occur first on the top of the tree crown, leading possibly to yield reduction. The large amount of mining through the leaves can also cause shoot growth delay and reduction of fruit weight. If defoliation occurs repeated and at a high volume, weakened trees may be produced. The damage threshold for this moth species is 0.5 to 1 mine per leaf following the blossoming of the host species.



Leaf damage by larvae (B. Smart)

Source Information:

Primary Pest of Stone Fruit: *Leucoptera malifoliell*- Pear Leaf Blister Moth. Cooperative Agricultural Pest Survey. June 2017.

Picture Information:

Adult photo: Neymorovets, V.V. Russian Institute for Plant Protection (VIZR). June 2017. <http://www.agroatlas.ru>

Larvae and Leaf damage photo: Smart, Ben. UK Moths. *Leucoptera malifoliell*. June 2017. http://www.ukmoths.org.uk/site/assets/files/7803/0259l_malifoliellalarvabs.jpg