

Pest Profile



Photo credit: Joseph V. Higbee, Contributor, BugGuide.net

Common Name: Western tentiform leafminer

Scientific Name: *Phyllonorycter elmaella* Doganlar and Mutuura

Order and Family: Lepidoptera, Gracillariidae

Size and Appearance:

	Adult	Egg	Larva	Pupae
Length (mm)	2.4 – 4.0 mm	0.3 mm	4 mm	3 - 5 mm
Appearance	Slender, brown to burnt orange with white chevron-like stripes on upper wings and hairs on the edge of hind wings. Wings held over the body.	-Elliptical and flat. -Transparent -Laid individually on the underside of leaves.	-Light green/yellow -Cylindrical abdomen. -The last 2 instars have a cylindrical thorax with 6 legs.	-Tan/yellow changing to glossy dark brown. -Cylindrical with a tapered rear. Located in leaf mines either on the tree or overwintered on the ground.

Type of feeder (Chewing, sucking, etc.): Chewing and sucking

Host plant/s: Apple, crabapple, pear, prune and cherry trees.

Description of Damage (larvae and adults): As the larvae hatch, they chew into the leaf tissue and create a mine through the egg case. The first three instars feed on spongy mesophyll, creating a mine under the leaf surfaces, usually along leaf veins. Mines gain size on the underside of the leaf as the pupa grows. The last two instars feed on other leaf tissues up to the epidermis, and mines can be seen near the tops of the leaves as well. Leaves appear mottled, peaked, or tentiform due to webbing that is spun in the mine. The green coloration is removed from under the epidermis, leaving white spots. The damage is mostly foliar and only an issue related to fruit set when extremely heavy infestations are present and cause enough foliar damage to kill limbs or flowering branches. First generation adults lay eggs primarily on early shoot leaves and flower clusters. When adults emerge from pupation they burst

through the leaf surface, exposing a mine. Pupal casing remains in the mine. Adults lay eggs on the underside of leaves, 3-4 generations per year.

References:

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