Michigan State University's invasive species factsheets

Cherry ermine moth Yponomeuta padella

The cherry ermine moth feeds on leaves of rosaceous trees such as hawthorn and cherries. During severe infestation, the caterpillars may defoliate entire trees. This exotic moth potentially poses a threat to Michigan's orchards and landscape tree industries.

Michigan risk maps for exotic plant pests.

Other common name

small ermine moth

Systematic position

Insecta > Lepidoptera > Yponomeutidae > *Yponomeuta* padella (Linnaeus)

Global distribution

Europe and Central Asia.

Quarantine status

This insect was first discovered in North America in British Columbia in 1993 followed by Washington State (Schlamp).

Plant hosts

Several trees and shrubs of Rosaceae family including blackthorn (*Prunus spinosa*), hawthorn (*Crataegus* spp.), mountain ash (*Sorbus aucuparia*), serviceberry (*Amelanchier*) and stone fruits (*Prunus* spp.) such as cherry, peach and plum.

Biology

Female moths lay clusters of eggs in the fall on twigs and branches of host trees and then shield egg masses with a sticky secretion. After egg hatch, the first-instar larvae remain aggregated and overwinter under protective shields. In the spring, from late-April to mid-June, larvae feed gregariously on buds and leaves, and tie leaves together in loose webs. Pupation occurs in cocoons that are suspended within larval webbing. Adults are active from July through August. Most flights occur at dusk. One generation develops per year.

Identification

• Adult: About 20 mm wingspan and 10 mm long; forewings white to grey with black dots arranged in four rows; hindwings dark grey.

• Larva: Up to 19 mm long; body grayish with blackspotted lines; head black; prothoracic and anal plates blackish.



Adult showing wingspan. (Photo: E. LaGasa, Washington State Department of Agriculture, Bugwood.org)



Adult. (Photo: J. Lindsey, Commanster.eu)

Pupa: About 10 mm long; body light brown and head dark brown.

Signs of infestation

Presence of gregarious larvae or pupae in loose webs constructed around leaves of food plants. Web nests of cherry ermine moth can be confused with those of fall webworm (*Hyphantria cunea*) and tent caterpillars (*Malacosoma spp.*) (British Columbia Ministry of Agriculture and Lands).

Skeletonized leaves by larval feeding.

Management notes

For monitoring cherry ermine moths, inspect leaves for larvae and feeding damage. Pheromones are available









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Cherry ermine moth



Larvae in webs. (Photo: J. Lindsey, Commanster.eu)

for monitoring male moths (Menken et al. 1992). Control measures include removal of web nests with caterpillars or pupae (Ovsyannikova and Grichanov) and insecticides that had been tested against larvae of the closely related apple ermine moth, *Yponomeuta malinellus* (Bay and McLane 1993).

Economic significance to Michigan

Cherry ermine moths infest ornamental and orchard trees of importance to Michigan. Heavy defoliation can cause economic losses to stonefruit and tree nursery industries.



Pupae. (Photo: J. Lindsey, Commanster.eu)

Likely pathways of entry to Michigan

Nursery stock of rosaceous ornamental trees and stone-fruit trees originated from Europe.

If you find something suspicious on a susceptible host plant, please contact MSU Diagnostic Services (517-355-4536), your county extension office, or the Michigan Department of Agriculture (1-800-292-3939).

References

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February 2010.

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