

ENTOMOLOGICAL NEWS



KANSAS DEPARTMENT OF AGRICULTURE—PLANT PROTECTION AND WEED CONTROL

EUROPEAN PEPPER MOTH- DUPONCHELIA FOVEALIS



Royal Tyler, Pro Pest and Lawn Store, Bugwood.org

The European pepper moth (EPM) is a new, potentially invasive species first found in the United States in 2004 in San Diego Co., California. It was not detected again in San Diego Co., California until 2010. It has now been found in Alabama, Arizona, Colorado, Florida, Georgia, Mississippi, New York, North Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas and, Washington. Southcentral Kansas has had recent detections confirmed. Southeastern, Kansas specimens are waiting to be confirmed. It is believed EPM

cannot survive winter outdoors in northern climates, but could survive year round in greenhouse situations.

Host plants comprise of plants in about 38 families.

The hatching larvae of EPM initially feed on the lower leaves of the plant near the soil line.

Older larvae can feed on plant roots or at the base of the plant girdling the plant. Larvae may also bore into stems and fruit leaving conspicuous holes.

Management of EPM include chemical and biological controls and sanitation. The caterpillars are able to live on live plant material and soil debris, which makes chemical control difficult.

"In general, natural enemies that are labeled for attacking lepidopterans should be effective against EPM. These include microbes (*Bacillus thuringiensis* - Bt), predatory nematodes that attack larvae (*Heterorhabditis bacteriophora*

and *Steinernema* spp.),

predatory beetles that attack eggs and larvae

(*Dalotia* or *Atheta coriaria*),

parasitoids that attack eggs

(*Trichogramma* species), and

predatory mites that attack eggs

(*Hypoaspis aculeifer*, *Hypoaspis miles*)"¹.

Monitoring for EPM is

accomplished by scouting plants to look for larvae which girdle or bore in the plant and cause wilting and plant collapse.

Additional monitoring can be done by using Delta traps and an EPM pheromone lure.



Kurt Ahlmark, Microlepidoptera on Solanaceae, USDA APHIS ITP, Bugwood.org

1) ENTFACT-324: European Pepper Moth *Duponchelia fovealis*
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