

# INVASIVE SPECIES & EXOTIC PESTS

## European Grape Berry Moth *Eupoecilia ambiguella*

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European grape berry moth is native to Europe and Central Asia. It primarily feeds on grapes (*Vitis vinifera*) but has also been found in honeysuckle and currant berries. While European grape berry moth has yet to be discovered in the United States, its arrival could negatively impact the grape industry because it is a direct pest feeding on berries.

### Concern

Grapes are used in a variety of production industries, and the introduction of European grape berry moth could greatly affect wine, juice, and table grape industries. The larvae may also feed on various other horticultural and native plants. European grape berry moth prefers Northern, humid climates making it of particular concern to the grape growing regions of New York, as well as the Great Lakes and Northeast. In Northern Europe and Southern Germany this moth can cause severe damage in wine production areas.

### Description

Adult European grape berry moths have forewings that are about ¼ inch long, yellowish brown with a dark brown band down the middle. Females are slightly larger than males. These moths have two generations per year and can be seen between May and June (1st generation) and between August and September (2nd generation).

The first generation of eggs can be found on buds, pedicels, and flowers while the second generation of eggs can be found on grape berries. When first laid, eggs are brown in color but over time develop orange speckles.



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European grape berry moth adult. Photo: Todd Gilligan, Screening Aids, USDA APHIS ITP, Bugwood.org.



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European grape berry moth adult. Photo: Todd M. Gilligan and Marc E. Epstein, TortAI: Tortricids of Agricultural Importance, USDA APHIS ITP, Bugwood.org.



Larvae can range in color from yellow to brown but all have dark brown legs and head. Upon emerging from their eggs, the larvae will burrow into the buds or berries on which they were laid and begin feeding. Older stages of larvae will create large webs connecting either the buds or the berries that they are feeding on. They generally can be found feeding during early morning or evening.

The first generation of moths will pupate in leaves. The second generation will pupate under bark and overwinter.

## Damage

Before a plant even has a crop the first generation of larvae are feeding on buds, pedicels, and flowers. This can cause the fruit to develop abnormally or not at all. The second generation of larvae feeds on the grape berries. This can completely devastate the grape crop by destroying large quantities of fruit. In each instance there is direct damage from feeding, but damaged fruit may develop Botrytis bunch rot and blight (*Botrytis cinerea*), particularly in damp conditions. Damaged berries may shrivel into raisin-like mummies.

## For More Information

*Eupoecilia ambiguella*. 2014. Gilligan, T.M. and Epstein, M.E. TortAI - Tortricids of Agricultural Importance. [http://idtools.org/id/leps/tortai/Eupoecilia\\_ambiguella.htm](http://idtools.org/id/leps/tortai/Eupoecilia_ambiguella.htm)

**Pests:** *Eupoecilia ambiguella* (Hubner). Interactive Agriculture Ecological Atlas of Russia and Neighboring Countries. [http://www.agroatlas.ru/en/content/pests/Eupoecilia\\_ambiguella/](http://www.agroatlas.ru/en/content/pests/Eupoecilia_ambiguella/)



European grape berry moth larva. Photo: Todd M. Gilligan and Marc E. Epstein, TortAI: Tortricids of Agricultural Importance, USDA APHIS ITP, Bugwood.org.



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