

This short description was prepared in the framework of the EU FP7 project DROPSA - Strategies to develop effective, innovative and practical approaches to protect major European fruit crops from pests and pathogens (grant agreement no. 613678). This pest was listed in the DROPSA alert list for *Vitis* fruit.

Paralobesia viteana (Lepidoptera: Tortricidae)

Fruit pathway: eggs are laid on berries, larvae feed on and in berries; severely affected bunches may contain several larvae at harvest. Often entire clusters are webbed together (Gilligan and Epstein 2014).

Other pathways: plants for planting, soil: Females lay also eggs on blossoms and stems. Larvae of the first generation feed on blossoms or small berries. Mature larvae exit the clusters and pupate in a crescent-shaped fold cut into a leaf. Larvae of the last generation may also drop to the ground and pupate in leaf litter. Overwintering occurs in the pupal stage (Gilligan and Epstein 2014).

Hosts: *Vitis* sp. (preferred larval host), *Vitis vinifera*, *Vitis riparia*, *Rubus*, *Sassafras* (Gilligan and Epstein 2014).

Distribution: North America: USA (Gilligan and Epstein 2014).

Damage: *P. viteana* is the primary lepidopteran pest of grapes in eastern North America (Gilligan and Epstein 2014). Up to 90% of fruit are destroyed in unmanaged vineyards. First-generation larvae web flower buds or berries together and feed on them or tender stems. Second generation tunnel into green berries and feed internally, reddish spots develop on the point of larval entry ("stung" berries). A single larva is able to destroy 2 to 6 berries of a cluster and several larvae may feed within one cluster. At harvest, several larvae may be within the clusters, which are often secondary infested with bunch rot fungi and *Drosophila* spp. (The Ohio State University nd.).

Other information: This species was formerly known as *Endopiza viteana*, the common name is grape berry moth. Quarantine Pest of *Vitis* for New Zealand. This species has 3-4 generations per year (Gilligan and Epstein 2014). Proposed in answer to the EPPO questionnaire on pests of concern for *Vitis*.

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| Impact: High | Intercepted: not known | Spreading/invasive: not known |
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References:

- Gilligan TM, Epstein M 2014. Tortricids of Agricultural Importance. Interactive Keys developed in Lucid 3.5. Last updated August 2014. <http://idtools.org/id/leps/tortai/index.html>
- The Ohio State University, nd. Grape Berry Moth, *Paralobesia viteana* Clemens. Insects and Mite Pests of Grapes in Ohio and the Midwest. <http://www.oardc.ohio-state.edu/grapeipm/index.htm>, accessed 13.10.2016.