

HOST LIST for *Lobesia botrana* (European Grapevine Moth)

Major hosts:

- *Vitis* spp. (grape) Vitaceae – Most important host world-wide. Major damage to vineyards.
- *Olea europaea* (olive) Oleaceae – Natural populations of *L. botrana* observed feeding on this host in Mediterranean regions. (Thiery, 2005). Larval development of *L. botrana* is significantly faster on olive than grape in field and laboratory experiments (Savopoulou-Soultani, 1990). Olive trees adjoining vineyards offer satisfactory food to the larvae and may be a source of infestation by moths of the first generation (Savopoulou-Soultani, 1990).

Major wild host:

- *Daphne gnidium* (spurge flax) Thymelaeaceae- This host plant is not naturalized in the U.S.

Other major hosts – These hosts were reported in Crete, Greece but it is not clear if they are major or minor hosts:

- *Rosemary officinalis* - Natural populations of *L. botrana* observed feeding on this host in Mediterranean regions. (Roditakis, 1988).
- *Urginea maritima* (sea squill) Liliaceae- Natural populations of *L. botrana* observed feeding on this host in Mediterranean regions. (Thiery, 2005). This host plant is not naturalized in the U.S.

*Minor or secondary hosts:

- *Actinidia chinensis* (kiwifruit/Chinese gooseberry) Actinidaceae
- *Berberis vulgaris* (European barberry) Berberidaceae
- *Dianthus* spp. (carnation) Asteraceae
- *Diospyros kaki* (persimmon) Ebenaceae
- *Galium mollugo* and *Rubus* spp. (currants and gooseberries) Rubiaceae
- *Prunus* (stone fruit, incl. plum, apricot, sweet cherry, and Japanese plum) Rosaceae
- *Punica granatum* (pomegranate) Punicaceae
- *Trifolium pretense* (red clover) Fabaceae

*Minor or secondary wild hosts:

- *Clematis vitalba* (old man's beard) Ranunculaceae
- *Hypericum calycinum* (St. John's Wort) Hypericaceae
- *Ligustrum vulgare* (European privet) Oleaceae
- *Rhus glabra* (smooth sumac) Anacardiaceae
- *Ribes* spp. (currant) Grossulariaceae
- *Rubus caesius* (European dewberry) Rosaceae
- *Silene vulgaris* (campion) Caryophyllaceae
- *Ziziphus jujuba* (jujube) Rhamnaceae

*Notes:

- Little to no information is available in the scientific literature regarding *damage* to these crops. Despite the wide host range recorded, grapevine is the major host crop in which damage is really important. With regard to wild hosts, *Daphne gnidium* is the major food plant. (Thiery, 2005; CABI, 2007). A query of the USDA Plants Database for *Daphne gnidium* indicates that this plant is not naturalized in the U.S.
- Crops traditionally assumed in the older literature to be natural hosts of *L. botrana* are not in fact naturally selected hosts: *Medicago sativa* (alfalfa) Fabaceae; *Solanum tuberosum* (potato) Solanaceae (CABI, 2007).
- High fecundity on the fruit of *Vitis* (grape), *Berberis vulgaris* (barberry), and *Rubus caesius* (dewberry) reported by Stoeva (1982).
- In laboratory studies, plums, grapes and nectarines were preferred as oviposition sites over apples, apricots, cherries, lilac, or poppy (Stavridis, 1998).

Additional References: CABI, 2007; Zhang, 1994; Ruiz Castro, 1943; Whittle, 1985; Gabel et al., 1992; Marchand, 1916; Maher and Thiery, 2006.