

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.

***Harrisina brillians* (Lepidoptera: Zygaenidae)**

Fruit pathway: Larvae of *H. brillians* are primarily leaf feeder, but also attack grape clusters (AQIS 1999, Biosecurity New Zealand 2009); when the populations are high, older larvae feed on the grape berries (Stern *et al.* 1980).

Other pathways: plants for planting: the larvae feed on leaves and sometimes move to the stem to molt (Stern *et al.* 1980)

Hosts: Wild and cultivated grape plants: *Vitis vinifera*, *Parthenocissus cuspidata*; *Parthenocissus quinquefolia*. Possible incidental hosts include: *Prunus armeniaca*; *Prunus avium*; *Prunus dulcis*, *Rosa* spp. (AQIS 1999)

Distribution: North America: USA, Mexico (AQIS 1999)

Damage: *H. brillians* is the most important grape defoliator in the major grape-growing area in Mexico (Guerra-Sobrevilla 1991). In parts of California the larvae cause serious defoliation of vineyards, backyard grapevines and wild grapes in parks and along rivers and streams (AQIS 1999). The larvae can defoliate entire vineyards (Stern *et al.* 1980). This pest causes serious damage to vines before and after harvest. Defoliation before harvest affects grape production and reduces the quality of grapes as the grape bunches are exposed to excessive sunlight. After harvest, defoliation hinders normal wood maturing and provokes marked haphazard regrowth, which weakens the vines and is detrimental to grape production for the following seasons (Guerra-Sobrevilla 1991). Damage to the berry skin by older larvae causes bunch rot, which destroys the whole cluster (Stern *et al.* 1980).

Other information: The common name is western grape leaf skeletonizer. This species is listed as quarantine pest of *Vitis* in New Zealand (Biosecurity New Zealand 2009). *H. brillians* was intercepted on table grapes to New Zealand (Biosecurity New Zealand 2009).

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

- AQIS 1999. Draft import risk analysis for the importation of fresh table grapes [*Vitis vinifera* L.] from California (USA). Australian Quarantine & Inspection Service. 60p.
- Biosecurity New Zealand 2009. Import risk analysis: table grapes (*Vitis vinifera*) from China. MAF Biosecurity New Zealand, Wellington, New Zealand, 314 p.
- Guerra-Sobrevilla L 1991. Parasitoids of the grapeleaf skeletonizer, *Harrisina brillians* Barnes and McDunnoug (Lepidoptera: Zygaenidae) in northwestern Mexico. *Crop Protection* 10(6), p. 501-503.
- Stern VM, Flaherty DL, Peacock WL 1980. Control of the grapeleaf skeletonizer. *California Agriculture* 34(5): 17–19.