

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.

Cotinis nitida (Coleoptera: Scarabidae)

Fruit pathway: The adults feed in groups on ripening or ripe fruits. Adults measure 25mm, they are attracted to undamaged grapes, very attracted to damaged fruits and conspecifics and remaining aggregation pheromones, most attracted to grapes with conspecifics and *Popilia japonica* (see damage; Hammons *et al.* 2009). The large beetles may be detected and removed at harvest but they may return on the harvested bunches if strong attractants are the commodity. Uncertain if this pest may be on the pathway, however, it was intercepted on table grapes to New Zealand (Biosecurity New Zealand 2009).

Other pathways: Soil and roots: eggs, larvae and pupae develop in the soil on roots and decaying matter. Overwintering stage are partially grown larvae (Flanders and Johnson nd.).

Hosts: *Vitis* spp., *Nicotiniana tabacum*, *Prunus persica*, *Ficus carica*, stone fruits; larvae damage grasses and young plants (Brown and Hudson 2008, Flanders and Johnson nd.), pollen and leaves of many shrubs (adults), *Medicago sativa*, vegetables, ornamental plants (larvae) (Bartlett 2004).

Distribution: North America: USA (Flanders and Johnson nd.).

Damage: Serious pest most commonly found in vineyards in the southern part of the USA. In years with severe infestations, direct feeding damage by adults can leave behind completely dried-up grape clusters (Coneva 2014). This species can devour nearly an entire crop. It is the most severe harvest-time insect pest of grapes in Kentucky (Hammons *et al.* 2010). *C. nitida* damage clusters by feeding on ripening or ripe berries. Beetles gain entry into undamaged fruit by gouging with the horn on the front of the head, then feed on the flesh of the fruit. Their odor and excrement may ruin fruit even if feeding damage is not severe (Mulder 2015, Oklahoma State University nd.). Hammons *et al.* 2009 mention that *C. nitida* is not able to damage intact berries; its high economic importance in North America appears after the introduction of the invasive *Popilia japonica* (EU Annex I/A2, recently introduced in Italy) which damages the berries first and summon *C. nitida* by the fruit odour and aggregation pheromones. *C. nitida* is a common pest of most fruits in Midwest, feeding on sweet sap as any of these fruits begin to ripen (Mulder 2015). Adults of *C. nitida* cause injuries to many fruits, including grape, peach, raspberry, blackberry, apple, pear, quince, plum, prune, apricot and nectarine. They frequently feed as well on the sap of oak, maple and other trees, and on the growing ears of corn (Oklahoma State University nd.). This species was described as a pest of tobacco and vegetables in the early 1900s. The burrowing behaviour of the larvae damages turf and grasses (Flanders and Johnson nd.).

Other information: intercepted on table grapes to New Zealand (Biosecurity New Zealand 2009).

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