

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 lists for apple, orange and mandarin, *Vaccinium* and *Vitis* fruits.

Argyrotaenia sphaeropa (Lepidoptera: Tortricidae)

Fruit pathway: larvae feed externally on fruit (Rocca and Brown, 2013; Meneguim and Hohmann, 2007; Botton *et al.*, 2003, SATA, 2012, USDA, 2015). In apple trees, it is common for them to feed on leaves and fruit at the same time (Bentancourt *et al.* 2003). On *Vitis*, larvae feed externally on grape berries; when they are once settled on the bunches, the larvae ignore leaves (Bentancourt *et al.* 2003). In a PRA on several *Citrus* species from Peru, USDA (2003) note that *A. sphaeropa* attacks fruit at fruit set, causing premature drop; however, Meneguim and Hohmann (2007) mention damage to newly formed or ripening *Citrus* fruit. It was therefore considered here that the pest may be associated with *Citrus* fruit at harvest, with an uncertainty.

Other pathways: plants for planting, soil (on its own or associated with plants or tubers); larvae are also on flowers, buds, leaves of their host plants (see 'damage'), no information was found on the location of pupae, but the pupae of the related species *A. velutina* and *A. citrina* are in leaves or debris on the ground.

Uncertain pathways: cut flowers and branches, herbs.

Hosts: Polyphagous, on a wide range of hosts, incl. *Vaccinium corymbosum* (new host; Rocca and Brown, 2013), *Prunus persica*, *Diospyros kaki*, *Pyrus*, *Citrus*, *Citrus sinensis* (Meneguim and Hohmann, 2007), *Zea mays*, *Acacia*, *Medicago sativa*, *Chrysanthemum*, *Pelargonium*, *Malus sylvestris*, *Malus domestica*, *Prunus*, *Vitis vinifera*, *Rosa*, *Mentha piperita*, *Capsicum annum*, *Solanum lycopersicum*, *S. tuberosum* (Trematerra and Brown, 2004).

Distribution: South America: Argentina (Rocca and Brown, 2013), Bolivia (Trematerra and Brown, 2004 citing others), Brazil, Uruguay (Meneguim and Hohmann, 2007). Uncertain records: South America: Peru; Central America: Panama (collection specimens; Trematerra and Brown, 2004).

Damage: On blueberry, larvae feed primarily on flowers, buds and fruit (for 4 Tortricidae species newly reported on *V. corymbosum* - Rocca and Brown, 2013). On Citrus, the pest causes damage on foliage and fruit (newly formed or ripening) (Meneguim and Hohmann, 2007). The pest also causes premature fruit drop (UC IPM, 2013). Damage to Citrus was observed in Brazil, Uruguay and Peru; in Parana, Brazil, occasionally causes outbreaks, requiring control measures (Meneguim and Hohmann, 2007). External feeding damage on leaves and fruits is also recorded for other hosts, such as pear, pear, persimmon (Botton *et al.*, 2003); apple, grapevine (SATA, 2012). Feeding on fruit decreases its value and favours fungal infections (Botton *et al.*, 2003). *A. sphaeropa* is a major pest in apple orchards and vineyards in Southern Uruguay, and also on *Diospyros kaki* in Brazil (limiting or impairing fruit production; Bentancourt *et al.*, 2003) and pear (Botton *et al.*, 2003). On apple trees, the larvae often feed on shoots, concomitantly connecting the leaves with silk threads; they damage fruit surface, and make them unmarketable (Bentancourt *et al.* 2003; SATA 2012). Damage was observed in 85% of sampled persimmon orchards in one region of Brazil (Bavaresco *et al.*, 2005). On grapevines the highest damages take place on bunches after the onset of ripening. The larvae damage the grape berries, and cover the area with silk filaments to which excrement and other remains of their activity adhere. The extent of the damage increases because they cause injuries that result in bunch rot (Bentancourt *et al.* 2003). Additionally the larvae feed on leaves of *Vitis vinifera* (SATA 2012).

Recorded impact: High	Intercepted: Not known	Spreading/invasive: Not known
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