

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 orange and mandarin fruit.

***Ecdytolopha aurantianum* (Lepidoptera: Tortricidae)**

Location of life stages on plant parts: On Citrus, eggs on green or mature fruit, larvae inside fruits, pupae in the soil (Gastaminza, 2012). Females usually deposit one egg per fruit (150-200 eggs in their lifetime); larvae penetrate into the fruit, and some reach the core of citrus fruit and feed on seeds (USDA, 2003). Larvae feed occasionally on leaves and stems (Gilligan and Epstein, 2014).

Fruit pathway: Yes, as eggs and larvae.

Other pathways: Plants for planting, soil.

Hosts: Polyphagous, incl. *Citrus*, *Citrus reticulata*, *Citrus sinensis*, *Citrus x paradisiaca*, *Litchi chinensis*, *Macadamia*, *Musa x paradisiaca*, *Theobroma cacao* (CABI CPC), *Citrus limon*, *Citrus limonia* (as lemons, limas) (Gastaminza, 2012), *Melicoccus bijugatus* (first record, Cabrera-Asencio et al., 2012). Brown et al. (2008) also lists *Sapindus saponaria*, *Psidium guajava*, *Averrhoa carambola*, *Punica granatum*, *Eriobotrya japonica*, *Prunus persica*, *Litchi chinensis*, *Macadamia integrifolia*, *Musa*.

Distribution: Central America: Costa Rica (CABI CPC), Nicaragua (Cabrera-Asencio et al., 2012); Caribbean: Trinidad and Tobago (CABI CPC), Puerto Rico (Cabrera-Asencio et al., 2012); South America: Argentina, Brazil (CABI CPC), Colombia, Peru, Ecuador, Venezuela (Cabrera-Asencio et al., 2012).

Damage: *E. aurantianum* causes direct damage to fruit by feeding, and causes lesions, premature drop and discoloration (CABI CPC; Gastaminza, 2012). Larval damage to fruit may lead to secondary infection by fungus and bacteria (Gilligan and Epstein, 2014). *E. aurantianum* is a major pest of neotropical fruits (Cabrera-Asencio et al., 2012). It has gained importance in Brazil in recent years (Cáceres, 2006). In Brazil, it became a key pest of Citrus in the 1980s (previously secondary), reaching damages in the order of 50 million USD per year in the 1990s in the State of São Paulo; losses corresponded to 1-2 boxes of fruits per plant in more intensely-attacked localities (Parra et al., 2004). It is reported as a pest of Citrus in Argentina (Sinavimo, 2016). USDA (2003) mention that it is possibly one of the most important pests of oranges in Brazil, with estimated yield losses reaching up to 50 % in Sao Paulo. It has also become a major pest of Citrus in Trinidad, causing up to 40 % losses. *E. aurantianum* is difficult to control (USDA, 2003). It causes damage to macadamia nuts (Blanco-Metzler et al., 2009). Damage on other hosts was not studied.

Other information: Intercepted on Citrus (from Europhyt, in Dropsa review, 2016). In the USA, intercepted on *Citrus*, *Byrsonima crassifolia*, *Litchi sinensis*, *Macadamia* (from South America and Central America) (commodities not mentioned; Brown, 2011); *Gymnandrosoma* sp. are also intercepted (USDA, 2003). Proposed in answer to the EPPO questionnaire on pests of concern for Citrus. The synonym *Gymnandrosoma aurantianum* is used in many publications (e.g. Brown et al., 2008; Brown, 2011; Cabrera-Asencio et al., 2012).

Recorded impact: High	Intercepted: Yes	Spreading/invasive: Not known
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- USDA. 2003. Importation of Fresh Commercial Citrus Fruit: Grapefruit (*Citrus x paradisi* Macfad.); Lime (*C. aurantiifolia* [Christm.] Swingle); Mandarin Orange or Tangerine (*C. reticulata* Blanco); Sweet Orange (*C. sinensis* [L.] Osbeck); Tangelo (*C. x tangelo* J.W. Ingram & H.E. Moore); from Peru into the United States. A Pathway-Initiated Plant Pest Risk Analysis. October, 2003