

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.

***Coscinoptycha improbana* (Lepidoptera: Carposinidae)**

**Location of life stages on plant parts:** eggs on ripening fruit (also fruit stalk), larvae in fruit, emerge from fruit and pupate close to fallen fruit (rarely in debris, leaf litter, loose soil) (Biosecurity New Zealand, 2008).

**Fruit pathway:** Yes, as eggs or larvae. Transport of fruit by passengers is one of the pathways suspected for introduction into New Zealand (Biosecurity New Zealand, 2008).

**Other pathways:** plants for planting. Biosecurity New Zealand (2008) also mentions it may have been transported to New Zealand by wind (although it is not known why this did not occur before).

**Hosts:** In Australia, native and exotic species from various families, such as *Schizomeria ovata*, *Citrus*, *Cassine australis*, *Psidium*, *Syzygium*. In New Caledonia, it was found on the endemic shrub *Eugenia hurlimannii* in New Zealand, it was also recorded on *Prunus persica* (Dymock, 2012), *Citrus*, *Citrus limon*, *Citrus unshui*; *Psidium*, *Acca sellowiana*, *Macadamia integrifolia*, *Eriobotrya japonica*, *Prunus domestica*, *Prunus persica*, *Pyrus pyrifolia*, *Cassine australis*, *Schizomeria ovata* (Biosecurity New Zealand, 2008).

**Distribution:** Oceania: Australia (native), New Zealand (first finding in 1997) (Suckling et al 2013), New Caledonia (first record) (Mille et al., 2012). In New Zealand, steadily spreading southwards (NorthernAdvocate, 2015).

**Damage:** In Australia, *C. improbana* is not a significant pest, and not a pest in commercial crops, but it is known to feed on fruit such as Citrus in home gardens (Biosecurity New Zealand, 2008). It also causes seasonal damage to ripening guava fruit (USDA, 2015). In New Zealand, it has become a pest of soft fruit in Norfolk Island, affecting commercial peach production, and infests a range of soft fruit and nuts year-round, including citrus, peach, plum, pear and nashi, guava, macadamia and loquat (Dymock, 2012). It is considered as a serious pest of *Macadamia integrifolia* and feijoa (*Acca sellowiana*); the extent of damage on other commercial crops is not reported (Biosecurity NZ, 2008).

<b>Recorded impact:</b> Moderate (on another crop, uncertain)	<b>Intercepted:</b> Not known	<b>Spreading/invasive:</b> Yes
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**References:**

- Biosecurity New Zealand. 2008. Pest risk analysis for six moth species: lessons for the biosecurity system on managing hitchhiker organisms. Final. Ministry of Agriculture and Forestry, New Zealand.
- Dymock JJ. 2012. Biological control agents for the guava moth, *Coscinoptycha improbana*. Sustainable Farming Fund Project L11/145. July 2012 (project report).
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- Northern Advocate. 215. Solar power against pest. Thursday, 12 March 2015.  
[http://m.nzherald.co.nz/northern%ADadvocate/rural/news/article.cfm?c\\_id=1503445&objectid=11416161](http://m.nzherald.co.nz/northern%ADadvocate/rural/news/article.cfm?c_id=1503445&objectid=11416161)
- Suckling DM, Dymock JJ, Park KC, Wakelin RH, Jamieson LE. 2013. Communication disruption of guava moth (*Coscinoptycha improbana*) using a pheromone analog based on chain length. *J Chem Ecol*. 2013 Sep;39(9):11618.

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