

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 *Vaccinium* and apple fruits.

Teia anartoides (Lepidoptera: Lymantriidae)

Fruit pathway: it was considered here that larvae (and pupae) may become associated to packaging material containing *Vaccinium* fruit (with an uncertainty), and with apple fruit or packing material containing apple. There is no indication of the presence of a life stage on fruit. However, *T. anartoides* is a pest of *Vaccinium* and apples and eggs and pupae may be associated with a wide range of commodities and items (see Other pathways).

Other pathways: plants for planting, inanimate objects (including possibly packaging, containers); eggs are laid at the pupation site, larvae feed on leaves and disperse by crawling or ballooning. Pupae form on or near hosts plants, on other plants and on inanimate objects (MAF, no date; CABI CPC). The pest was intercepted twice in New Zealand on a container, and a container packaging (MPI, 2014). Other possible pathways are indicated as vehicles, live plant material, passengers' items, other commodities (MAF, no date).

Hosts: Highly polyphagous. During an incursion in New Zealand, it was found on 92 species in 38 families, including new hosts and native plants (Zespri, no date). Hosts include *Vaccinium* (Ireland and Wilk, 2006), *Malus*, *Acacia*, *Eucalyptus*, *Pyrus*, *Prunus* (as cherry, apricot), *Cupressus*, *Pinus radiata*, *Passiflora*, *Rosa*, *Dahlia*, *Salix*, *Musa*, *Primula*, *Gladiolus* (Zespri, no date).

Distribution: Oceania: Australia (native - Ireland and Wilk, 2006, CABI CPC). Absent, eradicated: New Zealand (Suckling et al., 2007).

Damage: The pest is qualified as being a 'voracious and indiscriminate feeder', causing defoliation. Contact with caterpillars may cause skin irritation and allergic reactions (MPI, 2014). It can feed on pine trees up to 8 years old, affecting their growth. *Acacia*, *Rosa* and *Malus* are amongst preferred hosts (Zespri, no date). In Australia, *T. anartoides* is one of the main pests of blueberries in New South Wales (Ireland and Wilk, 2006); it is also a common pest on urban garden plants, and a sporadic pest of horticultural and forestry trees (CABI CPC). In New Zealand, it was identified as a major risk with potential high economic and ecological impact (30-213 million USD over 20 years) and, during an incursion, heavy defoliation of native trees was observed in a localised area (Zespri, no date; MAF, no date; Suckling et al, 2007). Eradication costed ca. 40 million USD (Zespri, no date).

Other information: Intercepted in NZ on packaging material (pupae), sea containers (adult) (MPI 2014). Females are flightless, ballooning larvae are the main means of dispersal (Suckling et al., 2007). Note: the name 'painted apple moth' is used in Ireland and Wilk (2006).

Recorded impact: Moderate	Intercepted: Yes	Spreading/invasive: Yes
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References:

- CABI CPC. Crop Protection Compendium. CAB International, UK. <http://www.cabi.org/cpc>
- Ireland G, Wilk P. 2006. Blueberry production in northern NSW (factsheet). PRIMEFACT 195. New South Wales Department of Primary Industries.
- MAF. No date. Painted Apple Moth – Auckland New Zealand May 1999. Outline for case-studies on alien species. <http://www.biosecurity.govt.nz/files/pests/painted-apple-moth/ias-nz-moth-2007-en.pdf> (accessed August 2015)
- MPI. 2014. Painted Apple Moth, *Teia anartoides* (online data sheet). Ministry for Primary Industries, New Zealand. Available at <http://www.biosecurity.govt.nz/pests/painted-apple-moth>.
- Suckling DM, Barrington AM, Chhagan A, Stephens AEA, Burnip GM, Charles JG, Wee SL. 2007. Eradication of the Australian Painted Apple Moth *Teia anartoides* in New Zealand: Trapping, Inherited Sterility, and Male Competitiveness. Chapter 7, pp 603-615. In Area-Wide Control of Insect Pests, eds Vreysen MJB, Robinson AS, Hendrichs J. Published by Springer Netherlands.

Zespri. No date. Data sheet. High Priority Organism: *Teia anartoides* (Painted Apple Moth). 2 pages.
Available from the website <http://mpi.govt.nz/> (accessed August 2015)