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 and *Vaccinium* fruits.

## **Tortrix excessana (Lepidoptera: Tortricidae)**

**Fruit pathway:** larvae feed at the fruit surface and young larvae may also enter the interior of an apple or pear through the calyx with no visible external damage (Gilligan and Epstein 2014, Biosecurity Australia 2006). No specific information was found for *Vaccinium*, but the pest was intercepted in the USA on blueberry fruit (2 interceptions - USDA, 2008).

**Other pathways:** plants for planting; larvae also feed on leaves, buds and soft stems, eggs are on leaves (NZFFA, 2009; Biosecurity Australia, 2006). Larvae web leaves or leaves to fruit; pupae are in the larval shelter (Gilligan and Epstein, 2014).

Uncertain pathway: cut branches.

**Hosts:** Polyphagous, incl. *Vaccinium corymbosum* (Tomkins and Koller, 1985), *Actinidia chinensis, Diospyros, Malus domestica, Prunus armeniaca, Vaccinium* (CABI CPC), many native and introduced forest, orchard, and garden shrubs and trees, deciduous or conifers, incl. *Eucalyptus, Sequoia sempervirens, Pinus, Pseudotsuga menziesii* (NZFFA, 2009).

**Distribution:** *Oceania*: New Zealand (native, NZFFA, 2009). *North America*: Hawaii (USA, introduced) (Gilligan and Epstein, 2014).

**Damage:** *T. excessana* may cause economic damage by feeding directly on the surface of fruit. It is a pest of strawberry, walnut, stonefruit, apple in New Zealand (Gilligan and Epstein, 2014; Biosecurity Australia, 2006). It may cause damage to forest trees (NZFFA, 2009). The pest is also a cause of rejection of *Vaccinium* fruit at export (Tomkins and Koller, 1985).

**Other information:** *T. excessana* is occasionally intercepted on *Fragaria, Malus* or *Prunus* (no indication of commodities; Gilligan and Epstein, 2014). The pest was intercepted in the USA on blueberry fruit from NZ in 1985-2007 (USDA 2008) and fresh avocadoes from NZ to Australia. It is regulated in South Africa on fruits of kiwi and *Vaccinium* from New Zealand (MPI, 2013), and in Australia for apple. Note: most publications use the name *Planotortrix excessana*.

Recorded impact: Moderate	Intercepted: Yes	Spreading/invasive: Yes
(on another crop, uncertain)		

## **References:**

Biosecurity Australia. 2006. Final import risk analysis report for apples from New Zealand, Part C. Biosecurity Australia, Canberra.

CABI CPC. Crop Protection Compendium. CAB International, UK. http://www.cabi.org/cpc.

Gilligan TM, Epstein M. 2014. Tortricids of Agricultural Importance. Interactive Keys developed in Lucid 3.5. Last updated August 2014. http://idtools.org/id/leps/tortai/index.html

MPI. 2013. Importing countries phytosanitary requirements: Republic of South Africa. New Zealand Ministry for Primary Industries.

NZFFA. 2009. Greenheaded leafroller, Blacklegged leafroller and Light Brown Apple Moth. Forest and Timber Insects in New Zealand No. 58. Pests and diseases of forestry in New Zealand. New Zealand Farm Forestry Associaion. http://www.nzffa.org.nz/

Tomkins AR, Koller MS. 1985. A preliminary investigation of highbush blueberry pest and disease control. Proceedings of the 38th NZ weed and pest control conference.

USDA. 2008. Pathway-Initiated Risk Analysis of the Importation of *Vaccinium* spp. Fruit from Countries in Central and South America into the Continental United States. February 5, 2008. Revision 003. USDA-APHIS.