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, and *Vaccinium* fruit.

***Ctenopseustis obliquana* (Lepidoptera: Tortricidae)**

Fruit pathway: Larvae feed on leaves, buds and fruit on a number of crops (Stevens et al., 1995; Gilligan and Epstein, 2014). This is the case for avocado (Stevens et al., 1995) and apple; on the latter young larvae may also enter the fruit through the calyx (Biosecurity Australia 2006). No specific information was found for *Vaccinium*, but the pest was intercepted on blueberry (2 interceptions in and on fruit; USDA, 2008). For Citrus, larvae may web leaves to fruit, and burrow in the rind of the fruit, occasionally in the flesh, and may cause fruit drop (Hamilton, 1937). On apple, kiwi, grapefruit and plum, the maturing fruit produces corky tissue over the damage; the calyx of various fruit (especially pome fruit) may be invaded by young larvae (Green, 1979). It is unclear if damage is observed on mature fruit, but the pest is mentioned as being present throughout the year (Hamilton, 1937), and this is not excluded here.

Other pathways: plants for planting, cut flowers and branches; larvae also feed on leaves and buds (Stevens et al., 1995; Gilligan and Epstein, 2014); eggs on leaves (Biosecurity Australia 2006).

Hosts: Highly polyphagous, in more than 20 families (Gilligan and Epstein, 2014), including deciduous and coniferous trees (NZFFA, 2009). Hosts include *Vaccinium corymbosum* (Tomkins and Koller, 1985), *Vitis*, *Prunus*, *Malus*, *Vaccinium* (CABI CPC), *Actinidia*, *Rubus*, *Persea americana*, *Pinus*, *Eucalyptus*, *Populus*, *Salix* (Green and Dugdale, 1982), *Diospyros kaki*, *Ribes*, *Syzygium smithii*, *Cyclamen*, *Rosa*, *Citrus*, *Veronica*, *Camellia japonica* (Gilligan and Epstein, 2014).

Distribution: Oceania: New Zealand (NZFFA, 2009; Shaw *et al.* 1994). Reports of introduction into Hawaii are not confirmed (Gilligan and Epstein, 2014).

Damage: *C. obliquana* causes damage by feeding on leaves, buds and fruit, and by webbing leaves to fruits (Gilligan and Epstein, 2014). It belongs to the economically important species in New Zealand apple orchards (Shaw *et al.* 1994). It is a cause of rejection of fruit at export for *Vaccinium* (Tomkins and Koller, 1985) and avocado (up to 30% of the fruit because of larval damage from unsprayed orchards - Stevens et al., 1995; egg rafts are a quarantine problem on fruit for export - NZ avocado growers association, 2004). On avocado C. obliquana increases fruit drop; on unsprayed trees, up to 70% fruits can have feeding damage (for *C. herana* and *C. obliquana*; NZ avocado growers association, 2004). It is an economically important pest of apple (Shaw et al. 1994), and causes occasional damage in *Pinus radiata* (Brockerhoff et al. 2002). It is considered as a pest of kiwi (controlled; Smith and Graham, 1980). No recent information was found for Citrus. In the past it was considered as a pest of a wide variety of fruit crops, such as pome and stone fruit, kiwi, citrus, grape, feijoa, berry crops (Green, 1979), and causing occasionally considerable damage on Citrus (Hamilton, 1937).

Other information: intercepted on blueberry (2 interceptions on fruit, USDA 2008). *C. obliquana* and *C. herana* cannot be morphologically distinguished but have different pheromones (Stevens *et al.* 1995). Regulated in the USA for Citrus fruit (USDA fruit and vegetable manual https://www.aphis.usda.gov/import_export/plants/manuals/ports/downloads/fv.pdf).

Recorded impact: Moderate (on apple)	**Intercepted:** Yes	**Spreading/invasive:** Not known

References:

Biosecurity Australia. 2006. Final import risk analysis report for apples from New Zealand, Part C. Biosecurity Australia, Canberra, 197 p.

Brockerhoff EG, Jactel H, Leckie AC, Suckling DM 2002. Species composition and abundance of leafrollers in a Canterbury pine plantation. New Zealand Plant Protection, 85-89.

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

Green CJ. 1979. Brownheaded leafroller, (Walker), life cycle. N.Z. Dep. Sci. Ind. Res. Inf. Ser.: 105(27):1-3.

Green CJ, Dugdale JS. 1982. Review of the genus Ctenopseustis Meyrick (Lepidoptera: Tortricidae), with reinstatement of two species, New Zealand Journal of Zoology, 9:4, 427-435, DOI: 10.1080/03014223.1982.10423874.

Hamilton WM. 1937. A preliminary survey of the citrus industry in New Zealand: the historical, cultural, and economic aspects. Wellington, N.Z.; G.H. Loney, Govt. Print., 1937

NZ Avocado Growers Association 2004. Growers' manual. New Zealand Avocado Growers' Association.

NZFFA. 2009. *Ctenopseustis obliquana* (Walker) and C. herana (Felder & Rogenhofer) (Lepidoptera: Tortricidae). Forest and Timber Insects in New Zealand No. 40. Pests and diseases of forestry in New Zealand. New Zealand Farm Forestry Associaion. http://www.nzffa.org.nz/

Shaw PW, Cruickshank VM, Suckling DM. 1994. Geographic changes in leafroller species composition in Nelson orchards. New Zealand journal of Zoology 21(3): 289-294.

Smith BN, Graham DPF 1980. Citrus and kiwifruit insect pest control with pirimiphos methyl and permethrin. Proceedings of the thirty third New Zealand weed and pest control conference Willow Park Motor Hotel, Tauranga, August 12th to 14th, 1980: 105-109 (abstract)

Stevens PS, McKenna CE, Steven D. 1995. management for avocados in New Zealand. Proceedings of The World Avocado Congress III, 1995 pp. 429 – 432.

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.