Fact sheet

Spotted winged drosophila

What is Spotted winged drosophila?

Spotted winged drosophila (SWD, *Drosophila suzukii*) is a newly emerging pest in North America. SWD is a small fly that attacks a range of soft skinned fruit and reduces crop yield and quality through direct feeding damage and secondary infection of the fruit. This pest has a significant impact on fruit production as the larvae feed on maturing fruit, not just over-ripe or decaying fruit.

The preferred hosts for SWD eggs to lay in healthy fruit include a range of berries, cherries, nectarines, plums and grapes. Apples, pears and other fruit with thicker skins are also hosts when fruit begins to rot.

What does it look like?

Adult SWD are yellow-brown coloured flies with dark bands on the abdomen and red eyes. They are 23 mm in length and the female flies have a serrated ovipositor at the tip of their abdomen. This ovipositor allows the females to lay eggs in healthy, thin-skinned fruit. Males have a small dark spot the front edge near the tip of each forewing (unlike females).

Larvae are cream or white coloured and about 3 mm long. Pupae are red to brown, 2-3 mm in length and cylinder shaped with two small projections on the end.

What can it be confused with?

Adult SWD look almost identical to the regular vinegar fly (*D. melanogaster*). SWD are distinguished from other *Drosophila* species present in Australia by the black spot on the wing tips in males.



Larvae feed internally on fruit making them hard to detect



External damage symptoms on cherry fruit



Adult male flies have distinct spots on the ends of their wings, which give the species their name





What should I look for?

Infested fruit show small scars and indented soft spots on the surface, which is left by the "stinging" (ovipositing) females. Larval feeding results in the fruit collapsing around the feeding site.

Detection of the SWD, as with a number of other insect pests that attack fruit, can occur following detection of fruit rot caused by secondary infection by moulds and bacteria.

How does it spread?

Adult SWDs can spread throughout a crop through flight, but longer distance dispersal occurs through movement of plant material (primarily fruit) infested with eggs or larvae.

Where is it now?

SWD are native to SE Asia but have recently become a pest in Japan and USA.

How can I protect my orchard from Spotted winged drosophila?

Source planting material and orchard inputs only from 'clean', accredited suppliers. Check your orchard frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common cherry pests so you can tell if you see something different.

If you see anything unusual, call the Exotic Plant Pest Hotline





Adult females do not have the spots present on their wings



Spotted winged drosophila pupae on damaged fruit surface



Oviposition scars and secondary rotting in cherry fruit

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