IMPROVING OUR PREPAREDNESS FOR SPOTTED WING DROSOPHILA

Understanding the enemy to better arm industry

MT17005

'Improving the biosecurity preparedness of Australian horticulture for the exotic Spotted Wing Drosophila (*Drosophila suzukii*)' will run until June 2020. This project recognises the potential impact of that an incursion of Spotted Wing Drosophila would have on multiple horticultural industries and is a proactive approach to dealing with an exotic threat before a detection in Australia is made.

Project objectives

1. Increase the chance of detection and reporting of Spotted Wing Drosophila through increased awareness and knowledge of the pest.
2. Improve Australia's capacity to respond effectively to any incursions of Spotted Wing Drosophila.

How will we do this?

We will review of the potential entry pathways and impacts for Australia, impacts of Spotted Wing Drosophila overseas, and our preparedness and response capability in Australia.

We will review overseas management practices and incursion response protocols to support preparation of appropriate management plans and control permits.

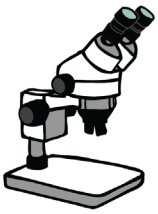
We will develop a cross commodity contingency plan, including optimum surveillance protocols.

We will run an awareness and education campaign for potentially affected industries, involving seminars, articles, and preparedness workshops.

We will have a clear picture of how prepared Australia is to detect and control this fly.

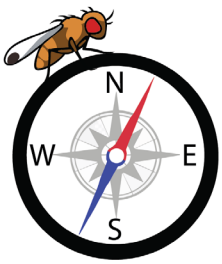
Information on best methods to manage, contain or eradicate the pest will be available to us.

We will understand the likely economic impacts, to industries and the supply chain.



RD&E needs to address gaps in our preparedness will be identified.

A contingency plan will be ready to guide response activities should Spotted Wing Drosophila be detected.



Pretty fly for a *suzukii* – or not…

Spotted Wing Drosophila are native to Eastern Asia but is rapidly becoming a global concern, having recently spread to North America, South America and Europe.

With a short generation time, the ability to reproduce on a wide variety of soft-skinned fruits, and cryptic appearance, this fly is of high biosecurity concern to horticulture.

This exotic fruit fly hit the headlines in 2009 following reports of unusual damage to a range of soft fruits in California, USA.

Damage had been observed the previous year, but the belief that this was an endemic species of Drosophila attacking damaged or over-ripe fruit meant that no action was taken.

When the pest was accurately identified it was realised that this was a species capable of damaging fruit prior to harvest. This is possible because Spotted Wing Drosophila has a serrated ovipositor, adapted to piercing the skin of developing fruit.

An outbreak in Australia would have a significant impact. While crop losses of 20-40% are commonly reported, if left unmanaged, losses from this pest could reach 80% in susceptible fruits.

Amongst the most susceptible crops are strawberries, cane berries, blueberries and cherries, with summerfruit and table grapes also impacted. The estimated production value of these industries is over $1.6b.

Project parters thank government and industry supporters of this work going forward. For more information about this project contact Dr Jessica Lye:
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Image credits: Dr Elia Pirtle, cesar