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What is it?

The tomato potato psyllid (TPP) is a small plant sucking insect of national importance for vegetable growers. The psyllid is a known vector for the bacterium (*Candidatus Liberibacter solanacearum (CLso)*) which causes 'Zebra Chip' in potatoes. TPP affects a range of plants including potato, tomato, eggplant, capsicum, chilli, tamarillo, goji berry and sweet potato.

What is the "TPP complex"?

The tomato potato psyllid causes significant plant damage to crops resulting in stunted growth, "psyllid yellows", necrosis, and premature plant death in heavy infestations. The psyllid can also carry the bacterium Clso and when present together form the TPP Complex.

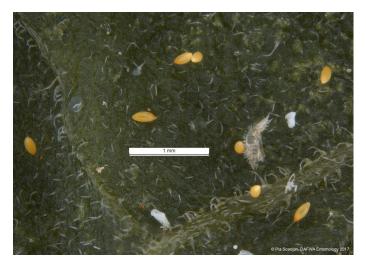
Where is it?

In February 2017 the tomato potato psyllid was discovered in Western Australia. This has resulted in export restrictions and more than 420 km quarantine zone around the CBD. To date, the bacteria has not been detected.

At present the psyllid remains contained to Western Australia. All State governments and TIA, with the support of industry, continue to provide surveillance of TPP through the placement of sticky traps.

Key Points

- TPP is a major threat to the potato, tomato and capsicum industry.
- All potato cultivars appear to be susceptible.
- TPP causes severe damage to plant growth and yield.
- The bacteria causes Zebra Chip disease in potatoes and reduces potato marketability.
- Presence of the psyllid results in restricted plant movement across borders.
- The psyllid is yet to be present in any other State other than Western Australia.
- The bacteria (Clso) remains undetected.
- Surveillance of all susceptible crops remains the best way to monitor for the psyllid.



Above: TPP eggs and Below: nymphs and adult TPP



Photo credit: Western Australian Agriculture Authority (Department of Agriculture and Food WA)

Psyllid movement

The psyllid can spread through movement of infected plant material although can also disperse through natural pathways such as flight and wind dispersal.

Adult psyllids are distinguishable by their white markings across the abdomen and across the thorax. For a more detailed taxonomic description of TPP and to view past and present surveillance activities follow this link:

http://www.utas.edu.au/tia/centres/vegetables/monitoring-psyllids-and-psyllid-predators-in-australian-potato-crops/surveillance-programme

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TIA is a joint venture of the University of Tasmania and the Tasmanian Government

Signs of TPP

- TPP eggs are yellow in colour and are on short stalks, typically along leaf margins.
- Nymphs are 2mm, "flat" and oval shaped with red eye spots and a fringe of hair surrounding the body.
- Adults tend to jump vertically when disturbed hence the term "jumping plant lice".
- Foliar symptoms such as yellowing of leaf margins and upward curling of the leaf margins.
- Honewdew is a by-product of plant feeding from psyllids and can be a food source for ants.
- Sightings of TPP must be reported to:

Exotic Plant Pest hotline

1800 084 881







The Surveillance of the tomato potato psyllid in the eastern states and South Australia (MT16018) is a strategic levy investment under the Hort Innovation fresh potato, potato processing and vegetable Fund.



