

Tomato potato potato psyllid



Factsheet

About Tomato potato psyllid (TPP)

Tomato potato psyllid (*Bactericera cockerelli*) is an exotic plant pest which feeds on tomato, potato, capsicum, chilli, tamarillo and sweet potato, and solanaceous weeds like nightshade.

Tomato potato psyllid (TPP) can affect plant growth, reduce crop yield and spread a serious plant disease known as 'zebra chip' in potato, caused by the *Candidatus* Liberibacter solanacearum (CLso) bacterium. CLso has not been detected in Australia.

TPP stages of development

TPP has three stages of development — egg, nymph and adult. All stages are very small (less than 3mm) but can be seen with the naked eye. Adults and nymphs cause injury to plants when feeding.







- Eggs are less than 1mm long and attached to the plant by a short vertical stalk.
- They are usually laid on the lower surface of leaves or as a halo around the leaf edge.
- Eggs are white when first laid then turn yellow to orange after a few hours.
- Nymphs are up to 2mm long, oval shaped and have a flattened scale-like appearance.
- Young nymphs are yellow with a pair of red eyes.
- Older nymphs are greenish, fringed with hairs and have visible wing buds.
- Adults resemble small winged cicadas in appearance, but are the size of an aphid (about 3mm long).
- The body is brownish and has white or yellowish markings, and a broad white band on the abdomen.
- Wings are transparent and rest roof-like over the body.





L-R: Dull fruit colour from TPP infestation. Psyllid sugars on a leaf.

Signs and symptoms of TPP

Commercial and residential growers of host crops should regularly check for signs of TPP. Look for:

- insect life stages on the underside of leaves and signs of leaf damage in host plants
- adult TPP jumping from foliage when disturbed
- stunting and yellowing of growth tips in host plants
- yellowing or purpling of leaf margins

- 'cupping' or upward curling of leaves
- severe wilting of plants caused by high numbers of TPP feeding
- 'psyllid sugars' white sugar-like granules excreted by adults and nymphs, which coat leaves and stems, and can lead to growth of sooty mould
- stem death symptoms similar to other potato and tomato disorders



EARLY DETECTION IS IMPORTANT IN ANY PEST MANAGEMENT SCENARIO.

How you can help combat TPP in Western Australia

- Practice sound crop hygiene and biosecurity practices to prevent the entry, establishment and spread of pests and diseases on your property.
- Regularly monitor your plants for any unfamiliar pests or diseases.
- Check plants you purchase are free of pests.
- Comply with any movement restrictions of host plants if in a Quarantine Area.
- Avoid moving home-grown plants off your property, even if you are not in a Quarantine Area.
- Apply treatments to control TPP.
- If you live in regional areas around Kununurra, Broome, Carnarvon, Geraldton, Albany and Esperance, report suspect signs of TPP to the Department of Primary Industries and Regional Development.

Pest and disease reporting and identification



Send a photo to DPIRD via the **MyPestGuide Reporter** app available from Google Play or App Store



Email photos with your name, address and phone number to DPIRD at padis@dpird.wa.gov.au



Call the Pest and Disease Information Service on (08) 9368 3080



For current updates on TPP in Western Australia, visit agric.wa.gov.au/tpp

This factsheet is an initiative of the national TPP Transition to Management Plan.

Important disclaimer: The Chief Executive Officer of the Department of Primary Industries and Regional Development (DPIRD) and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.



CHECK. PROTECT

Help limit the spread of the Tomato potato psyllid