

Tomato Potato Psyllid Identification

Tomato Potato Psyllid (TPP) has been detected in Victoria.

Be alert for the pest and the symptoms in plants.

The tomato potato psyllid (*Bactericera cockerelli*) is a tiny sap-sucking insect with key host plants from the *Solanaceae* and *Convolvulaceae* families. This includes fresh fruit and vegetables such as tomatoes, potatoes and capsicum.

TPP can also be transported on other species of plants even though it does not feed on them. These 'carrier' plants are also regulated when moving interstate.

The psyllid can be identified at three stages of development:

Egg

Psyllid eggs are less than 0.5 mm long and are white when first laid, then turn yellow to orange after a few hours. Eggs can often be found on the lower leaf surface of along the leaf stalk as shown in Figures 1 and 2.



Figure 1: TPP eggs laid along leaf edge (Ashley De Vries)



Figure 2: TPP adult and eggs showing egg stalks from side of leaf (New Zealand Plant and Food)

Nymph (Juvenile)

Nymphs moult 5 times, getting progressively larger each time, up to 2 mm long. Nymphs have flattened oval, pale yellow to green or orange scale-like bodies and red eyes (Figures 3 and 4). More mature nymphs have wing buds and are fringed with hairs. Nymphs can usually be found on the underside of leaves.



Figure 3: TPP adults and juveniles on the underside of a leaf (Department of Primary Industries and Regional Development, Western Australia)

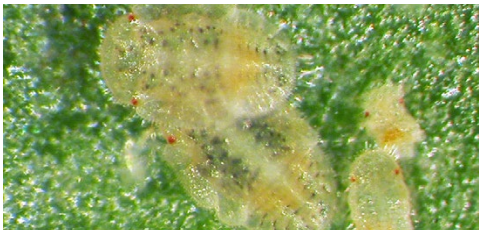


Figure 4: Close up of TPP nymphs (Joseph Munyaneza USDA)

Adult

Adults resemble small, winged cicadas and are about 3 mm long (Figures 2 to 6). When new moulted their body is yellow but turns brown soon after. White or yellowish markings are apparent on the thorax and a broad white band occurs on the abdomen. Their wings are transparent and held vertically over their body. In crops insects may be seen jumping or flying when disturbed.



Figure 5: TPP size relative to 5 cent piece (Department of Primary Industries and Regional Development, Western Australia)



Figure 6: TPP adult and eggs on leaf. White substance is honeydew (sugar-like granules) excreted by TPP (Joseph Munyaneza, USDA)

Signs of TPP in crops

When TPP is present in a crop plants may wilt severely when heavily infested and leaves may show yellowing along the edges and upward curling. Growth may be stunted, with shortened stem internodes and stem death.

White, sugar-like granules excreted by psyllids can coat leaves and stems, leading to the development of sooty mould (Figure 7).



Figure 7: Honeydew (sugar-like granules) excreted by psyllids (Department of Primary Industries and Regional Development, Western Australia)

Tomato potato psyllid may be mistaken for other common psyllids and aphids found in Victoria



Lilly pilly psyllid (*Trioza eugeniae*) multiple life stages

Whitney Cranshaw, Colorado State University, bugwood.org



Adult Gum tree psyllid (*Ctenarytaina eucalypti*)

Jesse Rorabaugh, iNaturalist



Cotton aphid (*Aphis gossypii*) multiple life stages

Whitney Cranshaw, Colorado State University, bugwood.org



Australian solanum psyllid (*Acizzia solanicola*)

N A Martin, Plant and Food Research New Zealand

What should you do?

If you suspect TPP **please report** with photos.

Report online at agriculture.vic.gov.au/reportaplantpest OR Call 1800 084 881

Need help taking pest photos? Visit: agriculture.vic.gov.au/takeaphoto

For more information

More information about TPP can be found on the **Agriculture Victoria website.**

Scan the QR code to visit:

