



# Tomato potato psyllid

Tomato potato psyllid (*Bactericera cockerelli*) is an exotic plant pest which feeds on tomato, potato, capsicum, chilli and solanaceous weeds like nightshade, leading to loss of plant vigour and yield.



**It is important to be vigilant for signs of the pest and report suspect tomato potato psyllids.**

## What is a psyllid?

The psyllid is a tiny sap-sucking insect. Tomato potato psyllids go through three stages of development – adult, egg and nymph.

Adults and nymphs of tomato potato psyllid cause injury to plants by feeding with sucking mouth parts.

- Adult psyllids resemble small winged aphids in appearance about 3mm long. The body is brownish and has white or yellowish markings on the thorax and a broad white band on the abdomen. Wings are transparent and held vertically over the body.
- Nymphs are 2mm long, oval shaped, flattened and scale-like in appearance. Young nymphs are yellowish green to orange with a pair of red eyes and three pairs of short legs. Older nymphs are greenish and fringed with hairs and have visible wing buds.
- Psyllid eggs are less than 1mm long and are attached to the plant by a short vertical thread. They are usually laid on the lower surface of leaves or along the leaf stalk. Eggs are white when first laid then turn yellow to orange after a few hours.

The tomato potato psyllid can carry the bacterium “*Candidatus Liberibacter solanacearum*”, causing the ‘zebra chip’ disease in potato.

## Symptoms of psyllid infestation to look for

Look for damage on the underside of leaves.

Signs of tomato potato psyllid include:

- Insects jumping from the foliage when disturbed.
- Severe wilting of plants caused by high numbers of psyllids feeding.
- Yellowing of leaf margins and upward curling of the leaves caused by the injection of salivary toxins.
- Honeydew which makes the leaves sticky and can cause severe infestations, which can lead to the development of sooty mould.
- Shortening of stem internodes, and
- Stem death are similar to other potato and tomato disorders.

## Report the pest if you find it

If you suspect tomato potato psyllid, send a photo to the Department of Agriculture and Food, WA via the [MyPestGuide Reporter](#) app available from the [Google Play](#) or the [App Store](#) or email photos with your name, address and mobile number to [info@agric.wa.gov.au](mailto:info@agric.wa.gov.au). Alternatively, call the [Pest and Disease Information Service](#) on 1800 084 881.

## Symptoms

### Symptoms in tomatoes

Plants may become stunted or abnormally elongated. Foliage symptoms include leaf curling and yellowing. Fruit development is uneven. Tomatoes may be misshapen, or no fruit is produced or there is an over-production of small, non-commercial grade fruit. Symptoms vary in severity between cultivars.

### Symptoms in capsicums and chillies

Parts of the plant may die back. Foliage symptoms include leaves becoming misshapen, pale green or yellow with spiky tips and leaf stalks appear stunted. Flowers may drop prematurely. Symptoms vary in severity between cultivars.

### Symptoms in potatoes

Potato plants may have shortened internodes and aerial tubers may develop in the leaf nodes. Potato tops are likely to be smaller than normal. The foliage turns yellow and may have a burnt or purplish appearance. Stems may die completely but regrowth from the base may occur. Tubers from affected plants may have small stalked tubers protruding from the main tuber (called 'chaining') and when cut may show internal browning of the vascular ring or brownish streaks along the medullary rays.

Below: Mature adult psyllid in comparison to 5 cent piece. Note the small size of the insect and how the wings are held vertically.



### Biosecurity reminder

Practice sound crop hygiene/biosecurity practices to prevent the entry, establishment and spread of pests and diseases.

- Check the plants you purchase are free of pests and don't bring infested plants into your property.
- Regularly monitor your plants for any unfamiliar pests or diseases.
- Report any suspect pests or diseases to the Department of Agriculture and Food, WA's Pest and Disease Information Service (PaDIS) by email at [info@agric.wa.gov.au](mailto:info@agric.wa.gov.au) or freecall 1800 084 881.
- The [Pest and Disease Information Service \(PaDIS\)](#) provides advisory and identification services on animal and plant pests, weeds and diseases that impact Western Australia's agriculture and food industries.
- Report suspect pests or diseases via the [MyPestGuide Reporter](#) app available from the [Google Play](#) or the [App Store](#).

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