Department of Agriculture and Food
GOVERNMENT OF WESTERN AUSTRALIA

Tomato potato psyllid in WA
Frequently Asked Questions for industry

Current as of 14 March 2017

General

1. What is tomato potato psyllid?

Tomato potato psyllid (*Bactericera cockerelli*) is an exotic plant pest which feeds on a range of Solanaceae and Convolvulaceae plants, including potato, tomato, eggplant, capsicum, chilli, tamarillo and sweet potato.

The psyllid is a tiny sap-sucking insect with three stages of development – egg, nymph and adult. Adults and nymphs cause injury to plants with their sucking mouth parts when feeding.

Adult psyllids 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 on the thorax and a broad white band on the abdomen. Wings are transparent and rest roof-like over the body.

Nymphs are up to 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 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.

The tomato potato psyllid can carry the bacterium "*Candidatus* Liberibacter solanacearum", which is associated with 'zebra chip' disease in potato.

2. What crops does tomato potato psyllid affect?

Tomato potato psyllid is an insect pest of a range of plants in the Solanaceae family, including potato, tomato, eggplant, capsicum, chilli and tamarillo, and some in the Convolvulaceae family such as sweet potato.

The weeds nightshade, groundcherry, matrimony vine and field bindweed are also hosts of the pest.

3. How do I know if I have tomato potato psyllid?

If you grow a crop that is a host for tomato potato psyllid, look for insect life stages 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.
- White sugar-like granules (excreted by adults and nymphs), which coats the plant leaves and stems, and can lead to the development of sooty mould.
- Ants may be symptomatic of the presence of the white sugar-like granules.
- Stem death symptoms are similar to other potato and tomato disorders.

If you suspect tomato potato psyllid is present in your crop, please report directly to the department. Reporting tomato potato psyllid will help protect other growers and the WA industry.

4. What can I do to stop the spread of tomato potato psyllid?

Practice sound farm biosecurity procedures to prevent the entry, establishment and spread of pests and diseases. More information on biosecurity is available at the Farm Biosecurity website www.farmbiosecurity.com.au

Be vigilant in checking for signs of the psyllid and report any unusual symptoms to the department as soon as they have been identified.

Follow instructions set out in the Quarantine Area Notice and associated FAQs, on the Department of Agriculture and Food website www.agric.wa.gov.au/tpp

5. How do I report tomato potato psyllid?

Tomato potato psyllid can be reported via app, phone or email.

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.

Alternatively, call the Pest and Disease Information Service on 1800 084 881.

6. Where did tomato potato psyllid come from?

This is the first time the pest has been detected in Australia. The origin is unknown. Tomato potato psyllid is present in other countries including the USA, Central America and New Zealand. It can spread through the movement of host plant material. It can also disperse through natural pathways such as flight, wind and human-assisted movement (movement of plant material).

7. Has the bacterium "*Candidatus* Liberibacter solanacearum" been detected?

Testing is continuing to determine whether the bacterium '*Candidatus* Liberibacter solanacearum' that is associated with zebra chip is present.

Treatment and management

8. What sprays can I use for tomato potato psyllid?

The department is working to refine chemical treatment and rotation options for use on-farm, and will advise once these options have been confirmed.

If a tomato potato psyllid incursion is suspected in a crop, growers should immediately contact the department.

9. Do I need to set up my own monitoring and surveillance for tomato potato psyllid?

The department is undertaking targeted surveillance in the metropolitan area and regional areas.

Growers are reminded to check crops and report any suspect tomato potato psyllid 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. Alternatively, call the Pest and Disease Information Service on 1800 084 881.

10. Will my property be inspected?

Surveillance is progressing in the metropolitan area and regional areas to determine the spread of the pest.

Growers will be contacted by the department to advise of inspections on their property.

The visit will include a visual inspection of crops, particularly solanaceous crops and any solanaceous weeds surrounding crops; the collection of suspect insects and plant material for testing for the bacterium, and the installation of 'sticky traps' to trap insects.

A department officer will return after a few days to replace the sticky traps, and submit the collected traps for testing by the department.

11. What happens if the pest is found on my property?

Where the psyllid is detected, a Pest Control Notice is issued to the property owner or occupier which provides directions to control the pest. Where the psyllid is detected in a commercial vegetable crop, mandatory chemical treatments must be applied prior to the movement of host material off the property and into the Quarantine Area.

The department is working with individual property owners on a treatment and inspection process which is appropriate to their business and to minimise the impact of these restrictions on individual businesses.

These notices will be issued if the psyllid is detected on a commercial property, regardless of whether the property is located inside or outside the Quarantine Area.

Industry action

12. What has been done so far to combat tomato potato psyllid?

Tomato potato psyllid is an emergency plant pest and the department is working as a priority with industry to minimise the impact of this pest incursion.

Department surveillance teams are inspecting properties in the metropolitan area and in regional areas.

More than 1700 surveillance traps ('sticky traps') have been installed across regional and metropolitan areas.

The department has imposed movement restrictions of host material on commercial properties where the psyllid has been found in order to stop spread of tomato potato psyllid. Owner/occupiers of the properties where the psyllid has been detected are being directed to undertake chemical treatment on all affected host materials.

A Quarantine Area Notice is in place for the metropolitan area and the shires of Murray, Chittering and Gingin area to help prevent the spread of tomato potato psyllid to other parts of the State.

Grower information sessions have been held in conjunction with vegetablesWA and Potato Growers Association of WA and AUSVEG.

Industry updates are being provided as new information becomes available.

The latest industry update and other information on the tomato potato psyllid response are available from www.agric.wa.gov.au/tpp.

13. Who has been involved in the response to tomato potato psyllid?

The department continues to work closely with industry and government at a State and Federal level, including AUSVEG, vegetablesWA, Potato Growers Association of WA, Nursery and Garden Industry WA, Plant Health Australia, the Department of Agriculture and Water Resources and other State departments.

14. Who is paying for this response?

The department is funding the cost of surveillance and its response activities. Property owners who are applying chemical treatments are responsible for the associated costs.

15. Why haven't commercial crops found to have tomato potato psyllid been destroyed?

The department has considered all available options at this point in time. As a result, a treatment regime involving multiple chemical treatments is the current recommended option for these properties.

Movement restrictions are applied to properties where the psyllid is found and property owners/occupiers are directed to undertake chemical treatment to suppress the population and prevent the spread of tomato potato psyllid.

Nationally, the tomato potato psyllid is a recognised emergency plant pest under the Emergency Plant Pest Response Deed.

A nationally-agreed Deed response to this exotic pest will determine whether destruction of commercial crops will be supported by owner reimbursement.

In order to inform this national decision, surveillance is progressing as a priority to determine the extent of the infestation and technical feasibility of eradication.

16. Is compensation available?

There are no provisions for compensation under the State's *Biosecurity and Agriculture Management Act* (BAM Act). The Department is funding the cost of surveillance and its response activities.

Nationally, tomato potato psyllid is a recognised emergency plant pest under the Emergency Plant Pest Response Deed.

If a determination is made on a nationally-agreed eradication response, this deed covers national cost-sharing arrangements, which includes provisions for owner reimbursement in relation to destruction of commercial crops.

This decision is made by a national group which includes representation from State and Federal departments and industry bodies.

Surveillance, which is currently progressing as a priority, along with economic and technical data, is critical to informing a nationally-agreed decision on management of this pest.

Trading

17. Can I still sell fruit/vegetables that are considered hosts for tomato potato psyllid (e.g. tomato, capsicum, eggplant, chilli, potato etc.)?

Yes. However, please note that solanaceous and convolvulaceous fruit/vegetables (other than potato or sweet potato tubers) produced and/or packed inside the Quarantine Area, or on a quarantined place outside the Quarantine Area, must be prepared in an approved manner published on the department's website.

It is important to note, a Quarantine Area Notice is in place for the metropolitan area and the shires of Murray, Chittering and Gingin. The notice requires the treatment of host material (plants/produce) before it can be moved outside the Quarantine Area, or moved from a quarantined place which is outside the Quarantine Area. More information on the Quarantine Area Notice is available at www.agric.wa.gov.au/tpp

18. Can non-host material be moved off properties?

The department is working to refine chemical treatment and rotation options for use on-farm, and will advise once these options have been confirmed. Please contact the department for further information.

19. Are there interstate restrictions on fruit/vegetables that are considered hosts for tomato potato psyllid (e.g. tomato, capsicum, eggplant, chilli, potato etc.)?

Yes. New South Wales, Victoria, South Australia and Queensland have introduced movement controls on host material from the Solanaceae or Convolvulaceae families produced in Western Australia.

Exporters should contact the Quarantine WA Exports Officer (ph: 9334 1800; fax: 9334 1880; email: qa@agric.wa.gov.au) to verify export requirements.

Biosecurity

20. What is farm biosecurity?

Farm biosecurity is a set of measures designed to protect a property from the entry and spread of pests and diseases. Farm biosecurity is your responsibility, and that of all visitors and workers on your property.

21. What biosecurity measures should I implement to assist in managing tomato potato psyllid incursion?

Proper signage to restrict entry, routine surveillance for pests, on-farm clean down facilities, and action plan and checklist are all part of a farm biosecurity regime.

The weeds nightshade, groundcherry, matrimony vine, and field bindweed are also hosts of the pest and management of these should be considered.

22. What biosecurity resources are available?

More information on biosecurity is available at the Farm Biosecurity website farmbiosecurity.com.au

Additional resources include the AUSVEG Farm Biosecurity Plan, **ausveg.com.au/biosecurity/Biosecurity%20R.pdf**

Growers should have received a copy in the mail via vegetablesWA.

23. Where can I get more information?

The latest information on the tomato potato psyllid response in Western Australia is available on the department website www.agric.wa.gov.au/tpp

WA vegetable growers can also access detailed industry information at www.vegetableswa.com.au

Industry contacts for growers

VegetablesWA
Phone: 08 9481 0834
Email: office@vegetableswa.com.au

Potato Growers Association of WA
Phone: (08) 9481 0834
Email: potatoes@vegetableswa.com.au

Nursery and Garden Industry Western Australia
Matthew Lunn, Chief Executive Officer
Phone: 0410 714 207
Email: matthew@ngiwa.com.au

Department of Agriculture and Food, WA
Rohan Prince, Industry Liaison
Phone: 0429 680 069
Email: rohan.prince@agric.wa.gov.au

Don Telfer, Development Officer
Phone: 0429 014 063
Email: don.telfer@agric.wa.gov.au

agric.wa.gov.au