

Potato Update



Issue 1

Monitoring for tomato potato psyllid with sticky traps: a guide for growers

Why monitoring?

Crop monitoring techniques allow for the collection of information about pest insect populations throughout the growing season. This information is beneficial to both growers and researchers.

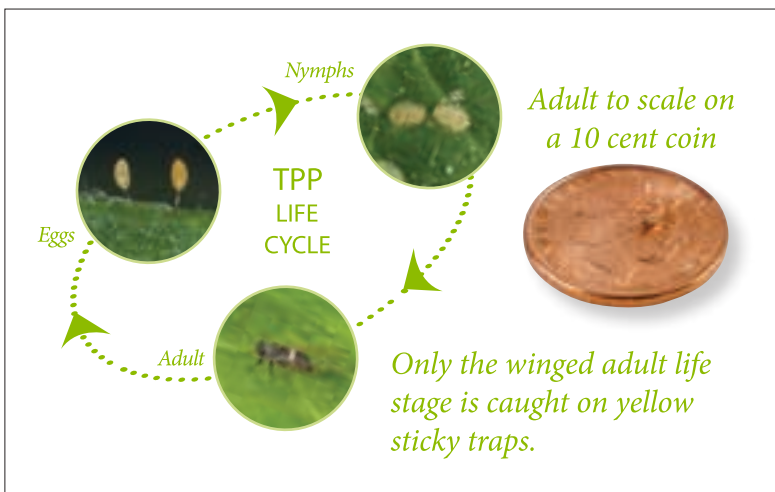


Figure 1. Life cycle of Tomato Potato Psyllid (TPP).

Trapping protocol

- Traps at the end of each pack may have 'clean' sides, so to ensure both sides are coated in adhesive, press back-to-back with a sticky side to transfer the adhesive.
- Attach sticky traps to 1.5 m bamboo poles or similar using the twist ties provided with the traps and metal fold-back clips for extra security.
- Each trap should be positioned on a pole with the bottom edge of the trap level with the top of the crop canopy. Move the trap position upwards as the canopy height increases over the growing season.



Figure 2. Trap positioning.

Tips for trapping

- Traps should be placed in your crops from planting until harvest. We recommend that you continue your trapping until four weeks after harvest.
- We recommend the use of 10 x 25 cm yellow sticky trap, see end of document for suppliers.
- Traps should be replaced weekly.
- Traps should be wrapped individually with cling film (e.g. GLAD® Wrap) in the field and taken to a more comfortable location for counting. If you send your traps away for assessment and there is a delay in posting them, store them in the refrigerator to help preserve the insects.
- As insecticides have specific modes of action, we recommend that sticky trap monitoring is carried out alongside visual plant assessment, to gauge the numbers of eggs and nymphs, and the presence and impacts of important insect predators. Examine middle leaves of plants, paying particular attention to the underside of each leaf selected.

Trap placement

- Use a minimum of five traps per field.
- Place four traps five metres into the crop from the field margin, one per side, and one in the centre of the crop.



Figure 3. Trap placement.

Trap assessment

- If you send traps away for assessment, they must be clearly labelled with your name, site details, date put in the crop, date removed from the crop and position of the trap in the field.
- If you are assessing your own traps, you will require a magnifying glass (or access to a microscope), a permanent marker for circling TPP and a recording sheet. (<http://bit.ly/GGHO8F>).



Figure 4. Trap assessment label sample.

How you can help

Allow access to your spray diary information – this can help explain fluctuations in the numbers of TPP caught on your traps.

Provide information about the types of vegetation (weeds, shelter plants) surrounding your crops.

Inform us of anything out of the ordinary in relation to pest or disease incidence and yield you observe in your crops from year to year.

Resources

Plant & Food Research
Auckland 09 925 7000 or Lincoln 03 977 7340
www.plantandfood.co.nz

Suppliers of both sticky traps and crop monitoring services

Fruitfed Supplies:
www.fruitfed.co.nz or 06 873 0956
Horticentre:
www.horticentre.co.nz or 0800 855 255

Suppliers of sticky traps only

CRT Farmlands:
www.crt.co.nz or 0800 278 583

Crop monitoring service providers only

SGS: www.sgs.co.nz or 0800 747 2474

Psyllid resources

Potatoes New Zealand:
www.potatoesnz.co.nz

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For further information

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