



# Hosts of the potato psyllid

The potato psyllid (*Bactericera cockerelli*) has been reported from well over 100 host plants in the USA. Some of these are common weeds in New Zealand and others are home garden or commercially cultivated species. This fact sheet lists the key species which potato growers should be aware of. Before planting a potato crop it is essential to remove volunteer potatoes and as many of these weeds as possible.

## Cultivated hosts

A number of hosts for the potato psyllid are commonly grown in commercial farms and home gardens.

These include:

- tomatoes,
- chillis and bell peppers (capsicums),
- brassicas (broccoli, cabbage etc),
- sunflower,
- kumara,
- lettuce,

## Key issues

- Over 100 host plants have been reported for the potato psyllid
- The most common host weeds in New Zealand include alfalfa, dandelion, convolvulus, wild radish, several species of nightshade, wild oats, and the native poroporo
- A number of commonly cultivated plants are also hosts, including tomatoes, chilli peppers, capsicums, the brassicas (broccoli, cabbage etc), sunflower, kumara, lettuce, sweet pea, beans, eggplant, cape gooseberry, and willow

- sweet pea,
- beans,
- eggplant,
- cape gooseberry, and
- willow.

While it is unlikely to be practical to remove these from the area around a potato crop, growers should be aware that these plants may provide a refuge for the psyllid and factor this into their monitoring plans.

## Weed hosts

The following species are the most commonly occurring weed hosts of the psyllid in New Zealand. Potato growers should try to minimize the number of these which occur in and around their farms.

### Dandelion (*Taraxacum officinale*)



Image courtesy of Robert Vidéki, Doronicum Kft., Bugwood.org

**Apple of Peru** (*Nicandra physalodes*)



Image courtesy of Ohio State Weed Lab Archive, The Ohio State University, Bugwood.org

**Poroporo** (*Solanum aviculare*)



Image courtesy of Tony Foster, Bushmansfriend Ltd

**Spearmint** (*Mentha spicata*)



Image courtesy of Richard Old, XID Services, Inc., Bugwood.org

**Amaranth** (*Amaranthus* sp.), includes prostrate amaranth and redroot



*Amaranthus deflexus*. Image courtesy of Joseph M. DiTomaso, University of California - Davis, Bugwood.org

**Knotweed** (*Polygonum* sp.), includes wire weed, willow weed, and Indian knotweed



Image courtesy of Robert Vidéki, Doronicum Kft., Bugwood.org

**Alfalfa / Lucerne** (*Medicago sativa*)



Image courtesy of Keith Weller, USDA Agricultural Research Service, Bugwood.org

**Convolvulus** (*Convolvulus arvensis*)



Image courtesy of Jan Samanek, State Phytosanitary Administration, Bugwood.org

**Common morning glory** (*Ipomoea purpurea*)



Image courtesy of Pedro Tenorio-Lezama, Bugwood.org

**Jimson weed, thornapple** (*Datura stramonium*)



Image courtesy of Forest & Kim Starr, U.S. Geological Survey, Bugwood.org

**Wild radish** (*Raphanus raphanistrum* subsp. *raphanistrum*)



Image courtesy of Joseph M. DiTomaso, University of California - Davis, Bugwood.org

**Carolina horsenettle** (*Solanum carolinense*)



Image courtesy of Ted Bodner, Southern Weed Science Society, Bugwood.org

**Woolly nightshade** (*Solanum nigrum*), black nightshade, and purple African nightshade



Image courtesy of www.floralimages.co.uk

**Orach** (*Atriplex* sp.)



Image courtesy of Joseph M. DiTomaso, University of California - Davis, Bugwood.org

**Mallow** (*Malva* sp.), includes small flowered mallow and large flowered mallow



Image courtesy of Randy Westbrook, U.S. Geological Survey, Bugwood.org

**Wild oats** (*Avena fatua*)



Image courtesy of Joseph M. DiTomaso, University of California - Davis, Bugwood.org

**Orchard grass** (*Dactylis glomerata*)



Image courtesy of Carey Minter, University of Georgia, Bugwood.org

**Flower of an hour** (*Hibiscus trionum*)



Image courtesy of Joseph M. DiTomaso, University of California - Davis, Bugwood.org

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