## **Psyllids**

See also: http://www.potatoes.com/research.cfm





Psyllids are close relatives of aphids and whiteflies, and are also known as "jumping plant lice."

These pictures are all of the potato psyllid. This is the only psyllid found in potatoes in the U.S.

Adult potato psyllid - white stripes on the head and thorax, and bold white bands on the abdomen are distinctive for potato psyllid. They are able to jump long distances very quickly when disturbed.



Psyllid egg on leaf edge. Each egg is on a short stalk.



Young psyllid nymph.



Older psyllid nymphs, showing their strange tubes of excrement.



Psyllid nymph side view - psyllid nymphs have functional legs and are capable of walking, unlike whitefly nymphs (see reverse).

Psyllid nymphs and adults on a penny for size reference.



## Psyllid biology and damage

- Potato psyllids are thought not to overwinter in Washington, but arrive here from southern locales by mid-summer. Many fields will have some psyllids present by mid-July.
- Potato psyllid transmits the bacteria that causes "zebra chip."
   Zebra chip symptoms had not been seen in the Northwest until
   2011 when the disease was widespread in OR, WA, and ID.
- Psyllids can rapidly develop resistance to insecticides. Great care must be taken to alternate modes of action in psyllid control.

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## Whiteflies

See also: http://www.potatoes.com/research.cfm





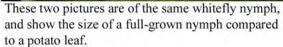
Adult whiteflies are less than 1/8" long and resemble tiny moths.

Whiteflies are close relatives of aphids & psyllids, feeding on plant sap through piercing-sucking mouthparts:

Immature whiteflies resemble immature psyllids (see reverse) and are sedentary throughout development.











The adult whitefly's eyes can be seen before it emerges from the nymphal skin.

## Whitefly biology and damage

- Whiteflies are present in many potato fields, but rarely if ever require control in the Pacific Northwest.
- 2. The whitefly most common in Washington potatoes is the greenhouse whitefly, not the silverleaf whitefly that is so feared in the southern U.S.
- 3. Whiteflies are most diverse and abundant in warm-temperate and tropical environments.

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