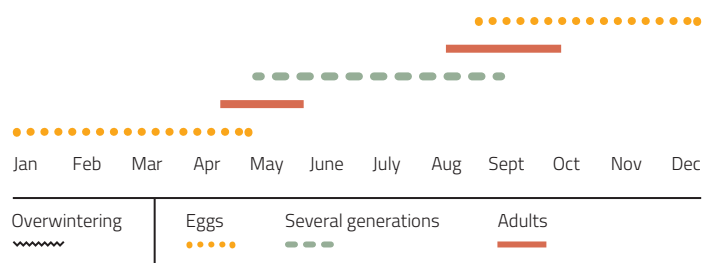




Potato aphid – adult, nymph  
Christophe Quintin, Flickr

## Aphid, potato

*Macrosiphum euphorbiae* (Thomas)



Potato aphid – adult, nymph  
Joseph Berger, Bugwood.org

### Hosts

Potato, flax, tomato, eggplant, pepper, turnip, corn, asparagus, clover, and rose. Weeds such as nightshade, ragweed, lambsquarters, jimsonweed, pigweed, and shepherd's-purse.

### Identification

**ADULTS:** 2.5–3.5 mm long, pale yellow to light green, or pink, often with a darker dorsal stripe; long legs generally pale with tarsi and antenna with dark or dusky colored patches. The cornicles are long and extend to the end of the cauda.

**MATURE NYMPHS:** Similar appearance to adults but smaller.

### Life Cycle

Overwinter as eggs on stems of roses on which 2–3 generations are produced asexually before winged females migrate to summer hosts (flax, potato, tomato) where several generations are produced over the summer. Winged forms are produced when colonies get overcrowded or the host plant quality declines. Later in the summer sexual forms are produced that mate and females return to winter hosts to lay eggs.

### Feeding Damage

**ADULTS AND NYMPHS:** Potato—This aphid transmits potato leafroll, potato Y and A viruses. It feeds mostly on the upper leaves. Under severe attack, blossoms are shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down.

Flax—feeds on the stems, leaves, and developing bolls, causing reduced seed production and subsequent crop yields.

### Similar Species

Green peach aphid (*Myzus persicae* (Sulzer), p. 61) is smaller and cornicles do not extend to the end of the cauda. This species feeds mainly on the lower leaves.

### Monitoring/Scouting

For flax, examine a minimum of 25 plants at full bloom and 20 plants at early green boll randomly in the field by severing stems at the base, then lightly tapping the severed stems on a white surface, such as a tray, to dislodge the insects for counting. A sequential sampling plan is available for flax at [www.gov.mb.ca/agriculture/crops/insects/aphids-on-flax.html](http://www.gov.mb.ca/agriculture/crops/insects/aphids-on-flax.html).

### Economic Threshold

None for potatoes. For flax, 3 aphids/main stem at full bloom and 8 aphids/main stem at the green boll stage.

### Management Options

**BIOLOGICAL:** Several species of predators (green lacewing (p. 139), snakefly (p. 140)) and parasitoids (*Aphidius matricariae* Haliday (p. 129), *A. ervi* Haliday (p. 129), *A. smithi* Sharma et Subba Rao (p. 129)) as well as pathogenic fungi attack this pest.

**CULTURAL:** Reducing nearby alternate summer hosts will reduce local population pressure.

**CHEMICAL:** Control is rarely required in commercial potato crops. Seed potato crops must be protected from infection by viruses transmitted by this species. A single warranted application of a foliar insecticide at full bloom or the green boll stage of flax will provide protection until harvest.



# Field Crop and Forage Pests and their Natural Enemies in Western Canada:

Identification and Management





**Field Crop and Forage Pests and their  
Natural Enemies in Western Canada:**

Identification and Management



Photo Credits:

1. Pea leaf weevil (*Sitona lineatus*) and leaf damage - Jonathon Williams, AAFC
2. *Pteromalus puparum* parasitizing an imported cabbage worm cocoon (*Pieris rapae*) - T. Haye, CABI
3. Lacewing (*Chrysopa* sp.) adult - John Gavloski, Manitoba Ministry of Agriculture
4. Grasshopper - Jesse MacDonald, AAFC



**Prepared for Agriculture and Agri-Food Canada  
by Hugh Philip, IPM 2 GO Consulting Service.**

Field Crop and Forage Pests and their Natural Enemies in Western Canada:  
Identification and Management Field Guide

Publication history:

- 2015 - 1<sup>st</sup> publication
- 2018 - 2<sup>nd</sup> publication, expanded

© Her Majesty the Queen in Right of Canada, represented by the Minister of Agriculture and Agri-Food Canada (2018).

Electronic version available at [www.publications.gc.ca](http://www.publications.gc.ca)

Catalogue No. A59-23/2018E-PDF

ISBN 978-0-660-25561-3

AAFC No. 12766E

This publication may be cited as follows:

Philip, H., B.A. Mori and K.D. Floate. 2018. Field crop and forage pests and their natural enemies in Western Canada: Identification and management field guide. Agriculture and Agri-Food Canada, Saskatoon, SK.

Paru également en français sous le titre Guide d'identification des ravageurs des grandes cultures et des cultures fourragères et de leurs ennemis naturels et mesures de lutte applicables à l'Ouest canadien

For more information, reach us at [www.agr.gc.ca](http://www.agr.gc.ca) or call us toll-free at 1-855-773-0241.