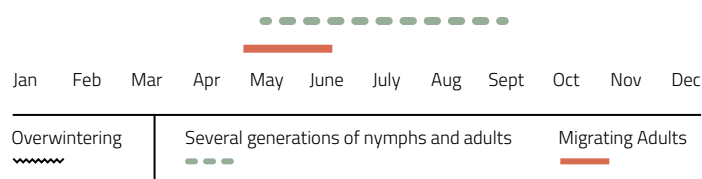




**Soybean aphid – adult**  
Robert J. O'Neil, Purdue University (wiki)

## Aphid, soybean

*Aphis glycines* (Matsumura)



### Hosts

Soybeans.

### Identification

**ADULTS:** Very small (1.5 mm long) pale yellow with distinctive black cornicles.

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

### Life Cycle

Not known to overwinter in Canadian prairies. Blow in from U.S. where they overwintered as eggs on stems of buckthorn on which 3–4 generations are produced asexually before winged females migrate to soybeans where several generations are produced over the summer. Winged forms are produced when colonies get overcrowded and the host plant quality declines. Populations die off in the fall.

### Feeding Damage

**ADULTS AND NYMPHS:** This aphid is a vector for soybean mosaic virus. It also produces sticky honey-dew on which black sooty mold develops. Feeding on the undersides of leaves, leaves may turn yellow, wilt, and/or curl. Infestations during the early reproductive stages can cause reduced pod formation, smaller seed size, and a reduction in seed quality.

### Monitoring/Scouting

Estimate the numbers of aphids present on each of 6 randomly selected plants (mid-canopy leaves, stems, and pods) and the number of plants infested at 5 sites spaced at least 50 m (150 ft) apart across a zigzag transect of the field. Calculate the average number/plant. Repeat weekly up to growth stage R5 (beginning seed formation) to determine if numbers are increasing.

**Soybean aphid – infestation**  
Christina DiFonzo, Michigan State University, Bugwood.org

### Economic Threshold

Average of 250/plant, the population is increasing, and the plants are in the R1 (beginning bloom) to R5 (beginning seed) growth stage.

### Management Options

**BIOLOGICAL:** Several species of predators (green lacewing (p. 139), snakefly (p. 140)) and parasitoids (*Aphidius smithi* Sharma et Subba Rao (p. 129)) as well as pathogenic fungi are capable of controlling population levels of less than 200–250 aphids/plant.

**CULTURAL:** Specific cultural methods have not been developed; see also IPM section (p. 3).

**CHEMICAL:** Insecticides are available to protect crops once the economic threshold is reached. Foliar treatments should be made within 7–10 days of reaching economic threshold to prevent economic injury.



# 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.