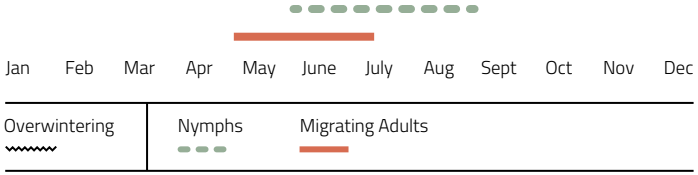
Oat-birdcherry aphid – adult, nymph
John Gavloski, Manitoba Agriculture, Food and Rural Development

Aphid, oat-birdcherry

Rhopalosiphum padi (Linnaeus)



Oat-birdcherry aphid – winged adult
Andrew Jensen, Flickr

Hosts

Wheat, barley, oats, canaryseed.

Identification

ADULTS: 2 mm long, olive-green with black antennae and cornicles, and a red-orange patch between and around the base of each cornicle.

MATURE NYMPHS: Nymphs turn from pale yellowish green to dark olive as they mature.

Life Cycle

Not known to overwinter in Canadian prairies; blow in from U.S. Several nymphal generations are produced asexually until late summer. Populations die off in the fall.

Feeding Damage

ADULTS AND NYMPHS: Although feeding causes no yellowing or other visible damage to wheat plants, heavy infestations can reduce grain quality and affect protein content and test weight. Spring wheat is more susceptible to injury than winter wheat. They are very efficient vectors of barley yellow dwarf virus which can stunt barley and oat plant growth and reduce seed weights in some varieties. Large colonies on wheat plants past the boot stage can cause the flag leaf to twist into a corkscrew shape that can trap the awns, resulting in "fish-hooked" heads.

Similar Species

See descriptions of other species attacking wheat (p. 59, p. 60).

Monitoring/Scouting

Prior to the soft dough stage, count the number of aphids present on each of 20 randomly selected tillers at 5 sites across a zig-zag transect of the field. Calculate the average number/tiller. In canaryseed, the head should be bent and closely inspected for aphids hiding inside along the small stem.

Economic Threshold

SMALL GRAINS: 12-15 aphids/tiller prior to the soft dough stage.

CANARYSEED: A nominal threshold of 10-20 aphids on 50% of the stems prior to the soft dough stage.

Management Options

BIOLOGICAL: Several species of parasitoids (*Aphidius colemani* Viereck (p. 129), *A. smithi* Sharma et Subba Rao (p. 129)), predators, (green lacewing (p. 139), snakefly (p. 140) and fungal pathogens attack this aphid.

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

CHEMICAL: Apply products least toxic to natural enemies if treatments are required.

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

Identification and Management



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Photo Credits:
1. Pea leaf weavil (*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 - 1st publication
2018 - 2nd publication, expanded

Electronic version available at 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

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