

Aphid, corn leaf *Rhopalosiphum maidis* (Fitch)

Jan	Feb	Ma	r Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Overwintering			Nymp	Nymphs and adults			Migrating Adults				



Corn leaf aphid – adult, nymph Indian Council of Agricultural Research-National Bureau of Agricultural Insect Resources (www.nbair.res.in)

Hosts

Barley, corn, occasionally winter wheat; wild and cultivated grasses.

Identification

ADULTS: 1.6-2 mm long, blue-green or gray with black legs, cauda and short broad black cornicles surrounded by a dark spot around their bases.

MATURE NYMPHS: Similar appearance to adults but smaller.

Life Cycle

Passes the winter on fall planted and volunteer barley and corn and grasses in the southern U.S. It migrates north in the spring, and passes through several generations during migration. Once arrived, it colonizes available host crops and passes through several asexual generations before dying off in the fall. Winged females are produced throughout the summer to seek out new hosts to colonize. Populations die off in the fall.

Feeding Damage

ADULTS AND NYMPHS: Are a vector of barley yellow dwarf virus. Produce sticky clear "honey dew" which supports growth of black sooty mold. Feeding causes mottling and discoloration of leaves. Heavily infested leaves turn red or yellow, shrivel, and die. The important damage usually occurs during and after flowering. Barley is not susceptible to damage from high infestations after the boot stage. Feed on corn tassels and silks.

Corn leaf aphid – damage Department of Plant Pathology Archive, North Carolina State University, Bugwood.org

Similar Species

See descriptions of other species of grain aphids.

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.

Economic Threshold

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

FIELD CORN: The critical period for injury by corn leaf aphid is during tassel emergence through pollination. Treatment is suggested only when 50% of the corn plants have 100+ aphids per plant during tassel emergence and plants are drought stressed.

Management Options

BIOLOGICAL: Several species of parasitoids (e.g. *Aphidius smithii* Sharma et Subba Roa, p. 129), predators (e.g. green lacewings, p. 139; snakeflies, 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









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



Ca

Photo Credits: 1. Pea leaf weavil (*Sitong li*

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

nadā

Publication history: 2015 - 1st publication 2018 - 2nd 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 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 or call us toll-free at 1-855-773-0241.