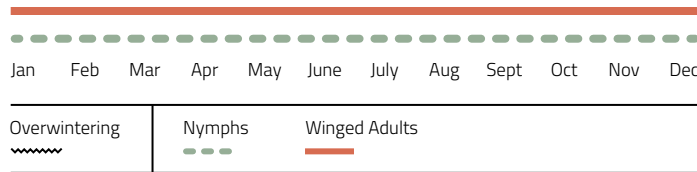




**Russian wheat aphid – adult, nymph**  
Frank Peairs, Colorado State University, Bugwood.org

## Aphid, Russian wheat

*Diuraphis noxia* (Mordvilko)



### Hosts

Wheat, barley, and many cool season grasses.

### Identification

**ADULTS:** 1.6-2.1 mm long, spindle-shaped, and lime green in colour. Shortened antennae and reduced cornicles at the end of the abdomen are distinguishing characteristics. Adults also have a “double cauda” from the side view.

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

### Life Cycle

No male aphids have ever been found, thus no eggs are produced. Females reproduce asexually all year long and give birth to live young over 60–80 day life span (egg to adult, 10–14 days). Throughout the season, winged forms are produced which search out new hosts.

### Feeding Damage

**ADULTS AND NYMPHS:** Suck sap from leaves causing characteristic white, purple or yellow streaks between leaf veins. Feeding can cause discoloration and prevent normal unrolling of leaves, plant and head stunting, and bleached heads with poorly formed grain.

### Similar Species

The western wheat aphid, *D. tritici* (Gillette), is similar in appearance and also damages wheat, but is covered with wax and has a regular cauda.

### Monitoring/Scouting

Prior to the soft dough stage, count the number of infested plants among 20 randomly selected plants at 5 sites across a zig-zag transect of the field. The % infested = total number of infested plants. Crops should be checked weekly up to soft dough stage.

### Economic Threshold

**WINTER CEREALS** (After Oct. 1<sup>st</sup>): 15-20% seedlings infested.

**SPRING CEREALS:** 10-15% of seedlings, 15-20% of plants at boot stage.

### Management Options

**BIOLOGICAL:** Several species of parasitoids (*Aphidius matricariae* Haliday (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:** Control volunteer host plants; plant spring grains early and fall grains late to reduce establishment of colonies.

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



**Russian wheat aphid – damage**  
International Maize and Wheat Improvement Centre (CIMMYT), Flickr

**Russian wheat aphid – damage**  
Frank Peairs, Colorado State University, Bugwood.org





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

Identification and Management





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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



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