



THE PULSE AGRONOMY NETWORK
PARTNERSHIP WITH INDUSTRY



PAN PEST REPORT # 2 – Pea Leaf Weevil & Grasshoppers

PLEASE NOTE - Be advised that areas not mentioned in this report may under disease / pest pressure... Scouting helps in managing problems.

If you see something - please let us know. Email reply or leave a message at 780-980-4360

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Pea Leaf Weevil vs Pea Weevil

Yves Dooper, Alberta Pulse Growers Commission

There has been some confusion amidst growers and agronomists regarding the insect pest damaging pea fields in southern Alberta. It is important that producers and agronomists are able to correctly name and identify the pest discovered in the field. The following table outlines some of the differences between the Pea Leaf Weevil and the Pea Weevil

Common Name	Pea Leaf Weevil	Pea Weevil
Scientific Name	<i>Sitona lineatus</i>	<i>Bruchus pisorum</i>
Classification: Order/ Family	Coleoptera (Beetles)/ Curculionidae (True Weevils)	Coleoptera (Beetles)/ Chrysomelidae (Leaf beetles & seed weevils)
Adult appearance features	3 stripes on thorax and wing covers, short snout, elbowed antennae, damage left on seedlings	Abdomen extending beyond wingcovers, spotting or mottling n wing covers
Damage	Notching on leaves, larvae feeding on roots	Feed on pollen, larvae borrow into pea seeds, resulting in hollow seeds
Impact	Reduced Nitrogen fixation, seedling injury, yield loss	15-20% hollowed seeds, downgrading, yield loss.
Host plants	Peas, fababeans, alfalfa, dry beans	Peas
Distribution	Present in many Southern Albertan pea fields	Not yet reported in Alberta or Saskatchewan
Registered Insecticides	Matador	Malathion, Thiodan, Thionex EC

For further visual difference consult http://info.ag.uidaho.edu/keys/peas_lentils/peas_lentils09.htm

While I cannot confirm that there are no pea weevils, there are no reports of pea weevils in Alberta. Meanwhile the pea leaf weevil is causing damage through many or most pea crops in Southern Alberta. Chemical control options for the two different insect pests are also different. Products that

are registered for control of the pea weevil are not registered for control of the pea leaf weevil and may not control it. Matador is the only registered foliar insecticide for controlling the pea leaf weevil in peas. Producers are urged to only use registered products for control of this pest.

Grasshopper update

Dan Johnson, University of Lethbridge

I took a net along on a road trip and did some checking around Lethbridge, Granum, and stops on the way to Calgary on May 12. The sweeping confirmed that pest species of grasshoppers have not started hatching early. The few grasshoppers that are out now are non-pest species. Their appearance can be seen at the link below:

http://people.uleth.ca/~dan.johnson/htm/dj_gh_guide.htm

You can look up the following species at the link above. The typical species that can be found now (May 10-20) are

roadsides and pastures:

- club-horned grasshopper (not a pest)
- velvet-striped grasshopper (not a pest)
- speckled rangeland grasshopper (flying now, red wing; not a pest)
- northern green-striped grasshopper (not a pest on the Prairies)

rangeland:

- brown-spotted range grasshopper (not a pest)
- red-shanked grasshopper (not a pest)

The pest species will be low to moderate in number this year, as indicated on the provincial government survey maps. However, there may still be local hotspots with 10 per square meter and up, as was the case in localized infestations in 2006, even though it was an overall low-risk year. The grasshopper species that can eat pulse crops are:

- two-striped grasshopper (common, hatching this year around May 25 and following)
- lesser migratory (less common, hatching around May 30 and following this year)
- Packard (sometimes called Packard's) grasshopper (less common, hatching around May 30 and following this year)

The clear-winged grasshopper will appear around June 1. It feeds on grasses, wheat and barley only. The newly hatch hopper is black-and-white, and then turns chocolate-brown for the remainder of the immature stages.

Other grasshopper species hatch between June 1 and June 15, but present a much lower threat to crops and forages.

During spot sweepnet sampling on May 12, I noticed more alfalfa weevil and grassbug than in some previous years, but without an actual sampling program it is hard to say what the levels are.

If you have a pest report that you would like to share with the Pulse Agronomy Network, e-mail reply or call 780-980-4360.