

Manitoba Insect and Disease Update

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To report observations on insects or plant pathogens that may be of interest or importance to Farmers and agronomists in Manitoba, please send messages to the above contact address.

To be placed on an E-mail list so you will be notified immediately when new Manitoba Insect Updates are posted, please contact John Gavloski at the address or numbers listed above.

August 3, 2012

Recent Insect and Plant Pathogen Activity

Canola

Lygus Bugs: Lygus bug populations are changing in their staging. We get 2 generations of Lygus bugs in Manitoba. Currently they are completing their first generation, and we are starting to see the young nymphs for the second generation. So when you look for Lygus bugs you will see a combination of adults and young nymphs. There are currently still more adults than juveniles in the counts, but this will change as adult numbers decline and eggs hatch, and juvenile Lygus will make up a bigger part of the population. Until recently it was almost solely adults we were catching when sweeping for Lygus, but that is changing.

The younger nymphs will not do as much damage as the older nymphs and adults. Make sure to not confuse Lygus nymphs with aphids. Lygus bugs progress through 5 juvenile stages (known as instars) before they become an adult. The first 2 stages will look like tiny aphid-shaped insects that move quick but have no wing buds visible. The third instars have wing pads (the start of the development of wings), and instars 4 and 5 will have wing buds (seen extending over the upper abdomen in Figure 1). None of these juvenile instars can fly.



Figure 1. 5th instar Lygus bug nymph



Figure 2. Adult Lygus bug

Heavy rainfall has been shown to reduce levels of *Lygus* bug nymphs in alfalfa. So if we do get some heavy rains, which is currently in the forecast, it may be good to reassess the situation after the rain if there are a lot of juvenile stages in the *Lygus* population.

Lots of diseased bertha armyworms: There have been several reports of substantial numbers of bertha armyworm being found dead on the upper parts of plants in some areas. These reports have been coming from the southwest, Dauphin and Swan River areas, and the Interlake. This could be caused by a virus or a fungus, although in a couple of these accounts the larvae were described as looking “melted” on the plants, which is something typical of infection by the virus. So we are getting some free biological control.

An entomologist with Agriculture and Agri-Food Canada in Saskatoon is looking for samples from diseased populations of bertha armyworms. If interested and able to collect some diseased bertha armyworms, larvae can be placed in any type of tube or vial. Samples can be sent to:

Doug Baldwin
Agriculture and Agri-Food Canada
107 Science Place
Saskatoon, SK S7N 0X2
Telephone | Téléphone (306) 956-7267
Doug.Baldwin@agr.gc.ca

If you are unable to collect any larvae, and you send me the location of the field we may be able to get some collected.

Pulse Crops

Spider mites on soybeans: Some high populations of spider mites on soybeans have been noted in the Altona and Niverville areas.

A few things to note regarding spider mites:

- There can at times be heavy edge effects, so if seeing higher levels, sample well into the field. Sometimes treating a field edge is an option. The mowing of roadsides can sometimes get the mites moving into a field.
- Spider mite populations are often higher when conditions have been hot and dry for a sustained period of time. Populations can change substantially after heavy rains.
- The mite normally of concern in Manitoba is the two-spotted spider mite (*Tetranychus urticae*). They are small (about 0.4 mm), so you have to look hard to see them. Note the 2 spots on the abdomen.



Figure 3. Two-spotted spider mite



Figure 4. Feeding from mites on soybean leaf
(Photo by Dennis Lange – MAFRI)

Surveys and Forecasts

Survey of Mites across the prairies: A scientist from AAFC in Ottawa studying the taxonomy of plant-feeding mites will be sampling mites across the Prairies from the end of July until mid-August. He will be collecting mites from Manitoba from August 8-12th. Mites will be collected from crops, weeds and native plants. The objective is to improve the knowledge of mite pests in Canada, and secondarily, of mite biocontrol agents of pests or of weeds.

We are trying to organize a list of crops and sites to sample in Manitoba. Knowing about mite populations that are currently at noticeable levels would help us decide on crops and sites to include. Let me know if you know of any sites that may be good to include in the survey.

Grasshopper Survey: Manitoba, Saskatchewan and Alberta have for many years surveyed grasshopper populations in August to predict the regional risk from grasshoppers the following year. The data is mapped, and this forecast is used by farmers, agronomists, and agricultural retailers to plan for the following season.

A reminder to farm production advisors and those involved in this survey, that counts are done during August, when the majority of grasshoppers are in the adult stage. Agronomists and farmers who would also be interested in estimating grasshopper numbers in the fields they are in and have this information included in the survey are encouraged to see the survey protocol for more details of the survey and where to send data. Estimates of grasshopper levels can be collected during regular farm visits. The grasshopper survey protocol is located at: <http://www.gov.mb.ca/agriculture/crops/insects/fad95s00.html>

Insect Identification Quiz

Some caterpillars like the one in the photo below have recently been found feeding up on the leaves of vegetables and ornamental plants in some gardens in Manitoba. What is this caterpillar.



Answer: This is a type of cutworm known as the variegated cutworm (*Peridroma saucia*). Note the series of yellow dots near the head end of this cutworm, which is one of the distinctive features. This is an insect that overwinters to the south of Manitoba, and moves in over the spring or summer. One report of them this year was from Gillam, Manitoba. So they have moved a long way.