

Issue 9 – July 18, 2024

# Manitoba Crop Pest Update



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## Summary

**Insects:** Control of **aphids in field peas** was reported from the Southwest (Boissevain area), and Central region (Notre Dame de Lourdes, Starbuck and Fannystelle areas). **True armyworms** remain at high levels in some areas, and control was reported from the Interlake and Central regions. There is also some evidence of parasitism of true armyworms starting to become visible (pupal clusters of a parasitic wasp called *Cotesia*). Some **grasshopper** control in soybeans and cereal crops occurred in the Central region. Evidence of **sunflower bud moth** has been noticeable in many sunflower fields.

**Disease:** You have probably heard many planes flying, applying pesticides to agricultural crops. Many of those planes are applying fungicides to primarily canola, wheat and other cereals. Disease pressure is high, especially *Sclerotinia* in canola and leaf diseases and fusarium head blight in cereals. More details to follow next week.

**Weeds:** Herbicide applications are wrapping up after a long drawn out spray season. Weed growth has been rapid due to the heat and moisture especially for warm season weeds like kochia, pigweeds, foxtails and barnyard grass. Windy conditions at spraying have led to drift complaints. Large weeds are present that have not been adequately controlled, they may have been too large at time of spraying or are herbicide resistant. Investigate weed escapes and do not let suspected herbicide resistant weeds go to seed.

## Entomology

### Pea Aphids in Peas

While scouting peas for aphids, note that pea aphids can also have a pinkish morph. This is not as common as the green morph, but we are seeing some of it this year. Refer to last weeks Manitoba Crop Pest Update for information on the most sensitive stages for aphids on peas. A factsheet on the biology, monitoring, thresholds and control options for aphids on peas, faba beans and lentils is available on the Manitoba Agriculture website at: [aphids-on-peas-factsheet.pdf \(gov.mb.ca\)](https://www.gov.mb.ca/agriculture/factsheets/aphids-on-peas-factsheet.pdf)

Recently published thresholds for pea aphids in faba beans and lentils have been incorporated into this factsheet.

### Pea Aphid Survey

Tyler Hartl, a M.Sc. student with the University of Saskatchewan has a project focusing on creating species distribution models for pea aphids. A field survey has been created to record locations where pea aphids are being found across the Canadian prairies. If you are finding pea aphids while scouting peas, faba beans, alfalfa or any of

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its other hosts, it only takes about 1 minute to complete the survey form and register the location and crop where the pea aphids were observed. You just need to click or fill out five things: date, whether you found pea aphids, location, crop, and crop stage. Please consider doing this if you are finding pea aphids while scouting your pulse crops or alfalfa.

The survey can be accessed via the following link:

[https://docs.google.com/forms/d/e/1FAIpQLSdvQr--hYRSbjlO50MWipv5oOebeiElc6GEXW\\_meq2oW6qtyw/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdvQr--hYRSbjlO50MWipv5oOebeiElc6GEXW_meq2oW6qtyw/viewform?usp=sf_link)

## Grasshopper Colour Morphs

There are 4 potential pest species of grasshoppers in Manitoba that we encourage crop scouts to get to know. The two-striped grasshopper can have different colour morphs, which can make identification of this species trickier. In last week's update we showed green and brown forms of two-striped grasshopper nymphs. There is also a rarer morph of two-striped grasshopper that has some pink markings on the thorax and abdomen. All three grasshoppers in the two photos below are two-striped grasshopper nymphs.



To learn more about identification of our potential pest species of grasshoppers, see: [grasshoppers-factsheet-revised-november2022.pdf \(gov.mb.ca\)](#)

## Sunflower Bud Moth

Sunflower bud moth has been quite noticeable in many sunflower fields this year. One of the first indications of sunflower bud moth is the presence of frass (insect excrement) around an entrance hole either in the stalk or the back of the sunflower head. This is from larvae that have tunneled into the sunflower plant. The visibility of the frass makes the presence of this insect very noticeable. Generally they do not cause high levels of economic loss, although there are exceptional circumstances. There are no registered controls for sunflower bud moth.



Frass from sunflower bud moth



Sunflower bud moth larva



Sunflower bud moth adult

## Weeds

### Kochia in the Northwest

Kochia has been slowly spreading north and has shown up in the Swan River Valley. Assume all kochia is glyphosate-resistant and remove all plants before they set seed. Don't allow individual plants or small patches to escape as this weed spreads very quickly. Kochia has a short seedbank life – 2 years – so diligent scouting and plant removal can prevent this weed from getting established. Kochia is a tumbleweed and can move in from the surrounding area so be aware of what's in neighbouring fields.



This picture is from the Swan River area and this plant has been sprayed with glyphosate multiple times. Assume all kochia is glyphosate-resistant and remove all plants before they set seed

### Lamb's Quarters?

I've been getting quite a few pictures of maple leaved goosefoot *Chenopodium simplex*, which is related to lamb's quarters, as they are both in the Chenopodiaceae family. Since they are in the same family, they have similar characteristics like the "blush" on the leaves, striped stem and the leaves have a somewhat similar shape. Maple

leaved goosefoot leaves are longer and narrower while lamb's quarters leaves are wider closer to the stem. Maple leaved goosefoot seems to show up in the wetter areas of the field, but its not widespread. The pictures below show some plants found in the Interlake region.



## Forecast

### True Armyworms

Larvae of armyworms (*Mythimna unipuncta*), sometimes also called true armyworms, can cause significant feeding injury to cereals and forage grasses when levels are abundant. Adult moths of armyworms migrate to Manitoba in the spring from overwintering sites from the southern US. A network of pheromone-baited traps are being monitored from early-May until late-July to determine how early and in what levels populations of armyworms have arrive.



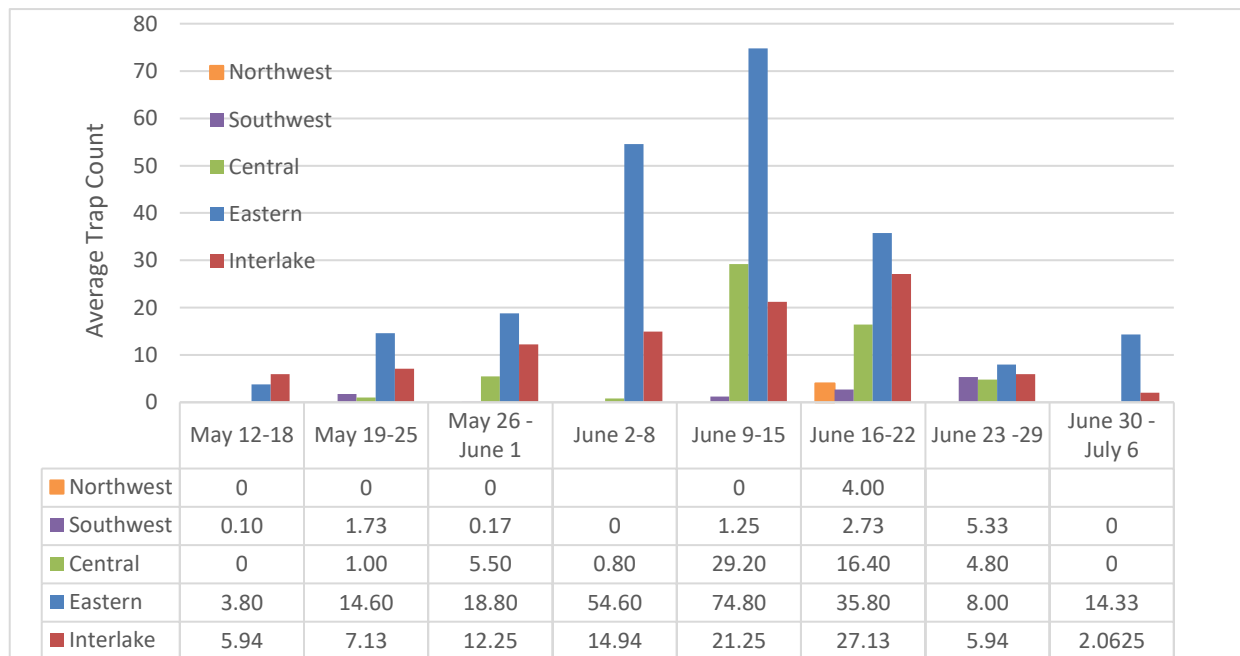
Counts have been low so far in the western regions of Manitoba, with some moderate cumulative counts in the Central region. Some higher cumulative counts have occurred in some of the traps in the Eastern and Interlake regions. Counts gradually got higher over a few week period in the Central, Eastern and Interlake regions, generally increasing and peaking during a three week period from about June 2 – 22 (see Figure 4). Late-June counts for these regions were lower.

The highest cumulative count is 436, from a trap near Riverton in the Interlake region. There are some areas in the Central, Eastern and Interlake regions where looking for larvae of armyworms while scouting cereals and forage grasses would be good to prioritize. Armyworm larvae have been reported from the Central and Interlake regions, with some control applied in both the Central and Interlake regions.

**Table 1.** Highest cumulative counts of armyworms in pheromone-baited traps for agricultural regions in Manitoba as of July 17, 2024.

Region	Nearest Town	Trap Count
Northwest	Russell	4
	Grandview	0
Southwest	North Pierson	26
	Rivers	25
	West Pierson	23
	Medora	9
	Glenboro	3
Central	Horndean	93
	Rosenfeld	79
	Altona	73
	Morris	22
	St. Joseph	17
Eastern	Dencross	426
	New Bothwell	270
	Beausejour	211
	Kleefeld	138
	Lorette	27
Interlake	Riverton	436
	Washow Bay	228
	Teulon	189
	Fisher Branch	136
	Balmoral	127

← Highest cumulative count



**Figure 1.** Average weekly trap counts for true armyworm per agricultural region in Manitoba

Highest counts in each region of Manitoba and a monitoring summary are updated weekly on the Insect Page of the Manitoba Agriculture website at: <https://www.gov.mb.ca/agriculture/crops/insects/pubs/true-armyworm-trap-results-07-10-2024.pdf>

A map showing armyworm counts from Manitoba, Eastern Canada, and several Northeast U.S. states is available at:

<https://experience.arcgis.com/experience/7164d23d488246d198dcf7a07d8c9021/page/Home/?views=Welcome>.

Go to the link "TAW". The "Play" button at the bottom can be set so the map automatically advances (click middle arrow), or set to "Stop" and the arrows at either side of the button used to go forward or backward a week at a time.

## Bertha Armyworm

The population of adult moths of bertha armyworms are being monitored during the flight and egg-laying period in June and July using pheromone-baited traps. Bertha armyworms have been found in 77 out of 82 traps that counts were reported from so far. Cumulative trap counts are all still in the low risk categories.

The highest cumulative trap count so far is 138 from a trap near Whitehead in the Southwest region.



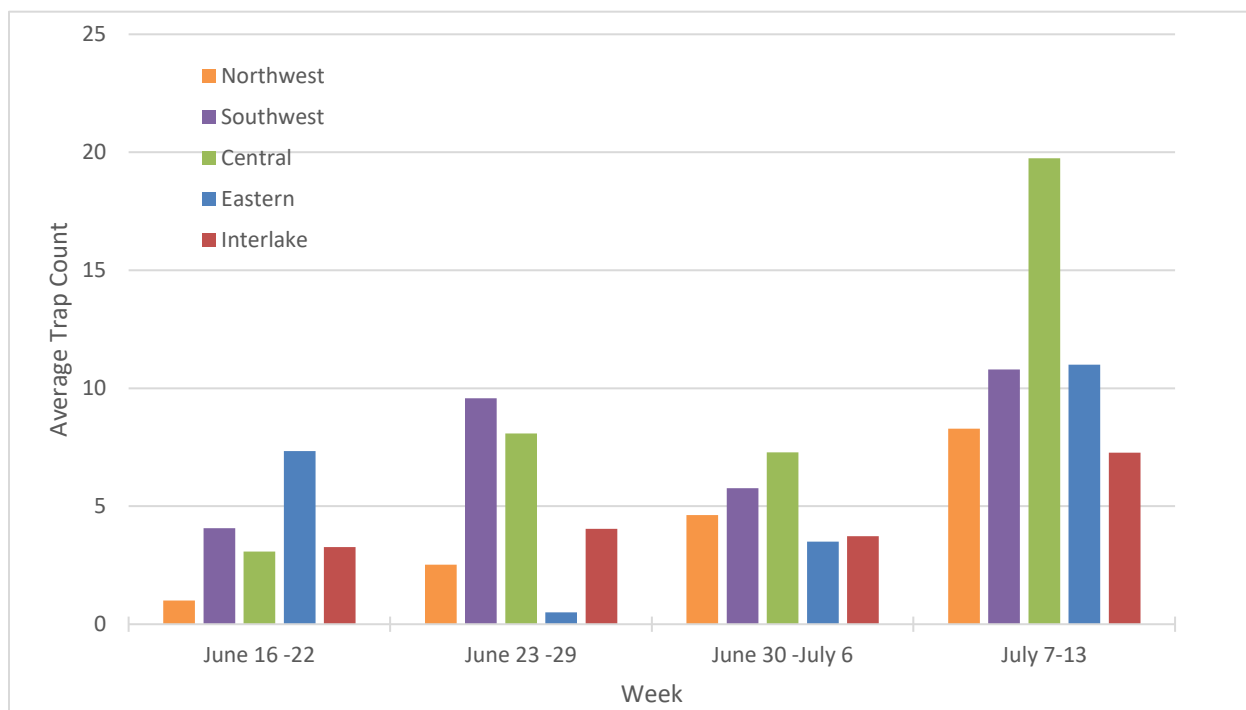
**Table 2.** Highest cumulative counts of bertha armyworm (*Mamestra configurata*) in pheromone-baited traps for five agricultural regions as of July 18, 2024.

Region	Nearest Town	Trap Count
Northwest	Durban	53
	Birch River	45
	Makaroff South	43
	Minitonas	40
	Grandview	38
Southwest	Whitehead	138
	Pierson East	77
	Brandon East	41
	Killarney	34
	Rivers	33
Central	Morris	61
	Haywood	57
	Elm Creek	47
	Starbuck, Wingham	45
	Emerson	35

0-300 = low risk  
 300-900 = uncertain risk  
 900-1,200 = moderate risk  
 1,200+ = high risk

← Highest cumulative count

Eastern	Whitemouth	49
	Stead	31
	Tourond	20
	Ste. Anne	14
	Beausejour	4
Interlake	Teulon East	85
	Pleasant Home	66
	Gimli	64
	Silver Bay	60
	Lundar	53



**Figure 2. Average weekly trap counts for bertha armyworm per agricultural region in Manitoba.**

Information on the biology of bertha armyworm and monitoring larval levels can be found at:

<https://www.gov.mb.ca/agriculture/crops/insects/pubs/bertha-armyworm-factsheet.pdf>

## Identification Quiz

**Question:** While scouting canola, these small orange larvae were found at the base of a canola stalk. The area was wilted, soft and discoloured. What are these larvae and the infection associated with it?

**Answer:** The insects in this photo are larvae of a species of gall midge (Cecidomyiidae) called the white-mold gall midge (*Karshomyia caulicola*). Gall midges are a fairly big group of insects that includes some crop pests such as wheat midge, swede midge and Hessian fly; there are some predaceous species, and some species feed on decaying organic matter and fungi (which is what you are seeing here). White-mold gall midge occurs after the onset of white mold, or sclerotinia as it is known in canola.

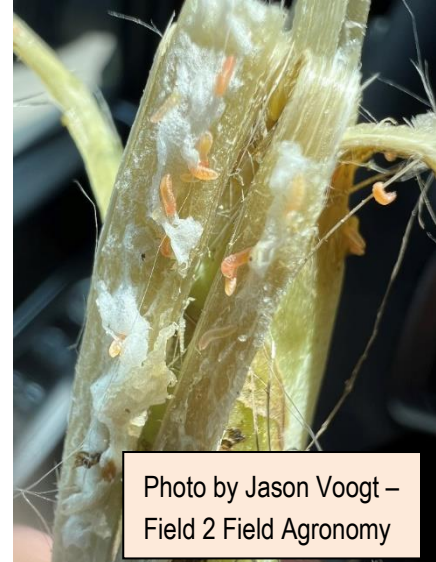


Photo by Jason Voogt –  
Field 2 Field Agronomy

In soybeans, the white-mold gall midge can be confused with the soybean gall midge, which can be a pest but luckily, we do not have in Manitoba. The following has some information on identifying white-mold gall midge from soybean gall midge:

[How to distinguish soybean gall midge from white mold gall midge \(umn.edu\)](https://www.umn.edu/extension/soybean-gall-midge)

Anyone suspecting they have soybean gall midge in Manitoba, please contact me (John Gavloski).

To **report observations** on insects, plant pathogens, or weeds that may be of interest or importance to farmers and agronomists in Manitoba, please send messages to one of the following Manitoba Agriculture Pest Management Specialists.

John Gavloski, Entomologist (204) 750-0594  
David Kaminski, Field Crop Pathologist (204) 750-4248  
Kim Brown, Weed Specialist (431) 344-0239