Manitoba Crop Pest Update
Issue 1: May 24, 2023

Manitoba Agriculture

Summary

Insects: Flea beetles are out feeding on the volunteer canola. Until recently it had been mainly striped flea beetles, but this past week we have been seeing crucifer flea beetle as well. When observing flea beetles yesterday at the University of Manitoba research farm near Carman, the majority of the flea beetles were crucifer flea beetles.

Some grasshoppers can be found while sampling grassy vegetation around fields, but mainly non-pest species so far. There have been a few reports of people finding dingy cutworms, but no reports of cutworm control being needed so far.

Aster leafhopper has been found in the southwest, but so far just in an isolated area. Levels are low in the Central region; out of 80 sweeps in the Carman area we found only 1 aster leafhopper, 1 potato leafhopper, and 22 leafhoppers of non-economic species (some a similar size and colour as aster leafhopper, but without the spots on the head).

Diseases:
No reports of disease concerns as yet. Warm windy weather is generally not conducive to either fungal or bacterial disease. Diseases that rely on a vertebrate vector, such as wheat streak mosaic, barley yellow dwarf and others, may not be so dependent on weather but rather on abiotic stresses to seedling crops.

Weeds: What a change from the last couple of springs – so many weeds emerging due to the earlier moisture and heat. Lots of burn-off sprays have gone down and continue as seeding progresses. Warm soil temperatures are leading to rapid crop emergence and scouting is essential to make sure your crop has not emerged if you are still planning a burn-off spray. Consult the product pages in the Guide to Field Crop Protection 2023 and the product label for proper timing of burn-off sprays. Some products are pre-seed or post-seed, pre-emergent to the registered crops while others are pre-seed only.

Entomology

Early grasshoppers not to confuse with pest species: There are a few non-pest species of grasshoppers that overwinter as partially developed nymphs. Any larger grasshoppers you may see in May will likely be one of these non-pest species. Some examples of these early-season non-pest species of grasshoppers include the **brown-spotted grasshopper** (*Psoloessa delicatula*), which overwinters as 4th or 5th instar nymphs. It is an important food item for the survival of the nestlings of grassland songbirds, and would be more common in western than eastern Manitoba.
The **specklewinged grasshopper** (*Arphia* conspersa) overwinters as 5th instar nymphs, and is another grasshopper that may be seen in a more advanced stage early in the season. Near Carman we have been finding late-instar nymphs, and very recently adults, of the **greenstriped grasshopper** (*Chortophaga viridifasciata),* which overwinters as late-instar nymphs. The photo below of the nymph was taken on May 16, and the photo of the adult was taken May 23rd, both along a grassy margin to field plots.


Greenstriped grasshopper - nymph


Greenstriped grasshopper - adult

There is also a species called the **club-horned grasshopper** (*Aeropedellus clavatus*) that can confuse those keeping an eye on the grasshopper hatch. The club-horned grasshopper overwinters as an egg, but hatches more than a month earlier than pest species. The **pasture grasshopper** (*Melanoplus confusus*) is also a species that hatches very early, hatching in early spring. None of these species will be at levels that could be damaging to crops.

So far we have only seen grasshoppers of some of the non-pest species, but expect that hatch of the species that can get to pest levels (such as twostriped, migratory, and clearwinged) to start soon.

Weeds

Here are some of the weeds we have seen while seeding plots for Crop Diagnostic School taking place July 5-13:

Foxtail barley (left) and lambs quarters (right)

Redroot pigweed (left) and wild buckwheat (right)

Chickweed, small and flowering plants

Green foxtail – note ligule is fringe of hairs. In picture on the right see the carcasses from glyphosate sprayed 6 days ago with new foxtails emerging post-spray.

And we see some larger weeds as well – prickly lettuce on the left – note row of spines on midvein on underside of leaf. American dragonhead is on the right – note the veins run to the tip of the leaf not the notch as in hemp-nettle

Interested in learning more about weed ID? Join us tomorrow in Brandon for the annual Weed Seedling ID Day at the ACC North Hill Campus. Registration starts at 9 with a presentation at 9:30 on identification tips and tricks followed by a visit to the ACC Weed Garden. See attached poster for details.

Forecasts

Diamondback moth. A network of pheromone-baited traps are being monitored across Manitoba in May and June to determine how early and in what levels populations of diamondback moth arrive. So far, diamondback moth has been found in 28 out of 59 traps that counts have been reported from. Levels are generally low. The highest cumulative trap count so far is 16 from a trap near Whitemouth in the Eastern region.

Table 1. Highest cumulative counts of diamondback moth (*Plutella xylostella*) in pheromone-baited traps for five agricultural regions in Manitoba as of May 24, 2023.

Region	Nearest Town	Trap Count
Northwest	All counts still 0	
Southwest	Miniota	2
	Brandon	1
	Rapid City	1
Central	Culross	9
	Altona	14
	Layland	4
	Gretna, Pilot Mound	3
Eastern	Whitemouth	16
	Beausejour	15
	Stead	7
	Tourond	6
	Hadashville, Ste. Anne	1
Interlake	Meadows	6
	Vidir	5

← Highest cumulative count

Highest counts in each region 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/diamondback-moth-monitoring-05-24-2023.pdf

So far no larvae of diamondback moth have been reported.

Identification Quiz:

Question: While looking at flowers, someone noticed this insect moving from plant to plant. It is a lot bigger than a bee. What is it?

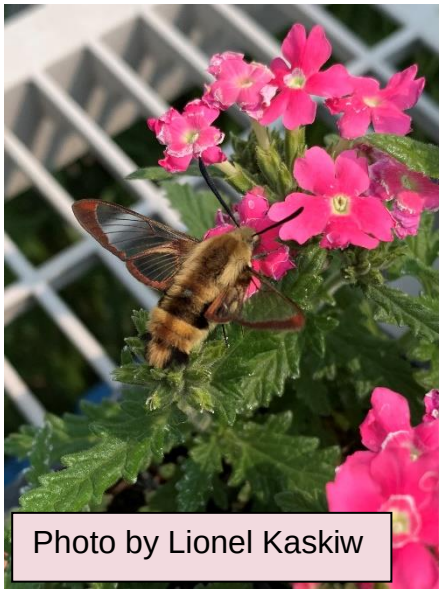
Photo by Lionel Kaskiw

Answer: This is a type of sphinx moth called the hummingbird clearwing (*Hemaris thysbe*). They are active during the day, which most moths are not, and often found taking nectar from flowers.

They beat their wings rapidly and hover while taking nectar from a variety of flowers. The combination of its appearance and its behavior commonly leads to it being confused with a hummingbird or bumblebee.

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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 the above contacts.

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