

Manitoba Crop Pest Update

Issue 4: June 14, 2023



Summary

Insects:

Some foliar insecticide applications for **flea beetles** continue, although many fields are getting to stages less susceptible to flea beetle feeding. Some have commented that overall in their region there has overall been less foliar spraying for flea beetles this year than last year.

Cutworms have resulted in insecticide applications and reseeded of soybeans in the Southwest. There have also been reports over the past week of spraying for cutworms in canola and corn in the Central region.

Grasshopper emergence continues. Some are noticing high levels emerging along field edges and headlands, and occasionally within fields. Some grasshopper control along field edges and headlands has been reported.

Counts of **diamondback moth** adults in pheromone-baited traps have been high recently in some traps in the Eastern and Central region. Larvae are starting to be noticed in some fields, although no reports of high levels.

Alfalfa weevil have been noticed in alfalfa in the Eastern, Interlake and Central regions. Planned early cutting to manage alfalfa weevil has been reported from the Interlake.

Notching from **pea leaf weevil** is noticeable on peas in the Northwest and the pea leaf weevil survey, described in last week's update, continues, although fields are starting to get quite advanced. The known range of pea leaf weevil in Manitoba continues to expand east as more fields are surveyed; last week we found pea leaf weevil and its feeding in a pea field near St. Leon.

The odd **green cloverworm** is being detected in soybeans in the Central region, but so far no big populations.

Plant Pathology: There has been some sporadic rainfall over the past week although the majority of cropland in Agri-Manitoba is still in a moisture deficit – lack of rainfall coupled with heat unit accumulation well above “normal.” Obviously, these are not conditions that favour fungal or bacterial infections. That has not slowed the deluge of calls, texts, and emails with the question, “What’s wrong with my crop?” A few have been possible pathogenic disease.

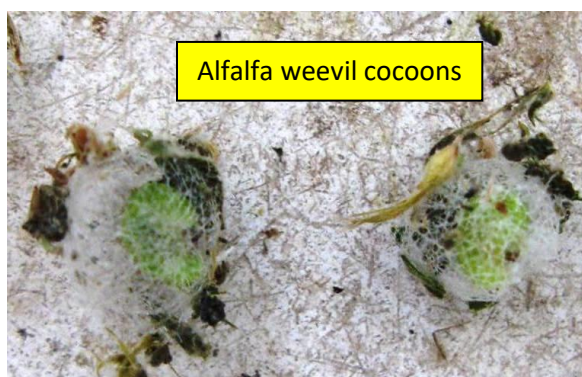
Weeds:

This past week saw rapid crop growth and better spraying conditions. Staging varies widely due to later seeding and dry conditions but all crops are being sprayed now. Weed growth has slowed down due to dry conditions but there is still tremendous weed pressure, especially warm season weeds like foxtails and pigweeds.

Entomology

Managing alfalfa weevil: One of the questions that came in this week, was regarding managing alfalfa weevil, and is this usually a problem in regrowth after the first cut. Usually when alfalfa weevil larvae are abundant they just a first cut issue, but there can be exceptions.

Early cutting is a good way to manage alfalfa weevil. This results in starvation and desiccation of the larvae. If we have some hot dry weather after the cut there is often very high levels of kill of alfalfa weevil. If the regrowth occurs really quick, and the conditions were less than ideal for high larval mortality, it is possible to still have significant levels of alfalfa weevil on the regrowth. The tricky part is that control of alfalfa weevil with insecticides is difficult. In hay crops, only a few insecticides are registered for alfalfa weevil, and some of these indicate suppression only or reduction on their labels.



Once the regrowth starts it would be good to check what larval survival is. A recommendation for when regrowth may need to be treated is that if 50 percent of regrowth shows signs of weevil feeding, larvae are less than about 9 mm long (their size when fully grown), and there are few or no weevil cocoons, the field may need to be treated with an insecticide.

The following factsheet has additional information on the biology, monitoring and management of alfalfa weevil: <https://www.gov.mb.ca/agriculture/crops/insects/alfalfa-weevil.html>

Plant Pathology

Disease Issues seen and heard:

* A seedling survey of corn has yielded the odd diagnosis of root rots including *Fusarium* and *Rhizoctonia*, albeit at low levels. Despite dry soils and some difficulty in seeding, most of the fields that we have visited look good at the V3 to V4 stages.

* Laura Schmidt, agronomist with MPSG reports that pea crops in Western Manitoba, that have received recent rains, are showing yellowing of lower leaves and root decay, especially in low areas of fields.

* Some powdery mildew is evident in winter wheat that has headed and is soon to flower. The same is apparent in some hybrid fall rye at a more advanced growth stage.

* Some growers are wondering when the first FHB risk forecast maps will be posted. Answer – Monday next week, Jun 19th.

* Cereals with yellowing of lower leaves continue to be related, most likely, to soaring temperatures at the soil surface.

Weeds

This pic from Manitoba Pulse and Soybean Growers shows pea staging for herbicide application.

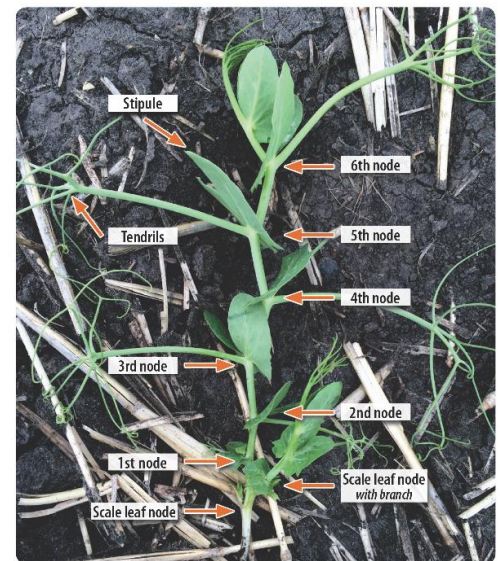
Post-emergent grass and broadleaf products like Viper (imazamox + bentazon) and Odyssey (imazamox + imazethapyr) need to be applied by the 6 node stage for crop safety. Spraying beyond the 6 node stage can cause crop damage, expect to see yellowing and stunting. If you have to spray these products beyond the 6 node stage use high water volumes to help minimize crop damage.

Sencor (metribuzin) can be applied post-emergent at up to six inches of vine length.

Grassy weed products like Poast Ultra and Assure (quizalofop) have no leaf stage restrictions but Pre-Harvest Interval must be observed. PHI is 65 days for quizalofop products and 60 days for Poast Ultra.

Basagran (bentazon) can be sprayed beyond the 6 node stage but high water volumes are necessary, minimum 20 gallons is recommended.

FIELD PEA STAGING This semi-leafless pea cultivar (tendrils largely replace leaves compared to leafy varieties) is at the 6th (true leaf) node stage. In-crop herbicide application beyond this stage would likely cause crop injury. Stipules are modified leaves at the base of each node along the main stem. Scale leaf nodes may be above or below ground and are not counted when staging.



When spraying cereals know your leaf stages, this pic (courtesy of Lionel Kaskiw) shows a wheat plant with 4 leaves and 2 tillers. What we can't see in this picture is how many nodes (if any) are on the main stem, you would have to feel near the bottom of the main stem for bumps to know if any nodes are present. I doubt there is a node present at this stage of the wheat. Right before spraying you should examine plants in several places in the field as growth stages can change very quickly with this weather.



Check each label or the product pages in the 2023 Guide to Field Crop Protection for the correct crop staging. Crops are growing rapidly with the heat and may be out of stage for certain herbicides. If using Varro (thiencarbazone) or Velocity in wheat the staging is 1-6 main stem leaves to a maximum of 3 tillers, and before the first node can be felt in the stem. Their labels also state that under drought conditions do not apply if there is less than 35 days between seeding and spraying as drought hastens crop development. Everest or Sierra (flucarbazone) can be applied in wheat to a maximum of 4 main stem leaves plus two tillers (6 total leaves), which would be the same as wheat in this pic. Thiencarbazone and flucarbazone are great Group 2 products and a crucial part of your rotation strategy when facing Group 1 wild oat and/or green foxtail resistance. Be sure to use them at the appropriate crop stage.

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 67 out of 79 traps that counts have been reported from. Trap counts were low until the week of May 21-27th, when some moderate counts occurred in traps in the Eastern region. The following week (May 28-June 3rd) higher counts occurred in some traps in the Eastern and Central region, with counts in 4 traps approaching or exceeding 100. Last week (June 4-10th) there were 3 traps with counts exceeding 100, two in the Eastern region and one in the Central region. The highest cumulative trap count so far is 346 from a trap near Beausejour 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 June 14, 2023.

Lower Risk: 0-25 Elevated Risk: 26-200 Higher level of moth catch: 200+		
Region	Nearest Town	Trap Count
Northwest	Makaroff	22
	Durban	21
	Russell	14
	Shell Valley	13

	Minitonas, Roblin	7
Southwest	Tilston	27
	Lauder	25
	Miniota	17
	Belmont	14
	Minnedosa, Rapid City	6
	Whitehead	4
Central	First week with weekly trap counts greater than 25: May 28 – June 3. Weekly trap counts greater than 100 occurred at the Brunkild and Altona traps for the weeks of June 4 – 10.	
	Altona	262
	Brunkild	152
	Horndean	143
	Rosenfeld	52
	Layland	50
Eastern	First week with weekly trap counts greater than 25: May 21 – 27. Weekly trap counts greater than 100 occurred at the Beausejour trap for the weeks of May 28 - June 3, and June 4-10.	
	Beausejour	346
	Whitemouth	166
	Hadashville	66
	Tourond	29
	Ste. Anne	15
Interlake	Ashern	34
	Poplarfield	24
	Steeprock	20
	Lundar	18
	Vidir	18

← 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>

Larvae of diamondback moth are starting to be found in some areas. Look for diamondback moth larvae when doing crop scouting in canola or other cruciferous crops.

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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.