Manitoba Crop Pest Update
Issue 2: May 19, 2021

Manitoba Agriculture

Summary

Insects: High levels of wireworms were reported from some cereal fields in the Central region. Some cutworms are being found, but no high levels reported yet. Flea beetles are active; no reports of economic damage to canola yet.

Diseases: Very few disease concerns at the moment.

Weeds: Weed growth is slow due to dry conditions, but scout carefully as weeds like lambs quarters and kochia show up early and can be at an advanced leaf stage even though they are short due to the challenging growing conditions. Crops are starting to emerge and we've missed the opportunity for pre-emerge weed control in those fields. Do not spray glyphosate on any emerged crop (other than glyphosate-tolerant crops like canola, soybeans and corn), even if plants are just starting to poke out they will still be damaged by the glyphosate.

Watch field peas, in dry conditions they can be at an advanced growth stage while being very short. In-crop herbicides like Viper and Odyssey need to be applied by the 6 node stage, do not wait for more weeds to come and spray beyond that crop stage.

Entomology

Black army cutworm: There are many different species of cutworms. Some species are more likely to cause economic damage to crops than others, and some will be more visible than others. A species that is sometimes quite noticeable early in the year, but not often of economic concern is the black army cutworm, *Actebia fennica*. An agronomist from the Interlake region reported seeing some of these, and noted that they seemed to be crossing the road to another field. This species, and a few others with "army" in the name, will do this when food is not abundant enough in an area. Black army cutworms overwinter as larvae, so caterpillars are seen early. Do not confuse these with the black colour phase of bertha armyworm, which you likely won't see as larvae until July.

Black army cutworms

Wireworms – What are Control Options? One of the questions that came in this week, is whether there are foliar spray options that can be used if you discover wireworms damaging emerging crops. The short answer is no. Wireworms do their feeding belowground, and any attempts at controlling them with foliar sprays are not likely to be successful.

If it is known based on history or monitoring that a field is at higher risk of wireworm damage, there are seed treatments and insecticides that can be applied in-furrow that can be used. Seed treatments belonging to the neonicotinoid or diamide insecticide groups cause a long-term and reversible intoxication/morbidity of the wireworms, but don't result in high levels of mortality. Products in these groups include Cruiser products, Trilex EverGol Shield, NipsIt, Fortenza, etc. A new active ingredient of insecticide called Broflanilide does kill wireworms. It is available as Teraxxa F4, a seed treatment for cereals, or Cimegra, which can be applied in-furrow or as a T-band in corn and potatoes. If needing to seed or reseed into a field with suspected wireworm problems, one of these options to stop the wireworms from feeding or kill the wireworms may be helpful. Seeding into soil that is warm and moist enough to promote quick germination and early growth can also reduce wireworm damage.

Plant Pathology

Disease Risks in Dry Conditions?

Many producers will be wondering about the ongoing effects of dry surface soils as their crops, seeded over the last few weeks, are slowly emerging. Are there any specific diseases that might be more prevalent if dry conditions persist?

The short answer is that they are few. Some root attacking fungi that don't need much moisture to infect crops are *Fusarium* and *Rhizoctonia*. Fusarium can end up causing crown rot in cereals which later in the season is evident as empty white heads. In canola, Rhizoctonia can cause wirestem, pinching at the soil surface, especially if that crop has had to emerge from depth.

On the flip side, those root pathogen known as "water moulds," *Pythium*, *Phytophthora* and *Aphanomyces* have very little chance of infecting seedlings under dry condition. They depend on free moisture around soil particles to move toward root hairs.

Environmental stresses can compound the impact of diseases especially vascular wilts, but this occurs much later in the season when crops progress to reproductive stages.

Forecasts

Diamondback moth. A network of pheromone-baited traps are monitored across the Canadian prairie provinces in May and June to determine how early and in what levels populations of diamondback moth arrive.

So far, out of 82 traps reporting data, only eight traps have caught any diamondback moth. Trap counts have been very low so far. The highest cumulative trap counts so far are 2 from a couple of traps in the Northern region (Shell Valley and Dropmore), and 1 trap in the Eastern region (Hadashville). In spite of some strong winds from the South, no high populations of adult diamondback moth have yet to arrive in Manitoba.

Highest counts in each region and a monitoring summary are updated twice weekly (Fridays and Tuesdays) on the Insect Page of the Manitoba Agriculture and Resource Development website at: https://www.gov.mb.ca/agriculture/crops/insects/diamondback-moth-forecast.html

Identification Quiz:

Question: A couple of people have sent in photos of the insect below recently, found near their homes. The question I often get regarding these is “is this a cockroach?” What is this insect, and if you find one near your house does it belong there, or is it like a fish out of water?

Answer: This is a giant water bug. They are large insects (hence giant), they spend most of their life in water, and they belong to a group of insects known as the true bugs (suborder Heteroptera).

They feed on other insects and small animals in the water. The front legs are modified into raptorial appendages used to grab prey. There are 4 species of giant water bugs in Canada.

Adults sometimes fly from one body of water to another at night and are attracted to light. The artificial light sources (i.e. - not the moon and stars) at night seems to disorient them, and often they can be found on pavement or other areas around artificial light.

Giant water bugs are a popular food in parts of southern Asia, such as Vietnam, Thailand, Cambodia, Laos and the Philippines, and can be found for sale in markets. They are often fried or roasted. The taste of the flight muscles is often compared to sweet scallops or shrimp. The “essence” of the giant water bug is also collected. A pheromone produced by the male to attract the female is harvested by collecting its liquid-producing sacs. That liquid is then placed in small glass containers. It is used by adding drops to dipping sauces or soups. Some delicacies to add to your bucket list on your next Asian trip.

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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.