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BADGER CROP CONNECT, JULY 1, CROPS AND GRAINS OUTLOOK

Badger Crop Connect, July 1, 12:30 PM – 1:30 PM

The Badger Crop Connect is a new crop production webinar series developed by the University of Wisconsin-Madison Extension Crops and Soils Program for the 2020 growing season. Badger Crop Connect’s goal is to bring agronomists, crops consultants and farmers timely crop updates for Wisconsin. This bi-weekly webinar is planned to continue through September. Webinars will have CCA CEUs available as assigned. Unfortunately, we are not able to record this webinar series, but resources shared by Extension Specialists will be available from the Resources link listed below.

July 1st Agenda:

Local Update on Crop Conditions - Dan Marzu, Lincoln and Langlade County Ag Educator

Grain Markets Outlook - Brenda Boetel, UW Extension Commodity Marketing Specialist

Pre-registration is required – Connection link will be emailed. Please register for this free webinar at: https://go.wisc.edu/3n0680

Resources from the webinar will be posted to this website https://fyi.extension.wisc.edu/grain/badger-crop-connection/

Please direct any questions to Extension Agriculture Educators Mike Ballweg michael.ballweg@wisc.edu or Dan Marzu dan.marzu@wisc.edu

This program is sponsored by University of Wisconsin-Madison Division of Extension with special support from the following Extension Educators: Mike Ballweg, Sheboygan County, Dan Marzu Lincoln and Langlade Counties, Nick Baker Rock County, Josh Kamps Lafayette County, Jerry Clark Chippewa County and Kimber-ly Schmidt Shawano County.
Armyworms

I have had a few more calls coming in since last week’s article. Keep looking. Especially in corn planted into a grass cover crop. I would expect this generation will be finishing soon. High populations during the current generation does not mean a significant problem with the next generation. Keep scouting.

Slugs

Yes, there are some out there but with good growing conditions I think corn will outgrow most of the injury. Hot spots may exist in soybean which could reduce stands in very late plantings.

Japanese Beetle (pictured)

No significant reports but…………. be patient. The take home message is to assess % defoliation on a “whole plant” basis. Not just the top nodes on soybean. An unneeded insecticide application could flare soybean aphids and two-spotted spider mites.

Potato leafhopper

Sweep alfalfa if you haven’t. It is early to predict impact on established stands. However, damage to new seedings is always a concern because of the longer period between harvest.

Soybean Gall Midge

Soybean gall midge has not been found in Wisconsin. However, states with this insect pest have indicated emergence of the overwintering adults. Keep this insect in the back of your mind if you find dead or dying plants on field borders and can’t come up with another cause. Please let me know ASAP if you see damage and find the clear to orange colored maggots at the base of the soybean plant. More information will be coming in the Wisconsin Crop Manager to help with field diagnosis.

European corn borer

DATCP indicates populations are at an all time low. Occasionally I hear of a few corn fields with economic injury. If you are in an area which has had injury in previous years make sure you look at susceptible corn fields (non-Bt hybrids with >18 inches extended leaf height). That isn’t a license to ignore traited hybrids. Resistance has not been documented in Wisconsin. Is it a matter of time?

Soybean Aphid

DATCP has found soybean aphids at low numbers this spring. Although populations have been low in previous growing seasons this insect is capable of rapid population increase. It is not too early to do some spot-checking.
**WISCONSIN WINTER WHEAT, SCOUT AND PLAN FOR HARVEST**

DAMON SMITH, EXTENSION FIELD CROPS PATHOLOGIST, DEPARTMENT OF PLANT PATHOLOGY, UNIVERSITY OF WISCONSIN-MADISON, BRIAN MUELLER, ASSISTANT FIELD RESEARCHER, DEPARTMENT OF PLANT PATHOLOGY, UNIVERSITY OF WISCONSIN-MADISON

We are now well past the time to apply fungicide on winter wheat in Wisconsin. Anthesis has come and gone and now it is time to scout for the predominant diseases to start planning for harvest. We have not observed any symptoms of Fusarium head blight (FHB or scab) yet, but we will continue traveling and scouting.

We are beginning to observe increasing levels of foliar diseases on winter wheat in the state. Septoria leaf blotch (Fig. 1) is visible in the lower canopy and moving up the canopy in many fields we have been in, as weather remains wet and humid. Fungicide applications for FHB should slow the progress of Septoria leaf blotch up the canopy, but care should be taken to monitor the progress of this disease.

We are also finding higher than normal levels of Barley yellow dwarf virus (BYDV) in winter wheat (Fig. 2). Levels of BYDV are between 5 and 10% incidence on some varieties in the uniform variety trials. Higher levels may be a result of earlier than normal aphid flights this spring due to mild conditions. Regardless, I don't think there is a huge amount of concern, as many varieties are resistant and levels observed are still below that at which yield might be reduced.

Finally, we have observed Cephalosporium stripe on wheat at the Arlington uniform variety trial location (Fig. 3). We have seen this disease occurring more frequently in the state over the last couple of seasons. One reason might be shorter rotations between wheat in some fields and potentially increased susceptibility in some varieties. I would say that this season it isn’t severe as far as we have seen, but we will rate the disease and report results if they look meaningful. You will remember that in 2019, we had a severe epidemic of Cephalosporium stripe at our Sharon, WI uniform variety trial location. The severity ratings can be found in the trial report.

We continue to look for stripe rust in the state. While we have found it at VERY low levels in a couple of locations, we have not seen increased occurrence or severity since the initial observations. Hot and dry weather has kept this disease under control. We will continue to scout wheat in the state and report the results of our observations here. Until then, get out and SCOUT, SCOUT, SCOUT!

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**USDA NASS CROP PROGRESS & CONDITION REPORTS**

DANIEL H. SMITH, NUTRIENT AND PEST MANAGEMENT PROGRAM, UNIVERSITY OF WISCONSIN-MADISON

Have you wondered what crop progress and conditions are like across the state of Wisconsin? The National Agricultural Statistics Service (NASS), within the
United States Department of Agriculture (USDA) publishes weekly reports on Wisconsin soil and crop conditions, crop progress, and statewide precipitation and temperatures during the growing season. These reports can help provide a bigger picture view of crop conditions, harvest timing, and growth stages of common Wisconsin crops across the state. Numerous other reports are available on dairy, livestock, farm economics, commodity supplies, acres planted to specific crops, and related topics.

Here is the newest report from June 22nd.

To sign up for these reports click here.

**GROWERS CAN USE EXISTING STOCKS OF XTENDIMAX, ENGENIA AND FEXAPAN, SAYS EPA**

BY STEVE TOMASKO, UNIVERSITY OF WISCONSIN PESTICIDE APPLICATOR TRAINING (PAT) PROGRAM

Last week, a U.S. Court ruling “vacated” the registrations for three dicamba products, sowing confusion over what that meant to farmers wanting to use those products. On June 8, the Environmental Protection Agency issued a response somewhat clearing the air, at least for the short term: growers who already have purchased any of the products can use them up until July 31, 2020. The long-term future for the herbicides remains cloudy.

The EPA has now issued a “cancellation order,” which removes the registration for three dicamba herbicides: XtendiMax, Engenia and FeXapan. Cancelling a registration essentially makes sale and use of a pesticide illegal in the U.S. However, the EPA order will allow use of existing stocks of the three products under specific circumstances. [EPA Cancellation]

Perhaps of most concern to growers, the EPA ruling allows use of existing stocks of products already purchased by growers. Those products must be used according to the label directions and can only be used until July 31, 2020. Commercial applicators may sell and distribute their existing stocks for use by July 31.

The registrants (manufacturers) of XtendiMax, Engenia and FeXapan (Bayer, BASF and Corteva respectively) will not be allowed to sell any product they still have in stock. The only distribution allowed for them under the order is for purposes of proper disposal. Similarly, sales by groups other than the registrants (dealers) is also banned. They also can only distribute the products either back to the registrants or for proper disposal.

In a press release, EPA Administrator Andrew Wheeler stated, “Today’s cancellation and existing stocks order is consistent with EPA’s standard practice following registration invalidation, and is designed to advance compliance, ensure regulatory certainty, and to prevent the misuse of existing stocks.”

This is how the situation stands today (June 9). There will likely be court challenges from the manufacturers, which could change things down the road.

Keep up to date at [https://fyi.extension.wisc.edu/pat/](https://fyi.extension.wisc.edu/pat/)
THE CURIOSITY OF CRISTOBAL AND THE ENSUING ENTOMOLOGICAL EFFECTS

BRYAN JENSEN, UW-MADISON DEPT. OF ENTOMOLOGY AND INTEGRATED PEST MANAGEMENT PROGRAM

Tropical depression Cristobal has made a visit to Wisconsin and I am not sure what impact that might have on migrating insects. At a minimum, there needs to be a source of insects from an area the storm passes over, insects at a life stage that can migrate, surface winds that will help them get airborne and conducive conditions for insects to settle out.

The last time a tropical storm passed through our state was Gilbert, September 1988. However, it only clipped southern Wisconsin and was too late to have an entomological impact. Certainly not enough for me to gain any experience. Before Gilbert, was an unnamed Category 2 hurricane in 1949. Contrary to popular belief, that was before my time.

All humor aside, keep an eye out for the usual migrating insects like corn earworm, fall armyworm and potato leafhopper and anything that might show up. I really do not know how this might play out, but it can be complicated and takes more than just winds to transport insects.

The take home message is to keep an eye open. If you see something that is unusual, especially if there are high numbers, reach out for answers.

ARMYWORM AWARENESS

BRYAN JENSEN, UW-MADISON DEPT. OF ENTOMOLOGY AND INTEGRATED PEST MANAGEMENT PROGRAM

I do not like armyworms. They are difficult to predict, hard to find, feed nocturnally and their damage can be clumped within a field making thorough scouting important. Not to mention they can cause pretty significant damage.

Regardless of my personal feelings, now is the time to be looking for damage. Typically, I would expect damage to be found primarily in wheat and corn.
After all, armyworms are grass feeders. However, do not ignore soybean and alfalfa. Especially new alfalfa seedings. The situation with soybean and alfalfa is that grassy weeds or cover crops may have attracted the adults during the egg laying period. When the weeds are killed, or the cover crop terminated the larvae might feed on broadleaves.

Armyworms migrate to the Midwest every year. There have been a few reports of damage in states to our south but that isn’t unusual. I would start spot-checking now and pay special attention to corn that was planted after a cereal rye cover crop. That situation has been, arguably, the most common scenario for damage in recent years. Corn with early season grassy weed problems can have injury as can corn planted next to a grassy pasture or non-crop areas. I would also not rule out clean tilled corn fields. I guess what I am trying to say is that “armyworms are where you find them”. Spot-checking the most likely damage scenarios can give you a feel for damage potential your area.

Armyworm damage can be clumped within a field and within a geographical area. That makes it difficult for people to find. Did I mention I don’t like armyworms?

There are several variables to consider when contemplating treatment in corn. Armyworm density and size are at the top of my list. Once the caterpillars reach approximately 1- 1 ¼ inch length they will be soon finish feeding and pupate. Having a mixed population of small and mature larvae complicates your decision. Furthermore, small corn is remarkably resilient to defoliation. The commonly used threshold is treating armyworms if caterpillars are under ¾-1 inch and if you find 1 on 75% of the plants or 2 caterpillars on 25% of the plants. I like to review Jim Vorst’s, Purdue University’s Hail Damage to Corn article to help with control decisions. Hail can damage corn in several ways including stand reduction, direct ear damage, stalk damage. Several of those factors may come into play within a single field. However, when hail only causes defoliation (Table 3) its yield loss can somewhat consistent with army defoliation. His table helps to confirm my recommendation. For a list of insecticides labeled for use on armyworm in corn, please consult page 61-63 of A3646, Pest Management in WI Field Crops. Always try to focus control on small larvae. Percent control will be higher as will your return on investment.

Armyworm damage in wheat is also possible, however, larvae can be difficult to find because of their nocturnal feeding habits. During daylight, larvae can be found on the soil surface and hiding beneath soil clods. Areas of lodged wheat should be checked closely. The control threshold is 3 caterpillars/sq ft. and is a good starting point. Be especially protective of the flag leaf and continue to make sure they do not clip the heads prior to harvest.

Before spraying wheat for armyworm, read each insecticide label carefully. Preharvest restrictions, or PHI, are usually measured in terms of weeks or even longer and may preclude them from being used based on your anticipated harvest date.

There are many beneficial organisms that can feed on armyworms including birds, ground beetles, etc. Tachinid flies are an interesting
story. Tachinids are a large family of parasitic flies. They are typically generalists and not attracted to a single host. The adult resembles a house fly and the species I see most often on armyworm may lay one or several small eggs externally on a caterpillar. Please see the classic photo (previous page) of Dr. Robert Bauernfeind, University of Kansas, for details. The eggs hatch and larvae will feed internally. It is not a quick death and may not give quick knock down but is one method of natural control. View several armyworm larvae and if eggs are present it may sway your treatment decision.

This will be the first of two generations this growing season. The second generation, sometimes call the summer generation, may be a problem in July or early August. Its overall threat is independent (mostly) of the spring generation's impact.

Armyworms are identified by the alternating light and dark bands running the length of the larvae. Their underside is usually light yellow, and their head is tan with several vein-like lines noticeable in the compound eyes. Color intensity can vary significantly. Within a field you will find individuals which are extremely light colored, and the longitudinal lines are very faint to those individuals which are very dark and the longitudinal lines are equally difficult to see.

MORE ON ARMYWORMS, AND NOW JAPANESE BEETLES TOO

BRYAN JENSEN, UW-MADISON DEPT. OF ENTOMOLOGY AND INTEGRATED PEST MANAGEMENT PROGRAM

I received a few calls/texts early this week regarding armyworms. I am not sure how this may play out and I don’t want to be “crying wolf” but if you are looking for another reason to get out of the office, armyworms may be that reason.

I mentioned in last week’s Wisconsin Crop Manager armyworm article a few field situations that would be worthwhile to spot check including, but not limited to, winter wheat, corn and soybean after a grass cover crop and new alfalfa seeding especially if there is a connection with grassy weed growth or cover crop. I also mentioned I did not like armyworms. I still don’t.

You may find armyworm damage to be spotty or “clumped” within fields as well as on the local and greater landscape level. This makes scouting important, yet frustrating. An example to prove my point could be that Southern Wisconsin may escape damage while northern Wisconsin gets more than their share. A county or township may have a very similar situation, if not worse. Or a single field may be devastated while all others in the area look good. It can be very frustrating, and damage easily missed until it is too late. Unfortunately, when it is too late you will know it.

Above ground Bt traits vary in their control of armyworm. Only those trait packages with Vip3A offer control. For help determining specific traits expressed in the packages please consult the Handy Bt Trait Table. It truly is handy.

In closing, scouting will allow you to see for yourself what the potential risk of damage may be in your area.
Japanese Beetles

Come to think of it I am not very fond of Japanese Beetles either. Adults have already been reported by the Wisconsin Pest Bulletin and I suspect we will see a significant increase in adults over the next few weeks. A couple of factors come to mind which suggest a higher than normal numbers in 2020. During the 2019 growing season we had adequate soil moisture which will increase egg viability and survival of newly hatch grubs. Furthermore, the mild winter of 2019/2020 should positively influence overwintering survival.

Japanese beetles lay eggs during mid-summer and grubs will be near full grown by the end of summer before they move deeper in the soil profile to overwinter. In the spring grubs will feed, pupate and adults will emerge. Scouting is relatively easy because the adults are large, showy and their damage is easy to find. What is difficult about management is the adults are large, showy and their damage is easy to find. My point is that because the adults and their damage is so noticeable it is easy to get anxious.

Soybean are more tolerant of defoliation during the vegetative stage; 30% defoliation is needed before an insecticide application can pay for itself. During the reproductive stages that percent defoliation is reduced to 20%. People tend to overestimate defoliation. You can calibrate your estimates by using the chart on the bottom of page 128 in A3646, Pest Management in Wisconsin Field Crops. Please keep in mind the defoliation threshold is based on the whole plant.

Not just the upper leaves where damage is concentrated. A concern about Japanese beetle over management is that soybean aphids and/or two-spotted spider mites may be colonizing fields at the same time. Unnecessary broad-spectrum insecticide application will kill beneficial organisms and increase pest populations quicker than normal.

In corn, a threshold has been established of 3 adults/plant, active silk pruning and feeding prior to 50% of the plants pollinated. Regarding scouting, it is common for people to tell me that populations are higher on the borders of corn fields.

**WISCONSIN PEST BULLETIN, JUNE 25**

KRISTA HAMILTON, ENTOMOLOGIST, WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

Volume 65 Issue No. 9 of the Wisconsin Pest Bulletin is now available at:

This Week’s Weather & Pests

A rainy weather pattern prevailed in Wisconsin throughout the week. After a period of mostly dry conditions, multiple days of showers and isolated storms brought ½ to 4 inches of rain, with the highest weekly totals (> 2 inches) recorded in the western areas. Prairie du Chien in Grant County received 3.7 inches of rain over six consecutive days (June 19-24). Meanwhile, temperatures were cooler than normal for late June, only reaching the upper 60s to mid-70s midweek.

Although the wet weather caused delays to lingering alfalfa harvesting and other fieldwork, the rain corrected June moisture deficits for Madison and several other locations, and helped maintain favorable prospects for summer crops. According to the USDA NASS, 80% of the state’s corn and 82% of soybeans were rated in good to excellent condition at the start of the week. Fruit and vegetables have exhibited a burst of growth after the recent showers.

WISCONSIN VEGETABLE CROP UPDATES

AMANDA GEVENS, ASSOCIATE PROFESSOR & EXTENSION SPECIALIST, POTATO & VEGETABLE PATHOLOGY, PLANT PATHOLOGY DEPARTMENT

In issue 11 find:

- potato production updates with links to new video reports
- introduction to water stewardship training tool
- potato DSVs and PDays (no thresholds met this past week)
- no new late blight reports from US this past week

UW-Madison Division of Extension Vegetable Crop Updates Newsletter #11

In issue 10, I have included an updated table of accumulated PDays and DSVs for disease management in potatoes (and tomatoes), along with information on late blight in the US at the current time, and late blight in WI over past decade.

UW-Madison Division of Extension Vegetable Crop Updates Newsletter #10

LINKS TO REPORTS

View information on: Management Strategies for Early- and Late-Planted Soybean in the North Central U.S.

View information on: Soybean Irrigation during Reproductive Growth

View information on: Using Corn and Soybean as cover crops on Prevented Planted acres in Wisconsin