

Wisconsin Crop Manager

Volume 18 Number 21 --- University of Wisconsin Crop Manager --- August 4, 2011

What's New

New facilities at Marshfield Ag Research Station host Summer Field Day 86

Reminder – Midwest Soil Improvement Symposium 86

Crops

Vegetable Crop Update 2011-15..... 86

Insects

WBC Emergence Just Peaking in NC and NE Wisc..... 87

Webcast Teaches Soybean Aphid Speed Scouting..... 87

Plant Disease

Plant Disease Diagnostic Clinic Update 88

Growing and Feeding Eastern Gamagrass for Dairy Heifers-
Wayne Coblenz-U.S. Dairy Forage Research Center

Manure and Crop Management Effects on Runoff Nutrients
and Pathogens-Bill Jokela & Mark Borchardt-U.S. Dairy
Forage Research Center

What's New with the UW Soil and Forage Diagnostic Program-
John Peters-UW Soil Science

This event is open to everyone and full of the latest research! A lunch plate will be served for a nominal cost. Specialists will be available to answer questions during lunch.

The Marshfield Agricultural Research Station's north farm (near Stratford) is located at M605 Drake Avenue, Stratford just off of Cty C west of highway 97. For more information please contact Maureen Kolstad at 715:387:2523 ext 101.

New facilities at Marshfield Ag Research Station host Summer Field Day

Mike Bertram, Superintendent Marshfield Ag Research Station

Thursday, August 18 beginning at 10:00am the Marshfield Agricultural Research Station, UW-Extension, and the Central Wisconsin Forage Council will be hosting a summer field day at the north farm of the Marshfield Agricultural Research Station. All are invited to attend with continuing education units available for certified crop advisers.

Don't forget to bring your water sample for a free nitrate analysis by Mark Borchardt—Microbiologist with the U.S. Dairy Forage Research Center!

Feel free to join us early for snacks before beginning the morning program!

10:20 *Introduction and Station Update*-Mike Bertram-Marshfield ARS

10:30 *Morning Program*

Growing Meadow Fescue, tall Fescue, and Orchardgrass with Alfalfa-Bill Verbeten-UW Agronomy

Return on Investment for Soybean Seed Treatments-Shawn Conley-UW Agronomy

Corn Hybrid Effects on Nitrogen Need and Nitrogen Use Efficiency-Carrie Laboski-UW Soil Science

12:00 *Lunch Break*

1:00 *Afternoon Program*

Reminder - Midwest Soil Improvement Symposium

Dick Wolkowski, Extension Soil Scientist, Emeritus

Wisconsin will host a cadre of national experts who will discuss the use of gypsum in crop production at the Midwest Soil Improvement Symposium on August 23rd. The program is directed toward consultants, educators, and progressive growers. The availability of flue gas desulfurized (FGD) gypsum from certain Wisconsin powerplants has accelerated the interest in gypsum use, which has generated considerable discussion. While gypsum is an excellent Ca and S source, often claims for beneficial effects on soil physical properties are made with these applications. The Symposium will offer presentations from University and USDA-ARS scientists, industry staff, and a panel discussion by farmers using the material. The event will be held at the Arlington Agricultural Research Station on August 23rd beginning with registration at 7:30. More information on the program, registration, and other details can be obtained at the UW Soil Science Extension website (<http://www.soils.wisc.edu/extension/>). 7.5 CCA CEU's will be available.

Vegetable Crop Update 16 is Now Available

The sixteenth vegetable crop manager is now available.

To view this update go to the Veg Crop Update page or follow this link

<http://ipcm.wisc.edu/WCMNews/VegCropUpdate/tabid/115/Default.aspx>

This issue includes information regarding:

Western bean cutworm, European corn borer, potato leafhopper, soybean aphid, onion thrips updates Late blight & early blight updates Cucurbit downy mildew updates Potato petiole nitrate sampling update The Science of Water & Agriculture Field Tour Agenda

Western Bean Cutworm Emergence Just Peaking in North-Central and Northeastern Counties

Eileen Cullen, Extension Entomologist

The WI DATCP [Wisconsin Pest Bulletin](#) reported August 4th the phenology model for Western Bean Cutworm moth emergence suggests that 75% of the moth flight is complete as far north as Stevens Point in Portage County. Pheromone trap and black light trap counts have begun to decline across the southern half of the state.

By contrast, emergence is only 50% complete in the north-central and northeastern counties where peak flight is underway.

The purpose of this short post on western bean cutworm is to remind field and processing sweet corn growers in north central and northeastern counties that peak egg-laying is underway. Now is not the time to wrap up scouting for egg masses and small larvae in those areas. Another couple of weeks of scouting will help to make sure that you detect egg masses and small larvae, determine treatment thresholds, and treat if needed before larvae enter the ear.

Bill Schaumberg, CCA, Polenske Agronomic Consulting, confirmed this with his field observations this week. Field corn in his acreage in northeastern WI in and around Outagamie Co. is ranging from pre-tassel/very early tassel to tasseled and pollinated. One of Bill's grower client western bean cutworm pheromone traps was catching ~5 moths per week, and increased in that particular trap to 40 moths for last week. This indicates peak moth emergence is occurring.

Female moths prefer to lay eggs on pre-tassel corn, but they will lay eggs on post tassel corn, particularly toward the end of the moth flight when there is less pre-tassel corn available. However, treatment decisions are best based upon percentage infestation with egg masses and small larvae. Peak egg-laying occurs during peak moth flight.

Please refer to the July 21, 2011 WCM article [Western Bean Cutworm Egg Masses and Larval Hatch - Scout Field and Processing Sweet Corn](#) for information previously published in this newsletter.

After peak moth emergence (the stage reached in the southern half of the state), you are more likely to find small larvae on leaves, in leaf axils, and on the silks after they have dispersed from the egg mass. Small larvae on the move on the plant are more difficult to detect. During peak moth emergence as is occurring in north central and northeastern Wisconsin now, you should detect more egg masses relative to hatched egg

masses. Eggs turn purple approximately 2 days before hatching.

Treatment threshold for field corn is 5% infestation (5 of 100 plants sampled with egg mass and/or small larvae). In processing sweet corn, the threshold is 4% infestation.



Recently hatched western bean cutworm egg mass (larval exit holes evident). Photo: E. Cullen, UW-Extension (2010)



Early instar western bean cutworm larvae on corn silks (harder to scout for in the field relative to egg mass scouting during peak moth flight). Photo: E. Cullen, UW-Extension (2010).

Focus on Soybean Webcast Teaches Soybean Aphid Speed Scouting

Eileen Cullen, Extension Entomologist

<http://www.plantmanagementnetwork.org/edcenter/seminars/AphidSpeedScouting/>

Visit this link to view an open access webcast on Soybean Aphid Speed Scouting Technique.

Scouting for soybean aphid using whole-plant counts is time consuming, particularly counting hundreds of aphids on heavily infested plants.

The latest Focus on Soybean presentation discusses speed scouting: an easier, more efficient method of estimating whether aphids will have a significant economic impact on

soybean, helping the grower or consultant more quickly decide if a treatment is warranted.

Erin Hodgson, Assistant Professor and Extension Specialist at Iowa State University and creator of the speed scouting method, offers a how-to lesson on speed scouting, as well as a review of the sampling plan for making treatment decisions. The presentation also includes some examples of possible treatment decisions and a new paperless way to sample.

Highlights from the presentation include:

- Speed scouting is based on the established economic threshold of 250 aphids/plant, R1-R5 soybean growth stages, with aphids actively increasing in the field.
- This is a binomial, sequential sampling plan. This means each sampled plant is categorized as "infested" or "not infested" (yes/no). The cutoff point for a yes/no decision is 40 aphids. If a plant has 39 or less aphids it is "not infested". If a plant has 40 or more aphids it is "infested".
- This is done in a sequential manner until a treatment decision is reached. A minimum of 11 plants must be sampled under the speed scouting plan. Under very low or very high aphid densities, this may be all the plants that are needed to make a non-treat or treat decision. A maximum of 31 plants may be required on the speed scouting plan. If the treatment decision can not be clearly called in a 31 plant sample, the speed-scouting method will require a re-sample in 3 to 4 days.
- 40 aphids/plant is not a new economic threshold. Rather it is the "cutoff point" on individual plants sampled to make the call "not infested" (39 or less aphids) or "infested" (40 or more aphids). This binomial cutoff point

was mathematically determined based on proportion of plants infested, density of aphids per plant, and the 250 aphids/plant economic threshold.

- Speed scouting is a conservative sampling method meaning that it consistently recommends treatment before aphid populations reach the economic threshold using whole plant counts. For this reason, the speed scouting protocol recommends that you confirm a "treat" decision by re-sampling the field in 3-4 days before treating.

Reference

Hodgson EW, McCornack BP, Koch KA, Ragsdale DW, Johnson KD, O'Neal ME, Cullen EM, Kraiss HJ, DiFonzo CD, and Behnken LM. 2007. [Field validation of Speed Scouting for soybean aphid](https://doi.org/10.1094/CM-2007-0511-01-RS). Crop Management doi:10.1094/CM-2007-0511-01-RS.

UW-Extension/Madison Plant Disease Diagnostic Clinic (PDDC) Update

Brian Hudelson, Ann Joy, Amanda Zimmerman, Adam Greene, and Erin Schmid, Plant Disease Diagnostics Clinic

The PDDC receives samples of many plant samples from around the state. The following diseases/disorders have been identified at the PDDC from July 27, 2011 through August 2, 2011:

For additional information on plant diseases and their control, visit the PDDC website at pddc.wisc.edu.



PLANT/SAMPLE TYPE	DISEASE/DISORDER	PATHOGEN	COUNTY
FIELD CROPS			
Corn	Anthraxnose	<i>Colletotrichum graminicola</i>	Waupaca
	Drought Stress	None	Waupaca
	Yellow Leaf Blight	<i>Phyllosticta maydis</i>	Waupaca
Soybean	Herbicide Injury	None	Outagamie
	Phyllosticta Leaf Spot	<i>Phyllosticta</i> sp.	Portage
	Root Rot	<i>Fusarium</i> sp., <i>Pythium</i> sp.	Outagamie
FORAGE CROPS			
Alfalfa	Crown/Root Rot	<i>Pythium</i> sp., <i>Fusarium</i> sp.	Jackson
FRUITS			
Apple	Blister Canker	<i>Biscogniauxia marginata</i>	Monroe
Raspberry	Foot/Crown Rot	<i>Phytophthora</i> sp., <i>Pythium</i> sp.	Dane
Sour Cherry	Bacterial Spot	<i>Xanthomonas pruni</i>	Milwaukee
	Cherry Leaf Spot	<i>Phloeosporrella padi</i>	Milwaukee
VEGETABLES			
Sweet Corn	Yellow Leaf Blight	<i>Phyllosticta maydis</i>	Winnebago, Waushara
Tomato	Blossom End Rot	None	Dane