

Wisconsin Crop Manager

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2017 UW Extension Pest Management Update Meetings

Damon Smith, Extension Field Crops Pathologist, University of Wisconsin-Madison

Be sure to get the latest field crop pest management updates, by attending the 2017 PMU Meetings!

Mark your calendars as the UW Extension's Pest Management Update meetings are just around the corner (November 6-10). This year's program will follow the same format as in 2016. Meetings will either be in the morning or afternoon and will run for 3 hours. Morning meetings will begin promptly at 9am and run to 12pm. Afternoon meetings will begin at 1pm and conclude at 4pm.

The full schedule with dates, meeting locations, and registration contact information are in the link below. Please

register with the host agent at least 1 week prior to the meeting at the location you wish to attend.

FULL MEETING SCHEDULE ATTACHED AT END.

Please attend the meeting location at which you registered. Each meeting in the series is a separate county-based event and host agents cannot interchange registrant fees or meal counts.

Three hours of Certified Crop Advisor CEU credits in pest management are requested for each session.

The speakers will be extension specialists Mark Renz, weed scientist, perennial cropping systems; Dan Heider, IPM outreach specialist, Bryan Jensen, entomologist, and Damon Smith, field crop pathologist.

2017 Pest Management Update Topics:

- Integrated Pest Management Updates in corn, soybeans, alfalfa, and small grains: Update on new products and/or use of existing products as well as brief highlights of the 2017 pest situations in each crop.
- Wisconsin herbicide resistance update by Mark Renz
- In-depth weed diagnostic and management training by Mark Renz and Dan Heider

Western Bean Cutworm Scouting

Bryan Jensen, UW Extension and IPM Program

DATCP's Pest Bulletin has indicated an uptick in 2017 Western bean cutworm (WBC) activity (26/trap) compared to 2016 (20/trap). Now will be a good time to assess local populations and/or if control recommendations were successful by looking for ear damage in the field.

WBC ear feeding is fairly diagnostic and not easily confused with European corn borer – although there can be some gray areas. Second generation European corn borer feeding is usually confined to small areas of the ear tip and larvae will be present on most of the damaged ears. WBC feeding is more extensive and will range from kernel scrapings to completely consumed kernels. This damage may be located on the ear tip but as frequently on the side of the ear. Exit holes will soon be noticeable as larvae leave the ear to overwinter in the ground. Molds may also be present on injured kernels. Bird damage to the ear and/or husk can be an early indicator of insect damage. However, field scouting is required to determine which species the birds were feeding on.

Seed purchases will soon be considered as will selection (+/-) for Bt traits. In the absence of local pheromone traps, scouting for late season field damage can help with those decisions.

The UW IPM program has a video about WBC on YouTube; check out the link below.

<http://bit.ly/2xQp2qG>

Research: Key Management Practices That Explain Soybean Yield Gaps

Shawn Conley, Soybean and Wheat Extension Specialist, UW-Madison Department of Agronomy

To date, identification of causes of yield gaps (difference between maximum yield potential and measured yield in producer yields) has been restricted to small geographic areas. In this study, researchers developed a novel approach that combines producer-reported data and a spatial framework to identify explanatory causes of yield gap over large geographic regions with diversity of climate, soils, and water regimes (rainfed and irrigated).

This research focused on soybean in the North-Central United States region, which accounts for approximately one third of global soybean production, as a case study to provide a proof of concept on the proposed approach.

We developed a novel approach that combines producer survey data with a biophysical spatial framework for identifying causes of yield gaps over large agricultural areas with diversity in climate and soils.

The approach was applied to both rainfed and irrigated soybean in the North Central US region, and it was based on producer survey data on yield and management col-

lected from 3,568 elds over two crop seasons.

The analysis indicated that the average regional yield potential was 71 bu ac⁻¹ (rainfed) and 85 bu ac⁻¹ (irrigated), with a respective yield gap of 22% and 13% of maximum yield potential.

Planting date, tillage, and in-season foliar fungicide and/or insecticide were identified as explanatory causes for yield variation, with planting date the most consistent management factor that influenced soybean yield.

To view the full report, click below:

http://www.coolbean.info/library/documents/2017_SoybeanYield_Final.pdf

Slugs in a Cereal Rye Cover Crop

Bryan Jensen, UW Extension and IPM Program

As the growing season winds down, some growers will be considering a broadcast planting of cereal rye seed over unharvested crops to establish an early cover. Consider scouting for slugs prior to broadcasting the cereal rye. Slugs can severely reduce stands by feeding on the seed prior to germination. The cool and wet conditions we had in most of Wisconsin during 2017 has been conducive to slugs.

To avoid surprises, scout fields prior to broadcasting seed. Slug damage can be found under many field scenarios including low residue conventional tillage systems. However, the potential for slug damage is usually higher when weed pressure is high, fields remain wet for prolonged periods of time or have heavy soils as well as no-till or any other management system which leaves high amounts of surface residue.

Slugs are nocturnal feeders and difficult to monitor during daytime hours. Looking for old or current damage on the standing crops may provide limited information. Instead, take advantage of a slug's habit of needing to hide during the day. Consider placing a large flat object on the soil surface that slugs can crawl under during daylight hours. Sections of scrap lumber or old singles (with the mineral side up) are ideal. Cardboard may also work if it doesn't get blown or washed away. However, direct contact with the soil surface is important. Monitor these structures for several days during daylight hours.

There are no established economic thresholds using this method and effectiveness may vary according to competing habitat. However, their use will confirm the presence/absence of slugs.

If slugs are present and you feel there is a concern based on field history, consider drilling the cereal rye after harvest. Drilling buries the seed out of reach of slugs and will significantly reduce economic damage to seed.

Putting Farm Safety into Practice, Silage and Grain Harvest

John Shutske, Agricultural Engineering Specialist, UW-Madison Biological Systems Engineering Department

A modern farm can be a dangerous and unforgiving place. Late summer and fall are high-risk times as harvest operations ramp up quickly. In Wisconsin, we always have tight time windows to get hay, silage, and other crops harvested and put into storage to make it through the year. It's that urgency and time pressure that can contribute to mistakes that often leads to injuries or even death. Machinery plays a major factor in serious farm injuries. Here are some ways to put safety into practice!

Think Like a Pilot – Or, a NASCAR Driver

The best way to prevent harvest season injuries is to invest prep time to get your equipment ready for the busy season. Adjustments and maintenance that improve safety also can also help maximize the quality and value of your crop.

As a farm owner, manager, or operator, think of your role the same way an airplane pilot or race car driver would. That means you need to establish something like a pre-flight or pre-race checklist — a run-through and shake-down to make sure all systems are “go.”

Consult your operator's manuals. Are shields in place – on tractors, choppers, blowers, wagons, combines, and augers? Replace any questionable hydraulic hoses and know the status of any bearings and belts that you know might need to be repaired during the season. Many terrible farming injuries happen when a breakdown occurs. People get super-stressed or frustrated and then do something that they know might be dangerous. Also make sure to carry a fully-charged, 10-pound ABC dry chemical fire extinguisher on all machines including trucks.

Gear Up for Highway Travel

Minimizing the time you spend on the highway is always the best way to reduce hazard levels. However, that's often not practical. As we roll into fall with fewer daylight

hours upon us, make sure SMV emblems are bright and clean and that all flashers and lights are fully operational. Plan highway travel whenever possible to avoid busy rush times including the early morning commute and the rush to school. Evening times are high risk as people are in a hurry to get home from work or school and the sun gets low in the sky. Make sure you fully understand and comply with all other state and local lighting, marking, width, and weight limit laws.

Train, Coach, & Create Expectations with Your Employees

Many farms have hired workers who help with harvest – As an employer, spend time with them. Talk about your safety expectations. A few of our larger farms now publish a monthly or bi-weekly newsletter, often available in English, Spanish and other languages. Operator's manuals and safety decals are a great source of information. The same is true if you're hiring custom harvest work. As a farm owner and operator, you must create and expect a culture of safety. With everybody involved in the operation, demonstrate and walk through safe procedures. Show people what to do if something unexpected happens. Make sure everyone involved in the operation has a reliable way to communicate. But realize that if it's a smartphone, steps need to be taken to make sure people are not distracted by phone use.

For more information on ways to make your farm a more safe and healthy place to work, check out the UW Agricultural Safety and Health Center website at:

<https://fyi.uwex.edu/agsafety/>

Wisconsin DATCP Pest Bulletin August 31, 2017

Krista Hamilton, Entomologist, Bureau of Plant Industry/ Division of Agricultural Resource Management, Wisconsin DATCP

Volume 62 Issue No. 18 of the Wisconsin Pest Bulletin is now available at:

<https://datcpservices.wisconsin.gov/pb/pdf/08-31-17.pdf>

PLEASE NOTE: This is the last regularly scheduled bulletin for 2017. A final summary issue will be published in November upon completion of our fall pest surveys. THANK YOU to the many cooperators, farmers, county agents and consultants who contributed their time to the survey program again this season.

LOOKING AHEAD: Fall nuisance insects expected to begin appearing in September

FORAGES & GRAINS: Pea aphid counts are up in most alfalfa fields

CORN: Significant corn earworm captures in Columbia and Dodge counties

SOYBEANS: Soybean aphid survey finds lowest state average population in 17 years

FRUITS: Spotted wing drosophila recommendations for fall raspberries

VEGETABLES: End-of-season clean up important for squash bug control

NURSERY & FOREST: Assorted reports from recent nursery inspections

DEGREE DAYS: Degree day accumulations through August 30, 2017

Wisconsin Fruit News-Sept 1, 2017

Janet van Zoeren and Christelle Guédot, UW-Extension

This issue of the newsletter continues with information about managing insect and disease pressure, as well as beginning to focus on fall maturity indices for grapes and apples. We hope you find it useful.

<http://go.wisc.edu/26h2r5>

- Insect Diagnostic Lab update
- Plant Disease Diagnostic Clinic update
- Picnic/sap beetles
- Spotted wing drosophila update
- Cranberry degree-day map and update
- Wine and table grape developmental stages
- Silver leaf of apple
- Reduced risk insecticide: Venerate
- Apple maturity index report
- Armillaria root rot on tree fruits

UW/UWEX Plant Disease Diagnostic Clinic (PDDC) Update, Sept 1

Brian Hudelson, Sue Lueloff, John Lake and Ann Joy

The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC. The 8/18/17 PDDC Wisconsin Disease Almanac (i.e., weekly disease summary) is attached at end of this newsletter.

Yearly PDDC files are also on the internet at >>>

<https://pddc.wisc.edu/wisconsin-disease-almanac-2017/>

UWEX Vegetable Crop Updates #20-#21 posted

Amanda Gevens, Associate Professor & Extension Specialist, Potato & Vegetable Pathology, UW-Madison Plant Pathology Department

[Newsletter No 21 September 4, 2017](#)

- updated disease severity values for late blight forecasting. In all locations, the weather has been very favorable for late blight
- updates on late blight confirmations in WI, the US
- updates on cucurbit downy mildew in the US. To date, we have not had a commercial or home garden confirmation of downy mildew on cucurbits or basil

[Newsletter No 20 August 26, 2017](#)

- updates on late blight as well as cucurbit downy mildew
- Additional reports of late blight in Iowa and Kenosha Counties this week. Details included in newsletter

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2017 Wisconsin Pest Management Update Meetings

The schedule for the Wisconsin Pest Management Update meeting series is listed below. Presentations will include pest management information for Wisconsin field and forage crops. Speakers will include Mark Renz, weed scientist, Damon Smith, plant pathologist, Dan Heider IPM specialist and Bryan Jensen, entomologist.

The format will be the same as in 2016. Meetings will either be in the morning or afternoon and will run for 3 hours. Morning meetings will begin promptly at 9am and run to 12pm. Afternoon meetings will begin at 1pm and conclude at 4pm.

Three hours of Certified Crop Advisor CEU credits in pest management are requested for each session.

Please make your reservation with the host agent at least one week prior to the scheduled meeting date.

DATE	LOCATION	HOST AGENT
Monday November 6 <i>1pm - 4pm</i>	<u>Marshfield</u> Marshfield Agricultural Research Station 2611 Yellowstone Drive Marshfield, WI 54449	Richard Halopka Clark County Extension Courthouse Room 104 517 Court Street Neillsville, WI 54456 (715) 743-5121
Tuesday November 7 <i>9am-12pm</i>	<u>Chippewa Falls</u> Lake Hallie Eagles Club 2588 Hallie Road Chippewa Falls, WI 54729	Jerry Clark Chippewa County Extension 711 N. Bridge Street Chippewa Falls, WI 54729 (715) 726-7950
Wednesday November 8 <i>9am-12pm</i>	<u>Belmont</u> Belmont Inn & Suites 103 West Mound View Avenue Belmont, WI 53510	Kory Stalsberg Grant County Extension P.O. Box 31 Lancaster, WI 53813 (608) 723-2125
Wednesday November 8 <i>1pm-4pm</i>	<u>Janesville</u> Holiday Inn Express Janesville 3100 Wellington Place Janesville, Wisconsin 53546 (I-90 and US Highway 14, West on 14)	Nick Baker Rock County Extension 51 S. Main Street Janesville, WI 53545 (608)-757-5698
Thursday November 9 <i>9am-12pm</i>	<u>Fond du Lac</u> University of Wisconsin – Fond du Lac Rm 113 University Center 400 University Drive Fond du Lac, WI 54935	Loretta Ortiz-Ribbing Fond du Lac County Extension 227 Admin/Extension Bldg. 400 University Dr. Fond du Lac, WI 54935 (920) 929- 3171
Thursday November 9 <i>1pm-4pm</i>	<u>Kimberly</u> Liberty Hall 800 Eisenhower Drive Kimberly, Wisconsin 54136 (Hwy. 441, College Avenue Exit, East 1 block)	Kevin Jarek Outagamie Co. UW Extension 3365 W. Brewster St. Appleton, WI 54914 Phone: 920-832-5128
Friday November 10 <i>9am-12pm</i>	<u>Sparta</u> Jake's Northwoods 1132 Angelo Road Sparta, WI 54656	Bill Halfman Monroe County Extension 14345 County Hwy B Sparta, WI 54656 (608) 269-8722

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

Brian Hudelson, Sue Lueloff, John Lake and Ann Joy

The PDDC receives samples of many plant and soil samples from around the state. The following diseases/disorders have been identified at the PDDC from August 26, 2017 through September 1, 2017.

PLANT/SAMPLE TYPE	DISEASE/DISORDER	PATHOGEN	COUNTY
BROAD LEAFED WOODY ORNAMENTALS			
Boxwood	Phyllosticta Blight Volutella Blight/Canker	<u>Phyllosticta</u> sp. <u>Volutella</u> sp.	Milwaukee Milwaukee, Waukesha
Cotoneaster	Coniothyrium Leaf Spot Root/Crown Rot	<u>Coniothyrium</u> sp. <u>Pythium</u> sp.	Milwaukee Milwaukee
Dogwood (Pagoda)	Root/Crown Rot	<u>Pythium</u> sp.	La Crosse
Elm (American)	Sphaeropsis Canker	<u>Sphaeropsis</u> sp.	Milwaukee
Honeylocust	Thyronectria Canker	<u>Thyronectria austroamericana</u>	Rock
Lilac	Powdery Mildew Septoria Leaf Blight	<u>Oidium</u> sp. <u>Septoria</u> sp.	Crawford Crawford
Maple (Japanese)	Verticillium Wilt	<u>Verticillium</u> sp.	Dane
Oak (Bur)	Anthracnose Phyllosticta Leaf Spot Tubakia Leaf Spot	<u>Discula</u> sp. <u>Phyllosticta</u> sp. <u>Tubakia dryina</u>	Walworth Walworth Dane, Dodge, Walworth
Oak (White)	Anthracnose	<u>Discula</u> sp.	Ramsey (MN)
Rose	Gloeosporium Canker	<u>Gloeosporium</u> sp.	Waukesha
Smokebush	Verticillium Wilt	<u>Verticillium</u> sp.	Dane
FIELD CROPS			
Corn	Common Rust Gray Leaf Spot	<u>Puccinia sorghi</u> <u>Cercospora</u> sp.	Grant Grant
Soybean	Fusarium Root Rot Phytophthora Root Rot	<u>Fusarium</u> sp. <u>Phytophthora</u> sp.	Manitowoc Manitowoc

Wisconsin Disease Almanac

FRUIT CROPS			
Apple	Root/Crown Rot	<i>Phytophthora</i> sp., <i>Pythium</i> sp.	Shawano
Currant	Septoria Leaf Blight	<i>Septoria</i> sp.	Bayfield
Grape	Phomopsis Cane And Leaf Spot	<i>Phomopsis viticola</i>	Dane
HERBACEOUS ORNAMENTALS			
Coleus	Downy Mildew Root Rot	<i>Peronospora</i> sp. <i>Rhizoctonia</i> sp.	Jefferson Jefferson
Peony	Botrytis Blight Powdery Mildew	<i>Botrytis cinerea</i> <i>Oidium</i> sp.	Milwaukee Milwaukee
NEEDED WOODY ORNAMENTALS			
Arborvitae	Root/Crown Rot	<i>Phytophthora</i> sp.	Winnebago
Juniper	Sphaeropsis Canker	<i>Sphaeropsis</i> sp.	Lake (IL)
Spruce	Rhizosphaera Needle Cast	<i>Rhizosphaera kalkhoffii</i>	Milwaukee
VEGETABLE CROPS			
Cucurbit (Unspecified)	Zucchini Yellow Mosaic	Zucchini yellow mosaic virus	Trempealeau
Pepper	Phytophthora Fruit Rot	<i>Phytophthora capsici</i>	Rock
Tomato	Early Blight Septoria Leaf Spot	<i>Alternaria solani</i> <i>Septoria lycopersici</i>	Jefferson Bayfield, Jefferson, Polk, Portage
Watermelon	Phytophthora Fruit Rot	<i>Phytophthora capsici</i>	Rock

For additional information on plant diseases and their control, visit the PDDC website at pddc.wisc.edu. Follow the clinic on Facebook and Twitter @UWPDDC.