

Wisconsin Crop Manager

Volume 26 Number 1 -- University of Wisconsin Crop Manager -- January 24, 2019

Contents

2019 Wisconsin Agricultural Outlook Forum.....	1
Identifying Optimal Soybean Planting Dates across the U.S.	1
2019 Cover Crop Conference	2
UW-River Falls Field Scout Training Class, March 27-28, 2019.....	2
Converting SCN Races to HG Types	2
2018 Wisconsin Weed Science Research Report	2
2019 Midwest Manure Summit at Lambeau Field, February 27.....	3
UW/UWEX Plant Disease Diagnostic Clinic (PDDC) Update, January 18.....	4

2019 Wisconsin Agricultural Outlook Forum

The 2019 Wisconsin Agricultural Outlook Forum will take place on Tuesday, January 29, 2019 at Union South on the UW-Madison campus. The registration fee of \$20.00 covers both lunch and the Forum.

This presentation by Renk Agribusiness Institute will run from 10:00AM to 5:00PM with talks on the agricultural situation and outlook, dairy industry trends and farmer perspective, and various panels on the dairy industry.

We hope to see you there.

[Click here to register for this event.](#)

Identifying Optimal Soybean Planting Dates across the U.S.

Shawn Conley, Professor and Extension Specialist, Department of Agronomy, University of Wisconsin-Madison

The U.S. is a major soybean producing country that supplies 34% of global annual soybean production. Most U.S. soybean-producing regions are rainfed, and thus are highly vulnerable to extreme weather events. Drought and elevated air temperatures, now more increasingly frequent due to climate change, are important constraints in crop production across major agricultural areas globally. Thus, the challenge to increase crop yields to meet future demand can be achieved by increasing the rate at which climate change adaptation practices are identified and adopted.

Vapor pressure deficit (Vpd) is a measure of atmospheric water demand with a strong influence on plant transpiratory water loss (Lobell et al., 2013). Increasing Vpd values are generally associated with drought and heat. Improved genetic traits and crop management strategies could help mitigate the projected negative impacts of climate change on crop yields. For example, drought-tolerant traits, introduced through conventional breeding, resulted in soybean transpiration rates that plateaued at Vpd levels above 1.4-2.1 kPa (Devi et al., 2014). Crop management strategies, such as earlier-than-typical planting, has also been proposed as a strategy to increase yields in regional studies (Rattalino Edreira et al., 2017). However, soybean exhibits different sensitivities to weather during varied developmental stages (Purcell and Specht, 2004), and therefore, the sensitivity of a crop to climate adaptation strategies and their effectiveness in mitigating drought-induced yield reduction remains unclear.

An important step towards adapting to climate change and mitigating its impact on yield is accurate identification of the weather conditions that most affect crop yield.

As has been reported earlier, one option is planting date adjustment. Regional trials have shown the benefits of earlier planting (Rattalino Edreira et al., 2017); however, there is a limit to how much the regional field trials can extrapolate results. Our objective was to examine crop sensitivity to varying in-season weather conditions and to model optimal planting dates and associated yield and monetary benefits due to planting date adjustment across the U.S. To date, there is no similar previous work.

[To read the rest of this article, click here.](#)

2019 Cover Crop Conference

Heidi Johnson, Crops and Soils Educator, Dane County, University of Wisconsin-Extension

February 20, 2019, Holiday Inn, Steven's Point, WI

[Link >> Information and Registration](#)

Farmers and ag professionals from around the state are coming together again to share and learn about all things cover crops. Whether you're a seasoned cover crop expert or an absolute beginner, there will be something for everyone!

Topics will include managing manure with covers, termination of covers, and machinery modifications for cover crops and no till. Many of the presenters will be Wisconsin grain and livestock farmers speaking from experience about what has worked in their Wisconsin conservation cropping systems. Last year's conference was a huge success with 400 attendees!

UW-River Falls Field Scout Training Class, March 27-28, 2019

Bryan Jensen, UW Extension, IPM Program

The University of Wisconsin-River Falls, UW-Extension and the Integrated Pest Management Program are co-sponsoring the IPM Field Scout Training Class which will be held March 27-28, 2019 at the UW-River Falls campus. This training session will provide classroom and laboratory instruction for several pest and nutrient management topics (pest identification, life cycle, damage symptoms, economic thresholds and scouting techniques for insects, weeds, plant pathogens, herbicide injury and nutrient deficiency symptoms for corn, alfalfa, soybean and wheat, soil sampling, plant tissue

testing, etc). [Click here](#) for the complete schedule. CEU's will be applied for.

Non-student registration fee is \$100/person and covers the cost of the training program and the Field Crop Scout Training Manual. To register online please go to <https://patstore.wisc.edu/ipm/register.aspx>

To register by check, send name, phone number, address and email address with a check payable to UW-Extension to:

Bryan Jensen

Dept. of Entomology

1630 Linden Drive

Madison, WI 53706.

For more information call Bryan Jensen at (608) 263-4073 or email at bmjense1@wisc.edu

Converting SCN Races to HG Types

Shawn Conley, Professor and Extension Specialist, Department of Agronomy, University of Wisconsin-Madison

The HG type test measures how well SCN populations can reproduce on soybean breeding lines used to create SCN-resistant soybean varieties. Resistant varieties developed from the breeding lines will control reproduction of the tested SCN population no better than the original sources of resistance, and control can be less.

[To see the rest of this guide, click here.](#)

2018 Wisconsin Weed Science Research Report

Rodrigo Werle (UW-Madison Extension Cropping Systems Weed Scientist) and Ryan DeWerff (UW-Madison Weed Science Research Specialist)

The purpose of this report is to share the results of twenty-three corn and soybean herbicide evaluation research trials conducted by the WiscWeeds Program during the 2018 growing season. Information in this report does not constitute a recommendation or endorsement of any particular product or practice. Information in this report also does not replace any information presented on pesticide labels.

Thanks to Ryan DeWerff, Weed Science Research Specialist & WiscWeeds Herbicide Evaluation Program Coordinator, for leading the efforts pertaining to this research report. Thanks for the WiscWeeds lab (Maxwel Oliveira, Sarah Striegel, Nikola Arsenijevic, Victor Ribeiro and Rachel Renz) and also Dan Smith and Richard Proost (UW NPM Program) for the assistance with establishing the field trials and data collection.

We sincerely thank the companies and organizations who have generously supported our research program through financial and/or material donations. We would also like to give a special thanks to the many UW faculty, staff, and Arlington and Lancaster Ag Research Stations and Rock County Farm personnel who provided valuable technical assistance with many aspects of the research projects presented herein.

[To download the 2018 Wisconsin Weed Science Research Report, CLICK HERE \(PDF FILE\)](#)

Please do not reproduce information presented within this report for public distribution without the expressed written consent from Dr. Rodrigo Werle.

Research Trials:

Corn Weed Control Trials

- Evaluation of Harness Max Applied PRE Compared to Competitors
- Evaluation of Harness Max Applied Early POST Compared to Competitors
- Sequential Corn Herbicide Evaluation
- Evaluation of Anthem Maxx Tank Mix Partners in 1 and 2-Pass Programs
- Evaluation of Diflexx Duo Applied Early POST Compared to Competitors
- Corn Herbicide Evaluation: 1 and 2-Pass Programs
- Corvus Length of Residual with Atrazine vs Competitors
- Liberty System Comparison with New Rates in Corn
- Corn Herbicide System Comparison without Atrazine
- ImpactZ and Impact Efficacy and Crop Safety in 1 and 2-Pass Programs
- Corteva Herbicide Programs in Enlist Corn
- Systems Approach to Weed Management in Corn

Soybean Weed Control Trials

- Authority Brands Programs Efficacy in Soybean
- Evaluation of Anthem Maxx Applied PRE Compared to Competitors
- Evaluation of Fierce Herbicide in Liberty Link Soybean
- Balance Bean Efficacy in Balance GT Soybean
- Corteva Soybean Herbicide Programs
- Systems Approach to Weed Control in Xtend Soybean
- Tavium Plus Vaporgrip Technology Efficacy in Xtend Soybean
- Engenia PRO System vs Competitors in Xtend Soybean
- Utility of PRE/EPOST Application of Dicamba in Xtend Soybean
- Evaluation of Single MOA Soybean Herbicides Applied PRE
- UW Waterhemp Challenge: Comparison of Soil Residual Herbicides

2019 Midwest Manure Summit at Lambeau Field, February 27

The 2019 Midwest Manure Summit will be held on Wednesday, February 27, 2019.

Midwest Manure Summit returns to legendary Lambeau Field, Green Bay, for a one-day conference highlighting many of the newest technologies and practices in manure handling, as well as many opportunities to network with farmers, industry, and university attendees!

Early Bird Registration One Day Registration (by Feb 1) \$125

Registration Fee (after February 1) \$145

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

UW/UWEX Plant Disease Diagnostic Clinic (PDDC) Update, January 18

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 January 12, 2019 through January 18, 2019.

The 1/18/19 PDDC Wisconsin Disease Almanac (i.e., weekly disease summary) is now available at:

<https://pddc.wisc.edu/wp-content/uploads/sites/39/2019/01/FullTable011819.pdf>

Follow us

