Wisconsin Crop Manager

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Contents

2017 Wisconsin Winter Wheat Performance Trials

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The Wisconsin Winter Wheat Performance Trials are conducted each year to give growers information to select the best-performing varieties that will satisfy their specific goals. The performance trials are conducted each year at four locations in Wisconsin: Arlington, Chilton, Fond du Lac and Sharon. Trials include released varieties, experimental lines from University breeding programs and lines from private seed companies. The primary objective of these trials is to quantify how varieties perform at different locations and across years. Growers can use this data to help select which varieties to plant; breeders can use performance data to determine whether to release a new variety.

Please click to view information on: 2017 Wisconsin Winter Wheat Performance Trials

Planning for Success with Cover Crops Field Day

Daniel H. Smith, Nutrient and Pest Management Program, University of Wisconsin-Madison

An upcoming field day on August 9th at the Lancaster Agricultural Research Station will provide cover crop recommendations and considerations. The field day will include presentations on cover crop species selection, seeding methods, herbicide considerations, forage value of cover crops including grazing and winter rye following silage corn, and an update on local cover crop incentives. The field day will begin around 9:30 a.m. and conclude by 12:00 p.m. Following the field day attendees are welcome to tour plots featuring cover crops interseeded into corn. The address of the research station is: 7396 WI 35 & 81 Lancaster, WI 53813. No advanced registration is required and the field day is free.

Results of Intensive Winter Wheat Management in 2017

Shawn P. Conley, Soybean and Wheat Extension Specialist, Department of Agronomy, University of Wisconsin, Madison

A research trial was initiated at the Arlington Agricultural Research Station to assess the impact of various management levels on the yield, test weight, and disease management of 14 soft red winter wheat varieties.

Management levels were stair-stepped with increasing intensity of inputs. Each management step increased yield, however growers should verify individual farm gate input prices to verify if yield increases had a positive ROI.

For additional information please review: Results of Intensive Winter Wheat Management in 2017

Cover Crop Field Day

Daniel H. Smith, Nutrient and Pest Management Program, University of Wisconsin-Madison

An upcoming field day on August 11th at Jay Aspenson's farm will provide an update to ongoing cover crop work in Crawford and Vernon County. The field day will include presentations on nitrogen credits from cover crops, using cover crops for weed suppression, cover-cropping methods at the Aspenson farm, and an update on local cover crop incentives. The field day will begin at 10 a.m. and conclude by 1:00 p.m. Lunch will be provided but registration is required. The field day will be one mile west on Rounds Road off Hwy. 27 just south of Mt. Sterling. RSVP by calling Sarah at 608-637-5480. Please see the announcement below for more information.

Wisconsin White Mold Risk Maps-July 27, 2017

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

Jaime Willbur, Graduate Research Assistant, University of Wisconsin-Madison

Sclero-cast: A Soybean White Mold Prediction Model

**This tool is for guidance only and should be used with other sources of information and professional advice when determining risk of white mold development. We encourage you to read the model how-to guide […]

You may view this post at

http://fyi.uwex.edu/fieldcroppathology/2017/07/27/wisconsin-white-mold-risk-maps-july-27-2017/

Corn and Southern Rust

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

If you are like me, you have been paying attention to reports from the southern U.S. indicating that southern rust of corn is making its way further north again this year. You can follow current southern rust updates on the iPiPE site. The latest reports place southern rust in central portions of Iowa and Illinois (Fig. 1), which means farmers in Wisconsin need to start paying attention to this issue. Scouting over the next several weeks is going to be critical for making in-season management decisions for this disease. Yield reductions in Wisconsin will be greatest if southern rust moves in prior to the "milk" (R3) growth stage in corn. Lets take a closer look at southern rust and its less damaging relative, common rust.

Figure 1. Corn Southern Rust Observations as of July 21, 2017 (Map from ext.ipipe.org)

Figure 2. Southern rust pustules on a corn leaf. Photo credit: Department of Plant Pathology., North Carolina State University, Bugwood.org

Southern rust is caused by the fungus Puccinia polysora. Symptoms of southern rust are different from common rust in that they are typically smaller in size and are often a brighter orange color (Fig. 2). Pustules of southern rust also typically only develop on the upper surface and will be be more densely clustered. Favorable conditions for southern rust development include high humidity and temperatures around 80F. However, very little free moisture is need for infection to occur. Southern rust is typically a rare occurrence in Wisconsin. When it does occur, it is usually in the southern and south-western portions of the state, with epidemics initiating late in the season. With that said, southern rust did make it to southern Wisconsin in 2016. However, the arrival was well past R3 and yield reductions caused by southern rust were

insignificant in Wisconsin. Spores of this fungus have to be blown up from tropical regions or from symptomatic fields in the southern U.S. The fungus can not overwinter in Wisconsin. While southern rust epidemics can be rare events in Wisconsin, the disease can be serious when it occurs. Therefore close monitoring of forecasts and scouting are needed to make timely in-season management decisions.

Management of Southern Rust

Traditionally resistance was used to manage southern rust. However, in 2008 a resistance-breaking race of the southern rust fungus was confirmed in Georgia. Thus most modern hybrids are considered susceptible to southern rust. Rotation and residue management have no effect on the occurrence of southern rust. The southern rust fungus has to have living corn tissue in order to survive and can not overwinter in Wisconsin. Fungicides are typically used to control southern rust in parts of the U.S. where this is a consistent problem. Efficacy ratings are available for fungicides against southern rust on the Corn Fungicide Efficacy Table. As I said previously, should southern rust make its way to Wisconsin prior to the "milk" (R3) growth stage in corn, it could cause yield reductions. Growers and consultants should scout carefully through the R3 growth stage and be sure to properly identify the type of rust observed. If you need assistance in identifying rust on corn, leaf samples of corn plants can be sent in a sealed plastic bag with NO added moisture to the University of Wisconsin Plant Disease Diagnostic Clinic (PDDC). Information about the clinic and how to send samples can be found by CLICKING HERE.

Figure 3. Brick-red Pustules of the common rust fungus on a corn leaf.

Common rust is caused by the fungus Puccinia sorghi and is extremely common in Wisconsin, but often results in little yield loss. Most field corn hybrids planted in Wisconsin are very resistant to the disease. Symptoms can include chlorotic flecks that eventually rise and break through the epidermis to produce pustules of brick-red spores (Fig. 3). Typically these pustules are sparsely clustered on the leaf. They can also appear on other parts of the plant including the husks and stalks. Management for common rust primarily focuses on using resistant hybrids. Remember resistance is not immunity, so some pustule development can be observed even on the most resistant hybrids. Some inbred corn lines and specialty corn can be highly susceptible to common rust. Under these circumstances a fungicide may be necessary to control common rust. Most of the hybrids I have scouted this season have some pustules, however incidence and severity is relatively low. Therefore, a fungicide application to control common rust isn't needed for most of these hybrids in Wisconsin. Residue management or rotation is typically not needed for this disease as inoculum (spores) have to be blown up on weather systems from the southern U.S.

Wisconsin Pest Bulletin 7/28/2017

Krista Hamilton, Entomologist — Bureau of Plant Industry/ Division of Agricultural Resource Management, Wisconsin Department of Agriculture, Trade and Consumer Protection

Volume 62 Issue No. 13 of the Wisconsin Pest Bulletin is now available at:

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Vegetable Crop Update No. 13-July 14, 2017

Amanda Gevens, Associate Professor & Extension Specialist, Potato & Vegetable Pathology, Plant Pathology Department, University of Wisconsin-Madison

Newsletter No. 13-July 14, 2017

Late Blight and Early Bight Disease Forecast Updates

National Late Blight Updates

Cucurbit Downy Mildew Updates

Phytophthora Crown and Fruit Rot in Cucurbit and other Crops

First detection of hop powdery mildew for WI in 2017

Wisconsin Fruit News Supplemental Issue-July 24, 2017

Janet van Zoeren and Christelle Guédot, UW-Extension

With cherry harvest beginning in Door County this week and next, and spotted wing drosophila in full swing across the state, we've decided to put together some reminder information about recommendations for control of SWD in cherries.

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We hope you find this helpful.

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