Wisconsin Crop Manager

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Contents

Introducing the Wisconsin Fruit Website and Newsletter

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We are very excited to announce that we have just launched our updated Wisconsin Fruit website, which you can find at http://fruit.wisc.edu! This site is divided into sections focusing on berry crops, cranberries, grapes, and tree fruit, and offers a one-stop spot where commercial fruit growers and home gardeners can access links to the most recent management recommendations, pest alerts, and research findings from UW faculties. In this way, it is meant to provide a first step toward finding the answer to any questions you might have about Wisconsin fruit production. In order to make the website more convenient for you to use, we're working on making it easily accessible through your mobile devices. Over the next couple of months, we will be making the website friendlier to view on smartphones and tablets.

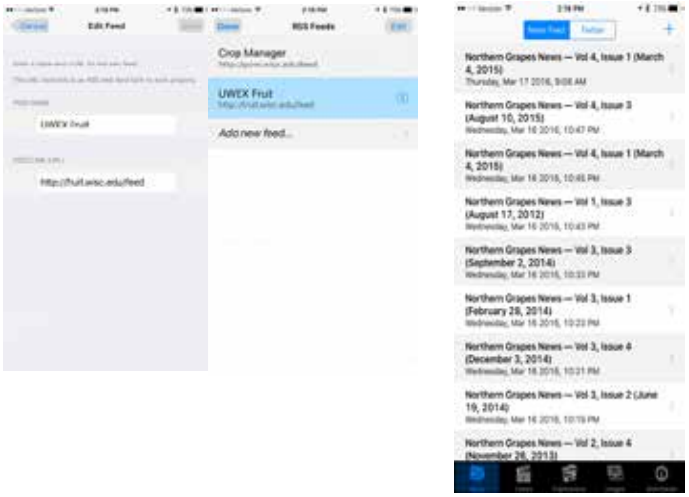
Along with the Wisconsin Fruit website, we are also starting up the Wisconsin Fruit News, a newsletter on fruit production, with the first issue to come out on April 18th. The Wisconsin Fruit News will be issued every other week during the summer, and will contain scouting reports, plant development reports, pest and disease management research updates, and other information pertaining to Wisconsin fruit production. Each issue will be divided into six sections: General Information, Berry Crops, Cranberries, Grapes, Tree Fruits, and an Upcoming Events Calendar.

If you would like a pdf of the newsletter to be delivered directly to your email inbox every other week, you can subscribe on our website! Simply go to http://fruit.wisc.edu and enter your email address on the right hand bar where it says "Sign up for our newsletter!"

In addition, you are now able to link the Wisconsin Fruit updates and newsletters to the IPM Toolkit application, which was created through the University of Wisconsin's Integrated Pest and Crop Management program (http://ipcm.wisc.edu/apps/ipmtoolkit/). Just download the app, then enter our RSS newsfeed URL (http://fruit.wisc.

edu/feed), and you will be able to immediately see our most recent posts and to access the newsletters on your phone.

These are screenshots of the IPM Toolkit mobile app being used to add this newsletter feed. On the News Feed screen we started by tapping on the "+" in the upper right area. Then we added in the URL as seen below.



New CCA's !!

Bryan Jensen
UW Extension

On behalf of the WI CCA Board, let's welcome and congratulate the new CCAs certified in 2015. Please take a minute to review the list and call or send your compliments on a job well done.

Cheers!

Wisconsin CCA's Achieving Certification in 2015:

Eric Bechel (Durand)

Ross Bender (Cleveland)

Eric Bertram (Appleton)

Jon Biermeier (Rio)

Mimi Broeske (Madison)

Tyler Bushmaker (Green Bay)

Jason Cavadini (Marshfield)

Troy Christenson (Hustisford)

Alexander Clark (Mazomanie)

Cheryl Cornell (Lost Nation, IA)

Paul Davidson (Watertown)

Laura Good (Madison)

Corey Haas (Belmont)

Craig Harmann (Algoma)

Clint Hodorff (Iola)

Brian Huiras (West Bend)

Bekka Lee (Belmont)

Parker Ludeking (Oconomowoc)

David Marburger (Madison)

Nicholas Peltier (Denmark)

Daniel Peterson (West Bend)

Nicholas Peterson (Clear Lake, MN)

Matthew Repking (Wausau)

Jeremy Richards (Mazomanie)

Abby Rotering (Arcadia)

Jacob Standal (Elkhorn)

Joseph Szczepanski (Merrill)

Tricia Verville (Wautoma)

Albert Vogt (Hazel Green)

Gregg Weaver (Verona)

Matthew Wichman (Manawa)

Jody Wilhelm (Fall Creek)

Miranda Yoose (Plover)

Kellie Zahn (Marion)

20 Year Milestone for Wisconsin CCA's

Bryan Jensen
UW Extension

While time may fly, 20 years is still a very important achievement for these WI CCA's. Please take time to review the list of WI CCA's who have recently reached their 20 year anniversary. Give them a call or send and email congratulating them on their 20 year commitment to Wisconsin agriculture and the CCA Program.

Wisconsin CCA's Achieving Their 20 Year Anniversary in 2016:

Steven Austin (Belmont)

Jeffry Breuer (Arlington)

Eric Clark (Madison)

Dennis Deitelhoff (Galesville)

Dennis Gunderson (Independence)

Scott Hendrickson (Manitowoc)

Kevin Hoyer (West Salem)

Bradley Dean Hurda (Cashton)

Robert Klink (Arlington)

Matthew Luther (Marshfield)

John Swehla (Sumner)

James Turner (Waunakee)

Mike Vollrath (Fitchburg)

Do Crop Rotation and Tillage Influence Seed-applied Inoculant Decisions?

David Marburger, Spyridon Mourtzinis, John Gaska, & Shawn Conley, Department of Agronomy, UW-Madison

Soybean has the unique ability to form a symbiotic relationship with a soil bacterium, Bradyrhizobium japonicum. This relationship results in biological nitrogen fixation, a process in which atmospheric nitrogen (N) is converted to plant-available N in exchange for photosynthetically derived carbon. Because of this symbiotic relationship, soybean growers typically do not apply N fertil- izer, but will apply inoculants containing B. japonicum on or near the seed to ensure that adequate bacterial infection and subsequent biological nitrogen fixation can occur (Schulz and Thelen, 2008). Current university recommenda- tions suggest using inoculants when planting in fields with no previous history of soybean, where soybean has not been planted in the last 3 to 5 years, for soils with pH <6.0, and for sandy texture soils (i.e., low organic matter soils) (Pedersen, 2004; Abendroth et al., 2006). Although much work has examined soybean yield response to inoculant use in fields with or without a previous history of soybean, there is a general lack of information examining inoculant use under different crop rotations and tillage systems. Our objective was to measure soybean yield response to seed-applied inoculants as influenced by crop rotation and tillage system.

Field trials were conducted from 2009 through 2011 within a long-term corn- soybean rotation study established in 1983 near Arlington, WI. This study contains two tillage systems: conventional and no-till. Conventional tillage was accomplished with one pass of a chisel plow in the fall and two passes with a field cultivator in the spring before planting. Within each tillage system, there are seven crop rotations containing soybean: continuous soybean (SS); soybean rotated annually with corn (SC); first-year soybean after 5 consecutive years of corn (1S); and two (2S), three (3S), four (4S), and 5 years (5S) of continuous soybean after 5 years of corn. Finally, within each crop rotation, there were three seed-applied rhizobia inoculant treatments: a non-treated control; Optimize Soybean (contains B. japonicum); and Excalibre (contains B. japoni- cum and B. elkanii). To view the results of the study and read the full article, please follow the link below:

http://www.coolbean.info/library/documents/SB_Innoc_Tillage_2016_FINAL_web.pdf

Wisconsin Winter Wheat Disease Update – April 13, 2016

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

Brian D. Mueller, Graduate Research Assistant, University of Wisconsin-Madison

Winter wheat in southern and south central Wisconsin was scouted on April 7 and 8, 2016 by the Wisconsin Field Crops Pathology research and extension crew. Locations of scouting included Sharon, Wisconsin near the Illinois border and Arlington, Wisconsin north of Madison. At both locations Septoria leaf blotch was observed on young, tillering winter wheat plants (Fig. 1). Septoria leaf blotch is caused by the fungus Septoria tritici. Typically this pathogen isn't identified on wheat in Wisconsin until closer to flag leaf emergence. The presence of the pathogen this early in the season is likely due to the mild, wet conditions we have had this spring. Other common leaf blotch disease can be caused by other fungi such as Stagnospora nodorum or Stagnospora avenae f. sp. triticae. However, in Wisconsin the most common causal agent of leaf blotch is Septoria tritici. Septoria leaf blotch can often be diagnosed based on the presence of darkly pigmented fruiting bodies (Fig. 2) that exude gelatinous spore masses when incubated in a humidity chamber (Fig. 3). To definitely differentiate this fungus from Stag-

nospora nodorum, however, spores need to be examined microscopically in the UW Diagnostic Clinic. For information on how to submit samples, CLICK HERE. For more information on leaf blotch diseases of winter wheat in Wisconsin and management of these diseases, CLICK HERE TO DOWNLOAD AN EXTENSION FACT SHEET.

Figure 1. Septoria leaf blotch on a young winter wheat plant.

Figure 2. Fruiting bodies of the Septoria fungus on winter wheat leaves.

Under the current conditions this season, a fungicide application **IS NOT** recommended as the pressure is low and little yield loss would be expected from a light epidemic early in the season. However, growers and consultants should scout fields and monitor the situation carefully. Should conditions continue to be mild and wet, disease may increase and require the application of fungicide to manage the disease. Past research in Wisconsin has demonstrated little need for application of fungicide prior to flag leaf emergence (Feekes 8 growth stage). In 2013, a significant epidemic of Septoria leaf blotch was present in a fungicide trial on winter wheat located in Arlington, Wisconsin. In that trial, the fungus that causes Septoria leaf blotch was active around the same time as noted this season. Application of fungicide at the Feekes 5 growth stage resulted in just marginal control of Septoria leaf blotch. To review the results of this trial, CLICK ON THIS LINK, and scroll to down to pages 9 and 10.

Figure 3. Gelatinous spore masses exuding from fruiting bodies of the Septoria fungus.

At all locations no stripe rust was observed. However, given recent reports of stripe rust occurring in locations in the Southern and central U.S., winter wheat growers should pay close attention to this disease. For more information about stripe rust and stripe rust management please check out our previous post from 2015 located by CLICKING HERE.

Be sure to check back to the blog frequently for winter wheat disease updates in 2016!

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

Brian Hudelson, Sean Toporek, 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 April 2, 2016 through April 8, 2016.

Plant/Sample Type, Disease/Disorder, *Pathogen*, County

Soil
Soybean Soil, Soybean Cyst Nematode, *Heterodera glycines*, Dane

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

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