

Wisconsin Crop Manager

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Fertility & Soil

Midwest Soil Improvement Symposium – August 23rd58

Plant Disease

New Seed Treatment Poster for Corn and Soybean58

UW Extension/Madison Plant Disease Diagnostic Clinic (PDDC) Update58

Crops

Vegetable Crop Updates Now Available59

Early Planted Soybeans Starting to Flower59

Weeds

Invasive Plant Identification Videos59

Midwest Soil Improvement Symposium – August 23rd

Dick Wolkowski, Extension Soil Scientist

The use of gypsum in crop production has become a somewhat controversial practice in recent years. The availability of flue gas desulfurized (FGD) gypsum from certain Wisconsin powerplants has accelerated the interest in its use. This by-product material is typically applied at rates of 1 – 2 tons/acre, which supplies many times crop need for Ca or S. Often claims for beneficial effects on soil 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/>). CCA CEU's will be available.

New Seed Treatment Poster for Corn and Soybean

Paul Esker and Richard Proost

With an increase in the number of seed treatments registered for corn and soybean in Wisconsin, it can be a bit daunting to understand

what the different products are, and what pest they are targeting or if they are marketed to improve seedling health. Richard Proost and I recently finished a new poster entitled, "[What is on your seed](#)" to help take some of the confusion about seed treatments away. This poster provides a current list of seed treatments that are registered in Wisconsin. Products are listed by the number of active ingredients, treatment type, and then alphabetically by product trade name. The list is not provided based on efficacy data nor is an endorsement or criticism of one product over another, rather the list is meant as a general guide. As always, consult current label directions for using any pesticide.

This publication is available from <http://www.ipcm.wisc.edu/> or by contacting the NPM program at (608) 265-2660.

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 June 15, 2011 through June 21, 2011:

PLANT/ SAMPLE TYPE	DISEASE/DISORDER	PATHOGEN	COUNTY
FIELD CROPS			
Wheat	Barley Yellow Dwarf	Barley yellow dwarf virus	Winnebago
	Potassium Deficiency	None	Juneau
FRUITS			
Apple	Apple Scab	<i>Venturia inaequalis</i>	Waukesha
	Phomopsis Canker	<i>Phomopsis</i> sp.	Unknown
	Sphaeropsis Canker	<i>Sphaeropsis</i> sp.	Unknown
Blueberry	Phomopsis Canker	<i>Phomopsis</i> sp.	Clark
	Root/Crown Rot	<i>Pythium</i> sp.	Washington (MN)
	Sphaeropsis Canker	<i>Sphaeropsis</i> sp.	Clark
Grape	Root Rot	<i>Rhizoctonia</i> sp.	Dane
VEGETABLES			
Potato	Cold Injury	None	Portage

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

Vegetable Crop Updates Now Available

Amanda J. Gevens, Assistant Professor, Extension Plant Pathologist in Potatoes & Vegetables

Issues 7, 8, 9, and 10 of the Vegetable Crop Update are now available. To view these newsletters please go to <http://ipcm.wisc.edu/WCMNews/VegCropUpdate/tabid/115/Default.aspx>.

In addition to the Vegetable Crop Updates is another supplemental newsletter is to alert growers in southern and central WI that Disease Severity Values for potatoes (all emergence dates) have reached and/or exceeded 18 indicating the need for preventative fungicide applications for the late blight control. The newsletter attached provides further detail and a list of fungicides currently labeled for use in WI. This supplemental newsletter can also be found on <http://ipcm.wisc.edu/WCMNews/VegCropUpdate/tabid/115/Default.aspx>.

Early Planted Soybeans Starting to Bloom

Shawn Conley, Soybean and Wheat Extension Specialist

I spotted my first soybean flower yesterday at the Janesville, WI variety trial site which was planted May 4th. As we enter the soybean reproductive growth phase there are a few things to keep in mind. The first is that soybean will produce flowers for ~3 to five weeks, depending upon planting date and environment. Soybean will abort anywhere from 20 to 80% of the flowers that they produce. Generally it is the first and last flush of flowers produced that are most likely to be aborted.

Second of all the timing window for our glyphosate applications in soybean are quickly closing.

"Monsanto has clarified the definition of "throughout flowering" in regard to the latest stage that glyphosate can be applied to glyphosate-resistant soybean. Soybean flowering is defined as the R2 growth stage. The R3 growth stage begins when one of the four top nodes with a fully developed leaf has a 3/16 inch long pod. With this definition, glyphosate can be applied through the R2 growth stage, but not after the R3 stage begins. Applications made after the R3 stage are off-label applications."

On average it takes ~ 4 days to move from R1 (beginning flower) to R2 (full flower) and ~10 days from R2 to the start of R3 (beginning pod). That means we have ~2 weeks for glyphosate applications to occur.

Next, wheel track damage made from ground applications may start to reduce yield. Sprayer wheel traffic from first flower (R1) through harvest can damage soybean plants and reduce yield (Hanna et al. 2008). Our research suggests that an adequate soybean stand (more than 100,000 plants per acre) planted in late April though mid-May can compensate for wheel tracks made when a field is sprayed at R1. Yield loss can occur, however, when wheel tracks are made at R1 or later in thin soybean stands (less than 100,000 plants per acre) or late planted soybeans. Regardless of stand, plants could not

compensate for wheel tracks made at R3 (early pod development) or R5 (early seed development). The average yield loss per acre is based on sprayer boom width (distance between wheel track passes). In our trials yield losses averaged 2.5, 1.9, and 1.3% when sprayer boom widths measured 60, 90, and 120 foot, respectively. Multiple trips along the same wheel tracks did not increase yield loss over the first trip.

Lastly, for white mold questions please refer to the following information: **White Mold in Soybean in 2010: Factors to Consider**

Image 1. Soybean crop beginning to bloom.



Invasive Plant Identification Videos

Mark Renz, Extension Weed Scientist and Brendon Panke Associate Scientist

Are you familiar with regulated invasive plants of Wisconsin? Thanks to a grant from Team Horticulture we have developed 2-4 minute videos that will help with your identification of these unwanted plants. Videos highlight the key aspects of identification of some of the common, and not so common invasive plants regulated by Wisconsin DNR's NR40. While videos focus on roadside areas, many of these plants are not restricted to these areas and can be found in urban and agricultural areas.

For a link to a website that lists all the videos please visit:

<http://www.youtube.com/user/uweedsience>

Videos available include black swallow-wort, bush honeysuckles, Canada thistle, creeping bellflower, dame's rocket, garlic mustard, hill mustard, leafy spurge, plumeless thistle, spotted knapweed, teasels, wild chervil, and tansy.

More videos are currently be shot this summer and we hope to add another 5-6 by the end of 2011.

