

Wisconsin Crop Manager

Volume 25 Number 6 -- University of Wisconsin Crop Manager -- May 11, 2018

Contents

Are You PRE-Emergence Ready For Soybean Planting?	21
2018 Agronomy/Soils Field Day on August 22nd.....	22
A Visual Guide to Soybean Growth Stages.....	22
Soybean Replant Decisions: Just the Facts Jack!.....	22
Geographic Restrictions for Corn and Soybean PRE-emergence Herbicides in Wisconsin	23
Use FieldWatch to Locate Managed Honey Bee Colonies	23
Fertility Guidelines for Hemp in Wisconsin	23
UW/UWEX Plant Disease Diagnostic Clinic (PDDC) Update April 27, May 4	24
Wisconsin UWEX Vegetable Crop Update Issue 3.....	24
Wisconsin Fruit News- May 4-11, 2018	24
Wisconsin Pest Bulletin 1&2.....	24

Are You PRE-Emergence Ready For Soybean Planting?

by Rodrigo Werle (UW-Madison Extension Cropping Systems Weed Scientist) and Shawn Conley (UW-Madison Extension Soybean and Small Grain Specialist)

Spring has finally arrived in Wisconsin and so has the planting season. Before getting your soybeans in the ground, make sure you have plans for your PRE-emergence herbicide program. According to our recent [SURVEY](#), several Wisconsin soybean fields get only treated with a one-pass POST-emergence herbicide program. Because of the spread of weed species resistant to glyphosate and/or other POST-emergence herbicides (e.g.,

ALS- and PPO-inhibitors), a one-pass POST-emergence program in soybeans is no longer a viable strategy.

Moreover, research conducted across the Midwest has demonstrated the importance of keeping your soybean crop weed-free from establishment through the V3 growth stage ([3rd trifoliolate](#)). Weeds emerging after the V3 growth stage will likely not impact soybean yield; however, they should still be proactively managed to prevent them from reproducing and replenishing the seedbank (remember “no seed, no weed”).

Thus, PRE-emergence herbicides can help farmers maintain their fields weed-free during initial establishment of the crop (= achieve full yield potential) and also reduce the selection pressure on POST-emergence herbicides (due to fewer weeds to be controlled POST-emergence), helping on the fight against herbicide resistance.



Several PRE-emergence herbicides are available for soybeans. Most of them can be applied before or up to 3 days after planting. To maximize their residual activity in-season, PRE-emergence herbicides should be sprayed at or shortly after planting. PRE-emergence herbicides need moisture for incorporation and activation in the soil. If there are established weeds at the time of PRE-emergence application and no additional pre-plant field cultivation will take place, it's important to have an effective burndown herbicide in the tank-mix. A PRE-emergence herbicide containing 2 or more effective

modes of action (MOA) will likely provide control of a wider range of weed species when compared to the use of a single MOA. Using multiple MOA during each pass is also a proactive strategy for herbicide resistance management.

It's important to note that under cool and wet conditions, PRE-emergence herbicides containing metribuzin (Group 5) and/or PPO-inhibitors (Group 14; e.g.: flumioxazin, saflufenacil, sulfentrazone) may cause some crop injury, particularly in lighter soils with low OM and/or higher pH. Our preliminary research in Nebraska has demonstrated that early-season crop injury caused by metribuzin (group 5) and sulfentrazone (group 14) did not lead to yield reduction (soybeans are indeed very resilient). Moreover, the benefit of an early-season weed-free field outweighs the concerns of early-season crop injury (assuming a herbicide is applied according to the label and no significant stand reduction is observed).



Metribuzin injury in soybeans (note healthy new growth):

[To read this article on their blog, click here.](#)

2018 Agronomy/Soils Field Day on August 22nd

Carrie Laboski, Professor & Extension Soil Scientist

Save the date: Agronomy/Soils Field Day at Arlington Ag Research Station will be held on August 22.

The Departments of Agronomy and Soil Science in conjunction with the Arlington Agricultural Research Station will host their annual field day on August 22, 2018. The field day will highlight UW-Madison research on emerging technologies and relevant crop production issues.

Watch for more information.

A Visual Guide to Soybean Growth Stages

Shawn Conley, State Soybean and Small Grains Specialist

Understanding and being able to correctly identify the growth stages of soybean is important for making sound agronomic management decisions. This guide describes the growth stages starting with germination, progressing through the vegetative stages (V) and concluding with the reproductive stages (R). Coolbeans!

[To read the full guide, click here.](#)

Soybean Replant Decisions: Just the Facts Jack!

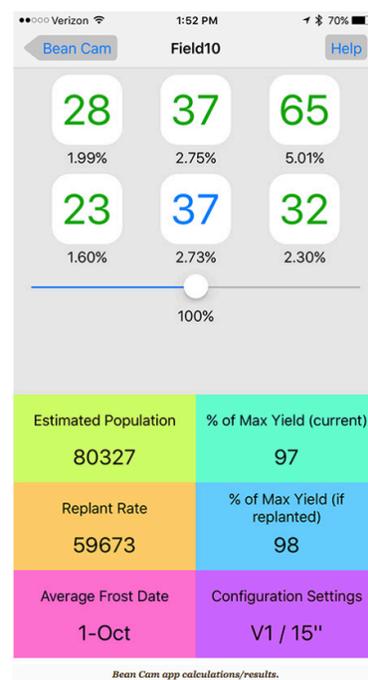
Shawn Conley, State Soybean and Small Grains Specialist

The Twittersphere is erupting with pictures of soybean beginning to [crack and emerge](#). As we finalize #plant18 and start to assess our soybean stands here are a few items to contemplate.

1. Get an accurate stand assessment. We are often drawn to the worst areas of fields and over-blow how bad the overall stand really is. You can go old school and use the [tape or hula-hoop method](#) or try a digital approach such as [Bean Cam the WSMB funded soybean replant app!](#)

[A. Link to the app store](#) for iPhone and iPad

[B. Link to the app store](#) for Android



C. An effective stand is obviously important to maximize soybean seed yield. However the downside yield risk for a sub-par stand is minimal until stands fall below 50,000 plants per acre. The synergy of early planting coupled with breeders adding 3x yield to soybean branches at low populations have effectively reduced the yield penalty for thins stands by 1/2 (Suhre et al. 2014) . Therefore we recommend the following.

- Early planted soybean yield is maximized with stands that range from [100,000 \(high yield environment\) to 135,000+ \(low yield environment\) plants per acre](#).
- When soybean stands are less than 50,000k plants per acre, inter-plant new seed with a similar maturity into the existing stand. DO NOT TEAR UP THE STAND AND START OVER.
- When stands fall between optimal and 50,000k plants per acre [Think Twice Before Replanting Soybeans!](#) Our data shows a nominal ~2 bu yield increase in this situation. Even if you have a “free re-plant” guarantee the numbers don’t make economic sense. As a grower you are better off investing \$\$\$ in an effective in-season residual herbicide to control weeds such as Palmer and waterhemp.

[To read this article on the blog, click here.](#)

Geographic Restrictions for Corn and Soybean PRE-emergence Herbicides in Wisconsin

[Rodrigo Werle](#) (UW-Madison Extension Cropping Systems Weed Scientist)

RE-emergence herbicides are the foundation for good weed control in corn and soybeans, particularly with the spread of [herbicide-resistant weeds](#). The use of some PRE-emergence herbicides is limited to certain regions or counties in Wisconsin. Prior to selecting a herbicide for your weed management program, make sure the same is approved for use in your region by the [Department of Agriculture, Trade and Consumer Protection \(DATCP\)](#). Below are examples of herbicides that have geographic restrictions in Wisconsin.

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

Use FieldWatch to Locate Managed Honey Bee Colonies

Bryan Jensen, UW Extension and IPM Program

Looking for help in identifying the location of managed bee hives (or other sensitive crops) in your application area? Try [FieldWatch](#)®. Honey bee colonies are not always painted a color that are easy to see. Others may be hidden from view behind buildings, trees or other

vegetation. Knowing that hives are present prior to application allows the applicator to take precautions prior to application.

FieldWatch is a nonprofit company which allows applicators, specialty crop growers and beekeepers to communicate with each other regarding sites which might be sensitive to pesticide application. FieldWatch is free to the end user (applicator). Furthermore, the registry to upload honey bee colony sites through [BeeCheck](#) and sensitive specialty crop locations through [DriftWatch](#) is also free. However, signing up as a voluntary dues paying member is appreciated but not required. After all, FieldWatch is a non-profit company. You can go to their website if you want more information about [dues](#).

To access the basic information, simply go to the [FieldWatch Map](#) and select your state. Using FieldWatch as a dues paying member provides the opportunity to zoom into your applications area and receive automatic updates for new apiaries and/or sensitive specialty crops

Both hobbyists and commercial beekeepers may upload their sites and select if that information is available publically or for registered applicators. These uploads are check by a data steward from WDATCP who verify each registration. There are several different style of pins used to mark hive locations. A single hive is marked with a “B”. If more than one hive is present at that location the pin will have horizontal lines. Pins may also be yellow or red. If red, those hives are registered and have a state registration number. Yellow pins indicate hives which are not registered with DATCP’s Apiary Program.

Fertility Guidelines for Hemp in Wisconsin

Carrie Laboski, Professor & Extension Soil Fertility/Nutrient Management Specialist

No research has been conducted on the nutritional needs of hemp grown in Wisconsin in 75 years. In order to develop nutrient application guidelines for hemp, available peer reviewed literature as well as conference abstracts/proceedings/posters, research station reports, and extension bulletins from the United States, Canada, and Europe were reviewed and evaluated for their applicability to Wisconsin soils and climate.

[Read more ...](#)

UW/UWEX Plant Disease Diagnostic Clinic (PDDC) Update April 27, May 4

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 4/27/18 PDDC Wisconsin Disease Almanac (i.e., weekly disease summary) is now available at:

<https://pddc.wisc.edu/wp-content/uploads/sites/39/2018/04/FullTable042718.pdf>

The 5/4/18 PDDC Wisconsin Disease Almanac (i.e., weekly disease summary) is now available at:

<https://pddc.wisc.edu/wp-content/uploads/sites/39/2018/05/FullTable050418.pdf>

Wisconsin UWEX Vegetable Crop Update Issue 3

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

[Vegetable Crop Updates newsletter #3](#)

In This Issue:

- National late blight updates
- Dual Magnum updates for WI vegetables
- Soil moisture updates
- Food Safety Modernization Act updates

Wisconsin Fruit News- May 4-11, 2018

Janet van Zoeren and Christelle Guédot, UW-Extension

Read issue 3 here - <https://go.wisc.edu/vtb7kl>

Apple Thinning Supplemental Issue - <https://go.wisc.edu/4zljio>

In Issue 3 you can read about:

- Insect Diagnostic Lab update
- Plant Disease Diagnostic Clinic update
- Weed management in established strawberries: can anything be done in spring?
- Cranberry plant and pest degree-days: May 1, 2018
- Crop lead for cold climate hybrid grapevines
- Grape variety developmental stages: May 3, 2018
- Grape insect scouting report: flea beetles out in full force
- First steps in the precision apple thinning process
- Grower interview with Allen Teach of Sunrise
- Orchards: experience with precision thinning tools

Wisconsin Pest Bulletin 1&2

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

Volume 63 Issue No. 1 of the Wisconsin Pest Bulletin is now available at:

<https://datcpservices.wisconsin.gov/pb/pdf/05-03-18.pdf>

Volume 63 Issue No. 2 of the Wisconsin Pest Bulletin is now available at:

<https://datcpservices.wisconsin.gov/pb/pdf/05-10-18.pdf>

INSIDE THIS ISSUE

[LOOKING AHEAD: Black cutworm migration continues](#)

[FORAGES & GRAINS: First alfalfa weevil adults collected on May 7](#)

[CORN: Peak seedcorn maggot fly emergence expected next week near Green Bay](#)

[SOYBEAN: Bean leaf beetles appearing in alfalfa](#)

[FRUITS: Grape flea beetle feeding reported from Dane and Vernon counties](#)

[VEGETABLES: Common asparagus beetle egg laying underway](#)

[NURSERY & FOREST: Volutella blight on pachysandra and other reports from recent inspections](#)

[DEGREE DAYS: Growing degree day accumulations as of May 9, 2018](#)

Follow us

