

# Wisconsin Crop Manager

Volume 23 Number 32 - University of Wisconsin Crop Manager - - December 8, 2016

## Contents

2017 IPM Field Scout Training Class .....	165
2017 WSA Area Soybean Conferences.....	165
Finalists for the 2016 WSA Soybean Yield Contest are Announced.....	166
2016 Wisconsin Corn Hybrid Performance Trials ..	166
2017 Wisconsin Agronomy Update Meetings .....	167
Wisconsin Soybean Variety Performance Trials 2016.	167
2016 Wisconsin Pest Management Update Tour Slides Now Live! .....	167
Does Strip Tillage or Fertilizer Placement Influence the Soybean Row Spacing Yield Response? .....	168
State Crop Hybrid/Variety Trials: A Wealth of Information.....	168
Delineating Optimal Soybean Maturity Groups Across the United States.....	168
New Traits Don't Automatically Translate to Highest Yield!.....	168
UW-Madison/Extension Plant Disease Diagnostic Clinic (PDDC) Update .....	169
UW-Madison/Extension Plant Disease Diagnostic Clinic (PDDC) Update .....	169
UW-Madison/Extension Plant Disease Diagnostic Clinic (PDDC) Update .....	170
UW-Madison/Extension Plant Disease Diagnostic Clinic (PDDC) Update .....	170
Wisconsin Pest Bulletin 12-8-16 .....	170

## 2017 IPM Field Scout Training Class

Bryan Jensen, UW Extension and IPM Program

A reminder that the Madison Field Scout Training Classes will be held on the UW Madison Campus from January 3-6, 2017. The course is designed to provide the skills necessary for proper pest identification, crop scouting techniques as well as provide complimentary baseline information for people preparing for the state CCA exam. [Click here](#) for the course syllabus.

Non-student registration fee is \$225/person. To register for the IPM Scout School, make checks payable to University of Wisconsin-Madison and send to Bryan Jensen, Dept. of Entomology, 1630 Linden Dr., Madison, WI 53706. Online registration can be made at: <https://patstore.wisc.edu/ipm/register.aspx>

For more information on this course, please contact Bryan Jensen at:

Dept. of Entomology  
1630 Linden Dr.  
Madison, WI 53706  
(608) 263-4073

[bmjense1@facstaff.wisc.edu](mailto:bmjense1@facstaff.wisc.edu)

## 2017 WSA Area Soybean Conferences

Shawn P. Conley, Soybean and Wheat Extension Specialist

This year's WSA Area Soybean Conferences features:

- Featuring What you need to know about new soybean herbicide traits in 30 minutes or less

- Managing white mold using weather information and fungicides
- The Power of Shared Grower Data: Yield Gap Report back!
- Grower Data Drive from 2016
- Growing Season What's New in Seed, Crop Protection, and Inoculants Wisconsin
- Soybean Association News
- Plant Disease Potpourri
- Marketing Hints for 2017

Conferences will be held:

- Wednesday, January 18- Fond Du Lac Holiday Inn
- Thursday, January 19- Janesville Holiday Inn and Conference Center
- Friday January 20-Eau Claire Holiday Inn South

[Click here to register.](#)

---

## Finalists for the 2016 WSA Soybean Yield Contest are Announced

Shawn P. Conley, Soybean and Wheat Extension Specialist

The Wisconsin 2016 growing season was one for the record books indeed! The National Agricultural Statistics Service projects the statewide average soybean yield in WI to be a record of 55 BPA. Similarly overall production is expected to be another record at 107 million bushels. The great yields also led to a great contest. Please join me in congratulating the below finalists.

The top two entries in each division (**listed in no particular order**) were:

Division 4:

- Rick DeVoe, Monroe (planted DuPont Pioneer P31T77R)
- Kevin Bahr, Belmont (planted Asgrow AG2535)
- \*WI Bean Team (Adam Gaspar, Steve Vosberg), Madison (planted DuPont Pioneer P28T33R)

\*The WI Bean Team is ineligible for official prizes as they are grad students of Dr. Conley; however, their efforts are still unofficially recognized.

Division 3:

- Jim Salentine, Luxemburg (planted Steyer 1401L)
- David Wilkens, Random Lake (planted NK S20-T6 Brand)

Division 2:

- Thad Sparby, Arkdale (planted FS HiSOY HS 19A50)
- Irvin Osterloh, Arkdale (planted FS HiSOY HS 23L50)

Division 1:

- Dawn Lundgren, Amery (planted Croplan R2C1400)
- David Lundgren, Amery (planted Croplan R2C1572)

New for 2016 was the Soybean Quality Contest. It was optional for any Soybean Yield Contest entrants. There are no geographical divisions for the Quality Contest. One cash award will be presented statewide to the highest protein plus oil yield per acre (measured in lbs. per acre).

The finalists for the Soybean Quality Contest are:

- Dawn Lundgren, Amery (planted Croplan R2C1400)
- Thad Sparby, Arkdale (planted FS HiSOY HS 19A50)

The final ranking and awards will be presented at the 2017 Corn Soy Expo to be held at the Kalahari Convention Center, Wisconsin Dells on Thursday February 2nd during the WSA/WSMB annual meeting.

The contest is sponsored by the WI Soybean Program and organized to encourage the development of new and innovative management practices and to show the importance of using sound cultural practices in WI soybean production.

---

## 2016 Wisconsin Corn Hybrid Performance Trials

Joe Lauer, Wisconsin Corn Agronomist

Every year, the University of Wisconsin Extension-Madison and College of Agricultural and Life Sciences conduct a corn evaluation program, in cooperation with the Wisconsin Crop Improvement Association. The purpose of this program is to provide unbiased performance comparisons of hybrid seed corn available in Wisconsin. These trials evaluate corn hybrids for both grain and silage production performance. In 2016, grain and silage performance trials were planted at fourteen locations.

**Situation:** A one bushel increase by Wisconsin corn farmers increases farm income \$8 to \$32 million dollars depending upon corn price.

**Objective:** To provide unbiased performance comparisons of hybrid seed corn available in Wisconsin.

These results are a "Consumer Report" for commercial corn hybrids. The trials evaluate grain, silage, and systems including organic, transgenic and refuge systems.

**Read more here >>>>** <http://corn.agronomy.wisc.edu/HT/2016/2016Text.aspx>

**Link to 52 page booklet, PDF version >>>>** <http://corn.agronomy.wisc.edu/HT/2016/A3653.pdf>



---

## 2017 Wisconsin Agronomy Update Meetings

Shawn P. Conley, Soybean and Wheat Extension Specialist

The Department of Agronomy will offer Crop Production and Management Meetings at eight locations during 2017. Joe Lauer, Dan Undersander and Shawn Conley will present the latest information on hybrid/variety performance, an analysis and discussion of last year's growing season, and updated recommendations for field crop production. The registration fee includes a meal and information materials. Certified Crop Advisor CEU credits have been requested (3.0 CEU hours-Crop Management). A \$45.00 registration fee (which includes the meal) will be charged for the meeting. A "walk-in" fee will be charged to those who have not preregistered. Extra information packets are available for \$21.00 each. Make your reservations with the host agent one week prior to the scheduled meeting date.

We invite you to be a part of these meetings. The meeting dates and locations for the 2017 Agronomy Update meetings are:

**Janesville** Tuesday, Jan. 3 at 12:00

**Madison** Wednesday, Jan. 4 at 7:30 am

**Fond du Lac** Wednesday, Jan. 4 at 12:00

**Kimberly** Thursday, Jan. 5 at 7:30 am

**Wausau** Thursday, Jan. 5 at 12:00

**Eau Claire** Friday, Jan. 6 at 7:30 am

**Sparta** Friday, Jan. 6 at 12:00

**Belmont** Monday, Jan. 9 at 12:00

Please join us at a meeting in your area. Help us spread the word by informing seed dealers and the ag industry from your county or area, and encourage them to attend. For all the details, click here to view the flier.

---

## Wisconsin Soybean Variety Performance Trials 2016

Shawn P. Conley, Adam C. Roth and John M. Gaska  
Department of Agronomy  
University of Wisconsin, Madison

The Wisconsin Soybean Performance Trials are conducted each year with the producer's needs in mind. Our objective is to give producers the information to select varieties that will satisfy their specific goals and are most likely to perform best under their management practices. [Click here to view the full PDF.](#)

---

## 2016 Wisconsin Pest Management Update Tour Slides Now Live!

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

Yet another Wisconsin Pest Management Update Tour is in the books. It was great to see everyone again this year. I hope you found value in the presentations and that information can improve farm productivity. As promised, I have uploaded the slides from the 2016 tour with some of our preliminary data from 2016. [You can download a PDF by CLICKING HERE.](#) Hope to see you at a winter meeting near you!

---

## Does Strip Tillage or Fertilizer Placement Influence the Soybean Row Spacing Yield Response?

Shawn P. Conley, J Gaska, A Roth, and S Mourtzinis  
State Soybean and Small Grains Specialist  
University of Wisconsin, Madison

Strip tillage adoption in corn and soybean has increased. This can alleviate cold, compacted soils in rotated production systems. Potential agronomic benefits are earlier planting dates, warmer soil temperatures, greater fertilizer efficiencies, less soil disturbance and fertilizer incorporation and soybean yield response to strip till has tended to be less consistent than in corn.

The objective of this study is: Quantify the effect of strip tillage and fertilizer placement on soybean stand establishment and seed yield

[Click here to learn more about this research.](#)

---

## State Crop Hybrid/Variety Trials: A Wealth of Information

Joe Lauer, Wisconsin Corn Agronomist

Seed is one of the best ways to transfer technology to the farm-gate. Every year universities across the country conduct crop hybrid/variety evaluation programs. The purpose of these programs is to provide unbiased performance comparisons of crop varieties and hybrids available commercially to farmers. These trials are important because slight increases in yield can translate into huge economic impacts for farmers. For example, a one bushel increase by U.S. corn farmers across 90 million acres increases farm income \$180 to \$450 million depending upon corn price (\$2 to \$5 per bushel). Recent corn yields have been increasing at the rate of 2 bushels per acre year.

[Click here to get the latest crop hybrid/variety results.](#)

---

## Delineating Optimal Soybean Maturity Groups Across the United States

Shawn P. Conley, Soybean and Wheat Extension Specialist

Soybean is the most important oilseed crop in the U.S., and its cultivated area is the second largest after corn (USDA, 2016). The cultivated area includes a wide range of environments that extend from northern North Dakota to south Texas and from western South Dakota to northeastern New York.

Soybean maturity is classified in different groups (MGs) ranging from 000 for the very early maturing varieties to 9 for the later. Gradations within MGs are also commonly noted by adding a decimal to the MG number. A variety is classified to a specific MG according to the length of period from planting to maturity. This phenological attribute is determined by two abiotic factors: photoperiod and temperature (Cober et al., 2001), and these factors can dictate the most suitable MG for a particular geographical location.

More than 45 years ago, Scott and Aldrich (1970), delineated optimum MG zones across the U.S. A more recent study redefined the optimum MG zones using variety trial yield data from 1998-2003 and found that adaptation regions for varieties with MG 0 to MG 3 had not changed from the work done in 1970. Whereas, varieties in the MG 4 to MG 6 range, adaptation zones are much broader than previously thought (Zhang et al., 2007). Nevertheless, there have been significant changes in soybean germplasm and management practices since 2003, and the climate has changed over the past 80 years across the U.S. (Mourtzinis et al., 2015). Therefore, the objective of this study was to delineate soybean MG adaptation zones across the U.S. using current soybean genetics and climate conditions.

[Click here to view the full PDF.](#)

---

## New Traits Don't Automatically Translate to Highest Yield!

Shawn P. Conley, Soybean and Wheat Extension Specialist

Last week's announcement by the [EPA to register Dicamba formulations](#) for use on Dicamba Tolerant Crops has the soybean world abuzz and for once that buzz isn't about pollinators! Many of my weed scientist colleagues

across the country will be discussing best management practices (BMP's) for introducing this technology into our agricultural landscape and will put forward recommendations to prolong the shelf-life of this technology. Here is one such example from UNL entitled: [Understanding the Roundup Ready 2 Xtend Soybean Weed Management System](#). \*\*\*Side bar...I decided to highlight this article since UNL never has any highlights in WI and Purdue and IL are like playing the J.V. squad.\*\*\*

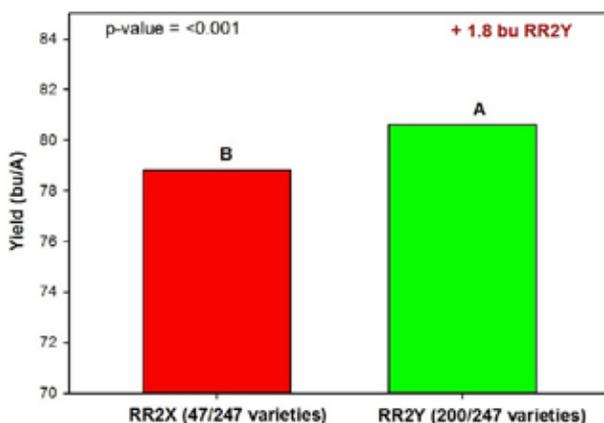
In this brief article I would just like to highlight four points to consider when making soybean variety selection choices for 2017.

New doesn't always mean it is automatically better. The WI Soybean program evaluated 200 RR2Y (Roundup Ready 2 Yield ) and 47 RR2X (Roundup Ready 2 Xtend ) varieties in 2016. On average across all varieties and regions RR2Y out-yielded RR2X by a significant +1.8 BPA (Figure 1.)

Remember every variety must stand on its own. Use independent trial data and pick varieties that not only perform well (we call them \*\*starred varieties\*\*) but also have the traits you are interested in (e.g. herbicide tolerance). Please see the [2016 Wisconsin Soybean Variety Performance Trials](#) for individual variety performance as we have RR2X varieties starred in each region.

RR2X soybeans are a stack of herbicide traits and not yield traits (i.e... these traits protect yield, not enhance yield). Remember this point with all pest management traits!

Hey Mr. Ivory Tower if I don't use this technology my yield loss will be a lot more than 1.8 bu per acre. I am fully aware of the amaranthus spp. train wreck across much of the corn belt and mid-south. We are starting to see herbicide resistance move across Wisconsin as well. I just want to reiterate #2 above that every variety must stand on its own as well as remind growers to use multiple modes of action and consider incorporating other



traits such as [Liberty Link](#) soybeans into your soybean weed management plans. All of the data and models I have seen suggest that the Dicamba tolerant crops shelf-life will be much shorter than the original RR if we don't manage this technology correctly.

---

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

Brian Hudelson, Sean Toporek, Jake Kurczewski 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 October 29, 2016 through November 4, 2016.

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

#### Field Crops

Corn, Anthracnose Stalk Rot, *Collectotrichum graminicola*, Dodge

Corn, Gibberella Stalk Rot, *Fusarium graminicola*, Dodge

Corn, Nigrospora Ear and Cob Rot, *Nigrospora sp.*, Dodge

Corn, Nigrospora Stalk Rot, *Nigrospora sp.*, Dodge

For additional information on plant diseases and their control, visit the PDDC website at [pddc.wisc.edu](http://pddc.wisc.edu).

---

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

Brian Hudelson, Sean Toporek, Jake Kurczewski 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 November 5, 2016 through November 11, 2016.

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

#### Vegetable Crops

Tomato, [Late Blight](#), *Ptytophthora infestans*, Racine

For additional information on plant diseases and their control, visit the PDDC website at [pddc.wisc.edu](http://pddc.wisc.edu).

---

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

Brian Hudelson, Sean Toporek, Jake Kurczewski 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 November 12, 2016 through November 18, 2016.

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

#### Forage Crops

Alfalfa, Fusarium Wilt, *Fusarium oxysporum*, Dane

#### Fruit Crops

Apple, Honeycrisp Leaf Chlorosis, None, Racine

For additional information on plant diseases and their control, visit the PDDC website at [pddc.wisc.edu](http://pddc.wisc.edu).

---

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

Brian Hudelson, Sean Toporek, Jake Kurczewski 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 November 19, 2016 through November 25, 2016.

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

#### Forage Crops

Alfalfa, Root/Crown Rot, *Phytophthora sp.*, *Pythium sp.*, *Fusarium sp.*, Fillmore (MN)

#### Fruit Crops

Cherry, White Rot, *Irpex lacteus*, Oconto

#### Vegetable Crops

Carrot, [Bacterial Soft Rot](#), *Pectobacterium carotovorum*, Portage

Carrot, Fusarium Dry Rot, *Fusarium sp.*, Portage

Carrot, Pythium Root Rot, *Pythium sp.*, Portage

#### Soil

Soybean Soil, [Soybean Cyst Nematode](#), *Heterodera glycines*, Rock

For additional information on plant diseases and their control, visit the PDDC website at [pddc.wisc.edu](http://pddc.wisc.edu).

---

## Wisconsin Pest Bulletin 12-8-16

Krista Hamilton, Entomologist, WI Dept of Agriculture, Trade and Consumer Protection

Volume 61 Issue No. 19 of the Wisconsin Pest Bulletin is now available at:

<https://datcpservices.wisconsin.gov/pb/pdf/12-08-16.pdf>

*PLEASE NOTE: This final Wisconsin Pest Bulletin of 2016 provides a post-growing season summary of prevailing insect and plant disease conditions and related weather. Once again, our sincerest thanks to the many cooperators, farmers, county agents and consultants who contributed their time and valuable information to the survey program this year.*

### INSIDE THIS ISSUE

PEST HIGHLIGHTS OF 2016: Brown marmorated stink bug trapped in Dane County orchards

FORAGES & GRAINS: Potato leafhopper counts low to moderate all season long

CORN: Corn rootworm beetle populations up in northern WI, down in the south

SOYBEAN: Soybean aphid densities generally low in 2016

FRUITS: Blueberry maggot detected for the first time in Wisconsin

VEGETABLES: Late blight far less prevalent in 2016 compared to 2015

NURSERY & FOREST: Detections of emerald ash borer surge this season