

Wisconsin Crop Manager

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Soybean Planting Date and Maturity Group Considerations for 2016

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

Early May planting in Wisconsin has been documented to increase yield due to increased light interception (Gaspar and Conley, 2015). In theory, earlier planting can potentially intercept greater amounts of solar radiation due to a longer growing season and therefore longer maturity group (MG) soybean varieties may be better suited to maximize yield if they can mature before a hard fall frost. 2015 provided many WI growers with a longer than

normal growing season due to favorable early spring planting condition and a later than normal fall frost. Yet, in some instances (weather or logistical problems) planting can be delayed or replanting may be needed. Therefore, investigating the effect of different MG's at multiple planting dates across the state would be useful. Thus, DuPont Pioneer and the Wisconsin Soybean Marketing Board have funded a 3-year study to examine proper MG selection at 5 different planting dates across the state to maximize yield. To read more about this study, please click the link below:

<http://thesoyreport.blogspot.com>

2015 Soybeans Herbicide Evaluation Program Results Now Available

Mark Renz and Dave Stoltenberg
Agronomy Department, University of Wisconsin-Madison;
University of Wisconsin Extension

Evaluation of new and existing herbicides for use in soybeans has annually occurred in Wisconsin for over 30 years. This program continues to compare effectiveness of weed control of herbicides applied at a range of timings and rates. In many cases crop safety and yield are also evaluated. 2015 soybean herbicide results are now summarized and available (see below for details).

Research was conducted at Arlington Agricultural Research Station (2 trials). Please click on the Trial ID link for a pdf of the application information and summarized results. Note that values are an average of four replications. Standard deviations are also provided as often responses (e.g. weed control, crop yield) to any treatment can vary within a trial. Consider this variability in addition to average values when comparing treatments.

Location (Trial ID link): Herbicides Evaluated

Arlington ([15-ARL-SB05](#)): Authority Elite, Authority First, Authority Maxx, Boundary, Cadet, Durango, Extreme, Fierce, Firstrate, Marvel, Optill, Outlook, Roundup Powermax, Select, Sonic, Surveil, Verdict, Zidua

Arlington ([15-ARL-SB06](#)): Anthem Maxx, Authority Elite, Authority First, Authority MTZ, Cobra, Fierce, Marvel, Roundup Powermax

Arlington ([15-ARL-SB07](#)): Boundary, Broadaxe, Dual Magnum, Enlite, Fierce, Flexstar GT, Roundup Powermax, Sonic, Touchdown Total, Tricor, Valor SX

Arlington ([15-ARL-SB08](#)): Anthem, Authority Maxx, Fierce, Fierce XLT, Optill, Outlook, Prefix, Roundup Powermax, Prowl H20, Select, Sharpen, Verdict, Zidua

Arlington ([15-ARL-SB09](#)): Authority First, Authority MTZ, Boundary, Dual II Magnum, Envive, Fierce, Liberty, OpTill, Outlook, Prefix, Tricor, Valor XLT, Warrant

Please note that any information presented here is NOT an endorsement or recommendation of any one product over another. Some treatments may not be legal for use in parts of Wisconsin or beyond. **Please read the label carefully and follow the directions provided on the label.**

Handy Bt Trait Table Update

Bryan Jensen
UW Extension

Chris DiFonzo, Extension Entomologist from Michigan State University, has just updated her [Handy Bt Trait Table](#). It is my “go to” bulletin to determine which Bt proteins are express in the different seed corn products.

Slugs

Bryan Jensen
UW Extension

During 2015, I had several conversations with producers and crop consultants regarding spring slug activity in corn and soybeans as well as some late-fall damage in cover crops. We had, I think, an unusually warm fall and certainly a warm winter. Both events can enhance slug survival. However, our spring weather will arguably have more impact on damage potential in seedling corn and soybean. Although it is hard to estimate what the 2016 damage potential will be, it will be worth your time and effort to do some spot-checking for damage this spring. Especially in area, you noticed problems last year.

Because slugs are nocturnal feeders and often hide

under crop residue and/or soil clods during the day, scout for evidence of crop feeding on the lower leaves. Slugs have a “rasp-like” mouthpart and damage plants by scraping off leaf tissue. On corn, feed scars are usually linear in appearance. The upper or lower cuticle may remain intact causing a “window-pane” effect. Eventually the cuticle will weather away and leave linear holes in the leaf. Feeding in soybean can be more severe because slugs will feed completely through the cotyledon and/or hypocotyl causing severe stand reduction

Slugs require a cool, moist habitat to survive which is why they are primarily a pest in no-till conditions. Prevention, in the form of habitat disruption, can significantly control slugs and manage future populations. During the 2016 planting season, anything you can do to bury residue will help.....assuming it is compliant with conservation plans and other erosion concerns. People have also had success using strip-till but effective residue within the row is important.

Planting date can also impact slug damage. Early planting into areas of know slug activity can give the crop a head start because older plants are less susceptible to slug feeding. If the cropping rotation allows, switching to corn may provide added benefits because corn’s growing point is located below ground until V6. The growing point of soybean is above ground after emergence and therefore significantly more susceptible to early season feeding. Regardless of crop, make sure the seed furrow is completely closed or slug feeding may result in higher stand loss, even in corn. Additionally, an open seed furrow provides additional habitat beneficial for slug survival.

Insecticides will not control slugs. Either they are non-toxic if ingested or because of the slug’s ability to produce slime making the contact insecticides ineffective. Attempting to try insecticides is likely to increase slug damage because those products kill non-target beneficial insects like ground beetles. Anecdotal information suggests that high salt fertilizer applied at night may work. However, this control tactic is not based on sound science, is not always effect and these fertilizers may be phytotoxic to plants.

Molluscicides applied as a bait can be an effective rescue treatment but should not be relied on as the only control tactic. Because of the low commodity prices in 2016, economics will be a primary concern. Spot applying to problem area may make baits more feasible. Products that include the active ingredients metaldehyde (corn only), sodium ferric EDTA and iron phosphate are labeled. Follow labeled use rates and make sure the product is distributed evenly throughout the treated area.

Corn Agronomy: Do farmer acreage intentions predict actual planted acres?

Last Thursday USDA-NASS came out with crop planting intentions for the U.S. This report along with the ending stocks report dramatically influences markets. Last week was no exception with market prices decreasing with the news that 2016 corn acreage intentions were up 6% and soybean acreage intentions were down 1% from 2015 planted acres. Nationally, ending stocks were up 1% for corn and up 15% for soybean.

The acreage intentions report can influence the crop rotation decision for a field, especially for corn. I was curious as to how well the acreage intentions report reflected actual planted acres, so I collected data back to 1975 for every state that produces corn and compared acreage intentions with planted acres for the year. The results are shown in Figure 1.

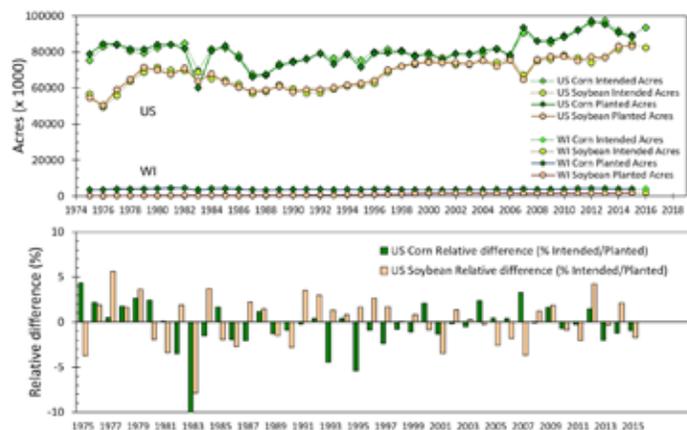


Figure 1. Spring Acreage Intentions, Planted Acreage and the Relative difference (%) for Corn and Soybean in the US and WI.

With the exception of 1983 and to some extent, 1993 and 1995, acreage intentions have accurately predicted planted acres within 5%. There are as many years over-predicted as under-predicted. For the 40-year period, there was a 3% standard deviation between intended and planted acres for corn and soybeans. In WI, which is typical of northern Corn Belt states, there was wider standard deviation (corn = 5%, while soybean= 11%) indicating weather impacts on acreage decisions as the planting season progresses.

Corn Agronomy: Looking ahead to 2016: The Economics

This spring farmers have been slow to make decisions on a number of inputs. Reluctance has largely been due to [weather concerns](#) and economics. The acreage intentions report last week did not help. Corn and soybean prices immediately decreased.

The USDA-ERS has been collecting cost of production (COP) data since 1975. These costs are based on the actual costs incurred by producers. A base survey is conducted every five years. The annual Agricultural Resource Management Survey (ARMS) has been used to modify the survey base since 1996. These costs of production excludes costs for marketing and storage. ARMS data collection starts during the fall when production practice and cost data are collected, and finishes in the spring when a follow-up interview collects data about whole-farm costs like overhead, interest, and taxes. New data becomes available every May. Each farm sampled in the ARMS represents a known number of farms with similar attributes so that weighting the data for each farm by the number of farms it represents provides a basis for calculating estimates. The country is divided into 9 regions. Wisconsin is part of the Northern Crescent region. Many of the Corn Belt states are in the Heartland region. To read the full article, please follow the link below:

http://wisccorn.blogspot.com/2016/04/B067.html?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+blogspot%2FmbfLa+%28Corn+Agronomy%29

Soybean Management Strategies to Facilitate Timely Winter Wheat Establishment in 2016

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

Winter wheat acres across WI have declined over the past few years due to high corn and soybean prices and late grain harvests, however current economic realities suggest an opportunity for increased wheat acres moving forward. As farmers get ready to kick off the 2016 growing season, please follow the link below to read about a few suggestions to help get your 2016/17 winter wheat

crop established on time.

<http://thesoyreport.blogspot.com/2016/04/soy-bean-management-strategies-to.html>

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 March 26, 2016 through April 1, 2016.

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

Specialty Crops

Hop, Apple mosaic, *Apple mosaic virus*, Dane
Hop, Carlavirus, *Unidentified carlavirus*, Dane

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

No Silver Bullets in Crop Production

Richard Halopka, CCA
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Media has dramatized the quick solution to any ailment you may have. If you have a pain, a condition, are overweight, etc. there is a pill or remedy that has cured thousands of people. The interesting fact is that during the few moments you view an advertisement you never see any true non-biased research supporting the product. People provide a testimonial of how their lives improved since using the product. Remember, there are no silver bullets to solve any problem. Silver bullets are only useful if you fear werewolves.

Both high and low commodity prices will provide an upswing in the promotion of silver bullet products for crop production. How can a farmer wade through information to determine if a product will provide a return on investment? Remember, if you invest in a product, it must be worth the investment.

As the farm's manager you must ask questions. There are many agronomist and salespersons traveling the side

roads selling products. First, what is the definition of an agronomist? A certified crop advisor (CCA) is an agronomist with formal education in agronomy. CCAs are required to pass an exam, then sign a code of ethics, much like a doctor or lawyer and attend classes for continuing education credits each year. Agronomy salespeople may have agronomy training or they are simply given products and sent out to sell.

An agronomist's approach to a problem will begin by asking questions and then determining if a product may provide benefits. A salesperson may not ask questions and will promote a product that may or may not be of interest to the farmer.

Farmers must weigh recommended best management practices (BMP), versus the quick fix of applying a product to correct a problem in a field. In weight loss, the tried and true methods are the best option: reduced calorie intake and increased physical activity, despite many fad claims. The same concept can be applied in a field: while continuing BMP requires a greater period of time, BMP also provide benefits into the future.

How can a farmer distinguish the difference between BMP or a silver bullet product? First ask questions. Agronomist will be able to provide answers and point out reasons why they recommended a product or management practice on your farm. A salesperson interested in selling a product may respond with reasons why you must purchase the product. The agronomist will provide research evidence why a practice or product is recommended. A sales rep will provide testimonials from farmers who made an investment in the product with no research evidence that the product provided a return on investment.

Testimonials are comments from farmers who purchased the product. They testify the product was effective. Remember, research is done by a non-biased third party, who has no reward from the outcome of the research. Testimonials are not research. They are opinion, with no data to support the claim of how a product will improve the farmer's finances.

So how can a farmer evaluate what is research proven compared to a testimonial product? Read the label, ask the agronomist or sales rep questions, and call your county Extension agent, and ask, "How will the product improve the problem in the field?"

Frustration, on the farmer's part, will set in when you hear that the cost is only \$5.00 per acre and the sales rep assures you the product works without providing supporting data. A check is written out, the product is applied and the farmer is not satisfied.

Remember, once the check leaves your farm the product

must perform. Salespeople, promoting silver bullet products, may not be looking for repeat sales. As the farm's manager, you MUST ask questions and understand what the product is and how it improves crop production.

Bottom line, in today's world there are many sources to gather research evidence. If a product is worth considering it has been researched at multiple locations and printed data will be available. The summary of the research will prove if a product was effective and if it provided a return on investment. Remember, if it sounds too good to be true it probably is. Quick fixes are generally not long term solutions, and a product used in a field will not replace best management practices.

From research, silver bullets are only effective if you fear and want to control werewolves. If you want to be profitable in crop production, focus on best management practices, know your cost of production; focus on the basics that will provide the greatest return, short and long term, scout your fields during the growing season, and implement a practice when it is economical.

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