December 2021 | **Vol. 69**

THE SEED CONSULTANT

A QUARTERLY NEWSLETTER **NEWS AND VIEWS FROM THE FIELD**

USING PLOT DATA TO MAKE SOUND DECISIONS

Compile and analyze yield testing data

SCOUTING SOYBEANS FOR POTENTIAL PROBLEMS

Growing season scouting leads to profitable harvest

STALK ROTS: CAUSES AND PREVENTATIVE TACTICS

Higher than normal rainfall amounts can contribute to stalk rot

SCI WINTER AGRONOMY MEETINGS

In-person meetings are back for 2022

USE PLOT DATA TO MAKE SOUND DECISIONS

By Matt Hutcheson, CCA
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As harvest is completed across the eastern Corn Belt, seed companies, universities, and growers will have the chance to compile and analyze data from yield testing. One of the most important decisions a farmer will face all year is deciding what variety to plant and in which field to plant it. To ensure that the best possible decision is made next spring, it is critical to spend some time looking at yield data. While reviewing data is critical, knowing how to determine whether it is accurate and useful is equally important. Below are some tips for using data to make sound planting decisions next spring.

LOOK FOR REPLICATED DATA

Don't rely on yield results from one strip plot on a farm or from a single plot location. Look for data from randomized tests that are repeated multiple times and across multiple locations. Replications in testing increase the reliability of the data.

For strip plot data, was a "tester" used?
Strip plots planted on farms can cover large areas of a field. In many fields in the eastern Corn Belt there are several soil types. If a plot crosses several soil types how can you be sure it is accurate? By planting a "tester" variety between each entry in the plot, you can calculate adjusted yields based on the variability of the tester yield across the plot. This ensures more accurate data.

LOOK FOR CONSISTENCY

According to Bob Nielsen, Purdue Extension Agronomist, "Documented consistency in yield performance is still the key to success in selecting hybrids that will perform well in your farming operation." When choosing a variety based on plot data, it is important to look for consistent performance—across several plot locations and between multiple years. Choose varieties that consistently performed well in 2020 and 2021, in multiple locations, and different growing conditions.

STATISTICAL SIGNIFICANCE

On published plot data look for foot notes

that indicate the least statistically significant yield difference, or LSD. In many plots, the performance of the top 5 or 10 varieties may not be statistically different. Although there are small differences in yield, statistical analysis of the data indicates that all varieties within the LSD have an equal chance of winning the plot.

While plot data can be very useful in making decisions, some plot data is significantly more accurate and reliable. The key to getting the most out of yield data is having the ability to sort through the large amounts of information to identify the data that most accurately and reliably represents crop performance.

EARLY CASH DISCOUNTS

Seed Consultants offers opportunities to maximize seed cost savings through an early cash discount schedule for the 2022 planting season.

If you have any questions, please call the office at 800-708-2676.

CASH DISCOUNTS

10% ..... December-January 5th

9% ..... January

7% ..... February

4% ..... March

2% ..... April

SCOUTING SOYBEANS FOR POTENTIAL PROBLEMS AND FUTURE SOLUTIONS

By Bill McDonald, CCA
Director of Agronomic Services
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There are many diseases that attack our soybean crop. These diseases, if identified, can be combated. There is no substitute for field scouting. If these diseases are found and identified when they hit, there may be something that we can do, either at that time, or steps can be taken to preserve future crops. The seat of a combine or the grain tank shows us that we had a problem but doesn't always give us the answers that we are looking for.

Some of the disease that hit our market area are:

- Anthracnose
- Brown Stem Rot
- Charcoal Rot
- Fusarium Root Rot
- Phytophthora Root and Stem Rot
- Rhizoctonia, Pythium
- White Mold
- Sudden Death Syndrome
- Diaporthe complex which include
  - Pod and Stem Blight
  - Phomopsis Seed Decay
  - Stem Canker

These aren't the only diseases that attack our crop, but they are probably the most prevalent.

The seedling diseases can be combated with good seed treatments. This has proven to be the most effective way to ward off diseases such as Fusarium, Phytophthora and Pythium. Our high-rate seed treatment contains Lumisena® fungicide seed treatment. Lumisena® fungicide seed treatment is the industry leader for the control of Phytophthora. EverGol® Energy, another component of our high-rate treatment, aids in the control of Pythium, Rhizoctonia and Fusarium seedling blights.

Anthracnose is common, but is not usually associated with yield loss, however if it hits early, it can cause yield loss. If detected early, foliar fungicides are an effective means of control.

Brown stem rot development favors cooler growing seasons. High temperatures hamper its development. Tillage and crop rotation to a non-

host crop such as corn or wheat will reduce pathogen levels. If you feel the need to plant soybeans again the following year, varietal resistance is the best way to fight this disease. Our soybeans have ratings for BSR and consulting your DSM can prove effective for future plantings.

Much like BSR, charcoal rot ratings are available for all the soybeans on our lineup. Charcoal rot also survives in the soil and crop residue but the development of this one favors hot, dry conditions.

White mold is one of the easier diseases to identify. A white fluffy mold will develop on the stems. This occurs in the reproductive phase of soybean development. In later phases of development, small black sclerotia will develop inside the stems. Planting soybeans in rows and/or reducing planting populations will allow for better air movement which is the enemy of this disease. Foliar fungicide can also be used to manage white mold.

Sudden death syndrome is also seen during the reproductive process. Soybean cyst nematode is believed to be one of the contributing factors to the severity of SDS but other stresses such as compaction can be a contributor. SDS is also seen in the reproductive phase although infections occurred earlier in the soybean's life. As with the other diseases, our soybeans have ratings for SDS also.

Anthracnose

Diaporthe Zone Lines

SDS

Seedling Blight

White Mold Sclerotia

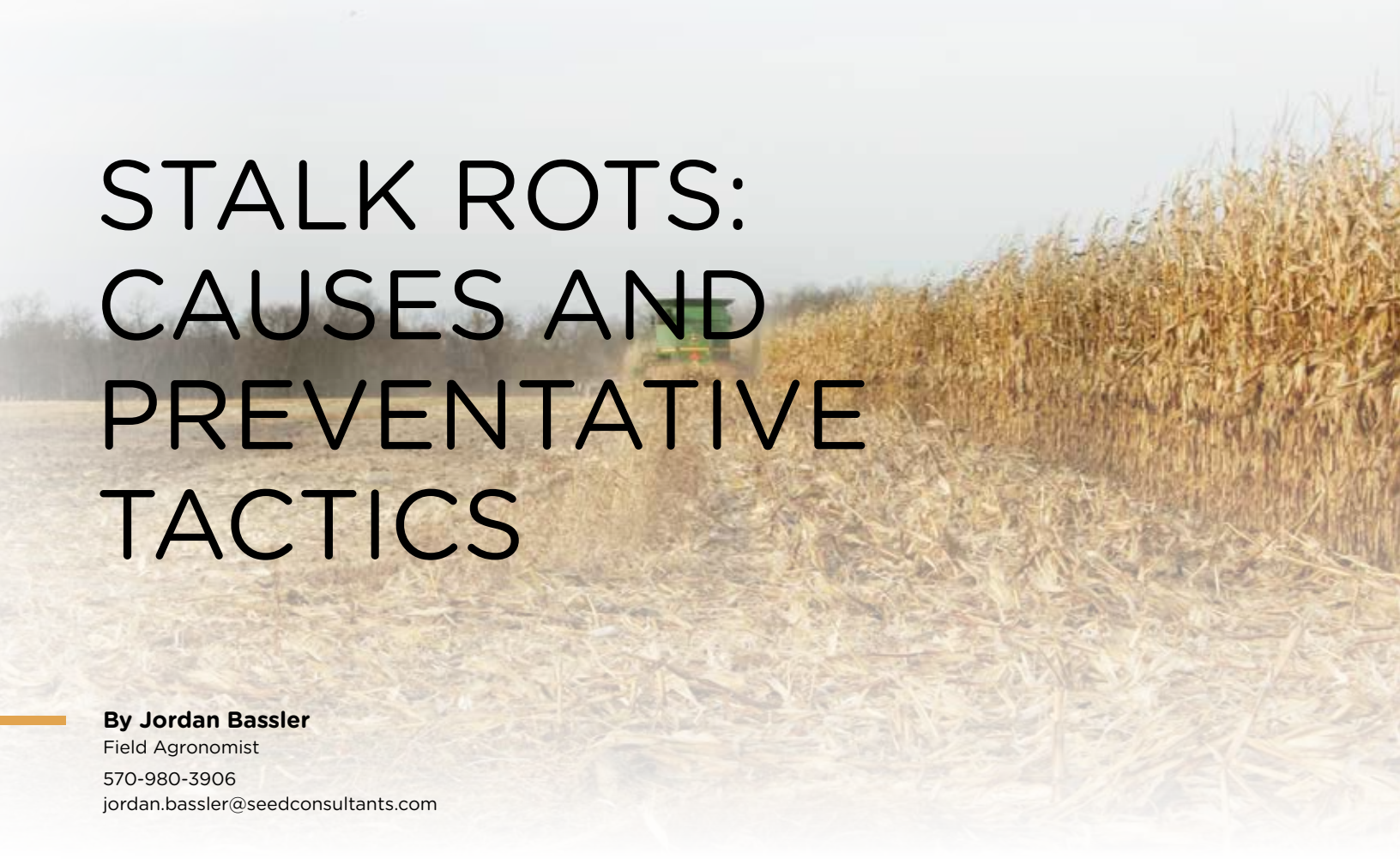
The three Diaporthe diseases that affect our soybean crop are stem canker, phomopsis seed decay and pod and stem blight. These diseases survive in the soil and in residue and are believed to infect the plants during early wet periods. Crop rotation and incorporation of residue will help some but will not eliminate the pathogen completely. Seed treatments will help in the case of phomopsis seed decay but will not guarantee infections will not occur. Timely harvest will lesson severity of the seed decay associated with Diaporthe.

Good fertility, crop rotation to a non-host crop, variety selection along with insect and weed management are practices that will lessen the severity of all of these diseases.

Have a candid conversation with your DSM/Dealer about the problems in your fields so that he/she can help you select the right variety and seed treatment. Your DSM/Dealer has a staff of agronomists at their disposal that can help identify unfavorable situations in your field.

Remember, the time to find the problems in your field isn't at harvest time. A good scouting program during the growing season will contribute to a successful and profitable harvest.

Source: "A Farmer's Guide To Soybean Diseases," Purdue University.



STALK ROTS: CAUSES AND PREVENTATIVE TACTICS

By Jordan Bassler
Field Agronomist
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Across much of Seed Consultants territory we have seen higher than normal rainfall amounts resulting in increased yields. Unfortunately, this has also caused a multitude of stalk rots making harvest challenging. The three main stalk rots we deal with in the eastern Corn Belt include gibberella, diplodia, and fusarium, and many more. In the 2021 growing season, we experienced all three parts of the disease triangle: environment, host plant, and present pathogen. The following can increase the possibility of having stalk rot(s):

1. Higher than average rainfall

Increased soil moisture can restrict root growth. The moisture tricks the plant into thinking that it does not need to grow more or deeper roots because all the moisture it needs is just below the soil surface. Normal plant growth cannot be supported by a smaller root structure because it cannot effectively support nutrient uptake. Conversely, drought conditions lead to less nutrient uptake by the plant and decreased stalk strength as well.

2. Imbalance and/or Deficiencies in Soil Nutrients

If you are overapplying nitrogen but only applying minimum potash, then the stalk cannot support the immense vegetative growth that goes along with high nitrogen levels leading to premature death of the stalk.

3. Insects, primarily corn rootworm and European corn borer

Feeding of insects on plant tissue and stalk gives stalk diseases an avenue into the plant. Also, corn rootworm larvae feeding on the roots reduces overall root mass and lessens nutrient uptake. Other insects like grasshoppers feed on plant tissue and decrease photosynthesis.

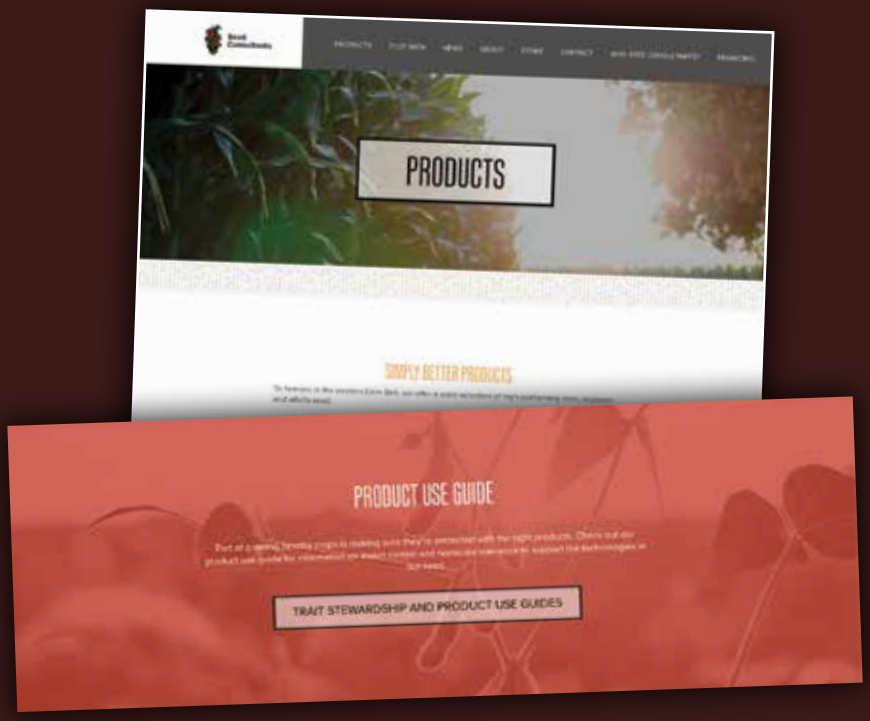
4. Crop Rotation

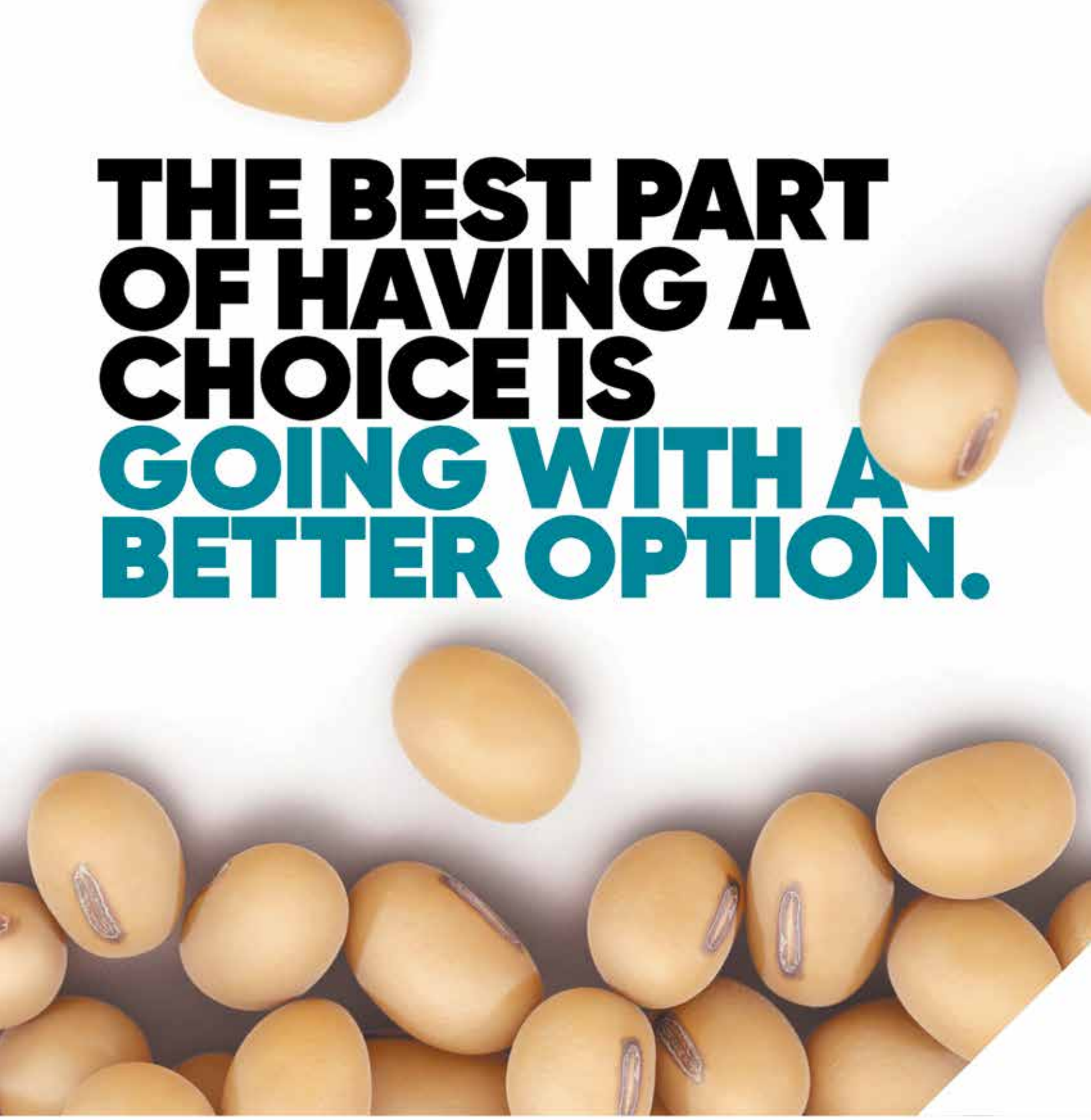
Continuous cropping sequences (corn after corn) do not break the cycle of disease. Many plant diseases last over a year on the soil surface on hosts such as crop fodder and weeds. Breaking the crop cycle allows crop fodder to fully decompose and disintegrate before planting the crop again in the same field.

These are just a few of the causes that can lead to stalk rots. So, what can be done to help prevent stalk rots? In fields that hold high moisture, installing drainage helps to control soil moisture. This can be in the form of tile or natural waterways. Soil tests give you results on your soil's nutrient levels so you can correctly apply the fertilizers needed and save you money by not over applying nutrients. To help manage insects, traited corn or soil applied insecticides help the plant combat insect feeding on its stalk, tissue, and roots. Crop rotation breaks the cropping cycle and allow crop fodder to fully decompose not giving stalk rots a host to survive on and die. Conventional tillage also helps by burying the fodder under the soil surface and speeding up the decomposition process. Nothing can replace scouting your crops. Getting out into your fields and seeing what is happening before there is a serious issue will nearly always be beneficial. This allows you to recognize fields with stalk issues and make a harvest plan for affected fields, whether it is simply to harvest first or apply an aerial fungicide if timing allows. Proper corn hybrid selection and placement helps to minimize the potential for stalk rots. Some hybrids naturally have a higher stalk strength standability rating than others.

PRODUCT USE GUIDE

Part of growing healthy crops is making sure they are protected with the right products. Visit the product page on our website to view our product use guide for information about insect control and herbicide tolerance to support technologies in our seed.





THE BEST PART OF HAVING A CHOICE IS GOING WITH A BETTER OPTION.

Enlist E3 SOYBEANS

Seed Consultants

The superior technology of Enlist E3® soybeans isn't a stroke of luck. It isn't a coincidence or happy accident. Enlist E3 soybeans are designed to be better. From Day 1, our goal has been to give you the ability to make a choice. A better choice.

And when it comes to what you get with that choice, you aren't leaving anything on the table. We've gotten used to saying the words "and" and "also" – a lot. Because it's better weed control that's also good to your neighbors. It's a wider application window and it has near-zero volatility.

With Enlist E3 soybeans, you get a choice, and it's a choice that's being made on millions upon millions of acres. So, choose better at SeedConsultants.com.

CORTEVA™ agriscience

2022 SCI Winter Agronomy Meetings

During January and February of 2022 Seed Consultants will again host in-person Winter Agronomy Meetings across the eastern Corn Belt. In addition to a review of 2021, agronomists will address important factors that are currently affecting our customers.

Dates and Locations

DATE	LOCATION	TIME
Jan. 4	**Der Dutchman** 445 S Jefferson Ave, Plain City, OH 43064	**11:30**
Jan. 5	**Rusty Keg** 1801 Columbus Avenue Washington Court House, OH 43160	**11:30**
Jan. 6	**Camden Falls** 2460 OH-231, Tiffin, OH 44883	**11:30**
Jan. 6	**Seed Consultants, Inc. Salem Warehouse** 205 Joseph St., Salem, IN 47167	**11:30**
Jan. 7	**Back 40 Junction** 1011 N 13th St, Decatur, IN 46733	**11:30**
Jan. 11	**Red Pig Inn** 1470 N Perry St, Ottawa, OH 45875	**11:30**
Jan. 12	**Rob's Restaurant and Catering** 705 Arlington Rd, Brookville, OH 45309	**11:30**
Jan. 12	**Shady Maple Smorgasbord**** 129 Toddy Dr, East Earl, PA 17519	**11:30**
Jan. 13	**Der Dutchman** 720 State Rte 97 W, Bellville, OH 44813	**11:30**
Jan. 13	**Bonanza Steakhouse**** 1635 Lincoln Way E, Chambersburg, PA 17202 *Need RSVPs by Jan. 5*	**12:00**
Jan. 14	**Back Woods** 8572 High Point Rd, Thornville, OH 43076	**11:30**
Jan. 18	**The Pines Golf Club and Restaurant** 1319 Millborne Rd, Orrville, OH 44667	**11:30**
Jan. 19	**Best Western Dutch Haus Inn** 150 East, OH-14, Columbiana, OH 44408	**11:30**
Jan. 19	**Lake View Loft** 10215 Jones Rd, Hillsboro, OH 45133	**11:30**
Jan. 19	**Hyatt Place/Hollywood Casino**** 212 Racetrack Road, Washington, PA 15301	**11:30**
Jan. 20	**Der Dutchman** 4967 Walnut St, Walnut Creek, OH 44687	**11:30**
Feb. 1	**Claudia Sanders Dinner House** 3202 Shelbyville Rd, Shelbyville, KY 40065	**11:30**
Feb. 1	**Pioneer Community Center** 100 N Elm St, Pioneer, OH 43554	**11:30**
Feb. 2	**Moonlite BBQ** 2840 W Parrish Ave, Owensboro, KY 42301	**11:30**
Feb. 3	**Smokin' Jims** 1414 Bundy Ln, Bedford, IN 47421	**11:30**
Feb. 4	**Holiday Inn Express** 2150 E Wooster St, Bowling Green, OH 43402	**11:30**
Feb. 23	**Country Cupboard Restaurant**** 101 Hafer Road, Lewisburg, PA 17837	**11:30**

RSVP: Please call 800-708-2676 to RSVP for a meeting.
For all meetings with ** please call 800-853-2676.

FINANCING

SEED CONSULTANTS, INC.

TWO GREAT FINANCING CHOICES FOR 2021-2022
0% THROUGH JOHN DEERE FINANCIAL
0% THROUGH RABO AGRIFINANCE

These financing programs are only available to John Deere Financial Preferred Customers and/or RABO AgriFinance approved customers. To apply for a John Deere Financial Preferred Account or RABO account or to increase your John Deere Financial or RABO line of credit, contact John Deere Financial (800-433-8964) or RABO (888-395-8505), so the necessary paperwork may be completed with John Deere Financial &/or RABO.

JOHN DEERE FINANCIAL & RABO GUIDELINES

- Must be a John Deere Financial Preferred Customer or approved by RABO AgriFinance.
- Approval and credit limits established by John Deere Financial &/or RABO...not by SCI.
- Terms and conditions apply. See respective credit applications for full terms and disclosures.
- To increase or establish your credit line call John Deere Financial (800-433-8964) or RABO (888-395-8505).
- Must be enrolled and approved to qualify for discounts.
- Discounts applied on approval date from John Deere Financial &/or RABO.
- Signed terms of disclosure on file.
- Minimum purchase of $1,000.
- Due date of December 2022.

For John Deere Financial customers with current special terms balances at or near their credit limit, they may have an option to enable their seed purchase now and lock in their order. Contact your SCI Seedsman for details.

	DISCOUNT SCHEDULE	
Finance Plan	**John Deere Financial**	**RABO**
Purchase & Approval Date	Fixed 0%	Fixed 0%
December - January 5, 2022	4%	4%
January 2022	3%	3%
February 2022	2%	2%
March 2022	0%	0%
April 2022	0%	0%
May 2022	0%	0%
In Season	0%	0%

LEADER UPDATE

By Daniel Call, CCA
General Manager
danielcall@seedconsultants.com

It's hard to believe, but here we are again wrapping up another growing season. As we reflect upon the 2021 growing season, in many ways it was unbelievable. The variability from state to state, county to county, and township to township has been extraordinary. One item with excellent consistency was the performance of our Enlist E3® soybeans.

In 2021, Enlist E3® soybeans were planted broadly across our entire sales area. Many customers were seeing the product performance for the first time on their own farm. Enlist E3® soybeans delivered in a big way in 2021 from excellent weed control, to yield and the simplicity of use. The Enlist™ weed control system has been an incredible success story.

Yield performance was outstanding with our Enlist E3® soybeans this year as verified in 3rd party yield results from across our market area. We had one of our best yield performance years ever, largely because of the outstanding performance of our Enlist E3® soybean varieties.

What made the Enlist™ weed control program even more impressive was the outstanding weed control. The diversity of options in addition to the consistency and predictability of the Enlist® herbicide chemistry made the program a home run.

Having the most herbicide options available in 2022 is going to be even more critical as the industry faces concerns of potential herbicide limitations. This is where the flexibility of the Enlist™ weed control program is going to be a tremendous asset for our customers.

We now have even more excitement around our Enlist E3® soybean lineup this winter as we launch a handful of new, Next Generation Enlist E3® soybean varieties for planting in 2022. These varieties have limited availability as new launches but are sure to bring elite agronomic and yield performance. These products have been bred for the Eastern Corn belt's unique growing environment and tested to ensure they will perform for our customers. Talk to your Seed Consultants salesperson soon for additional details.

Make sure you plan to attend one of our Agronomy Meetings this January. Our agronomy staff has prepared an excellent agenda where they will share key lessons from 2021. We hope you take advantage of these meetings to learn new ideas and techniques to make 2022 your most productive year ever.

All of us at Seed Consultants wish you a Merry Christmas and a wonderful 2022!

Seed Consultants
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Editorial Board

Don't miss a thing

The SCI free e-newsletter comes via e-mail every Monday. The newsletter is packed full of current agronomic topics. Subscribe by sending your e-mail address to matt@seedconsultants.com or by signing up on our website at **www.seedconsultants.com**.