vol. 37 April 2015

The Seed Consultant

A BI-MONTHLY NEWSLETTER NEWS AND VIEWS FROM THE FIELD

Are You Ready for the 2015 Growing Season?

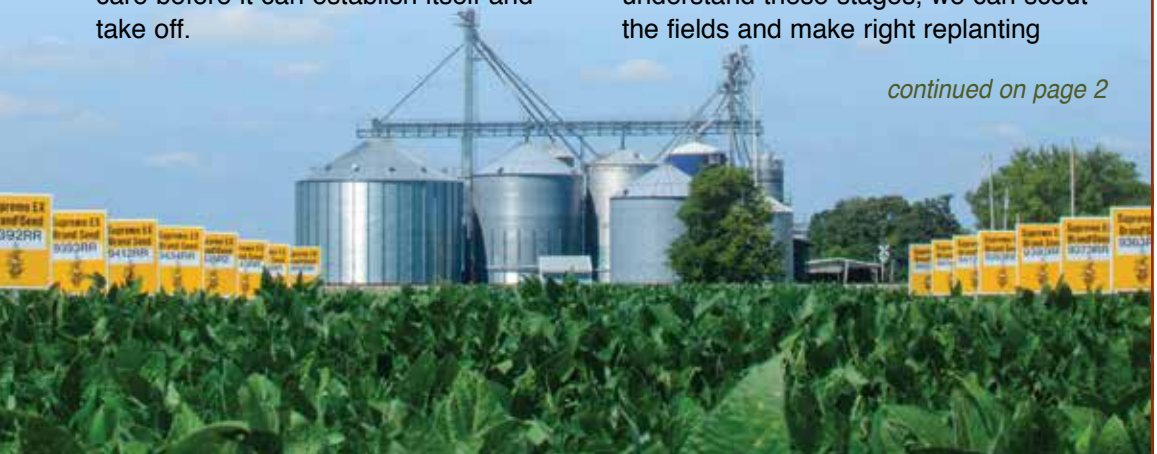
To successfully raise a crop, it is important to know how it grows. With all there is to understand about a farming operation, we may not completely understand how a crop plant grows. Let's look at the vegetative growth of the corn plant.

• Corn is one of the most efficient plants in capturing sun light, water and nutrients to create starches, proteins and oil. Each seed of corn can produce 500-800 kernels, compared to about 50-60 kernels per wheat seed. However, it takes a lot of tender loving care before it can establish itself and take off.

• We need to plant the seed where it can grow and prosper. Our studies in precision planting indicated that the ideal planting depth is 1.5 to 2 inches, with medium down pressure and planter speed based on the soil conditions. With the modern planters you can plant at higher speeds of 5-6 miles per hour but you get better plant distribution and lower plant-to-plant variability at lower speeds.

• The early stages of growth of a corn plant are very critical for the establishment of a good stand. If we understand these stages, we can scout the fields and make right replanting

continued on page 2



Seed Consultants, Inc.
800-708-2676
www.seedconsultants.com

Simply, the Best Value in the Seed Industry™

Page 3

WILL GLS AND NCLB BE A PROBLEM IN 2015
Tips for addressing issues early

Page 4

INCREASING SOYBEAN YIELDS
Strip trials can prove valuable

Page 7

GATES HONORED
Area seedsman honored at recent conference

Page 7

REPLANT & RETURNS
2015 guidelines and deadlines

Are You Ready... *continued from page 1*

decisions. It takes about 100-110 growing degrees for the corn seedlings to emerge.

• The root is the first one to break through the seed coat. The shoot breaks through the seed coat one or two days after the root. The shoot is enclosed in a pointed structure called the coleoptile which protects the leaves as the shoot pushes upward thru the soil. The first seedling root is followed by several other roots which serve to anchor the developing seedling. The coleoptile elongates and brings the leafy parts above ground. As soon as the coleoptile reaches the light, it splits at the tip and two leaves come out of the whorl and unfold at the rate of about one leaf every 3-4 days under good growing conditions.

• Germination and seedling establishment are the first critical times in the life of the corn plant. As the roots begin to take over the job of nourishing the young plant, shortages of major elements, especially nitrogen, phosphate and potash can slow growth and development. Young corn seedlings can handle setbacks but for maximum yields, it is best if early growing conditions are made as favorable as possible. The new leaves are produced by a single growing point at the tip of the seedling. The growing point remains underground even though there are 3-4 leaves above the ground. Sometime the seedling leaves may get frosted but the growing point will be OK. You can dig out the seedling and actually see a healthy light green point by cutting the plant lengthwise.

• A corn seed contains 4-5 embryonic leaves. Most of the leaves are formed in the first 4-5 weeks of the plant development. A corn plant may develop 18-24 total leaves based on its relative maturity, planting date and environment. All of these are started before the tassel development can begin. The root system develops rapidly as the young seedling starts to grow more leaves.

• The growing point of the knee high corn plant is still near the ground level. Several nutrient deficiency symptoms, especially nitrogen and phosphate are most common during the vegetative development stage.

• Sometimes purplish seedling color is not caused by the phosphate deficiency but is in the genetics of the hybrid. A good place to learn about the genetic qualities of your hybrids is observing them in the test plots on your farm.

By Dave Nanda, Ph.D.,
Director of Genetics and Technology
Phone: 317-910-9876

Will GLS and NCLB be a Problem in 2015?

During the 2014 growing season Gray Leaf Spot (GLS) and Northern Corn Leaf Blight (NCLB) developed in many corn fields, affecting both yield and stalk quality. You might ask; “Will these diseases be a problem next year?” The answer to this question depends on several factors.

The fungi that cause the development of these diseases overwinter on crop residue. If GLS and/or NCLB developed in 2014, the disease fungi will be present on residue in 2015. The development of these diseases also depends on environmental factors. Warm, humid weather favors growth of GLS and NCLB. Periods of heavy due, fog, or light rain will provide the needed conditions for these leaf diseases to develop. For either GLS or NCLB to become a problem in 2015, the fungi need to be present in the field in addition to favorable weather conditions. Fortunately, producers can make some management decisions to hinder the growth of GLS and NCLB and lessen their impact should they develop:

1. Crop Rotation: Research shows that crop rotation is one of the most effective ways to mitigate problem diseases.

2. Plant Resistant Hybrids: Hybrids with stronger disease resistance will not be affected as much as those susceptible to disease—talk to your seedsman/women or agronomist about resistant hybrids.

3. Till Crop Residue: Clean tillage will help break down crop residue, reducing the chance GLS or NCLB will become a problem.

4. Fungicides: Fungicides are recommended for GLS on susceptible hybrids where the disease pressure is high.

The best way to determine if disease is developing is to scout fields; recognize the environmental conditions that will contribute to disease growth/spread and know how to identify diseases. NCLB symptoms are brown or tan cigar-shaped lesions, ranging from one to six inches in length. GLS symptoms are tan or gray rectangles with parallel or straight sides, ranging from half and inch to four inches in length. When scouting, make sure to take a pocket field guide along—they are a great resource for identifying problems and determining management options.

By Matt Hutcheson, CCA,
Product Manager
Phone: 937-414-6784
matt@seedconsultants.com

An Input to Consider for Increasing Soybean Yields in 2015

In 2015 many farmers are likely going to increase soybean plantings. The reasons for this move include market price, production costs per acre, and crop rotation. For the past 5 years soybean genetics have greatly improved in yield potential, disease tolerance, SCN protection, to stronger emergence at planting time. Soybean growers are still having trouble maintaining yield averages of 70 bushel per acre. In the past several years growers have added fungicides, foliar fertilizers, and biological treatments trying to push yield potential. Soybean inoculants have greatly improved over past years with better strains of bacteria, better atmospheric nitrogen fixation needed by the soybean plant for nodulation, improved adherence to the seed with a longer shelf life, be it liquid or dry to apply to the soybean seed. For 2015, Seed Consultants has added TerraMax Soybean Inoculants including Maximize, a stabilized inoculant, TerraMax Liquid™, and TerraMax Dry™.

All 3 of the TerraMax products contain two strains of Bradyrhizobium, rhizobial bacteria specific for soybean nitrogen fixation needed by the plant as all inoculants do. When rhizobial bacteria are present in the soil, bacteria will attach and colonize the soybean root on new root hairs. After 10 to 14 days of colonization on the root,bacteria will form a visible nodule growing very rapidly and begin fixing nitrogen at the V2 to V3 growth stage. After 4 weeks, nodules reach their full size and continue to fix nitrogen up to seven weeks old. Research has shown the soybean plant peaks nitrogen fixation up to seed and pod fill, R5/R6 stage. Factors affecting nodule growth and nitrogen fixation include soil moisture, soil temperature, soil pH, fertility, pesticide use, and inoculant quality. One such factor affecting the lack of soybean nodulation in 2014 fields was compaction,a yield robber.

Universities throughout the Eastern Corn Belt have conducted trials of the different inputs that could increase soybean yields. One such inoculant trial by Ohio State University in 2014 involved 2 soybean inoculants from Verdesian Life Sciences, applied to treated seed at 2 different locations in the 3 soybean testing regions of Ohio.

N1—Henry County
.5 and 2.5 bu increase over the untreated check

N2—Sandusky County
2.2 and 6.6 bu increase over the untreated check

C1—Mercer County
0 and 5.1 bu increase over the untreated check

C2—Clark County
2.1 and 6 bu increase over the untreated check

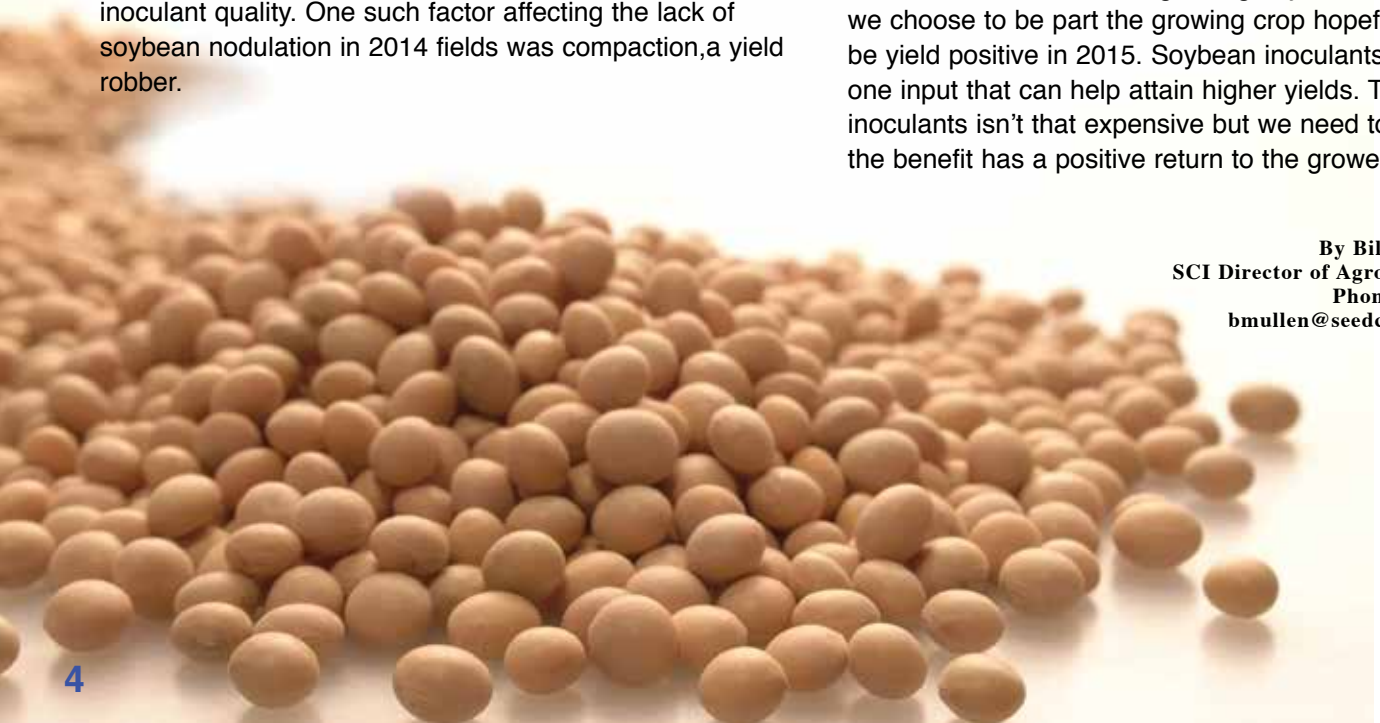
S1—Preble County
5.8 and 6.2 bu increase over the untreated check

S2—Clinton County
1.1 and 2.9 bu increase over the untreated check

It is important to keep in mind, this is only one year results, the different factors in the growing conditions in 2015 can have different results. For the best results soybean growers should plan to have their own strip trials of the inoculant products making sure the results are specific for their tested fields. For the best results the on farm strip trials need to have an untreated check against their planned trial.

Many factors, both environmental and non environmental, can have an effect on the growing soybean crop. What we choose to be part the growing crop hopefully will be yield positive in 2015. Soybean inoculants are just one input that can help attain higher yields. The cost of inoculants isn't that expensive but we need to make sure the benefit has a positive return to the grower in 2015.

By Bill Mullen, CCA,
SCI Director of Agronomic Services
Phone:740-505-2022
bmullen@seedconsultants.com



SCI's Grower Seed Treater BuyBack Program

Potential for a 400% return on your investment!

Soybean inoculation research conducted at Michigan State University showed that inoculation increased soybean yields on average by 1.3 bushels per acre in fields having a history of previous inoculation use. Similar results have been documented in long-term soybean inoculation trials conducted in Ohio (two bushels per acre), and Indiana (one bushel per acre).

So, why doesn't Seed Consultants offer commercially applied inoculants?
After inoculants are applied, their viability starts to diminish (depending on temperatures, humidity, etc.); of all the inoculants offered in the industry, six months is the longest shelf life offered. SCI starts delivering beans in November, December, January, etc.; if we were to have a wet spring, delayed planting; there would be no guarantee on viability of the bacteria for a yield response.

SCI's Solution is the Grower Seed Treater BuyBack Program

• Grower purchases Seed Treater (through SCI or another retailer, must submit copy of invoice to SCI)

#1 GST
• 2.5 gallon container
• mounts on seed tender
• conveyance system
applies to beans ($675)

#2 CST
• 10 Gallon
• complete slurry treater
• mounts on seed tender
• conveyance system
applies to beans ($1,325)

#3 CST
• 30 Gallon
• complete slurry treater
• stationary
• conveyance system
applies to beans ($1,950)

Based on yearly purchases of inoculants or biological from SCI, growers can earn up to 10% of the total cost of inoculates purchased from SCI per year over a five year period towards the seed treater purchase price. Accounts will be credited in November based on inoculate and biological purchased from SCI.

NO RETURN ON ALL INOCULANTS & BIOLOGICALS

PRODUCT	Competitive Product		Package Size	Price per	UNITS TREATED	GROWER CASE RETAIL PRICE	
N-Force Liquid with 120+ days on seed	Replaces Cell-Tech; Vault NP; & Optimize	Liquid	15 gal keg	1,920/keg	1,920	**$4,008.96**	**$2.09**
N-Force Liquid with 120+ days on seed	Replaces Cell-Tech; Vault NP; & Optimize	Liquid	2 X 2.5 ga.	640/case	640	**$1,336.32**	**$2.09**
N-Force Keg Pump	^^	^^		^^		**$462.84**	**^^**
DEI 15 gallon Poly with special pump and meter	^^	^^		^^		**$2,523.00**	**^^**
Maximizer (TerraMax Product)	Replaces Cell-Tech; Vault NP; & Optimize	Liquid	4 X 100 unit bag	400 units/case	400	**$939.60**	**$2.35**
TerraMax Dry + AZO (2 year dated dry)	Replaces N-Dure, ABN Peat; Vault SP; RhizoStick	Dry	12 X 1	10 units/bottle	10	**$14.09**	**$1.41**
TerraMax Dry + AZO (2 year dated dry)	Replaces N-Dure, ABN Peat; Vault SP; RhizoStick	Dry	6 X 1	40 units/jug	40	**$53.59**	**$ 1.34**

NO RETURN ON ALL INOCULANTS & BIOLOGICALS

All orders are subject to additional UPS charges.

The SCI Bulk Soybean Bin Program

SCI began the bulk soybean bin program eight years ago for several reasons. For starters, bulk boxes cost $700+ each. This price translates to more than $14/unit of soybeans stored, assuming 50 units per box. (Actually $17/unit if there are only 40 units per box.)

Bulk boxes must be returned, cleaned and nested. And growers must provide a covered structure for storage, unload, and load boxes. The bulk boxes eat up growers' storage space (equipment must be moved outside or to other buildings). Growers are also liable for damages to boxes.

An even bigger headache can be bulk bags.

The benefits of bulk soybean bins stack up. SCI currently has more than 150 bulk soybean bins on customers' farms. The majority are 521- bushel GSI bins with bean ladders. We are pleased with the bulk bin program, but believe many growers are missing out on the benefits.

Top 5 Reasons To Participate

SAFETY.
Bins eliminate the need to climb in and out of seed tenders and seed wagons, untying bulk bags. Bins also eliminate the risk of straps tearing or bags teetering over. You cannot put a value on injury to a family member or yourself, especially at this time of year.

CONVENIENCE.
You can set the conveyor, pull under, turn on conveyor, open the bin door, and fill your seed tender.

LABOR SAVING.
One person can unload bins and fill seed tenders with little effort. Bulk bags, on the other hand, require at least two workers. Bulk bag pallets must also be returned and bags disposed of, and bulk boxes must be nested for return, stored, and loaded.

COST EFFECTIVE.
The bins eliminate the need for additional storage buildings by growers, reduces manpower requirements at planting and the conveyor can also be used for other loading/unloading chores.

GROWER FRIENDLY.
100% satisfaction by growers. While not an official survey, we don't receive complaints about the bulk bin program.

How can you participate?

- Contact your area seedsman and sign an agreement.
- Pour a pad
- Purchase a multi use belt conveyor (40ft.)—eligible for Bulk Payback Program
- Order beans, minimum 400 units/variety/bin
- Order early and take early delivery

Chuck Gates Named Ohio CCA of the Year

Congratulations to Seed Consultants Area Seedsman Chuck Gates (pictured left) of Tiffin, Ohio who was recognized at the Conservation Tillage and Technology Conference in Ada, OH. Chuck was named the Ohio Certified Crop Adviser of the year. This award honors individuals who provide outstanding service to customers and are recognized as a source of sound agronomic advice.

SCI 2015 Replant and Return Guidelines

Deadline to issue replant credit…July 1, 2015

Growers must contact and allow the Area SCI Seedsman/woman and/or agronomist to assess the stand & approve replant.

General Guidelines

- No replant credit, if seed is planted prior to insurance guidelines.
- Must replant in 2015; no credit for 2016.
- Delivered replant seed is subject to a delivery charge.
- Subject to product availability
- Subject to change without prior notice.

Soybeans

- Grower must allow sufficient time for planted beans to emerge
- No replant if seed is still viable
- TURBO TREAT…100% replant
- Standard Treat…75% replant
- Untreated…0% replant

Corn

- VOTiVO 1250, AMX, AMXT, AM, AQ, HQ, HXX, RR, GT, &/or HR hybrids…100% replant
- All hybrids with PV500…100% replant
- Conventional hybrids w/o VOTiVO 1250 or PV500…75% replant
- Competitive replant ½ of list price
- Replant of replant ½ of list price

2015 SCI Return Guidelines

No return on treated soybeans

Growers may return untreated beans to the Sabina warehouse; to your Area Warehouse; or soybean returns will be picked up by SCI trucks.

NO corn returns will be accepted after July 1, 2015.

No soybean returns will be accepted after July 15, 2015.

If you have returns contact your Area Seedsman/woman; leave a message with your Area Seedsman/woman; call the office: 800-708-2676; leave a message: 800-708-2676; FAX the office: 740-333-8544; or email seedconsultants@seedconsultants.com

Remember SCI beans are covered under multiple patents that are still enforced; so please adhere to SCI guidelines and avoid pirated bin run issues.

2015 Financing Programs

John Deere Financial Preferred Customer and/or RABO financing programs only available to 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 your SCI representative, so the necessary paperwork can be completed with John Deere Financial &/or RABO.

Rabo AgriFinance

JOHN DEERE FINANCIAL

Finance Plan	A	B
Purchase & Approval Date	John Deere Financial	RABO
	Fixed 0%	Fixed 0%
Apr-15	0.0%	0.0%
In Season	0.0%	0.0%

GUIDELINES

- Must be a John Deere Financial Preferred Customer or approved by RABO
- Credit limits established by John Deere Financial &/or RABO…not by SCI
- 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 2015
- Applies only to seed purchases
- Please write on order (Plan A or B) allowing for proper cash discounting

Seed Consultants Inc.
P.O. Box 370
648 Miami Trace Rd. S.W.
Washington Court House, OH 43160
USA

Editorial Board

Stuart Yensel,
director of sales and marketing
740-505-0889 - Mobile
stuartyensel@seedconsultants.com

Bill Mullen, CCA
director of agronomic services
740-505-2022 - Mobile
bmullen@seedconsultants.com

Chris Jeffries,
general manager
740-505-0073 - Mobile
seedconsultants@seedconsultants.com

Matt Hutcheson, CCA
product manager
937-414-6784 - Mobile
matt@seedconsultants.com

Dave Nanda, Ph.D.
director of genetics and technology
317-910-9876 - Mobile
dave.nanda@gmail.com

Between the Rows

Updates from Chris Jeffries, general manager

Creating a NEW BRAND!

SCS 1034™, SCS 1043™, SCS 1085™, SC 1096™, SCS 1105™, SCS 1115™, SCS 1125™, & SC 1143™ Brands **HEALTH, STRESS TOLERANCE and YIELD POTENTIAL** – a new generation of Seed Consultants' genetics that will push our corn volume over 200,000 units.

HEALTH – strong tolerance to leaf diseases, especially NCLB.

STRESS TOLERANCE – ability to handle eastern Corn Belt's forest soils, and our difficult yield environments.

YIELD – 2014 3rd party testing, raised the bar for SCI's yield performance potential.

If we would have had our NEW BRAND two years ago, we would already be a 200,000+ unit company. If you have SCS 1034™, SCS 1043™, SCS 1085™, SC 1096™, SCS 1105™, SCS 1115™, SCS 1125™, or SC 1143™ brands ordered for 2015 planting, please make sure they get planted. In fact, I have asked our area seedsmen/women for NO RETURN. Watch these key new hybrids for their health, stress tolerance, and yield. You will be impressed with SCI's NEW BRAND.

Continued Dedication to our Key Building Blocks

Extensive replicated testing – sorting genetics for the eastern corn belt as part of the largest genetics company in the world.

Strong Agronomic Services – highly qualified agronomists that assist SCI with our premier customer service.

Varietal selection based on an Eastern Corn Belt bias – SCI continues its STEPP testing and SCI's regionalized replicated testing. We have the data to back up our selections for the eastern Corn Belt.

Quality seed – the very highest standards in the seed industry

Avenue to superior seed traits and cutting-edge technologies

Direct Sales Model – by-passing the conventional dealer network, returning the savings to our customers.

Reasonable pricing – my personal commitment to emphasize our pricing advantage

Combine SCI's NEW Brand with SCI's building blocks and SCI is poised for growth! Simply, the Best Value in the Seed Industry™

Chris Jeffries

DON'T MISS OUR WEEKLY EMAIL NEWSLETTER!
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.