vol. 38 June 2015

The Seed Consultant

A BI-MONTHLY NEWSLETTER NEWS AND VIEWS FROM THE FIELD

What is the right Maturity and Population for Double Crop Soybeans?

Many of our customers find it profitable to double-crop soybeans. A recurring question many of our growers ask is, “What is the right population and which maturity should I plant?” As many of you know, many factors contribute to yield potential such as planting date, final stand populations, varietal selection, soil fertility, rain fall, planting conditions, etc.

According to Jim Beuerlein (now retired OSU Extension Specialist), “late planting reduces our cultural practice options for row spacing, seeding rate and variety

continued on page 2

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

Simply, the Best Value in the Seed Industry™

HOW DO CORN PLANTS GROW
Knowledge can help increase yields

SIDEDRESSING NITROGEN IN CORN FIELDS
Earlier is better

2016 SCI CUSTOMER TRIP
Join us in Costa Rica

2015 WHEAT PROFITABILITY
Picking the best varieties from this year’s offering.

What is the Right Maturity... *continued from page 1*

maturity. For the last half of June, 225,000 to 250,000 seeds per acre are generally suggested, and in early July drop 250,000 to 275,000 seeds per acre."

Soybeans are not like corn because they are photo period sensitive. The amount of daylight the plant receives triggers its reproductive cycle. The date and timing of physiological maturity are affected by day length and the stage of seed development in the uppermost pods on the plants. Relative maturity (RM) has little effect on yield for plantings made during the first three weeks of May but the effect can be large for late plantings. During the first half of June, a 4-day delay in planting delays physiological maturity about one day. In the last half of June it takes a 5-day planting delay to delay physiological maturity a day. As planting is delayed, yield potential decreases and there is concern about whether late maturing varieties will mature before a killing frost.

When planting late, the rule-of-thumb is to plant the latest possible maturing variety that will reach physiological maturity before the first killing frost. The reason for using late maturing varieties for late planting is to allow vegetative growth for as long as possible to produce nodes where pods can form before flowering and pod formation. Also, taller varieties can allow for more pods to form because more nodes equal more pods and more yield. So we need late maturing varieties that will mature before getting frosted but since we never know when the first frost will occur, we use a narrow maturity range that will not be damaged by frost occurring at the normal time.

Assuming normal weather and frost dates, varieties with the following relative maturity should mature before frost and produce maximum possible yields when planted on the dates indicated. Varieties with an earlier relative maturity will mature earlier but will produce reduced yields (C.O.R.N.).

Region- Ohio and Indiana	Planting Date	Suitable Relative Maturity & Supreme EX® brand soybean varieties	Yield Potential
Northern	July 1–15	2.8 – 3.3 (SCS 9282RR™ – SCS 9335RR™)	10 – 30 bpa
Central	July 1–15	3.1 – 3.6 (SCS 9314RR™ – SCS 9363RR™)	15 – 35 bpa
Southern	July 1–15	3.6 – 4.1 (SCS 9363RR™ – SCS 9412RR™)	20 – 40 bpa

Source: CORN Newsletter June 2004 – 17, by Agronomic Crops Team, OSU Extension., http://corn.osu.edu/story.php?setissueID=41&storyID=192

By Matt Hutcheson, CCA,
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How Do Corn Plants Grow?

Understanding the corn plant growth process and knowing what they require for optimal growth, can increase yield potential.

By Dave Nanda, Ph.D.,
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Green plants have microscopic “windows” called stomata which can be opened or closed by the plants as needed. The windows are used by the plants to exchange gases from the atmosphere. During photosynthesis, plants absorb carbon dioxide from air plus water and nutrients from soil through roots. With the help of light and heat from the sun, they create sugars, starches, oils, proteins and many other compounds. Plants use these stomata also as a defense mechanism against heat and drought. When the leaves of corn plants curl up during hot periods of the day, they can close these windows to reduce transpiration and respiration rates as needed. The plants are under stress at this time and are not very productive.

Plants absorb carbon dioxide and release oxygen into the atmosphere through the stomatal openings during the day. Corn is one of the most efficient plants for converting carbon dioxide and water plus nutrients into organic matter. It produces about three times the amount of biomass produced by soybeans.

At night, plants respire and don’t release any oxygen back. Plants slow down during the night and deposit products of photosynthesis where needed. During vegetative growth, these are used to build leaves, stalks, tassels and ears. After pollination is complete, during the grain-fill period, sugars, starches, oils and proteins are deposited in the seed or grain.

The objective of every plant is to produce as many viable progeny or seeds as possible based on their genetics and environment. Both the macro-climate such as soil type, weather, water and nutrients and the micro-environment, such as competition from weeds or other corn plants are important. Each plant produces as many kernels as possible based on its own environment. It will sacrifice other parts of the plant to fill needs of growing embryos and seeds. Nutrient and water deficiency can result in plants sending the photosynthates from leaves and stalks to the seeds which may cause weak stalks, lodging and reduce yields.

It’s very important to provide equal spacing to each individual plant within a field. Plants which are too close to each other may produce nubbins. So, in order to maximize yield, a grower has to be an “equal-opportunity employer”. Plants are working for you as “employees”. If you provide them with good working conditions, they will be more productive and give you higher yields.

Recent studies conducted by Fred Below at the University of Illinois showed that all nutrients are not acquired at the same rate or used in the same way by the corn plant. The researchers found that corn plants pick up about 75% of their total nitrogen needed by flowering time. Later, when the plant needs nitrogen to help fill grain, it simply pulls some out of other tissues and transports it to the ear. On the other hand, nearly half of the corn plant’s sulfur is drawn straight from soil into the grain. So it must be taken up after flowering. The leaves and stalks cannot offer a reserve for the plant to redirect to the ear when it is needed. Sulfur is relatively immobile in the plant. There’s relatively little redistribution of sulfur out of the leaves. That means it would better to have sulfate sulfur available for root uptake during the grain fill period. That’s why maintaining adequate levels of sulfur in the soil is vital to good yields. Knowing how the plants operate allows us to make better decisions and produce higher yields!

Early Sidedressing N in Cornfields Better

With corn fields planted or close to being finished, corn growers are gearing up to sidedress nitrogen in their corn fields as part of their crop plan. There are producers that already have all their nitrogen applied, it works well for their operation. There are many growers who plan to sidedress nitrogen, a means of breaking up shallow compaction and helps to stimulate good, early root development. By the V5 growth stage nodal roots should be developed so as to take the nutrients out of the soil for the young corn plant. There are hybrids today that need nitrogen later on in the growth process and by sidedressing nitrogen needs are met to get the full yield benefit. Past research, by industry and university experts, has shown 80 to 90% of the nitrogen needs to be in the corn plant by VT Stage (Tasseling) for maximum yield potential.

Nitrogen fertilizer is in either the nitrate or ammonium form. Corn plants can use either form, the nitrate form moves with water to the roots, the ammonium form needs to be close to the roots for uptake. It is far better to inject the nitrogen into the soil, be it knifing in anhydrous ammonia or UAN as well as coulter injecting UAN as their sidedress plan. If one chooses the coulter injector method using UAN, if all possible to get done 3 to 4 days prior to rain or making sure the slit behind the coulter is covered up so as to reduce the potential of volatilization of the urea portion of UAN. There are times when due to extended rainfall, growers can't apply the nitrogen needed. When this situation occurs, corn plants are getting taller and one is limited to how the nitrogen gets applied. I would much rather see corn growers dribble UAN on top, between the rows with drop tubes or hoses, rather than risk the chance of loss of nitrogen using urea as a nitrogen source for sidedress due to the fact 30% of broadcast urea can volatilize if no rainfall is predicted within 3 to 4 days and high temperatures and humidity are forecasted.

Any way you look at it, nitrogen is a primary nutrient needed by the corn crop to maximize yield potential. Sidedressing nitrogen is an effective means of getting this needed nutrient to the young growing crop as well as helping establishing good, early root development that will continue to draw water and other nutrients for higher yields later on.

By Bill Mullen, CCA,
SCI Director of Agronomic Services
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SAVE THE DATE!

SCI'S 2016 CUSTOMER TRIP

WESTIN GOLF RESORT & SPA PLAYA CONCHAL

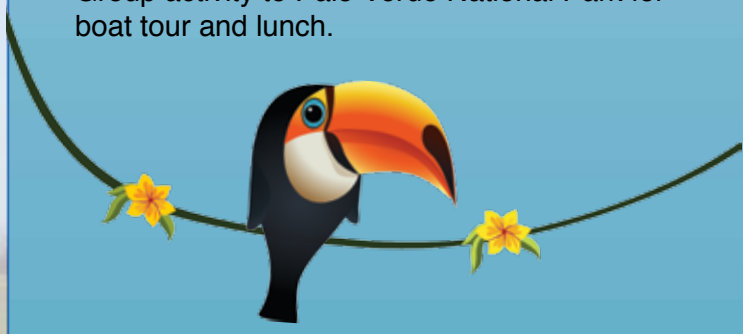
Guanacaste, Costa Rica
January 22-28, 2016

The Westin Golf Resort & Spa Playa Conchal

- Located in Costa Rica's magnificent North-Pacific Riviera, nestled between lush forests and the sparkling azure waters of the Pacific Ocean.
- Spacious sleeping rooms with forest views and close proximity to the beach.
- All-inclusive food and drink at 8 restaurants.
- Huge lagoon-style pool area.
- Full-service spa and complimentary fitness facility.

The Costa Rica Trip Package Includes:

- 7 days, 6 nights accommodations
- All-inclusive meals, snacks and beverages
- Group activity to Palo Verde National Park for boat tour and lunch.



Stay tuned for registration information and important deadlines in late-July.

SCI's 2015 Wheat Varieties

Wheat profitability in 2015 will depend upon many factors from planting to harvest. Selecting the best variety is the first step for a successful crop in your fields. When selecting the right variety one needs to include the variety's characteristics of maturity, winter hardiness, test weight, yield potential, and good agronomics with disease tolerance/resistance.

Throughout OH, IN, IL, KY, and MI, Seed Consultants conducts on-farm testing of the different wheat varieties as well as planting its own Replicated Research Wheat Plots. SCI participates in university's Wheat Performance Trials as well. We test existing varieties and new lines to help you make the right selection for your area.

SC 1315-15™ brand NEW

- Medium-Early maturity, bearded variety, ideal for double crop
- 105% of yield mean in 2014 SCI Wheat Testing at 8 test locations
- Planting rates of 1.6 to 1.8 million seeds per acre 2 to 3 weeks after fly free date
- Medium height, with excellent standability and heavy bucket weight
- Spring topdress N of 85 to 100 pound actual N under high management
- Widely adapted variety throughout the SCI sales area
- Nice companion variety with SC 1325-15™ in early, high yield environments
- Very good disease package including Head Scab and Leaf Blotch tolerance
- Patent Pending

SC 1321™ brand

- High yield potential, bearded variety, adapted throughout OH, IN, and KY
- Medium maturity line; works well in Intensive Wheat Management programs
- Very good plant health, test weight, and standability
- Excellent winter hardiness with a solid disease package
- On Mennel Milling Co. recommended list
- 2013 UKY Wheat Test SC 1321™ yielded 100.6 bushel, #1 out of 99 entries
- 2013 OSU Wheat Test SC 1321™ yielded 89.3 bushel, #17 out of 68 entries
- Patent Pending

SC 1325-15™ brand NEW

- High yield potential, bearded variety, adapted throughout OH, IN, KY and MI
- Ideal choice for planting double crop soybeans after wheat
- Medium maturity line; works well in intensive wheat management programs
- Very good plant health, test weight, and winter hardiness
- Excellent standability with very good tolerance to Glume Blotch and Head Scab
- Topped 2014 OSU Wheat Trials at 113.4 bpa/110% of plot mean of 87 entries
- 2014 UKY Wheat Test SC 1325-15™ yielded 102 bushel, #10 out of 102 entries, 106% of plot mean
- Adapts to a high wheat management environment – 90 to 100# N spring topdress
- Where Powdery Mildew is an issue, a fungicide is recommended for control
- Patent Pending

SC 1335-15™ brand NEW

- Medium Late maturity, bearded variety adapted well to all environments throughout the SCI sales area
- Excellent standability, Test Weight, and Winter Hardiness
- Excellent tolerance to Powdery Mildew and Glume Blotch and very good tolerance to Head Scab
- High yield potential variety, works well before double crop soybeans
- 103% of plot mean in 2014 KY Wheat Trials, #37 out of 112 entries at 98.7 bushel with 59.8 test weight.
- 103% of plot mean in 2014 OSU Wheat Trials, #24 out of 87 entries at 106 bushel with a 59.7 test weight
- Spring topdress N of 80 to 95 pounds helps this variety to excel in yield.
- Fall seeding rate of 1.6 to 1.8 million seeds per acre
- Great companion for SC 1342™
- Patent Pending

SC 1342™ brand

- Full season variety choice for I-70 and North
- Medium Late maturity allowing for longer grain fill time
- Superior yield potential and excellent test weight
- Medium tall variety, non bearded with excellent standability
- Very good disease tolerances including Head Scab, Glume Blotch, and Barley Yellow Dwarf (BYDV)
- Use of foliar fungicide maybe needed in areas where Powdery Mildew and Septoria Leaf Blotch have occurred in past years
- 2013 UKY Wheat Trials, SC 1342 was 98.4 bushel, 10TH out of 99 entries
- 2013 OSU Wheat Trials, SC 1342 was 8TH out of 80 entries, at 90.3 bushel. 2 year average yield of 94.7 bushel, ranked #1
- Excellent variety for those growers needing straw tons
- Patent Pending

Product performance is variable and depends on many factors such as moisture and heat stress, soil type, management practices and environmental stress as well as disease and pest pressures. Individual results may vary.

2015 Yield Contests

NATIONAL CORN YIELD CONTEST

Important Details

- Winner receives highest level prize attained. One trip for two per winner.
- To be eligible for reimbursement and prizes grower grants Seed Consultants, Inc. the permission to use for all purposes the NCGA information as well as grower's name, pictures of grower and grower's property.
- Awards from Seed Consultants are not transferable or be transferred for cash.
- Entrants must hold a current membership in the National Corn Growers Association and his/her state associations to qualify.
- Trip includes 4 nights hotel accommodations, coach class airline tickets, registration to the Commodity Classic, and dinner with SCI representatives
- The membership must be in the exact name as on the entry form.
- Taxes, if applicable, are the sole responsibility of each prize winner.
- Fill out the NCGA Yield Contest entry form and submit, before their final postmark deadline. Contest rules and all forms needed to enter will be available at www.ncga.com or contact Seed Consultants, Inc. at 800-708-2676.
- Fill out entry form for NCYC and submit form (one copy to NCGA and one copy to Stuart Yensel), send in no money SCI picks up entry fee and membership dues for grower.

2015—NATIONAL WINNER AWARDS

(winning Seed Consultants entries only)

1st Trip for two to the 2016 Commodity Classic in New Orleans, LA
Prize of $10,000 in SC Brand Seed and/or Supreme EX® brand Seed

2nd Trip for two to the 2016 Commodity Classic in New Orleans, LA
Prize of $7,500 in SC Brand Seed and/or Supreme EX® brand Seed

3rd Trip for two to the 2016 Commodity Classic in New Orleans, LA
Prize of $5,000 in SC Brand Seed and/or Supreme EX® brand Seed

2015—STATE WINNER AWARDS

(winning Seed Consultants entries only)

1st Trip for two to the 2016 Commodity Classic in New Orleans, LA
Prize of $1,000 in SC Brand Seed and/or Supreme EX® brand Seed

2nd Trip for two to the 2016 Commodity Classic in New Orleans, LA
Prize of $500 in SC Brand Seed and/or Supreme EX® brand Seed

3rd Trip for two to the 2016 Commodity Classic in New Orleans, LA

SCI Yield Contests

In addition to state and national yield contests, Seed Consultants offers companywide yield contests. Seed Consultants is committed to helping entrants in yield contests and any customer who enters will receive frequent tips, advice, and agronomic updates via email.

What are the benefits of entering one of these contests?

- Customers who enter will receive timely and practical agronomic advice sent via email from Seed Consultants' agronomists

Tips for success in yield contests

- Seek insight from agronomists on past contest winners' successful methods.
- Use new information and methods to improve production.
  Data and information from these contests will be compiled and sent to entrants in an effort to promote sound management practices that will help our customers improve their productivity.

CONTESTS

- **Project 300 Corn Yield Contest**
- **Project 100 Soybean Yield Contest**
- **Project 150 Wheat Yield Contest**
- **Double-Crop Soybean Yield Contest**
- **LibertyLink® Soybean Yield Contest**
- **Corn Test Weight Contest**

AWARDS

Awards for the winners of each SCI yield contests are:

- **1st place:**
  Prize of $1,000 in SC and/or Supreme EX® brand Seed
- **2nd place:**
  Prize of $750 in SC and/or Supreme EX® brand Seed
- **3rd place:**
  Prize of $500 in SC and/or Supreme EX® brand Seed

NO PURCHASE NECESSARY. A PURCHASE WILL NOT INCREASE YOUR CHANCES OF WINNING. The 2015 Seed Consultants Yield Contests are open to residents of the 50 United States who own or operate a farming operation. Contests subject in all respects to the Official Contest rules, available by mailing a self-addressed stamped envelope to Yield Contest Rules Request at sponsor's address below, and to the official rules of any applicable state or national yield contest. Enter by participating in a state, national, or Seed Consultants corn, soybean, or wheat yield contest using Seed Consultants or Supreme EX brand seed and submitting a completed an entry form available by contacting your Seed Consultants, Inc. sales representative or visit: **www.seedconsultants.com/sci-yield-contest/** *To enter without purchase, contact sponsor at the address listed below to request seed for contest entry. Contest start and end periods vary by contest—see Official Rules for more information. Winners will receive seed prizes, as stated in Official Rules. Winner receives the highest prize level attained if they win both the NCGA Yield Contest & the SCI Yield Contest with the same entry. Total value of all prizes depends on number of winners of national and state contests. Minimum ARV of all prizes is $11,250. Odds: The winners of the Contest will not be determined at random, but rather by their ability to grow a high yielding grain crop. Void where prohibited by law. Sponsor: Seed Consultants, Inc., P.O. Box 370, 648 Miami Trace Rd. SW, Washington C.H., OH 43160.*

SCI 2015 Replant & Return Guidelines

Deadline to issue replant credit…
July 15, 2015

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

- All traited 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 corn returns will be accepted after July 1, 2015.

No soybean returns will be accepted after July 15, 2015. We only accept untreated soybeans and unopened packaged soybeans for returns. No return on treated soybeans.

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.

Rabo AgriFinance

JOHN DEERE FINANCIAL

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.

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

Call and have your spring balance applied to John Deere Financial or RABO by June 30, 2015.

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JD Gator LibertyLink® Contest Winners

Mary Lu Swartz – Richwood, Ohio

Profit In Ag, LLC – Bluffton, Ohio

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.