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The Seed Consultant



A BI-MONTHLY NEWSLETTER NEWS AND VIEWS FROM THE FIELD

Determining the Right Corn Plant Population

One factor that greatly influences corn yields is plant population. Determining the correct plant population may take some effort, however, it is a critical factor that every corn grower needs to get right in order to maximize yields. Recent research performed by universities and seed companies has determined that that yields increase significantly as populations are increased up to a point of 34,000 seeds/acre. In general, yields begin to level off at planting rates around rates 36,000 seeds/acre. Recent studies have also determined that even in low yield environments planting rates of 31,000 seeds/acre maximize yield and economic return. In very productive, 250 bu/acre yield environments, research results show that higher populations (38,000+ seeds/acre) maximize yields. Breeding and advances in genetics have improved the modern corn plant's ability to yield at higher populations when compared to corn hybrids from the past.

ARE YOUR POPULATIONS TOO LOW?

Although kernel weight and the number of kernels per ear are important factors in determining yield, yields are driven by the number of ears per acre. Higher numbers of smaller uniform ears will result in better yields than low numbers of large "flex" ears. Keep in mind, flex ears cannot make up for large gaps between plants that exist where populations are too low. In most situations, corn hybrid populations should be at least 32,000 plants/acre. According to Purdue corn agronomist Bob Nielsen: Results from 67 field-scale trials around Indiana suggest that optimum plant population for corn grown under typical yield levels and growing conditions is approximately 32,100 ppa or seeding rates of about 34,000 spa at 95% stand."

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Seed Consultants, Inc.

800-708-2676

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**Simply, the Best Value
in the Seed Industry™**



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PLANTING**
A critical control in
higher yields



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Weed control has
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Important dates
and deadlines

Determining the Right Corn...

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Determining the correct population for each field may be a challenge, but using university recommendations of 32,000 plants per acre is a good starting point. While rates of 38,000 seeds/acre are too high for much of our sales territory, rates of 28,000 seeds/acre are too low and may be keeping producers from maximizing yields.

The challenge in determining the right population is taking into consideration several factors, including: soil type and expected yield levels, flex vs. determinant ears, hybrid stress tolerance, etc. Below are some key points to keep in mind when determining plant populations.

- Plant populations should be adjusted based on field yield levels and soil types
- Modern hybrids perform best at higher populations when compared to hybrids from the past
- Ear flex cannot make up for large gaps in plant stands at a low population
- Yield is driven by ears per acre, more ears result in higher yields
- Hybrids with below average stress tolerance and flex ears should not be planted at excessively high populations, especially in lower yield environments where plant stress will occur
- Determinant-eared hybrids will perform better at higher populations and will maintain uniform ear size



SAVE THE DATE!

SCI'S 2018 CUSTOMER TRIP



THE WESTIN MAUI RESORT AND SPA KA'ANAPALI BEACH

Maui, Hawaii • January 19-26, 2018

Hotel:

The Westin Maui Resort & Spa
Ka'anapali Beach

Duration:

7 nights, 8 days

Potential Activities:

Island Tours
Volcano Tours
Whale Watching
Various Island Hopping
Fishing
Traditional Hawaiian Luau
Pearl Harbor Tours
Snorkeling
Swimming
Hiking
Road to Hana



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



Preparing for Planting in 2017

Spring planting is right around the corner. Planting is one critical factor that growers have control over and paying attention to details help crops achieve their highest yield potential. Thorough maintenance before heading to the field is important, as well as making adjustments throughout the planting process.

PERFORM MAINTENANCE AND REPAIRS

Prior to heading to the field, growers should check for excessive wear that will negatively affect planting equipment. No-till coulters, disc openers, seed firmers, chains, etc. may need to be adjusted or replaced. Planter units should be tested and calibrated as needed. Correct seed placement can be hindered by excessively worn planter parts that don't operate as they were designed. Taking time to completely go over all parts of a planter will eliminate potential problems in the field that can affect crops for the entire growing season.

IN-SEASON ADJUSTMENTS

Making adjustments to planters throughout the season is as important as preventative maintenance, and there are several areas growers should check regularly. Seedling depth is a key factor in ensuring uniform emergence and high yields. Depth settings should be set and monitored often. Depth should be checked frequently in each field as field conditions will change throughout the season.

Planters set up for no-till may have row cleaners. Row cleaners should be set so they move residue without disturbing soil and may need to be adjusted on a field-by-field basis.

One area that probably doesn't get enough attention is planter down pressure. Down pressure should be set to accurately place seed and may need to be adjusted from field-to-field. Down pressure requirements and settings will change based on soil moisture, tillage practices, compaction, etc. Used correctly, down pressure allows planters to accurately place seed. Too much or too little down pressure will affect seeding depth and could create sidewall compaction of the seed trench.

Seed firmers and closing wheels should also be monitored and adjusted if need. Seed should be placed firmly in the bottom of the seed furrow and the furrow should be closed, allowing for adequate seed-to-soil contact. Different styles of closing wheels require differing spacing and down pressure. To ensure closing wheels are operating correctly, growers should consult dealers and/or manuals when installing and adjusting them.

Making in-season adjustments to planters will take time and effort, however, these adjustments will ensure correct seed placement which will help growers achieve high yield potential.



**LIBERTY
LINK** 

Liberty



**High-performing Genetics
+ Excellent Weed Control
Real Yield**

In the real world, weeds interfere with high yields. The good news is we've got that covered with high-performing genetics coupled with better weed control than Roundup® on tough-to-control weeds for high yields that deliver.

See the real yield story at BayerCropScience.us.



Bayer CropScience

Sprayer Readiness

Before the sprayer goes to the field, it needs to be gone through thoroughly. Even though they were rinsed out last fall before they were put away, sprayers need to be rinsed out again to get any remaining residue out of the tank and booms. Once the booms are rinsed, growers should check the pump, booms, and nozzles to ensure they are in good working order. In order to check these things out, growers need to run the sprayer at the desired RPM and pressure.

Things to look for:

- Clean all screens and filters in the system
- Any seals or gaskets leaking
- Any hoses that developed leaks or splits
- Any plugged or leaking nozzles
- Any nozzles that may need to be replaced
- Make sure spray pattern is correct

When checking the nozzle pattern, make sure there are no streaks in the pattern. If there are, then nozzles need to be replaced. Stainless nozzles will last longer than plastic, but cost more money. If using dry AMS when spraying, nozzles will wear out faster as well. Dry AMS will wear grooves in the nozzles which can lead to streaking.

With all of the Liberty® and Dicamba that could be sprayed as well as many other products, sprayers need to ready to apply all products the correct way. Mistakes made now may cause severe problems late. It is critical to spend the time required to make sure sprayers are ready to go this spring.

Application of Liberty® and Dicamba

With a shift from soybeans with the Roundup Ready® gene to Liberty® and Dicamba tolerant soybeans in 2017, growers need to make sure that both of these products get applied correctly. Growers can no longer apply weed control the way it has been done in the past. Liberty® and Dicamba products must be applied correctly to avoid problems that growers don't need or want to contend with.

Liberty® must be applied using a minimum of 15 gallons of water but preferably 20 gallons per acre to be done correctly. Liberty® must have adequate coverage for it to work. Nozzles are also very important as well. Liberty® requires a smaller water droplet than Roundup® as well as more pressure to break up the droplets. Growers absolutely must use the correct labeled rates of Liberty® as well as the correct amount of water or will risk losing herbicide effectiveness and create weed resistance.

GUIDELINES FOR APPLYING LIBERTY®:

- Make sure you have the correct nozzles for your sprayer that will apply correct amount of water- 40 to 50 psi
- Spray a minimum of 15 gallons of water, but preferably 20 gallons
- Apply 32 ounces of Liberty® or Generic Liberty®
- Continue to use AMS
- Spray when weeds are at the size of pop-cans for best control
- Make sure you employ a strong residual program

When applying Dicamba to soybeans with the Roundup Ready 2 Xtend™ trait there are completely different guidelines that need to be followed very closely:

- Minimum of 10 gallons of water
- At this time there is one nozzle that can be used: TTI11004
- Absolutely NO AMS can be used with these products
- Label must be carried in the cab when product is being applied
- Required 110 foot border on the downwind side of field if beside a sensitive crop
- As of now, there are no labeled tank mixes to be used with these products
- Cannot be sprayed if wind speed is less than 3 miles per hour
- Do not spray Dicamba as a burndown and the follow with Dicamba in crop. You can develop resistance very quickly



Between the Rows

Updates from Daniel Call, general manager

As we turn the page to planting season 2017, decisions made this spring at planting time will have a tremendous impact on our outcome at harvest. There are several critical factors which significantly influence final yield, a couple of the most critical would be:

1. Uniform Plant spacing
2. Correct hybrid selection
3. Planting within the optimum calendar window
4. Uniform plant emergence

A lot of focus has been spent the past couple years on factor #4. Uniform plant emergence has received a significant amount of attention recently. So in 2016, SCI agronomist Matt Hutcheson embarked on year one of a multi-year study to determine the effects of uniform plant emergence. Matt's goal was to document the amount of yield variability from plant to plant based upon emergence delays. Matt determined yield variations by documenting and marking plants based upon emergence timing in the spring. Then he weighed individual ears and adjusting them to the same moisture at harvest. The results from year one were incredible. Matt was able to document yield variability of as much as 50 bu/ac with a 48 hour difference in emergence from plant to plant. When emergence varied greater than 48 hours from plant to plant yield variations of nearly 80 bu/ac were documented.

Therefore, it is imperative we do everything we can at planting time to ensure as uniform emergence as absolutely possible. It's important to get plants to emerge within 12 – 24 hours of each other for maximum yield potential. Matt has a few tips to take into consideration this spring at planting to maximize emergence uniformity:

- Uniform planting depth
- Uniform seed-to-soil contact
- Slower planting speeds
- Use seed firmers
- Avoid chemical damage to seedlings
- Uniform soil moisture
- Uniform down pressure

Keep in mind this is year one of a multi-year study. Next year Matt is going to repeat the study but at multiple seeding depths. Please keep the aforementioned recommendations in mind as you head to the field this spring. Small adjustments to your planter could make a significant difference at harvest. Most importantly, please have a safe and prosperous planting season!

*Successfully,
Daniel Call*



JOHN DEERE
FINANCIAL



Rabo
AgriFinance

SCI FINANCING

TWO Great Financing Choices for 2017
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 your SCI representative, so the necessary paperwork may be completed with John Deere Financial &/ or 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 2017.

Finance Plan	John Deere Financial	RABO
Purchase & Approval Date	Fixed 0%	Fixed 0%
April 2017	0.0%	0.0%
May 2017	0.0%	0.0%
In Season	0.0%	0.0%

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.

SCI 2017 Replant

All replant paperwork must be received into the main office by July 15, 2017.

Growers must contact and allow the Area Seedsman to assess the stand and approve all replant.

General Guidelines

- No replant credit, if seed is planted prior to insurance guidelines.
- Must replant in 2017; no credit for 2018.
- 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 or, 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

2017 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, 2017.

No soybean returns will be accepted after July 15, 2017.

If you have returns, contact your Area Seedsman or the main office at 800-708-2676 before the return and/or replant deadlines.

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

Early Cash Discounts Continue

Seed Consultants offers opportunities to maximize seed cost savings through its early cash discount schedule. SCI offers the following early cash discount schedule for the 2017 planting season. If you have any questions, please call the office at 800-708-2676.

Spring Seeding Cash Discounts

April2.0%

Accounts Due Paid in Full:

August 1, 2017

Interest will be charged beginning September 1, 2017 on any unpaid balance.



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

Daniel Call, CCA

general manager

937-313-7421 - Mobile

danielcall@seedconsultants.com

Matt Hutcheson, CCA

product manager

937-414-6784 - Mobile

matt@seedconsultants.com



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.



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RR2Y: Always follow grain marketing, stewardship practices and pesticide label directions. Roundup Ready® crops contain genes that confer tolerance to glyphosate, the active ingredient in Roundup® brand agricultural herbicides. Roundup® brand agricultural herbicides will kill crops that are not tolerant to glyphosate. Genuity®, Roundup® and Roundup Ready 2 Yield® are registered trademarks of Monsanto Technology LLC used under license. Individual results may vary, and performance may vary from location to location and from year to year. This result may not be an indicator of results you may obtain as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible.

RR2X: DO NOT APPLY DICAMBA HERBICIDE IN-CROP TO SOYBEANS WITH Roundup Ready 2 Xtend® technology unless you use a dicamba herbicide product that is specifically labeled for that use in the location where you intend to make the application. IT IS A VIOLATION OF FEDERAL AND STATE LAW TO MAKE AN IN-CROP APPLICATION OF ANY DICAMBA HERBICIDE PRODUCT ON SOYBEANS WITH Roundup Ready 2 Xtend® technology, OR ANY OTHER PESTICIDE APPLICATION, UNLESS THE PRODUCT LABELING SPECIFICALLY AUTHORIZES THE USE. Contact the U.S. EPA and your state pesticide regulatory agency with any questions about the approval status of dicamba herbicide products for in-crop use with soybeans with Roundup Ready 2 Xtend® technology.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Soybeans with Roundup Ready 2 Xtend® technology contain genes that confer tolerance to glyphosate and dicamba. Glyphosate herbicides will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba.

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