Special Sponsored Section

Upper Midwest Edition

Farmer's Independent Research of Seed Technologies

FIRST

Evaluating Corn Hybrids and Soybean Varieties

Evaluation guide of corn hybrids and soybean varieties featuring independent on-farm yield tests

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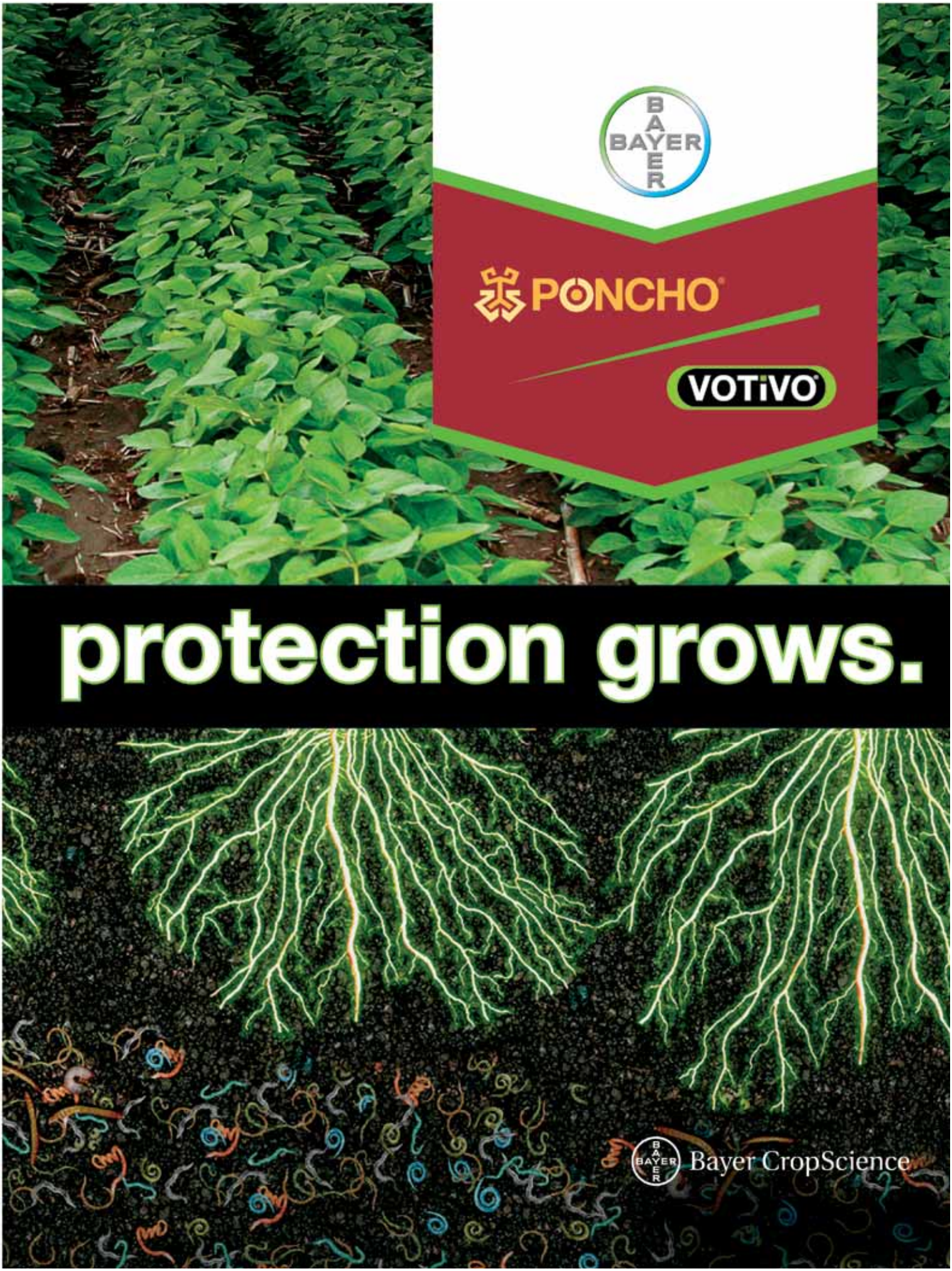
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How to Interpret F.I.R.S.T. Trials

Farmers Independent Research of Seed Technologies (F.I.R.S.T.) is an independent corn and soybean yield testing service. We compare product yield performance in grower fields across 14 states: Delaware, Illinois, Indiana, Iowa, Maryland, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota and Wisconsin. In 2011, we compared yields of 875 corn grain and 473 soybean products. In total, more than 63,900 plots spread across 260 farms were established.

Test locations are selected to represent the geographic diversity within a region. Ideal sites have uniform, well drained soils with farmer hosts using production practices typical for the area.

Sponsoring seed companies submit their best products to desired test regions. They provide high-quality seed from commercial lots and fees to enter F.I.R.S.T. seed tests. The only exceptions are check products (CK), chosen by F.I.R.S.T. managers to bridge results between early- and full-season tests, and Grower Comparison products (denoted by GC at the end of the product name), provided by our host farmers for their knowledge.

F.I.R.S.T. managers package, randomize, and plant seeds into host grower fields using slightly modified commercial planting equipment. Plot strips are 45' long and 10' wide (four 30" corn rows and soybean rows of either seven 15" single rows, four 30" single rows or four 30" twin rows spaced 8" apart). The center two corn rows and all soybean rows are used to measure yield.

Regions have been established to provide similarity by geography and crop maturity. Corn products within a 10-day maturity range are pooled into a single all-season test or split into early- and full-season tests depending on entry volume. Soybean products must fall within a 0.7 maturity range.

All seed products entered in a region are seeded at each of six corn and four soybean locations within the region. Products are replicated three times per test and grouped in blocks from front to back and side to side. This provides more precision in yield measurement and flexibility should a disruptive event require elimination of nonuniform plot areas.

Soybean cyst nematode (SCN) levels are reported for most soybean test sites. Egg counts are taken per 100 ml of soil. Sites with up to 2,000 eggs, 2,000 to 12,000 and more than 12,000 eggs are classified as low, medium or high populations, respectively.

F.I.R.S.T. regional summaries are designed to identify consistently high yielding products from multiple locations. Product performance is averaged across all locations within a region. Regional summary tables rank the Top 30 products on yield within a region. Grain yield, grain moisture, and lodging are averaged from all locations and presented along with individual site yield results.

Regional summaries include least significant difference (LSD) for the region and individual site results. Statistically, the LSD value is the difference needed between two products to accurately state that one product is better than another 9 times out of 10 (90% probability).

F.I.R.S.T. manager comments are provided for each test site. Comments provide insight regarding test conditions such as weather patterns, plant health and any other factors that may have impacted product results.

For more details or additional results visit *www.firstseedtests.com.*

Footnotes and Abbreviations:

Yields in **bold** are significantly above test average.

Brands in ***italics*** exceed the test's grain moisture limit.

Brands identified with * had no commercial seed lot number.

Brand names ending with GC are grower chosen product entries.

Brand names ending with CK are check products in both early- and full-season tests.

identifies rejected results omitted from summary

** identifies locations with 2 replications

^ G2® brand seed is distributed by NuTech Seed, LLC. RPM® brand seed is distributed by Doebler's PA Seed. Supreme EX® brand seed is distributed by Seed Consultants, Inc. XL™ and Phoenix™ brand seeds are distributed by Beck's Superior Hybrids. G2®, RPM®, Supreme EX®, and XL™ are trademarks of Pioneer Hi-Bred.

ns – not significant

SCN Resistance:
S – Susceptible,
MR – Moderately Resistant,
R – Resistant.

Technologies

3000GT	Agrisure® 3000GT
3111	Agrisure® Viptera™ 3111
AMRW	Optimum® AcreMax™ Rootworm Protection
CB/LL	Agrisure® CB/LL
CB/LL/RW	Agrisure® CB/LL/RW
GT	Agrisure® GT
GT/CB/LL	Agrisure® GT/CB/LL
HX	HERCULEX® I Insect Protection
HXT	HERCULEX® XTRA Insect Protection
LL	LibertyLink® herbicide tolerance
RR	Roundup Ready® Soybeans
RR2	Roundup Ready® Corn 2
RR2Y	Genuity® Roundup Ready 2 Yield®
STX	SmartStax®
STS	STS® herbicide tolerance
VT2P	Genuity® VT Double PRO™
VT3	YieldGard VT Triple®
VT3P	Genuity® VT Triple PRO™

Seed Treatments

A	Allegiance®
AC	Acceleron®
AM	ApronMaxx®
AP	Apron XL®
AV	Avicta®
C	Cruiser®
CM	CruiserMaxx®
E	Excalibre™
I	Inovate™ System
G	Gaucho®
O	Optimize®
P	Poncho®
T	Trilex®
T2	Trilex® 2000
T6	Trilex® 6000
V	VOTiVO®
n/a	not available

Additional F.I.R.S.T. Data Available

Readers looking for more details about cropping practices, products tested, hosting a test location or desiring to search results online can visit *www.firstseedtests.com.* You can view our blog and download Harvest Reports by location or products tested lists sorted by region or company. Seed Scout is an online tool allowing you to search F.I.R.S.T. results by your interests; crop, state, region, maturity, or technology to identify the best seed products for your production practices.

There are 4 print editions. Each edition contains F.I.R.S.T. results from a different geography. *Visit www.firstseedtests.com,* click Media and Print Media to download or view all four editions or type *www.firstseedtests.com/printmedia.htm* into your browser.

Covering Minnesota and the Dakotas

Other editions available at www.firstseedtests.com/printmedia.htm

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F.I.R.S.T.® Farmer's Independent Research of Seed Technologies

2011 Season Highlights

When asked to sum up 2011, F.I.R.S.T. general manager Joe Bruce says, "We had a good corn crop, a really good soybean crop, and plenty of great data."

But, he notes, care must be taken when interpreting the data. Different weather conditions mean that different testing regions – and sometimes, individual testing sites – have to be evaluated independently. For example, "there was not much variability in the Iowa and Wisconsin corn crops," he says, "but in some Indiana and Michigan locations, we saw corn yield vary by as much as 100 bushels per acre for the same product within the test." Variable results like this are ultimately rejected.

Eric Beyers, F.I.R.S.T. manager for central and southern Illinois, agrees with Bruce. "Lots of good data is there. Growers and researchers should focus on data from regions with qualities they are looking for and pay close attention to the notes accompanying it."

Weather was the source of most of the variability in 2011. "We got a reprieve from pests and disease this year," Bruce says. A few places were hit with Goss's wilt and other ailments, but most of the data lends itself to studying a hybrid or variety's ability to cope with weather-related stress.

Weather

Extreme heat had a huge effect on corn and soybean yields this year.

A few northern regions saw high temperatures in the low to mid 90s in July, but every other F.I.R.S.T. testing area saw high 90s and 100s for at least a week. "It was the second hottest summer on record," says Corey Rozenboom, F.I.R.S.T. manager for northern Iowa. Likewise, Indiana, Ohio and southern Michigan had a record number of days above 95 degrees without any rain, reports Rich Schleuning, F.I.R.S.T. manager for regions in those states. The I-72 corridor that runs through central Illinois "just got hammered," Beyers says. "For the plants, it was like us sleeping without fans or air conditioning. They got no rest and a lot of stress." Further east, in Pennsylvania, Delaware and Maryland, the effects were worse because "the sandy soil in the region gets hot and stays hot. Irrigation became impossible," according to Rob Kauffman, F.I.R.S.T. manager for that region.

The moisture pattern was like a seesaw. Planting in nearly all regions was late because of cold and wet conditions in April and May. "It looked like a repeat of the last two years," says Randy Meinsma, F.I.R.S.T. manager for southern Iowa and northwest Missouri. June was fairly normal, but dryness was the rule in July and August for most F.I.R.S.T. regions. Scattered showers granted a reprieve in a few testing spots, but most experienced mild drought.

Many F.I.R.S.T. regions also saw high winds, with the accompanying lodging and green snap. Maryland, Delaware and the eastern region of Pennsylvania even experienced sustained 80 mph winds from Hurricane Lee in September.

Other damaging conditions were isolated. Minnesota and the Red River Valley received an early hard frost on Sept. 15, and severe hail damage occurred in a few testing locations in Missouri and Nebraska.

The good news, according to Bruce, is that the weather was not devastating for any of F.I.R.S.T.'s testing regions. Ten years ago, he notes, similar conditions would have caused much more damage. Now, "seed companies are constantly developing products with ever-better built-in pest and disease resistance," he says. These traits enable plants to better withstand the inevitable stresses inflicted by the weather. "And that's why yields were, all in all, good this year."

Corn

Corn yields were, by and large, down slightly when compared to averages from the past five years. This is why "most of the farmers are ready for 2012," according to Kauffman. But Bruce still thinks

Corn Yield

	% change '10 to '11	bu. (+/-) '10 to '11	(bu. per acre) 2011	2010	2009	2008
Minimum	-79.7	-24.0	6.1	30.1	84.6	18.8
Average	-6.9	-13.2	178.7	191.9	202.4	191.9
Maximum	-7.5	-22.6	277	299.6	281.0	281.0

Soybean Yield

% change '10 to '11	bu. (+/-) '10 to '11	(bu. per acre) 2011	2010	2009	2008	
438.6	19.3	23.7	4.4	20.7	18.3	**Minimum**
-4.3	-2.6	57.0	59.6	54.0	51.9	**Average**
1.0	0.9	92.1	91.2	80.3	90.9	**Maximum**

Data from all F.I.R.S.T. plots tested during that year. Any rejected data was eliminated from these figures.

that, given the conditions most corn growers faced in 2011, yields were better than expected.

Southern Wisconsin, northeastern Iowa and northwestern Illinois were "the sweet spot" for corn this season, claims Jason Beyers, F.I.R.S.T. manager for that area and northeast Missouri. "It was far enough north not to be hit by the extreme heat and it had regular rainfall when everyone else was dry," he explains. The result: yields nearly as high as those in 2010 and not much variability.

According to Bruce, Minnesota, Iowa, South Dakota and Nebraska "were the other winners" when it came to good yields and good data. In Iowa in particular, there was not a lot of variability. "It was a good year for testing," agrees Mark Tollefson, F.I.R.S.T. manager of South Dakota and the Red River Valley region. "Unlike the past two years, there were no drowned-out spots or serious drainage issues." Colder, wetter weather in the Red River Valley area made the corn susceptible to green snap when the high winds came in July, resulting in "a disappointing year in terms of yield," according to Tollefson.

Although 2011 yields in Nebraska were comparable to 2010 yields, "every site was hit with some type of extreme weather, and there was inconsistent rain, which led to a lot of variability," says Tim Dozier, F.I.R.S.T.'s manager for both regions in the state. "Growers need to make sure they look at the environmental conditions at each site to understand the data."

All other F.I.R.S.T. regions were hit by high heat and dry conditions in July and August. According to Schleuning, Kauffman and Meinsma, early-planted hybrids fared poorly because the heat occurred during peak pollination time. Rozenboom noticed that the heat and dryness resulted in a lot more tip dieback in northern Iowa, an observation echoed by many other F.I.R.S.T. managers. According to Mark Querna, F.I.R.S.T. manager for Minnesota, the heat had one benefit for many corn growers: it saved them the cost of drying a large percentage of their grain. "Given the cool, wet spring that slowed crop development through June, I would have bet grain dryers would be needed," he says.

"Yield results were consistently inconsistent. Despite having wide yield variability excellent products can be found."

— Joe Bruce, F.I.R.S.T. General Manger

Wind was a factor everywhere. Kauffman estimates that southeast Pennsylvania, Maryland and Delaware growers lost nearly 50 bushels per acre because of Hurricane Lee – which, he says, explains why yields in central Pennsylvania were better than yields in those regions. Querna notes that an hour-long onslaught of 80 mph winds in early July brought down 50 percent of the early-maturing hybrids in Clinton, a planting area in west central Minnesota. The story was much the same in east central and southern Illinois, says Eric Beyers, resulting in yields notably lower than those of 2010.

Clayton, a testing location in western Illinois, "was one of the few places where the entire crop was lost," says Eric Beyers. But it wasn't because of heat and dryness. In fact, Beyers says, "excessive June moisture followed by the stress of a hot and dry July and August was more than plants could handle."

Other than a severe outbreak of Goss's wilt at Rinard in northwest Iowa that nearly cut yields in half among susceptible hybrids, diseases and pests did not do any significant damage to corn throughout the F.I.R.S.T. regions.

Soybeans

Soybeans were also largely free of diseases and pests in 2011 – a big difference from 2010, when many Iowa fields were hit with sudden death syndrome, Bruce says.

Minnesota and South Dakota had the lowest yield average of all the F.I.R.S.T. regions. "We planted late this year, had poor growing conditions and suffered a killing frost on Sept. 15," Querna explains. He adds that a hot and humid July, coupled with some August rain, actually kept yields from being lower.

Growers in northern Iowa also planted late and were excessively dry in August and September, and "that turned what could have been a great crop into a good crop," Rozenboom says.

Nearly every other region saw exceptionally good soybean yields. "Weather that was bad for corn was good for soybeans," theorizes Kauffman, noting that in Hanover, Pa., farmers averaged more soybeans than corn in terms of bushels per acre. Jason Beyers agrees: "Rain that came too late to benefit the corn crop helped beans fill out." Moreover, the wind that caused so much lodging and green snap in corn didn't affect the shorter soybean plants as much. Because it brought rain with its high winds, "Hurricane Lee helped more than hurt the soybean crop," Kauffman says.

In short, the 2011 soybean harvest was "outstanding" according to Meinsma, "phenomenal" according to Jason Beyers, and simply "good" according to Eric Beyers. "Soybeans were a pleasant surprise for most everyone," Bruce summarizes. "Right up to harvest, most growers thought that the conditions meant an average yield at best." Instead, several regions saw record or near-record yields. It's no surprise, Tollefson says, that a lot of South Dakota farmers are thinking about planting more soybeans and less corn next year.

CORN

F.I.R.S.T. Region	Average Yield by Year 2011	2010	2009	2008
DMNO	129	169	195	148
IAEC	196	199	219	189
IANC	189	191	204	185
IANO	176	181	197	194
IANW	187	188	198	222
IAWC	168	188	240	208
ILEC	172	192	211	221
ILNO	196	206	220	221
ILNO (ultra early)	180	197		
ILSO	139	168	178	197
ILWC	201	190	198	224
INCE	214	232	237	207
INNO	207	220	200	178
INSO	192	162	201	153
MISO	178	186	180	105
MITH	180	170	192	
MNSE	199	218	200	188
MNSW	181	203	200	192
MNWC	183	213	221	201
MONE	166			
MONW	157			
NCTS	206	212	212	194
NENE	190	198	219	184
NESE	156	187		
OHNW	185	155	184	134
OHWC	170	182	182	142
PACE	149	195	188	175
PASE	121	185	197	187
RDRV	146	159	156	
SDNE	184	135	163	192
SDSE	166	171	173	173
WISO	196	215	197	176
TOTAL	179	192	202	192

Includes all available results except rejected data.

Corn Technologies Tested

	(% of entries containing traits) 2011	2010	2009	2008
Traits Tested				
Conventional	0.9	1.0	1.2	0.9
Glyphosate	98.8	98.0	94.2	88.7
LibertyLink	42.6	32.4	19.1	9.7
Corn Borer	96.5	94.2	96.2	95.5
Rootworm	86.2	88.8	90.4	86.6
Triple Stack*	86.0	88.2	89.0	79.7
*Triple stack = CB + RW + herbicide tolerant trait				
Key Technologies Tested				
YGVT3	20.5	50.4	74.7	72.3
VT3P	30.8	11.3	0.0	0.0
STX	14.2	9.5	0.0	0.0
3000GT	10.7	9.4	3.8	0.4
3111	2.7	0.0	0.0	0.0
HXT, RR2	7.0	7.9	8.6	2.0
HX,RR	5.7	3.9	2.1	2.1

Expansion

2011 signaled F.I.R.S.T.'s expansion of its corn testing into two regions which, together, encompass northern Missouri and the southern fifth of Iowa. According to Jason Beyers and Meinsma, F.I.R.S.T.'s managers for the two regions, the season went quite well.

"Like other yields, northeast Missouri's was hampered by intense moisture in the spring and heat and winds in the summer months," Beyers reports. Based on grower comments, Meinsma estimates that yields were down about 10 percent for the year. "It was a difficult harvest" because of so much lodging, he says, "but we captured all the relevant data."

Both Meinsma and Beyers learned a lot about the features unique to the area. "There's a lot more soil variability," Meinsma says. "It can be hard to find uni-

form soil even in the same field. That's one of the reasons there was a lot of variability in yields. It also stays wetter a lot longer, which results in different kinds of diseases, pests and chemical treatments." Beyers discovered that almost no one uses dryers in Missouri. "They just leave the corn in the field longer because of the warmer climate," he explains. "All corn products dried to equivalent grain moisture, making relative maturity differences indistinguishable."

Meinsma and Beyers both appreciated the support they got from the growers and look forward to building a long-term database in the coming years. "We had more volunteers than test plots," Meinsma says. "The Missouri growers want what F.I.R.S.T. has to offer – data from local soil subject to local conditions, not a company plot."

Looking Ahead to 2012

Bruce is already excited about the 2012 season. "F.I.R.S.T. will have its first soybean testing expansion since 2008," he says. It will add two testing regions in Missouri that roughly follow the I-70 corridor north to the Iowa border. It will also carve a new testing region, Iowa Northwest, from the existing Iowa North and Iowa North Central regions. "Northwest Iowa has a unique environment requiring specially adapted varieties for high yields," Rozenboom says, "and our testing should reflect that."

Since 2005, F.I.R.S.T. has cooperated with the United Soybean Board to provide soybean grain quality results, such as oil and protein content, of varieties tested. The goal of this partnership is to develop a broad soybean quality database for growers. "We hope to include more varieties over a wider geography in the near future," Bruce says. "The growers have been asking for more data for some time, and we hope to deliver.

"We hope to include more varieties over a wider geography in the near future."

— Joe Bruce, F.I.R.S.T. General Manger

"The corn grain regions will likely stay the same," Bruce says, adding that F.I.R.S.T.'s focus will continue to be on accumulating enough data to observe short-term and long-term trends. "We've considered expanding our corn grain testing regions in Wisconsin, but we have not determined if it will be done in 2012."

Bruce's positive assessment of agriculture in F.I.R.S.T. regions underlies his excitement for 2012. "The general trend is toward larger and more consistent yields" because of the continual advances made by seed companies, he says. "We still have yield peaks and valleys, but the valleys aren't as deep and the peaks are higher." That means plenty of work for F.I.R.S.T. and better results for growers – both of which are something to look forward to, Bruce says.

SOYBEAN

F.I.R.S.T.	Average Yield by Year			
Region	2011	2010	2009	2008
IANC	57	63	53	48
IANO	62	61	45	64
IASC	64	55	62	58
IASO	67	72	67	67
ILNC	61	62	57	55
ILNO	70	66	43	65
ILSC	45	57	60	52
ILSO	50	50	52	50
INCE	77	74	64	60
INNO	73	70	59	51
INSO				52
MIDA	51	37	56	36
MNCE	49	61	46	46
MNSC	46	61	50	49
MNSO	50	58	56	49
NCSL	75	66	57	52
OHNW	55	41	47	33
SDEC	49	57	57	39
SDNE	40	45	42	40
SDSE	43	49	58	41
WISO	66	72	57	58
TOTAL	57	60	54	52

Includes all available results except rejected data.

Soybean Technologies Tested

	(% of entries)			
	2011	2010	2009	2008
Seed Treatment Use				
Treated	96.5	93.7	87.8	57.6
Untreated	3.5	6.3	12.2	42.4
Traits Tested				
RR2Y	89.8	72.8	46.1	
RR2/STS	0.1	0.5	0.0	
RR	9.8	21.4	47.9	100*
RR/STS	0.3	0.7	2.3	
RR Lo Lin	0.0	0.0	0.2	
LL	–	3.4	3.5	
Conventional	–	1.2	0.0	

— items not available or not tested
* specific traits not tracked

PONCHO®/VOTiVO®
CORN AND SOYBEAN Q&A

WHAT IS PONCHO/VOTiVO SEED TREATMENT?

Poncho®/VOTiVO® is a seed-applied product that combines proven early-season insect control with biological protection from a broad range of nematodes in corn, soybeans, and cotton.

I'VE USED PONCHO ON MY CORN – HOW DOES IT PERFORM ON SOYBEANS?

Poncho/VOTiVO brings to soybeans the trusted and reliable insect control of Poncho. The formulation delivers the rate of Poncho required to control many important early-season insect pests, such as aphids, bean leaf beetles, grape colaspis, seed corn maggots, wireworms, and others. Poncho is now available for soybeans in combination with VOTiVO.

HOW DOES PONCHO/VOTiVO PROTECT PLANTS AGAINST NEMATODES?

Millions of spores of the bacteria in Poncho/VOTiVO are applied directly to every seed. Once the seed is planted and the environment is favorable for seed germination, the bacteria also germinate and begin to grow and multiply exponentially. The bacteria continue to grow with the plant to protect roots from nematode damage during the critical stage of plant establishment.

These bacteria compete with nematodes for space and food resources by forming a protective barrier around the young root in the rhizosphere (root zone) of the soil. The bacteria use root exudates, a food source for nematodes that also attracts the pest to plant roots. Fewer nematodes therefore reach the root surface, and some even die from lack of nutrients. Poncho/VOTiVO does not directly kill nematodes, but it renders many of them ineffective.

ARE NEMATODES A PROBLEM IN CORN?

Nematodes can cause 30 percent crop losses in corn without exhibiting any above-ground symptoms. There are several species of plant-pathogenic nematodes that can be found in corn, including needle, root-lesion, lance, dagger, stubby root, sting, spiral, root-knot, and stunt. Depending on type and severity of infestation, nematodes can cause stunting, chlorosis, root decay, and other damage.

I PLANT SOYBEAN CYST NEMATODE-RESISTANT SOYBEAN VARIETIES. DOESN'T THAT OFFER ADEQUATE NEMATODE PROTECTION?

Resistance has been bred into many soybean varieties, but no SCN-resistant variety offers total protection against this pest, which causes an estimated $1 billion in crop losses annually. Some lines of SCN-resistant varieties have shown a slow decline in effectiveness due to SCN population shifts among its 16 distinct races. Depending on geographic location, soybean growers may also have infestations of root-knot and/or reniform nematodes.

DOES PONCHO/VOTiVO PROVIDE ANY DISEASE PROTECTION?

Poncho/VOTiVO decreases nematode and insect damage to roots. Nematodes feed by piercing root tissue with their sharp mouth parts called stylets. The ensuing punctures serve as points of entry for several significant plant pathogens that cause seedling diseases. Soil insect feeding also damages young root tissue causing openings that other soilborne pests use as a means to establish infections.

WHAT YIELD BENEFITS DOES PONCHO/VOTiVO PROVIDE?

In a three-year span and on 400+ corn field trials, Poncho/VOTiVO delivered an average of 6 to 8 bu/A over the 250 rate of Poncho. Even higher yields were seen in areas that have economically significant nematode populations.

In more than 100 head-to-head soybean trials conducted over the past year, Poncho/VOTiVO produced a consistent average of 1 to 1.5 bu/A more than the current Bayer CropScience premium seed treatment, Trilex® 6000 Soybean System,** which in turn averages 4 to 6 bu/A more when tested against untreated checks in stressful environments.

BEYOND YIELD, WHAT ARE THE BENEFITS OF USING PONCHO/VOTiVO?

Poncho/VOTiVO increases root development resulting in healthier and more vigorous plants. It has been shown to increase stands when compared to the untreated seed. A larger root system often results in enhanced water and nutrient uptake, resulting in increased yields.

IS IT EFFECTIVE TO COMBINE A TRADITIONAL CHEMICAL WITH A BIOLOGICAL COMPONENT?

Combining a chemical and a biological component leads to the pairing of different modes of action for different types of pests into a simple-to-apply single formulation. It is a challenging task to pair a traditional seed treatment with a biological product, but Bayer CropScience has crafted a formulation that is stable in the container and on the seed from application time through planting.

IS PONCHO/VOTiVO SAFE FOR THE SEED, INCLUDING CARRYOVER CORN SEED?

The germination of seed treated with Poncho/VOTiVO has been evaluated in the field and in the laboratory using industry-standard germination tests. These studies have shown Poncho/VOTiVO has no negative impact on germination speed or counts. Storability tests have shown no concerns when carrying over seed treated

**Trilex 6000 Soybean System consists of Trilex 2000, Gaucho® 600 Flowable, Yield Shield® Concentrate Biological Fungicide, Precise™ Soybean, and Pro-Ized® red colorant.

the previous year with Poncho®/VOTiVO.® This product is undergoing additional germination evaluation by an independent seed lab as well as a university seed testing department.

IS ANY SPECIAL EQUIPMENT NEEDED TO APPLY PONCHO®/VOTiVO® TO THE SEED?

No special equipment is needed to apply Poncho/VOTiVO to the seed. It can be applied using the same commercial seed-treatment equipment used to apply other leading seed treatments offered by Bayer CropScience or with standard soybean seed treatment equipment that has been certified by your Bayer CropScience representative. It is not for use in hopper box, planter box, slurry box, or other on-farm applications.

BECAUSE PONCHO/VOTiVO CONTAINS A LIVING MICROORGANISM, ARE THERE ANY SPECIAL REQUIREMENTS FOR STORING THE PRODUCT OR TREATED SEED?

For best results, Poncho/VOTiVO must be stored between 32ºF and 86ºF. Ideally long-term product storage should have temperature-controlled conditions; areas typically used for long-term seed storage may also provide favorable conditions for product storage. Transportation through hot conditions will not affect the viability of Poncho/VOTiVO unless at higher temperatures for continuous periods of time. Once the product is on the seed, store treated seed at a standard temperature and humidity to assure seed viability.

DOES THE BACTERIA IN PONCHO/VOTiVO CARRY OVER IN THE SOIL FROM YEAR TO YEAR?

While the bacteria is able to live and grow in the soil, it is not able to survive on dead plant tissue for very long. Therefore, an acre of treated seed will not result in a sustained population of bacteria from one season to the next.

WILL PONCHO/VOTiVO BE EFFECTIVE IN ALL SOIL TYPES AND IN ENVIRONMENTS WITH VARIOUS TEMPERATURES AND MOISTURE?

Poncho/VOTiVO has been shown to provide benefits on multiple seed types, including soybean, corn, and cotton. Yield benefits have been seen across a wide range of environments that includes all different types of soil. Moisture is needed to induce the spore of Poncho/VOTiVO to germinate. If there is enough moisture for a corn or soybean seed to germinate and grow, then there is adequate moisture for the bacteria to begin to multiply. The bacteria of Poncho/VOTiVO can grow across a wide temperature range.

HOW LONG DOES THE PROTECTION LAST?

Poncho/VOTiVO provides protection through the critical time of plant development that includes seed germination, seedling emergence, and the establishment of the plant's production potential. Research shows the VOTiVO bacteria on the roots and in the rhizosphere 60+ days following seed germination. Unlike traditional nematicides, which begin to break down immediately, Poncho/VOTiVO keeps deterring nematodes from attacking the plant's root system through the first two generations of nematodes.

IS PONCHO/VOTiVO COMPATIBLE WITH SEED-APPLIED INOCULANTS?

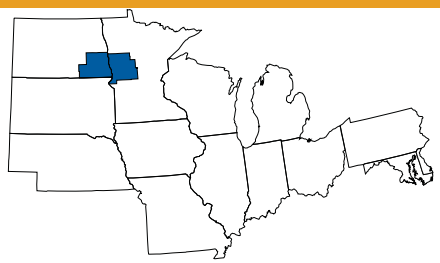
Yes. Poncho/VOTiVO has been tested by Bayer CropScience and was found to have compatibility similar to other commercial soybean seed treatments. Testing is underway by several manufacturers of inoculants (see companies' Web sites for additional information).

IMPORTANT: This information is not intended to provide adequate information for use of these products. Read the label before using these products. Observe all label directions and precautions while using these products.

CRP0311PONVOT0012-R00

Bayer CropScience

Mark Tollefson, FIRST Manager



Corn Stats:
Yield Range: 97.9-167 bu. per acre
Yield Average: 146.2 bu. per acre
Top $ Per Acre: $1,002.00

Corn Field Notes: Red River Valley

Colfax—The spring was wet, and the cool, wet weather slowed growth shortly after emergence; this plot lacked vigor early. We dried out in August and September and the plot made maturity. Excessive moisture early and the lack of rain at the end of the year made yields suffer. There was some green snap in this plot and the lodging score reflects that.

Elbow Lake—This site had some green snap and the lodging score reflects the amount of it. We also had some goose-necked corn which made harvest a challenge at times. The varieties that stood the best at harvest typically yielded better. The dry fall made for good grain moistures at harvest. A Sept. 15 frost occurred. Yields averaged in the low-150s bu. per acre.

Foxhome—We had a wet start after planting as saturated soils affected plant vigor in some sections. Conditions dried out in August and September, and a Sept. 15 frost finished the growing season. The dry weather in the fall has made for extremely good harvest conditions in the area and this plot was no exception. Average yields were 172.4 bu. per acre from the early-season test and 180.7 bu. per acre from the full-season test.

Gwinner—The spring was wet, and after planting, even more cool and wet weather hurt the plot, as saturated soils lingered. We dried out in the late summer and the crop was able to mature before a Sept. 15 frost. Farmers reported a lot of problems with green snap in the area and we saw some of that in the test plot also. One repetition in each test was lost to variable yields from ponding.

Hawley—This site drained well, which really helped after planting, as soils were saturated in the spring and early summer. This area dried out in the fall and harvest conditions were excellent. We had a good planting date, which was fortunate, because we had a frost on Sept. 15 that ended the growing season. This was a good plot despite the weather challenges.

Kindred—We had spring floods and wet, cool weather in the area to start the season. After planting we had good emergence but the prolonged excessive moisture took its toll when nitrogen was leached form the soils. This site never fully recovered, having damage and the loss of one repetition from each test. Farmers had a tough year and yields are poor in the area.

Photo courtesy of Corey Rozenboom

A Gleaner K2 harvests corn plots, 2 rows per pass, stopping at 45 feet intervals to measure yield and grain moisture.

Site Information						2011 Rainfall (inches)					
Red River Valley						Monthly				Vs. 30-year avg.	
Site	Soil Texture	Tillage	Prev. Crop	Units N	Planted	May	June	July	August	July	August
Colfax	silt loam	conventional	sugarbeet	120	5/19	3.25	4.76	4.55	2.95	1.59	0.54
Elbow Lake	clay loam	conventional	soybean	140	5/16	2.82	2.47	6.73	4.58	2.78	0.97
Foxhome	loam	conventional	sugarbeet	150	5/16	2.66	2.91	6.81	4.70	2.86	1.09
Gwinner	sandy clay	conventional	soybean	125	5/17	3.65	4.26	4.78	1.61	1.40	-1.01
Hawley	sandy loam	conventional	soybean	150	5/17	2.99	4.37	3.63	2.32	0.67	-0.09
Kindred	silty clay	conventional	soybean	100	5/19	4.75	4.69	3.08	2.81	0.28	0.37

F.I.R.S.T. Red River Valley Corn Results

EARLY SEASON TEST 85 - 90 Day CRM — **Top 30 of 48 tested**

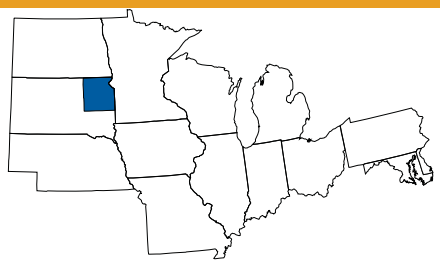
Company/ Brand	Seed Brand	Technology	Insecticide Seed Treatment	Relative Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Gross Income Rank	Colfax	Elbow Lake	Foxhome‡	Gwinner‡	Hawley	Kindred‡
Dyna-Gro	52V01	VT3	P250	87	**167.0**	12.8	1	1,002.00	1	**150.5**	163.3	179.3	**162.6**	**190.5**	156.0
Kruger	K-7386	VT3P	P500,V	86	**165.3**	12.9	1	991.80	2	139.8	163.8	193.3	146.5	**180.4**	**168.0**
Mustang	2307	VT3	P500,V	86	**165.1**	12.9	1	990.60	3	**148.3**	171.9	199.5	150.5	**180.1**	140.3
Channel	190-21VT3P	VT3P	P500,V	90	**164.6**	12.9	2	987.60	4	129.6	**175.1**	190.3	**156.6**	174.1	161.8
Producers	4972RR	RR2	P500,V	89	**162.3**	12.7	2	973.80	5	143.9	**180.5**	183.1	**160.2**	174.4	131.6
Kruger	K-4189	VT2P	P500,V	89	**161.8**	12.9	5	970.80	6	**150.0**	151.9	187.2	144.9	**187.6**	149.0
Renk	RK334RR	RR2	P250	90	**161.6**	12.7	2	969.60	7	139.2	168.7	190.7	139.3	173.4	158.0
Dyna-Gro	51V57	VT3	P250	85	158.4	12.5	1	950.40	8	117.3	159.9	181.9	144.1	176.4	**170.9**
Dairyland	ST-7985	GT/CB/LL	C250	86	158.4	13.1	4	950.40	9	144.9	**173.9**	193.9	138.3	161.0	138.2
Rea	3B330	VT2P	P250,V	90	157.2	13.1	7	943.20	10	110.2	**184.0**	192.7	150.1	**179.5**	126.8
Wensman	W 8089VT2PRO	VT2P	P250	86	156.7	12.4	2	940.20	11	132.0	161.5	181.0	147.5	171.8	146.2
NuTech	5N-186*	3000GT	C250	86	156.0	12.7	4	936.00	12	130.9	155.7	168.6	140.2	169.3	**171.3**
Rea	3B266	VT2P	P250	89	155.6	12.6	3	933.60	14	141.0	150.6	193.9	117.0	**181.3**	149.5
Seeds 2000	2852GTCBLL	GT/CB/LL	C250	85	155.4	13.3	3	932.40	15	125.3	171.8	175.9	140.9	167.2	151.0
Proseed	1086-3000GT*	3000GT	C250	86	153.7	12.8	3	922.20	16	139.3	164.1	161.3	150.4	166.3	141.0
Channel	190-95VT3P	VT3P	P500,V	90	152.4	13.0	2	914.40	17	131.6	162.2	184.4	120.4	173.8	141.9
Gold Country	89-09	VT3P	P250	89	152.2	12.4	2	913.20	18	139.5	147.8	**191.8**	133.4	**187.7**	113.2
Rea	2V550	VT3P	P250	85	150.4	12.7	2	902.40	19	129.3	161.6	165.9	**157.7**	173.1	114.8
Kruger	K4-9489	STX	P500,V	89	150.2	14.4	5	901.20	20	143.8	134.5	171.0	134.0	170.3	147.4
Gold Country	87-27	VT2P	P250	87	148.9	12.7	3	893.40	21	134.7	143.7	183.7	136.3	168.0	126.9
Wensman	W 8085VT2PRO	VT2P	P250	84	147.8	12.5	2	886.80	22	134.2	133.9	177.1	132.4	165.0	144.0
Mustang	3026	GT/CB/LL	P500,V	90	147.3	12.8	7	883.80	23	97.6	162.3	166.0	137.7	159.6	160.8
Seeds 2000	2903GTCBLL	GT/CB/LL	C250	90	146.1	12.7	4	876.60	24	101.0	168.8	176.1	127.4	163.5	139.5
AgVenture/Scherr	2708	3000GT	P250	88	145.8	13.7	3	874.80	25	133.5	160.6	175.2	114.9	160.6	130.0
Proseed	1189GT*	GT	C250	89	144.5	13.4	10	867.00	26	126.1	170.7	154.7	121.3	167.7	126.2
Producers	5004VT3	VT3	P500,V	90	144.4	13.6	6	866.40	27	126.5	141.1	**190.2**	118.4	143.0	147.4
Hyland	8234*	STX	P250	86	143.0	12.7	2	858.00	28	130.3	135.3	153.6	107.6	167.0	**164.0**
Gold Country	89-43	STX	P250	89	142.2	14.5	4	853.20	29	122.0	151.7	169.5	137.4	161.2	111.5
Channel	187-74VT3P	VT3P	P500,V	87	142.1	12.8	2	852.60	30	140.6	138.8	159.3	141.4	151.2	121.5
G2 Genetics	5X-9101^	HXT,RR2	P1250,V	90	141.5	13.1	3	849.00	31	131.3	156.0	169.3	113.1	157.0	122.3
Rea	3V376 CK	VT3P	P250	89	155.9	12.6	3	935.40	13	141.3	150.2	**195.6**	138.7	**181.4**	128.3
Test Average =					**146.0**	**12.9**	**5**	**876.10**		**122.8**	**150.6**	**172.4**	**128.8**	**162.2**	**140.8**
LSD (0.10) =					13.9	0.5	7			23.4	22.2	14.2	26.3	17.0	22.3

FULL SEASON TEST 91 - 94 Day CRM — **Top 30 of 45 tested**

Rea	4B285	VT2P	P250	93	**165.2**	12.8	2	991.20	1	122.6	153.4	192.6	**182.7**	**190.3**	149.5
Hyland	8323	STX	P250	92	**161.7**	15.0	2	970.20	2	123.1	**178.3**	**195.7**	154.5	163.8	**155.0**
Stine	9206RR*	RR2	C250	91	**159.8**	12.7	1	958.80	3	131.2	159.6	186.3	161.5	162.1	**157.8**
Dyna-Gro	D35RR40	RR2	P250	95	156.6	12.7	4	939.60	4	125.2	145.9	**206.6**	154.6	174.6	132.7
Seeds 2000	9202VT2P	VT2P	P250	92	156.3	13.2	2	937.80	5	130.7	147.9	181.9	163.4	**178.6**	135.2
Kruger	K-4292	VT2P	P500,V	92	155.7	13.0	2	934.20	6	110.1	162.1	171.9	**175.2**	171.8	143.3
Channel	194-27VT2P	VT2P	P500,V	94	155.5	13.2	2	933.00	7	135.7	148.6	180.8	158.7	158.0	151.0
Wensman	W 7140VT3PRO	VT3P	P250	93	155.4	13.6	1	932.40	8	122.5	156.4	190.1	162.2	171.5	129.5
Mustang	3347	VT3	P500,V	92	154.9	13.8	2	929.40	9	136.5	159.7	187.7	163.1	157.3	125.2
Stine	9311VT3Pro*	VT3P	C250	93	154.5	13.8	3	927.00	10	138.2	154.6	188.0	134.5	158.1	153.8
Rea	3T544	VT3	P250	92	153.4	14.5	1	920.40	11	135.9	160.0	170.5	158.1	165.5	130.4
Gold Country	94-29	VT3	P250	94	152.7	13.5	1	916.20	12	119.1	161.5	178.3	167.5	159.8	129.7
Proseed	1193VT3Pro*	VT3P	C250	93	151.3	13.6	1	907.80	13	120.4	151.5	**195.9**	153.4	169.6	116.7
Proseed	1191VT3Pro*	VT3P	C250	91	151.1	13.0	3	906.60	14	137.2	146.2	185.1	145.7	160.2	131.9
Channel	193-46VT3	VT3	P500,V	93	151.0	13.8	2	906.00	15	117.3	152.5	189.5	157.3	160.8	128.8
Gold Country	93-39	VT3P	P250	93	150.9	12.7	3	905.40	16	119.1	144.5	179.0	142.8	156.4	**163.7**
Gold Country	93-07	VT3P	P250	93	150.3	12.8	7	901.80	17	122.7	153.4	**201.7**	118.1	159.8	145.8
Renk	RK530VT3P	VT3P	P250	94	149.6	13.4	3	897.60	19	123.0	158.4	186.2	142.4	164.2	123.4
Producers	5408STX	STX	P500,V	94	149.2	14.4	1	895.20	20	105.6	150.4	157.5	167.2	169.3	145.1
Producers	5223VT2Pro	VT2P	P500,V	92	148.7	13.3	3	892.20	21	130.6	152.9	177.5	144.2	142.6	144.6
Dyna-Gro	D32VP29	VT3P	P250	92	147.8	13.0	2	886.80	22	**142.1**	140.8	185.7	151.3	154.6	112.0
Kruger	K-7495	VT3P	P500,V	95	147.1	13.2	5	882.60	23	121.4	135.5	**202.7**	133.2	153.5	136.1
Kruger	K-7593	VT3P	P500,V	93	145.7	12.6	4	874.20	24	127.1	117.3	189.5	129.9	158.6	151.6
Stine	9207GTCBLL*	GT/CB/LL	C250	91	144.9	12.5	4	869.40	25	103.4	144.1	183.4	152.4	163.7	122.5
Rea	4V588	VT3P	P250	94	144.5	12.6	6	867.00	26	131.9	104.3	**200.8**	127.7	**178.3**	123.7
Renk	RK434VT3P	VT3P	P250	92	144.0	13.7	2	864.00	27	**145.7**	158.2	174.1	146.8	136.0	103.2
Dairyland	ST-9992	VT3	C250	92	144.0	14.1	2	864.00	28	124.2	143.9	177.6	129.7	170.1	118.3
G2 Genetics	5H-492^	HX,RR2	P1250,V	92	143.5	13.0	4	861.00	29	117.8	141.7	177.8	149.1	147.0	127.8
Wensman	W 8120VT2PRO	VT2P	P250	92	143.4	13.4	3	860.40	30	139.3	139.4	193.0	120.3	162.1	106.1
Proseed	1091-3000GT*	3000GT	C250	91	142.7	12.5	5	856.20	31	120.4	151.9	179.6	152.7	150.9	100.8
Rea	3V376 CK	VT3P	P250	89	149.6	12.3	1	897.60	18	118.7	156.4	**202.8**	155.2	150.3	113.9
Test Average =					**146.4**	**13.2**	**4**	**878.50**		**123.5**	**144.8**	**180.7**	**142.4**	**156.8**	**130.3**
LSD (0.10) =					12.4	0.5	4			18.4	20.1	14.9	25.2	19.7	23.6

‡ = 2 replications

Mark Tollefson, FIRST Manager



Corn Stats:
Yield Range: 166.6-199.5 bu. per acre
Yield Average: 183.7 bu. per acre
Top $ Per Acre: $1,197.00

Corn Field Notes: South Dakota North East

Arlington—This site was planted in a timely manner, which really helped produce some nice yields. This was the earliest test site planted in the region with a planting date of May 10.

Tim Bjorklund, F.I.R.S.T. farmer member, said his better corn was all planted close to when this plot was planted. The plot was standing well and had very little lodging. Nice fall weather and dry corn made for a good harvest. Average yields were 176.7 bu. per acre from the early-season hybrids and 183.3 bu. per acre from the full-season hybrids.

Bath—This plot was very productive this year. The corn was some of the tallest I've seen all year with only minor green snap and lodging present. Scott Sperry, Bath's F.I.R.S.T. farmer member, reported yields from 175 to 190 bu. per acre in the area. Dry weather in August was one of the major stressors. A dry fall has made for an early harvest, as corn moistures are low in this area.

Cavour—We had a timely start despite the wet spring. This plot was planted on May 11. There was plenty of moisture through June and the plot looked good but needed some heat to help move things along. July turned hot, and we dried out into August and September.

We had good results, and the harvest weather has been excellent. Yields averaged 180.9 bu. per acre in the early-season test and 181.5 bu. per acre in the full-season test.

Clear Lake—In spite of a wet spring, we had a good planting date of May 18. The plot looked good all year but got too dry in August, and yields were hurt from the lack of rain at the end of the growing season.

The dry weather continued into the fall and contributed to good harvest conditions and grain moistures. A Sept. 15 frost occurred.

Howard—This site drains well, which allowed timely planting. This test was planted on May 11. Much of spring and early summer were wet and cool, slowing growth. July and August turned dry and hot, which helped the corn mature.

This site caught rains in August, which helped yields, whereas rainfall was lacking in other areas. The crop stood well and was dry at harvest.

Webster—This site was planted on May 18. Just over two months later, 80-mph winds roared through Webster on July 26, which caused green snap that was most prevalent in the early-season test.

The last significant rain event was July 26, as August and September remained dry. We had good yields despite the dry finish to the season. Average yields were 167.3 bu. per acre in the early-season test and 182.2 bu. per acre from the full-season test. Fred Zenk, Webster's F.I.R.S.T. farmer member, was pleased with the yield.

Site Information						2011 Rainfall (inches)					
South Dakota North East						Monthly				Vs. 30-year avg.	
Site	Soil Texture	Tillage	Prev. Crop	Units N	Planted	May	June	July	August	July	August
Arlington	silty clay loam	no-till	soybean	140	5/10	5.36	3.03	3.26	1.41	-0.79	-2.39
Bath	silt loam	strip-till	soybean	140	5/18	2.77	3.30	4.48	0.26	1.72	-2.22
Cavour	loam	minimum	soybean	150	5/11	4.38	4.88	3.80	2.31	1.11	-0.03
Clear Lake	silty clay loam	conventional	soybean	150	5/18	5.56	4.13	6.65	1.40	2.60	-2.40
Howard	loam	no-till	soybean	130	5/11	4.01	3.63	2.86	1.98	0.28	-0.74
Webster	silty clay	conventional	soybean	125	5/18	3.20	2.45	4.31	0.81	0.86	-2.25

F.I.R.S.T. South Dakota North East Corn Results

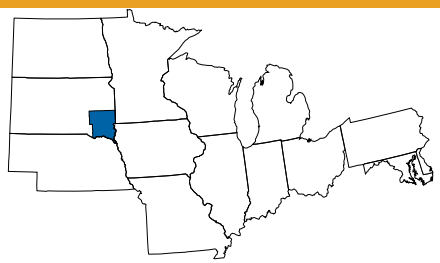
EARLY SEASON TEST 91 - 96 Day CRM — **Top 30 of 53 tested**

Company/ Brand	Seed Brand	Technology	Insecticide Seed Treatment	Relative Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Gross Income Rank	Arlington	Bath	Cavour	Clear Lake	Howard	Webster
Kruger	K-7194	VT3P	P500,V	94	**199.5**	14.1	1	1,197.00	1	189.0	199.8	196.2	**213.6**	206.6	**191.9**
Gold Country	93-07	VT3P	P250	93	**198.6**	13.8	2	1,191.60	2	186.7	**224.1**	191.0	202.8	**212.5**	174.7
Seeds 2000	9503VT3P	VT3P	P250	95	**195.6**	14.0	1	1,173.60	3	173.1	**226.5**	191.8	199.0	197.7	185.3
Kruger	K-4292	VT2P	P500,V	92	**195.4**	14.0	2	1,172.40	4	181.1	204.2	197.0	**214.2**	195.2	180.6
Gold Country	96-20	VT3P	P250	96	194.7	14.1	1	1,168.20	5	**195.1**	**222.5**	192.2	181.4	191.1	186.1
Kruger	K-7495	VT3P	P500,V	95	193.6	14.2	1	1,161.60	6	170.3	197.2	**198.7**	195.2	201.3	**198.9**
Renk	RK585VT3P	VT3P	P250	95	193.1	14.2	1	1,158.60	8	186.5	219.9	188.1	193.9	198.9	171.2
Dekalb	DKC42-72 GC	VT3	P250	92	192.9	13.9	2	1,157.40	9	179.3	208.2	182.4	203.5	202.4	181.5
Rea	4B285	VT2P	P250	93	192.6	14.1	1	1,155.60	10	186.9	197.7	184.5	203.1	201.4	182.1
Dekalb	DKC43-27 GC	VT3	P250	93	191.4	13.8	2	1,148.40	11	175.5	194.8	184.7	199.9	208.8	184.5
Wensman	W 7268VT3	VT3	P250	96	191.3	14.6	1	1,147.80	12	184.8	207.4	187.8	180.9	188.4	**198.4**
Producers	5223VT2Pro	VT2P	P500,V	92	190.8	13.5	1	1,144.80	13	190.7	204.6	187.9	191.2	180.8	**189.8**
Dyna-Gro	D36SS39	STX	P250	96	190.5	14.8	1	1,143.00	14	174.8	192.0	196.8	185.5	209.0	185.0
Rea	4V588	VT3P	P250	94	190.5	14.0	2	1,143.00	15	187.7	216.9	178.3	201.3	192.9	165.9
Gold Country	95-15	STX	P500,V	95	190.2	14.1	1	1,141.20	16	168.3	208.9	182.3	186.6	**219.6**	175.2
Stine	9207GTCBLL*	GT/CB/LL	C250	91	189.9	13.6	3	1,139.40	17	176.4	212.7	186.0	198.3	183.0	183.1
Mustang	4212	VT3P	P500,V	95	189.0	14.0	1	1,134.00	18	182.6	201.2	182.0	195.9	203.0	169.4
Rea	4A609	STX	P250	95	188.9	14.3	1	1,133.40	19	176.3	199.1	**197.4**	187.1	202.3	170.9
Rea	4V653	VT3P	P250	96	188.3	14.3	1	1,129.80	20	178.2	218.6	174.1	195.2	171.9	**192.0**
Dyna-Gro	D35RR40	RR2	P250	95	187.1	13.8	3	1,122.60	21	**191.9**	217.8	171.4	187.7	196.2	157.3
King	4010GTCBLL GC	GT/CB/LL	None	91	186.8	13.6	3	1,120.80	22	180.5	209.3	173.8	196.1	186.2	175.1
Kruger	K-7593	VT3P	P500,V	93	186.6	13.8	3	1,119.60	23	185.5	216.8	186.6	200.3	185.6	145.0
AgVenture/Scherr	GL4342ABW	3000GT	C250	92	186.4	13.0	3	1,118.40	24	**200.4**	203.0	183.4	183.8	189.1	158.9
Gold Country	93-39	VT3P	P250	93	185.5	13.8	2	1,113.00	25	190.2	198.0	187.1	162.1	**210.7**	164.9
Seeds 2000	9202VT2P	VT2P	P250	92	185.1	13.5	1	1,110.60	26	185.8	192.9	187.4	192.9	171.7	180.0
Mustang	3347	VT3	P500,V	92	184.9	13.8	2	1,109.40	27	174.0	192.6	178.8	201.7	185.0	177.1
Stine	9311VT3Pro*	VT3P	C250	93	184.6	14.8	1	1,107.60	28	177.3	**224.3**	169.1	190.1	173.6	173.4
Great Lakes	4555G3VT3	VT3	P500,V	95	183.3	14.3	1	1,099.80	29	172.4	186.1	180.5	182.5	201.4	176.7
Mustang	4689	VT3	P500,V	95	183.2	14.4	2	1,099.20	30	181.8	197.0	195.9	182.8	182.4	159.4
Great Lakes	4689G3VT3	VT3	P500,V	96	182.7	14.7	1	1,096.20	31	171.7	182.4	182.9	175.4	**213.7**	170.0
Channel	197-32VT3P CK	VT3P	P500,V	97	193.4	14.8	3	1,160.40	7	185.3	218.0	**197.7**	185.4	**228.0**	145.8
Test Average =					**184.4**	**14.0**	**2**	**1,106.40**		**176.7**	**201.3**	**180.9**	**187.6**	**191.3**	**167.3**
LSD (0.10) =					10.6	0.4	1			14.7	19.9	16.2	16.0	18.3	20.8

FULL SEASON TEST 97 - 100 Day CRM — **Top 30 of 35 tested**

AgVenture/Scherr	5925	HXT,RR2	C250	100	**195.4**	16.1	16	1,161.70	1	**207.4**	**211.1**	172.5	187.8	191.8	**201.7**
Wensman	W 8294VT2PRO	VT2P	P250	99	**194.3**	15.5	1	1,160.90	2	**201.7**	178.7	195.0	**205.0**	198.6	186.9
Producers	6044VT3	VT3	P250	100	192.2	16.2	1	1,141.70	7	195.7	190.2	185.6	**196.6**	206.3	179.0
Wensman	W 7290VT3PRO	VT3P	P250	99	191.7	15.4	3	1,146.40	4	**202.2**	197.8	189.7	177.3	186.4	196.9
Renk	RK580VT3	VT3	P250	98	191.6	15.0	1	1,149.60	3	190.5	185.6	187.6	191.5	203.0	191.3
NuTech	5N-001*	3000GT	C250	100	191.3	15.7	2	1,141.10	8	**198.6**	197.5	**196.5**	170.7	198.9	185.8
Gold Country	101-77	VT3	P250	101	191.0	15.2	3	1,144.10	5	**200.2**	174.8	191.9	181.0	203.5	194.7
Wensman	W 7270VT3PRO	VT3P	P250	97	190.3	14.3	1	1,141.80	6	188.8	175.5	188.1	**192.6**	193.4	**203.5**
Kruger	K-6399VT3	VT3	P500,V	99	190.3	15.1	1	1,140.80	9	184.6	204.8	190.0	179.0	193.8	189.5
Wensman	W 7273VT3	VT3	P250	98	189.5	14.6	1	1,137.00	10	191.7	187.4	187.0	177.6	191.4	**201.9**
NK Brand	N39Z-3000GT GC	3000GT	C250	99	189.2	14.9	2	1,135.20	11	187.2	185.6	194.9	178.0	196.7	192.9
Dekalb	DKC50-66 GC	VT3	P250	100	186.9	15.1	2	1,120.50	12	171.4	185.3	**201.1**	172.4	200.1	191.2
Producers	5784VT3	VT3	P500,V	97	185.6	14.5	2	1,113.60	14	176.8	185.8	181.4	180.6	196.6	192.3
Pioneer	P9990XR GC	HXT,RR2	C250	99	185.6	15.9	1	1,105.20	16	183.4	**216.3**	179.3	176.3	184.2	173.9
Dekalb	DKC49-94 GC	STX	P500,V	99	185.5	14.7	1	1,113.00	15	183.9	194.3	189.1	175.7	192.4	177.6
Kruger	K4-9100	STX	P500,V	100	185.4	15.8	1	1,105.00	17	184.2	176.2	181.8	180.3	**216.0**	173.9
Seeds 2000	9902G3	3000GT	C250,AV	99	184.7	15.6	1	1,102.70	18	188.4	192.8	184.0	160.3	201.2	181.6
Stine	9417VT3*	VT3	C250	100	181.5	15.1	1	1,088.10	19	183.5	185.5	170.9	174.7	185.2	188.9
Pioneer	P9910AM1 GC	HXT,RR2	C250	99	181.3	15.1	1	1,086.90	20	172.8	167.8	185.5	159.0	201.9	**200.9**
Gold Country	98-90	STX	P250	98	181.3	16.3	1	1,076.00	24	180.7	170.1	176.6	186.1	191.8	182.3
G2 Genetics	5H-696^*	HX,RR2	C250	96	181.1	15.8	1	1,079.40	23	187.5	182.5	185.2	172.1	188.7	170.3
Gold Country	100-07	VT3	P250	100	180.5	14.4	1	1,083.00	21	170.7	189.8	170.6	177.3	192.6	182.0
NuTech	5N-197*	3000GT	C250	97	180.3	15.2	2	1,080.00	22	180.3	167.5	188.9	149.9	206.2	188.9
Dairyland	ST-9399	3000GT	C250	99	180.3	15.8	2	1,074.60	25	189.9	205.6	170.3	161.3	176.8	178.1
G2 Genetics	5H-0101^	HX,RR2	P1250,V	100	178.0	15.4	2	1,064.40	26	154.2	199.0	183.8	163.5	186.5	181.1
AgVenture/Scherr	RL5267HBW	HXT,RR2	P1250	97	177.8	16.0	2	1,057.90	27	178.3	181.9	181.5	166.0	182.1	177.0
G2 Genetics	5X-0001^	HXT,RR2	P1250,V	100	177.7	17.1	4	1,047.50	28	178.7	186.4	193.4	163.2	195.1	149.5
King	5808 3000GT GC	3000GT	C250	98	175.3	15.5	2	1,047.40	29	189.7	151.9	168.5	181.3	179.4	180.9
Kruger	K4-9599	STX	P500,V	99	175.3	16.9	1	1,035.10	31	179.2	185.4	171.2	171.1	175.2	169.4
Mustang	4454	3000GT	P500,V	98	173.4	15.6	2	1,035.20	30	171.6	160.4	165.6	169.6	192.7	180.5
Channel	197-32VT3P CK	VT3P	P500,V	97	185.9	14.9	2	1,115.40	13	**201.4**	194.7	190.3	181.1	198.3	149.7
Test Average =					**182.9**	**15.4**	**2**	**1,093.20**		**183.3**	**186.0**	**181.5**	**174.9**	**190.7**	**182.2**
LSD (0.10) =					10.2	0.7	5			12.8	22.3	14.8	17.7	17.7	18.3

Mark Tollefson, FIRST Manager



Corn Stats:
Yield Range: 140.5-190.3 bu. per acre
Yield Average: 166.3 bu. per acre
Top $ Per Acre: $1,136.10

Corn Field Notes: South Dakota South East

Beresford—The lodging score reflects the amount of green snap and stalk lodging present. Both problems have been common in surrounding fields this year. Despite a good start, hot and dry weather in August and September took its toll on yield potential. Most varieties had been stripped of their leaves at harvest.

Chancellor—This site looked great early, as the plot had good vigor through mid-July. A dry end to the growing season affected yield. A frost occurred on Sept. 15, killing the plants. Most lodging occurred in the fall as very dry weather in September made stalks brittle. Brock Hoogestraat, F.I.R.S.T. farmer member, had some green snap in the field around the plot but the test plot itself had little damage.

Colton—We started out well here with timely planting and plenty of spring moisture. We had dry conditions in fall that really brought corn moistures down and helped make a good harvest. The crop stood really well and lodging was not a big problem at harvest. A Sept. 15 frost occurred, killing the plants. This plot produced good results despite the unusual season.

Ethan—This area had wet conditions early in the year and Lewis Bainbridge, F.I.R.S.T. farmer member for Ethan, replanted three times in the field surrounding the plot. Planting was delayed because the no-till ground stayed saturated into June. Conditions dried out in July and August, when the lack of rainfall dramatically reduced yields. We had a good stand of corn but ears were small. Average yields here were 104.8 bu. per acre from the early-season test and 113.8 bu. per acre from the full-season test.

Flandreau—This was a nice stand at harvest. We did have some varieties that goose-necked but it was not a harvest issue. Wet and cool weather in the spring and then hot and dry weather in July and August affected the crops. September remained dry and the corn dried down well. We had a frost on Sept. 15 that killed the crop. Despite the challenging year, we had good yields.

Salem—We had a later-than-ideal planting date, as spring was very wet and cool. This site had good moisture early in the season but then it turned dry from mid-July through August, with virtually no rain in September. On Sept. 15 a big frost finished the crop. Grain moistures were good. A few ears had fallen off; however, it was not a big problem. This test had good yields.

Photo courtesy of Joe Bruce

Planting plots is a 2 person operation, one to operate the tractor, another to pour the next seed product into the planter meters.

Site Information						2011 Rainfall (inches)					
South Dakota South East						Monthly				Vs. 30-year avg.	
Site	Soil Texture	Tillage	Prev. Crop	Units N	Planted	May	June	July	August	July	August
Beresford	silty clay loam	conventional	soybean	150	5/7	5.57	4.71	1.27	2.02	-1.80	-1.64
Chancellor	silty clay loam	conventional	soybean	120	5/7	4.82	3.51	3.89	2.02	1.03	-0.91
Colton	silty clay loam	conventional	soybean	120	5/6	5.55	3.31	7.59	2.37	4.73	-0.56
Ethan	loam	no-till	soybean	110	6/5	6.54	3.99	2.33	1.94	-0.25	-0.78
Flandreau	clay loam	conventional	soybean	140	5/10	4.62	4.00	7.69	2.41	4.32	-0.84
Salem	loam	conventional	soybean	165	5/24	4.62	3.43	3.06	3.17	0.48	0.45

F.I.R.S.T. South Dakota South East Corn Results

EARLY SEASON TEST 99 - 104 Day CRM — **Top 30 of 48 tested**

Company/ Brand	Seed Brand	Technology	Insecticide Seed Treatment	Relative Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Gross Income Rank	Beresford	Chancellor	Colton	Ethan	Flandreau	Salem
Wensman	W 7320VT3PRO	VT3P	P250	101	**183.5**	13.9	2	1,101.00	1	**190.2**	151.5	**219.0**	**128.6**	200.1	211.3
Rea	5T577	VT3	P250	101	**177.1**	12.5	3	1,062.60	2	**181.9**	157.2	198.9	118.4	189.6	216.6
Producers	6044VT3	VT3	P250	100	174.1	13.6	5	1,044.60	3	161.8	**166.6**	195.9	99.7	**210.9**	209.5
Fielders Choice	NG6546	VT3	P250	100	173.9	12.6	2	1,043.40	4	163.1	156.0	206.5	**123.9**	191.6	202.2
NuTech	5N-001*	3000GT	C250	100	173.0	12.9	6	1,038.00	5	168.2	149.2	**209.8**	99.4	**216.5**	194.8
Gold Country	96-20	VT3P	P250	96	172.7	12.3	2	1,036.20	6	159.2	**164.7**	171.3	116.1	207.5	217.6
Gold Country	103-09	VT3	P250	103	172.5	13.9	4	1,035.00	7	**173.2**	142.3	198.2	105.8	203.7	211.9
Wensman	W 7290VT3PRO	VT3P	P250	99	172.2	12.9	7	1,033.20	8	137.0	**167.7**	180.0	111.5	**219.1**	217.6
Kruger	K-6201VT3	VT3	P500,V	101	171.9	13.9	4	1,031.40	9	168.4	161.3	200.8	103.7	**213.8**	183.2
Mustang	6460	3000GT	P250	104	171.5	15.3	4	1,026.40	11	138.0	145.7	196.3	**132.6**	197.3	**219.2**
Dekalb	DKC52-59 GC	VT3	P250	102	171.1	12.7	3	1,026.60	10	158.8	**164.5**	204.6	110.6	191.7	196.6
Gold Country	101-77	VT3	P250	101	170.1	13.0	2	1,020.60	12	**173.6**	149.4	182.3	118.1	201.3	196.1
G2 Genetics	5H-0101^	HX,RR2	P1250,V	100	170.0	13.1	3	1,020.00	13	120.7	147.5	**218.8**	**128.4**	195.9	208.5
Heine	741GT	GT	C250	106	169.7	15.0	3	1,018.20	14	**177.3**	146.9	206.5	95.1	192.5	200.1
Great Lakes	5157G3VT3	VT3	P500,V	101	168.3	13.6	5	1,009.80	15	128.8	138.8	203.0	109.6	**212.1**	217.2
Wensman	W 7360VT3	VT3	P250	103	167.9	13.4	6	1,007.40	16	156.8	**164.6**	183.3	108.8	188.2	205.6
Renk	RK580VT3	VT3	P250	98	167.6	12.4	4	1,005.60	17	134.9	150.8	200.9	107.2	193.9	217.7
Fielders Choice	NG6530	STX	P250	99	166.9	13.3	5	1,001.40	18	151.7	150.5	175.7	113.9	208.0	201.3
Wensman	W 7392GT3	3000GT	P250	104	166.2	15.4	2	993.90	19	155.3	138.4	191.3	112.0	206.5	193.7
Kruger	K4-9100	STX	P500,V	100	165.5	13.3	5	993.00	20	161.0	160.7	176.8	101.7	**211.7**	180.9
Renze	1219VT3	VT3	C250	103	165.1	13.9	2	990.60	21	148.8	143.3	197.8	104.5	190.5	205.4
G2 Genetics	5X-903^	HXT,RR2	P1250,V	103	164.4	13.5	5	986.40	22	120.5	162.1	198.1	104.2	207.5	194.2
Kruger	K4-9302	STX	P500,V	102	163.2	14.3	6	979.20	23	101.5	151.3	178.0	117.0	**211.7**	**219.4**
G2 Genetics	5H-501^*	HX,RR2	C250	101	162.9	13.6	4	977.40	24	123.3	157.5	195.2	106.1	191.5	203.6
Pioneer	P9910AM1 GC	HXT,RR2	C250	99	162.7	12.8	7	976.20	25	100.3	**164.2**	207.1	99.8	208.5	196.4
Heine	744-3000GT	3000GT	P250	104	162.6	15.2	2	974.00	26	155.4	135.4	175.6	111.8	193.4	204.1
Renk	RK698VT3	VT3	P250	102	162.3	13.7	3	973.80	27	138.6	137.6	201.4	106.7	189.4	199.8
Kruger	K4-9599	STX	P500,V	99	162.0	13.5	2	972.00	28	**171.0**	160.0	169.0	92.2	180.0	199.9
Stine	9417VT3*	VT3	C250	100	161.7	12.6	2	970.20	29	138.4	139.0	191.9	96.7	196.4	207.8
Renze	2222-3000GT*	3000GT	C250	104	161.3	15.0	3	967.80	30	141.3	131.9	189.0	103.8	199.0	202.8
Golden Harvest	H-7949 3000GT CK	3000GT	C250	103	154.6	14.1	4	927.60	40	161.6	125.1	174.0	86.2	177.2	203.4
Test Average =					**163.0**	**13.5**	**5**	**977.90**		**144.6**	**145.4**	**187.0**	**104.8**	**195.8**	**200.4**
LSD (0.10) =					14.1	0.8	6			24.0	18.8	22.2	18.0	13.2	17.8

FULL SEASON TEST 105 - 108 Day CRM — **Top 29 of 29 tested**

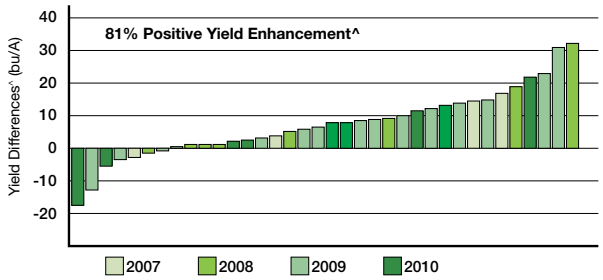
Heine	810VT3P	VT3P	P250	108	**190.3**	15.6	1	1,136.10	1	**194.1**	**202.3**	**210.3**	122.2	204.6	208.3
Renk	RK818VT3P	VT3P	P250	108	183.7	16.0	2	1,093.00	4	**183.5**	168.0	**210.2**	**124.8**	199.2	216.7
G2 Genetics	5H-905^	HX,RR2	C250	105	183.6	14.1	3	1,101.60	2	150.8	**189.3**	200.9	**134.5**	**208.9**	217.0
LG Seeds	LG2544VT3	VT3	P500,V	108	183.1	15.4	2	1,094.90	3	**193.2**	183.3	**206.9**	95.6	204.0	215.3
Producers	6944VT3	VT3	P500,V	108	180.2	16.4	2	1,068.60	6	**181.5**	165.8	196.4	109.0	192.7	**235.5**
Stine	9529VT3Pro*	VT3P	C250	106	178.8	15.3	2	1,070.10	5	**183.2**	156.3	201.9	121.5	201.7	208.3
G2 Genetics	5H-0601^	HX,RR2	P1250,V	106	178.6	15.6	4	1,066.20	7	155.6	156.3	**206.7**	122.4	**220.0**	210.3
Stine	9531VT3Pro*	VT3P	C250	107	177.5	16.3	3	1,053.50	9	164.1	174.7	196.0	122.1	199.7	208.1
Renk	RK741VT3P	VT3P	P250	108	177.4	15.5	3	1,060.00	8	166.5	162.1	**203.8**	117.6	185.5	**228.6**
Producers	6694VT3Pro	VT3P	P250	106	173.1	15.5	2	1,034.30	10	178.1	160.8	196.8	102.7	200.0	200.4
Wensman	W 7473VT3	VT3	P250	109	172.1	14.9	2	1,032.60	11	**191.4**	183.0	183.8	101.0	177.9	195.4
Kruger	K-6408VT3	VT3	P500,V	108	170.8	15.2	4	1,023.10	12	151.4	172.7	172.5	121.4	**209.5**	197.5
Great Lakes	5770VT3PRO	VT3P	P500,V	107	169.8	15.9	2	1,011.20	14	159.2	175.8	203.2	98.2	193.4	189.0
Mustang	6808	STX	P500,V	106	169.7	16.8	3	1,002.90	17	155.8	164.5	199.4	121.3	175.7	201.2
Great Lakes	5643VT3PRO	VT3P	P500,V	106	169.1	14.1	2	1,014.60	13	179.0	160.0	183.5	106.5	182.5	203.2
G2 Genetics	5H-0701^	HX,RR2	C250	106	168.5	15.0	3	1,011.00	15	139.6	172.1	195.8	114.1	195.3	193.8
Pioneer	35F48AM1 GC	HXT,RR2	C250	105	168.5	15.4	2	1,007.60	16	151.4	174.0	184.5	117.2	198.2	185.8
Heine	751STX	STX	P250	106	167.5	16.7	3	990.80	19	149.8	169.3	184.1	110.7	193.9	197.0
Kruger	K4-9607	STX	P500,V	107	165.9	15.8	2	988.80	20	145.2	160.0	195.8	109.1	185.2	200.3
Dekalb	DKC55-09 GC	STX	P250	105	165.8	14.9	3	994.80	18	155.1	165.3	157.0	**137.6**	183.7	196.1
Wensman	W 6443RR	RR2	P250	105	162.2	14.8	5	973.20	22	133.9	143.9	**205.0**	101.1	191.0	198.0
Kruger	K-7907	VT3P	P500,V	107	160.9	14.6	7	965.40	23	104.1	171.3	156.4	**136.1**	189.4	207.9
Mustang	6230	VT3	P500,V	105	160.9	15.2	6	963.80	24	176.8	132.8	198.8	103.6	154.0	199.6
G2 Genetics	5X-908^*	HXT,RR2	C250	108	160.4	18.1	3	937.50	27	130.8	151.0	191.4	106.2	184.1	198.6
Kruger	K4-9205	STX	P500,V	105	158.7	14.1	3	952.20	25	139.1	161.3	191.2	94.7	191.4	174.4
Gold Country	107-17	VT3P	P250	107	157.2	15.0	5	943.20	26	123.7	167.9	134.3	124.3	199.5	193.3
Dairyland	ST-9206SSX	STX	C250	106	156.6	15.8	4	933.30	28	161.0	148.1	163.7	111.4	176.7	178.7
Dairyland	ST-9308SSX	STX	C500,AV	108	140.5	15.6	12	838.80	29	106.7	143.4	99.5	109.8	191.4	192.2
Golden Harvest	H-7949 3000GT CK	3000GT	C250	103	163.6	14.9	4	981.60	21	**186.9**	146.9	179.0	96.5	166.7	205.6
Test Average =					**169.5**	**15.5**	**3**	**1,011.90**		**156.9**	**165.3**	**186.0**	**113.8**	**191.8**	**202.0**
LSD (0.10) =					15.2	1.0	5			22.5	18.7	17.7	11.0	12.9	17.5

PONCHO®

VOTiVO®

Corn – Yield Advantage Over Poncho 250*

2007–10 University Trials (36) with High Nematode Infestations



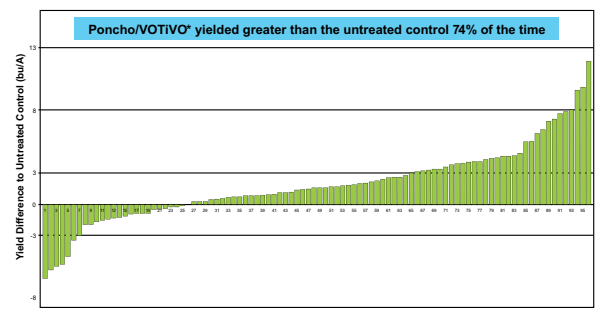
^Poncho®/VOTiVO® average yield is statistically different from Poncho 250 at 95% confidence interval level.
*Poncho 250 is the 0.25 mg ai/seed rate of Poncho 600.

AVAILABLE FOR CORN, COTTON, AND SOYBEANS.

SOYBEAN TRIAL DATA

2010 Yield Field Trials

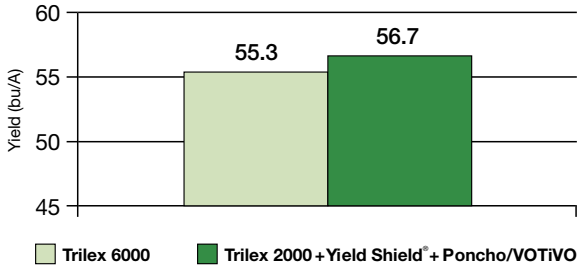
Benefit over Untreated Seed



*Includes Trilex 2000 + Yield Shield® Concentrate Biological Fungicide + Precise™ Soybean & Pro-Ized® red colorant.

Soybean – Poncho®/VOTiVO®* Benefit Over Trilex® 6000** Soybean System

2010 Yield Summary Locations: AR(3), IA(10), IL(8), IN(2) KY, LA, MN, MO(4), NC, NE(2)



*Includes Trilex 2000, Yield Shield Concentrate Biological Fungicide, Precise™ Soybean & Pro-Ized® red colorant
**Trilex 6000 Soybean System consists of the following: Trilex 2000, Gaucho® 600 Flowable, Yield Shield Concentrate Biological Fungicide, Precise Soybean, and Pro-Ized red colorant.

For more information, visit PonchoVOTiVO.us.

IMPORTANT: This information is not intended to provide adequate information for use of these products. Read the label before using these products. Observe all label directions and precautions while using these products.

Bayer CropScience

PLANT IT AND THE PROTECTION GROWS

Poncho®/VOTiVO® seed treatment combines the most trusted seed-applied insecticide in corn with the most revolutionary, complete nematode protection on the seed. The result is a powerful new seed treatment for your corn and soybean seed that protects early-season seedlings and roots from numerous insect and nematode pests.

Poncho/VOTiVO employs a new biological mode of action with a unique bacteria strain that lives and grows with young roots, creating a living barrier that prevents important nematode species from reaching the roots. Poncho/VOTiVO also provides control of many critical early-season insect pests. This dual protection results in improved plant vigor, which in turn results in a more uniform crop and consistently higher yields.

Poncho/VOTiVO brings immediate, consistent protection through the critical phases of vigorous plant growth. From seed germination to plant establishment, Poncho/VOTiVO secures a foundation for the best yields.

PONCHO/VOTiVO ADVANTAGES:

CORN

- Controls black cutworms, wireworms, and other important early-season insects common in corn.
- New mode of action protects against nematode damage from a wide range of species.
- Valuable seed is protected from the moment it is planted.
- Maximizes early-season plant stands, uniformity, and vigor for higher yields.

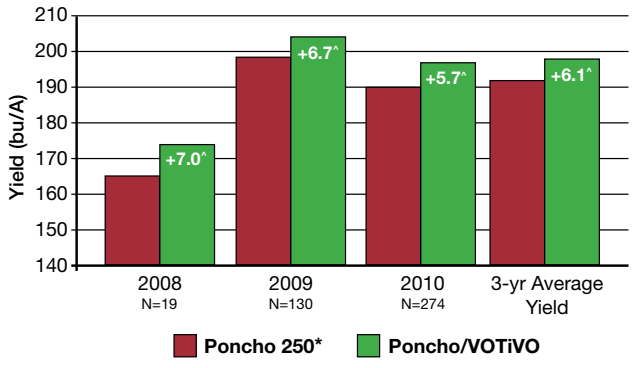
SOYBEANS

- Controls early-season aphids, overwintering bean leaf beetles, and other important early-season insects common in soybeans.
- New mode of action protects against nematode damage from soybean cyst nematode (SCN) and other significant types of nematodes.
- Complements existing SCN-resistant soybean varieties for even greater protection.
- Promotes higher yields through a healthier root system and a more vigorous and uniform crop.

CORN TRIAL DATA

Poncho®/VOTiVO® Corn Demo Yield Comparisons

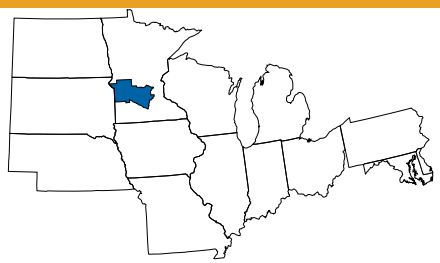
423 Trials, 2008–10, U.S.



^Poncho/VOTiVO average yield is statistically different from Poncho 250 at 95% confidence interval level.
*Poncho 250 is the 0.25 mg ai/seed rate of Poncho 600.

CRP0311PONVOT0010-R00

Mark Querna, FIRST Manager



Corn Stats:
Yield Range: 157.2-203.5 bu. per acre
Yield Average: 182.7 bu. per acre
Top $ Per Acre: $1,220.50

Corn Field Notes: Minnesota West Central

Clinton—This site had good planting conditions despite cool, wet weather prevailing from April through June. This site received over 20 inches of rain from May through mid-July, then only two 0.2-inch rains from mid-July to Oct. 10. Winds at 80 mph caused green snap, especially in early hybrids, causing yields to vary. Lodging of 20 percent in the early-season test reflect the severity of green snap. Yields averaged 163.3 bu. per acre in the early-season test and 169 bu. per acre in the full-season test.

Glencoe—Wet, cool weather prevailed from April to June. Temperatures rose, with dry weather from July through harvest. This combination of extremes caused great variability not only here but in all other fields farmed by Gary and Mark Krcil, F.I.R.S.T. farmer members for this location. Hybrids stood well despite a Sept. 15 frost. The field around this plot yielded 180 bu. per acre, while this test averaged 179.8 bu. per acre in the early-season test and 188.1 bu. per acre in the full-season test.

Granite Falls—Planting conditions were excellent, even though cool, wet weather prevailed through June. Late-June stand counts were perfect. High early-July winds caused green snap, reflected in lodging scores. This site was planted north to south, and F.I.R.S.T. farmer member Keith Beito's east-to-west fields had more green snap. A killing frost on Sept. 15 dried corn to 14 percent. Average yields were 187.1 bu. per acre in the early-season test and 186.5 bu. per acre in the full-season test.

Hector—Cool, wet spring weather continued through June. High July 1 winds caused green snap in some; however, the plot stood well, without goose-necking. Rainfall decreased after mid-July to almost nothing. Higher temperatures caused tall plants despite the lack of moisture. A killing frost occurred Sept. 15. Average yields were 174.1 bu. per acre in the early-season test and 176 bu. per acre in the full-season test.

Litchfield—Wet conditions delayed planting by a month. Temperatures were below normal through June and then rose. Rains continued through mid-August, leaching nitrogen out of the root zone. It finally dried in late August. This plot had a Sept. 15 frost while corn was at half milk line. Early-test soils were more saturated by rain and yielded an average of 180.6 bu. per acre. The full-season test averaged 198.1 bu. per acre.

Nicollet—We delayed planting due to a wet spring. Part of the full-season test had ponded water, which lowered stands. July heat and humidity yielded fast growth without causing leaves to roll from lack of moisture. Under 1 inch of rain fell in August and September. Frost on Sept. 15 killed 80 percent of plants. Winds in July caused green snap, and in August, stalk breakage.

Site Information						2011 Rainfall (inches)					
Minnesota West Central						Monthly				Vs. 30-year avg.	
Site	Soil Texture	Tillage	Prev. Crop	Units N	Planted	May	June	July	August	July	August
Clinton	silty clay loam	minimum	soybean	150	5/18	4.14	3.85	7.17	1.27	3.70	-1.61
Glencoe	loam	minimum	soybean	168	5/19	3.89	3.58	4.97	1.38	0.28	-3.70
Granite Falls	clay loam	minimum	soybean	157	5/17	6.30	3.49	4.75	1.56	1.14	-1.95
Hector	clay loam	conventional	sugarbeet	175	5/17	4.91	3.75	7.21	4.18	2.50	-0.91
Litchfield	silty clay loam	minimum	soybean	200	5/19	5.05	4.00	3.40	1.00	-1.64	-4.31
Nicollet	clay loam	minimum	soybean	155	5/16	4.37	8.00	3.48	1.42	3.37	1.31

F.I.R.S.T. Minnesota West Central Corn Results

EARLY SEASON TEST 93 - 98 Day CRM — **Top 30 of 63 tested**

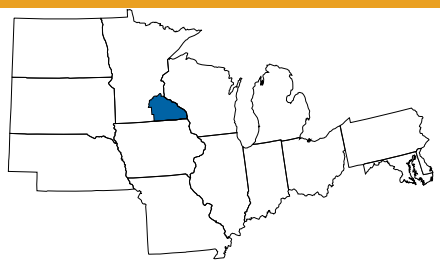
Company/ Brand	Seed Brand	Technology	Insecticide Seed Treatment	Relative Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Gross Income Rank	Clinton	Glencoe‡	Granite Falls	Hector	Litchfield	Nicollet‡
Channel	196-06VT3P	VT3P	P500,V	96	**203.5**	15.1	0	1,220.50	1	**228.1**	191.0	**217.5**	176.7	197.8	209.8
Wensman	W 7268VT3	VT3	P250	96	**199.0**	15.2	1	1,193.00	2	**227.2**	179.6	198.2	183.8	197.5	207.7
Producers	5784VT3	VT3	P500,V	97	196.1	15.1	0	1,176.10	3	**220.8**	192.1	193.8	176.7	189.0	204.2
LG Seeds	LG2468VT3	VT3	P500,V	97	195.8	15.0	0	1,174.80	4	**221.3**	175.6	199.1	189.4	182.9	206.5
Wensman	W 7143VT3	VT3	P250	93	191.6	15.1	1	1,149.10	5	**195.5**	195.4	183.0	174.3	**201.2**	200.1
G2 Genetics	5H-696^*	HX,RR2	C250	96	191.5	16.1	1	1,143.70	7	186.4	190.2	194.5	182.3	194.7	200.9
Anderson	617R	RR2	None	98	191.4	15.6	1	1,145.50	6	**204.1**	174.9	201.0	188.5	179.4	200.7
Gold Country	93-07	VT3P	P250	93	190.4	14.7	2	1,142.40	8	190.0	190.4	201.2	180.0	177.4	203.1
Mustang	4212	VT3P	P500,V	95	189.7	14.9	1	1,138.20	9	182.1	192.7	192.6	181.6	178.8	210.5
Anderson	628VT3	VT3	C250	96	188.7	14.8	1	1,132.20	10	**206.1**	183.4	187.0	177.7	174.2	203.9
Enestvedt	E651VT3Pro	VT3P	P250	95	188.5	14.8	2	1,131.00	11	181.6	196.4	180.4	174.8	189.4	208.4
Wensman	W 7273VT3	VT3	P250	98	188.2	15.0	1	1,129.20	12	**211.9**	170.2	195.4	172.7	175.2	203.5
Kruger	K-7194	VT3P	P500,V	94	187.5	14.5	4	1,125.00	13	190.0	**199.9**	194.6	161.4	179.5	199.7
Gold Country	95-15	STX	P500,V	95	187.0	14.8	1	1,122.00	14	**194.4**	185.3	187.6	173.4	178.4	203.0
Producers	5684VT3	VT3	P500,V	96	186.8	14.7	0	1,120.80	15	**209.8**	163.8	187.7	171.9	178.2	209.4
Renk	RK585VT3P	VT3P	P250	95	186.1	14.8	1	1,116.60	17	182.7	190.2	184.9	174.3	187.6	197.1
LG Seeds	LG2478VT3Pro	VT3P	P500,V	97	185.7	14.7	4	1,114.20	18	164.5	176.1	190.2	184.6	182.4	**216.2**
Dyna-Gro	D35RR40	RR2	P250	95	185.7	14.7	5	1,114.20	19	154.6	180.5	192.8	187.8	190.6	207.6
Titan Pro	89A98GL	3000GT	C250	98	185.7	16.7	2	1,106.30	22	**201.5**	177.3	190.0	157.3	193.6	194.6
Wensman	W 7270VT3PRO	VT3P	P250	97	185.5	14.9	4	1,113.00	20	177.0	179.9	188.5	185.6	178.9	202.9
Renk	RK530VT3P	VT3P	P250	94	184.9	15.4	3	1,107.60	21	178.3	168.9	193.3	188.7	184.2	196.0
Stine	9311VT3Pro*	VT3P	C250	93	183.9	15.6	2	1,100.60	23	164.8	173.7	190.6	180.3	195.2	198.5
Renk	RK580VT3	VT3	P250	98	183.1	15.2	2	1,097.70	24	**211.1**	186.8	192.8	148.7	153.2	206.0
Terning	TS8245	3000GT	C250	95	182.8	14.8	7	1,096.80	25	154.8	176.8	185.6	181.1	198.7	199.9
Jung	7452VT3	VT3	P500	98	182.8	15.6	1	1,094.10	28	**209.5**	176.9	191.5	168.7	155.9	194.4
NuTech	3A-9901*	GT	C250	98	182.5	15.0	2	1,095.00	26	183.8	171.1	194.7	177.1	182.1	186.4
Kruger	K-7495	VT3P	P500,V	95	182.5	14.8	6	1,095.00	27	143.9	190.2	198.7	183.5	183.4	195.4
Titan Pro	X81A97	GT/CB/LL	C250	97	182.5	15.5	6	1,092.70	29	131.9	191.1	**204.2**	168.5	185.6	**213.6**
Trelay	5ST192	STX	P500,V	98	182.2	16.3	3	1,087.30	31	170.1	159.3	**204.4**	180.9	180.8	197.7
Anderson	628R	RR2	None	95	182.0	15.0	3	1,092.00	30	162.1	188.9	182.7	179.5	180.5	198.0
Dekalb	DKC48-12 CK	STX	P500,V	98	186.7	15.0	2	1,120.20	16	179.1	181.4	197.6	174.4	187.1	200.8
Test Average =					**180.6**	**15.3**	**4**	**1,082.00**		**163.3**	**179.8**	**187.1**	**174.1**	**180.6**	**198.7**
LSD (0.10) =					17.1	0.6	8			27.3	19.3	14.2	16.9	19.0	12.7

FULL SEASON TEST 99 - 102 Day CRM — **Top 30 of 45 tested**

NuTech	5N-001*	3000GT	C250	100	**199.1**	17.1	0	1,184.10	1	**222.6**	197.2	194.4	178.9	203.4	198.2
G2 Genetics	5H-502^*	HX,RR2	C250	102	**198.9**	17.6	0	1,180.50	2	**215.7**	177.3	**204.4**	175.4	**219.8**	201.0
Channel	201-16VT3	VT3	P500,V	101	197.3	16.9	0	1,174.40	3	162.1	**214.3**	198.6	189.6	212.2	**207.2**
Viking	Y84-00RL	3000GT	C250	100	196.6	17.4	2	1,167.80	5	**206.0**	179.8	195.6	183.5	206.9	**208.0**
Wensman	W 7320VT3PRO	VT3P	P250	101	196.3	16.8	0	1,169.00	4	198.5	178.3	**207.2**	**198.3**	199.3	196.0
G2 Genetics	5H-0101^	HX,RR2	P1250,V	100	194.0	16.3	0	1,157.70	6	**201.1**	204.9	192.9	172.9	212.3	179.7
Gold Country	101-77	VT3	P250	101	192.4	16.0	0	1,149.60	8	184.1	193.8	191.8	194.0	204.3	186.4
Titan Pro	89A02GL	3000GT	C250	102	191.9	17.4	0	1,139.90	10	198.8	187.7	195.0	176.9	198.9	194.0
Dekalb	DKC48-37 GC	VT3	C250	98	191.2	15.4	1	1,145.30	9	181.7	197.6	199.9	177.0	204.0	187.0
Wensman	W 7360VT3	VT3	P250	103	190.6	17.2	0	1,133.10	13	183.7	193.9	179.9	179.9	**213.0**	193.0
Producers	6044VT3	VT3	P250	100	190.4	17.1	0	1,132.40	14	178.6	189.6	191.3	187.2	202.5	192.9
Kruger	K-6201VT3	VT3	P500,V	101	190.4	17.1	3	1,132.40	15	175.8	177.7	195.0	187.1	204.1	202.9
Trelay	5VP688	VT3P	P500,V	101	190.3	16.0	3	1,137.00	12	160.8	199.2	199.1	170.1	**216.7**	196.0
Renk	RK698VT3	VT3	P250	102	190.3	17.2	0	1,131.30	17	180.5	191.5	189.8	182.7	198.9	198.4
G2 Genetics	5H-501^*	HX,RR2	C250	101	190.2	17.0	1	1,131.70	16	189.7	195.2	193.8	186.2	187.2	189.0
Dekalb	DKC52-59 GC	VT3	n/a	102	189.8	15.2	1	1,137.90	11	194.5	189.0	194.6	178.6	183.4	198.6
Dekalb	DKC50-66 GC	VT3	n/a	100	188.6	15.9	0	1,127.40	18	184.7	179.2	197.5	183.8	194.5	191.7
Channel	201-85VT3P	VT3P	P500,V	101	188.1	17.0	1	1,119.20	20	167.4	180.1	196.8	173.1	208.7	202.7
Trelay	6VT154	VT3	P500,V	102	187.7	16.9	1	1,117.30	21	148.2	187.1	196.0	185.3	208.8	200.5
Anderson	605VT3	VT3	C250	100	187.6	16.0	0	1,120.90	19	193.6	186.2	188.8	188.8	183.9	184.1
Trelay	6VP125	VT3P	P500,V	102	186.3	16.8	0	1,109.40	23	195.5	177.5	185.3	178.5	189.1	191.8
Kruger	K-6399VT3	VT3	P500,V	99	185.9	15.6	0	1,112.60	22	**201.1**	173.3	195.4	172.8	184.1	188.5
Dairyland	ST-9799	VT3	C250	99	184.9	15.3	1	1,108.00	24	189.4	181.7	183.4	159.0	191.7	204.3
Gold Country	100-07	VT3	P250	100	183.2	15.4	0	1,097.40	25	168.7	183.5	183.5	184.7	188.5	190.4
Anderson	626R	RR2	None	100	183.1	16.5	0	1,091.70	28	164.0	187.1	180.7	177.0	195.2	194.6
Wensman	W 7290VT3PRO	VT3P	P250	99	183.0	16.1	6	1,093.00	26	151.2	194.5	174.9	177.9	208.7	190.8
Dairyland	ST-9399	3000GT	C250	99	182.4	16.8	0	1,086.20	30	172.8	192.9	181.1	166.5	199.9	180.9
Kruger	K4-9100	STX	P500,V	100	182.3	16.6	0	1,086.50	29	174.4	187.8	178.7	160.6	208.8	183.7
Stine	9417VT3*	VT3	C250	100	182.2	15.3	1	1,091.80	27	187.2	183.4	192.5	157.1	179.2	193.6
LG Seeds	LG2501VT3Pro	VT3P	P500,V	100	181.8	16.3	5	1,084.90	31	132.6	**207.4**	172.7	182.5	205.3	190.3
Dekalb	DKC48-12 CK	STX	P500,V	98	192.6	15.7	2	1,152.20	7	177.0	196.6	195.6	179.5	204.8	202.0
Test Average =					**184.8**	**16.6**	**2**	**1,101.60**		**169.0**	**188.1**	**186.5**	**176.0**	**198.1**	**191.1**
LSD (0.10) =					13.3	0.8	5			31.6	18.2	14.5	18.5	14.8	15.3

‡ = 2 replications, full season tests

Mark Querna, FIRST Manager



Corn Stats:
Yield Range: 175.1-216.6 bu. per acre
Yield Average: 198.9 bu. per acre
Top $ Per Acre: $1,299.60

Corn Field Notes: Minnesota South East

Cannon Falls—Planting for this site occured on May 8. A cool, wet spring continued into late June, causing slow development. Rapid July growth coincided with windstorms; lodging scores reflect the severity of the goose-necking this caused. Brace roots were highly developed. Marc Hernke, F.I.R.S.T. farmer member, is pleased with the yields (average of 190.1 bu. per acre in the early-season test and 177.7 bu. per acre in the full-season test), considering the extremes in weather.

Dexter—Below-normal temperatures and above-normal moisture delayed planting until May 7, then continued until the end of June. July brought heat and humidity while August was hot and dry. Some tip dieback on ears occurred (as in most areas of Minn.). No corn was blacklayered when frost occurred on Sept. 15. High winds on Sept. 29 caused stalk lodging. Average yield was 213.7 bu. per acre on both the early- and full-season tests.

Eyota—Cool, wet conditions slowed early growth through June. July brought warm, humid weather conducive to good pollination. August stayed warm, but lack of moisture caused some kernel tip dieback. Paul Wendt, F.I.R.S.T. farmer member, is quite pleased with his corn and soybean yields, as they were some of the best in Minn. this year. This test averaged 210.5 bu. per acre in the early-season test and 214.1 bu. per acre in the full-season test.

Kasson—Cool, wet weather delayed planting two weeks. However, seeds were in the ground on May 7. Rains were plentiful until Aug. 1. Temperatures were low through July 1, allowing plants to set good ear girth. Consistently warm conditions caused tip dieback during the dry August. Test weights were excellent, despite a Sept. 15 frost. Stalks were weak but stood well thanks to good weather.

Madison Lake—Planting was delayed to the latest plant date for this region, May 20, by cool, wet spring weather, which continued through June. Water ponding in June had a greater affect on some plot areas more than others. Higher temperatures and humidity dominated July. Rainfall dropped off after mid-July and did not return. A frost on Sept. 15 curtailed seed fill. Dry conditions caused rapid drydown of all entries. Average yield at this site was 172.5 bu. per acre in the early-season test and 186 bu. per acre on the full-season test.

New Richland—Planting conditions were favorable with cool, wet conditions through June. Leon Schoenrock, F.I.R.S.T. farmer member, said early growth showed deep-green corn from more mineralized nitrogen than normal. He noted that there was ample rain through mid-July, then only one significant rain on Aug. 13 (0.8 inch) during grain fill. A killing frost occurred Sept. 15. Corn was only half milk line, but grain quality was excellent!

Site Information						2011 Rainfall (inches)					
Minnesota South East						Monthly				Vs. 30-year avg.	
Site	Soil Texture	Tillage	Prev. Crop	Units N	Planted	May	June	July	August	July	August
Cannon Falls	silty clay loam	conventional	soybean	210	5/8	3.89	5.06	6.45	1.63	5.51	0.50
Dexter	silt loam	conventional	soybean	160	5/7	6.13	7.61	6.49	1.20	1.59	-3.80
Eyota	silt loam	minimum	soybean	150	5/4	3.08	3.64	6.86	1.29	2.21	-3.37
Kasson	silt loam	minimum	soybean	178	5/7	4.31	5.86	6.14	0.92	0.70	-4.04
Madison Lake	clay loam	minimum	soybean	125	5/20	3.43	4.50	5.83	0.62	0.79	-4.69
New Richland	clay loam	minimum	soybean	135	5/6	3.72	3.95	4.64	1.17	-0.01	-3.88

F.I.R.S.T. Minnesota South East Corn Results

EARLY SEASON TEST 95 - 100 Day CRM — Top 30 of 72 tested

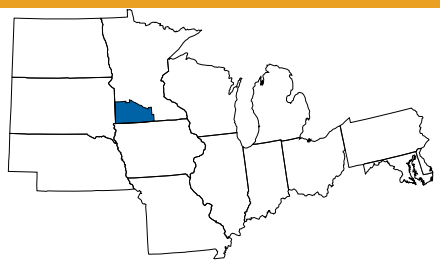
Company/ Brand	Seed Brand	Technology	Insecticide Seed Treatment	Relative Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Gross Income Rank	Cannon Falls	Dexter	Eyota	Kasson	Madison Lake‡	New Richland
Channel	197-32VT3P	VT3P	P500,V	97	**216.6**	14.4	1	1,299.60	1	**213.5**	**234.2**	221.5	**221.9**	**197.2**	211.0
Viking	Y84-00RL	3000GT	C250	100	**215.2**	15.4	1	1,289.00	2	205.4	**228.9**	**227.7**	**223.6**	191.5	**213.9**
Wensman	W 7290VT3PRO	VT3P	P250	99	**212.9**	14.8	1	1,277.40	3	206.6	222.9	**224.9**	215.5	189.5	**218.0**
NuTech	5N-001*	3000GT	C250	100	**212.1**	15.2	0	1,271.50	4	**210.9**	**226.9**	220.1	217.5	190.2	206.9
Producers	6044VT3	VT3	P250	100	**212.1**	15.6	2	1,269.40	5	205.5	220.8	**229.5**	**232.8**	176.7	207.2
LG Seeds	LG2501VT3Pro	VT3P	P500,V	100	**211.2**	14.9	3	1,267.20	6	180.4	**230.7**	**228.9**	**224.1**	191.9	**211.3**
Jung	7V429	VT3P	P500	96	**209.5**	14.2	0	1,257.00	7	**213.0**	216.5	220.7	216.5	**196.0**	194.0
Pioneer	P9917XR GC	HXT,RR2	C250	99	**209.3**	15.2	1	1,254.80	8	199.6	215.3	209.2	**222.3**	188.0	**221.6**
LG Seeds	LG2468VT3	VT3	P500,V	97	**208.3**	14.8	0	1,249.80	9	196.9	215.5	220.5	**224.0**	193.8	198.8
G2 Genetics	5H-0101^	HX,RR2	P1250,V	100	**208.0**	14.9	0	1,248.00	10	196.5	221.1	**223.8**	**222.7**	184.3	199.7
Kruger	K-7495	VT3P	P500,V	95	**207.9**	14.3	0	1,247.40	11	196.3	221.0	220.5	205.4	**197.5**	206.9
Dekalb	DKC48-12 GC	STX	P500,V	98	207.4	14.5	0	1,244.40	12	198.6	**229.2**	215.7	215.7	176.3	208.9
AgriGold	A6203VT3	VT3	P500,V	96	207.1	14.7	0	1,242.60	13	194.7	223.4	215.6	207.9	184.7	**216.0**
Gold Country	101-77	VT3	P250	101	206.0	15.1	1	1,235.50	14	197.8	**231.7**	203.1	212.7	182.2	208.5
Gold Country	96-20	VT3P	P250	96	205.5	14.2	1	1,233.00	15	**215.7**	**227.8**	212.9	205.4	161.0	210.2
Channel	196-06VT3P	VT3P	P500,V	96	205.5	14.6	1	1,233.00	16	204.7	222.4	201.2	210.2	189.3	205.2
Pioneer	P9910AM1 GC	HXT,RR2	C250	99	204.5	14.6	0	1,227.00	17	193.0	212.1	218.9	213.5	187.5	201.9
Mustang	4689	VT3	P500,V	95	204.3	14.8	0	1,225.80	18	205.4	214.4	212.7	205.6	178.5	209.0
Viking	C44-95R	VT3P	C250	96	203.9	14.7	0	1,223.40	19	205.5	212.6	221.0	209.8	177.1	197.4
Wensman	W 7268VT3	VT3	P250	96	203.7	14.8	0	1,222.20	20	189.4	216.2	207.7	212.3	186.1	210.4
Anderson	628R	RR2	None	95	203.5	14.3	1	1,221.00	21	**212.9**	210.3	208.9	206.4	164.6	**217.7**
Croplan	3514VT3 GC	VT3	C250	95	203.5	15.7	0	1,217.40	23	181.5	213.4	209.6	**222.7**	**196.7**	197.1
Trelay	5VP688	VT3P	P500,V	101	203.0	14.7	1	1,218.00	22	185.3	218.7	**228.2**	220.4	167.3	198.1
Mustang	5808	STX	P500,V	98	201.8	14.6	1	1,210.80	24	202.6	216.9	214.1	215.1	170.2	191.7
Renk	RK565GTCBLLRW	3000GT	C250	100	201.4	14.8	1	1,208.40	25	189.0	212.3	203.8	211.7	186.1	205.7
Kruger	K4-9100	STX	P500,V	100	200.5	15.0	0	1,203.00	26	**211.0**	212.3	214.1	204.3	173.3	187.8
Dyna-Gro	D37VP71	VT3P	P250	97	200.5	14.3	0	1,203.00	27	206.8	223.2	205.1	205.8	162.2	199.8
Jung	7452VT3	VT3	P500	98	200.3	14.5	1	1,201.80	28	203.7	210.6	209.1	205.5	173.9	198.7
Fielders Choice	NG6550	VT3P	P250	100	200.2	14.8	0	1,201.20	29	188.4	223.3	208.2	212.5	166.3	202.5
Mustang	4404	3000GT	P500,V	95	200.0	14.6	2	1,200.00	30	184.4	218.0	220.0	206.1	166.0	205.2
Dekalb	DKC50-66 CK	VT3	n/a	100	197.7	14.8	1	1,186.20	36	176.7	213.7	216.2	209.8	169.0	200.7
Test Average =					**198.7**	**14.9**	**1**	**1,191.50**		**190.1**	**213.7**	**210.5**	**207.9**	**172.5**	**197.4**
LSD (0.10) =					8.8	0.5	2			19.3	12.2	13.1	13.5	22.5	13.8

FULL SEASON TEST 101 - 104 Day CRM — Top 30 of 54 tested

Company/ Brand	Seed Brand	Technology	Insecticide Seed Treatment	Relative Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Gross Income Rank	Cannon Falls	Dexter	Eyota	Kasson	Madison Lake‡	New Richland
Channel	203-43VT3P	VT3P	P500,V	103	**215.5**	15.3	1	1,291.40	1	**200.6**	220.0	222.8	**228.1**	**211.5**	**210.0**
Kruger	K-4104	VT2P	P500,V	104	**212.6**	16.0	0	1,270.30	2	196.0	218.0	220.3	**229.1**	200.3	**211.6**
Channel	201-16VT3	VT3	P500,V	101	**208.5**	15.8	5	1,246.80	3	174.7	226.2	**228.7**	215.0	197.8	**208.7**
Wensman	W 7320VT3PRO	VT3P	P250	101	**208.5**	16.1	1	1,245.30	4	193.6	225.4	214.7	206.8	204.6	205.7
Trelay	6VT154	VT3	P500,V	102	**208.4**	16.0	3	1,245.20	5	183.4	223.3	224.5	218.3	205.4	195.6
Trelay	6ST576	STX	P500,V	104	206.6	16.0	0	1,234.40	7	197.0	214.0	218.8	213.8	194.8	201.2
Kruger	K-6102VT3	VT3	P500,V	102	206.4	15.3	3	1,236.90	6	186.7	**229.6**	218.0	211.2	197.0	195.9
Titan Pro	89A02GL	3000GT	C250	102	205.4	15.8	1	1,228.30	8	196.6	224.5	211.8	212.7	190.0	196.6
Viking	Y54-04RL	3000GT	C250	104	205.3	16.8	2	1,222.60	9	179.0	219.9	222.8	218.7	193.7	197.6
Mustang	6460	3000GT	P250	104	204.8	17.0	3	1,218.60	11	192.5	215.2	211.3	**221.1**	190.4	198.4
AgriGold	A6319VT3Pro	VT3P	P500,V	103	204.5	16.2	1	1,220.90	10	191.2	224.2	217.2	214.2	191.2	189.2
G2 Genetics	5X-903^	HXT,RR2	P1250,V	103	203.3	15.7	3	1,216.20	12	183.6	213.5	225.7	218.2	181.9	197.1
Kruger	K-6201VT3	VT3	P500,V	101	203.2	15.9	5	1,214.60	13	178.5	220.8	227.8	210.1	181.0	201.1
G2 Genetics	5H-502^*	HX,RR2	C250	102	203.2	16.4	1	1,212.10	15	179.4	221.9	215.7	215.8	186.0	200.1
Renk	RK698VT3	VT3	P250	102	203.0	15.8	1	1,213.90	14	175.8	217.7	220.0	208.9	187.6	**207.9**
LG Seeds	LG2509GT3	3000GT	P500,V	103	202.9	17.0	2	1,207.30	18	171.5	218.0	213.7	211.7	**212.3**	190.3
Wensman	W 7392GT3	3000GT	P250	104	202.7	17.2	1	1,205.10	19	169.6	214.5	220.5	**221.2**	193.3	197.2
Dekalb	DKC53-78 GC	STX	n/a	103	202.2	15.9	1	1,208.70	17	162.4	218.9	217.0	217.1	198.4	199.5
AgriGold	A6276VT3	VT3	P500,V	101	202.0	15.6	1	1,209.00	16	183.4	211.7	**232.7**	210.3	176.6	197.3
Gold Country	103-09	VT3	P250	103	201.6	16.1	3	1,204.10	21	174.2	216.5	223.6	215.8	187.3	192.0
Kruger	K4-9302	STX	P500,V	102	201.6	16.6	1	1,201.50	22	185.0	204.0	218.4	214.3	194.3	193.7
AgriGold	A6323GT3	3000GT	P500,V	103	201.3	17.1	3	1,197.20	27	178.4	215.8	**228.8**	219.7	174.8	190.2
Dekalb	DKC51-85 GC	STX	P500,V	101	201.2	15.5	1	1,204.70	20	193.7	203.1	225.2	202.6	188.2	194.6
Gold Country	101-99	STX	P250	104	201.0	16.4	1	1,199.00	26	164.8	220.2	219.8	217.0	179.7	204.2
LG Seeds	LG2508VT3Pro	VT3P	P500,V	104	200.6	15.6	3	1,200.60	23	186.5	215.1	211.4	213.6	182.5	194.7
Wensman	W 7360VT3	VT3	P250	103	200.3	15.5	4	1,199.30	24	163.3	**233.4**	**228.2**	**221.8**	154.4	200.7
Jung	7475VT3	VT3	P500	100	200.1	15.3	1	1,199.10	25	197.5	225.0	219.4	201.0	162.0	195.7
Titan Pro	80A05GL	3000GT	C250	105	200.1	16.4	1	1,193.60	28	189.2	212.4	216.3	206.8	189.4	186.7
Channel	202-32STX	STX	P500,V	102	199.6	16.0	1	1,192.60	30	174.6	202.6	216.5	212.2	194.7	197.0
Dairyland	ST-9799	VT3	C250	99	199.1	15.2	0	1,193.60	29	196.4	213.7	217.8	192.6	186.6	187.7
Dekalb	DKC50-66 CK	VT3	n/a	100	198.7	15.0	3	1,192.20	31	182.6	210.0	210.3	203.6	190.7	195.2
Test Average =					**199.1**	**16.0**	**2**	**1,189.30**		**177.7**	**213.7**	**214.1**	**209.1**	**186.0**	**193.9**
LSD (0.10) =					7.9	0.6	3			19.9	13.5	14.0	10.9	22.1	12.6

‡ = 2 replications, early season test

Mark Querna, FIRST Manager



Corn Stats:
Yield Range: 157.6-200.9 bu. per acre
Yield Average: 181.4 bu. per acre
Top $ Per Acre: $1,205.40

Corn Field Notes: Minnesota South West

Easton—Cool, wet weather prevailed from April through June. Temperatures rose into July and through harvest, but rainfall decreased after July 15. A warm, dry August and September moved maturity along, allowing fast drydown despite a killing frost on Sept. 15. Yield variability here is similar to what Tom Warmka, F.I.R.S.T. farmer member, has seen on his farm. Average production showed a yield of 185.3 bu. per acre in the early-season test and 173.5 bu. per acre in the full-season test.

Jackson—This was my earliest-planted corn site because wet and cool weather dominated until the end of June. Higher temperatures from July to harvest allowed hybrids to grow quickly and develop good grain quality in spite of a Sept. 15 killing frost. Little rain fell in August through October. Soil saturation lowered yields in the full-season test. Average yields were 195.8 bu. per acre and 181.4 bu. per acre.

Jeffers—A cool, wet spring delayed planting and made for slow growth into late June. Temperatures climbed in July, and the crop was near average GDUs by the end of August. Rainfall was short from the mid-July through harvest. A killing frost hurt full-season hybrids most. Soil moisture and corn yield were highly variable in one early-test replication, which was omitted. Remaining results showed average yields of 163.1 bu. per acre in the early-season test and 166.3 bu. per acre in the full-season test.

Lake Crystal—Data was collected from the Lake Crystal test site but has been rejected because of undiagnosed planter problems that caused a lack of confidence in the presented results.

Redwood Falls—We planted into wet soil this year. Cool, wet weather prevailed through June. Rainstorms with high winds hit in early July, causing green snap in some hybrids. Weather turned hot and wet through July, then hot and dry from August through harvest. A killing frost occurred Sept. 15. Poor vigor from excess moisture showed here for the first time in years. Average yields were 170.5 bu. per acre in the early-season test and 173.9 bu. per acre in the full-season.

Tracy—Planting conditions were great in spite of wet, cool weather that continued through the end of June. Winds caused minimal green snap in some plots. Rainfall was negligible from the mid-July through harvest. Warmer temperatures from July through October coupled with a killing frost on Sept. 15 resulted in quick drydown and very good grain quality. Yields averaged 200.8 bu. per acre in the early-season test and 203.4 bu. per acre in the full-season.

Photo courtesy of Mark Querna

Leon Shoenrock evaluates hybrids at his MNSE New Richland location.

Site Information						2011 Rainfall (inches)					
Minnesota South West						Monthly				Vs. 30-year avg.	
Site	Soil Texture	Tillage	Prev. Crop	Units N	Planted	May	June	July	August	July	August
Easton	clay loam	conventional	soybean	140	5/5	5.18	4.15	3.55	0.79	-1.92	-4.46
Jackson	clay loam	minimum	soybean	154	5/3	4.29	4.56	3.09	1.31	-0.77	-2.24
Jeffers	clay loam	minimum	soybean	177	5/10	4.16	6.55	4.87	1.03	-0.31	-4.10
Lake Crystal	clay loam	minimum	soybean	140	5/11	4.33	6.32	4.29	0.54	-0.73	-4.00
Redwood Falls	clay loam	minimum	soybean	170	5/18	4.58	5.14	4.70	0.87	-0.34	-4.44
Tracy	silty clay loam	minimum	soybean	170	5/11	5.98	3.33	4.10	1.31	0.32	-2.50

F.I.R.S.T. Minnesota South West Corn Results

EARLY SEASON TEST 97 - 102 Day CRM — Top 30 of 72 tested

Company/ Brand	Seed Brand	Technology	Insecticide Seed Treatment	Relative Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Gross Income Rank	Easton	Jackson	Jeffers‡	Lake Crystal#	Redwood Falls	Tracy‡
Wensman	W 8294VT2PRO	VT2P	P250	99	**200.9**	14.3	0	1,205.40	1	199.9	210.7	**194.5**	180.0	180.2	**219.2**
Gold Country	101-77	VT3	P250	101	**198.1**	13.8	1	1,188.60	2	191.3	194.9	**194.0**	169.1	**191.5**	**218.7**
Croplan	4033VT3PRO GC	VT3P	C250	100	**197.1**	14.5	0	1,182.60	3	**205.0**	204.1	184.0	183.1	178.5	214.0
LG Seeds	LG2501VT3Pro	VT3P	P500,V	100	**196.3**	14.7	0	1,177.80	4	199.5	**214.4**	155.5	**196.9**	183.0	**229.0**
Trelay	5VP688	VT3P	P500,V	101	**195.8**	14.4	1	1,174.80	5	190.8	**211.9**	166.9	**196.6**	**192.0**	**217.2**
Kruger	K-6201VT3	VT3	P500,V	101	**194.8**	15.6	4	1,165.90	8	195.4	**220.5**	160.1	187.5	186.0	212.0
LG Seeds	LG2468VT3	VT3	P500,V	97	**194.7**	14.1	0	1,168.20	6	199.1	200.5	162.1	183.5	**197.7**	214.2
Wensman	W 7320VT3PRO	VT3P	P250	101	**194.5**	15.0	1	1,167.00	7	191.8	208.8	183.8	182.7	174.4	213.7
Wensman	W 7290VT3PRO	VT3P	P250	99	**194.3**	14.5	0	1,165.80	9	**204.6**	204.9	**190.2**	184.7	178.6	193.4
Producers	6044VT3	VT3	P250	100	**194.0**	15.5	1	1,161.60	10	193.4	**211.8**	179.4	174.1	179.0	206.4
Jung	7V546	VT3P	P500	102	193.1	15.2	1	1,157.60	11	195.3	205.5	166.8	179.4	176.6	**221.4**
Kruger	K-6102VT3	VT3	P500,V	102	191.6	14.2	1	1,149.60	12	185.9	208.3	166.9	183.1	**193.5**	203.6
Pioneer	36V53 GC	HX,RR2	P1250,V	102	191.5	15.5	0	1,146.60	14	190.7	205.6	162.0	167.6	**190.4**	208.6
Gold Country	96-20	VT3P	P250	96	191.4	13.9	0	1,148.40	13	195.6	195.9	180.6	170.7	174.3	210.5
Dyna-Gro	D37VP71	VT3P	P250	97	190.1	13.7	0	1,140.60	15	193.4	193.0	178.9	180.0	184.8	200.4
G2 Genetics	5H-502^*	HX,RR2	C250	102	189.8	14.8	0	1,138.80	16	183.5	**211.7**	172.7	173.3	185.7	195.6
Channel	201-85VT3P	VT3P	P500,V	101	189.3	14.9	0	1,135.80	17	199.4	**214.5**	157.0	183.0	169.6	205.8
LG Seeds	LG2478VT3Pro	VT3P	P500,V	97	188.1	13.9	1	1,128.60	18	190.2	197.5	167.2	176.8	183.5	202.2
Dekalb	DKC50-66 GC	VT3	n/a	100	188.0	13.9	0	1,128.00	19	183.5	195.7	165.5	186.3	188.2	207.3
Channel	201-79VT3P	VT3P	P500,V	101	188.0	14.4	1	1,128.00	20	193.9	198.5	159.2	166.2	169.9	**218.5**
Wyffels	W1831	VT3P	P250	97	187.5	14.0	0	1,125.00	21	188.9	206.2	183.6	166.0	166.6	192.4
Anderson	626R	RR2	None	100	187.3	14.5	0	1,123.80	22	196.4	198.3	149.7	170.3	179.0	213.1
Jung	7475VT3	VT3	P500	100	187.2	14.4	1	1,123.20	23	180.9	**214.1**	**186.0**	187.6	158.3	196.7
Trelay	6VP125	VT3P	P500,V	102	187.2	15.6	0	1,120.40	25	188.7	202.9	150.7	177.3	173.9	**220.0**
Gold Country	98-90	STX	P250	98	187.1	15.3	0	1,121.20	24	197.1	201.7	169.8	185.2	166.1	200.8
Jung	7S555	STX	P500	102	186.8	16.0	0	1,116.10	27	190.2	**212.3**	156.7	178.8	166.5	208.2
Wyffels	W1941	VT3	P250	98	186.6	13.7	1	1,119.60	26	187.9	188.7	175.6	176.6	178.2	202.6
Enestvedt	E609VT3Pro	VT3P	C250	100	185.3	14.3	1	1,111.80	29	190.0	200.6	160.0	169.1	163.2	212.6
Dairyland	ST-9799	VT3	C250	99	184.6	13.8	1	1,107.60	30	189.8	183.3	165.3	183.9	179.7	204.7
Producers	5784VT3	VT3	P500,V	97	183.9	13.9	0	1,103.40	31	163.3	190.1	182.0	186.0	175.0	208.9
Dekalb	DKC52-59 CK	VT3	n/a	102	186.0	13.7	2	1,116.00	28	186.3	193.3	162.9	173.5	185.8	201.9
Test Average =					**183.1**	**14.5**	**1**	**1,098.20**		**185.3**	**195.8**	**163.1**	**177.1**	**170.5**	**200.8**
LSD (0.10) =					10.8	0.9	2			15.3	15.8	22.6	19.5	19.9	15.9

FULL SEASON TEST 103 - 106 Day CRM — Top 30 of 54 tested

Trelay	6VT154	VT3	P500,V	102	**197.1**	15.1	1	1,182.10	1	191.1	177.8	**192.6**	187.6	**196.4**	**227.7**
Gold Country	103-09	VT3	P250	103	**193.5**	15.9	1	1,156.60	2	**193.4**	**204.1**	178.5	179.1	188.6	202.9
Viking	Y54-04RL	3000GT	C250	104	**192.1**	16.8	0	1,144.00	4	181.4	**201.8**	**191.1**	195.1	181.2	205.0
Dekalb	DKC53-78 GC	STX	n/a	103	191.1	14.8	0	1,146.60	3	174.6	182.4	**208.1**	187.3	**190.0**	200.5
G2 Genetics	5H-0601^	HX,RR2	P1250,V	106	186.4	16.9	1	1,109.50	9	183.6	185.6	161.1	196.2	**190.1**	211.4
Renze	2222-3000GT*	3000GT	C250	104	186.4	17.6	0	1,106.30	11	187.3	182.4	181.3	199.5	172.1	208.8
Wyffels	W4267	VT3P	P250	105	186.2	15.7	0	1,113.90	7	180.7	192.1	158.5	**204.3**	177.7	**222.2**
J Pasker Seed	JP5047GT3	3000GT	C250	104	186.0	16.0	2	1,111.40	8	188.4	187.7	**188.8**	197.9	168.7	196.2
Renk	RK708VT3P	VT3P	P250	105	185.8	14.3	0	1,114.80	5	168.2	183.5	175.2	181.9	178.8	**223.4**
Fielders Choice	NG6583	VT3	P250	102	185.8	15.1	0	1,114.30	6	178.4	192.8	168.0	195.9	186.8	203.2
LG Seeds	LG2509GT3	3000GT	P500,V	103	185.8	17.1	0	1,105.00	14	174.5	175.1	176.0	**206.5**	181.1	**222.2**
G2 Genetics	5H-0701^	HX,RR2	C250	106	185.3	16.2	0	1,106.20	12	185.7	185.8	169.3	187.5	181.7	204.0
Wensman	W 7392GT3	3000GT	P250	104	185.0	17.2	0	1,099.80	17	161.3	198.5	**189.5**	192.6	184.8	191.0
Wyffels	W3127	VT3P	P250	102	184.4	14.5	0	1,106.40	10	153.9	198.7	183.2	191.7	185.1	201.0
Trelay	6ST576	STX	P500,V	104	184.3	14.8	0	1,105.80	13	185.9	188.4	164.8	185.4	177.9	204.5
Producers	6694VT3Pro	VT3P	P250	106	183.7	14.4	0	1,102.20	15	183.8	188.0	158.2	197.0	171.9	216.5
Dekalb	DKC55-09 GC	STX	P250	105	183.5	15.8	0	1,097.30	18	171.3	191.4	168.1	193.0	178.5	208.3
Mustang	6460	3000GT	P250	104	183.1	16.2	0	1,093.10	21	183.7	177.4	171.2	198.6	188.0	195.4
Gold Country	107-17	VT3P	P250	107	183.1	16.4	0	1,092.20	22	185.6	159.5	171.2	193.7	173.2	**226.0**
Kruger	K4-9205	STX	P500,V	105	182.5	14.8	0	1,095.00	19	181.9	184.0	160.4	184.6	176.5	209.7
G2 Genetics	5H-905^	HX,RR2	C250	105	182.5	15.0	0	1,095.00	20	179.5	186.0	160.2	203.2	179.4	207.3
Wensman	W 7360VT3	VT3	P250	103	182.0	15.4	1	1,090.20	23	186.6	188.1	150.2	188.3	169.1	215.8
Producers	6374VT3	VT3	P500,V	103	181.7	14.7	0	1,090.20	24	166.7	178.8	170.6	191.2	187.1	205.4
Renze	CX17104RR2*	RR2	P250	104	180.1	14.2	0	1,080.60	25	174.4	172.7	178.2	162.2	177.6	197.5
Titan Pro	89A02GL	3000GT	C250	102	179.6	14.9	1	1,077.60	26	169.7	179.9	163.0	178.1	168.0	217.2
LG Seeds	LG2508VT3Pro	VT3P	P500,V	104	179.6	15.1	0	1,077.20	27	174.0	158.0	159.5	**206.6**	187.0	219.6
Kruger	K-4104	VT2P	P500,V	104	179.4	15.9	0	1,072.40	30	173.0	175.5	156.3	179.5	174.1	218.3
Titan Pro	80A05GL	3000GT	C250	105	179.2	15.5	0	1,073.00	28	174.7	179.9	174.6	191.4	163.1	203.9
Kruger	K4-9302	STX	P500,V	102	179.1	15.7	0	1,071.50	31	157.5	191.9	157.3	202.5	173.3	215.3
Wensman	W 6443RR	RR2	P250	105	178.8	14.8	1	1,072.80	29	179.5	193.5	161.7	179.2	183.3	175.9
Dekalb	DKC52-59 CK	VT3	n/a	102	183.4	14.4	1	1,100.40	16	178.6	188.1	165.6	178.9	173.9	210.9
Test Average =					**179.7**	**15.7**	**0**	**1,074.50**		**173.5**	**181.4**	**166.3**	**187.9**	**173.9**	**203.4**
LSD (0.10) =					12.3	1.3	1			18.2	20.0	17.9	15.6	15.9	17.0

‡ = 2 replications, Jeffers early, Tracy full season tests; # = rejected results, not included in summary

How to Evaluate A Hybrid

The largest limiting factor in a field is not the soil, Mother Nature or machinery; it's the farmer's acumen about seed selection. Seed selection is part science, part mystery and part luck. However, some parts of the process never change.

Data Matters

It's not about having the most data (although that can be helpful) but having the right data. The key is finding tests that are near your area and match the most variables to your farm–soil type, soil condition, pest pressures (insects, weeds and diseases), previous crop grown and, of course, weather.

"I do a lot of plots myself. I also sell seed for CPS [Crop Production Services], which has plots; I use the University of Missouri trials; and I'm glad to have the F.I.R.S.T. plots now. F.I.R.S.T. is one more good source of info that's right in my backyard," says Shawn Kiefaber, who farms near Palmyra, Mo.

Kiefaber says multiple sources of data are important to him because he wants to see hybrids pitted against each other. F.I.R.S.T. gives him that opportunity, he notes, but in other trials, competing products aren't always compared and it's hard to draw meaningful conclusions. This is the first year the F.I.R.S.T. trials have expanded into Missouri.

Secondary Factors

While yield is the main determinant of profit potential, it's usually not the deciding factor. The tipping point comes with secondary factors like standability, moisture, disease packages and traits.

"The No. 1 factor I'm looking at is yield, of course, but it's no good having 200-plus bushels of corn and it's down," says Dwight Bartle, who farms near Brown City, Mich. "With F.I.R.S.T. test plots, I look at yield and then I look at standability [lodging]. I am extremely picky. The difference between a zero and a one is huge, in my opinion."

Grain moisture is also a factor in determining the hybrids he selects. Besides the cost of drying corn, another consideration is time. A difference of even three percentage points in moisture can considerably slow down Bartle's operation and hamper his productivity. He chooses hybrids that are at or below average moisture in yield trials. "Because of the time factor, moisture is critical," he says.

Replication and Consistency

Replication takes much of the guesswork out of plot trials. "With replication, product performance anomalies are evened out," says Joe Bruce, F.I.R.S.T. general manager. "Just as taking more soil cores evens out the highs and lows of a soil test, replications in a yield test show you which hybrids win in terms of consistency. Farmers don't want to plant the hybrid that hit a home run one time then struck out the next; they want the one that consistently provides a good return on investment. Replications help identify a hybrid that delivers across multiple situations. That's what farmers need to look for because those results are more easily repeatable in their own field. That's why F.I.R.S.T. replicates every product three times per test location."

Farmers will take every data set they can get their hands on to confirm if a seed selection is a good choice. Jon Schram, who farms near Gretna, Neb., is no exception. Schram uses F.I.R.S.T. data as well as plot data from local field trials. He says that most company plot trials are not replicated trials, so he looks at how individual hybrids did in as many locations as he can find. And Schram keeps data from multiple years. With hybrids cycling through development so fast he can usually find only two or three years' worth of data on any hybrid. However, he thinks looking back gives him an edge. At first, he doesn't pay much attention to what did well, he says, but looks instead for the ones that didn't do well. Anything in the bottom third or half of a plot trial he'll avoid.

"It's easier to eliminate the ones I will give a pass to and then weed it down," Schram says. "The consistent ones at the top jump out at you. If you pay attention to the top third and the bottom third of the tests, you notice those hybrids you should keep and those you should avoid."

Test Everything

Once seeds make the cut, you should continue to compare them. Every field is an opportunity to learn what should make the cut for next year. Most of Schram's fields have a side-by-side trial or a split planter test so he can compare hybrids of the same maturity and characteristics.

"I like to keep a hybrid around for about three years. The first year, you're trying it; the second year, you're comfortable with it; and the third year, you put some newer stuff up against it," Schram says. "After two years, you have to have a handle on the hybrid, because in another two you might not be able to buy it even when you want to."

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KNOW YOUR CORN NEMATODES

Information compiled from recent university extension articles.

Common Name		Damage Rating	Soil Type	Threshold* (per 100 cc soil)	Additional Information
	Needle	High	Sandy	5–25	Most damaging. Prefers cool, wet conditions. Can kill corn plants. Causes stubby roots. Found near rivers and streams and in continuous corn.
	Root-Lesion	Moderate	All types	50–100 Pre-plant soil	Most significant impact in Midwest corn. Smaller root systems that are dark and discolored. Moderate stunting.
	Lance	Moderate	Sandy and others	40–150	Reduces root system. Darkened and discolored roots. Moderate stunting and chlorosis.
	Dagger	Moderate	All types; worse in coarse soils	50–100	Kills root tips. Sensitive to tillage. Severe stunting and chlorosis. Fewer fine roots remaining.
	Stubby-Root	High	Sandy	50–100	Severe stunting and chlorosis. Stubby lateral roots. Excessive upper roots.
	Sting	High	Sandy	20–50	Severe stunting and chlorosis. Small, coarse, devitalized root system. Found in southern Illinois and in the South.
	Spiral	Damage with high populations	Heavier soils	300+	Mild stunting. Smaller-than-normal root system. Root decay.
	Root-Knot	Damage with high populations	Sandy	100	Corn damaged by root-knot nematodes often is stunted and has the appearance of moisture and nutrient deficiencies.
	Stunt	Damage with high populations	Heavier soils	150–300	Moderate stunting and chlorosis Smaller-than-normal root system.

*Guidelines only – consult your state's extension nematologist.

IMPORTANT: This information is not intended to provide adequate information for use of these products. Read the label before using these products. Observe all label directions and precautions while using these products.

Photos courtesy of J. Eisenback, Virginia Tech University.

Bayer CropScience

F.I.R.S.T. South Dakota North East Soybean Results

Site Information

Site	Soil Texture	Tillage	Row Width (in)	Planting Date	Stand	SCN Pop.	August Rain (in)
Arlington	silty clay loam	minimum	30	6/6	98.8	low	1.41
Bath	silt loam	minimum	30	5/25	97.6	low	0.26
Clear Lake	silty clay loam	conventional	30	6/6	92.7	low	1.40
Webster	silty clay	conventional	30	5/25	95.3	low	0.81

Mark Tollefson, FIRST Manager

Soybean Stats:
Yield Range: 34.9-45.6 bu. per acre
Yield Average: 39.7 bu. per acre
Top $ Per Acre: $501.05

Soybean Field Notes: South Dakota North East

Arlington—This no-till location battled a difficult planting due to the wet conditions this spring. The site was finally in on June 6. After planting, the soil and weather stayed wet and spraying was delayed, making weed pressure an issue. We lost one replication from the inconsistent conditions. A dry August and a Sept. 15 frost contributed to the suffering yields. Yields averaged 38 bu. per acre with a top performer producing 46.8 bu. per acre.

Bath—This site was planted on May 25. The test had some weed pressure early as wet soils prevented timely spraying. Extended wet conditions in June also impacted select areas. One replication was removed from the test to eliminate these impacts on results. In August the weather turned dry, impacting yield potential. We finished off with a mid-September frost, which also affected yields. Average yield was 43.2 bu. per acre.

Clear Lake—The wet spring pushed the planting date into the first week in June. We had cool, moist weather early, and beans had a good start. Then we had very little rain from mid-July until harvest. A frost occurred on Sept. 15 that potentially reduced top yields for late-maturity products. Recent rainfall raised soybean grain moisture to at least 13 percent at harvest. Yields here averaged 41.8 bu. per acre.

Webster—Some volunteer corn survived after being sprayed on this plot, which caused the results to be more variable. This site was planted in late May and the soybeans got off to a good start as we had plenty of moisture early in the season. Conditions changed in the second half of the season, with a lack of rainfall and a mid-September freeze closing the growing season.

1.0 - 1.7 Maturity Group — **Top 20 of 41 tested**

Company/ Brand	Seed Brand	Technology	Maturity	SCN Resistance	Seed Treatment	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Arlington‡	Bath‡	Clear Lake	Webster
Titan Pro	11M61*	RR2Y	1.1	S	AC	**45.6**	11.5	2	501.05	**46.8**	**51.2**	42.4	41.8
Hefty	H13Y12	RR2Y	1.3	S	I	**43.7**	11.3	1	480.43	40.3	**53.1**	41.0	40.3
Kruger	K2-1001	RR2Y	1.0	S	AC	**43.6**	11.7	2	479.33	40.5	48.1	**45.6**	40.1
Gold Country	1040	RR2Y	1.0	S	AC	**43.6**	11.2	1	479.05	43.0	46.1	44.5	40.6
Kruger	K2-1602	RR2Y	1.6	R	AC	42.6	11.4	2	468.88	42.4	**49.0**	43.2	35.9
Hefty	H15Y12	RR2Y	1.5	S	I	42.6	11.1	1	468.60	**45.5**	48.5	42.4	34.0
Hefty	H13Y11	RR2Y	1.3	S	I	42.5	11.1	1	467.78	43.0	**49.3**	**45.6**	32.2
Wensman	W 3131R2	RR2Y	1.3	S	AC	41.9	11.5	1	460.90	43.2	45.5	39.1	39.8
Dyna-Gro	38RY13	RR2Y	1.3	S	AC	41.4	11.3	1	455.68	40.2	47.5	43.7	34.3
Mustang	M-17722	RR2Y	1.7	R	AC	41.1	11.2	2	452.38	35.3	43.7	44.4	41.1
Kruger	K2-0801	RR2Y	0.8	S	AC	41.1	11.1	1	451.83	32.4	48.7	42.3	40.9
Wensman	W 3120R2*	RR2Y	1.2	S	AC	40.8	11.2	2	448.80	41.4	41.8	43.4	36.6
Prairie Brand	PB-1320R2	RR2Y	1.3	S	CM	40.7	11.3	1	447.70	41.9	40.9	**45.3**	34.7
Mustang	M-15522	RR2Y	1.5	R	AC	40.0	11.5	1	440.28	37.7	43.9	41.4	37.1
Hefty	H12Y12	RR2Y	1.2	S	I	39.8	11.6	1	437.80	36.9	45.6	41.6	35.1
Prairie Brand	PB-0920R2	RR2Y	1.0	S	CM	39.8	10.9	1	437.80	34.8	43.4	41.6	39.4
Hefty	H16Y12	RR2Y	1.6	MR	I	39.8	11.4	1	437.25	40.3	44.1	40.7	33.9
Kruger	K2-1501	RR2Y	1.5	R	AC	39.6	11.6	1	435.88	32.9	44.5	**45.7**	35.4
Mustang	M-13552	RR2Y	1.3	R	AC	39.6	11.2	1	435.33	35.2	43.3	**45.6**	34.2
Dyna-Gro	37RY14	RR2Y	1.4	R	AC	39.4	11.0	1	433.68	38.1	43.0	40.3	36.3
Site Averages =						**39.7**	**11.3**	**1**	**436.33**	**38.0**	**43.2**	**41.8**	**36.3**
LSD (0.10) =						3.7	0.4	1		6.9	5.6	3.4	5.8

‡ = 2 replications

 For protein and oil scores visit *www.FirstSeedTests.com*

F.I.R.S.T. South Dakota East Central Soybean Results

Site Information

Site	Soil Texture	Tillage	Row Width (in)	Planting Date	Stand	SCN Pop.	August Rain (in)
Cavour	sandy loam	minimum	30	5/26	95.7	low	2.31
Colton	clay loam	conventional	30	5/26	88.3	low	2.37
Flandreau	clay loam	conventional	30	6/6	98.5	low	2.41
Howard	loam	minimum	30	5/26	94.0	low	1.98

Mark Tollefson, FIRST Manager

Soybean Stats:
Yield Range: 44.5-52.2 bu. per acre
Yield Average: 48.7 bu. per acre
Top $ Per Acre: $573.65

Soybean Field Notes: South Dakota East Central

Cavour—This plot was planted on May 26 and plenty of early-season moisture gave the soybeans a good start. Weather turned dry in mid-July and we struggled for rain the rest of the season. A fall rain helped bring moistures up, as many area beans were harvested at 8-percent moisture. A September frost hurt the bean tops. The earlier-planted beans fared better than those planted later.

Colton—We had plenty of rain and moisture early in the season. Weather turned in August and fields started to dry out. We caught a couple rains in August and had the potential for a bumper crop. An early frost took some yield away in September. Most lodging reflects the bushiness of crop. The average yield was 52.3 bu. per acre with a top producer yielding 63.7 bu. per acre.

Flandreau—A very wet spring delayed planting. This was the last plot planted in this region, with a planting date of June 6. We had plenty of moisture early and good growing conditions throughout most of the season. This changed in August and beans could have used more rain. Stewart Benson, F.I.R.S.T. cooperator, sprayed for aphids in August. An early September frost hurt yield as the crop was still green and filling pods. Average yield was 44.5 bu. per acre with a top producer yielding 50.5 bu. per acre.

Howard—We got off to a good start. We planted on May 26 and had plenty of moisture early. Soybean plants were tall with plenty of vegetative growth. Many fields around the plot area yielded around 45 bu. per acre, but here we averaged 52.2 bu. per acre. Weather was dry in August, and a Sept. 15 frost hurt the tops of the plants. Overall, this was a nice plot site.

1.6 - 2.3 Maturity Group — **Top 20 of 44 tested**

Company/ Brand	Seed Brand	Technology	Maturity	SCN Resistance	Seed Treatment	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Cavour	Colton	Flandreau	Howard
Hefty	H22Y12	RR2Y	2.2	MR	I	**52.2**	10.9	6	573.65	47.4	**63.7**	42.1	55.4
Prairie Brand	PB-1722R2	RR2Y	1.7	R	CM	51.4	10.5	5	565.13	46.2	54.3	**50.5**	54.5
Kruger	K2-2301	RR2Y	2.3	S	AC	51.3	11.4	4	564.58	46.9	55.3	46.3	**56.8**
Prairie Brand	PB-1942R2	RR2Y	1.9	R	CM	50.6	11.1	6	556.88	44.3	**58.8**	47.8	51.6
Mustang	M-23530	RR2Y	2.3	MR	AC	50.6	11.3	4	556.33	44.4	56.7	47.8	53.4
Kruger	K2-1501	RR2Y	1.5	R	AC	50.5	10.6	4	555.23	47.9	50.9	47.6	55.5
Hefty	H21Y12	RR2Y	2.1	MR	I	50.5	10.6	5	554.95	48.9	56.4	44.4	52.1
Gold Country	2140	RR2Y	2.1	R	AC	50.4	11.0	5	554.40	**49.2**	52.5	46.0	53.9
Wensman	W 3230R2	RR2Y	2.3	S	AC	50.3	11.6	4	553.58	46.1	52.7	42.9	**59.6**
Kruger	K2-1902	RR2Y	1.9	R	AC	50.0	10.7	4	550.00	47.9	52.5	46.5	53.1
Kruger	K2-1901	RR2Y	1.9	R	AC	49.9	10.6	4	549.18	48.5	51.9	43.9	55.4
Titan Pro	20M1	RR2Y	2.0	R	CM	49.9	10.7	4	549.18	45.4	51.6	47.0	55.7
Wensman	W 3180NR2*	RR2Y	1.8	R	AC	49.8	10.9	4	547.25	45.7	52.7	46.6	54.0
Gold Country	2040	RR2Y	2.0	R	AC	49.5	10.9	3	544.23	**49.8**	53.1	45.5	49.5
NK Brand	S19-A6 GC	RR	1.9	R	None	49.5	11.0	5	544.23	47.4	57.0	43.4	50.1
Titan Pro	23M9	RR2Y	2.3	S	CM	49.4	11.5	5	543.68	45.8	50.7	45.8	55.4
Prairie Brand	PB-2419RR2	RR2Y	2.3	S	CM	49.4	11.5	6	543.68	43.4	51.7	45.9	**56.7**
Gold Country	1640	RR2Y	1.6	MR	AC	49.4	10.8	4	543.13	46.9	51.3	47.8	51.5
Wensman	W 3140R2	RR2Y	1.4	S	AC	49.4	10.9	5	543.13	47.9	51.3	45.6	52.7
Wensman	W 3174NR2	RR2Y	1.7	R	AC	49.2	10.8	5	541.20	46.5	50.5	47.8	52.0
Site Averages =						**48.7**	**10.9**	**5**	**535.96**	**45.7**	**52.3**	**44.5**	**52.2**
LSD (0.10) =						3.2	0.6	2		3.5	4.9	3.8	4.0

F.I.R.S.T. South Dakota South East Soybean Results

Site Information

Site	Soil Texture	Tillage	Row Width (in)	Planting Date	Stand	SCN Pop.	August Rain (in)
Beresford	silty clay loam	conventional	30	6/5	110.0	medium	2.02
Chancellor	silty clay loam	conventional	30	6/2	110.2	low	1.94
Ethan	loam	no-till	30	6/5	101.2	low	2.02
Salem	loam	conventional	30	5/26	98.1	low	3.17

Mark Tollefson, FIRST Manager

Soybean Stats:
Yield Range: 38.9-47.2 bu. per acre
Yield Average: 42.9 bu. per acre
Top $ Per Acre: $519.20

Soybean Field Notes: South Dakota South East

Beresford—This plot had a very wet spring, which extended the planting date well into June. The plot was finally planted on June 5. There was plenty of moisture after planting and we had good emergence. This growing season was very hot, causing some heat stress. We experienced timely rains in August, but area farmers have been disappointed with yields in the mid-40s bu. per acre. A September frost nipped the top of the beans, which also impacted yield.

Chancellor—Wet conditions this spring pushed planting to June 2. We had good emergence and good growing conditions most of the summer, but August turned dry. Timely rains helped produce good yields. We noted quality vegetation, as plants were tall and bushy. A September frost killed the bean tops and took some yield potential. The average yield was 49.6 bu. per acre, higher than many area farms.

Ethan—A wet spring delayed planting until June 5. July turned hot and dry and August had only one major rainfall of 0.4 inch. Many pods had only two beans with an aborted third bean. The field around the plot yielded less than 30 bu. per acre. A September frost also reduced yield potential. Average yield here was 32.2 bu. per acre.

Salem—A wet spring delayed planting, as was common for this area this growing season. This was the earliest plot planted in this region, with a planting date of May 26. The site had good growing conditions most of the summer. Ernie Christensen, F.I.R.S.T. farmer member, was able to catch some rains in August as things started to dry out in late summer. The beans had potential for better yields but a September frost really affected the later bean varieties. Earlier varieties rose to the top this year.

2.1 - 2.8 Maturity Group — **Top 20 of 45 tested**

Company/ Brand	Seed Brand	Technology	Maturity	SCN Resistance	Seed Treatment	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Beresford	Chancellor	Ethan	Salem
Prairie Brand	PP-213	RR2Y	2.1	R	AM	**47.2**	8.0	3.4	$519.2	42.4	54.0	**37.0**	**55.3**
SOI	2430RR2Y	RR2Y	2.4	S	CM,AP	**46.9**	7.9	3.1	$515.9	46.6	52.0	**35.4**	**53.5**
Hefty	H22Y12	RR2Y	2.2	MR	I	46.5	7.9	4.4	$511.5	38.8	53.2	**36.7**	**57.2**
Prairie Brand	PB-2544R2	RR2Y	2.5	R	CM	46.4	8.3	3.3	$510.4	43.4	53.0	34.8	**54.2**
Kruger	K2-2301	RR2Y	2.3	S	AC	46.4	8.1	4.9	$510.4	42.9	55.2	31.7	**55.7**
Titan Pro	24M21	RR2Y	2.4	R	AC	46.2	8.4	3.5	$508.2	44.2	52.8	35.0	52.6
Prairie Brand	PB-2242R2	RR2Y	2.2	R	CM	45.7	8.1	2.4	$502.7	46.3	51.7	**35.6**	49.3
Mustang	M-23530	RR2Y	2.3	MR	AC	45.4	8.0	3.3	$499.4	**47.6**	46.0	31.1	**56.7**
Wensman	W 3230R2	RR2Y	2.3	S	AC	45.4	7.9	4.2	$499.4	42.6	53.3	33.1	52.4
Hefty	H23Y10	RR2Y	2.2	S	I	45.3	8.0	3.1	$498.3	40.5	51.5	32.1	**57.2**
Mustang	M-24322	RR2Y	2.4	R	AC	45.2	8.3	4.2	$497.2	44.0	**55.6**	32.3	48.8
Kruger	K2-2602	RR2Y	2.6	R	AC	44.9	8.3	3.3	$493.9	43.0	**58.3**	32.7	45.5
Hefty	H25Y12	RR2Y	2.5	MR	I	44.9	8.4	8.4	$493.9	41.4	52.2	**35.7**	50.3
Wensman	W 3200NR2	RR2Y	2.0	R	AC	44.8	7.9	3.4	$492.8	42.7	44.8	**41.0**	50.5
Prairie Brand	PB-2419RR2	RR2Y	2.3	S	CM	44.3	8.1	2.8	$487.3	43.1	50.4	31.8	51.7
Kruger	K2-2102	RR2Y	2.1	R	AC	44.3	8.1	3.8	$487.3	43.7	52.2	33.1	48.0
Gold Country	2341	RR2Y	2.3	S	AC	44.1	8.0	4.5	$485.1	38.9	**55.5**	32.6	49.4
Wensman	W 3212NR2	RR2Y	2.1	R	AC	43.8	8.0	3.4	$481.8	42.0	48.4	33.5	51.1
Wensman	W 3256NR2*	RR2Y	2.5	R	AC	43.8	8.5	6.7	$481.8	36.8	**57.8**	32.5	48.2
Prairie Brand	PB-2558NRR	RR	2.4	R	CM	43.7	8.1	3.7	$480.7	39.1	53.2	30.8	51.8
Site Averages =						**42.9**	**8.2**	**4.0**	**$471.9**	**41.7**	**49.6**	**32.2**	**48.0**
LSD (0.10) =						4.0	0.3	ns		5.4	5.8	3.1	4.8

F.I.R.S.T. Minnesota Central Soybean Results

Site Information

Site	Soil Texture	Tillage	Row Width (in)	Planting Date	Stand	SCN Pop.	August Rain (in)
Clinton	silty clay loam	conventional	30	5/18	140.1	Low	1.27
Glencoe	loam	conventional	30	6/2	139.3	Low	1.38
Hector	clay loam	conventional	30	6/2	139.3	Medium	4.18
Litchfield	clay	conventional	30	6/5	138.5	Low	1.56

Mark Querna, FIRST Manager

Soybean Stats:
Yield Range: 43.7-53.4 bu. per acre
Yield Average: 48.5 bu. per acre
Top $ Per Acre: $587.40

Soybean Field Notes: Minnesota Central

Clinton—This site was planted two weeks before Doug Nelson, a F.I.R.S.T. farmer member, planted the rest of the field. These beans looked great all year with a lot of vegetative growth. The cool, wet conditions of May and June were replaced with higher temperatures the rest of the season. This test saw excessive moisture throughout mid-July followed by almost no rain throughout harvest. A killing frost occurred on Sept. 15 and the test was harvested on Oct. 10.

Glencoe—The Glencoe test plot was planted on June 2 into "concrete-like" surface soil. Those poor conditions did not hamper growth, as the beans were the tallest I have ever harvested. If it had not been for the killing frost of Sept. 15, these beans would have been fantastic. Full-season varieties were hit the hardest by the frost. Otherwise, this was an exceptional-looking plot!

Hector—Planting conditions were poor due to an extremely wet spring, and early growth was very slow due to cool, wet weather until the end of June. The rest of the summer and fall brought higher temps, and rainfall dropped off drastically after mid-July. A killing frost occurred on Sept. 15. Varieties looked great at harvest, considering the wet planting conditions!

Litchfield—Extremely wet conditions delayed planting at this site, but conditions were good at the time of planting. Early growth was slowed by cool, wet weather. Rains here were plentiful until Aug. 1. When I asked Tom Walsh, Litchfield F.I.R.S.T. farmer member, how his crop was looking in mid-August, he stated that "things were finally drying out." It stayed dry here until harvest, with a killing frost occurring on Sept. 15.

1.3 - 2.0 Maturity Group — **Top 20 of 60 tested**

Company/ Brand	Seed Brand	Technology	Maturity	SCN Resistance	Seed Treatment	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Clinton	Glencoe	Hector	Litchfield
Kruger	K2-1401	RR2Y	1.4	MR	AC	**53.4**	11.5	0	587.40	**58.2**	**51.8**	**54.5**	**49.1**
Renk	RS082R2*	RR2Y	0.8	S	None	**52.8**	11.2	0	580.53	**57.5**	**52.5**	**57.6**	43.5
Kruger	K2-1001	RR2Y	1.0	S	AC	**52.4**	11.6	7	575.85	**55.6**	**51.8**	**57.2**	44.8
Advantage	ADV1788CR2	RR2Y	1.7	MR	None	**52.3**	11.6	0	575.58	54.2	**51.3**	**55.6**	**48.2**
Prairie Brand	PB-1743R2	RR2Y	1.6	R	CM	**52.3**	11.6	0	575.03	**57.8**	49.6	**56.9**	44.8
NorthStar	NS 1726NR2	RR2Y	1.7	R	AC	**52.1**	11.8	0	573.38	**56.1**	**50.8**	**54.4**	47.2
Dyna-Gro	37RY14	RR2Y	1.4	R	AC	**51.9**	11.3	0	571.18	54.2	**49.9**	51.5	**52.1**
Gold Country	1440	RR2Y	1.4	MR	AC	**51.6**	11.4	0	567.88	54.3	**50.3**	**54.1**	47.8
Kruger	K2-1902	RR2Y	1.9	R	AC	**51.5**	11.8	0	566.23	54.7	49.1	**55.0**	47.1
Channel	1805R2	RR2Y	1.8	R	AC	**51.3**	11.5	0	564.58	55.0	48.3	**53.9**	**48.1**
Gold Country	2040	RR2Y	2.0	R	AC	**51.3**	11.7	0	564.30	**56.7**	46.3	52.7	**49.5**
Wensman	W 3200NR2	RR2Y	2.0	R	AC	**51.2**	11.7	0	562.65	**55.9**	45.9	**53.3**	**49.5**
Renk	RS140NR2	RR2Y	1.4	R	AM	**50.9**	11.4	0	560.18	52.9	47.3	**54.3**	**49.2**
Prairie Brand	PB-1523R2	RR2Y	1.5	R	CM	50.5	11.4	1	555.78	51.6	49.4	**53.3**	47.8
Channel	2000R2	RR2Y	2.0	R	AC	50.4	11.7	0	554.68	53.9	47.6	52.2	48.0
NorthStar	NS 7159NRR	RR	1.5	R	AC	50.2	11.7	0	551.65	52.5	**50.3**	51.8	46.0
Mustang	M-17722	RR2Y	1.7	R	AC	49.6	11.7	1	545.33	51.7	47.8	53.0	45.8
Gold Country	1741	RR2Y	1.7	R	AC	49.3	11.7	0	541.75	54.5	47.3	51.6	43.6
Kruger	K2-1901	RR2Y	1.9	R	AC	49.2	11.5	0	541.48	**55.2**	46.7	50.4	44.6
Wensman	W 3174NR2	RR2Y	1.7	R	AC	49.1	12.1	0	540.38	54.9	44.0	51.6	46.0
Site Averages =						**48.5**	**11.6**	**0**	**533.45**	**52.3**	**47.2**	**50.0**	**44.6**
LSD (0.10) =						2.2	0.3	ns		2.9	2.7	3.3	3.5

F.I.R.S.T. Minnesota South Central Soybean Results

Site Information

Site	Soil Texture	Tillage	Row Width (in)	Planting Date	Stand	SCN Pop.	August Rain (in)
Madison Lake	clay loam	conventional	30	6/4	138.5	Low	0.62
Nicollet	clay loam	conventional	30	6/4	139.0	Low	1.00
Tracy	silty clay loam	conventional	30	6/3	136.1	Medium	1.42
Wabasso	clay loam	conventional	30	6/3	138.1	Medium	1.31

Mark Querna, FIRST Manager

Soybean Stats:
Yield Range: 38.4-51.5 bu. per acre
Yield Average: 46.3 bu. per acre
Top $ Per Acre: $566.50

Soybean Field Notes: Minnesota South Central

Madison Lake—Wet and cold spring conditions continued on through the end of June, which slowed early season growth. Warmer temperatures July through harvest encouraged some vegetative growth and taller plant height. A frost occurred on Sept. 15, but it was not as severe here as it was in other areas. This test produced an average yield of 55 bu. per acre with a top producer yielding 61.7 bu. per acre.

Nicollet—Excessive rains delayed planting. Cool and wet weather through June slowed crop development, but July brought some higher temperatures. These higher temperatures were great, but then rains ceased by midmonth. Pod-fill stage saw little moisture. A killing frost on Sept. 15 affected the full-season varieties most. Plant heights were quite tall at harvest. This site averaged a yield of 50.2 bu. per acre with a top producer yielding 58.1 bu. per acre.

Tracy—Planting was delayed here due to a wet and cool spring, but conditions were good at planting when it did occur on June 3. Rainfall was excessive through July 1 when a storm brought wind, rain and light hail. The rest of the growing season here brought only 0.6 inch of rain and mostly above average temperatures. Yields were highly variable due partly to pockets of high soybean cyst nematode counts and dry weather. The average yield was 36.1 bu. per acre with a top producer yielding 48.4 bu. per acre.

Wabasso—Extremely wet spring conditions made for poor planting conditions and slow early growth. The temperatures rose in July and stayed high through harvest, but rainfall stopped after July 15. There was less than 0.5 inch of rain after mid-July this year. Soybeans averaged 43.8 bu. per acre. Some hail fell about 8 miles north of this site, dropping bean yields to 20 bu. per acre and corn yields to less than 100 bu. per acre.

1.5 - 2.2 Maturity Group — **Top 20 of 72 tested**

Company/ Brand	Seed Brand	Technology	Maturity	SCN Resistance	Seed Treatment	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Madison Lake	Nicollet	Tracy	Wabasso
Kruger	K2-1902	RR2Y	1.9	R	AC	**51.5**	7.1	0	566.50	58.9	**56.3**	41.0	**49.9**
Titan Pro	20M1	RR2Y	2.0	R	CM	**51.5**	7.1	0	566.50	55.0	**54.5**	**48.4**	47.9
Renk	RS202NR2	RR2Y	2.0	R	None	**50.6**	6.9	0	556.60	**60.3**	50.1	**44.3**	47.6
Channel	2000R2	RR2Y	2.0	R	AC	**50.4**	7.3	0	554.40	**59.0**	**54.6**	41.1	46.9
Kruger	K2-1901	RR2Y	1.9	R	AC	49.9	7.0	0	548.90	54.4	53.8	41.9	**49.4**
Renk	RS140NR2	RR2Y	1.4	R	AM	49.5	6.8	0	544.50	54.5	53.3	40.1	**50.1**
NorthStar	NS 1916NR2	RR2Y	1.9	R	AC	49.5	7.1	0	544.50	55.7	51.0	42.7	**48.5**
Advantage	ADV1811CR2	RR2Y	1.8	R	None	49.2	6.9	0	541.20	55.1	49.5	**43.2**	**49.0**
Dyna-Gro	31RY20	RR2Y	2.0	R	AC	49.2	7.3	0	541.20	**60.0**	53.3	37.8	45.5
Gold Country	2040	RR2Y	2.0	R	AC	49.1	7.0	0	540.10	**59.1**	**54.4**	36.9	46.1
Kruger	K2-1501	RR2Y	1.5	R	AC	48.9	6.9	0	537.90	57.0	52.6	39.4	46.6
Jung	1201RR2	RR2Y	2.0	R	AC	48.8	7.2	0	536.80	58.9	**55.2**	34.2	46.7
Kruger	K2-1602	RR2Y	1.6	R	AC	48.6	7.0	0	534.60	53.8	50.7	41.0	**48.7**
Hefty	H18Y12	RR2Y	1.8	MR	I	48.4	7.1	0	532.40	55.1	50.3	41.9	46.1
Channel	1901R2	RR2Y	1.9	R	AC	48.3	7.2	0	531.30	58.8	50.1	37.0	47.2
Mustang	M-18922	RR2Y	1.8	R	AC	48.3	7.1	0	531.30	55.7	49.0	41.4	47.2
Prairie Brand	PB-1743R2	RR2Y	1.6	R	CM	48.1	7.0	0	529.10	52.8	**58.1**	36.1	45.4
Anderson	184R2Y	RR2Y	1.8	R	AC	48.1	7.1	0	529.10	58.7	46.7	39.1	47.9
Trelay	18RR21	RR2Y	1.8	R	AC	48.0	7.3	0	528.00	53.5	**54.7**	36.8	47.1
Trelay	15RR51	RR2Y	1.5	R	AC	47.9	6.8	0	526.90	56.9	50.8	37.2	46.8
Site Averages =						**46.3**	**7.2**	**0**	**509.20**	**55.0**	**50.2**	**36.1**	**43.8**
LSD (0.10) =						3.8	0.3	ns		4.0	4.0	7.0	4.4

F.I.R.S.T. Minnesota South Soybean Results

Site Information

Site	Soil Texture	Tillage	Row Width (in)	Planting Date	Stand	SCN Pop.	August Rain (in)
Easton	clay loam	conventional	30	5/31	125.8	Low	0.79
Jeffers	clay loam	conventional	30	6/5	133.8	Low	0.54
Kasson	silt loam	conventional	30	5/27	124.9	Low	0.92
New Richland	clay loam	conventional	30	5/31	113.2	Low	1.17

Mark Querna, FIRST Manager

Soybean Stats:
Yield Range: 44.3-55.0 bu. per acre
Yield Average: 50.3 bu. per acre
Top $ Per Acre: $549.50

Soybean Field Notes: Minnesota South

Easton—Wet weather delayed planting; cool, wet weather continued through the end of June before temperatures rose in July. Rainfall was plentiful until mid-July, when it stopped. No appreciable rainfall fell in August or September. A killing frost occurred on Sept. 15, cutting yields up to 25 percent in some varieties. Plant heights ranged from 36 to 40 inches. Average yield was 43.9 bu. per acre with a top producer of 50.5 bu. per acre.

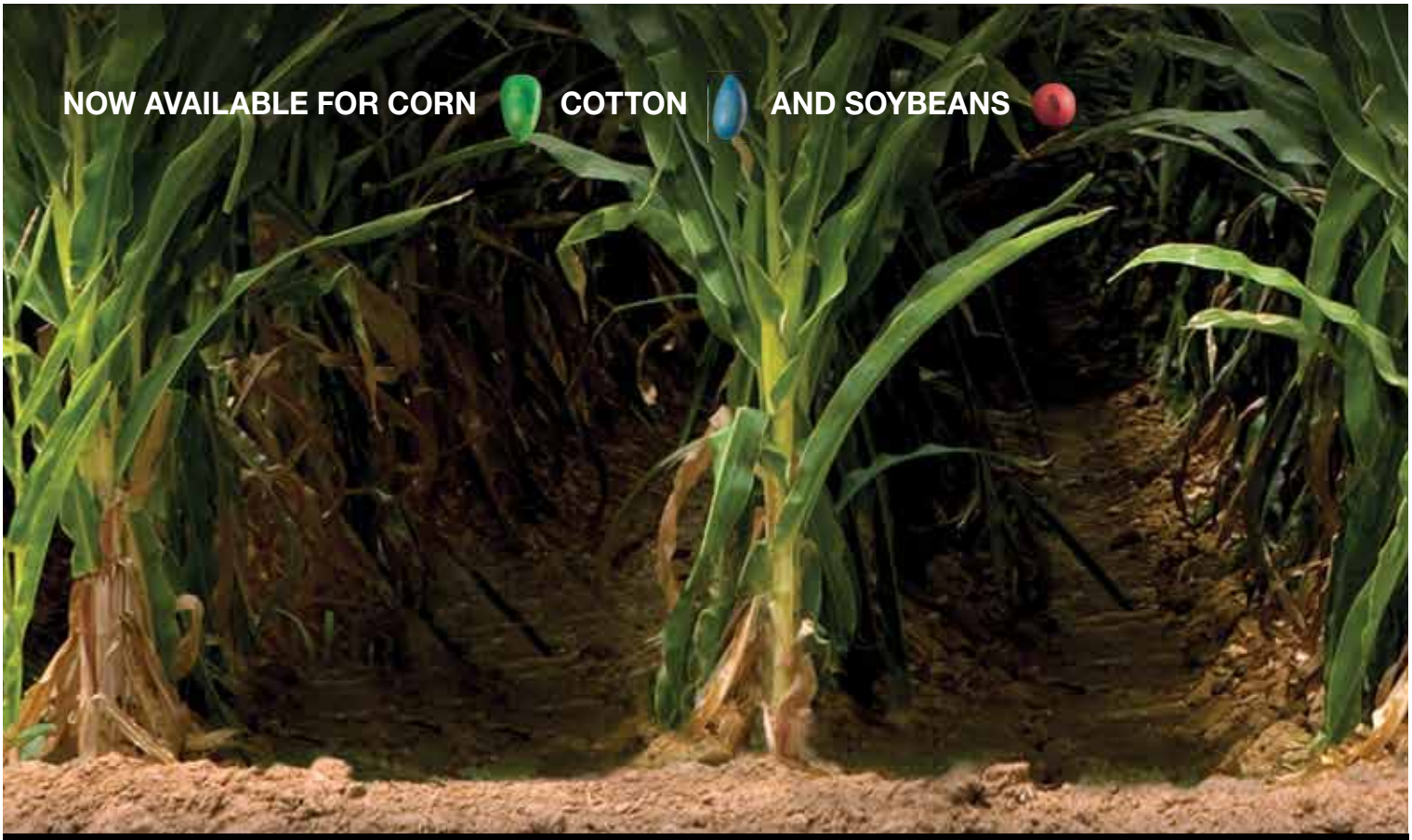
Jeffers—This site was planted late due to a cool, wet spring. The planter made it to the field on June 5. (These conditions lasted until the end of June.) Higher temperatures prevailed from July 1 through harvest. The last good rain was July 15. Dry weather in August lowered yield potential, but the Sept. 15 killing frost hurt full-season beans. Soybeans in the same field that were 1.8 relative maturity beans yielded 50 bu. per acre.

Kasson—Cool, wet weather through June delayed planting until May 27 and hampered early-season growth. Rains slowed after July 15 and hot, humid conditions in late July led to dry weather through harvest. A killing frost on Sept. 15 hurt full-season beans most. The cooperative Brian Herbst for the site noted that top nodes have only one pod this year versus a cluster of pods in previous years.

New Richland—Cool, wet weather through June slowed early growth and resulted in sickly plants until July 1. Higher temperatures and more rain through mid-July caused rapid growth and tall plants. High humidity in late July was replaced by dry weather until harvest. This site received one rainfall more in August than many other places in Minnesota. There was a killing frost on Sept. 15.

1.6 - 2.3 Maturity Group — **Top 20 of 72 tested**

Company/ Brand	Seed Brand	Technology	Maturity	SCN Resistance	Seed Treatment	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income ($/A)	Easton	Jeffers	Kasson	New Richland
Viking	1707R2N	RR2Y	1.7	R	AC	**55.0**	7.4	0	549.50	45.2	51.2	**60.8**	**62.6**
Kruger	K2-1902	RR2Y	1.9	R	AC	**54.7**	7.6	0	547.00	**48.4**	**54.1**	57.1	**59.2**
Wensman	W 3200NR2	RR2Y	2.0	R	AC	**54.7**	7.5	0	546.75	**48.8**	48.7	**60.8**	**60.4**
Jung	1201RR2	RR2Y	2.0	R	AC	**54.5**	7.6	0	544.75	**49.0**	49.9	56.8	**62.2**
Gold Country	2040	RR2Y	2.0	R	AC	**54.4**	7.6	0	543.75	**48.8**	50.9	**57.9**	**59.9**
SOI	1741NRR2Y	RR2Y	1.7	R	CM,AP	**54.0**	7.4	0	539.75	**48.3**	**52.3**	56.6	**58.7**
Prairie Brand	PB-1722R2	RR2Y	1.7	R	CM	**53.9**	7.4	0	539.00	47.1	50.7	**59.0**	**58.8**
Kruger	K2-1501	RR2Y	1.5	R	AC	**53.6**	7.3	0	535.75	47.2	**52.6**	56.9	57.6
Kruger	K2-1901	RR2Y	1.9	R	AC	**53.5**	7.6	1	535.00	45.9	51.2	**60.8**	56.1
Viking	2000R2N	RR2Y	2.0	R	AC	**53.5**	7.6	1	534.75	47.3	51.8	55.0	**59.8**
Dyna-Gro	31RY20	RR2Y	2.0	R	AC	**53.2**	7.6	0	531.75	**47.8**	48.7	56.2	**60.0**
SOI	2013NRR2Y	RR2Y	2.0	R	CM,AP	**53.2**	7.5	1	531.75	46.2	**52.7**	56.0	57.8
Channel	2200R2	RR2Y	2.2	R	AC	**52.8**	7.8	0	527.50	**48.4**	49.3	57.0	56.3
NorthStar	NS 2377NR2	RR2Y	2.3	R	AC	52.6	8.0	0	526.25	**50.5**	49.6	54.9	55.5
Gold Country	1844	RR2Y	1.8	MR	AC	52.5	8.0	0	525.25	47.2	48.6	**58.3**	56.0
Mustang	M-18922	RR2Y	1.8	R	AC	52.5	7.4	0	525.25	**49.9**	50.3	55.7	54.2
Mustang	M-17722	RR2Y	1.7	R	AC	52.5	7.3	0	525.00	42.5	**52.4**	57.7	57.4
Titan Pro	20M1	RR2Y	2.0	R	CM	52.5	7.6	1	525.00	43.6	**52.7**	57.7	56.0
Renk	RS172NR2*	RR2Y	1.7	R	None	52.4	7.3	0	524.00	**48.4**	51.0	54.4	55.8
Hefty	H20Y12	RR2Y	2.0	MR	I	52.3	7.5	0	522.75	44.6	52.2	56.6	55.7
Site Averages =						**50.3**	**7.7**	**0**	**503.41**	**43.9**	**49.0**	**54.1**	**54.3**
LSD (0.10) =						2.4	0.6	ns		3.9	3.3	3.8	4.0



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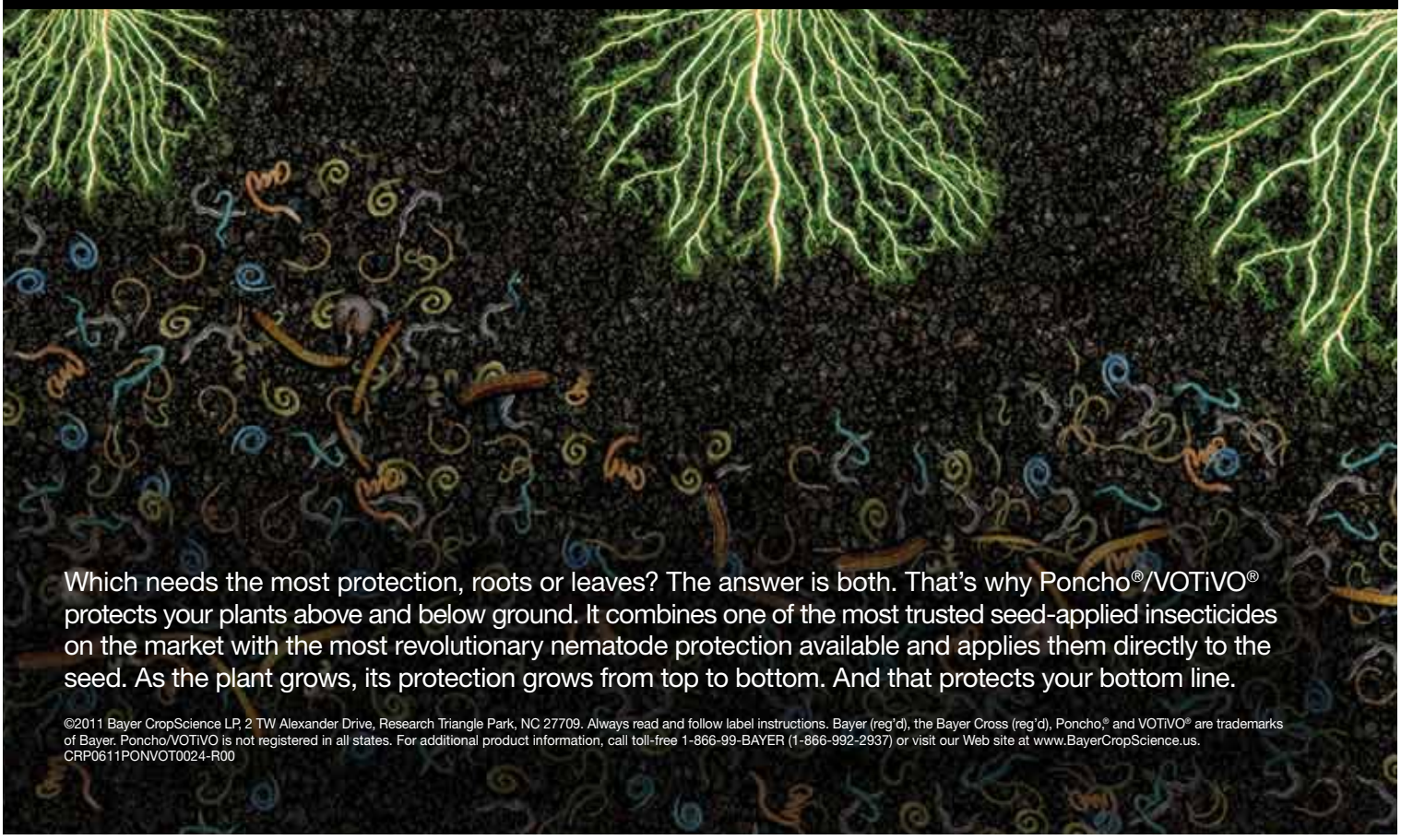

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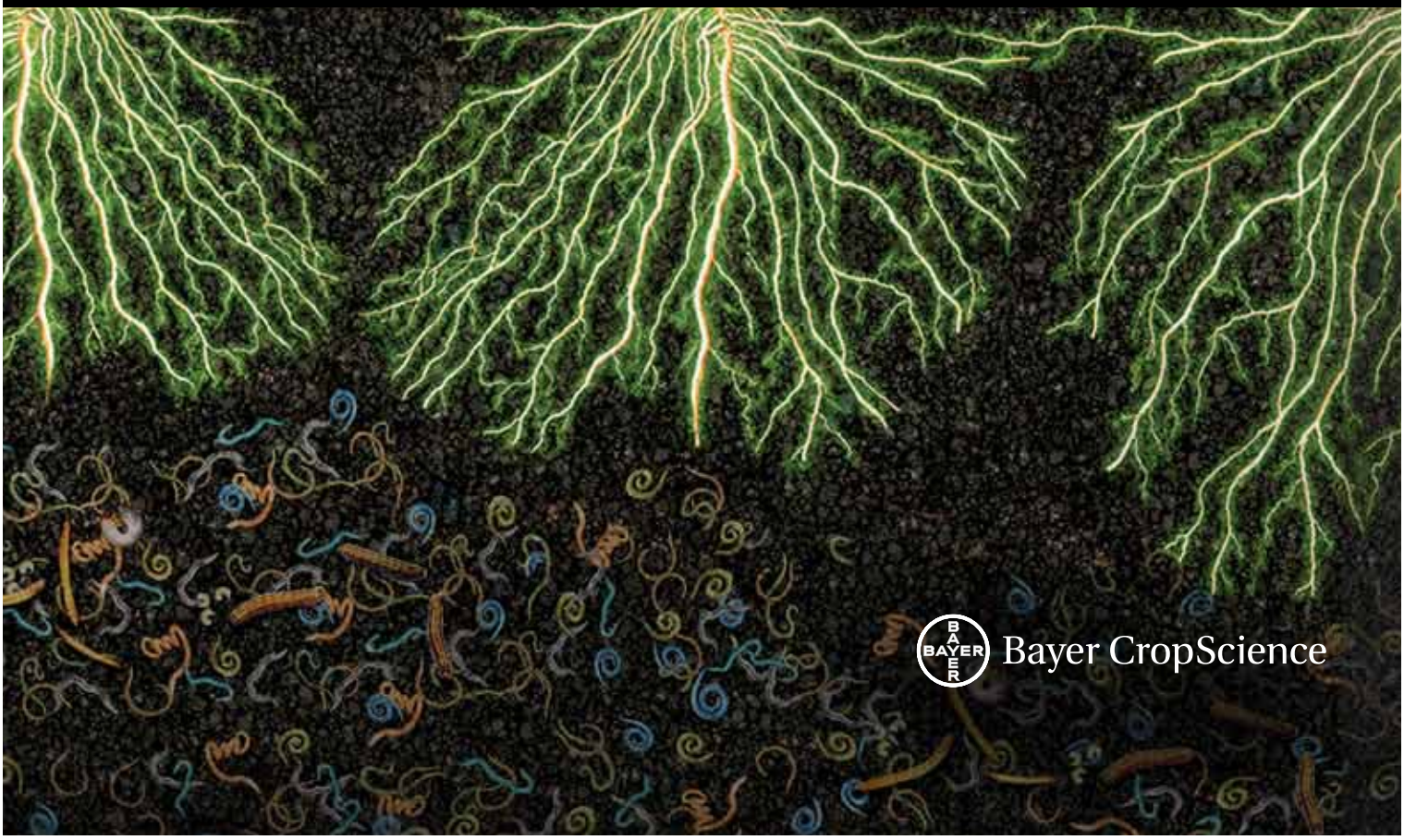

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