

farmers' independent research of seed technologies

www.firstseedtests.com

INSIDE

Unbiased yield research for corn and soybean products tested near you. Find the best seed for your farm.

Check first

2022 Performance Summary

Red River Valley



Luke Brendemuhl
FIRST Field Manager

Northland FIRST, LLC
luke.brendemuhl@firstseedtests.com
Summary of the 2022 Season

We are proud to bring you this report presenting the top corn and soybean performances in FIRST's independent yield trials. FIRST is your trusted source for unbiased, accurate yield information about America's finest seed brands. Each hybrid and variety is tested at multiple locations with the best and most consistent performers appearing in this summary. For all the harvest reports and complete multi-year results for each product in the trials, visit us at www.firstseedtests.com.



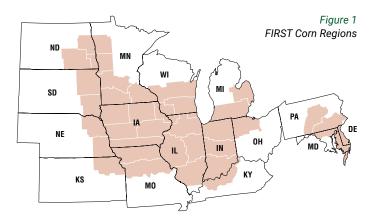


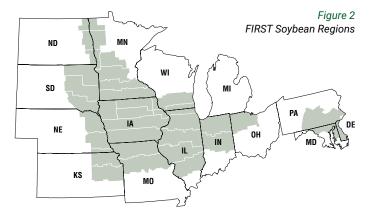
FIRST Testing Methodology and Procedures

TESTING PROGRAM

Our testing program compares corn and soybean seed product yield and agronomic performance in grower fields across 16 states: Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota and Wisconsin (Figure 1 & Figure 2).

Testing regions have been established to provide similarity by geography and crop maturity. Seed products within a predefined maturity range (e.g., 106 to 116 RM corn or 0.7 to 1.5 maturity soybeans) are pooled into a single, all-season test or split into early- and full-season tests depending on entry volume. Products are planted at five or six corn test locations or four soybean locations within a region.





Test locations are selected to represent the geographic diversity within a region. Ideal sites have uniform, well-drained soils where farmer hosts use standard production practices for the area. Typically, all tests at a location are conducted adjacent to each other to minimize yield variance between tests.

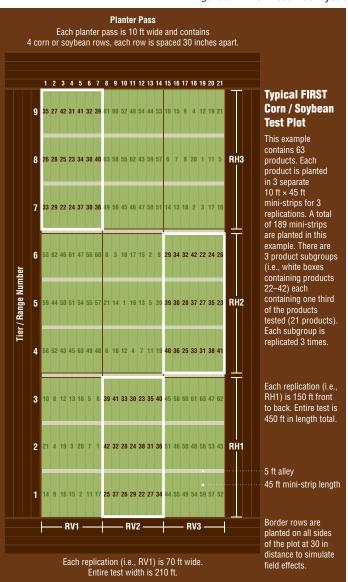
Seed companies and/or seed distributors are invited to submit their most promising seed products within specified test maturity limits to desired test regions. They provide high-quality seed from commercial lots and fees to enter FIRST tests. The only exceptions are check products (CK after product names, i.e. A1234 CK), chosen by FIRST Managers to bridge results between early- and full-season tests, and Grower Comparison products (GC after the product name), often provided by host farmers for their knowledge as test space permits.

Products are replicated three times minimum per test and grouped in sub-blocks arranged in replication blocks from front to back and side to side. This provides more precision in yield measurement and flexibility should a disruptive event (i.e., standing water) require elimination of non-uniform test areas.

FIRST Field Managers package, randomize, and plant seeds into host grower fields using slightly modified commercial planting equipment to facilitate mini strip research. Individual plots (a.k.a. mini-strips) contain four corn rows spaced 30-inches apart, 45 feet in length (Figure 3). Soybean is planted in four rows spaced 30-inches apart or seven 15-inch spaced rows. Soil insecticide is typically applied to corn at planting. Seeding rate is based on standard area practices.

FIRST Managers measure yield from the center two corn rows or all soybean rows using customized commercial self-propelled combines. Grain from each plot is electronically weighed and moisture content measured. Soybean grain is sampled from one replicate per test for protein and oil content analysis.

Figure 3 FIRST Test Plot Layout





PERFORMANCE SUMMARIES

FIRST Corn Grain and Soybean Top 30 Harvest Reports are designed to identify high-yielding products at a single location. These reports are posted to www.firstseedtests.com generally within 2 days of harvest and provide product information, yield and agronomic results.

The Corn Grain and Soybean Top 30 Region Summary reports (Figures 4 & 5) identify products that consistently deliver top performance across a region by averaging product results from all test locations. These corn and soybean regional reports display grain Yield (Bu/A), grain Moisture (%), Lodging (%) and Gross Income (\$/A) averaged over all locations, presented alongside individual site yield results. This report is available shortly after the last Harvest Report for a region becomes available at www.firstseedtests.com.

In both reports, products are first ranked by Gross Income (\$/A). The 30 highest ranked Gross Income (\$/A) products are sorted by Yield (Bu/A) for public presentation. Nearly all tests include more than 30 products but only the Top 30 products are reported.

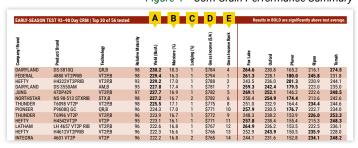
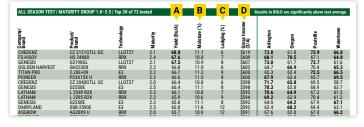


Figure 4 Corn Grain Performance Summary

Figure 5 Soybean Performance Summary



PERFORMANCE MEASUREMENTS

- A Yield (Bu/A) Harvested grain weight and grain moisture are used to convert yield results to bushels per acre at 15% moisture (base moisture) for corn and 13% moisture for soybean. Grain shrinkage is additionally applied to product yields exceeding the base moisture.
- **B** Moisture (%) A calibrated electronic sensor measures moisture content of harvested grain.
- C Lodging (%) Estimated percentage of corn plants leaning more than 45° from vertical or stalks broken below the ear at harvest. Encompasses both stalk and root lodging. Estimated soybean plant leaning (0% = all plants vertical, 100% = all plants flat on the ground).
- Gross Income (\$/A) Harvested crop value in dollars per acre is derived by multiplying crop yield and price per bushel minus drying costs, if any, to reach base moisture. Each Harvest Report and Performance Summary details specific crop price and drying costs.
- **E** Gross Income Rank Gross Income values are sorted from high to low then numbered consecutively (1, 2, 3...) from highest to lowest value. Ties are broken based on higher yield, lower lodging and lower moisture values.

STATISTICS REPORTED

Least Significant Difference (LSD) is provided on all replicated results to facilitate valid product comparisons. Statistically, the LSD value is the minimum difference needed between two products to declare that one product is greater than another. FIRST calculates LSD at the 10% level (p = 0.10). Product yield differences equal or greater than the LSD (0.10) value would have been greater one versus the other nine times out of 10 (90% probability). Typically, low LSD values indicate high-quality test results. However, keep in mind that LSD values increase as: test yield level increases, p values decrease [i.e. LSD (0.05) value > LSD (0.10) value > LSD (0.25) value] and as data variability increases. Just because LSD values are higher in some tests vs. others does not mean the results are low quality. Multiple factors have a role in LSD value magnitude.

Coefficient of Variance (CV) measures the average difference between the replications of a test entry, averaged for all the entries in the test, then divided by the average of all observations recorded and expressed as a percentage. Higher values indicate more unexplained variability in proportion to the test average than lower values. Researchers within the seed industry may drop yield data from consideration when CV's are above 15% because the unexplained variance is high or the yield level is low or both. Low yield levels at a test site do not estimate yield potential well, nor are there as many or as great a difference between hybrids and varieties compared to higher yield conditions.

Data Rejected — If a data table has "Data Rejected" stamped across it, we have deemed this data is highly variable and of very poor quality, typically due to weather or uncontrolled factors. Rejection decisions are based on statistical analysis of yield results. Data with very high CV and/or low F-test values (the ratio of variability between entry averages divided by the variability between entry replications) are often rejected.

OTHER INFORMATION

Estimated Maturity (corn only) — Product maturity is determined by linear regression comparison of harvest grain moisture and company stated relative maturity (RM). Products with estimated maturity exceeding the test maximum by at least 1 RM are identified in italics. These products may have an unfair yield advantage over peers due to later maturity.

Bold Identified Means — These product means are significantly better than the test average for that measured parameter.

Check Product (CK) — When early- and full-season tests are conducted at a site, an identical check product is planted in both tests. Check yield results allow growers to comparatively view product performance in both early- and full-season tests. No product yield adjustments are made based on check performance.

Grower Comparison (GC) products — These products, identified with a "GC" product name suffix, are often supplied by growers hosting test sites and included when space permits. Grower comparison products allow direct comparison to products in our tests.

United Soybean Board (USB) Products (soybean only) — Products identified with a "§" product name suffix are funded by soybean checkoff dollars. This program strives to gather yield and grain composition results from genetics that otherwise would not be available.

Product Suffix Key

СК	Check product found in early- and full- season tests
GC	Grower Comparison product from farmer cooperator or field manager
§	United Soybean Board sponsored entry

Corn Seed Technology Key

	a realmonegy ney
CODE	DESCRIPTION
3010	Agrisure® 3010 (GT,CB,LL), formerly GT/CB/LL
3011	Agrisure® 3011 (CB,RW,LL,GT)
3110	Agrisure® Viptera® 3110 (Vip, CB,LL,GT)
3111	Agrisure® Viptera® 3111 (Vip,CB,RW,LL,GT)
A	Agrisure® Artesian®
AT	Agrisure® Total (CB,HXX,RW,LL,GT), formerly Agrisure® 3122
AM	Optimum® AcreMax® (YGCB,HX,LL,RR2)
AM1	Optimum® AcreMax® 1 (HXT,LL,RR2)
AML	Optimum® AcreMax® Leptra (Vip,YGCB,HX,LL,RR2)
AQ	Optimum® AQUAmax®
CONV	conventional corn
D	Duracade™ (CB,HX,RW,RW2,LL,GT), formerly Agrisure Duracade® 5122
DV	DuracadeViptera™ (Vip,CB,HX,RW,RW2,LL,GT), formerly Agrisure Duracade® 5222
DVZ	DuracadeViptera™ Z3 (Vip,CB,VTP,RW,RW2,LL,GT), formerly Agrisure Duracade® 5332
DG	DroughtGard®
E	Enlist™ (2,4-D, glyphosate, fop tolerance)
GT	Agrisure® GT
GTA	Agrisure® GTA
PC	PowerCore™ (HX,VT2P)
QR	Qrome™
RR2	Roundup Ready® 2 Corn
STX	SmartStax® (VT3P,HXX)

STXP	SmartStax® PRO (VT3P,HXX)
TRE	Trecepta®
VT2P	VT Double PRO®
V	Viptera™ (Vip,CB,HX,LL,GT), formerly Agrisure Viptera® 3220

Soybean Seed Technology Key

CODE	DESCRIPTION
CONV	Conventional
E3	Enlist E3® (2,4-D, choline, glyphosate, LL)
LLGT27	LibertyLink® GT27®
RR	glyphosate tolerant (formerly Roundup Ready)
RR2Y	Roundup Ready 2 Yield®
RRX	Roundup Ready 2 Xtend®
RXF	Roundup Ready 2 XtendFlex®
ST	Sulfonylurea tolerant

Soybean Cyst Nematode (SCN) Resistance Rating

CODE	SOYBEAN CYST NEMATODE DESCRIPTION
NA	information is not available
S	susceptible
MR	moderate resistance
R	resistant

FIRST would like to thank the United Soybean Board for support and funding for the soybean entry and quality reporting program.

Be the first to Get Yield Results





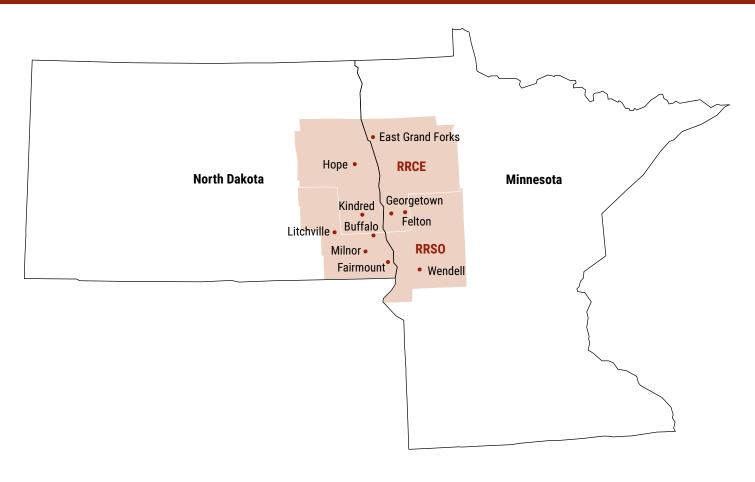


ACCESS

FAST

www.firstseedtests.com





Site Description: RRCE (See corn results table on page 6)

	FIRST	Soil Texture	Tillage	Previous Crop	Total	Data	Data	Avera	ge	Yield History	
Site	FIRST Farmers				Nitrogen (lbs)	Date Planted	Date Harvested	Stand × 1,000	Yield	Bu/A	Years
Buffalo	Tim Berntson	loam	conventional	soybeans	124	25-May	25-0ct	33.4	183.1	195.2	1
East Grand Forks	Matthew Krueger	silty clay loam	conventional	soybeans	104	25-May	31-0ct	32.7	171.3	160.6	4
Felton	Curtis Brendemuhl	loam	conventional	soybeans	165	18-May	13-0ct	32.8	196.8	158.6	1
Georgetown	Curtis Brendemuhl	silty clay loam	conventional	soybeans	163	24-May	12-0ct	32.9	200.8	178.2	4
Норе	Thomas Hiam					Not Planted				182.6	3
								_	RRCE	163.5	5

Site Description: RRSO (See corn results table on page 7)

	FIRST	0.11	Tillage		Total		Date Harvested	Avera	ge	Yield History	
Site	FIRST Farmers	Soil Texture		Previous Crop	Nitrogen (lbs)	Date Planted		Stand × 1,000	Yield	Bu/A	Years
Fairmount	Rydell Farms					Not Planted				176.1	4
Kindred	Todd Toppen	silty clay	conventional	soybeans	130	26-May	20-0ct	33.4	137.5	146.5	3
Litchville	Mark Formo	silty clay loam	conventional	soybeans	71	28-May	26-0ct	31.9	141.7	195.3	5
Milnor	Steve Hogness	silt loam	strip till	soybeans	11	23-May	20-0ct	33.3	149.3	197.6	3
Wendell	Chad Biss	clay loam	conventional	soybeans	160	24-May	21-0ct	33.1	186.8	186.5	4
									RRSO	186.5	8

CORN REGIONAL ANNUAL YIELD AVERAGES FOR 2018-2022											
	Since Ir	nception									
FIRST Region	2022	2021	2020	2019	2018	Bu/A	#Years				
RRCE	188.0	187.2	139.0	179.0	172.7	163.5	5				
RRSO	154.3	211.4	164.7	167.4	190.0	186.5	8				

	EST 80-85 Day CRM	10p 30 01 1	o teotea						Ites	uits iii bocb	are significe	intly above te	St avera
Company/ Brand	Product/ Brand	Technology	Relative Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income (\$/A)	Gross Income Rank	Buffalo	East Grand Forks	Felton	Georgetown	Hope*
Golden Harvest	G85Z56-V	V	85	200.4	17.9	0	\$1,307	1	187.4	ш 177.7	214.1	222.5	
NK Brand	NK8519-V	V	85	200.1	17.9	2	\$1,304	2	182.1	192.7	218.9	206.7	-
Renk	RK256-3120-EZ	AA	84	193.3	18.4	1	\$1,257	3	182.8	181.3	195.5	213.8	-
Solden Harvest ntegra	G80Q01-V 3431 VT2PRIB	V VT2P	80 84	193.1 191.7	18.2 16.7	0	\$1,257 \$1,255	4 5	187.5 182.4	176.9 180.0	198.0 204.8	210.1 199.4	_
lefty	H3442 RIB	VT2P	84	191.0	16.1	0	\$1,253	6	185.2	167.0	207.2	204.6	_
hunder	T6983 VT2P	VT2P	83	190.9	16.4	0	\$1,251	7	180.7	188.8	200.9	193.2	-
lenk	RK223RR	RR2	82	190.6	16.8	0	\$1,248	8	181.5	182.7	199.6	198.6	
airyland IK Brand	DS-2531AM NK8005-V	AM V	85 80	189.7 189.6	16.6 18.7	0 0	\$1,242 \$1,233	9 12	184.2 187.0	186.4 168.7	193.4 206.3	194.9 196.6	_
REA	2B851	VT2P	85	188.9	15.6	0	\$1,242	10	175.9	179.1	193.5	207.4	_
hunder	THX22-85	VT2P	85	188.6	16.7	1	\$1,235	11	182.0	176.1	192.2	204.2	_
hunder	T6185 VT2P	VT2P	85	187.1	16.7	0	\$1,225	13	185.6	172.7	191.3	198.7	-
lefty	H3262 D23VC83RIB	VT2P VT2P	84	185.8	16.4	0	\$1,218	15	174.9 179.0	185.7 177.4	181.2	201.7	_
yna-Gro airyland	DS-2505Q	QR	83 85	185.7 185.4	15.5 16.4	1	\$1,220 \$1,216	14 16	179.0 189.8	177.4	187.5 197.8	198.9 199.3	_
ob-See-Co	RC3041-3110A	3110A	80	184.8	17.6	1	\$1,206	21	170.0	169.3	202.8	197.0	-
EA	83B33	VT2P	83	184.7	15.0	1	\$1,215	17	180.5	174.0	193.4	190.7	-
efty	H3322 RIB	VT2P	83	184.3	16.5	0	\$1,208	18	181.2	169.1	188.0	198.7	-
atham tine	LH 3325 VT2P RIB 9141-30	VT2P V	83 81	184.1 182.6	16.7 18.7	0	\$1,206 \$1,187	20 22	179.2 179.9	164.1 169.1	204.9 191.6	188.4 189.9	
hunder	T6085 VT2P	V VT2P	85	179.8	15.5	0	\$1,182	23	165.0	169.7	188.6	195.7	_
ioGene	BG510AT	V	81	179.6	18.7	2	\$1,167	28	159.5	159.9	188.4	210.6	-
roseed	1882 VT2PRIB	VT2P	82	178.7	15.6	0	\$1,175	24	157.7	163.4	192.5	201.3	_
hunder	T6181 VT2P	VT2P	81	178.3 178.0	15.6	1	\$1,172	25	176.5 172.1	167.2	183.1	186.4	-
yna-Gro hannel	D21VC81RIB 180-33VT2PRIB	VT2P VT2P	81 80	178.0	16.2 14.9	0	\$1,168 \$1,171	27 26	174.6	165.3 169.7	185.8 186.7	189.0 180.2	_
egacy	LC354-20	3110	85	175.9	18.0	6	\$1,147	30	165.2	128.2	200.4	209.6	_
roseed	2181 VT2PRIB	VT2P	81	175.6	15.6	0	\$1,155	29	167.0	159.8	187.0	188.6	_
ioneer	P8588AM GC	AM	85	173.2	15.3	0	\$1,140	31	157.1	167.1	188.6	180.2	<u> </u>
eKalb verages =	DKC35-88RIB CK	VT2P	85	183.6 181.4	15.7 16.4	0 1	\$1,207 \$1,188	19	171.1 172.7	174.7 167.4	192.6 190.8	196.0 194.9	_
SD (0.10) =				7.7	0.4	2.8	ψ1,100		11.7	11.2	8.9	9.8	
ULL-SEASON TE	ST 86-90 Day CRM	Top 30 of 32	tested						Res	ults in BOLD	are significa	antly above te	st aver
egacy	LC403-22	AA	90	213.1	21.6	6	\$1,371	1	237.5	147.1	233.7	234.1	-
notech	IC3983-3220	V	89	208.2	20.3	1	\$1,346	2	220.5	173.7	216.3	222.2	-
K Brand K Brand	NK9023-DV NK8760-V	DV V	90 87	206.4 205.6	20.3 19.8	4 0	\$1,333 \$1,331	3 4	209.0 203.2	175.1 183.3	220.0 219.8	221.5 216.2	_
hunder	6090 AA	AA	90	203.1	19.7	1	\$1,315	8	216.6	167.7	206.8	221.1	_
airyland	DS-3022AM	AM	90	202.6	18.6	0	\$1,317	5	204.9	178.5	220.1	206.9	_
EA	EXP88B04	VT2P	88	202.4	18.4	0	\$1,317	6	196.4	191.0	206.6	215.8	-
enk efty	RK400VT2P H4052	VT2P VT2P	90 90	202.2 202.1	20.5 20.3	0	\$1,305 \$1,305	13 12	208.4 210.2	188.1 186.2	194.6 200.2	217.9 211.9	
EA	3B903	VT2P	90	202.1	17.8	0	\$1,303	7	190.8	190.2	211.2	211.9	_
atham	LH 3937 VT2P RIB	VT2P	89	201.7	20.2	0	\$1,303	14	210.7	172.8	211.9	211.4	-
enk	RK297VT2P	VT2P	89	201.3	19.2	0	\$1,306	11	201.3	177.5	207.2	219.1	-
hunder	T6389 VT2P	VT2P	89	201.1	17.5	0	\$1,313	9	192.7	191.7	204.8	215.2	-
efty roseed	H3712 RIB 1790 VT2PRIB	VT2P VT2P	87 90	200.7 200.5	17.7 20.9	1 0	\$1,309 \$1,293	10 16	205.3 205.2	187.7 164.8	202.3 219.7	207.7 212.2	_
olden Harvest	G87A53-V	V 121	87	199.8	19.7	0	\$1,294	15	200.2	179.0	212.3	207.7	_
olden Harvest	G84J92-AA	AA	84	199.4	20.1	2	\$1,289	17	206.0	176.3	202.7	212.8	-
atham	LH 3827 VT2P RIB	VT2P	88	196.2	19.3	0	\$1,272	18	194.4	179.4	203.7	207.4	-
hunder	T6888 VT2P	VT2P	88 90	195.3 194.8	18.8	0	\$1,269	19	195.2 203.2	185.7	197.0	203.4	_
efty ob-See-Co	H4064 RC3601-GTA	STX GTA	86	194.8	18.8 19.1	0	\$1,266 \$1,259	20 21	186.1	177.0 178.9	194.1 201.2	205.1 209.8	
airyland	DS-2919AM	AM	89	193.1	19.2	5	\$1,255	22	207.2	126.8	222.6	216.1	_
hunder	T6987 VT2P	VT2P	87	189.9	17.6	0	\$1,239	23	184.1	179.8	195.5	200.4	-
atham	LH 3695 VT2P RIB	VT2P	86	188.4	18.0	1	\$1,228	25	180.3	176.0	197.4	200.1	
atham EA	LH 3867 VT2P RIB 2B863	VT2P VT2P	88 86	188.1 187.3	17.8 19.0	0	\$1,226 \$1,216	26 28	179.1 169.3	176.9 170.6	192.4 199.0	204.0 210.5	_
yna-Gro	D27VC87RIB	VT2P	87	187.3	18.0	1	\$1,210	27	181.4	170.0	187.7	201.8	_
eKalb	DKC40-99RIB	TRE	90	185.8	19.2	0	\$1,204	30	172.6	189.1	192.7	188.7	_
yna-Gro	D28VC33	VT2P	88	185.1	17.9	0	\$1,207	29	184.1	169.0	196.6	190.9	-
EA eKalb	86A94	STX VT2D	86	183.9 188.0	17.2 16.7	0	\$1,201	31	182.1 194.4	175.1	191.3 195.4	187.0	
verages =	DKC35-88RIB CK	VT2P	85	188.0	18.9	0 1	\$1,231 \$1,275	24	194.4	175.5 176.3	203.9	186.8 208.1	
				10.5	0.5	2.5	γ1 , ∠/0		10.2	11.7	11.3	9.6	

^{*}Hope: not planted, wet spring conditions.



EARLY-SEASON T	EST 85-90 Day CRM	I Top 30 of 3	6 tested						Re	sults in BOLD	are significa	intly above t	est averag
Company/ Brand	Product/ Brand	Technology	Relative Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income (\$/A)	Gross Income Rank	Fairmount*	Kindred	Litchville⁴	Milnor	Wendell
Integra	4023-3220A	V	90	≻ 172.0	19.1	1	\$1,097	1	<u>н</u>	150.1	132.2	193.6	212.0
Legacy	LC403-22	AA	90	169.7	17.8	0	\$1,086	2	-	150.5	117.1	195.8	215.3
Thunder	T6389 VT2P	VT2P	89	167.1	15.6	0	\$1,079	3	_	138.2	159.6	176.6	194.1
REA Golden Harvest	3B903 G90S99-DV	VT2P DV	90 90	166.9 166.7	15.7 18.4	0	\$1,077 \$1,065	4 5	_	143.9 138.6	148.3 129.0	172.5 196.9	202.7 202.3
Innotech	IC3983-3220	V	89	163.9	17.3	Ő	\$1,052	6	_	139.7	124.3	177.8	213.7
Renk	RK400VT2P	VT2P	90	162.5	17.1	0	\$1,044	7	_	143.6	135.6	172.3	198.5
Dairyland	DS-3022AM	AM VT2P	90 90	159.4	16.4 17.2	0	\$1,026	8	-	131.8 139.4	127.9	178.3 177.6	199.7 184.9
Hefty Renk	H4052 RK297VT2P	VT2P VT2P	90 89	158.6 158.6	16.5	0	\$1,019 \$1,021	12 10	_	139.4	132.6 141.7	163.0	204.9
Latham	LH 3937 VT2P RIB	VT2P	89	158.2	17.1	0	\$1,017	13	_	122.1	146.3	164.7	199.6
Hefty	H3712 RIB	VT2P	87	158.0	15.1	2	\$1,022	9	-	142.8	135.4	153.8	200.2
REA	EXP88B04	VT2P	88	157.9	15.3	0	\$1,021	11	_	149.7	143.8	159.4	178.7
Dairyland Latham	DS-2919AM LH 3827 VT2P RIB	AM VT2P	89 88	156.9 155.8	16.7 16.6	0	\$1,009 \$1,003	14 15	_	127.8 139.7	144.8 139.0	166.5 153.8	188.4 190.7
NK Brand	NK8760-V	V	87	154.2	17.3	0	\$990	18	_	128.7	133.5	162.2	192.6
Dairyland	DS-2505Q	QR	85	154.2	15.1	0	\$997	16	-	135.7	129.2	171.0	180.9
Golden Harvest	G87A53-V	V	87	154.0	17.3	0	\$988	19	-	147.1	124.2	163.1	181.8
Thunder Rob-See-Co	T6888 VT2P RC3601-GTA	VT2P GTA	88 86	153.7 153.4	16.0 16.6	0 0	\$991 \$987	17 20	_	134.1 135.7	137.9 133.4	160.4 167.9	182.3 176.6
Thunder	T6987 VT2P	VT2P	87	152.3	14.9	3	\$985	21	_	139.0	135.4	155.5	170.0
_egacy	LC353-22	AA	85	151.9	16.2	Õ	\$979	23	_	141.0	130.4	163.6	172.8
Latham	LH 3867 VT2P RIB	VT2P	88	150.4	15.5	0	\$972	24	_	131.8	132.6	160.8	176.2
Hefty	H4064	STX	90	149.0	15.7	0	\$962	25	-	125.4	131.4	171.4	168.0
Dyna-Gro Latham	D28VC33 LH 3695 VT2P RIB	VT2P VT2P	88 86	148.6 148.0	15.6 15.1	0 1	\$960 \$957	26 27	_	129.2 133.8	132.3 131.7	151.3 149.8	181.8 176.5
ntegra	3629 VT2PRIB	VT2P	86	147.6	15.0	1	\$954	28	_	125.7	126.4	161.4	177.0
REA	86A94	STX	86	146.6	15.1	0	\$949	29	_	125.3	135.2	155.5	170.6
Dairyland	DS-2531AM	AM	85	146.5	14.8	0	\$948	30	_	130.4	117.4	154.2	184.0
D yna-Gro DeKalb	D27VC87RIB DKC40-99RIB CK	VT2P TRE	87 90	145.6 152.2	15.4 16.1	0	\$940 \$982	31 22	_	133.6 133.1	119.5 149.2	152.0 151.0	177.3 175.6
Averages =	DIG40-33IND GIC	TILL	30	153.7	16.1	0	\$990	22		132.9	132.3	163.8	185.1
LSD (0.10) =				9.0	0.7	0.7	·			12.5	13.4	9.2	11.5
	ST 91-95 Day CRM								Re	sults in BOLD			
NK Brand	NK9231-AA	AA	92	170.0	21.7	0	\$1,072	1	_	156.5	169.2	146.7	207.7
Rob-See-Co Enestvedt	RC4166-3110A E612RR	3110A RR2	91 92	166.9 164.5	19.2 18.4	1	\$1,063 \$1,052	2	_	160.7 160.1	131.7 162.7	161.6 144.9	213.4 190.2
Hefty	H4564	STX	95	163.6	21.7	0	\$1,033	6	_	160.1	145.3	149.1	200.0
Thunder	THX22-95	VT2P	95	163.5	19.4	0	\$1,041	4	_	144.5	175.1	147.0	187.4
Latham	LH 4527 VT2P RIB	VT2P	95	162.9	19.8	0	\$1,036	5	-	143.9	168.3	142.6	196.7
Hefty Rob-See-Co	H4462 RC4535-3110	VT2P 3110	94 95	161.9 161.7	19.5 18.6	0	\$1,030 \$1,033	8 7	_	144.4 150.4	161.4 153.5	140.8 156.6	200.9 186.5
Renk	RK444VT2P	VT2P	93	161.2	19.3	0	\$1,033	9	_	137.9	166.1	148.2	192.7
Latham	LH 4242 VT2P RIB	VT2P	92	159.5	18.9	0	\$1,017	10	_	153.6	153.2	144.3	186.8
Dairyland	DS-3550AM	AM	95	159.4	19.8	0	\$1,013	11	_	146.3	140.7	148.2	202.3
Renk Thunder	RK502SSTX T6294 VT2P	STX VT2P	95 94	159.4 157.9	19.8 19.8	0	\$1,013 \$1,004	12 14	_	141.9 149.0	152.1 158.1	136.7 139.6	206.8 184.9
atham	LH 4517 VT2P RIB	VT2P VT2P	95	157.9	17.8	0	\$1,004	13	_	149.0	158.9	139.0	191.6
Dyna-Gro	D34VC93	VT2P	94	156.9	19.2	0	\$1,000	15	_	136.4	170.2	133.2	187.9
RÉA	95A36	STX	95	156.4	19.2	0	\$997	16	_	139.9	156.1	137.1	192.6
Oyna-Gro	D33QZ83	V	93	155.7	19.0	0	\$993	17	_	152.6	146.1	133.9	190.1
Golden Harvest Hefty	G91V51-DV H4262 RIB	DV VT2P	91 92	155.3 154.6	21.3 18.0	1	\$982 \$990	20 18	_	141.9 141.3	135.7 156.0	149.5 131.1	194.3 190.1
REA	92B10	VT2P	92	153.9	16.7	Ő	\$990	19	_	140.3	160.3	125.2	190.0
REA	4B944	VT2P	94	153.8	18.8	0	\$981	21	-	140.4	158.7	127.3	188.7
Oyna-Gro	D31VC23	VT2P	91	152.8	17.6	0	\$980	22	_	146.1	142.5	139.4	183.3
IK Brand Dairyland	NK9175-DV DS-3477AM	DV AM	91 94	152.6 152.4	21.2 18.0	0 0	\$965 \$976	24 23	_	150.0 121.3	115.1 162.7	156.1 137.0	189.1 188.5
Hefty	H4522	VT2P	95	152.4	20.6	0	\$965	25	_	139.0	150.1	131.9	188.2
Rob-See-Co	RC4213-3120	AA	92	150.5	18.9	0	\$960	26	_	144.4	137.8	130.9	188.8
eKalb	DKC44-98RIB GC	VT2P	94	149.9	18.1	0	\$959	27	_	138.9	149.5	124.1	187.0
Thunder	T6595 VT2P	VT2P VT2P	95 91	149.7 148.8	19.3 17.5	0	\$954 \$954	29 28	_	126.3 138.5	154.5 150.1	133.4 121.0	184.8 185.5
Thunder					1/7		343/1			1307			100.5
Γhunder _atham	T6791 VT2P LH 4375 VT2P RIB												
Γhunder ∟atham DeKalb	LH 4375 VT2P RIB DKC40-99RIB CK	VT2P VT2P TRE	93 90	148.3 144.6	17.3 17.3 16.4	0	\$952 \$931	30 35	_ _	135.7 135.4	146.2 149.6	130.2 121.8	181.0 171.5
atham	LH 4375 VT2P RIB	VT2P	93	148.3	17.3	0	\$952	30	_	135.7	146.2	130.2	181.0

^{‡3} replications early-season test; *Fairmount: not planted, wet spring conditions.



Site Description: RRNO (See soybean results table on page 9)

					Total	D-4-	D-4-	Avera	ge	Yield History	
Site	FIRST Farmers	Soil Texture	Tillage	Previous Crop	Nitrogen (lbs)	Date Planted	Date Harvested	Stand × 1,000	Yield	Bu/A	Years
Donaldson	Jackson Klein	clay	conventional	sugarbeet	_	5-Jun	19-0ct	ND	ND	_	new site
East Grand Forks	Matthew Krueger	silty clay loam	conventional	corn	_	9-Jun	18-0ct	116.9	28.5	45.4	6
Greenbush	Garner Eeg	loam	conventional	wheat	_	5-Jun	11-0ct	124.5	40.7	_	_
Warren	Warren Farm	sandy loam	conventional	wheat	-	7-Jun	Not harvested	_	-	40.2	4
									RRNO	40.0	6

Site Description: RRCE (See soybean results table on page 9)

	FIRST	Soil Texture	Tillage		Total	Data	Data	Average		Yield History	
Site	FIRST Farmers			Previous Crop	Nitrogen (lbs)	Date Planted	Date Harvested	Stand × 1,000	Yield	Bu/A	Years
Buffalo	Tim Berntson	loam	conventional	corn	_	26-May	8-0ct	ND	ND	42.21	1
Colgate	Thomas Hiam	loam	conventional	navy beans	_	8-Jun	17-0ct	124.0	41.5	_	new site
East Grand Forks	Matthew Krueger	silty clay loam	conventional	corn	_	9-Jun	18-0ct	120.9	32.3	45.4	6
Georgetown	Curtis Brendemuhl	silty clay	conventional	wheat	_	22-May	Oct 04	122.0	71.7	43.5	4
			'					_	RRCE	42.5	8

Site Description: RRSO (See soybean results table on page 10)

Site		Soil Texture	re Tillage	Total		. .		Average		Yield History	
	FIRST Farmers			Previous Crop	Nitrogen (lbs)	Date Planted	Date Harvested	Stand × 1,000	Yield	Bu/A	Years
Georgetown	Curtis Brendemuhl	silty clay	conventional	wheat	_	22-May	7-0ct	123.3	71.9	43.5	4
Kindred	Todd Toppen	silty clay	conventional	soybeans	130.0	27-May	Oct 05	122.2	57.4	58.9	1
Litchville	Mark Formo					Not Planted				49.6	7
Milnor	Steve Hogness	silt loam	no-till	corn	_	27-May	9-0ct	124.1	76.9	59.3	2
								_	RRSO	48.6	8

SOYBEAN REGIONAL ANNUAL YIELD AVERAGES FOR 2018-2022											
	Since In	ception									
FIRST Region	2022	2021	2020	2019	2018	Bu/A	#Years				
RRNO	34.3	47.7	37.3	33.8	37.0	40.0	6				
RRCE	48.6	52.3	33.3	36.5	46.3	42.5	8				
RRSO	68.8	67.9	41.1	38.2	47.3	48.6	8				



Soybean Results: RRNO (See site description on page 8)

ALL-SEASON TEST		Results in BOLD are significantly above test av									
Company/ Brand	Product/ Brand	Technology	Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income (\$/A)	Donaldson*	East Grand Forks	Greenbush	Warren*
Thunder	TX8304N	RXF	0.4	44.1	10.2	0	\$579	42.1	45.3	42.9	-
REA	R0422XF	RXF	0.4	41.7	10.8	0	\$546	42.0	37.3	46.0	-
Hefty	H03XF3	RXF	0.3	41.0	10.5	0	\$538	44.6	41.0	40.9	-
Hefty	H009XF3	RXF	0.1	40.9	10.2	0	\$536	39.5	35.0	46.8	_
Asgrow	AG01XF3 U	RXF	0.1	40.8	10.5	0	\$535	45.4	35.9	45.7	_
Proseed	XF30-42N	RXF	0.4	40.6	10.2	0	\$533	39.6	38.6	42.6	-
NK Brand	NK009-G7E3	E3	0.1	39.3	10.3	0	\$516	33.4	36.4	42.2	-
NK Brand	NK03-V5E3 U	E3 E3	0.3	38.8	10.7	0	\$508	37.7	29.3	48.3	
Golden Harvest	GH0363E3		0.3	38.7	10.5	0	\$507	36.6	32.9	44.5	_
Latham	L 0254 XF	RXF	0.2	38.4 38.4	9.7	0	\$503	36.1 34.2	34.4	42.4 44.8	-
Pioneer Golden Harvest	P04A98E U GH00973E3	E3 E3	0.4 0.1	38.4 37.2	11.0 10.1	0 0	\$503 \$487	28.5	31.9 33.2	44.8 41.1	_
Proseed	EL30-13	E3	0.1	37.2	10.1	0	\$487	32.5	33.2	41.1	_
Channel	0122RXF	RXF	0.1	36.8	9.9	0	\$487 \$483	32.5 38.8	33.0	41.2	_
Thunder	TX8203	RXF	0.1	36.6	9.9	0	\$481	28.0	32.1	41.2	
Latham	L 0136 E3	E3	0.3	36.4	10.3	0	\$477	31.2	32.1	39.8	_
Stine	04EE06 U	E3	0.4	36.1	10.5	0	\$477	35.7	29.4	42.8	
Dairyland	DSR-0220E	E3	0.2	36.0	10.5	0	\$471	31.5	27.5	44.4	_
Dak-Sota	DE5301	E3	0.1	35.9	10.3	0	\$471	32.1	30.2	41.7	_
Hefty	H01XF3	RXF	0.1	35.7	10.1	0	\$469	37.0	31.9	39.6	_
Asgrow	AG04XF2 U	RXF	0.4	35.7	10.1	Ö	\$468	42.6	32.1	39.3	_
Thunder	TE7101N	E3	0.1	35.2	10.5	Õ	\$461	24.4	26.2	44.3	_
Channel	0423RXF	RXF	0.4	35.1	10.4	Ö	\$461	42.7	33.3	37.0	_
Golden Harvest	GH0213E3 U	E3	0.2	35.0	10.8	Ŏ	\$458	22.0	27.2	42.7	_
NK Brand	NK04-G8E3	E3	0.4	34.7	10.4	Õ	\$456	33.0	33.2	36.3	_
Proseed	EL30-03N	E3	0.1	34.5	10.3	Ŏ	\$452	26.9	27.2	41.8	_
Proseed	XF30-12	RXF	0.1	34.1	9.8	Ŏ	\$446	37.9	27.1	41.1	_
Dairyland	DSR-0645E	E3	0.4	34.0	10.5	Ö	\$446	28.0	27.4	40.7	_
Stine	01EA63 U	E3	0.1	34.0	10.2	0	\$446	31.9	28.4	39.6	-
Dyna-Gro	S01XF43	RXF	0.1	33.7	10.0	Õ	\$443	38.7	29.7	37.8	_
Averages =	. ,		0	34.6	10.2	ő	\$453	32.9	28.5	40.8	
LSD (0.10) =				5.2	0.4	ns		4.8	5.9	3.0	

^{*}Warren: lost to herbicide drift damage; #Donaldson: rejected due to dicamba drift damage.

Soybean Results: RRCE (See site description on page 8)

ALL-SEASON TEST	MATURITY GROUP 0.	2-0.9 Top 30 of 6	63 tested								
Company/ Brand	Product/ Brand	Technology	Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income (\$/A)	Buffalo*	Colgate	East Grand Forks	Georgetown
Thunder	TE7309N	E3	0.9	54.5	11.1	0	\$726	55.7	41.7	40.9	80.9
Dairyland	DSR-0920E	E3	0.9	54.5	10.9	0	\$725	66.6	45.7	38.0	79.6
Mustang	XF09123	RXF	0.9	53.2	10.5	0	\$708	64.4	43.7	38.6	77.2
Thunder	TX8309N	RXF	0.9	53.1	10.7	0	\$707	66.0	44.3	37.6	77.3
Latham	L 0945 LLGT27	LLGT27	0.9	52.9	10.9	0	\$705	69.3	43.4	35.7	79.8
Thunder	TX8307N	RXF	0.7	52.8	11.2	0	\$704	72.7	45.4	34.0	79.2
Hefty	H03XF3	RXF	0.3	52.4	10.4	0	\$698	72.6	42.3	43.1	71.9
Hefty	H09XF3	RXF	0.9	52.3	10.5	0	\$697	72.3	44.2	38.1	74.7
Brevant	B091EE U	E3	0.9	52.3	10.9	0	\$696	67.2	45.1	31.0	80.8
Latham	L 0528 LLGT27	LLGT27	0.5	51.9	10.4	0	\$691	74.0	48.3	36.5	71.0
Asgrow	AG09XF3 U	RXF E3	0.9 0.9	51.7 51.2	10.9 10.7	0	\$689	72.9 67.8	43.1 41.8	30.0	82.1 78.3
Dak-Sota Dyna-Gro	DE5309 S07XF23	RXF	0.9	50.8	10.7	0	\$682 \$676	66.6	41.8	33.6 36.7	72.8
Dyna-Gro	S05EN82	E3	0.7	50.6	10.3	0	\$673	67.4	42.9	34.6	72.8 74.8
Stine	08EC32 U	E3	0.8	50.0	10.4	0	\$670	68.5	42.3	31.7	76.3
Asgrow	AG02XF2 U	RXF	0.0	50.3	10.3	Ö	\$669	65.6	44.3	35.4	70.3 71.1
Pioneer	P04A98E U	E3	0.4	50.2	10.2	0	\$669	66.6	42.2	36.8	71.8
Latham	L 0959 E3	E3	0.9	50.2	10.1	Ŏ	\$668	69.3	42.7	32.6	75.3
Thunder	TE7207	E3	0.7	50.1	10.5	Ö	\$667	67.1	46.9	30.8	72.6
Hefty	H07XF1	RXF	0.7	50.1	10.5	Ŏ	\$667	63.8	40.3	35.2	74.8
Hefty	H06XF2	RXF	0.6	50.1	10.5	Ŏ	\$667	65.4	45.0	34.1	71.1
Dyna-Gro	S07EN61	E3	0.7	50.0	11.3	Ö	\$666	66.2	44.6	33.3	72.1
Stine	04EE06 U	E3 E3	0.4	50.0	10.2	0	\$665	66.9	38.8	33.2	77.9
NK Brand	NK06-D9E3 U	E3	0.6	49.7	10.7	0	\$661	65.1	40.6	37.8	70.7
Golden Harvest	GH0653XF	RXF	0.6	49.5	10.3	0	\$659	70.0	41.4	37.5	69.6
Paloma	PL20E61 GC	E3	0.6	49.4	10.7	0	\$657	67.1	40.9	32.7	74.5
Hefty	H05XF3	RXF	0.5	49.3	10.3	0	\$657	65.2	42.6	32.8	72.7
Latham	L 0728 XF	RXF	0.7	49.2	10.6	0	\$656	61.4	42.8	35.0	69.9
Golden Harvest	GH0803XF	RXF	0.8	49.2	10.8	0	\$654	66.4	41.1	34.9	71.4
Hefty	H08XF2	RXF	0.8	48.9	10.8	0	\$651	67.9	42.8	32.9	71.0
Averages =				48.5	10.6	0	\$646	66.3	41.5	32.4	71.7
LSD (0.10) =				3.7	0.3	ns		4.2	3.3	5.2	3.9

^{*}Buffalo results not included in overall average due to evidence of dicamba drift damage.

Soybean Results: RRSO (See site description on page 8)

ALL-SEASON TES	ST MATURITY GROUP 0.0	6-1.4 Top 30 of	72 tested								
Company/ Brand	Product/ Brand	Technology	Maturity	Yield (Bu/A)	Moisture (%)	Lodging (%)	Gross Income (\$/A)	Georgetown	Kindred	Litchville*	Milnor
Latham	L 1439 XF	RXF	1.4	75.6	10.6	0	\$1,005 \$965	78.9	63.6	-	84.3
Mustang	XF13323	RXF	1.3	72.6	10.6	0	\$965	79.5	60.3	_	77.9
Paloma	PL2E141 GC	E3	1.4	72.3	10.5	0	\$960	80.9	59.7	_	76.1
Dyna-Gro	S09EN53	E3	0.9	72.2	10.2	0	\$959	75.3	59.8	_	81.4
Asgrow	AG09XF3 U	RXF	0.9	72.1	9.9	0	\$959	74.6	60.1	_	81.8
Xitavo	X0 1133E	E3	1.1	72.1	10.2	0	\$959	76.5	59.3	_	80.6
Dairyland	DSR-0920E	E3	0.9	72.0	10.1	0	\$957	71.2	61.1	_	83.7
Genesis	G1070E	E3	1.0	71.8	10.1	0	\$954	76.1	59.5	_	79.8
Zinesto	Z1202E	E3	1.2	71.6	10.4	0	\$952	77.7	55.3	_	81.8
NK Brand	S13-E3	E3	1.3	71.5	10.1	0	\$951	76.9	59.7	_	78.0
Zinesto	Z0903E	E3_	0.9	71.5	10.3	0	\$950	74.2	58.8	_	81.4
Hefty	H13XF3	RXF	1.3	71.4	10.3	0	\$949	73.6	61.0	_	79.6
Latham	L 1392 E3	E3	1.3	71.3	10.2	0	\$949	74.4	58.5	_	81.2
Stine	10EF23 U	E3	1.0	71.3	10.2	0	\$948	73.3	59.9	_	80.8
Loyal	L1050E	E3	1.0	71.2	10.1	0	\$947	77.0	58.3	-	78.4
Hefty	H14XF3	RXF	1.4	71.2	10.4	0	\$946	71.5	61.0	_	81.1
Dairyland	DSR-1450E	E3,ST	1.4	71.2	10.1	0	\$946	74.2	64.1	_	75.2
Brevant	B131EE U	E3	1.3	71.1	9.9	0	\$945	74.3	60.2	-	78.7
Thunder	TE7011N	E3 E3	1.1	71.0	10.2	0	\$944	74.7	56.8	-	81.5
Latham	L 0959 E3 L 0945 LLGT27	LLGT27	0.9 0.9	70.9 70.9	10.2 10.0	0	\$943 \$943	70.8 72.3	60.9 62.1		81.1 78.3
Latham Thunder	TX8313N	RXF	1.3	70.9	10.0	0	\$943 \$941	72.5	60.4	_	76.3 79.6
Dairyland	DSR-1290E	E3,ST	1.3	70.8	9.9	0	\$941	72.5	60.3	_	79.6
Xitavo	XO 0993E	E3,31 E3	0.9	70.7	10.1	0	\$939	72.4	59.0	_	80.2
Zinesto	Z1101E	E3	1.1	70.0	9.7	0	\$936	69.6	59.4	_	82.2
Thunder	TE7309N	E3	0.9	70.4	10.2	0	\$935	71.3	60.8	_	79.0
Xitavo	XO 1372E	E3,ST	1.3	70.3	10.2	0	\$934	71.3	62.3		76.6
Stine	14EE02 U	E3,31	1.3	70.3	10.8	0	\$934	77.1	54.4	_	70.0
Xitavo	XO 1451E	E3	1.4	70.3	10.7	0	\$934	76.3	57.7	_	76.8
Paloma	PL2E101 GC	E3	1.0	70.3	10.7	Ö	\$933	73.2	60.1	_	77.2
Averages =	12210100	LU	1.0	68.7	10.1	0	\$914	71.9	57.4		76.9
							ارن				
LSD (0.10) =				2.6	0.4	ns		3.1	3.1		5.4

^{*}Litchville: not planted, wet spring conditions.























































GET RESULTS



farmers' independent research of seed technologies







What I like about using FIRST is that it's independent research. They have no horse in the race.

Mark Uittenbogaard Iowa farmer





I really like seeing what different brands, varieties, and traits do in the field.

> **Ed Iverson** Minnesota Farmer





FIRST's unbiased data tells us which corn varieties are going to perform best and in what way.

> **Darren Walter** Illinois Farmer



What Farmers say about FIRST trials



PRODUCT RESULTS

Check the complete results for each product tested in FIRST trials. Reports includes the overall wins, trial results, locations, and links to Harvest Reports and Region Summaries.



HARVEST REPORTS

See the head-to-head performance of corn and soybean seed products in the same conditions. Make informed decisions about next year's seed purchase using the most trusted independent trials in America.



EMAIL ALERTS

Get FIRST email alerts to know about the latest results. Customize which emails you receive firstseedtests.com account preferences for the crops, states, or maturities of interest to you.







f efirstseedtests

info@firstseedtests.com

 info@firstseedtests.com

www.firstseedtests.com