

Test by: Northland F.I.R.S.T., LLC Moorhead, MN

2021 Soybeans Top 30 Harvest Report

Red River South North Dakota & Minnesota [RRSO]
LITCHVILLE, ND
Mark Formo, Barnes County, ND 58461

Early-Season Test 0.6 - 0.9 Day CRM
S2021RRSO04a

Top 30 of 44 For Gross Income
(Sorted by Yield)
Average of (3) Replications

PREV. CROP/HERB: Wheat / Wolverine Advanced

SOIL DESCRIPTION: Lismore-Kranzburg silty clay
loam, mod. well drained, non-
irrigated

SOIL CONDITION: medium P, very high K, 6.5 pH,
3.1% OM, 19.5 CEC

TILLAGE/CULTIVATION: No-Till

PEST MANAGEMENT: Fierce Ez, Mad Dog, Medal Ec,
Gunsmoke

Applied N-P-K (units): 0-0-0

SEEDED - RATE - ROW: May 17 140.0 /A 30" spacing

HARVESTED - STAND: Oct 6 131.8 /A

TEST COMMENTS:

The plot was planted into no-till wheat stubble in dry conditions. Things stayed dry through May, but after that, this area was around the 10 year average for precipitation. At harvest, plants were about waist high and loaded with pods containing large beans. Some green stems and minimal lodging was seen as well. Mark said that beans were running well, with spots in fields reaching the 70's and 80's for yield. One replicate with high variance was removed from the full-season test.

Company/Brand	Product/Brand	Technol.†	RM	SCN Resist.	Yield Bu/A ↓	Moisture %	Lodging %	Stand (x 1000)	Gross Income \$/Acre	Rank	
Thunder	SB8010N ↗	RRX	1.0	R	81.4	10.4	0	132.0	995	1	
Dairyland	DSR-0920E ↗	E3	0.9	R	78.9	10.8	0	132.3	964	2	
Thunder	SB8807N ↗	RRX	0.7	R	77.8	10.6	0	133.0	951	3	
Thunder	TX8109N ↗	RXF	0.9	R	77.5	11.4	1	132.0	947	4	
Brevant	B091EE GC ↗	E3	0.9	S	76.9	11.5	0	133.0	940	5	
Asgrow	AG09XF0 § ↗	RXF	0.9	R	76.4	10.4	0	130.0	934	6	
Latham	L 0984 XF ↗	RXF	0.9	R	76.0	11.2	1	131.7	929	7	
Hefty	H08XF2 ↗	RXF	0.8	NA	75.9	10.9	0	132.5	927	8	
Hefty	H07XF1 ↗	RXF	0.7	NA	75.8	10.8	0	131.7	926	9	
Thunder	TX8207N ↗	RXF	0.7	R	75.8	10.4	0	131.7	926	10	
Thunder	TX8206N ↗	RXF	0.6	R	75.4	11.0	0	131.7	921	11	
Innotech	IS0864E3 ↗	E3	0.8	R	75.2	11.2	0	132.0	919	12	
NK Brand	NK08-V9E3 § ↗	E3	0.8	R	74.6	10.6	0	130.7	912	14	
NK Brand	NK08-B7XF ↗	RXF	0.8	R	74.2	10.7	8	132.7	907	15	
Genesis	G0750E ↗	E3	0.7	R	74.1	10.6	0	131.7	906	16	
Stine	09EA02 § ↗	E3	0.9	R	73.5	10.8	1	131.3	898	17	
Genesis	G0651E ↗	E3	0.6	R	73.3	10.5	1	131.7	896	18	
Latham	L 1094 E3 ↗	E3	1.0	R	73.2	10.7	0	131.0	895	19	
Golden Harvest	GH0842E3 ↗	E3	0.8	R	73.0	10.7	0	132.0	892	20	
Loyal	L0740E ↗	E3	0.7	R	72.9	10.8	0	133.0	891	21	
Apex	AE0720 ↗	E3	0.7	R	72.3	10.7	0	131.7	884	22	
Golden Harvest	GH1032XF ↗	RXF	1.0	R	72.3	10.7	0	132.0	884	23	
Xitavo	XO 1041E ↗	E3	1.0	R	71.3	11.7	1	131.5	871	24	
Apex	AE0611 ↗	E3	0.6	R	71.3	11.0	2	130.0	870	25	
Zinesto	Z0602E ↗	E3	0.6	NA	71.2	10.6	0	132.3	870	26	
Asgrow	AG10XF1 § ↗	RXF	1.0	R	71.2	10.6	0	132.0	870	27	
Innotech	IS0678E3 ↗	E3	0.6	MR	70.9	10.3	0	131.3	866	28	
Hefty	H10XF1 ↗	RXF	1.0	NA	70.9	11.0	1	132.0	866	29	
Genesis	G0760E ↗	E3	0.7	R	70.9	10.7	0	132.0	866	30	
Dairyland	DSR-1010E ↗	E3	1.0	R	70.7	10.9	0	132.7	864	31	
Channel	1022RFX CK	RXF	1.0	NA	74.8	10.9	0	131.0	914	13	
					Averages =	72.0	10.8	0	131.8	878	
					LSD (0.10) =	5.9	0.3	ns			
					LSD (0.25) =	3.1	0.1	ns			
Luke Brendemuhl					C.V. =	7.8					
luke.brendemuhl@firstseedtests.com, (218) 790-4497											Historic yield: 42.79 bu/a, 6 yr(s)

Yield & Income Factors: Base Moisture = 13.0% Shrink = 1.3 Drying = \$0.025 Prices: GMO = \$12.22

Report Date: 10/06/2021

† See last page for abbreviation descriptions. Dark colored row identifies the check product found in early- and full-season tests. **Bold** yields are significantly above test average by LSD(0.10). **Italicized** brands exceed the grain moisture limit for this test. **ns** = column values not significantly different. ↗ New! Links to full product yield results at www.firstseedtests.com

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2021 Soybeans Top 30 Harvest Report

Red River South North Dakota & Minnesota [RRSO]
LITCHVILLE, ND
Mark Formo, Barnes County, ND 58461

Full-Season Test 1.0 - 1.4 Day CRM
S2021RRSO04b

Top 30 of 43 For Gross Income
(Sorted by Yield)
Average of (2) Replications

PREV. CROP/HERB: Wheat / Wolverine Advanced

SOIL DESCRIPTION: Lismore-Kranzburg silty clay loam, mod. well drained, non-irrigated

SOIL CONDITION: medium P, very high K, 6.5 pH, 3.1% OM, 19.5 CEC

TILLAGE/CULTIVATION: No-Till

PEST MANAGEMENT: Fierce Ez, Mad Dog, Medal Ec, Gunsmoke

Applied N-P-K (units): 0-0-0

SEEDED - RATE - ROW: May 17 140.0 /A 30" spacing

HARVESTED - STAND: Oct 6 131.7 /A

TEST COMMENTS:

The plot was planted into no-till wheat stubble in dry conditions. Things stayed dry through May, but after that, this area was around the 10 year average for precipitation. At harvest, plants were about waist high and loaded with pods containing large beans. Some green stems and minimal lodging was seen as well. Mark said that beans were running well, with spots in fields reaching the 70's and 80's for yield. One replicate with high variance was removed from the full-season test.

Company/Brand	Product/Brand	Technol.†	RM	SCN Resist.	Yield Bu/A ↓	Moisture %	Lodging %	Stand (x 1000)	Gross Income \$/Acre	Rank	
Dairyland	DSR-1290E ↗	E3	1.2	R	86.5	10.1	13	132.5	1057	1	
Hefty	H12XF2 ↗	RXF	1.2	NA	85.6	10.5	0	131.5	1046	2	
Latham	L 1482 R2X ↗	RRX	1.4	R	85.0	10.0	0	132.0	1039	3	
Hefty	H14XF1 ↗	RXF	1.4	NA	84.2	10.1	0	131.0	1029	4	
Loyal	L1230ES ↗	E3,ST	1.2	R	83.7	10.3	2	132.5	1023	5	
Zinesto	Z1101E ↗	E3	1.1	R	83.0	10.1	0	132.5	1014	6	
Dyna-Gro	S12XF92 ↗	RXF	1.2	R	82.8	10.3	1	133.0	1012	7	
Zinesto	Z1302E ↗	E3	1.3	NA	82.6	10.6	0	132.0	1009	8	
Brevant	B141EE § ↗	E3	1.4	MR	82.5	10.5	0	132.5	1008	9	
Credenz	CZ 1171GTLL ↗	LLGT27	1.1	MR	82.2	10.5	0	131.5	1004	10	
Thunder	TX8211N ↗	RXF	1.1	R	81.7	10.2	0	132.0	998	11	
Dairyland	DSR-1450E ↗	E3	1.4	R	80.5	10.2	0	131.5	984	12	
Dairyland	DSR-1318E ↗	E3	1.3	R	80.2	10.0	1	131.5	980	13	
NK Brand	NK14-C7XF ↗	RXF	1.4	R	79.6	10.0	0	132.5	971	14	
Thunder	TE7011N ↗	E3	1.1	R	78.7	10.8	0	131.0	962	15	
Golden Harvest	GH1472E3 § ↗	E3	1.4	R	78.5	10.5	13	132.5	959	16	
Brevant	B119EE § ↗	E3	1.1	R	77.4	10.5	0	131.5	946	17	
Zinesto	Z1202E ↗	E3	1.2	NA	77.1	10.7	0	131.5	941	18	
Hefty	H13XF1 ↗	RXF	1.3	NA	76.8	10.4	18	131.5	938	19	
Stine	12EE63 § ↗	E3	1.2	R	75.6	10.2	0	130.0	924	20	
Stine	14EE01 § ↗	E3	1.4	MR	75.6	10.8	1	131.0	923	21	
Xitavo	XO 1451E ↗	E3	1.4	R	74.6	10.1	0	131.5	912	22	
Apex	AE1220 ↗	E3	1.2	R	73.5	10.5	18	132.0	898	24	
Zinesto	Z1411E ↗	E3	1.4	R	73.1	10.6	0	131.5	893	25	
Latham	L 1383 XF ↗	RXF	1.3	R	73.0	10.4	0	131.5	892	26	
Loyal	L1440E ↗	E3	1.4	R	72.8	10.5	0	132.5	890	27	
Apex	AE1410 ↗	E3	1.4	R	72.4	11.9	0	132.5	885	28	
Xitavo	XO 1372E ↗	E3	1.3	R	72.0	10.4	0	131.5	880	29	
Golden Harvest	GH1442XF ↗	RXF	1.4	MR	71.6	10.3	0	132.5	875	30	
Loyal	L1240E ↗	E3	1.2	R	71.3	10.4	5	131.5	871	31	
Channel	1022RFX CK	RXF	1.0	NA	74.5	10.5	0	131.5	910	23	
					Averages =	75.3	10.4	2	131.7	921	
					LSD (0.10) =	8.3	ns	ns			
					LSD (0.25) =	4.3	ns	ns			
Luke Brendemuhl					C.V. =	8.4					
luke.brendemuhl@firstseedtests.com, (218) 790-4497											Historic yield: 42.79 bu/a, 6 yr(s)

Yield & Income Factors: Base Moisture = 13.0% Shrink = 1.3 Drying = \$0.025 Prices: GMO = \$12.22

Report Date: 10/06/2021

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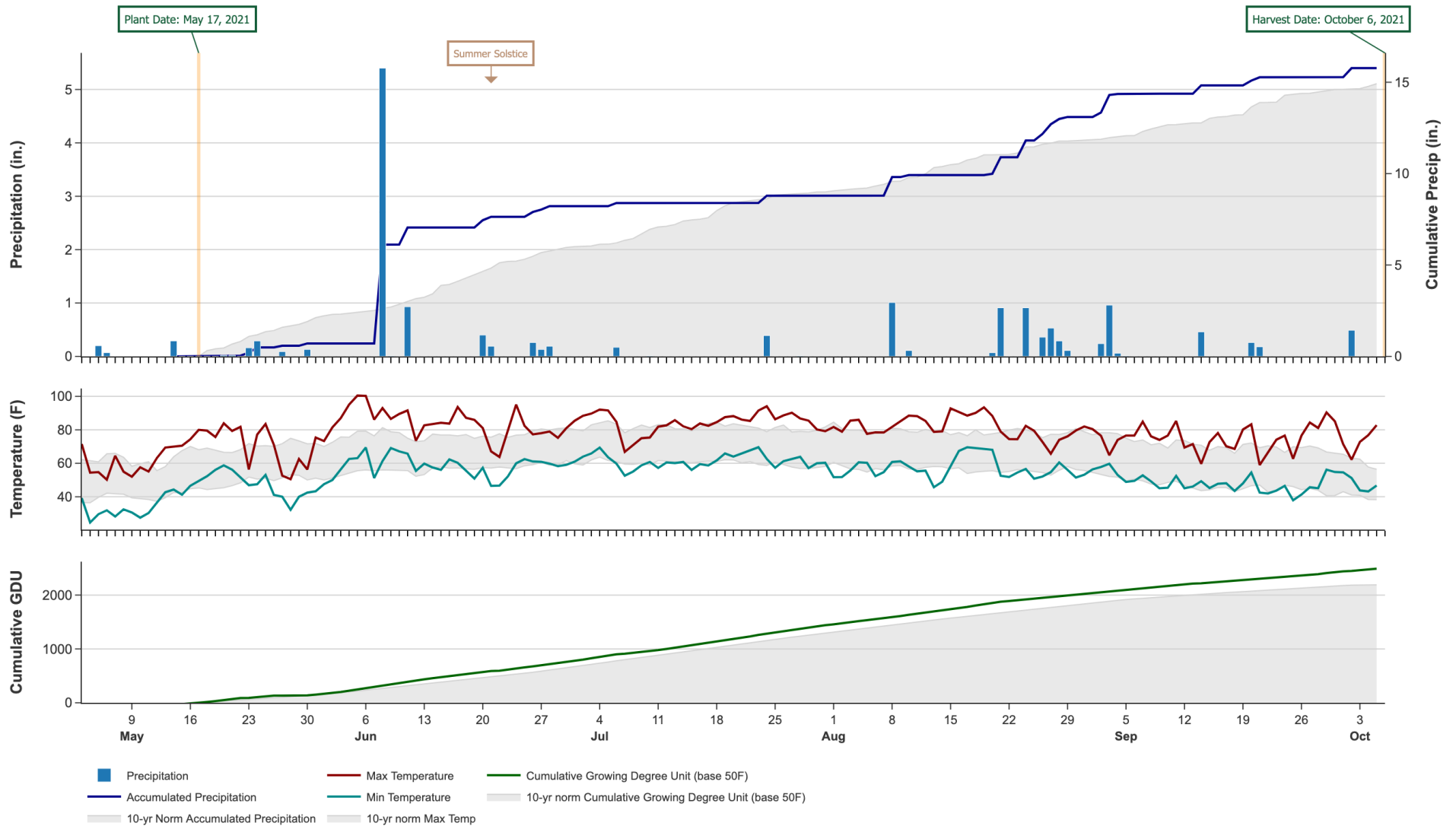
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2021 Soybeans - Red River South North Dakota & Minnesota [RRSO]

Weather Conditions Summary at LITCHVILLE, ND

Weather Data Retrieved: 10/06/2021

Monthly Total	May*	Jun	Jul	Aug	Sep	Oct*	Total
Precip (in) Normal (Diff)	1.3 3.1 (-1.9)	7.5 3.8 (+3.7)	0.6 3.0 (-2.4)	4.3 2.8 (+1.5)	2.2 2.8 (-0.6)	0.5 0.3 (+0.2)	16.3 15.9 (+0.4)
GDU Normal (Diff)	220 211 (+8)	600 500 (+99)	687 645 (+41)	589 549 (+39)	400 325 (+74)	61 20 (+40)	2557 2252 (+304)



* First monthly total starts on the date 14 days prior to planting and final monthly total ends on the harvest date.

Note: Weather information from PRISM Climate Group. Data may be revised by the provider after retrieval. FIRST will not revise or update reports to reflect any weather data changes. For information purposes only.

2021 Soybeans - Red River South North Dakota & Minnesota [RRSO]

Early-Season Test Products (44 Total)

Company/Brand	Product/Brand	Technology	SCN	RM	Seed Treat.
Apex	AE0611	E3	R	0.6	CMBV,SA
Apex	AE0720	E3	R	0.7	CMBV,SA
Asgrow	AG09XF0 §	RXF	R	0.9	ACi,IL
Asgrow	AG10XF1 §	RXF	R	1.0	ACi,IL
Brevant	B061EE GC	E3	MR	0.6	Untreated
Brevant	B091EE GC	E3	S	0.9	Untreated
Channel	0622RXF §	RXF	NA	0.6	ACi,IL
Channel	1022RXF CK	RXF	NA	1.0	ACi,IL
Credenz	CZ 0661GTLL	LLGT27	R	0.6	PV,IL,OB
Dairyland	DSR-0920E	E3	R	0.9	Lum,IL
Dairyland	DSR-1010E	E3	R	1.0	Lum,IL
Dyna-Gro	S09EN41	E3	R	0.9	EQV,SA
Genesis	G0651E	E3	R	0.6	CMBV,SA
Genesis	G0750E	E3	R	0.7	CMBV,SA
Genesis	G0760E	E3	R	0.7	CMBV,SA
Golden Harvest	GH0842E3	E3	R	0.8	CMBV,SA
Golden Harvest	GH1032XF	RXF	R	1.0	CMBV,SA
Hefty	H06XF2	RXF	NA	0.6	DST4,SA
Hefty	H07XF1	RXF	NA	0.7	DST4,SA
Hefty	H08XF2	RXF	NA	0.8	DST4,SA
Hefty	H10XF1	RXF	NA	1.0	DST4,SA
Innotech	IS0678E3	E3	MR	0.6	Fortify
Innotech	IS0864E3	E3	R	0.8	Fortify
Innotech	IS1022E3	E3	R	1.0	Fortify
Latham	L 0984 XF	RXF	R	0.9	SS+,SA
Latham	L 0995 E3	E3	R	0.9	SS+,SA
Latham	L 1094 E3	E3	R	1.0	SS+,SA
Loyal	L0640E	E3	R	0.6	CMBV,SA
Loyal	L0740E	E3	R	0.7	CMBV,SA
NK Brand	NK08-B7XF	RXF	R	0.8	CMBV,SA
NK Brand	NK08-V9E3 §	E3	R	0.8	CMBV,SA
NK Brand	NK10-W8XF §	RXF	R	1.0	CMBV,SA
Stine	09EA02 §	E3	R	0.9	SFI
Thunder	SB8010N	RRX	R	1.0	AM
Thunder	SB8807N	RRX	R	0.7	AM
Thunder	TE7207	E3	S	0.7	AM

Company/Brand	Brand/Product	Technology	SCN	RM	Seed Treat.
Thunder	TX8109N	RXF	R	0.9	AM
Thunder	TX8206N	RXF	R	0.6	AM
Thunder	TX8207N	RXF	R	0.7	AM
Xitavo	XO 0602E	E3	R	0.6	PV,IL,OB
Xitavo	XO 0731E	E3	R	0.7	PV,IL,OB
Xitavo	XO 1041E	E3	R	1.0	PV,IL,OB
Zinesto	Z0602E	E3	NA	0.6	DST4,SA
Zinesto	Z0702E	E3	NA	0.7	DST4,SA

* FIRST does not inspect products for refuge blend. N* indicates the product was entered without a refuge component by the sponsoring seed company. Prior year entries may contain refuge blend.

2021 Soybeans - Red River South North Dakota & Minnesota [RRSO]

Full-Season Test Products (43 Total)

Company/Brand	Product/Brand	Technology	SCN	RM	Seed Treat.
Apex	AE1220	E3	R	1.2	CMBV,SA
Apex	AE1410	E3	R	1.4	CMBV,SA
Apex	AE1420	E3	R	1.4	CMBV,SA
Asgrow	AG12XF1 §	RXF	S	1.2	ACi,IL
Brevant	B119EE §	E3	R	1.1	Untreated
Brevant	B141EE §	E3	MR	1.4	Untreated
Channel	1022RFX CK	RXF	NA	1.0	ACi,IL
Credenz	CZ 1171GTLL	LLGT27	MR	1.1	PV,IL,OB
Credenz	CZ 1331GTLL	LLGT27	R	1.3	PV,IL,OB
Dairyland	DSR-1290E	E3	R	1.2	Lum,IL
Dairyland	DSR-1318E	E3	R	1.3	Lum,IL
Dairyland	DSR-1450E	E3	R	1.4	Lum,IL
Dyna-Gro	S12EN72	E3	R	1.2	EQV,SA
Dyna-Gro	S12XF92	RXF	R	1.2	EQV,SA
Genesis	G1260E	E3	R	1.2	CMBV,SA
Genesis	G1460E	E3	R	1.4	CMBV,SA
Golden Harvest	GH1442XF	RXF	MR	1.4	CMBV,SA
Golden Harvest	GH1472E3 §	E3	R	1.4	CMBV,SA
Hefty	H11XF2	RXF	NA	1.1	DST4,SA
Hefty	H12XF2	RXF	NA	1.2	DST4,SA
Hefty	H13XF1	RXF	NA	1.3	DST4,SA
Hefty	H14XF1	RXF	NA	1.4	DST4,SA
Innotech	IS1283E3	E3	R	1.2	Fortify
Latham	L 1219 E3	E3	R	1.2	SS+,SA
Latham	L 1383 XF	RXF	R	1.3	SS+,SA
Latham	L 1392 E3	E3	R	1.3	SS+
Latham	L 1429 LLGT27	LLGT27	R	1.4	SS+,SA
Latham	L 1482 R2X	RRX	R	1.4	SS+,SA
Loyal	L1230ES	E3,ST	R	1.2	CMBV,SA
Loyal	L1240E	E3	R	1.2	CMBV,SA
Loyal	L1440E	E3	R	1.4	CMBV,SA
NK Brand	NK14-C7XF	RXF	R	1.4	CMBV,SA
Stine	12EE63 §	E3	R	1.2	SFI
Stine	14EE01 §	E3	MR	1.4	SFI
Thunder	TE7011N	E3	R	1.1	AM
Thunder	TX8211N	RXF	R	1.1	AM

Company/Brand	Brand/Product	Technology	SCN	RM	Seed Treat.
Xitavo	XO 1212E	E3	R	1.2	PV,IL,OB
Xitavo	XO 1372E	E3	R	1.3	PV,IL,OB
Xitavo	XO 1451E	E3	R	1.4	PV,IL,OB
Zinesto	Z1101E	E3	R	1.1	DST4,SA
Zinesto	Z1202E	E3	NA	1.2	DST4,SA
Zinesto	Z1302E	E3	NA	1.3	DST4,SA
Zinesto	Z1411E	E3	R	1.4	DST4,SA

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Footnotes and Abbreviations Descriptions

Brand Footnotes

CK	Identifies a check product included in early- and full-season tests.
GC	Grower Comparison product included by FIRST when space permits.
§	United Soybean Board sponsored entry

Soybean Cyst Nematode (SCN) Resistance Rating

S	susceptible
MR	moderate resistance
R	resistant
n/a	info unavailable

Soybeans Technologies

E3	Enlist™ E3
LLGT27	LibertyLink® GT27®
RRX	Roundup Ready 2 Xtend®
RXF	Roundup Ready 2 XtendFlex®
ST	Sulfonylurea tolerant

Soybeans Seed Treatments*

NA	Not Available
ACi,IL	Acceleron® Standard Insecticide-Fungicide, ILeVO
AM	ApronMaxx
CMBV,SA	Cruisermass® Beans, Vibrance®, Saltro®
DST4,SA	Dominance 4 ST,Saltro®
EQV,SA	Equity VIP, Saltro®
Fortify	Insecticide-Fungicide (Rob-See-Co)
Lum,IL	LumiGEN™ plus ILeVO
PV,IL,OB	Poncho®/Votivo®, ILeVO, Obvius Plus
SFI	Stine XP F&I
SS+	SoyShield Plus
SS+,SA	SoyShield Plus, Saltro®
Untreated	No seed treatment

* Seed treatments may include unspecified plant health promoting components.