

Test by: Southern MN FIRST New Richland, MN

## 2021 Soybeans Top 30 Harvest Report

Minnesota South [MNSO] LAMBERTON, MN  
Ed Iverson, Redwood County, MN 56152

<b>Early-Season Test</b>	1.6 - 1.9 Day CRM S2021MNSO01a
<b>Top 30 of 53</b>	For Gross Income (Sorted by Yield) Average of (3) Replications
<b>PREV. CROP/HERB:</b>	Corn / Force, Ironclad, Incinerate, Aatrix , Stratego Yld, Aquila XI
<b>SOIL DESCRIPTION:</b>	Romnell clay loam, mod. well drained, non-irrigated
<b>SOIL CONDITION:</b>	low P, medium K, 5.9 pH, 3.6% OM, 26.4 CEC
<b>TILLAGE/CULTIVATION:</b>	Conventional W/ Fall Till
<b>PEST MANAGEMENT:</b>	Flexstar, Select, Headline
<b>Applied N-P-K (units):</b>	0-0-0
<b>SEEDED - RATE - ROW:</b>	May 11 140.0 /A 30" spacing
<b>HARVESTED - STAND:</b>	Oct 9 122.7 /A

### TEST COMMENTS:

*This site had good soil moisture at planting, but below-average rainfall fell through late Aug. Rainfall on 8/28 was accompanied by damaging pea-sized hail and high winds. The crop adjuster estimated 85% defoliation of the bean plants here. Yields that should have been 65 bpa or more, dropped to 50 or less. Harvest samples showed 5-7 % damaged beans. On top of that, Ed noted Dicamba damage from an outside source in late June. The nearest field sprayed with Dicamba was 3/4 mile away, and downwind. The early-season test did not have a significant difference between yields for dicamba-tolerant and non-tolerant varieties, however, the full-season test had significantly different yields and is not reported.*

Company/Brand	Product/Brand	Technol.†	RM	SCN Resist.	Yield Bu/A ↓	Moisture %	Lodging %	Stand (x 1000)	Gross Income \$/Acre	Rank
Stine	17EE32 § ↗	E3	1.7	R	<b>55.8</b>	12.6	0	124.3	698	1
Asgrow	AG18XF1 § ↗	RXF	1.8	R	<b>54.1</b>	12.2	0	122.3	676	2
NK Brand	NK18-J7E3 § ↗	E3	1.8	MR	<b>53.4</b>	12.4	1	123.3	668	3
Apex	AE1930 ↗	E3	1.9	R	<b>53.3</b>	12.5	0	123.7	666	4
Xitavo	XO 1822E ↗	E3	1.8	R	<b>53.0</b>	12.6	0	125.7	662	5
Latham	L 1784 XF ↗	RXF	1.7	R	52.7	12.8	0	122.3	659	6
Gold Country	1609X ↗	RRX	1.6	R	52.1	12.6	0	126.0	651	7
Dairyland	DSR-2030E ↗	E3	1.9	R	51.9	12.2	0	122.0	649	8
Dairyland	DSR-1820E ↗	E3	1.8	R	51.7	11.8	0	121.0	645	9
Xitavo	XO 1632E ↗	E3	1.6	R	51.6	12.9	0	121.3	645	10
NK Brand	NK17-M2XF ↗	RXF	1.7	R	51.3	12.3	0	122.7	641	11
Golden Harvest	GH1802E3 ↗	E3	1.8	R	50.8	12.4	0	121.0	635	12
Loyal	L1740E ↗	E3	1.7	R	50.3	12.4	0	122.7	629	13
Zinesto	Z1702E ↗	E3	1.7	NA	50.3	12.9	0	121.3	629	14
Pioneer	P18A33X § ↗	RRX	1.8	NA	50.3	12.6	0	123.0	629	15
Hefty	H16XF2 ↗	RXF	1.6	NA	49.9	12.5	0	120.3	624	16
Anderson	A1821XF ↗	RXF	1.8	NA	49.8	12.9	0	122.7	622	17
Golden Harvest	GH1762XF § ↗	RXF	1.7	MR	49.6	12.2	0	124.3	620	18
Dahlman	1215E3N GC ↗	E3	1.5	NA	49.5	12.7	1	122.7	619	19
Federal	F1909N ↗	LLGT27	1.9	R	49.4	12.2	0	123.3	618	20
NK Brand	NK19-Y5E3 ↗	E3	1.9	R	49.3	12.7	1	122.3	616	21
Zinesto	Z1802E ↗	E3	1.8	NA	49.2	12.8	0	122.7	615	22
Apex	AE1720 ↗	E3	1.7	R	49.2	12.6	0	124.3	615	23
Federal	F1920N ↗	RXF	1.9	R	49.0	12.1	3	121.7	612	24
Hefty	H16X1 ↗	RRX	1.6	R	49.0	12.4	0	122.7	612	25
Genesis	G1760E ↗	E3	1.7	R	48.7	12.7	0	123.3	609	26
Gold Country	1531XF ↗	RXF	1.5	R	48.6	12.6	6	125.7	608	27
Latham	L 1758 E3 ↗	E3	1.7	R	48.5	12.6	0	122.3	606	28
Dairyland	DSR-1673E ↗	E3	1.6	R	48.5	12.5	0	121.7	606	29
Hefty	H18XF2 ↗	RXF	1.8	NA	48.3	12.4	0	125.0	604	30
Dahlman	1120E3N CK	E3	2.0	NA	46.7	12.5	0	121.7	584	38
					Averages =	<b>48.5</b>	<b>12.5</b>	<b>1</b>	<b>122.7</b>	<b>607</b>
					LSD (0.10) =	4.3	ns	ns		
					LSD (0.25) =	2.3	ns	ns		
					C.V. =	8.5				
					Historic yield: 66.63 bu/a, 1 yr(s)					

Mark Querna

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**Yield & Income Factors:** Base Moisture = 13.0% Shrink = 1.3 Drying = \$0.03 Prices: GMO = \$12.50; non-GMO = \$14.50

Report Date: 10/11/2021

† 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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Test by: Southern MN FIRST New Richland, MN

## 2021 Soybeans Top 30 Harvest Report

Minnesota South [MNSO] LAMBERTON, MN  
Ed Iverson, Redwood County, MN 56152

<b>Full-Season Test</b>	2.0 - 2.3 Day CRM S2021MNSO01b
<b>Top 30 of 54</b>	For Gross Income (Sorted by Yield) Average of (3) Replications
<b>PREV. CROP/HERB:</b>	Corn / Force, Ironclad, Incinerate, Aatrix , Stratego Yld, Aquila XI
<b>SOIL DESCRIPTION:</b>	Romnell clay loam, mod. well drained, non-irrigated
<b>SOIL CONDITION:</b>	low P, medium K, 5.9 pH, 3.6% OM, 26.4 CEC
<b>TILLAGE/CULTIVATION:</b>	Conventional W/ Fall Till
<b>PEST MANAGEMENT:</b>	Flexstar, Select, Headline
<b>Applied N-P-K (units):</b>	0-0-0
<b>SEEDING - RATE - ROW:</b>	May 11 140.0 /A 30" spacing
<b>HARVESTED - STAND:</b>	Oct 9 123.3 /A

### TEST COMMENTS:

*This site had good soil moisture at planting, but below-average rainfall fell through late Aug. Rainfall on 8/28 was accompanied by damaging pea-sized hail and high winds. The crop adjuster estimated 85% defoliation of the bean plants here. Yields that should have been 65 bpa or more, dropped to 50 or less. Harvest samples showed 5-7 % damaged beans. On top of that, Ed noted Dicamba damage from an outside source in late June. The nearest field sprayed with Dicamba was 3/4 mile away, and downwind. The early-season test did not have a significant difference between yields for dicamba-tolerant and non-tolerant varieties, however, the full-season test had significantly different yields and is not reported.*

Company/Brand	Product/Brand	Yield 1	Yield 2	Yield 3	Yield Avg	Moisture %	Shrink %	Stand (x 1000)	Gross Income \$/acre	Rank
Gold Country	220007 +	NSP	2.2	N	66.4	13.3	0	123.7	606	1
Holly	H220071 +	NSP	2.3	NA	66.1	13.2	0	123.7	606	2
Anderson	2170007 +	NSP	2.0	NS	66.7	13.3	0	123.0	604	3
Latham	L 200003 +	ES	2.0	N	66.4	13.0	0	123.0	600	4
Proseed	P21A2000 g +	NSP	2.1	N	66.3	12.9	0	123.0	600	5
Genesee	G210000 +	L20707	2.1	N	66.3	12.2	0	123.0	600	6
Golden Harvest	G210000 +	NSP	2.1	NS	66.3	12.9	0	123.0	600	7
MR Brand	M21A2000 g +	NSP	2.1	N	66.3	12.9	0	123.0	600	8
Dynacore	D210000 +	NSP	2.1	N	66.3	12.9	0	123.0	600	9
Dynacore	D210000 +	ES	2.1	N	66.3	12.9	0	123.0	600	10
Anderson	A20003 +	ES	2.1	NA	66.1	13.0	0	123.0	600	11
Winn	W200000 +	ES	2.1	N	66.2	13.0	0	123.0	600	12
Argus	A200002 g +	NSP	2.2	N	66.1	12.8	0	124.7	600	13
Holly	H200071 +	NSP	2.0	N	66.3	13.3	0	124.0	600	14
Zenith	Z210000 +	ES	2.1	N	66.3	12.8	0	124.7	600	15
Agri	A220000 +	ES	2.1	N	66.3	12.7	1	125.7	600	16
Holly	H200072 +	NSP	2.1	NA	66.3	12.7	0	125.0	600	17
Golden Harvest	G210000 +	NSP	2.1	NS	66.4	12.3	1	124.7	600	18
Genesee	G200000 GC +	NSP	2.0	NA	66.4	12.4	0	124.0	600	19
Latham	L 200000 +	NSP	2.2	N	66.2	12.1	0	124.0	600	20
MR Brand	M21A2000 +	NSP	2.2	N	66.1	12.3	0	125.7	600	21
Winn	W200000 +	ES	2.0	N	66.3	13.0	0	121.7	600	22
Federal	F200000 +	NSP	2.3	N	66.2	13.0	0	124.7	600	24
Winn	W200000 g +	ES	2.1	N	66.2	13.2	0	123.0	600	25
Zenith	Z200000 +	ES/ST	2.3	NA	66.0	13.0	0	125.0	600	26
Proseed	P20A2000 GC +	NSP	2.3	N	66.0	13.3	0	123.0	600	28
Proseed	P20A2000 GC +	ES	2.0	N	66.3	12.9	2	122.7	600	27
Argus	A200002 g +	NSP	2.1	N	66.3	12.8	0	123.0	600	28
Zenith	Z200000 +	ES	2.2	NA	66.1	12.9	0	125.7	600	29
Winn	W200000 +	ES	2.0	N	66.0	12.4	0	124.0	600	30

REJECTED

*Mark Querna*  
 Mark Querna  
 mark.querna@firstseedtests.com, (507) 380-9920  
 Averages = **48.4**   **12.8**   **1**   **123.3**   **606**  
 LSD (0.10) = 3.8   0.5   ns  
 LSD (0.25) = 2.0   0.3   ns  
 C.V. = 7.5   Historic yield: 66.63 bu/a, 1 yr(s)

**Yield & Income Factors:** Base Moisture = 13.0%   Shrink = 1.3   Drying = \$0.03   Prices: GMO = \$12.50; non-GMO = \$14.50

Report Date: 10/11/2021

† 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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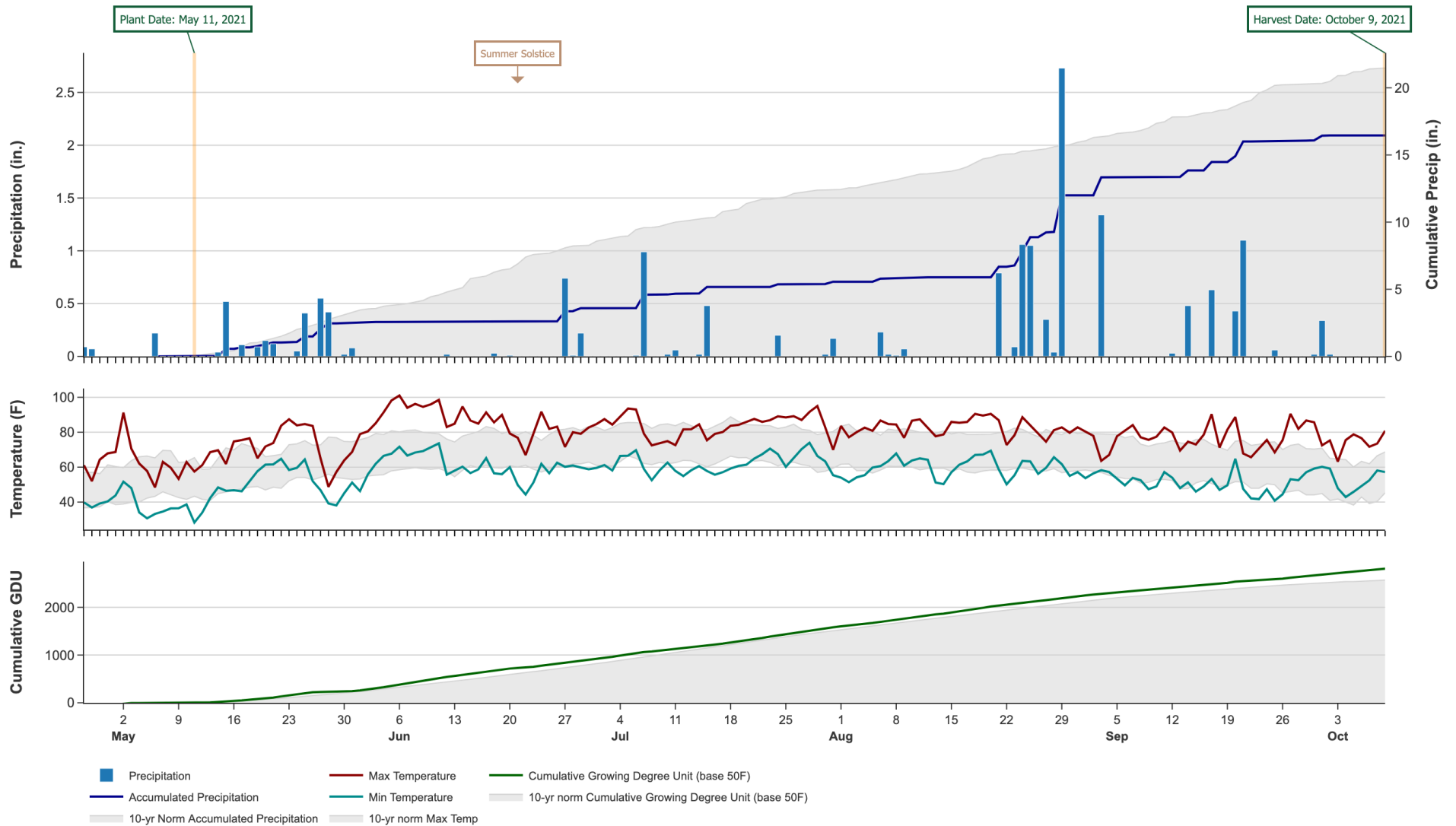
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# 2021 Soybeans - Minnesota South [ MNSO ]

## Weather Conditions Summary at LAMBERTON, MN

Weather Data Retrieved: 10/11/2021

Monthly Total	Apr*	May	Jun	Jul	Aug	Sep	Oct*	Total
Precip (in)   Normal (Diff)	0.2   0.5 (-0.3)	2.8   4.9 (-2.1)	1.0   5.0 (-3.9)	2.0   4.1 (-2.2)	6.4   3.5 (+2.9)	4.1   4.4 (-0.3)	0.4   1.2 (-0.8)	16.8   23.5 (-6.7)
GDU   Normal (Diff)	22   5 (+16)	290   292 (-2)	652   577 (+74)	686   708 (-22)	652   605 (+46)	448   394 (+53)	128   62 (+65)	2878   2646 (+231)



\* 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 - Minnesota South [ MNSO ]

### Early-Season Test Products (53 Total)

Company/Brand	Product/Brand	Technology	SCN	RM	Seed Treat.
Anderson	A180E3	E3	NA	1.8	Untreated
Anderson	A1821XF	RXF	NA	1.8	Untreated
Apex	AE1720	E3	R	1.7	CMBV,SA
Apex	AE1910	E3	R	1.9	CMBV,SA
Apex	AE1920	E3	R	1.9	CMBV,SA
Apex	AE1930	E3	R	1.9	CMBV,SA
Asgrow	AG18XF1 §	RXF	R	1.8	Untreated
Credenz	CZ 1660GTLL	LLGT27	MR	1.6	PV,IL,OB
Dahlman	1120E3N CK	E3	NA	2.0	IS
Dahlman	1215E3N GC	E3	NA	1.5	Untreated
Dahlman	6815XN GC	RRX	R	1.5	IS
Dairyland	DSR-1673E	E3	R	1.6	Lum,IL
Dairyland	DSR-1707E	E3	R	1.7	Lum,IL
Dairyland	DSR-1820E	E3	R	1.8	Lum,IL
Dairyland	DSR-2030E	E3	R	1.9	Lum,IL
Dyna-Gro	S17XF02	RXF	MR	1.7	EQV,SA
Dyna-Gro	S18EN52	E3	MR	1.8	EQV,SA
Federal	F1909N	LLGT27	R	1.9	MAG
Federal	F1920N	RXF	R	1.9	MAG
Genesis	G1680GL	LLGT27	R	1.6	CMBV,SA
Genesis	G1760E	E3	R	1.7	CMBV,SA
Genesis	G1950E	E3	R	1.9	CMBV,SA
Genesis	G1960E	E3	R	1.9	CMBV,SA
Gold Country	1531XF	RXF	R	1.5	ACi,IL
Gold Country	1609X	RRX	R	1.6	ACi,IL
Golden Harvest	GH1762XF §	RXF	MR	1.7	CMBV,SA
Golden Harvest	GH1802E3	E3	R	1.8	CMBV,SA
Hefty	H16X1	RRX	R	1.6	DST4,SA
Hefty	H16XF2	RXF	NA	1.6	DST4,SA
Hefty	H17XF1	RXF	NA	1.7	DST4,SA
Hefty	H18XF2	RXF	NA	1.8	DST4,SA
Latham	L 1648 LLGT27	LLGT27	R	1.6	SS+
Latham	L 1758 E3	E3	R	1.7	SS+,SA
Latham	L 1784 XF	RXF	R	1.7	SS+,SA
Latham	L 1995 E3	E3	R	1.9	SS+,SA
Loyal	L1740E	E3	R	1.7	CMBV,SA
Loyal	L1940E	E3	R	1.9	CMBV,SA
Loyal	L1950E	E3	R	1.9	CMBV,SA
NK Brand	NK17-M2XF	RXF	R	1.7	CMBV,SA
NK Brand	NK18-J7E3 §	E3	MR	1.8	CMBV,SA
NK Brand	NK19-C8XF	RXF	R	1.9	CMBV,SA
NK Brand	NK19-Y5E3	E3	R	1.9	CMBV,SA

Company/Brand	Brand/Product	Technology	SCN	RM	Seed Treat.
NuTech	18N02E	E3	R	1.8	Lum,Lu,IL
Pioneer	P15A63X §	RRX	NA	1.5	Untreated
Pioneer	P18A33X §	RRX	NA	1.8	Lum,Lu
Stine	17EE32 §	E3	R	1.7	SFI
Xitavo	XO 1632E	E3	R	1.6	PV,IL,OB
Xitavo	XO 1761E	E3	R	1.7	PV,IL,OB
Xitavo	XO 1822E	E3	R	1.8	PV,IL,OB
Zinesto	Z1702E	E3	NA	1.7	DST4,SA
Zinesto	Z1801E	E3	R	1.8	DST4,SA
Zinesto	Z1802E	E3	NA	1.8	DST4,SA
Zinesto	Z1902E	E3	NA	1.9	DST5

\* 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 - Minnesota South [ MNSO ]

### Full-Season Test Products (54 Total)

Company/Brand	Product/Brand	Technology	SCN	RM	Seed Treat.
Anderson	217RXT	RRX	MR	2.0	Untreated
Anderson	A200E3	E3	NA	2.0	Untreated
Anderson	A2121XF	RXF	NA	2.0	Untreated
Apex	AE2020	E3	R	2.0	CMBV,SA
Apex	AE2110	E3	R	2.1	CMBV,SA
Apex	AE2220	E3	R	2.2	CMBV,SA
Asgrow	AG21XF0 §	RXF	R	2.1	ACi,IL
Asgrow	AG22XF2 §	RXF	R	2.2	ACi,IL
Credenz	CZ 2121GTLL	LLGT27	MR	2.1	PV,IL,OB
Dahlman	1120E3N CK	E3	NA	2.0	IS
Dahlman	7220XF GC	RXF	NA	2.0	IS
Dairyland	DSR-2040E	E3	R	2.0	Lum,IL
Dairyland	DSR-2112E	E3	R	2.1	Lum,IL
Dairyland	DSR-2222E	E3	R	2.2	Lum,IL
Dyna-Gro	S21EN81	E3	R	2.1	EQV,SA
Dyna-Gro	S21XF61	RXF	R	2.1	EQV,SA
Dyna-Gro	S21XF72	RXF	R	2.1	EQV,SA
Federal	F2210N	RXF	R	2.2	MAG
Federal	F2320N	RXF	R	2.3	MAG
Genesis	G2060E	E3	R	2.0	CMBV,SA
Genesis	G2150E	E3	R	2.1	CMBV,SA
Genesis	G2190GL	LLGT27	R	2.1	CMBV,SA
Genesis	G2260E	E3	R	2.2	CMBV,SA
Gold Country	2250XF	RXF	R	2.2	ACi,IL
Golden Harvest	GH2102XF	RXF	MR	2.1	CMBV,SA
Golden Harvest	GH2292E3	E3	MR	2.2	CMBV,SA
Hefty	H20XF1	RXF	NA	2.0	DST4,SA
Hefty	H20XF2	RXF	NA	2.0	DST4,SA
Hefty	H21XF2	RXF	NA	2.1	DST4,SA
Hefty	H23XF1	RXF	NA	2.3	DST4,SA
Latham	L 2049 E3	E3	R	2.0	SS+,SA
Latham	L 2193 E3	E3	R	2.1	SS+,SA
Latham	L 2295 R2X	RRX	R	2.2	SS+,SA
Latham	L 2379 E3	E3	R	2.3	SS+,SA
Loyal	L2040E	E3	R	2.0	CMBV,SA
Loyal	L2130E	E3	R	2.1	CMBV,SA
Loyal	L2240E	E3	R	2.2	CMBV,SA
NK Brand	NK21-H4XF §	RXF	MR	2.1	CMBV,SA
NK Brand	NK22-C4E3	E3	R	2.2	CMBV,SA
NuTech	20N04E	E3	R	2.0	Lum,Lu,IL
NuTech	21N06E	E3	R	2.1	Lum,Lu,IL
Pioneer	P20T64E GC	E3	R	2.0	Lum,Lu

Company/Brand	Brand/Product	Technology	SCN	RM	Seed Treat.
Pioneer	P21A28X §	RRX	R	2.1	Lum,Lu
Pioneer	P23A15X GC	RRX	R	2.3	Lum,Lu
Renk	RS212NXF	RXF	R	2.1	EcTC,SA
Renk	RS219NX	RRX	R	2.1	EcTC,SA
Stine	20EE23 §	E3	R	2.0	SFI
Stine	21EE62 §	E3	R	2.1	SFI
Xitavo	XO 2181E	E3	R	2.1	PV,IL,OB
Xitavo	XO 2282E	E3	R	2.2	PV,IL,OB
Zinesto	Z2002E	E3	NA	2.0	DST4,SA
Zinesto	Z2101E	E3	R	2.1	DST4,SA
Zinesto	Z2202E	E3	NA	2.2	DST4,SA
Zinesto	Z2302SE	E3,ST	NA	2.3	DST5

\* 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.

## Footnotes and Abbreviations Descriptions

### Brand Footnotes

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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

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

### Soybeans Technologies

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

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### Soybeans Seed Treatments\*

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NA	Not Available
ACi,IL	Acceleron® Standard Insecticide-Fungicide, ILeVO
CMBV,SA	Cruisermass® Beans, Vibrance®, Saltro®
DST4,SA	Dominance 4 ST,Saltro®
DST5	Dominance 5 ST
EcTC,SA	Eclipse US Total Coverage Trio IM, N-Force, Saltro®
EQV,SA	Equity VIP, Saltro®
IS	Integro® Suite
Lum,IL	LumiGEN™ plus ILeVO
Lum,Lu	LumiGEN™, Lumisena™
Lum,Lu,IL	LumiGEN™, Lumisena™, ILeVO
MAG	Max Armor Guard (Federal Hybrids)
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

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\* Seed treatments may include unspecified plant health promoting components.