

Test by: North Iowa F.I.R.S.T., Inc. Sanborn, IA

2021 Soybeans Top 30 Harvest Report

Iowa North [IANO] OSAGE, IA

Dale Hemann, Michell County, IA 50461

Early-Season Test	1.7 - 2.1 Day CRM S2021IANO03a
Top 30 of 54	For Gross Income (Sorted by Yield) Average of (3) Replications
PREV. CROP/HERB:	Corn / Halex Gt, Atrazine
SOIL DESCRIPTION:	Disndale silty clay loam, mod. well drained, non-irrigated
SOIL CONDITION:	high P, medium K, 6.2 pH, 4.1% OM, 20.5 CEC
TILLAGE/CULTIVATION:	Minimum W/O Fall Till
PEST MANAGEMENT:	Matador, Warrant Ultra, Section Three
FERTILITY - Applied N:	13.5# S
Applied N-P-K (units):	0-58-91
SEEDED - RATE - ROW:	May 11 144.0 /A 30" spacing
HARVESTED - STAND:	Oct 15 123.3 /A

TEST COMMENTS:

This area had some issues with frost around Memorial Day. Early planted beans and low-lying field edges were hit hardest. The plot area within Dale's field was not severely affected by the frost, however, the cold soils that persisted after planting did reduce stands that appeared to be variety specific. The growing season was mostly dry until a deluge of 11.5" fell from Aug 21 thru Sept 3. Lodging was more prevalent in the early season varieties. Due to the severity of lodging, the plot was harvested in one direction.

Company/Brand	Product/Brand	Technol.†	RM	SCN Resist.	Yield Bu/A ↓	Moisture %	Lodging %	Stand (x 1000)	Gross Income \$/Acre	Rank
Federal	F2121N ↗	LLGT27	2.1	R	70.8	12.1	8	126.3	885	1
Apex	AE1720 ↗	E3	1.7	R	70.5	12.5	25	125.7	881	2
Genesis	G2190GL ↗	LLGT27	2.1	R	68.1	11.8	19	133.0	851	3
NuTech	21N06E ↗	E3	2.1	R	67.4	12.1	0	121.7	843	4
Zinesto	Z1902E ↗	E3	1.9	NA	66.9	12.2	25	110.3	836	5
Credenz	CZ 2121GTLL ↗	LLGT27	2.1	MR	65.9	12.1	5	126.7	824	6
Asgrow	AG18XF1 § ↗	RXF	1.8	R	64.3	12.3	31	116.3	804	7
Viking	2155N ↗	CONV	2.1	MR	64.1	12.7	42	113.7	801	8
P3 Genetics	2218E ↗	E3	1.8	R	63.9	12.3	28	123.7	799	9
Hefty	H18XF2 ↗	RXF	1.8	NA	63.6	12.0	14	130.7	795	10
Golden Harvest	GH1802E3 ↗	E3	1.8	R	63.2	12.1	40	126.0	790	11
NK Brand	S18-H3X GC ↗	RRX	1.8	R	62.7	12.1	65	128.7	784	12
Zinesto	Z1702E ↗	E3	1.7	NA	62.0	12.6	41	114.7	775	13
Hefty	H17XF1 ↗	RXF	1.7	NA	61.8	12.0	33	122.7	772	14
Viking	1940KN ↗	CONV	1.9	R	61.8	12.4	22	131.7	772	15
Latham	L 2184 R2X ↗	RRX	2.1	R	61.6	12.1	59	113.0	770	16
Hefty	H20XF1 ↗	RXF	2.0	NA	61.1	12.1	0	119.0	764	17
Latham	L 1784 XF ↗	RXF	1.7	R	60.9	12.2	0	111.0	761	18
Xitavo	XO 1971E ↗	E3	1.9	R	60.5	12.4	21	124.7	756	19
Genesis	G1760E ↗	E3	1.7	R	60.3	12.8	50	132.7	754	20
FS HiSOY	19F10 ↗	RXF	1.9	R	59.8	12.0	34	122.0	748	21
Zinesto	Z2002E ↗	E3	2.0	NA	59.8	12.2	17	121.7	748	22
Latham	L 2049 E3 ↗	E3	2.0	R	59.5	11.8	45	118.3	744	23
Apex	AE2110 ↗	E3	2.1	R	59.4	12.4	43	123.3	742	25
NK Brand	S19-2E3 GC ↗	E3	1.9	R	58.4	11.6	34	122.7	730	26
Viking	2018N ↗	CONV	2.0	MR	58.2	12.5	8	127.7	728	27
Latham	L 2193 E3 ↗	E3	2.1	R	58.1	12.1	11	110.7	726	28
Zinesto	Z1802E ↗	E3	1.8	NA	57.9	12.8	23	123.0	724	29
Asgrow	AG21XF0 § ↗	RXF	2.1	R	57.9	12.4	33	120.0	724	30
NuTech	20N04E ↗	E3	2.0	R	57.8	12.0	41	128.3	722	31
Croplan	CP2200X CK	RRX	2.2	R	59.4	11.8	42	115.3	742	24

Corey Rozenboom

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Averages = **58.7** **12.2** **34** **123.3** **734**

LSD (0.10) = 4.2 0.3 21

LSD (0.25) = 2.2 0.2 11

C.V. = 6.9 Historic yield: 56.77 bu/a, 10 yr(s)

Yield & Income Factors: Base Moisture = 13.0% Shrink = 1.3 Drying = \$0.02 Prices: GMO = \$12.50

Report Date: 10/16/2021

† 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

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Dale Hemann, Michell County, IA 50461

Full-Season Test	2.2 - 2.5 Day CRM S2021IANO03b
Top 30 of 48	For Gross Income (Sorted by Yield) Average of (3) Replications
PREV. CROP/HERB:	Corn / Halex Gt, Atrazine
SOIL DESCRIPTION:	Disndale silty clay loam, mod. well drained, non-irrigated
SOIL CONDITION:	high P, medium K, 6.2 pH, 4.1% OM, 20.5 CEC
TILLAGE/CULTIVATION:	Minimum W/O Fall Till
PEST MANAGEMENT:	Matador, Warrant Ultra, Section Three
FERTILITY - Applied N:	13.5# S
Applied N-P-K (units):	0-58-91
SEEDED - RATE - ROW:	May 11 144.0 /A 30" spacing
HARVESTED - STAND:	Oct 15 120.0 /A

TEST COMMENTS:

This area had some issues with frost around Memorial Day. Early planted beans and low-lying field edges were hit hardest. The plot area within Dale's field was not severely affected by the frost, however, the cold soils that persisted after planting did reduce stands that appeared to be variety specific. The growing season was mostly dry until a deluge of 11.5" fell from Aug 21 thru Sept 3. Lodging was more prevalent in the early season varieties. Due to the severity of lodging, the plot was harvested in one direction.

Company/Brand	Product/Brand	Technol.†	RM	SCN Resist.	Yield Bu/A ↓	Moisture %	Lodging %	Stand (x 1000)	Gross Income \$/Acre	Rank
P3 Genetics	2223E ↗	E3	2.3	R	69.7	12.3	6	120.7	871	1
Genesis	G2460ES ↗	E3,ST	2.4	R	67.4	12.2	0	98.0	843	2
Latham	L 2458 E3 ↗	E3	2.4	R	66.9	12.3	8	121.0	836	3
Golden Harvest	GH2292E3 ↗	E3	2.2	MR	65.7	12.1	0	119.3	821	4
NK Brand	NK22-C4E3 ↗	E3	2.2	R	65.6	12.0	0	119.7	820	5
Zinesto	Z2302SE ↗	E3,ST	2.3	NA	65.1	12.3	14	114.3	814	6
Asgrow	AG24XF1 § ↗	RXF	2.4	R	64.9	12.5	0	136.7	811	7
Zinesto	Z2202E ↗	E3	2.2	NA	64.7	12.2	0	122.0	809	8
Apex	AE2420S ↗	E3,ST	2.4	R	64.4	12.3	0	123.0	805	9
Stine	24EE32 § ↗	E3	2.4	R	64.2	12.3	18	112.3	802	10
FS HiSOY	25E00 ↗	E3	2.5	R	64.1	12.1	8	114.7	801	11
Apex	AE2220 ↗	E3	2.2	R	64.0	12.0	5	115.3	800	12
P3 Genetics	2222E ↗	E3	2.2	R	64.0	11.9	3	114.0	800	13
Hefty	H25X0 ↗	RRX	2.5	R	63.7	12.3	0	105.7	796	14
Latham	L 2549 R2X ↗	RRX	2.5	R	63.4	11.9	0	121.3	792	15
Genesis	G2260E ↗	E3	2.2	R	63.1	12.0	0	122.0	789	16
Kruger	K2594XF ↗	RXF	2.5	R	62.8	12.6	0	134.7	785	17
Kruger	K2294XF ↗	RXF	2.2	R	62.7	12.4	0	129.3	784	18
FS HiSOY	23E10 ↗	E3	2.3	R	62.6	12.2	3	124.0	782	19
Genesis	G2550E ↗	E3	2.5	R	61.8	12.1	11	123.3	772	20
FS HiSOY	23F10 ↗	RXF	2.3	R	61.3	12.3	12	120.0	766	21
Renk	RS248NX ↗	RRX	2.4	R	61.1	12.4	0	128.3	764	22
Credenz	CZ 2550GTLL ↗	LLGT27	2.5	MR	61.0	12.1	0	119.7	762	23
Zinesto	Z2401E ↗	E3	2.4	R	60.6	11.8	11	128.3	758	24
Viking	2418N ↗	CONV	2.4	MR	60.6	12.0	5	116.7	758	25
Cornelius	CB23XF63 ↗	RXF	2.3	R	60.5	12.3	12	123.7	756	26
Kruger	K2391XF ↗	RXF	2.3	R	60.3	12.4	3	130.0	754	27
Hefty	H23XF1 ↗	RXF	2.3	NA	60.2	12.2	0	115.7	752	28
Xitavo	XO 2501E ↗	E3	2.5	R	60.1	12.2	3	120.0	751	29
Hefty	H24XF2 ↗	RXF	2.4	NA	59.6	12.5	5	107.0	745	30
Croplan	CP2200X CK	RRX	2.2	R	59.2	11.9	30	118.3	740	33
					Averages =	60.9	12.2	8	120.0	761
					LSD (0.10) =	3.3	0.3	12		
					LSD (0.25) =	1.7	0.1	6		
					C.V. =	5.2	Historic yield: 56.77 bu/a, 10 yr(s)			

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Yield & Income Factors:

Base Moisture = 13.0% Shrink = 1.3 Drying = \$0.02 Prices: GMO = \$12.50

Report Date: 10/16/2021

† 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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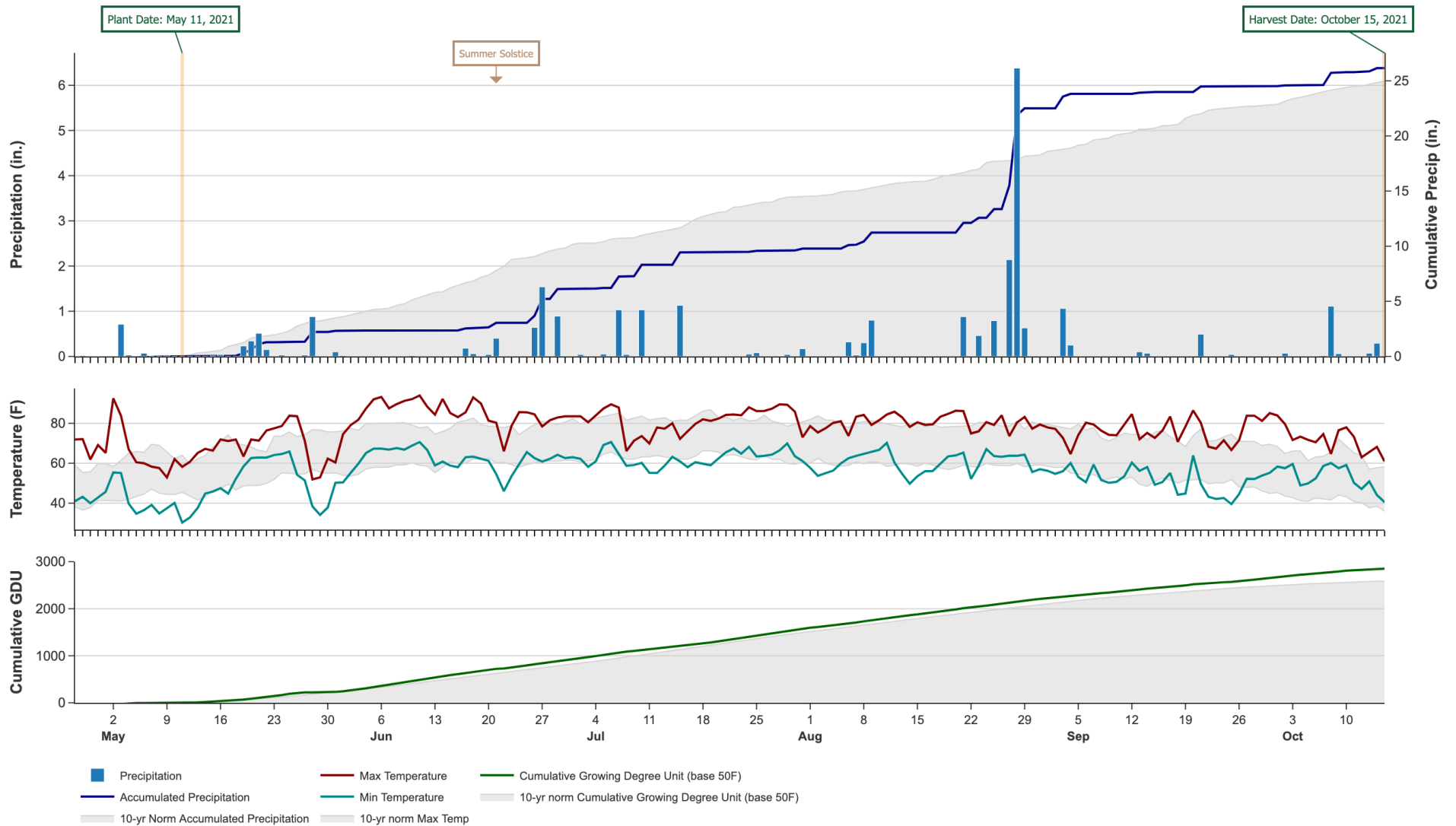
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2021 Soybeans - Iowa North [IANO]

Weather Conditions Summary at OSAGE, IA

Weather Data Retrieved: 10/16/2021

Monthly Total	Apr*	May	Jun	Jul	Aug	Sep	Oct*	Total
Precip (in) Normal (Diff)	0.0 0.6 (-0.6)	3.2 5.5 (-2.4)	3.8 6.3 (-2.5)	3.7 4.7 (-1.0)	12.7 3.7 (+9.0)	2.0 4.5 (-2.5)	1.6 2.2 (-0.6)	27.0 27.6 (-0.6)
GDU Normal (Diff)	38 4 (+33)	294 302 (-8)	674 567 (+106)	672 698 (-26)	631 603 (+27)	446 391 (+54)	195 94 (+100)	2950 2662 (+287)



* 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 - Iowa North [IANO]

Early-Season Test Products (54 Total)

Company/Brand	Product/Brand	Technology	SCN	RM	Seed Treat.
Apex	AE1720	E3	R	1.7	CMBV,SA
Apex	AE2020	E3	R	2.0	CMBV,SA
Apex	AE2110	E3	R	2.1	CMBV,SA
Asgrow	AG18XF1 §	RXF	R	1.8	Untreated
Asgrow	AG21XF0 §	RXF	R	2.1	ACi,IL
Benson Hill	E1958	CONV	MR	1.9	Untreated
Cornelius	CB20XF71	RXF	R	2.0	PG+
Cornelius	CB21X55	RRX	R	2.1	PG+
Credenz	CZ 2121GTLL	LLGT27	MR	2.1	PV,IL,OB
Croplan	CP2200X CK	RRX	R	2.2	Untreated
Federal	F2121N	LLGT27	R	2.1	MAG
FS HiSOY	19F10	RXF	R	1.9	ACi,B-200
FS HiSOY	21E00	E3	R	2.1	ACi,B-200
FS HiSOY	21F00	RXF	R	2.1	ACi,B-200
Genesis	G1760E	E3	R	1.7	CMBV,SA
Genesis	G1960E	E3	R	1.9	CMBV,SA
Genesis	G2060E	E3	R	2.0	CMBV,SA
Genesis	G2190GL	LLGT27	R	2.1	CMBV,SA
Golden Harvest	GH1802E3	E3	R	1.8	CMBV,SA
Golden Harvest	GH2102XF §	RXF	MR	2.1	CMBV,SA
Hefty	H17XF1	RXF	NA	1.7	DST4,SA
Hefty	H18XF2	RXF	NA	1.8	DST4,SA
Hefty	H20XF1	RXF	NA	2.0	DST4,SA
Hefty	H21XF2	RXF	NA	2.1	DST4,SA
Kruger	K2084XF	RXF	R	2.0	ACi,IL
Latham	L 1784 XF	RXF	R	1.7	SS+,SA
Latham	L 2049 E3	E3	R	2.0	SS+,SA
Latham	L 2184 R2X	RRX	R	2.1	SS+,SA
Latham	L 2193 E3	E3	R	2.1	SS+,SA
Loyal	L2130E	E3	R	2.1	CMBV,SA
NK Brand	NK19-C8XF	RXF	R	1.9	CMBV,SA
NK Brand	NK21-H4XF §	RXF	MR	2.1	CMBV,SA
NK Brand	S18-H3X GC	RRX	R	1.8	CMBV,SA
NK Brand	S19-2E3 GC	E3	R	1.9	Untreated
NuTech	18N02E	E3	R	1.8	Lum,Lu,IL
NuTech	20N04E	E3	R	2.0	Lum,Lu,IL
NuTech	21N06E	E3	R	2.1	Lum,Lu,IL
P3 Genetics	2218E	E3	R	1.8	PG+
P3 Genetics	2220E	E3	R	2.0	PG+
Pioneer	P18A98X §	RRX	R	1.8	Lum,Lu
Pioneer	P21A28X §	RRX	R	2.1	Lum,Lu,IL
Renk	RS212NXF	RXF	R	2.1	EcTC,SA

Company/Brand	Brand/Product	Technology	SCN	RM	Seed Treat.
Renk	RS219NX	RRX	R	2.1	EcTC,SA
Stine	21EE62 §	E3	R	2.1	SFI
Viking	1940KN	CONV	R	1.9	CMB
Viking	2018N	CONV	MR	2.0	CMB
Viking	2155N	CONV	MR	2.1	CMB
Xitavo	XO 1761E	E3	R	1.7	PV,IL,OB
Xitavo	XO 1971E	E3	R	1.9	PV,IL,OB
Xitavo	XO 2181E	E3	R	2.1	PV,IL,OB
Zinesto	Z1702E	E3	NA	1.7	DST4,SA
Zinesto	Z1802E	E3	NA	1.8	DST4,SA
Zinesto	Z1902E	E3	NA	1.9	DST5
Zinesto	Z2002E	E3	NA	2.0	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 - Iowa North [IANO]

Full-Season Test Products (48 Total)

Company/Brand	Product/Brand	Technology	SCN	RM	Seed Treat.
Apex	AE2220	E3	R	2.2	CMBV,SA
Apex	AE2420S	E3,ST	R	2.4	CMBV,SA
Asgrow	AG24XF1 §	RXF	R	2.4	ACi,IL
Benson Hill	E2358	CONV	MR	2.3	Untreated
Cornelius	CB22XF02	RXF	R	2.2	PG+
Cornelius	CB23XF63	RXF	R	2.3	PG+
Credenz	CZ 2360GTL	LLGT27	MR	2.3	PV,IL,OB
Credenz	CZ 2550GTL	LLGT27	MR	2.5	PV,IL,OB
Croplan	CP2200X CK	RRX	R	2.2	Untreated
FS HiSOY	23E10	E3	R	2.3	ACi,SA,B-200
FS HiSOY	23F10	RXF	R	2.3	ACi,B-200
FS HiSOY	24F00	RXF	R	2.4	ACi,B-200
FS HiSOY	25E00	E3	R	2.5	ACi,B-200
Genesis	G2260E	E3	R	2.2	CMBV,SA
Genesis	G2460ES	E3,ST	R	2.4	CMBV,SA
Genesis	G2550E	E3	R	2.5	CMBV,SA
Golden Harvest	GH2292E3	E3	MR	2.2	CMBV,SA
Golden Harvest	GH2562XF §	RXF	R	2.5	CMBV,SA
Hefty	H23XF1	RXF	NA	2.3	DST4,SA
Hefty	H24XF2	RXF	NA	2.4	DST4,SA
Hefty	H25X0	RRX	R	2.5	DST4,SA
Hefty	H25XF1	RXF	NA	2.5	DST4,SA
Kruger	K2294XF	RXF	R	2.2	ACi,IL
Kruger	K2391XF	RXF	R	2.3	ACi,IL
Kruger	K2594XF	RXF	R	2.5	ACi,IL
Latham	L 2379 E3	E3	R	2.3	SS+,SA
Latham	L 2458 E3	E3	R	2.4	SS+,SA
Latham	L 2494 XF	RXF	R	2.4	SS+,SA
Latham	L 2549 R2X	RRX	R	2.5	SS+,SA
Loyal	L2530E	E3	R	2.5	CMBV,SA
NK Brand	NK22-C4E3	E3	R	2.2	CMBV,SA
NK Brand	NK25-C9XF	RXF	MR	2.5	CMBV,SA
NuTech	22N02E	E3	R	2.2	Lum,Lu,IL
NuTech	24N04E	E3	R	2.4	Lum,Lu,IL
P3 Genetics	2222E	E3	R	2.2	PG+
P3 Genetics	2223E	E3	R	2.3	PG+
Renk	RS242NXF	RXF	R	2.4	EcTC,SA
Renk	RS248NX	RRX	R	2.4	EcTC,SA
Stine	24EE32 §	E3	R	2.4	SFI
Stine	25EB32 §	E3	R	2.5	SFI
Viking	2340KN	CONV	R	2.3	CMB
Viking	2418N	CONV	MR	2.4	CMB

Company/Brand	Brand/Product	Technology	SCN	RM	Seed Treat.
Viking	O.2244AT	CONV	MR	2.2	Vi,Ti
Xitavo	XO 2501E	E3	R	2.5	PV,IL,OB
Zinesto	Z2202E	E3	NA	2.2	DST4,SA
Zinesto	Z2300E	E3	R	2.3	DST4,SA
Zinesto	Z2302SE	E3,ST	NA	2.3	DST5
Zinesto	Z2401E	E3	R	2.4	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

CONV	Conventional
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,B-200	Acceleron® Standard Insecticide-Fungicide, B-200 SAT
ACi,IL	Acceleron® Standard Insecticide-Fungicide, ILeVO
ACi,SA,B-200	Acceleron® Standard Insecticide-Fungicide, Saltro®, B-200 SAT
CMB	CruiserMaxx® Beans
CMBV,SA	Cruisermaxx® Beans, Vibrance®, Saltro®
DST4,SA	Dominance 4 ST,Saltro®
DST5	Dominance 5 ST
EcTC,SA	Eclipse US Total Coverage Trio IM, N-Force, Saltro®
Lum,Lu	LumiGEN™, Lumisena™
Lum,Lu,IL	LumiGEN™, Lumisena™, ILeVO
MAG	Max Armor Guard (Federal Hybrids)
PG+	Profit Guard +
PV,IL,OB	Poncho®/Votivo®, ILeVO, Obvius Plus
SF1	Stine XP F&I
SS+,SA	SoyShield Plus, Saltro®
Untreated	No seed treatment
Vi,Ti	Vibrance®, Trio

* Seed treatments may include unspecified plant health promoting components.