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# North Dakota Soybean

## *Variety Trial Results for 2022 and Selection Guide*

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Variety trial data from all NDSU Research Extension Centers for all crops can be found at [www.ag.ndsu.edu/varietytrials](http://www.ag.ndsu.edu/varietytrials). Several herbicide traits are represented in the tables: E = Enlist, RR = Roundup Ready, RRXT = RR2Xtend, F = Flex, X or XT = Xtend, GT = glyphosate tolerant, LL = Liberty Link.

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# Soybean Variety Selection

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## Selection

Soybean variety selection should be based on maturity, yield, seed quality, lodging, iron-deficiency chlorosis tolerance and disease reactions. In most years, later-maturing varieties tend to yield more than early maturing varieties when evaluated at the same location.

After determining a suitable maturity for the farm, comparing yields of varieties that are of similar maturity is important. Although late maturity increases yield potential, later-maturing varieties are riskier to grow than earlier-maturing varieties because an early fall frost may kill a late-maturing variety before the beans have completely filled in the pods, which will reduce yield and percent of oil greatly.

## Soybean Maturity

Soybean plants respond to day length and heat units, so the actual calendar date a variety will mature is highly influenced by latitude; each variety has a narrow range of north to south adaptation. Soybean yield and quality are affected if a season-ending freeze occurs before a variety reaches physiological maturity. Dates of maturity are listed in the performance tables and indicate when varieties were physiologically mature.

Physiological maturity has been reached when 95% of the pods have the mature color. Varieties may have a different mature pod color. Usually, harvest can commence approximately seven to 14 days after the soybean crop is physiologically mature. Relative maturity ratings also are provided for many of the varieties entered in the trials at various locations. Relative maturity ratings for private varieties were provided by the companies entering the variety in the trial.

Varieties of maturity groups 00 (double zero), 0 (zero) and 1 are suitable for eastern North Dakota and northwestern Minnesota. Maturity group 00 is very early and primarily grown in the northern Red River Valley and the north-central area of North Dakota. Maturity group 0 is adapted to Traill, Cass and Richland counties and other counties with similar latitudes. Maturity group 1 primarily is suitable for southern areas. These maturity groups are further subdivided. For example, a 0.1 maturity group is an early group 0 variety and a 0.9 is a late-maturity group 0 variety.

The best way to select a high-yielding variety is to use data averaged across several locations and years. Because weather conditions are unknown in advance, averaging across several years' data will identify how a variety might perform across different weather conditions. Selecting a variety that has performed well in a dry season and normal rainfall conditions is the best way to identify a variety that does relatively well, regardless of growing season weather fluctuations.

## Phytophthora

Phytophthora root rot, caused by the pathogen *Phytophthora sojae*, is one of the most important disease problems of soybeans in North Dakota. Phytophthora root rot tends to be more of a problem in the Red River Valley and on poorly drained, heavy soils, but the disease can cause significant stand reduction and yield loss in other areas when conditions are favorable for disease development.

Most varieties have *Phytophthora* root rot-resistance genes, and each gene confers resistance to a different race (or races) of *Phytophthora*. For example, a gene that may confer resistance to Race 3 may not confer resistance to Race 4, and vice versa.

*Phytophthora sojae* is a variable pathogen, and many races of the pathogen exist in North Dakota. No specific gene guarantees control of the pathogen. Consequently, monitoring your fields for *Phytophthora* root rot every year is important. If the disease is widespread, the pathogen may have overcome the gene being used, and the gene may not be effective in future plantings.

Similarly, continually rotating effective genes is very important. Lack of gene or crop rotation can speed the development of new *Phytophthora* races. In some North Dakota fields, the pathogen already has become resistant to multiple genes. Fungicide seed treatments with activity against *Phytophthora* may help prevent early infection. However, seed treatments do not provide season-long control and over time, the pathogen can become resistant to them. Consequently, fungicide seed treatments and resistance genes should be rotated. The most effective strategy would include planting varieties with genetic resistance, the use of effective fungicide seed treatments, water management (surface and subsurface drainage) and crop rotation.

## White Mold

Varieties have genetic differences for tolerance or resistance to white mold. Varieties that are less susceptible to white mold should be grown on fields where white mold has a history of causing problems. The same pathogen causing white mold in soybean, causes white mold in other crops (dry bean, sunflower, pea, canola, etc.). Consequently, recent white mold problems in **any crop** in that field should be noted, and crop rotation with nonhosts, such as wheat, barley or corn, is preferred for white mold management.

Fungicides are labeled for management/suppression of white mold, but applications must be made on a preventive basis. Efficacy may be inconsistent (particularly in high disease-pressure environments) and economics in low disease-risk environments are often not favorable.

## Iron-deficiency Chlorosis

Iron-deficiency chlorosis (IDC) is a major problem in the eastern part of North Dakota. Iron chlorosis symptoms might be present during the two- to seven-trifoliolate leaf stages. Plants tend to recover and start to turn green again during the late vegetative, flowering and pod-filling stages. However, IDC during the early vegetative stages can reduce yield potential severely.

Some varieties are more tolerant to IDC than others. For high-pH soils with known IDC problems, select an iron chlorosis-tolerant variety of suitable maturity that is high yielding. For varieties tested by NDSU during the 2022 season, IDC ratings are provided in Tables 3 and 4.

## Soybean Cyst Nematode

Soybean cyst nematode (SCN), *Heterodera glycines*, is a small parasitic roundworm that attacks the roots of soybean plants. Nematodes often are undetected because above-ground symptoms are uncommon until a 15% to 30% yield loss has occurred.

Soybean cyst nematode has been confirmed in many soybean-growing counties in North Dakota. Growers are strongly urged to test their soils for SCN. If a positive sample for SCN is found, growers should begin managing SCN actively.

Crop rotation and resistance are the most important management tools against this disease. The primary source of resistance available in soybean varieties grown in North Dakota is PI88788. While PI88788 is still

largely effective in North Dakota, the nematode is slowly adapting to it. Other sources of resistance, such as Peking, will be effective in the vast majority of fields in the state. However, few varieties have sources of resistance other than PI88788. Rotation of resistant varieties will help manage SCN. While rotating between sources is ideal (such as a PI88788 – Peking rotation), it is not always possible. However, because PI88788 is made up of multiple genes, rotating among varieties with PI88788 may limit nematode adaptation. Importantly, the level of resistance in varieties is variable, even if they contain the same source of resistance, so selecting the most resistant variety possible and monitoring the field for SCN is important.

For SCN management, a rotation out of soybean for even one year is beneficial, but two to three years is better. Dry edible bean is the only other SCN-susceptible crop we grow, and should not be used as a rotation crop for managing SCN. Nematicide seed treatments also are available and may help manage SCN; however, they are not a substitute for resistance and rotation. More information of soybean cyst nematode can be found at [www.thescncoalition.com](http://www.thescncoalition.com).

Monitoring SCN egg levels by soil sampling is critical for evaluating how well your management strategies are working. In general, if egg levels remain approximately the same after a season of soybean, your management strategy is working. If egg levels increase (especially by orders of magnitude) after a season of soybean, adjusting the source of resistance, the rotation crops, the length of rotation, and/or considering a nematode-protectant seed treatment may be advised.

**Table 1. Agronomic Characteristics of Public Soybean Varieties Suitable for North Dakota Production.**

Variety	Maturity Group	Fargo Relative Maturity	Height	Hilum Color	Remarks <sup>1</sup>
ND21008GT20	00.8	Early	Med.	Gray	1,2,7
ND18008GT	00.8	Early	Med.	Black	1,2,7,9
ND17009GT	00.9	Early	Med.	Black	7
ND Rolette	00.9	Early	Med.	Buff	1,2,8
ND Benson	0.4	Med.	Med.	Buff	1,2,6,8
ND Dickey	0.7	Med. Late	Med,	Gray	1,3
ND Stutsman	0.7	Med. Late	Med.	Yellow	1,3,8
ND2108GT73	0.8	Late	Tall	Yellow	4,7

<sup>1</sup>Remarks: 1 = Good iron chlorosis resistance; 2 = Resistant to races 1-4 of Phytophthora root rot; 3 = Resistant to races 1 - 3 of Phytophthora root rot; 4 = Susceptible to Phytophthora root rot; 5 = Tofu bean; 6 = resistant to soybean cyst nematode (SCN); 7 = Glyphosate resistant; 8 = Tolerant to metribuzin herbicide; 9 = tolerance to soybean aphid.

**Table 2. Full Company Name, Abbreviated Name Used in Tables and Website.**

Company	Abbreviated	Website
AgriGold	AgriGold	agrigold.com/soybeans
BASF	Xitavo	www.xitavosoybeanseed.com/
Bayer Crop Science	Bayer	www.dekalbasgrowdeltapine.com/en-us.html
Brushvale Seed Inc.	Brushvale	www.brushvaleseed.com
Champion	Chmpion	www.plantchampion.com/
Channel	Channel	www.channel.com/en-us/products.html
Dahlman Seed Co.	Dahlman	www.dahlmanseed.com
Dairyland Seed Co. Inc.	Dairyland	www.dairylandseed.com
DuPont Pioneer	Pioneer	www.pioneer.com/us
Dyna-Gro Seed	Dyna-Gro	www.dynagroseed.com
Farmer's Business Network Inc.	Farmer's BN / Paloma	www.fbn.com/direct/seed
Golden Harvest	Golden H.	www.goldenharvestseeds.com/soybeans
Hefty Seed Co.	Hefty	www.heftyseed.com/soybeans
Impact	IMPACT	legendseeds.net/products/impact-soybeans
Innictis Seed Solutions	Innictis	www.innictisseed.com/products/soybeans/107
Integra Fortified Seed	Integra	www.wilburellisagribusiness.com/integra-seed/
Legacy Seeds Inc.	Legacy	www.legacyseeds.com
Legend Seeds Inc.	Legend	www.legendseeds.net
MS Technologies	MS Tech.	www.mstechseed.com/
Mustang Seed	Mustang	www.mustangseeds.com/products/soybeans/
N.D. Foundation Seed	NDSU	www.ag.ndsu.edu/fss/
Peterson Farms Seed	Peterson	www.petersonfarmsseed.com
Proseed Inc.	Proseed	www.proseed.net
REA Hybrids	REA	www.rea-hybrids.com/en-us/products/soybeans.html
Richland	Richland	www.richlandifc.com
Sevita International	Sevita	www.sevitagenetics.com
Stine Company	Stine	www.stinseed.com/soybeans
Sunrise	Sunrise	--
Syngenta NK Brand	Syng NK	www.syngenta-us.com/seed
Thunder Seed Inc.	Thunder	www.thunderseed.com
Thunder Seed / Dak-Sota	Dak-Sota	www.thunderseed.com/crop/dak-sota-soybeans-us/
WinField Croplan	Croplan	www.winfieldunited.com/

**Table 3. 2022 NDSU Enlist, RR and Xtend Soybean Iron-deficiency Chlorosis Trial - Author, C. Miranda (Page 1 of 3).**

Company	Variety	Trial Mean IDC <sup>1</sup>	Company	Variety	Trial Mean IDC <sup>1</sup>
AgriGold	G0303E3	3.6	Dairyland	DSR-1290E	3.9
AgriGold	G0557E3	3.2	Dak-Sota	DE5212	3.7
AgriGold	G0620XF	3.8	Dak-Sota	DE5309	3.9
AgriGold	G0801E3	3.6	Dyna-Gro	S04XT91	3.3
AgriGold	G0854XF	3.8	Dyna-Gro	S05EN82	2.8
AgriGold	G1003E3	3.6	Dyna-Gro	S05XF73	3.3
AgriGold	G1202XF	3.9	Dyna-Gro	S07XF23	3.6
AgriGold	G1209E3	3.7	Dyna-Gro	S09EN53	3.8
Bayer	AG007XF3	3.8	Dyna-Gro	S09XF62	3.5
Bayer	AG009XF3	3.0	Dyna-Gro	S12EN72	3.6
Bayer	AG01XF3	3.8	Dyna-Gro	S12XF92	3.8
Bayer	AG06XF3	3.7	Golden H.	GH00973E3	3.7
Bayer	AG09XF3	3.5	Golden H.	GH0213E3	3.9
Bayer	AG13XF3	3.4	Golden H.	GH0363E3	3.6
Champion	0563XL	3.7	Golden H.	GH0443X	2.9
Champion	0692XL	4.3	Golden H.	GH0653XF	3.0
Champion	0743XL	3.8	Golden H.	GH0693E3	3.3
Channel	00922R2X	3.9	Golden H.	GH0803XF	3.5
Channel	0122RFX	3.5	Golden H.	GH0933E3	3.6
Channel	0218R2X	2.2	Golden H.	GH0936X	3.9
Channel	0320R2X	2.9	Golden H.	GH1323XF	3.7
Channel	0423RFX	2.8	Golden H.	GH1442XF	3.6
Channel	0622RFX	3.3	Golden H.	GH1472E3	3.7
Channel	0721RFX	3.0	Hefty	Z0610E	3.7
Channel	0823RFX	3.4	Hefty	Z0801E	4.1
Channel	1022RFX	3.4	Hefty	Z1001E	3.7
Channel	1123RFX	3.4	Hefty	Z1101E	3.5
Channel	1220RFX	3.6	Integra	70212	3.6
Channel	1422RFX	2.9	IMPACT	03E000N	3.6
Channel	1623RFX	3.7	IMPACT	05E256N	3.4
Dahlman	1102E3N	3.9	IMPACT	07E165N	4.0
Dahlman	AE0300	3.7	IMPACT	09E345N	3.6
Dahlman	AE1220	3.0	IMPACT	10E125N	4.0
Dahlman	7203XF	3.6	IMPACT	12E157N	3.3
Dahlman	7301XF	3.8	Integra	40300N	2.9
Dahlman	7304XF	3.1	Integra	70622N	3.4
Dahlman	7309XF	3.9	Legacy	L1050E	3.8
Dairyland	DSR-0220E	3.6	Legacy	LS-012-21 E	3.4
Dairyland	DSR-0645E	3.3	Legacy	LS-014-22 XF	3.5
Dairyland	DSR-0660E	3.7	Legacy	LS-0239N RR2X	2.6
Dairyland	DSR-0757E	3.9	Legacy	LS-0320 E3	3.9
Dairyland	DSR-0920E	3.4	Legacy	LS-032-22 E	3.9
Dairyland	DSR-1121E	2.4	Legacy	LS-044-21 XF	4.1
Mean		3.5	Mean		3.5
CV %		12.2	CV %		12.2
LSD 0.05		0.7	LSD 0.05		0.7
LSD 0.10		0.6	LSD 0.10		0.6

**Table 3. 2022 NDSU Enlist, RR and Xtend Soybean Iron-deficiency Chlorosis Trial - Author, C. Miranda (Page 2 of 3).**

Company	Variety	Trial Mean IDC <sup>1</sup>	Company	Variety	Trial Mean IDC <sup>1</sup>
Legacy	LS-062-21 E	3.3	Peterson	19EN008	3.1
Legacy	LS-064-22 XF	3.4	Peterson	19EN04	3.2
Legacy	LS-072-21 E	3.7	Peterson	19X03N	2.5
Legacy	LS-074-22 XF	3.7	Peterson	2003E	3.3
Legacy	LS-082-22E	3.4	Peterson	2013E	3.2
Legacy	LS-084-22XF	3.1	Peterson	2015E	4.1
Legacy	LS-092-22E	3.6	Peterson	20X05	3.4
Legacy	LS-094-20 XF	2.8	Peterson	20X09N	3.8
Legacy	LS-102-22 E	3.8	Peterson	2106E	3.1
Legacy	LS-105-22E	3.9	Peterson	2108E	3.6
Legacy	LS-122-21 E	3.5	Peterson	2109E	4.1
LG Seeds	LGS00663RX	3.2	Peterson	21XF07	3.4
LG Seeds	LGS00838XF	3.9	Peterson	2201E	3.6
LG Seeds	LGS0111RX	3.8	Peterson	2207E	3.8
LG Seeds	LGS0338E3	3.5	Peterson	2212E	3.3
LG Seeds	LGS0355RX	3.2	Peterson	2214E	3.7
LG Seeds	LGS0400RX	3.1	Peterson	2216E	4.0
LG Seeds	LGS0550E3	3.3	Peterson	2218E	4.4
LG Seeds	LGS0595RX	3.1	Peterson	2220E	4.1
LG Seeds	LGS0660XF	3.8	Peterson	2222E	3.9
LG Seeds	LGS0701XF	4.1	Peterson	22XF009	3.8
LG Seeds	LGS0822E3	3.3	Peterson	22XF03	3.8
LG Seeds	LGS0988XF	3.8	Peterson	22XF06	3.9
LG Seeds	LGS1203E3	3.7	Peterson	22XF10	3.6
LG Seeds	LGS1232XF	3.8	Peterson	22XF12	3.6
LG Seeds	LGS1385XF	3.2	Peterson	22XF14	2.9
Mustang	008X828	3.4	Peterson	22XF18	4.1
Mustang	03X329EX	2.9	Peterson	22XF21	3.8
Mustang	XF01433	3.9	Peterson	23009E	4.2
Mustang	XF03312	3.9	Peterson	2302E	3.6
Mustang	XF05533	3.4	Peterson	2304E	3.1
Mustang	XF07722	3.4	Peterson	2309E	3.8
Mustang	XF09523	3.2	Peterson	2310E	3.8
Mustang	XF10522	3.6	Peterson	2311E	3.7
NDSU	ND21008GT20	3.3	Peterson	2318E	4.1
NDSU	ND2108GT73	3.6	Peterson	2321E	3.9
NDSU	ND17009GT	4.2	Peterson	23XF009	3.2
Paloma / Farmer's BN	PL2E061	2.9	Peterson	23XF01	3.8
Paloma / Farmer's BN	PL2E101	2.9	Peterson	23XF09	3.9
Paloma / Farmer's BN	PL2E141	4.1	Peterson	23XF10	3.1
Peterson	17X04N	3.0	Peterson	23XF13	3.6
Peterson	18X07N	3.3	Pioneer	P005A59E	3.1
Peterson	1911E	3.9	Pioneer	P04A98E	3.3
Mean		3.5	Mean		3.5
CV %		12.2	CV %		12.2
LSD 0.05		0.7	LSD 0.05		0.7
LSD 0.10		0.6	LSD 0.10		0.6



**Table 3. 2022 NDSU Enlist, RR and Xtend Soybean Iron-deficiency Chlorosis Trial - Author, C. Miranda (Page 3 of 3).**

Company	Variety	Trial Mean IDC <sup>1</sup>	Company	Variety	Trial Mean IDC <sup>1</sup>
Pioneer	P06A38E	2.8	Stine	16EC32	3.4
Pioneer	P06A85E	2.6	Sunrise	SR 00630XF	3.3
Proseed	EL30-33	3.1	Syng NK	NK02-T4E3	3.1
Proseed	EL30-53	3.4	Syng NK	NK03-V5E3	3.4
Proseed	EL30-93N	3.9	Syng NK	NK05-W3XF	3.4
Proseed	EL31-13N	3.6	Syng NK	NK06-D9E3	3.2
Proseed	EL31-43N	3.5	Syng NK	NK06-P2XF	3.1
Proseed	EL80-33	3.6	Syng NK	NK08-M1XF	3.5
Proseed	EL90-93N	3.6	Syng NK	NK09-B5XF	3.6
Proseed	XF30-42N	3.1	Syng NK	NK09-H7E3	3.8
Proseed	XF30-52N	3.0	Syng NK	NK10-W8XF	3.7
Proseed	XF30-62N	3.8	Syng NK	NK13-Y4XF	3.1
Proseed	XF30-72N	3.4	Syng NK	SO4-Q7X	3.4
Proseed	XF30-82N	3.4	Thunder	SB8104N	3.2
Proseed	XF30-92N	3.8	Thunder	SB8903N	2.9
Proseed	XF31-12	3.3	Thunder	TE7207	3.0
Proseed	XF31-32N	3.1	Thunder	TE7304N	3.6
Proseed	XT90-50	3.3	Thunder	TE7309N	3.4
REA	R0112XF	3.6	Thunder	TX8211N	3.1
REA	R0442XF	3.1	Thunder	TX8304N	2.7
REA	R0632XF	3.4	Thunder	TX8305N	3.1
REA	R0843XF	3.2	Thunder	TX8307N	3.8
REA	R1042XF	3.6	Thunder	TX8309N	3.5
REA	R1133XF	3.3	Thunder	TX8312N	3.2
REA	RX0721	3.0	Xitavo	XO 0101E	2.9
Stine	01EA63	3.6	Xitavo	XO 0213E	3.1
Stine	03EB02	3.4	Xitavo	XO 0311E	3.1
Stine	04EE06	3.2	Xitavo	XO 0573E	2.9
Stine	05EA23	3.6	Xitavo	XO 0602E	3.9
Stine	05EB23	3.4	Xitavo	XO 0731E	3.7
Stine	06EC23	3.4	Xitavo	XO 0993E	3.9
Stine	07EA36	3.8	Xitavo	XO 1133E	3.9
Stine	08EC32	3.0	Xitavo	XO 1212E	3.4
Stine	11EC02	3.3	Xitavo	XO 1372E	3.6
Mean		3.5	Mean		3.5
CV %		12.2	CV %		12.2
LSD 0.05		0.7	LSD 0.05		0.7
LSD 0.10		0.6	LSD 0.10		0.6

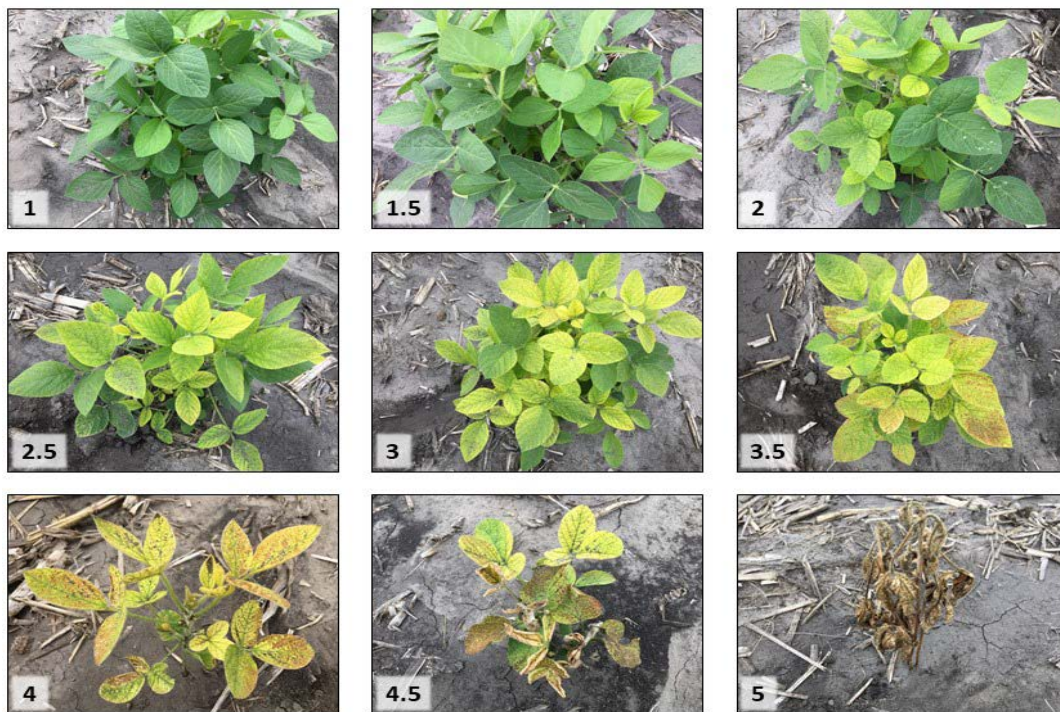
<sup>1</sup>IDC score was 1-5, with 1-green, 3-yellow, 5-dead tissue.

See Table 4 footnotes for IDC score images.

**Table 4. 2022 NDSU Conventional Soybean Iron-deficiency Chlorosis Trial - Author, C. Miranda.**

Company	Variety	Trial		Company	Variety	Trial
		Mean	Mean			
Brushvale	BS1146	3.5	Richland	MK1023	4.1	Richland
Brushvale	BS1252	3.7	Richland	MK41	3.7	Richland
Brushvale	BS1512	4.4	Richland	MK808CN	3.9	Richland
Legacy	LS123-23C	3.8	Richland	MK9101	3.2	Richland
NDSU	ND Benson	3.2	Sevita	Dunham	3.4	Sevita
NDSU	ND Dickey	3.4	Sevita	Finch	4.0	Sevita
NDSU	ND Rolette	2.3	Sevita	Odessa	3.6	Sevita
Richland	MK009	3.8	Sevita	Skyline	3.9	Sevita
Richland	MK0249	3.6	Sevita	SVX21T0S15	3.6	Sevita
Richland	MK0603	3.9	Sevita	Panorama	3.9	Sevita
Richland	MK1016	3.9	Sevita	SVX20T00S4	3.6	Sevita
Mean		3.7	Mean		3.7	
CV %		11.0	CV %		11.0	
LSD 0.05		0.7	LSD 0.05		0.7	
LSD 0.10		0.5	LSD 0.10		0.5	

<sup>1</sup>IDC score was 1-5, with 1-green, 3-yellow, 5-dead tissue.



Soybean plants with IDC scores; 1 is green and 5 is dead tissue.

**Table 5. 2022 NDSU Enlist, RR and Xtend Soybean Cyst Nematode Yield Trial - Authors, C. Miranda and G. Kreutz.**

Company	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Height (in)	Seed Oil (%)	Seed Protein (%)	Seed Yield				
							Madson	Prosper	Selzer	3-site Avg.	2-yr. Avg.
Dahlman	7210XF	1.0	9/27	38	19.9	37.6	48.6	70.5	76.1	65.0	58.5
Dahlman	7213XF	1.3	9/27	39	20.7	36.3	50.9	70.4	81.0	67.4	57.6
Dahlman	7304XF	0.4	9/19	34	20.2	37.6	39.4	66.3	69.1	58.2	--
Dahlman	7309XF	0.9	9/23	34	20.7	36.1	46.4	50.4	75.8	57.5	--
Dahlman	AE0300	0.3	9/14	32	19.8	36.8	35.4	43.4	74.4	51.0	--
Dahlman	AE1220	1.2	9/30	36	19.8	37.5	51.9	75.8	74.0	67.2	--
Golden H.	GH0363E3	0.3	9/17	33	19.3	38.6	52.9	67.1	69.5	63.2	--
Golden H.	GH0653XF	0.6	9/20	36	20.0	38.0	37.9	61.5	71.2	56.8	--
Golden H.	GH0693E3	0.6	9/20	32	20.6	36.8	51.4	65.9	72.4	63.2	--
Golden H.	GH0803XF	0.8	9/22	35	19.2	39.5	38.8	60.6	74.3	57.9	--
Golden H.	GH0933E3	0.9	9/25	28	20.3	37.2	50.4	65.6	62.4	59.5	--
NDSU	ND21008GT20	00.8	9/10	35	20.2	36.8	17.8	23.1	59.3	33.4	--
NDSU	ND2108GT73	0.8	9/24	35	20.4	37.3	42.2	49.5	66.9	52.9	--
NDSU	ND17009GT	00.9	9/14	36	19.7	40.7	42.5	32.7	54.6	43.3	--
REA	R0422XF	0.4	9/28	38	20.4	36.3	54.7	68.0	74.9	64.9	--
REA	R0632XF	0.6	9/22	34	18.7	38.5	40.0	57.6	72.8	55.3	47.9
REA	R0843XF	0.8	9/24	36	19.7	38.3	40.9	56.4	79.3	58.4	--
REA	R1042XF	1.0	9/27	36	20.5	37.8	50.2	64.3	70.0	59.0	48.8
REA	R1133XF	1.1	9/20	35	19.5	38.7	49.3	64.3	71.9	62.2	--
REA	RX0721	0.7	9/21	37	19.3	37.7	57.5	63.7	76.6	63.4	52.1
Syng NK	NK05-W3XF	0.5	9/18	37	19.2	38.1	45.8	49.5	74.0	62.6	--
Syng NK	NK06-D9E3	0.6	9/20	31	20.4	37.5	42.6	69.5	64.4	54.9	--
Syng NK	NK06-P2XF	0.6	9/19	37	19.5	38.4	50.3	65.2	70.6	59.2	--
Syng NK	NK08-M1XF	0.8	9/21	35	19.3	39.9	29.0	49.1	69.0	54.1	--
Syng NK	NK09-B5XF	0.9	9/23	33	19.8	38.1	56.7	55.0	68.7	63.2	--
Syng NK	NK09-H7E3	0.9	9/25	30	20.3	37.4	50.7	56.9	73.9	62.7	--
Syng NK	NK10-W8XF	1.0	9/25	38	19.4	37.8	49.8	65.5	79.2	59.5	51.1
Syng NK	NK13-Y4XF	1.3	9/29	37	19.9	37.1	52.6	56.2	75.1	65.7	--
Xitavo	XO 0101E	0.1	9/13	31	19.3	39.1	43.9	43.1	63.6	50.2	--
Xitavo	XO 0213E	0.2	9/18	36	20.6	37.0	35.9	38.3	66.6	46.9	--
Xitavo	XO 0311E	0.3	9/13	31	--	--	53.6	50.3	71.4	58.4	55.1
Xitavo	XO 0573E	0.5	9/23	33	20.3	38.3	40.2	34.4	64.5	46.4	--
Xitavo	XO 0602E	0.6	9/24	35	19.7	37.7	59.2	52.2	77.7	63.0	--
Xitavo	XO 0731E	0.7	9/25	35	20.0	37.5	59.2	61.2	71.8	64.1	60.4
Xitavo	XO 0993E	0.9	9/26	38	20.0	37.7	56.4	65.7	76.4	66.2	--
Xitavo	XO 1133E	1.1	9/28	36	19.4	38.9	51.6	65.8	77.1	64.8	--
Xitavo	XO 1212E	1.2	9/30	36	19.5	38.3	55.9	62.4	74.3	64.2	--
Xitavo	XO 1372E	1.3	9/28	36	21.0	36.3	60.3	68.9	80.0	69.7	--
Mean			9/21	35	19.9	37.8	47.2	57.5	71.7	58.8	53.9
CV %			20.0	4.9	--	--	26.9	23.7	7.6	28.1	--
LSD 0.05			3.5	2.4	--	--	17.7	18.9	7.6	13.2	--
LSD 0.10			2.9	2.0	--	--	15.4	16.1	6.4	11.1	--

Madson Planted: June 6. Harvested: Oct 10.

Prosper Planted: May 25. Harvested: Oct 15.

Selzer Planted: May 23. Harvested: Oct 2.

<sup>1</sup>Maturity is date of 95% brown or tan pods

**Table 6. 2022 NDSU Combined SCN-infested Soil Soybean non-GMO Variety Trial - Authors, C. Miranda and G. Kreutz.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Height (in)	Seed Oil (%)	Seed Protein (%)	Seed Yield				
							Madson	Prosper	Selzer	3-site Avg.	2-yr. Avg.
NDSU	ND Benson	0.4	9/19	37	20.5	38.1	49.3	44.3	63.5	52.4	51.7
NDSU	ND Dickey	0.7	9/22	37	19.2	37.7	41.4	43.9	66.2	50.5	39.4
NDSU	ND Rolette	00.9	9/11	36	20.4	37.9	33.4	30.0	58.8	40.8	--
Sevita	Dunham	0.7	9/24	38	17.7	42.9	30.6	37.5	61.3	43.1	--
Sevita	Skyline	1.1	9/27	42	19.8	39.9	48.6	60.7	63.8	57.7	52.1
Sevita	SVX21T0S15	0.7	9/22	36	19.0	39.6	41.5	38.1	63.3	47.6	--
Mean			9/21	38	19.4	39.4	40.8	42.4	62.8	48.7	47.7
CV %		--	18.1	4.1	--	--	22.0	27.5	6.5	31.4	--
LSD 0.05		--	3.1	2.3	--	--	13.1	17.4	6.1	12.4	--
LSD 0.10		--	2.6	1.9	--	--	11.5	14.4	5.0	10.4	--

Madson Planted: June 6. Harvested: Oct 10.

Prosper Planted: May 25. Harvested: Oct 15.

Selzer Planted: May 23. Harvested: Oct 2.

<sup>1</sup>Maturity is date of 95% brown or tan pods**Table 7. 2022 NDSU Enlist, RR and Xtend Soybean - Central Locations in North Dakota - Authors, C. Miranda and G. Kreutz.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Height (in)	Seed Oil (%)	Seed Protein (%)	Seed Yield				
							Arthur	Grandin	Hatton	3-site Avg.	2-yr. Avg.
Dairyland	DSR-0220E	0.2	9/13	23	19.7	38.4	43.8	37.8	32.8	38.1	--
Golden H.	GH0213E3	0.2	9/15	21	19.6	38.5	30.3	28.1	29.9	29.4	--
Golden H.	GH0363E3	0.3	9/14	25	18.5	39.2	35.0	48.7	42.1	41.9	--
Legacy	LS062-21E	0.6	9/19	24	19.6	37.8	48.6	44.9	43.2	45.6	46.1
Legacy	LS064-22 XF	0.6	9/19	26	18.9	36.7	33.0	47.1	46.0	42.0	--
Legacy	LS072-21E	0.7	9/18	26	18.7	37.9	42.5	49.6	33.6	41.9	44.5
Legacy	LS074-22 XF	0.7	9/20	28	19.9	36.3	44.1	48.9	35.7	42.9	--
LG Seeds	LGS0338E3	0.3	9/13	21	19.2	37.9	40.4	35.9	48.8	42.6	--
NDSU	ND21008GT20	00.8	9/13	20	--	--	27.3	36.8	31.7	31.6	--
NDSU	ND2108GT73	0.8	9/22	25	19.5	37.0	26.8	44.9	45.8	38.6	--
NDSU	ND17009GT	00.9	9/13	20	19.5	39.8	29.1	36.6	31.0	32.2	--
Proseed	EL30-03N	0.0	9/11	20	19.4	38.5	35.5	33.8	44.1	36.4	--
Proseed	EL30-13	0.1	9/15	24	19.9	37.3	41.8	43.1	45.6	43.5	--
Proseed	EL30-33	0.3	9/16	22	20.2	37.6	45.5	34.3	28.8	36.2	--
Proseed	EL80-33	0.3	9/17	26	19.8	37.5	38.5	38.4	26.0	34.3	--
Proseed	XF30-12	0.1	9/10	23	19.1	37.4	26.4	38.1	40.9	35.1	--
Xitavo	XO 0101E	0.1	9/13	25	19.2	38.2	33.9	48.7	41.6	41.4	--
Xitavo	XO 0213E	0.2	9/16	27	19.9	37.7	39.6	46.9	39.0	41.8	--
Xitavo	XO 0311E	0.3	9/13	26	19.3	36.8	39.7	50.5	46.2	45.5	48.7
Mean			9/15	24	19.4	37.8	36.9	41.7	38.6	39.0	46.4
CV %			27.2	7.5	2.4	1.9	19.3	15.5	20.3	22.3	--
LSD 0.05			4.7	3.0	1.0	1.6	12.0	10.2	13.0	8.2	--
LSD 0.10			4.0	2.5	0.8	1.3	10.0	8.8	11.1	6.9	--

Arthur Planted: May 24. Harvested: Oct 1.

Grandin Planted: May 19. Harvested: Oct 6.

Hatton Planted: June 9. Harvested: Oct 9.

<sup>1</sup>Maturity is date of 95% brown or tan pods

**Table 8. 2022 NDSU Conventional Soybean, Central Locations in North Dakota - Authors, C. Miranda and G. Kreutz.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Height (in)	Seed Oil (%)	Seed Protein (%)	Seed Yield				
							Arthur	Grandin	Hatton	3-site Avg.	2-yr. Avg.
NDSU	ND Benson	0.4	9/16	29	19.2	36.7	28.0	47.5	42.8	39.5	39.5
NDSU	ND Dickey	0.7	9/20	27	18.7	38.0	33.1	57.6	50.7	47.1	49.9
NDSU	ND Rolette	00.9	9/10	27	19.8	38.4	18.2	49.1	38.0	35.1	38.1
Richland	MK009	0.0	9/14	25	19.2	36.4	27.7	39.1	27.4	31.4	--
Richland	MK0249	0.2	9/16	20	19.2	38.0	16.1	36.4	17.1	23.2	31.2
Sevita	Panorama	0.3	9/16	25	20.4	39.0	37.1	43.6	39.4	40.0	44.1
Mean			9/16	26	19.2	36.7	26.7	45.6	35.9	36.1	40.6
CV %			26.2	7.7	4.5	4.2	17.3	9.2	13.2	26.9	--
LSD 0.05			4.9	3.5	2.1	3.9	8.7	7.6	8.9	9.6	--
LSD 0.10			4.1	2.9	1.7	3.1	7.1	6.2	7.3	8.0	--

Arthur Planted: May 24. Harvested: Oct 1.

Grandin Planted: May 19. Harvested: Oct 6.

Hatton Planted: June 9. Harvested: Oct 9.

<sup>1</sup>Maturity is date of 95% brown or tan pods**Table 9. 2022 NDSU Conventional Soybean, Southern Locations in North Dakota - Authors, C. Miranda and G. Kreutz.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Height (in)	Seed Oil (%)	Seed Protein (%)	Seed Yield			
							Lisbon	Milnor	2-site Avg.	2-yr. Avg.
Brushvale	BS1252	1.2	9/22	24	19.1	38.7	47.0	65.0	56.0	--
Legacy	LS123-22 C	1.2	9/27	31	20.1	38.6	52.0	59.3	55.7	--
NDSU	ND Benson	0.4	9/14	27	19.7	39.2	47.8	60.8	54.3	48.7
NDSU	ND Dickey	0.7	9/20	24	19.4	36.8	45.8	60.3	53.1	48.7
NDSU	ND Rolette	00.9	9/10	23	20.7	35.9	41.0	52.7	46.9	--
Richland	MK0603	0.6	9/18	23	18.2	38.3	41.1	47.4	44.3	44.3
Richland	MK1016	1.0	9/16	27	18.6	38.5	40.0	46.7	43.3	43.9
Richland	MK1023	1.0	9/25	26	19.2	35.9	45.9	55.9	50.9	--
Richland	MK41	1.1	9/19	26	19.0	40.1	49.2	49.9	49.6	47.6
Richland	MK808CN	0.8	9/22	25	20.7	36.3	47.0	60.4	53.7	48.6
Sevita	Finch	0.9	9/20	26	19.8	40.1	50.3	54.9	52.6	--
Sevita	Odessa	1.1	9/24	25	19.3	41.3	47.0	62.2	54.6	--
Sevita	Skyline	1.1	9/22	29	20.5	38.9	51.1	60.5	55.8	50.8
Sevita	SVX20T00S4	0.4	9/16	26	20.4	39.9	35.7	54.9	45.3	--
Mean			9/20	26	19.6	38.6	45.8	56.5	51.2	47.5
CV %			15.9	3.7	2.2	2.2	7.6	11.3	15.8	--
LSD 0.05			3.6	1.6	1.0	2.0	5.9	10.7	9.4	--
LSD 0.10			3.0	1.3	0.8	1.7	4.9	9.5	7.8	--

Lisbon Planted: May 18. Harvested: Oct 5.

Milnor Planted: May 23. Harvested: Oct 4.

<sup>1</sup>Maturity is date of 95% brown or tan pods

**Table 10. 2022 NDSU Enlist, RR and Xtend Soybean, Southern Locations in North Dakota (1 of 2).**  
**Authors, C. Miranda and G. Kreutz.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Height (in)	Seed Oil (%)	Seed Protein (%)	Seed Yield			
							Lisbon	Milnor	2-site Avg.	2-yr. Avg.
							------(bu/a)-----			
Dahlman	7210XF	1.0	9/24	32	19.8	37.5	66.4	56.7	61.6	52.3
Dahlman	7213XF	1.3	9/24	33	20.5	36.2	68.3	48.7	58.5	53.4
Dahlman	AE1220	1.2	9/28	29	19.0	38.6	70.5	65.8	68.1	--
Dairyland	DSR-0645E	0.4	9/15	26	20.6	36.7	59.3	53.3	56.3	--
Dairyland	DSR-0660E	0.6	9/19	23	19.6	37.4	61.4	61.0	61.2	--
Dairyland	DSR-0757E	0.7	9/20	28	20.2	37.0	59.5	58.6	59.1	--
Dairyland	DSR-0920E	1.1	9/24	27	19.8	38.1	62.3	69.9	66.1	57.3
Dairyland	DSR-1121E	1.1	9/23	27	21.3	35.1	60.6	63.1	61.9	--
Dairyland	DSR-1290E	1.1	9/24	24	20.9	36.6	62.9	62.4	62.7	59.0
Golden H.	GH0653XF	0.6	9/17	27	20.1	38.6	66.8	51.9	59.3	--
Golden H.	GH0693E3	0.6	9/18	24	20.6	36.6	60.0	60.1	60.1	--
Golden H.	GH0803XF	0.8	9/19	31	19.9	38.7	66.2	60.7	63.4	--
Golden H.	GH0933E3	0.9	9/20	27	20.0	37.6	68.4	63.5	65.9	--
Golden H.	GH1323XF	1.3	9/24	31	19.9	38.2	61.2	57.6	59.4	--
Legacy	LS084-22XF	0.8	9/19	28	20.2	37.0	63.1	51.4	57.2	--
Legacy	LS092-22E	0.9	9/22	29	20.6	36.2	58.4	67.1	62.8	--
Legacy	LS094-20XF	0.9	9/20	28	20.1	37.5	57.0	50.1	53.6	--
Legacy	LS102-22E	1.0	9/24	27	19.8	37.0	69.2	60.9	65.0	--
Legacy	LS122-21E	1.2	9/22	26	20.9	36.0	67.1	51.8	59.4	57.2
LG Seeds	LGS0550E3	0.5	9/19	23	19.7	38.8	55.8	57.6	56.7	--
LG Seeds	LGS0660XF	0.6	9/20	29	19.5	38.9	58.3	46.2	52.3	--
LG Seeds	LGS0701XF	0.7	9/18	29	19.6	38.1	62.3	55.9	59.1	--
LG Seeds	LGS0822E3	0.8	9/20	24	19.9	37.5	62.7	60.9	61.8	53.6
LG Seeds	LGS0988XF	0.9	9/21	28	19.2	37.9	67.4	66.6	67.0	--
LG Seeds	LGS1203E3	1.2	9/27	28	19.2	38.5	66.1	69.0	67.6	58.1
LG Seeds	LGS1232XF	1.2	9/24	24	20.3	37.1	63.8	68.3	66.0	--
LG Seeds	LGS1385XF	1.3	9/26	32	19.3	38.2	71.2	64.3	67.8	--
NDSU	ND21008GT20	00.8	9/9	25	20.6	37.8	36.0	47.6	41.8	--
NDSU	ND2108GT73	0.8	9/25	25	19.9	37.7	57.0	49.1	53.1	--
NDSU	ND17009GT	00.9	9/13	31	20.1	39.9	43.4	56.8	50.1	--
Paloma	PL2E061	0.6	9/18	22	20.7	36.5	59.7	59.0	59.4	--
Paloma	PL2E101	1.0	9/24	28	19.2	38.0	72.1	60.7	66.4	--
Proseed	EL30-53	0.5	9/19	26	20.0	38.6	55.3	56.8	56.0	--
Proseed	EL30-93N	0.9	9/20	24	20.7	37.2	64.3	66.2	65.3	--
Proseed	EL31-13N	1.1	9/23	27	19.8	36.7	65.9	67.7	66.8	--
Proseed	XF30-42N	0.4	9/16	29	20.2	37.7	58.6	59.9	59.2	--
Proseed	XF30-52N	0.5	9/13	35	20.7	36.8	57.2	63.3	60.2	--
Proseed	XF30-62N	0.6	9/19	27	19.5	39.0	63.7	58.7	61.2	--
Proseed	XF30-72N	0.7	9/18	26	19.2	37.8	64.8	66.5	65.7	--
Proseed	XF30-82N	0.8	9/20	30	20.0	38.0	54.4	60.3	57.4	--
Proseed	XF30-92N	0.9	9/22	32	19.6	37.4	63.8	60.9	62.3	--
Proseed	XF31-32N	1.3	9/28	29	20.3	36.8	70.1	64.3	67.2	--
REA	R0422XF	0.4	9/16	23	19.9	38.7	48.7	62.3	55.5	--
REA	R0632XF	0.6	9/18	26	19.1	38.5	56.0	58.4	57.2	--
REA	R0843XF	0.8	9/21	24	19.7	38.1	58.3	59.7	59.0	--
Mean			9/20	27	20.0	37.7	61.3	60.3	60.8	55.1
CV %			13.9	4.4	2.4	2.0	9.8	15.4	13.8	--
LSD 0.05			3.2	1.9	1.0	1.5	9.6	14.9	9.4	--
LSD 0.10			2.7	1.6	0.8	1.3	8.1	12.5	7.9	--

**Table 10. 2022 NDSU Enlist, RR and Xtend Soybean, Southern Locations in North Dakota (2 of 2).****Authors, C. Miranda and G. Kreutz.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Height (in)	Seed Oil (%)	Seed Protein (%)	Seed Yield			
							Lisbon	Milnor	2-site Avg.	2-yr. Avg.
REA	R1042XF	1.0	9/24	32	19.8	37.6	60.1	62.5	61.3	54.4
REA	R1133XF	1.1	9/26	29	20.1	36.6	59.5	62.8	61.1	--
REA	RX0721	0.7	9/17	30	20.0	38.0	63.2	55.9	59.5	--
Syng NK	NK05-W3XF	0.5	9/17	29	19.0	38.0	62.3	62.8	62.5	--
Syng NK	NK06-D9E3	0.6	9/17	25	20.2	37.8	57.0	65.3	61.2	--
Syng NK	NK06-P2XF	0.6	9/17	30	20.2	38.1	61.6	58.5	60.1	--
Syng NK	NK08-M1XF	0.8	9/18	29	19.2	39.3	60.0	57.2	58.6	--
Syng NK	NK09-B5XF	0.9	9/20	29	19.1	38.9	63.9	54.3	59.1	--
Syng NK	NK09-H7E3	0.9	9/20	24	19.9	36.6	68.5	65.9	67.2	--
Syng NK	NK10-W8XF	1.0	9/23	31	19.7	38.1	66.5	47.1	56.8	50.4
Syng NK	NK13-Y4XF	1.3	9/23	34	19.6	38.5	69.9	56.6	63.3	--
Xitavo	XO 0573E	0.5	9/19	23	20.5	37.2	49.3	63.5	56.4	--
Xitavo	XO 0602E	0.6	9/20	21	19.9	37.8	55.5	68.8	62.2	--
Xitavo	XO 0731E	0.7	9/21	26	19.6	38.2	56.6	66.7	61.6	--
Xitavo	XO 0993E	0.9	9/23	25	21.2	36.0	59.2	67.4	63.3	--
Xitavo	XO 1133E	1.1	9/26	23	19.8	37.5	60.6	61.5	61.1	--
Xitavo	XO 1212E	1.2	9/27	25	19.2	38.4	62.0	69.0	65.5	--
Xitavo	XO 1372E	1.3	9/25	25	20.7	36.8	60.8	68.8	64.8	--
Mean			9/20	27	20.0	37.7	61.3	60.3	60.8	55.1
CV %			13.9	4.4	2.4	2.0	9.8	15.4	13.8	--
LSD 0.05			3.2	1.9	1.0	1.5	9.6	14.9	9.4	--
LSD 0.10			2.7	1.6	0.8	1.3	8.1	12.5	7.9	--

Lisbon Planted: May 18. Harvested: Oct 5.

Milnor Planted: May 23. Harvested: Oct 4.

<sup>1</sup>Maturity is date of 95% brown or tan pods

**Table 11. 2022 Soybean - Dryland, Enlist, RR and Xtend - Carrington - Authors, M. Ostlie, K. Simons and G. Endres (1 of 2).**

Company/ Brand	Variety	Maturity <sup>1</sup> (date)	Pod	Plant	Plant	Seeds/	Test	Seed	Seed	Seed Yield		
			Ht (inch)	Ht (inch)	Lodge <sup>2</sup> (0-9)	Pound	Weight (lb/bu)	Oil (%)	Protein (%)	2022	2-yr. Avg.	3-yr Avg.
											------(bu/a)-----	
Champion	0563XL	9/17	3	28	1	3,612	57.6	18.3	35.4	62.2	--	--
Champion	0692XL	9/18	4	31	2	3,317	57.7	18.9	35.5	56.1	42.2	--
Champion	0743XL	9/18	6	28	2	3,161	58.1	17.9	37.7	56.3	--	--
Dairyland	DSR-0660E	9/13	3	25	1	3,063	57.4	18.5	37.0	56.4	41.4	--
Dairyland	DSR-0757E	9/17	4	27	1	3,137	57.9	19.0	35.6	50.5	--	--
Dyna-Gro	S04XT91	9/13	4	26	1	2,902	57.9	19.2	34.8	65.6	45.1	51.2
Dyna-Gro	S05EN82	9/16	4	27	2	3,356	57.7	18.4	36.4	64.0	46.7	--
Dyna-Gro	S05XF73	9/15	5	30	1	3,577	57.8	19.0	35.6	62.2	--	--
Integra	70212	9/12	3	37	2	3,193	57.3	18.9	35.9	56.7	40.6	--
Integra	40300N	9/15	4	28	1	3,215	57.5	19.1	36.4	59.9	42.9	49.8
Integra	70622N	9/16	4	27	2	3,558	57.5	18.4	35.2	61.8	46.0	--
Legacy	LS-0320 E3	9/8	5	23	1	3,718	56.7	18.4	35.6	65.2	46.1	51.2
Legacy	LS032-22 E	9/13	4	28	1	3,417	56.9	19.2	35.1	58.6	--	--
Legacy	LS044-21 XF	9/14	3	42	1	3,374	57.7	18.8	35.5	53.1	41.6	--
Legacy	LS064-22 XF	9/16	4	31	1	3,694	57.7	18.2	35.2	62.8	--	--
Legacy	LS072-21 E	9/15	6	27	1	3,379	58.1	17.3	37.3	61.6	44.7	--
Legacy	LS074-22 XF	9/15	4	29	1	3,147	57.5	18.7	36.1	58.7	--	--
Legacy	LS092-22E	9/15	5	26	1	3,850	57.9	18.1	36.2	60.0	--	--
LG Seeds	LGS0400RX	9/13	4	32	2	3,113	57.3	19.5	33.9	60.1	--	--
LG Seeds	LGS0595RX	9/15	4	27	2	2,685	57.7	19.4	35.0	59.8	--	--
LG Seeds	LGS0660XF	9/17	5	29	2	3,015	57.9	18.0	37.7	53.8	--	--
LG Seeds	LGS0701XF	9/17	6	32	2	3,559	57.8	17.8	36.1	54.3	41.6	--
NDSU	ND17009GT	9/6	4	28	2	3,104	58.8	19.2	37.7	48.6	34.5	40.9
NDSU	ND21008GT20	9/4	3	29	1	3,359	57.5	19.0	35.2	53.1	35.5	42.2
NDSU	ND2108GT73	9/19	5	29	1	3,597	58.0	19.3	35.0	61.8	43.0	48.9
Paloma	PL2E061	9/15	5	24	1	3,669	57.8	18.8	35.4	67.6	--	--
Proseed	EL30-33	9/13	4	28	2	3,474	57.1	18.7	36.2	56.4	--	--
Proseed	EL30-53	9/15	5	26	2	3,355	57.7	18.3	36.5	58.5	--	--
Proseed	XF30-12	9/8	4	25	1	2,707	57.1	18.7	34.9	59.4	--	--
Proseed	XF30-42N	9/13	4	28	1	3,170	57.3	19.0	36.4	60.3	--	--
REA	R0112XF	9/12	4	37	1	3,214	57.5	18.8	36.0	57.1	39.3	--
REA	R0422XF	9/15	4	28	2	3,218	57.4	19.1	36.1	55.7	--	--
REA	R0632XF	9/17	4	27	1	3,432	57.3	18.5	35.8	61.1	44.6	--
REA	RX0721	9/17	5	33	2	3,200	57.2	18.8	35.3	63.9	47.7	54.7
Stine	03EB02	9/7	4	24	1	3,603	56.3	18.1	35.5	65.0	43.3	--
Stine	04EE06	9/14	4	23	2	3,609	57.9	18.3	36.9	54.3	--	--
Stine	05EB23	9/13	4	28	3	3,205	57.1	18.7	35.4	57.3	41.3	--
Stine	08EC32	9/18	5	28	3	3,182	58.3	17.9	37.7	54.2	--	--
Syng NK	NK02-T4E3	9/13	4	25	1	2,983	57.2	18.1	37.0	53.9	--	--
Syng NK	NK03-V5E3	9/11	5	26	2	3,349	57.4	17.3	37.2	58.9	--	--
Syng NK	NK05-W3XF	9/14	5	31	2	3,549	58.8	17.3	37.3	61.0	45.3	--
Syng NK	NK06-P2XF	9/14	4	30	1	3,051	57.6	18.4	37.5	56.5	--	--
Syng NK	SO4-Q7X	9/12	4	26	1	3,130	58.1	18.1	38.2	57.9	43.6	50.7
Mean		9/14	4	29	1	3,304	57.6	18.5	36.1	59.1	43.0	49.2
CV %		0.6	28	9.7	61	5.2	0.5	2.3	1.9	11.8	9.2	6.7
LSD 0.05		2.2	1.7	3.8	1.1	247	0.4	0.6	1.0	9.8	8.2	5.7
LSD 0.10		1.9	1.4	3.2	0.9	207	0.4	0.5	0.8	8.2	6.8	4.7



**Table 11. 2022 Soybean - Dryland, Enlist, RR and Xtend - Carrington - Authors, M. Ostlie, K. Simons and G. Endres (2 of 2).**

Company/ Brand	Variety	Maturity <sup>1</sup> (date)	Pod Ht (inch)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield		
										2022	2-yr. Avg.	3-yr Avg.
Thunder	SB8104N	9/14	5	28	1	2,988	57.9	19.0	35.5	72.1	48.4	53.3
Thunder	SB8903N	9/10	4	30	3	3,515	57.6	18.3	34.9	60.7	44.3	49.0
Thunder	TE7304N	9/11	4	26	0	3,035	57.5	18.4	36.6	60.2	--	--
Thunder	TX8304N	9/12	5	31	1	3,829	57.5	19.0	35.0	64.3	--	--
Thunder	TX8305N	9/17	5	28	1	3,039	57.8	18.0	37.7	57.6	--	--
Mean		9/14	4	29	1	3,304	57.6	18.5	36.1	59.1	43.0	49.2
CV %		1/0	28	10	61	5.2	0.5	2.3	1.9	11.8	9.2	6.7
LSD 0.05		1/2	2	4	1	247	0.4	0.6	1.0	9.8	8.2	5.7
LSD 0.10		1/1	1	3	1	207	0.4	0.5	0.8	8.2	6.8	4.7

Planted: May 26. Harvested: Sept. 27. Previous crop: spring wheat.

<sup>1</sup>Maturity is date of 95% brown or tan pods<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.**Table 12. 2022 Soybean - Irrigated, Conventional - Carrington - Authors, M. Ostlie, K. Simons and G. Endres.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (inch)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield		
											2022	2-yr. Avg.	3-yr Avg.
NDSU	ND Stutsman	0.7	9/28	4	38	4	3,342	58.8	18.7	34.7	69.3	71.0	67.6
NDSU	ND Rolette	0.9	9/18	4	37	2	3,883	58.7	18.5	35.7	70.8	66.0	64.5
NDSU	ND Benson	0.4	9/25	3	36	3	3,286	58.6	17.8	38.1	61.0	60.8	60.7
NDSU	ND Dickey	0.7	9/25	4	37	2	3,045	58.1	17.5	37.3	62.1	67.1	65.7
NDSU	ND17009GT <sup>3</sup>	00.9	9/17	5	36	4	3,005	59.9	18.4	37.6	61.9	--	--
Richland	MK0249	0.2	9/26	4	35	6	5,331	58.7	17.6	35.4	58.3	--	--
Richland	MK0603	0.6	9/29	5	38	8	5,312	58.0	16.8	36.3	57.6	--	--
Richland	MK009	0.9	9/27	4	37	6	6,307	59.4	17.3	35.7	51.3	--	--
Mean			9/23	4	37	4	4,189	58.8	17.8	36.4	61.5	66.2	64.6
CV %			1.3	1	26.4	3	9.5	0.6	18.0	1.4	7.4	--	--
LSD 0.05			2.2	1.7	1.8	1.0	543	0.5	0.4	0.7	6.7	--	--
LSD 0.10			1.8	1.4	1.5	0.8	451	0.4	0.3	0.6	5.6	--	--

Planted: June 2. Harvested: Oct. 10. Previous crop: winter rye.

<sup>1</sup>Maturity is date of 95% brown or tan pods.<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.<sup>3</sup>GT = Glyphosate tolerant.

**Table 13. 2022 Soybean - Irrigated, Enlist, RR and Xtend - Carrington - Authors, M. Ostlie, K. Simons and G. Endres.**

Company/ Brand	Variety	Mat.		Pod	Plant	Plant	Seeds/	Test	Seed	Seed	Seed Yield	
		Group	Maturity <sup>1</sup> (date)	Ht (inch)	Ht (inch)	Lodge <sup>2</sup> (0-9)	Pound (seeds)	Weight (lb/bu)	Oil (%)	Protein (%)	2022 -----	2-yr. Avg. (bu/a)-----
Dairyland	DSR-0660E	0.6	9/19	3	32	2	3,175	58.1	17.7	37.9	69.8	64.3
Dairyland	DSR-0757E	0.7	9/24	6	34	5	3,035	59.1	18.9	35.8	65.0	--
Dyna-Gro	S04XT91	0.4	9/19	4	35	2	2,816	58.9	18.5	35.8	69.8	64.1
Dyna-Gro	S05EN82	0.5	9/20	4	32	5	3,370	58.2	16.9	38.8	61.6	57.1
Dyna-Gro	S05XF73	0.5	9/19	3	42	4	3,765	58.5	17.8	37.0	64.0	--
Legacy	LS-0320 E3	0.3	9/18	4	34	3	3,737	57.3	17.6	36.3	65.9	61.6
Legacy	LS032-22 E	0.3	9/20	3	34	5	3,208	57.0	18.9	35.3	68.0	--
Legacy	LS044-21 XF	0.4	9/24	3	47	7	3,138	58.4	18.6	35.5	64.3	61.6
Legacy	LS064-22 XF	0.6	9/22	3	36	5	3,429	58.4	17.7	36.3	63.3	--
Legacy	LS072-21 E	0.7	9/23	6	33	5	3,099	58.7	17.5	36.9	67.0	62.5
Legacy	LS074-22 XF	0.7	9/21	4	36	3	2,747	58.0	18.3	36.4	70.4	--
Legacy	LS092-22E	0.8	9/21	5	34	5	3,509	58.3	18.3	36.1	63.2	--
LG Seeds	LGS0400RX	0.4	9/19	4	39	5	2,908	57.8	18.9	34.8	68.9	--
LG Seeds	LGS0595RX	0.5	9/20	3	32	2	2,641	58.7	18.7	35.7	66.4	--
LG Seeds	LGS0660XF	0.6	9/23	4	37	3	2,815	58.8	17.4	38.7	60.7	--
LG Seeds	LGS0701XF	0.7	9/23	5	38	4	3,273	58.6	17.3	36.9	69.5	67.2
NDSU	ND17009GT	00.9	9/10	4	35	5	2,971	60.3	18.2	38.6	56.3	53.5
NDSU	ND21008GT20	00.8	9/10	3	35	5	3,222	58.8	18.3	35.7	61.0	56.1
NDSU	ND2108GT73	0.8	9/27	4	36	6	3,445	59.1	18.5	35.9	62.9	59.5
Paloma	PL2E061	0.6	9/25	5	31	6	3,592	59.0	18.6	35.4	64.3	--
Proseed	EL30-33	0.3	9/19	5	33	5	3,338	57.3	18.7	35.9	63.9	--
Proseed	EL30-53	0.5	9/21	4	31	4	3,383	58.3	17.8	37.2	65.3	--
Proseed	XF30-12	0.1	9/13	3	35	3	2,548	57.8	18.0	36.1	66.0	--
Proseed	XF30-42N	0.4	9/18	4	38	4	3,017	57.9	18.2	37.5	66.0	--
REA	R0112XF	0.1	9/20	3	43	6	2,886	58.1	18.3	36.6	64.6	57.7
REA	R0422XF	0.4	9/19	5	38	3	2,948	58.0	18.4	37.1	67.0	--
REA	R0632XF	0.6	9/21	5	35	3	3,490	57.8	17.6	37.1	70.6	62.4
REA	RX0721	0.7	9/20	4	38	4	3,146	57.8	18.0	36.7	65.8	64.3
Stine	03EB02	0.3	9/19	3	33	4	3,517	57.0	18.1	36.0	70.6	--
Stine	04EE06	0.4	9/21	3	32	4	3,442	58.5	17.5	37.7	64.0	--
Stine	05EB23	0.5	9/18	4	33	5	3,224	57.6	17.9	36.8	66.6	--
Stine	08EC32	0.7	9/26	7	34	5	2,704	59.1	17.8	37.2	67.1	--
Mean			9/20	4	35	4	3,173	58.3	18.1	36.6	65.6	60.9
CV %			0.3	33	5.0	17.8	3.6	0.4	1.4	1.3	7.8	--
LSD 0.05			2.0	4.7	6.3	1.1	165	0.4	0.3	0.7	7.1	--
LSD 0.10			1.7	3.9	5.3	0.9	138	0.3	0.3	0.5	6.0	--

Planted: June 2. Harvested: Oct. 5. Previous crop: winter rye.

<sup>1</sup>Maturity is date of 95% brown or tan pods.<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.

**Table 14. 2022 Soybean - Dryland, Conventional - Carrington - Authors, M. Ostlie, K. Simons, G. Endres.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (inch)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
											2022	3-yr. Avg. -----(bu/a)-----
NDSU	ND Stutsman	0.7	9/21	5	34	2	3,791	58.4	19.4	34.1	53.3	40.8
NDSU	ND Rolette	0.9	9/14	3	32	2	4,252	58.2	19.4	34.4	57.2	38.2
NDSU	ND Benson	0.4	9/19	4	33	1	3,986	58.1	18.9	36.2	52.7	37.2
NDSU	ND Dickey	0.7	9/22	4	31	2	3,258	57.7	19.0	34.4	62.3	42.1
Richland	MK0249	0.2	9/20	4	31	2	5,349	58.4	19.1	32.8	55.4	35.7
Richland	MK0603	0.6	9/24	6	38	5	6,067	57.9	17.5	35.0	46.4	33.9
Richland	MK808CN	0.8	9/22	4	37	2	3,949	59.0	20.2	32.9	57.2	38.3
Richland	MK009	0.9	9/20	6	33	3	7,200	59.0	18.0	34.4	44.9	--
Mean			9/20	5	34	2	4,732	58.3	18.9	34.3	53.7	38.0
CV %			0.6	38	5.9	59	4.8	0.7	2.1	0.8	7.5	--
LSD 0.05			2.1	2.3	2.9	1.7	309	0.6	0.6	1.0	5.9	--
LSD 0.10			1.8	1.9	2.4	1.4	257	0.5	0.5	0.8	4.9	--

Planted: June 2. Harvested: Oct. 4. Previous crop: spring wheat.

<sup>1</sup>Maturity is date of 95% brown or tan pods.<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.**Table 15. 2022 Soybean - Conventional - Wishek (Carrington REC) - Authors, M. Ostlie, K. Simons and T. Indergaard.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (inch)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
										2022	3-yr. Avg. ---(bu/a)-----
NDSU	ND Benson	0.4	9/12	4.9	32.9	0.5	57.9	18.0	39.2	45.3	37.0
NDSU	ND Dickey	0.7	9/17	5.5	30.1	1.0	58.3	17.4	37.7	46.8	40.2
NDSU	ND Rolette	0.9	9/6	5.7	34.3	0.5	56.9	19.0	37.0	51.1	--
NDSU	ND Stutsman	0.7	9/14	5.3	34.3	0.5	57.7	18.7	36.1	48.6	41.6
Richland	MK009	0.9	9/13	4.1	29.9	0.8	57.6	17.0	37.7	33.4	--
Richland	MK0603	0.6	9/16	6.9	35.0	1.0	58.3	15.7	38.8	37.3	--
Richland	MK1016	1.0	9/17	5.1	35.0	1.0	58.6	17.1	38.1	36.2	--
Richland	MK41	1.1	9/13	5.3	35.6	0.8	57.4	16.5	40.3	45.0	--
Richland	MK808CN	0.8	9/15	6.5	33.7	0.5	58.6	19.2	35.9	48.4	--
Richland	MK9101	1.1	9/19	6.5	34.0	0.5	57.0			36.9	--
	RR check 1		9/8	5.9	35.2	0.5	58.0	19.0	38.1	42.8	--
	RR check 2		9/18	7	33	0.8	57.4	19.1	35.3	51.7	--
Mean			9/14	6	34	0.7	57.8	17.9	37.7	43.6	40.9
CV %			0.7	33	12.3	93.1	1.2	2.3	1.8	9.7	--
LSD 0.05			2.6	2.7	5.9	0.9	1.0	0.6	1.0	6.1	--
LSD 0.10			2.2	2.2	4.9	0.8	0.8	0.5	0.8	5.0	--

Planted: June 3. Harvested: Oct. 6. Previous crop: spring wheat.

<sup>1</sup>Maturity is date of 95% brown or tan pods.<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.

**Table 16. 2022 Soybean - Enlist, RR and Xtend - Dazey (Carrington REC) - Authors, M. Ostlie, K. Simons and T. Indergaard.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (inch)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield		
										2022	2-yr. Avg.	3-yr. Avg.
Dairyland	DSR-0757E	0.7	9/10	2	28	0	19.9	33.0	55.9	54.8	--	--
Dairyland	DSR-0920E	0.9	9/14	2	30	0	19.5	34.4	56.7	56.3	52.8	52.4
Dairyland	DSR-1121E	1.1	9/16	1	28	0	20.8	32.6	56.2	57.8	--	--
Dairyland	DSR-1290E	1.2	9/12	1	33	0	20.1	32.4	57.1	64.1	57.1	--
Dak-Sota	DE5309	0.9	9/12	2	28	0	20.2	33.4	56.1	60.4	--	--
Dyna-Gro	S05EN82	0.5	9/8	2	27	0	19.0	35.8	55.7	57.1	51.2	--
Dyna-Gro	S07XF23	0.7	9/9	2	30	0	19.0	33.9	56.8	59.0	--	--
Dyna-Gro	S09EN53	0.9	9/17	2	27	0	19.5	33.7	57.4	58.3	--	--
Dyna-Gro	S09XF62	0.9	9/13	2	30	0	20.2	33.4	56.1	57.7	--	--
Legacy	LS084-22	0.8	9/11	1	32	0	19.8	33.0	56.4	61.0	--	--
Legacy	LS092-22E	0.8	9/11	1	28	0	20.1	33.5	56.1	67.6	--	--
Legacy	LS094-20 XF	0.9	9/11	2	30	0.3	19.8	33.5	56.5	55.9	49.2	--
Legacy	LS102-22 E	1.0	9/16	1	28	0	19.3	33.6	57.1	60.7	--	--
Legacy	LS122-21 E	1.1	9/12	1	30	0	20.1	32.1	56.4	54.8	51.8	--
Legacy	LS072-21 E	0.7	9/10	2	28	0	18.5	35.0	57.2	61.0	50.4	--
Legacy	LS074-22 XF	0.7	9/10	2	30	0	20.1	33.5	56.1	61.6	--	--
NDSU	ND17009GT	00.9	8/30	2	32	0.5	19.2	35.4	56.9	47.0	42.7	44.0
NDSU	ND21008GT20	00.8	8/26	1	32	0.5	19.6	33.5	56.0	43.7	40.2	--
NDSU	ND2108GT73	0.8	9/12	2	27	0	19.7	33.1	56.6	52.7	45.0	45.4
Paloma	PL2E061	0.6	9/8	2	27	0	19.6	33.5	56.4	55.9	--	--
Paloma	PL2E101	1.0	9/17	2	30	0	19.1	34.0	57.6	62.5	--	--
Proseed	EL30-53	0.5	9/9	1	27	0	19.5	34.5	56.2	56.9	--	--
Proseed	XF30-52N	0.5	9/11	2	28	0	19.0	33.8	56.9	62.0	--	--
Proseed	XF30-62N	0.6	9/10	2	30	0	19.2	35.3	56.8	52.7	--	--
Proseed	XF30-72N	0.7	9/6	2	33	0	19.6	34.0	56.4	63.5	--	--
Proseed	XF30-82N	0.8	9/11	2	30	0	19.1	34.7	56.5	59.4	--	--
Proseed	XT90-50	0.5	9/11	2	31	0.5	19.6	34.7	56.5	64.7	55.1	52.8
REA	R0632XF	0.6	9/10	2	29	0	19.1	34.1	56.0	57.7	49.1	--
REA	R0843XF	0.8	9/11	2	32	0	18.8	34.5	56.1	58.2	--	--
REA	RX0721	0.7	9/9	2	32	0	19.5	33.4	56.2	62.6	53.1	--
REA	R0442XF	0.4	9/8	2	29	0	19.9	34.8	56.0	56.1	--	--
Stine	04EE06	0.4	9/10	1	26	0	19.5	34.1	56.0	61.8	--	--
Stine	05EB23	0.5	9/4	1	27	0	20.3	33.0	55.8	46.9	--	--
Stine	08EC32	0.7	9/11	2	29	0	19.1	34.7	56.9	55.4	--	--
Stine	03EB02	0.3	9/3	2	27	0	19.5	33.9	55.8	64.5	--	--
Syng NK	NK03-V5E3	0.3	9/4	1	28	0	18.9	35.2	56.1	57.1	--	--
Syng NK	NK05-W3XF	0.5	9/8	2	36	0.5	19.0	35.1	57.6	57.6	49.4	--
Syng NK	NK06-D9E3	0.6	9/7	1	27	0	19.5	34.1	56.3	61.8	--	--
Syng NK	NK06-P2XF	0.6	9/7	2	31	0.3	19.7	34.3	56.6	52.5	--	--
Syng NK	NK08-M1XF	0.8	9/12	2	31	0.5	18.9	36.3	57.1	60.2	--	--
Thunder	TE7207	0.7	9/12	2	32	0.5	19.5	33.0	57.4	54.5	49.4	--
Thunder	TE7309N	0.9	9/14	2	30	0	19.9	33.9	57.6	61.1	--	--
Thunder	TX8307N	0.7	9/11	3	33	0	18.7	34.3	57.6	58.8	--	--
Thunder	TX8309N	0.9	9/14	2	33	1.0	18.6	34.7	57.2	58.9	--	--
Mean			9/10	2	30	0.1	19.5	34.0	56.6	58.1	49.7	48.7
CV %			1.7	31	9.1	211	1.7	1.5	0.9	9.4	--	--
LSD 0.05			2.6	2.0	3.8	0.4	0.5	0.7	0.7	7.6	--	--
LSD 0.10			2.2	1.6	3.2	0.3	0.4	0.6	0.6	6.4	--	--

Planted: May 27. Harvested: Oct. 5. Previous crop: spring wheat.

<sup>1</sup>Maturity is date of 95% brown or tan pods.

<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.

**Table 17. 2022 Soybean - Irrigated, Enlist, RR and Xtend - Oakes (Carrington REC) - Authors, M. Ostlie, K. Cooper, H. Eslinger and S. Eslinger.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Height (inch)	Plant Height (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield		
											2022	2-yr. Avg.	3-yr. Avg.
Dairyland	DSR-0920E	0.9	9/17	4	37	0	2,594	56.5	18.2	36.8	75.9	78.6	74.1
Dairyland	DSR-1121E	1.1	9/18	3	34	0.5	2,929	56.4	20.0	33.6	76.4	--	--
Dairyland	DSR-1290E	1.2	9/17	4	38	1.5	2,785	57.5	19.7	33.5	77.0	80.5	--
Dyna-Gro	S09EN53	0.9	9/17	4	36	0	2,785	56.9	18.5	35.4	78.5	--	--
Dyna-Gro	S09XF62	0.9	9/16	4	38	0.3	2,929	56.6	19.4	34.3	72.8	81.4	--
Dyna-Gro	S12EN72	1.2	9/18	3	36	0	2,624	57.0	18.5	36.5	76.5	80.2	--
Dyna-Gro	S12XF92	1.2	9/18	4	36	0.5	2,752	56.4	18.5	35.6	80.5	85.2	--
Legacy	LS092-22E	0.8	9/17	4	36	0.3	2,873	56.5	19.2	35.2	73.9	--	--
Legacy	LS094-20 XF	0.9	9/16	3	36	0.5	2,785	56.7	18.8	35.5	75.5	--	--
Legacy	LS102-22 E	1.0	9/19	4	36	0.3	2,702	56.8	18.5	35.2	81.6	--	--
Legacy	LS122-21 E	1.1	9/17	3	37	2.0	2,873	57.6	19.6	33.5	78.5	89.2	--
Legacy	LS084-22	0.8	9/12	4	37	0	2,752	56.3	19.4	34.2	75.6	--	--
LG Seeds	LGS0822E3	0.8	9/14	3	35	0.8	2,415	57.0	18.4	36.5	75.4	79.9	--
LG Seeds	LGS0988XF	0.9	9/15	4	38	0.8	2,594	57.6	18.1	35.8	75.9	--	--
LG Seeds	LGS1203E3	1.2	9/19	4	37	0.5	2,551	56.8	18.5	36.6	74.0	81.1	--
LG Seeds	LGS1232XF	1.2	9/18	3	37	0.3	2,838	56.8	18.3	36.0	74.2	81.4	--
LG Seeds	LGS1385XF	OL	9/18	4	41	0.8	2,702	57.5	18.1	36.3	77.0	--	--
NDSU	ND2108GT73	0.7	9/17	4	36	1.0	2,967	57.4	18.5	35.9	71.9	64.4	--
NDSU	ND17009GT	0.9	9/6	3	37	2.5	2,594	58.5	18.5	37.9	53.4	--	--
Paloma	PL2E061	0.6	9/16	4	34	0.5	2,929	56.9	18.9	35.0	77.7	--	--
Paloma	PL2E101	1.0	9/17	3	33	0.5	2,929	57.2	18.7	35.1	75.4	--	--
REA	RX0721	0.7	9/12	4	39	0.3	2,752	56.3	18.9	35.0	76.5	73.7	--
REA	R0843XF	0.8	9/13	3	36	0	3,131	56.7	18.1	36.8	70.4	--	--
REA	R1042XF	1.0	9/18	4	39	0.8	3,068	56.9	18.5	36.9	73.1	73.7	--
REA	R1133XF	1.1	9/18	3	38	1.0	2,967	57.6	19.0	35.0	73.0	--	--
Mean			9/16	4	37	0.6	2,793	57.0	18.7	35.5	74.8	79.1	74.1
CV %			1.3	17.2	4.8	92	4.0	0.5	1.0	0.9	5.4	--	--
LSD 0.05			2.0	0.9	2.5	1	243	0.4	0.3	0.4	5.7	--	--
LSD 0.10			1.7	0.7	2.1	1	219	0.3	0.2	0.4	4.7	--	--

Planted: May 27. Harvested: Oct. 2. Previous crop: corn.

<sup>1</sup>Maturity is date of 95% brown or tan pods.

<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.

**Table 18. 2022 Soybean - Irrigated, Conventional - Oakes (Carrington REC) - Authors, M. Ostlie, K. Cooper, H. Eslinger and S. Eslinger.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (inch)	Plant Height (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield 2022 3-yr. Avg. ------(bu/a)-----	
Brushvale	BS1252	1.2	9/12	3	39	0.5	2,752	55.4	18.7	35.9	73.0	--
Legacy	LS123-23 C	1.2	9/15	4	40	0.5	2,551	42.4	19.0	37.3	78.8	--
Sevita	Dunham	0.7	9/11	3	37	0	2,162	56.2	17.4	41.1	73.0	--
Sevita	Finch	0.9	9/9	4	39	0.3	2,415	56.0	18.4	38.6	69.0	--
Sevita	Odessa	1.1	9/14	4	35	0.5	2,183	41.9	18.6	38.7	90.5	--
Sevita	Skyline	1.1	9/12	4	39	1.0	2,551	55.6	19.0	37.9	68.0	65.9
Sevita	SVX21T0S15	0.7	9/9	3	36	0.3	2,293	54.5	18.5	36.8	72.9	--
Mean			9/12	4	38	0.4	2,415	51.7	18.5	38.0	75.0	65.9
CV %			1.0	22.3	2.3	96	4.2	29.6	0.9	0.8	24.8	--
LSD 0.05			1.7	1.2	1.3	0.6	170	22.7	0.3	0.5	27.6	--
LSD 0.10			1.4	1.0	1.1	0.5	152	18.8	0.2	0.4	22.8	--

Planted: May 27. Harvested: Sept. 30. Previous crop: corn.

<sup>1</sup>Maturity is date of 95% brown or tan pods.<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.**Table 19. 2022 Soybean - Conventional - Dazey (Carrington REC) - Authors, M. Ostlie, K. Simons and T. Indergaard.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Plant Lodge <sup>2</sup> (0-9)	Pod Ht (inch)	Plant Height (inch)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield 2022 3-yr. Avg. ------(bu/a)-----	
Legacy	LS123-23 C	1.2	9/19	0	7	40	58.8	19.9	36.2	63.8	--
NDSU	ND Benson	0.4	9/9	0.3	5	32	57.9	18.8	37.4	61.2	48.6
NDSU	ND Dickey	0.7	9/10	0.3	4	32	57.8	19.1	35.3	65.1	50.5
NDSU	ND Rolette	0.9	9/2	0.3	5	35	58.2	19.2	35.3	61.9	49.5
NDSU	ND Stutsman	0.7	9/9	0	6	35	58.4	19.8	33.9	64.7	53.2
Richland	MK009	0.9	9/10	0.5	5	34	59.0	17.9	35.4	51.5	--
Richland	MK0603	0.6	9/14	1.0	6	38	58.4	16.8	37.5	53.3	43.6
Richland	MK1016	1.0	9/13	0.8	5	41	59.3	17.5	37.7	52.9	43.1
Richland	MK1023	1.0	9/18	0.3	5	33	60.0	18.6	34.5	47.0	--
Richland	MK41	1.1	9/7	0.5	4	37	57.6	16.9	39.4	59.2	48.9
Richland	MK808CN	0.8	9/13	0.5	4	35	58.6	20.3	34.0	63.6	47.3
Richland	MK9101	1.1	9/16	0.5	7	39	59.1			58.1	--
Richland	MK0249	0.2	9/8	0	4	29	58.0	18.7	34.0	59.3	44.4
	RR Check 1		9/11	0	4	34	58.2	19.6	34.5	74.2	--
	RR Check 2		9/2	0.3	4	32	59.2	19.6	36.6	54.6	--
Mean			9/11	0.3	5	35	58.6	18.8	35.8	59.4	47.7
CV %			1.6	117.3	30	7.0	0.8	1.6	1.5	7.1	--
LSD 0.05			2.6	0.6	2.2	3.5	0.7	0.4	0.8	6.1	--
LSD 0.10			2.1	0.5	1.8	2.9	0.6	0.4	0.6	5	--

Planted: May 27. Harvested: Oct. 4.

<sup>1</sup>Maturity is date of 95% brown or tan pods.<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.

**Table 20. 2022 Soybean - Enlist, RR and Xtend - Wishek (Carrington REC) - Authors, M. Ostlie, K. Simons and T. Indergaard.**

Company/ Brand	Variety	Maturity		Pod Ht (inch)	Plant Ht (inch)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity <sup>1</sup> (date)						2022	2-yr. Avg. (bu/a)
Dyna-Gro	S09EN53	0.9	9/23	5	31	56.4	18.8	33.9	62.4	--
Dyna-Gro	S09XF62	0.9	9/20	4	29	54.5	19.5	32.9	51.4	--
Dyna-Gro	S12EN72	1.2	9/22	5	35	56.9	18.7	36.8	62.5	--
Dyna-Gro	S12XF92	1.2	9/22	5	31	56.1	18.5	34.8	56.2	--
Legacy	LS084-22	0.8	9/18	4	35	54.8	18.4	33.5	64.1	--
Legacy	LS092-22E	0.8	9/13	5	30	54.6	18.7	35.1	58.0	--
Legacy	LS094-20 XF	0.9	9/20	3	31	54.8	18.8	34.1	69.9	--
Legacy	LS102-22 E	1.0	9/22	4	31	55.8	18.4	33.6	63.4	--
Legacy	LS122-21 E	1.1	9/20	4	32	55.7	19.1	33.3	57.3	50.7
LG Seeds	LGS0660XF	0.6	9/20	3	31	55.5	18.1	35.0	56.9	--
LG Seeds	LGS0701XF	0.7	9/18	4	30	54.9	17.5	35.2	50.6	45.3
NDSU	ND17009GT	0.9	9/7	4	31	54.5	18.9	35.2	46.2	39.1
NDSU	ND2108GT73	0.7	9/17	3	30	55.6	19.0	33.5	48.4	42.7
Paloma	PL2E061	0.6	9/14	4	27	54.6	19.2	34.2	58.7	--
Paloma	PL2E101	1.0	9/15	5	28	55.2	18.9	34.7	58.6	--
REA	R0442XF	0.4	9/16	5	30	53.8	19.1	33.8	53.4	--
REA	R0632XF	0.6	9/18	4	31	54.7	17.9	34.2	63.1	49.7
REA	R0843XF	0.8	9/18	6	32	55.7	18.4	34.9	66.9	--
REA	R1042XF	1.0	9/21	8	35	55.3	18.1	35.2	53.3	--
REA	RX0721	0.7	9/18	4	32	54.7	18.5	33.8	63.9	52.7
Syng NK	NK05-W3XF	0.5	9/16	5	33	55.1	17.7	35.5	62.9	52.0
Syng NK	NK06-P2XF	0.6	9/15	5	31	55.1	18.3	35.1	58.5	--
Syng NK	NK09-B5XF	0.9	9/18	5	30	55.4	17.9	35.2	52.8	--
Syng NK	NK10-W8XF	1.0	9/17	6	32	56.1	17.9	34.5	48.5	48.5
Mean			9/17	5	31	55.2	18.5	34.5	57.8	47.6
CV %			0.9	38.2	11.9	1.5	3.8	2.9	18.5	--
LSD 0.05			3.2	2.4	5.1	0.9	0.8	1.4	12.1	--
LSD 0.10			2.7	2.0	4.3	0.8	0.7	1.2	10.2	--

Planted: June 3. Harvested: Oct. 6. Previous crop: spring wheat.

<sup>1</sup>Maturity is date of 95% brown or tan pods.

**Table 21. 2022 Soybean - Enlist, RR and Xtend - Langdon - Authors, B. Hanson, L. Henry and R. Duerr (1 of 2).**

Company/ Brand	Variety	Herbicide Trait	Maturity Group	Maturity <sup>1</sup> (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield		
								2022	2-yr. Avg.	2-site Avg. <sup>2</sup>
								------(bu/a)-----		
Dahlman	7301XF	RR2XF	0.1	9/22	45	14.9	35.7	67.7	--	67.8
Dahlman	AE0300	Enlist E3	0.1	9/22	36	15.0	34.9	70.1	67.3	63.8
Dairyland	DSR-0220E	Enlist E3	0.2	9/25	33	15.4	34.7	65.7	--	--
Dak-Sota	DE5301	Enlist E3	0.1	9/27	35	15.5	35.1	64.3	--	64.0
Dyna-Gro	S006XF83	RR2XF	00.6	9/12	32	16.2	32.9	67.9	--	70.3
Dyna-Gro	S009XF33	RR2XF	00.9	9/17	30	15.2	34.3	62.3	--	66.2
Dyna-Gro	S01XF43	RR2XF	0.1	9/17	34	14.8	35.7	70.8	--	69.8
Dyna-Gro	S02EN71	Enlist E3	0.2	9/22	30	15.2	35.0	68.8	68.3	71.1
Golden H.	GH00973E3	Enlist E3	00.9	9/18	34	14.9	37.1	71.3	--	72.6
Golden H.	GH00982XF	RR2XF	00.9	9/17	32	15.6	34.3	69.2	66.2	69.8
Golden H.	GH0213E3	Enlist E3	0.2	9/24	33	14.8	36.0	70.3	--	71.3
Innkvictis	A00821XF	RR2XF	00.8	9/19	34	15.3	34.7	60.4	--	58.0
Innkvictis	A00979X	RR2X	00.9	9/20	32	15.4	35.8	60.8	63.7	60.7
Innkvictis	B00730E	Enlist E3	00.7	9/18	34	16.2	33.7	60.8	--	62.7
Integra	40089N	Enlist E3	00.8	9/22	34	15.6	34.9	55.5	60.2	57.4
Integra	40113N	Enlist E3	0.1	9/19	31	15.0	36.0	70.6	--	67.6
Integra	70082N	RR2XF	00.9	9/18	34	15.1	35.1	65.2	--	60.2
Legacy	LS-00930 RR2X	RR2X	00.9	9/20	32	15.3	36.1	65.2	64.3	64.6
Legacy	LS012-21E	Enlist E3	0.1	9/24	37	16.0	34.5	64.9	65.9	65.0
Legacy	LS014-22 XF	RR2XF	0.1	9/22	44	15.1	35.6	68.1	--	69.5
Legacy	LS-0239 RR2X	RR2X	0.2	9/21	37	15.0	34.6	70.4	68.6	69.2
Legacy	LS-0320 E3	Enlist E3	0.2	9/24	35	15.1	34.9	70.3	--	72.2
Legacy	LS032-22 E	Enlist E3	0.3	9/27	36	15.5	34.4	68.6	--	65.3
LG Seeds	LGS00663RX	RR2X	00.6	9/15	33	15.3	34.4	68.6	65.2	69.6
LG Seeds	LGS00838XF	RR2XF	00.8	9/16	38	15.3	35.3	63.3	60.6	60.0
LG Seeds	LGS0111RX	RR2X	0.1	9/21	39	15.5	35.6	68.7	68.0	70.6
NDSU	ND17009GT	GT	00.9	9/16	36	16.2	36.0	62.2	59.2	62.7
NDSU	ND21008GT20	GT	00.8	9/16	37	15.7	34.8	64.7	62.1	61.7
Pioneer	P005A59E	Enlist E3	00.5	9/14	31	15.8	35.3	59.7	--	--
Pioneer	P005A83X	RR2X	00.5	9/12	34	15.9	34.1	61.0	59.0	--
Pioneer	P007A08X	RR2X	00.7	9/15	35	15.9	34.6	60.3	--	--
Pioneer	P009T18E	Enlist E3	00.9	9/19	34	16.2	33.5	53.8	58.3	54.0
Pioneer	P00A49X	RR2X	0.0	9/19	35	16.2	33.6	63.4	63.0	--
Pioneer	P01A84X	RR2X	0.1	9/20	34	16.1	33.7	60.1	60.6	--
Proseed	EL30-13	Enlist E3	0.1	9/25	37	15.9	34.9	62.6	--	63.6
Proseed	XF30-062	RR2XF	00.6	9/12	33	16.1	32.7	64.6	--	67.7
Proseed	XF30-082	RR2XF	00.8	9/15	30	15.1	34.9	62.2	--	66.4
Proseed	XF30-092N	RR2XF	00.9	9/20	36	15.7	34.5	77.1	--	77.5
Proseed	XF30-12	RR2XF	0.1	9/17	34	15.3	35.3	68.5	--	70.3
Proseed	XT80-20	RR2X	0.2	9/25	38	14.7	35.1	66.2	65.9	67.5
REA	R0112XF	RR2XF	0.1	9/21	44	15.5	34.8	67.3	67.9	71.9
REA	RX00912	RR2X	00.9	9/17	37	16.1	33.4	67.8	63.6	66.4
Stine	002EE06	Enlist E3	00.2	9/9	33	15.3	35.6	47.9	47.7	48.4
Stine	008EE02	Enlist E3	00.8	9/22	31	16.5	34.0	56.2	--	56.0
Syng NK	NK009-G7E3	Enlist E3	00.9	9/18	32	14.7	36.6	69.3	--	71.7
Syng NK	NK009-T1XF	RR2XF	00.9	9/18	34	15.8	34.5	71.9	67.6	70.1
Syng NK	NK02-M4XF	RR2XF	0.2	9/17	35	16.0	33.6	69.3	--	70.9
Syng NK	NK02-T4E3	Enlist E3	0.2	9/20	31	14.9	35.6	66.0	--	71.8
Mean				9/19	35	15.4	34.9	65.0	63.2	65.9
CV %				1.6	4.8	1.7	1.4	6.7	--	--
LSD 0.05				2.6	2.3	0.5	1.0	6.1	--	--
LSD 0.10				2.2	1.9	0.4	0.8	5.1	--	--



**Table 21. 2022 Soybean - Enlist, RR and Xtend - Langdon - Authors, B. Hanson, L. Henry and R. Duerr (2 of 2).**

Company/ Brand	Variety	Herbicide Trait	Maturity		Plant Height	Seed Oil	Seed Protein	Seed Yield		
			Group	Maturity <sup>1</sup> (date)				2022	2-yr. Avg.	2-site Avg. <sup>2</sup>
Thunder	SB87009	RR2X	00.9	9/18	39	14.5	35.6	64.7	63.4	66.6
Thunder	TB7101N	Enlist E3	0.1	9/24	29	15.3	34.5	63.6	--	69.1
Thunder	TE7302N	Enlist E3	0.2	9/21	30	15.2	35.2	67.2	--	67.7
Thunder	TX82008N	RR2XF	00.8	9/20	35	15.2	35.7	59.4	61.3	59.9
Thunder	TX8301	RR2XF	0.1	9/16	31	15.2	34.7	62.9	--	66.8
Xitavo	XO 0101E	Enlist E3	0.1	9/21	35	15.2	35.8	62.5	--	63.0
Xitavo	XO 0213E	Enlist E3	0.2	9/25	36	15.5	35.0	60.8	--	60.8
Mean				9/19	35	15.4	34.9	65.0	63.2	65.9
CV %				1.6	4.8	1.7	1.4	6.7	--	--
LSD 0.05				2.6	2.3	0.5	1.0	6.1	--	--
LSD 0.10				2.2	1.9	0.4	0.8	5.1	--	--

Planted: May 26. Harvested: Oct. 10. Previous crop: wheat.

<sup>1</sup>Date of physiological maturity at R7 stage (one pod on the main stem is mature brown or tan color).

<sup>2</sup>A 2-site average of Cavalier County (Langdon) and Pembina County (Cavalier).

**Table 22. 2022 Soybean - Conventional - Langdon - Authors, B. Hanson, L. Henry and R. Duerr.**

Company/ Brand	Variety	Maturity		Plant Height	Seed Oil	Seed Protein	Seed Yield			
		Group	Maturity <sup>1</sup> (date)				2022	2-yr. Avg.	2-site Avg. <sup>2</sup>	
<b>Conventional</b>										
Legacy	LS0090-20C		00.8	9/18	32	14.7	39.1	51.8	50.9	51.1
NDSU	ND Rolette		00.9	9/19	37	15.8	35.4	67.9	63.2	68.7
Richland	MK009		00.9	9/24	39	14.7	35.0	50.5	48.8	54.9
Richland	MK0249		0.2	9/23	35	15.1	35.1	56.5	52.9	57.8
Mean				9/22	36	15.1	36.2	56.7	53.9	58.1
CV %				1.5	5.7	2.1	1.6	7.5	--	--
LSD 0.05				2.6	3.1	0.7	1.2	6.4	--	--
LSD 0.10				2.1	2.5	0.5	1.0	5.3	--	--

Planted: May 26. Harvested: Oct. 11. Previous crop: spring wheat.

<sup>1</sup>Date of physiological maturity at R7 stage (one pod on the main stem is mature brown or tan color).

<sup>2</sup>2-site average of conventional trials at Langdon REC and Walsh County (Park River).

**Table 23. 2022 Soybean - Enlist, RR and Xtend - Park River (Langdon REC) - Authors, B. Hanson, L. Henry and R. Duerr.**

Company/		Herbicide	Maturity		Plant	Seed	Seed	Seed Yield		
Brand	Variety	Trait	Group	Maturity <sup>1</sup>	Height	Oil	Protein	2022	2-yr. Avg.	2-site avg. <sup>2</sup>
				(date)	(inch)	(%)	(%)	----- (bu/a) -----		
Dahlman	7203XF	RR2XF	0.3	9/18	44	15.6	36.2	79.5	55.1	66.5
Dahlman	7304XF	RR2XF	0.4	9/23	35	15.0	37.3	81.5	--	70.7
Dyna-Gro	S01XF43	RR2XF	0.1	9/10	36	15.6	35.7	76.7	--	64.1
Dyna-Gro	S02EN71	Enlist E3	0.2	9/16	31	15.9	34.9	80.4	52.5	67.9
Dyna-Gro	S04XT91	RR2X	0.4	9/20	36	15.8	35.4	85.2	59.3	73.1
Golden H.	GH0213E3	Enlist E3	0.2	9/18	33	15.5	36.4	82.8	--	68.5
Golden H.	GH0272XF	RR2XF	0.2	9/13	35	15.9	35.0	76.9	53.5	62.8
Golden H.	GH0363E3	Enlist E3	0.3	9/20	35	15.3	36.5	85.8	--	71.9
Integra	40511	Enlist E3	0.4	9/23	38	15.8	36.5	76.0	--	62.6
Integra	70212	RR2XF	0.2	9/18	45	15.9	35.6	81.0	--	67.6
Integra	40113N	Enlist E3	0.1	9/12	34	16.0	35.1	78.5	--	63.4
Integra	70082N	RR2XF	00.9	9/11	34	15.7	35.4	67.5	--	54.4
Legacy	LS012-21E	Enlist E3	0.1	9/21	35	16.5	35.0	73.6	55.4	60.8
Legacy	LS014-22 XF	RR2XF	0.1	9/16	44	15.7	36.3	81.1	--	67.7
Legacy	LS-0239 RR2X	RR2X	0.2	9/19	36	15.4	35.1	83.1	53.2	69.7
Legacy	LS-0320 E3	Enlist E3	0.3	9/16	35	15.7	35.4	77.6	53.7	64.8
Legacy	LS032-22 E	Enlist E3	0.3	9/21	37	16.3	35.2	77.2	--	64.7
Legacy	LS044-21 XF	RR2XF	0.4	9/25	46	15.5	35.0	81.1	--	69.6
LG Seeds	LGS0111RX	RR2X	0.1	9/21	41	15.8	35.7	76.7	52.4	65.0
LG Seeds	LGS0400RX	RR2X	0.4	9/23	40	16.0	33.9	80.5	56.9	67.5
NDSU	ND17009GT	GT	00.9	9/13	40	16.3	36.7	69.6	46.6	57.5
NDSU	ND21008GT20	GT	00.8	9/10	37	16.3	34.7	72.7	45.6	60.0
Pioneer	P009T18E	Enlist E3	00.9	9/12	32	15.6	36.5	63.7	--	--
Pioneer	P03A17X	RR2X	0.2	9/16	34	15.9	35.2	70.5	50.1	--
Pioneer	P03A26X	RR2X	0.3	9/22	39	15.9	34.7	82.2	55.4	--
Pioneer	P03T87E	Enlist E3	0.3	9/18	30	16.0	35.8	77.8	53.0	--
Pioneer	P04A98E	Enlist E3	0.4	9/21	33	15.2	37.0	76.2	--	--
Proseed	EL30-13	Enlist E3	0.1	9/22	38	16.6	34.1	73.9	--	63.1
Proseed	XF30-062	RR2XF	00.6	9/8	34	16.8	34.5	70.5	--	57.0
Proseed	XF30-082	RR2XF	00.8	9/9	32	15.8	34.8	75.5	--	62.9
Proseed	XF30-092N	RR2XF	00.9	9/14	37	15.9	35.4	89.8	--	75.0
Proseed	XF30-12	RR2XF	0.1	9/9	35	15.6	35.3	75.2	--	65.0
Proseed	XT80-20	RR2X	0.2	9/20	36	16.3	35.2	79.0	54.4	62.3
REA	R0112XF	RR2XF	0.1	9/17	44	16.9	32.7	78.2	53.3	66.9
REA	R0422XF	RR2XF	0.4	9/23	38	15.8	34.6	82.2	--	71.3
REA	RX00912	RR2X	00.9	9/13	36	16.4	34.0	75.4	50.1	60.8
Stine	002EE06	Enlist E3	00.2	9/6	32	15.6	35.2	51.1	29.1	--
Stine	008EE02	Enlist E3	00.8	9/21	31	15.5	34.7	63.0	--	52.8
Syng NK	NK009-G7E3	Enlist E3	00.9	9/13	32	15.9	35.9	83.0	--	70.3
Syng NK	NK009-T1XF	RR2XF	00.9	9/9	35	15.3	37.0	79.9	52.5	66.8
Syng NK	NK02-M4XF	RR2XF	0.2	9/14	38	16.3	33.6	78.6	--	64.3
Syng NK	NK02-T4E3	Enlist E3	0.2	9/17	34	15.5	35.7	77.8	--	66.1
Syng NK	NK03-V5E3	Enlist E3	0.3	9/19	36	16.8	35.0	79.5	--	69.1
Xitavo	XO 0101E	Enlist E3	0.1	9/15	34	15.6	35.8	75.0	--	62.4
Xitavo	XO 0213E	Enlist E3	0.2	9/20	36	16.2	35.5	67.8	--	58.4
Mean				9/17	36	15.9	35.4	76.7	51.7	65.0
CV %				1.8	5.4	1.4	1.1	5.9	--	--
LSD 0.05				2.9	2.8	0.5	0.8	6.3	--	--
LSD 0.10				2.4	2.3	0.4	0.6	5.2	--	--

Planted: May 25. Harvested: Oct. 13. Previous crop: wheat.

<sup>1</sup>Date of physiological maturity at R7 stage (one pod on the main stem is mature brown or tan color).<sup>2</sup>2-site average Walsh County (Park River) and Nelson County (Pekin).

**Table 24. 2022 Soybean - Conventional - Park River (Langdon REC) - Authors, B. Hanson, L. Henry and R. Duerr.**

Company/ Brand		Maturity		Plant	Plant	Seed	Seed	Seed Yield		
Variety		Group	Maturity <sup>1</sup>	Height	Lodge <sup>2</sup>	Oil	Protein	2022	2-yr. Avg.	2-site Avg. <sup>3</sup>
			(date)	(inch)	(0-9)	(%)	(%)	------(bu/a)-----		
Legacy	LS0090-20C	00.8	9/18	28	1	15.2	39.1	50.3	36.5	51.1
NDSU	ND Rolette	00.9	9/10	37	0.0	16.5	35.0	69.5	48.0	68.7
Richland	MK009	00.9	9/20	35	4.0	15.3	34.7	59.3	41.9	54.9
Richland	MK0249	0.2	9/24	34	2.8	15.5	34.8	59.0	43.7	57.8
Mean			9/17	34	1.5	15.9	36.0	65.0	42.5	58.1
CV %			2.0	6.8	83.7	1.0	0.8	7.9	--	--
LSD 0.05			3.2	3.3	1.7	0.3	0.6	7.3	--	--
LSD 0.10			2.7	2.7	1.4	0.3	0.5	6.1	--	--

Planted: May 25. Harvested: Oct. 13. Previous crop: wheat.

<sup>1</sup>Date of physiological maturity at R7 stage (one pod on the main stem is mature brown or tan color).

<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.

<sup>3</sup>A 2-site average of conventional trials at Langdon REC and Walsh County (Park River).

**Table 25. 2022 Soybean - Enlist, RR and Xtend - Cavalier (Langdon REC) - Authors, B. Hanson, L. Henry and R. Duerr (1 of 2).**

Company/ Brand	Variety	Herbicide Trait	Maturity Group	Maturity <sup>1</sup> (date)	Plant Height (inches)	Seed Oil (%)	Seed Protein (%)	Seed Yield (bu/a)		
								2022	2-yr. Avg.	2-site Avg. <sup>2</sup>
Dahlman	7301XF	RR2XF	0.1	10/4	41	15.6	33.6	67.9	--	67.8
Dahlman	AE0300	Enlist E3	0.1	10/2	32	15.9	32.8	57.4	67.3	63.8
Dak-Sota	DE5301	Enlist E3	0.1	10/4	35	16.5	33.1	63.7	--	64.0
Dyna-Gro	S006XF83	RR2XF	00.6	9/24	36	16.9	32.4	72.7	--	70.3
Dyna-Gro	S009XF33	RR2XF	00.9	9/26	29	15.6	32.8	70.0	--	66.2
Dyna-Gro	S01XF43	RR2XF	0.1	9/26	32	15.5	34.2	68.7	--	69.8
Dyna-Gro	S02EN71	Enlist E3	0.2	10/2	29	15.9	32.8	73.3	61.3	71.1
Golden H.	GH00973E3	Enlist E3	00.9	9/26	31	15.7	33.9	73.8	--	72.6
Golden H.	GH00982XF	RR2XF	00.9	9/25	33	16.0	33.1	70.4	57.3	69.8
Golden H.	GH0213E3	Enlist E3	0.2	10/4	30	15.7	33.1	72.3	--	71.3
Innvictis	A00821XF	RR2XF	00.8	9/27	32	15.9	33.4	55.5	--	58.0
Innvictis	A00979X	RR2X	00.9	10/2	29	15.9	33.8	60.5	53.0	60.7
Innvictis	B00730E	Enlist E3	00.7	9/28	30	16.9	32.2	64.6	--	62.7
Integra	70063	RR2XF	00.6	9/25	34	16.4	32.3	67.6	--	
Integra	40089N	Enlist E3	00.8	9/30	33	16.5	32.2	59.3	51.2	57.4
Integra	40113N	Enlist E3	0.1	10/1	29	16.2	33.7	64.6	--	67.6
Integra	70082N	RR2XF	00.9	9/26	34	15.9	33.2	55.2	--	60.2
Legacy	LS-00930 RR2X	RR2X	00.9	9/29	31	16.0	33.9	63.9	57.1	64.6
Legacy	LS012-21E	Enlist E3	0.1	10/2	32	16.4	33.5	65.1	57.9	65.0
Legacy	LS014-22 XF	RR2XF	0.1	10/3	41	15.6	34.4	70.9	--	69.5
Legacy	LS-0239 RR2X	RR2X	0.2	10/1	37	15.2	33.5	67.9	61.2	69.2
Legacy	LS-0320 E3	Enlist E3	0.2	10/2	32	15.7	33.2	74.1	--	72.2
Legacy	LS032-22 E	Enlist E3	0.3	10/5	33	16.1	32.9	61.9	--	65.3
LG Seeds	LGS00663RX	RR2X	00.6	9/26	32	15.8	33.3	70.6	56.3	69.6
LG Seeds	LGS00838XF	RR2XF	00.8	9/26	34	15.5	34.0	56.6	48.6	60.0
LG Seeds	LGS0111RX	RR2X	0.1	10/3	37	15.9	33.9	72.5	60.9	70.6
NDSU	ND17009GT	GT	00.9	9/27	36	16.4	35.3	63.1	52.3	62.7
NDSU	ND21008GT20	GT	00.8	9/26	40	15.8	34.2	58.7	49.9	61.7
Pioneer	P009T18E	Enlist E3	00.9	10/1	30	15.6	34.3	54.2	48.8	54.0
Pioneer	P03A17X	RR2X	0.2	10/4	33	16.2	33.2	63.7	56.3	--
Pioneer	P03A26X	RR2X	0.3	10/6	37	16.3	32.6	66.5	60.4	--
Pioneer	P03T87E	Enlist E3	0.3	10/4	27	15.7	33.7	70.2	56.8	--
Pioneer	P04A98E	Enlist E3	0.4	10/6	29	16.8	31.9	67.0	--	--
Proseed	EL30-13	Enlist E3	0.1	10/4	34	16.7	31.8	64.5	--	63.6
Proseed	XF30-062	RR2XF	00.6	9/24	34	16.3	31.8	70.8	--	67.7
Proseed	XF30-082	RR2XF	00.8	9/25	29	15.8	33.0	70.6	--	66.4
Proseed	XF30-092N	RR2XF	00.9	9/28	36	15.8	33.1	77.9	--	77.5
Proseed	XF30-12	RR2XF	0.1	9/25	30	16.3	33.6	72.1	--	70.3
Proseed	XT80-20	RR2X	0.2	10/2	36	16.4	32.7	68.8	--	67.5
REA	R0112XF	RR2XF	0.1	10/3	39	15.8	33.5	76.5	62.1	71.9
REA	RX00912	RR2X	00.9	10/2	35	15.9	33.1	64.9	54.4	66.4
Stine	002EE06	Enlist E3	00.2	9/22	32	15.3	34.6	48.9	37.7	48.4
Stine	008EE02	Enlist E3	00.8	10/3	31	15.3	33.6	55.8	--	56.0
Syng NK	NK009-G7E3	Enlist E3	00.9	9/27	30	15.2	34.2	74.1	--	71.7
Syng NK	NK009-T1XF	RR2XF	00.9	9/26	30	16.2	31.9	68.2	57.3	70.1
Syng NK	NK02-M4XF	RR2XF	0.2	9/27	32	15.9	34.2	72.4	--	70.9
Syng NK	NK02-T4E3	Enlist E3	0.2	10/3	31	17.2	31.0	77.5	--	71.8
Thunder	SB87009	RR2X	00.9	9/27	37	16.1	33.2	68.4	--	66.6
Mean				9/29	33	16.0	33.3	66.6	55.5	65.9
CV %				1.5	8.9	1.7	1.3	7.5	--	--
LSD 0.05				2.4	4.1	0.6	0.9	6.9	--	--
LSD 0.10				2.0	3.4	0.5	0.7	5.8	--	--

**Table 25. 2022 Soybean - Enlist, RR and Xtend - Cavalier (Langdon REC) - Authors, B. Hanson, L. Henry and R. Duerr (2 of 2).**

Company/		Herbicide	Maturity		Plant	Seed	Seed	Seed Yield		
Brand	Variety	Trait	Group	Maturity <sup>1</sup>	Height	Oil	Protein	2022	2-yr. Avg.	2-yr. site Avg. <sup>2</sup>
				(date)	(inches)	(%)	(%)	------(bu/a)-----		
Thunder	TE7101N	Enlist E3	0.1	10/3	29	14.8	34.3	74.5	--	69.1
Thunder	TE7302N	Enlist E3	0.2	9/29	29	15.6	33.8	68.2	--	67.7
Thunder	TX82008N	RR2XF	00.8	9/26	33	15.8	33.5	60.3	53.1	59.9
Thunder	TX8301	RR2XF	0.1	9/24	29	16.0	33.3	70.7	--	66.8
Xitavo	XO 0101E	Enlist E3	0.1	9/29	29	15.9	33.3	63.5	--	63.0
Xitavo	XO 0213E	Enlist E3	0.2	10/6	35	16.1	33.2	60.8	--	60.8
Mean				9/29	33	16.0	33.3	66.6	55.5	65.9
CV %				1.5	8.9	1.7	1.3	7.5	--	--
LSD 0.05				2.4	4.1	0.6	0.9	6.9	--	--
LSD 0.10				2.0	3.4	0.5	0.7	5.8	--	--

Planted: June 6. Harvested: Oct. 18. Previous crop: soybean.

<sup>1</sup>Date of physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).

<sup>2</sup>2-site average of Langdon REC and Pembina County (Cavalier).

**Table 26. 2022 Soybean - Enlist, RR and Xtend - Grand Forks County - Author, K. Landeis.**

Company/		Maturity		Seed Yield	
Brand	Variety	Group	IDC <sup>1</sup>	Yield	2-yr. Avg.
			(1-5)	---(bu/a)---	
Integra	70082N	00.8	3.0	42.3	49.3
Integra	40113N	0.1	1.8	49.3	--
Integra	70212	0.2	1.9	55.4	56.6
Integra	40511	0.4	1.5	47.6	55.2
Integra	70493N	0.4	1.5	55.5	--
Integra	70622	0.6	1.5	59.4	--
Legacy	LS032-22 E	0.3	2.0	46.0	--
Legacy	LS044-21 XF	0.4	1.5	63.9	--
Legacy	LS062-21 E	0.6	1.4	51.7	60.6
Legacy	LS064-22 XF	0.6	1.8	57.6	--
LG Seeds	00838XF	00.8	2.7	42.2	--
LG Seeds	LGS0338E3	0.3	1.9	48.6	--
LG Seeds	LGS0355RX	0.3	1.5	52.9	62.2
LG Seeds	LGS0400RX	0.4	1.5	56.6	62.2
LG Seeds	LGS0550E3	0.5	1.7	47.7	--
LG Seeds	LGS0660XF	0.6	2.3	53.0	--
NDSU	ND21008GT20	00.8	1.4	47.2	52.1
NDSU	ND17009GT	00.9	3.0	43.4	47.7
Pioneer	P04A98E	0.4	1.8	48.0	--
REA	RX00912	00.9	2.1	50.8	--
REA	R0112XF	0.1	1.4	53.0	55.1
REA	R0422XF	0.4	1.5	54.1	--
REA	RX0411	0.4	2.2	49.4	53.4
REA	R0632XF	0.6	2.2	51.8	62.2
Stine	01EE02	0.1	2.2	39.9	--
Stine	02EE03	0.2	2.1	51.0	--
Stine	03EB02	0.3	1.8	50.4	--
Stine	04EE06	0.4	1.7	52.1	60.4
Stine	05EB23	0.5	2.0	49.2	--
Stine	06EC23	0.6	1.6	50.9	--
Mean			1.9	50.7	56.2
C.V. %			25.9	7.5	9.0
LSD 0.05			0.7	5.3	5.0
LSD 0.10			0.6	4.5	4.2

Planted: June 7. Harvested: Oct. 11. Previous crop: corn.

<sup>1</sup>IDC score was 1-5, with 1-green, 3-yellow, 5-dead tissue. Scored on July 1 and July 7 and scores were averaged.

**Table 27. 2022 Soybean - Enlist, RR and Xtend - Pekin (Langdon REC) - Authors, B. Hanson, L. Henry and R. Duerr.**

Company/ Brand	Variety	Herbicide Trait	Maturity Group	Maturity <sup>1</sup> (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield		
								2022	2-yr. Avg.	2-site Avg. <sup>2</sup>
								------(bu/a)-----		
Dahlman	7203XF	RR2XF	0.3	9/18	34	16.4	34.0	53.5	54.2	66.5
Dahlman	7304XF	RR2XF	0.4	9/24	27	16.5	34.6	59.9	--	70.7
Dyna-Gro	S01XF43	RR2XF	0.1	9/17	26	15.6	34.9	51.4	--	64.1
Dyna-Gro	S02EN71	Enlist E3	0.2	9/22	22	15.9	34.7	55.3	52.4	67.9
Dyna-Gro	S04XT91	RR2X	0.4	9/23	27	16.8	33.7	61.0	58.0	73.1
Golden H.	GH0213E3	Enlist E3	0.2	9/22	26	15.8	35.0	54.2	--	68.5
Golden H.	GH0272XF	RR2XF	0.2	9/18	25	16.7	33.5	48.6	46.4	62.8
Golden H.	GH0363E3	Enlist E3	0.3	9/20	25	15.9	35.3	58.0	--	71.9
Integra	40511	Enlist E3	0.4	9/25	27	16.0	34.7	49.1	--	62.6
Integra	70212	RR2XF	0.2	9/17	36	16.3	34.5	54.2	--	67.6
Integra	40089N	Enlist E3	00.8	9/18	24	16.3	33.9	44.6	--	--
Integra	40113N	Enlist E3	0.1	9/18	22	16.2	35.0	48.3	--	63.4
Integra	70082N	RR2XF	00.9	9/18	25	15.7	34.8	41.2	--	54.4
Legacy	LS012-21E	Enlist E3	0.1	9/20	29	16.6	33.9	47.9	51.5	60.8
Legacy	LS014-22 XF	RR2XF	0.1	9/17	31	16.4	34.3	54.3	--	67.7
Legacy	LS-0239 RR2X	RR2X	0.2	9/19	28	15.5	33.6	56.3	56.0	69.7
Legacy	LS-0320 E3	Enlist E3	0.3	9/19	25	15.8	34.0	52.0	49.4	64.8
Legacy	LS032-22 E	Enlist E3	0.3	9/22	26	16.7	33.8	52.1	--	64.7
Legacy	LS044-21 XF	RR2XF	0.4	9/25	37	15.9	33.4	58.0	--	69.6
LG Seeds	LGS0111RX	RR2X	0.1	9/19	29	16.1	34.9	53.2	54.4	65.0
LG Seeds	LGS0338E3	Enlist E3	0.3	9/19	25	15.9	34.2	57.8	--	--
LG Seeds	LGS0400RX	RR2X	0.4	9/23	28	16.2	33.3	54.5	58.1	67.5
NDSU	ND17009GT	GT	00.9	9/14	28	16.5	36.4	45.3	45.3	57.5
NDSU	ND21008GT20	GT	00.8	9/14	27	16.4	34.0	47.2	42.9	60.0
Proseed	EL30-13	Enlist E3	0.1	9/21	25	16.6	33.9	52.3	--	63.1
Proseed	XF30-062	RR2XF	00.6	9/16	24	16.9	32.4	43.5	--	57.0
Proseed	XF30-082	RR2XF	00.8	9/16	25	15.9	33.9	50.3	--	62.9
Proseed	XF30-092N	RR2XF	00.9	9/16	27	16.7	33.2	60.2	--	75.0
Proseed	XF30-12	RR2XF	0.1	9/15	26	15.7	34.3	54.7	--	65.0
Proseed	XT80-20	RR2X	0.2	9/20	24	15.9	33.3	45.5	--	62.3
REA	R0112XF	RR2XF	0.1	9/17	33	16.0	34.5	55.5	54.3	66.9
REA	R0422XF	RR2XF	0.4	9/24	29	16.1	34.5	60.3	--	71.3
REA	RX00912	RR2X	00.9	9/16	27	16.5	32.9	46.2	42.8	60.8
Stine	008EE02	Enlist E3	00.8	9/19	20	17.3	33.8	42.5	--	52.8
Stine	03EB02	Enlist E3	0.3	9/20	26	16.1	34.2	55.9	54.8	--
Stine	04EE06	Enlist E3	0.4	9/24	26	16.4	34.8	55.2	--	--
Syng NK	NK009-G7E3	Enlist E3	00.9	9/16	23	16.0	35.5	57.6	--	70.3
Syng NK	NK009-T1XF	RR2XF	00.9	9/16	28	16.3	34.1	53.7	52.5	66.8
Syng NK	NK02-M4XF	RR2XF	0.2	9/17	28	16.5	33.5	49.9	--	64.3
Syng NK	NK02-T4E3	Enlist E3	0.2	9/21	25	16.0	34.7	54.4	--	66.1
Syng NK	NK03-V5E3	Enlist E3	0.3	9/20	24	15.6	35.2	58.6	--	69.1
Syng NK	NK05-W3XF	RR2XF	0.5	9/25	30	15.6	34.5	61.2	--	--
Xitavo	XO 0101E	Enlist E3	0.1	9/18	26	15.7	35.6	49.8	--	62.4
Xitavo	XO 0213E	Enlist E3	0.2	9/24	25	16.4	34.1	49.0	--	58.4
Mean				9/19	27	16.2	34.3	52.6	51.5	65.0
CV %				1.6	7.5	1.6	1.2	8.0	--	--
LSD 0.05				2.5	2.8	0.5	0.8	5.9	--	--
LSD 0.10				2.1	2.3	0.4	0.6	4.9	--	--

Planted: June 2. Harvested: Oct. 17. Previous crop: wheat.

<sup>1</sup>Date of physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).<sup>2</sup>A 2-site average of our southern region, Walsh County (Park River) and Nelson County (Pekin).

**Table 28. 2022 Soybean - Enlist, RR and Xtend - Minot (North Central REC) - Authors, E. Eriksmoen, A. Kraklau and J. Hansen.**

Company/ Brand	Variety	Herbicide Trait	Maturity Group	Maturity (date)	Plant Height (inches)	Seed Protein (%)	Seed Oil (%)	Test Weight (lb/bu)	Seed Yield 2022 2-yr. Avg. ------(bu/a)-----	
Dairyland	DSR-0220E	Enlist E3	0.2	9/11	25	36.8	15.2	53.4	38.4	--
Dyna-Gro	S009XF33	XtendFlex	00.9	9/5	22	35.1	15.9	53.3	36.5	--
Dyna-Gro	S009XT68	Xtend	00.9	9/11	25	35.3	15.5	53.8	42.7	39.8
Dyna-Gro	S01XF43	XtendFlex	0.1	9/10	29	35.3	15.7	53.1	43.6	--
Golden H.	GH00973E3	Enlist E3	00.9	9/10	27	37.4	14.4	52.9	33.7	--
Golden H.	GH0213E3	Enlist E3	0.2	9/11	22	37.0	15.1	53.1	40.1	--
Integra	70493	XtendFlex	0.4	9/12	26	36.6	15.8	53.4	37.8	--
Integra	50309N	Xtend	0.3	9/11	31	36.4	15.0	54.1	41.3	37.2
Integra	70082N	XtendFlex	00.8	9/6	28	35.8	16.1	52.9	37.0	--
Integra	70212	XtendFlex	0.2	9/11	33	35.5	16.2	54.0	42.4	--
Legacy	LS012-21 E	Enlist E3	0.1	9/11	27	36.1	15.7	53.6	39.9	35.5
Legacy	LS014-22 XF	XtendFlex	0.1	9/8	32	35.6	15.8	54.2	40.5	--
Legacy	LS-0239	Xtend	0.2	9/11	30	36.2	14.3	52.9	43.8	37.9
Legacy	LS-0320E	Enlist E3	0.3	9/11	26	35.7	15.8	52.8	40.2	--
Legacy	LS032-22E	Enlist E3	0.3	9/10	28	36.1	14.8	52.8	41.9	--
LG Seeds	LGS00838XF	XtendFlex	00.8	9/6	30	35.2	16.1	53.3	40.6	--
LG Seeds	LGS0111RX	RR2Xtend	0.1	9/6	28	35.8	16.1	53.2	42.4	38.7
LG Seeds	LGS0400RX	RR2Xtend	0.4	9/11	28	35.5	15.3	53.4	38.3	37.8
NDSU	ND17009GT	GT	00.9	9/5	28	37.3	16.1	54.8	33.7	30.4
NDSU	ND21008GT20	GT	00.8	9/4	30	35.3	16.0	52.7	38.8	--
Proseed	EL30-13	Enlist E3	0.1	9/11	27	35.2	16.1	53.1	40.5	--
Proseed	EL30-33	Enlist E3	0.3	9/12	28	35.4	15.8	53.5	38.3	--
Proseed	EL30-53	Enlist E3	0.5	9/14	26	36.9	15.1	54.5	41.1	--
Proseed	XF30-092N	RR2XF	00.9	9/4	32	36.0	15.6	53.7	46.4	--
Proseed	XF30-42N	RR2XF	0.4	9/11	27	36.0	15.6	53.5	40.1	--
Proseed	XF30-52N	RR2XF	0.5	9/11	32	36.5	15.5	53.8	41.0	--
REA	R0112XF	RR2XF	0.1	9/10	36	35.9	16.6	54.2	39.3	--
REA	R0422XF	RR2XF	0.4	9/12	26	35.8	16.3	53.5	40.1	--
REA	RX00912	RR2Xtend	00.9	9/5	31	34.5	16.5	52.8	41.5	--
Stine	002EE06	Enlist E3	00.2	9/3	26	36.1	15.6	52.5	34.8	--
Stine	008EE02	Enlist E3	00.8	9/10	24	35.7	16.1	53.0	35.6	--
Stine	01EE02	Enlist E3	0.1	9/9	21	35.5	16.1	51.2	37.3	--
Stine	01EE03	Enlist E3	0.1	9/11	27	36.8	15.2	53.7	33.2	--
Syng NK	NK009-G7E3	Enlist E3	00.9	9/6	23	36.2	15.4	52.4	40.5	--
Syng NK	NK009-T1XF	XtendFlex	00.9	9/6	29	36.0	16.1	52.2	37.0	--
Syng NK	NK02-M4XF	XtendFlex	0.2	9/6	29	35.2	16.2	53.4	41.3	--
Syng NK	NK02-T4E3	Enlist E3	0.2	9/12	21	36.3	15.3	52.5	40.0	--
Syng NK	NK03-V5E3	Enlist E3	0.3	9/12	26	37.3	14.2	53.9	36.0	--
Xitavo	XO 0101E	Enlist E3	0.1	9/10	24	36.9	15.1	52.8	37.1	--
Xitavo	XO 0213E	Enlist E3	0.2	9/13	28	35.5	15.9	53.7	39.6	--
Mean				9/9	27	36.0	15.6	53.3	39.4	36.8
CV %				9.9	11.3	2.3	3.1	1.0	6.8	--
LSD 0.05				1.0	5.0	1.3	0.8	0.8	4.4	--
LSD 0.10				1.0	4.0	1.1	0.7	0.7	3.7	--

Planted: May 23. Harvested: Sept. 30. Previous crop: oat.



**Table 29. 2022 Soybean - Enlist, RR and Xtend - Garrison (North Central REC) - Authors, E. Eriksmoen, A. Kraklau and J. Hansen.**

Company/ Brand	Variety	Herbicide Trait <sup>1</sup>	Maturity Group	Plant Height	Seed Protein	Seed Oil	Test Weight	Seed Yield	
								2022	2-yr. Avg.
				(inch)	(%)	(%)	(lb/bu)	------(bu/a)-----	
Dyna-Gro	S01XF43	XtendFlex	0.1	19	34.5	16.0	56.5	32.2	--
Dyna-Gro	S03XT29	Xtend	0.3	21	34.7	15.6	56.9	34.0	34.9
Dyna-Gro	S05XF73	XtendFlex	0.5	23	35.7	16.3	58.3	29.4	--
Golden H.	GH0272XF	XtendFlex	0.2	22	33.7	17.2	55.9	37.5	--
Golden H.	GH0443X	Xtend	0.4	19	36.9	16.0	57.5	29.7	--
Integra	70493	XtendFlex	0.4	22	35.3	17.4	56.6	32.0	--
Integra	50309N	Xtend	0.3	21	34.9	15.6	57.6	29.1	30.7
Integra	70212	XtendFlex	0.2	26	35.0	16.5	57.5	27.8	--
Legacy	LS-0239	Xtend	0.2	22	35.0	15.3	57.1	34.2	34.9
Legacy	LS-0320E	Enlist E3	0.3	21	34.3	17.4	55.8	33.3	36.1
Legacy	LS032-22E	Enlist E3	0.3	20	35.3	15.6	56.0	28.5	--
Legacy	LS044-21 XF	XtendFlex	0.4	25	34.7	16.3	58.4	25.6	--
LG Seeds	LGS0111RX	Xtend	0.1	26	35.6	16.0	56.6	32.3	35.1
LG Seeds	LGS0400RX	Xtend	0.4	25	33.9	16.6	57.3	37.0	36.0
NDSU	ND17009GT	GT	00.9	21	36.4	16.5	58.8	30.3	31.9
NDSU	ND21008GT20	GT	00.8	22	34.5	16.9	56.1	28.5	--
Proseed	EL30-13	Enlist E3	0.1	21	34.9	16.1	56.2	29.8	--
Proseed	EL30-33	Enlist E3	0.3	21	34.3	17.4	55.9	33.6	--
Proseed	EL30-53N	Enlist E3	0.5	19	34.6	17.1	56.9	27.2	--
Proseed	XF30-092N	XtendFlex	00.9	23	34.5	16.4	56.1	32.4	--
Proseed	XF30-42N	XtendFlex	0.4	20	35.6	17.2	56.3	31.2	--
Proseed	XF30-52N	XtendFlex	0.5	22	35.5	16.3	57.6	32.9	--
REA	R0112XF	XtendFlex	0.1	25	34.0	16.9	57.2	34.0	--
REA	R0422XF	XtendFlex	0.4	20	34.2	17.5	56.4	26.1	--
REA	RX00912	Xtend	00.9	23	33.4	17.2	56.1	39.7	--
Syng NK	NK009-G7E3	Enlist E3	00.9	20	35.9	15.6	55.9	32.3	--
Syng NK	NK009-T1XF	XtendFlex	00.9	20	34.2	17.0	55.7	38.5	--
Syng NK	NK02-M4XF	XtendFlex	0.2	22	33.7	17.2	56.3	34.0	--
Syng NK	NK02-T4E3	Enlist E3	0.2	18	35.8	16.2	56.1	30.9	--
Syng NK	NK03-V5E3	Enlist E3	0.3	18	35.7	15.9	56.7	32.0	--
Syng NK	NK05-W3XF	XtendFlex	0.5	22	36.4	15.7	58.3	32.6	--
Syng NK	NK06-D9E3	Enlist E3	0.6	17	34.4	16.7	57.1	32.1	--
Syng NK	NK06-P2XF	XtendFlex	0.6	21	36.0	16.4	58.1	25.0	--
Xitavo	XO 0101E	Enlist E3	0.1	18	36.5	16.2	55.6	28.3	--
Xitavo	XO 0213E	Enlist E3	0.2	21	34.7	16.9	56.3	29.1	--
Xitavo	XO 0311E	Enlist E3	0.3	20	35.1	15.8	56.1	29.9	--
Mean				21	35.0	16.5	56.8	31.5	34.2
CV %				8.9	1.5	1.9	0.8	6.6	--
LSD 0.05				3.0	0.9	0.5	0.7	3.5	--
LSD 0.10				3.0	0.7	0.4	0.6	2.9	--

Planted: May 17. Harvested: Sept. 27. Previous crop: soybean.

**Table 30. 2022 Soybean - Enlist, RR and Xtend - Mohall (North Central REC) - Authors, E. Eriksmoen, A. Kraklau and J. Hansen.**

Company/ Brand	Variety	Herbicide Trait <sup>1</sup>	Maturity Group	Plant Height (inch)	Seed Protein (%)	Seed Oil (%)	Test Weight (lb/bu)	Seed Yield	
								2022	2-yr. Avg. ------(bu/a)-----
Dyna-Gro	S006XF83	XtendFlex	00.6	29	32.2	17.9	55.7	50.3	--
Dyna-Gro	S009XF33	XtendFlex	00.9	26	33.7	16.6	56.5	48.4	--
Golden H.	GH00973E3	Enlist E3	00.9	26	36.0	15.6	55.8	53.1	--
Golden H.	GH0213E3	Enlist E3	0.2	27	35.5	15.5	56.4	49.4	--
Integra	40089N	Enlist E3	00.8	29	34.2	17.0	55.4	47.1	42.0
Integra	70063	XtendFlex	00.6	31	34.6	17.0	56.2	46.3	--
Integra	70082N	XtendFlex	00.8	27	33.7	17.3	56.5	45.4	41.9
Legacy	LS012-21 E	Enlist E3	0.1	32	34.7	16.1	57.5	49.1	46.7
Legacy	LS014-22 XF	XtendFlex	0.1	37	34.6	16.5	57.6	47.2	--
Legacy	LS-0239	Xtend	0.2	31	34.4	16.0	55.2	45.2	39.7
Legacy	LS-0320E	Enlist E3	0.3	32	34.4	16.5	57.6	50.4	44.8
Legacy	LS032-22E	Enlist E3	0.3	28	34.7	15.5	57.4	52.2	--
LG Seeds	LGS00838XF	XtendFlex	00.8	27	34.0	16.8	56.7	45.2	41.1
LG Seeds	LGS0111RX	Xtend	0.1	32	34.8	16.6	57.3	51.3	48.7
NDSU	ND17009GT	GT	00.9	34	36.5	16.9	58.0	39.0	35.2
NDSU	ND21008GT20	GT	00.8	32	34.2	17.0	56.1	42.4	35.8
Proseed	EL30-13	Enlist E3	0.1	30	34.8	16.3	57.3	46.7	--
Proseed	EL30-33	Enlist E3	0.3	30	34.0	16.4	57.1	45.4	--
Proseed	EL30-53N	Enlist E3	0.5	30	34.9	16.2	58.8	49.4	--
Proseed	XF30-092N	XtendFlex	00.9	32	34.0	17.0	56.5	55.0	--
Proseed	XF30-42N	XtendFlex	0.4	30	34.8	16.7	56.5	50.5	--
Proseed	XF30-52N	XtendFlex	0.5	36	34.5	16.1	57.8	51.1	--
REA	R0112XF	XtendFlex	0.1	37	34.4	16.8	57.6	49.5	45.5
REA	RX00912	Xtend	00.9	29	32.2	18.1	56.1	45.5	44.6
Stine	002EE06	Enlist E3	00.2	27	34.9	15.6	56.9	28.8	27.8
Stine	008EE02	Enlist E3	00.8	25	34.5	16.7	57.2	39.3	--
Stine	01EE02	Enlist E3	0.1	22	35.0	16.1	56.7	35.4	--
Stine	01EE03	Enlist E3	0.1	29	35.1	16.1	57.7	49.5	45.7
Syng NK	NK009-G7E3	Enlist E3	00.9	26	36.4	15.6	55.8	53.4	--
Syng NK	NK009-T1XF	XtendFlex	00.9	27	34.0	17.0	56.5	46.6	42.5
Xitavo	XO 0101E	Enlist E3	0.1	28	35.4	15.7	57.1	48.2	42.2
Mean				30	34.5	16.5	56.8	47.0	41.6
CV %				9.5	2.2	2.5	1.2	8.6	--
LSD 0.05				5.0	1.2	0.7	1.1	6.7	--
LSD 0.10				4.0	1.0	0.6	0.9	5.6	--

Planted: May 26. Harvested: Sept. 28. Previous crop: oat.

**Table 31. 2022 Soybean - Enlist, RR and Xtend - Rugby (North Central REC) - Authors, E. Eriksmoen, A. Kraklau and J. Hansen.**

Company/ Brand	Variety	Herbicide Trait	Maturity Group	Plant Height (inch)	Plant Lodge <sup>1</sup> (0-9)	Seed Protein (%)	Seed Oil (%)	Test Weight (lb/bu)	Seed Yield	
									2022	2-yr. Avg. ------(bu/a)-----
Dak-Sota	DE5301	Enlist E3	0.1	27	0.3	33.7	16.9	54.8	45.5	--
Golden H.	GH00973E3	Enlist E3	00.9	28	0.7	35.5	15.5	56.1	39.7	--
Golden H.	GH00982XF	Xtendflex	00.9	28	0	34.0	16.5	54.9	48.2	--
Golden H.	GH0272XF	Xtendflex	0.2	29	0	33.6	16.5	55.8	44.5	--
Integra	40113N	Enlist E3	0.1	25	0.3	34.7	16.5	55.7	51.7	--
Integra	50309N	Xtend	0.3	35	1.7	34.1	15.9	56.4	46.9	40.6
Integra	70082N	Xtendflex	00.8	28	1.0	34.4	16.0	55.8	45.5	--
Integra	70212	Xtendflex	0.2	34	2.7	34.6	16.0	55.3	58.1	--
Legacy	LS014-22 XF	Xtendflex	0.1	38	1.3	34.6	15.8	55.0	56.6	--
Legacy	LS-0239	Xtend	0.2	32	1.3	33.6	16.2	55.6	55.9	45.5
Legacy	LS-0320E	Enlist E3	0.3	25	0.3	33.4	16.7	55.1	43.2	40.0
Legacy	LS032-22E	Enlist E3	0.3	26	1.0	34.0	16.1	54.8	49.1	--
Legacy	LS044-21 XF	Xtendflex	0.4	41	4.7	34.2	15.7	55.8	55.1	--
LG Seeds	LGS00838XF	Xtendflex	00.8	29	1.3	34.6	16.1	56.2	38.7	--
LG Seeds	LGS0111RX	RR2Xtend	0.1	35	1.3	35.0	16.4	55.2	55.7	45.9
NDSU	ND17009GT	GT	00.9	35	3.7	32.7	16.5	54.8	52.2	41.0
NDSU	ND21008GT20	GT	00.8	29	0	33.3	16.9	54.5	56.3	--
Proseed	EL30-13	Enlist E3	0.1	28	1.0	33.9	16.9	55.0	48.6	--
Proseed	EL30-33	Enlist E3	0.3	28	1.0	33.4	16.8	55.1	46.8	--
Proseed	EL30-53	Enlist E3	0.5	28	0.3	34.5	16.0	55.4	55.0	--
Proseed	XF30-092N	RR2XF	00.9	30	0.3	33.1	16.8	56.3	52.6	--
Proseed	XF30-42N	RR2XF	0.4	30	0.7	34.5	16.4	55.7	56.0	--
Proseed	XF30-52N	RR2XF	0.5	36	1.0	34.1	16.3	55.5	49.1	--
REA	R0112XF	RR2XF	0.1	42	1.7	35.1	15.9	55.2	50.5	--
REA	RX00912	RR2Xtend	00.9	26	0	32.8	17.1	55.9	48.2	--
Stine	04EE06	Enlist E3	0.4	30	0	35.2	16.1	55.7	50.2	--
Stine	05EB23	Enlist E3	0.5	29	1.0	32.9	16.8	55.0	49.3	--
Syng NK	NK009-G7E3	Enlist E3	00.9	26	0.3	35.3	15.9	55.7	47.6	--
Syng NK	NK009-T1XF	Xtendflex	00.9	29	0	33.9	16.5	55.5	47.5	--
Syng NK	NK02-M4XF	Xtendflex	0.2	29	0	33.1	16.6	55.8	46.0	--
Syng NK	NK02-T4E3	Enlist E3	0.2	26	0	35.2	15.7	56.1	40.7	--
Thunder	TE7101N	Enlist E3	0.1	25	0.7	34.5	16.0	55.9	40.7	--
Thunder	TE7302N	Enlist E3	0.2	23	0	34.8	16.2	55.4	48.2	--
Thunder	TX82008N	Xtendflex	00.8	29	0.7	34.3	16.2	55.9	40.5	--
Thunder	TX8301	Xtendflex	0.1	24	0	33.8	16.2	54.6	49.2	--
Xitavo	XO 0101E	Enlist E3	0.1	28	0.7	34.7	16.0	55.3	36.1	--
Xitavo	XO 0213E	Enlist E3	0.2	30	1.0	34.3	16.7	55.3	49.4	--
Xitavo	XO 0311E	Enlist E3	0.3	26	0	33.0	16.4	54.4	49.8	--
Mean				30	0.8	34.1	16.3	55.4	48.6	42.6
CV %				6.5	109	1.3	1.7	0.7	5.2	--
LSD 0.05				3.0	2.0	0.7	0.4	0.6	4.2	--
LSD 0.10				3.0	1.0	0.6	0.4	0.5	3.5	--

Planted: May 27. Harvested: Oct. 5. Previous crop: spring wheat.

<sup>1</sup>Lodging: 0-none, 9-lying flat on the ground.

**Table 32. 2022 Soybean - Enlist, RR and Xtend - Hettinger (REC) - Authors, J. Rickertsen and M. Wells.**

Company/ Brand	Variety	Maturity		Plant Height	Test Weight	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)					2022	2-yr. Avg. (bu/a)
NDSU	ND17009GT	00.9	9/11	28	56.6	17.0	35.8	27.0	24.0
NDSU	ND21008GT20	00.8	9/6	29	53.0	16.8	34.4	26.0	--
NDSU	ND2108GT73	0.8	9/19	26	57.3	17.3	33.4	28.1	25.9
Proseed	EL 30-33	0.3	9/19	26	53.6	18.3	32.5	30.6	--
Proseed	XF 30-12	0.1	9/15	25	53.0	16.9	33.6	30.0	--
Proseed	XF 30-42N	0.4	9/18	27	53.6	18.1	33.7	31.8	--
Proseed	XT 60-40N	0.4	9/15	25	54.4	17.9	33.7	29.3	25.8
Proseed	XT 80-20N	0.2	9/15	29	54.9	16.5	33.6	31.8	--
Xitavo	XO 0101E	0.1	9/15	23	54.3	16.8	34.5	26.2	--
Xitavo	XO 0213E	0.2	9/17	27	53.8	17.7	33.2	30.5	--
Xitavo	XO 0311E	0.3	9/18	24	53.9	16.7	33.7	30.4	--
Xitavo	XO 0573E	0.5	9/20	23	55.9	17.5	33.5	27.9	--
Xitavo	XO 0602E	0.6	9/21	25	57.5	16.0	34.3	31.2	--
Xitavo	XO 0731E	0.7	9/25	25	56.2	16.4	33.9	28.7	--
Mean			9/16	26	54.8	17.1	33.8	29.2	25.2
CV %			0.4	4.5	1.2	1.8	1.0	6.4	--
LSD 0.05			1.6	1.4	0.8	0.4	0.4	2.3	--
LSD 0.10			1.3	1.1	0.6	0.3	0.3	1.7	--

Planted: May 25. Harvested: Sept. 28. Previous crop: spring wheat.

<sup>1</sup>Maturity is date of 95% brown or tan pods.**Table 33. 2022 Soybean - Enlist, RR and Xtend - Mandan (Hettinger REC) - Authors, J. Rickertsen and M. Wells.**

Company/ Brand	Variety	Maturity		Plant Height	Test Weight	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)					2022	2-yr. Avg. (bu/a)
NDSU	ND17009GT	00.9		21	56.4	17.8	35.2	40.7	34.2
NDSU	ND21008GT20	00.8		22	53.6	17.9	32.3	42.0	--
NDSU	ND2108GT73	0.8		21	56.1	17.6	32.2	48.4	40.1
Proseed	EL 30-33	0.3		22	53.3	18.0	32.1	41.9	--
Proseed	XF 30-12	0.1		22	53.8	17.2	32.4	46.9	--
Proseed	XF 30-42N	0.4		22	55.0	17.8	33.4	49.8	--
Proseed	XT 60-40N	0.4		21	55.4	17.9	32.6	44.7	35.1
Proseed	XT 80-20N	0.2		23	55.1	16.8	32.9	48.3	--
Xitavo	XO 0101E	0.1		19	53.0	17.2	33.3	42.2	--
Xitavo	XO 0213E	0.2		22	53.8	17.7	32.7	42.7	--
Xitavo	XO 0311E	0.3		21	54.1	17.2	32.5	46.2	--
Xitavo	XO 0573E	0.5		19	55.2	17.0	34.2	40.2	--
Xitavo	XO 0602E	0.6		20	57.0	16.1	34.3	43.8	--
Xitavo	XO 0731E	0.7		21	56.7	16.9	33.7	48.2	--
Mean				21	54.9	17.4	33.1	44.7	36.5
CV %				6.4	1.0	1.9	1.4	8.1	--
LSD 0.05				2.7	0.6	0.4	0.5	4.4	--
LSD 0.10				1.9	0.5	0.3	0.4	3.4	--

Planted: May 18. Harvested: Oct. 6. Previous crop: spring wheat.

**Table 34. 2022 Soybean - Enlist, RR and Xtend - Williston - Author, G. Pradhan.**

Company/ Brand	Variety	Maturity Group	Plant Height (inch)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield (bu/a)		
							2022	2-yr. Avg.	3-yr. Avg.
NDSU	17009GT	00.9	23	55.4	20.3	42.2	9.0	12.2	11.2
LG Seeds	LGS00838XF	00.8	20	53.2	21.5	40.9	9.7	11.6	--
LG Seeds	LGS0111RX	0.1	21	53.8	20.9	40.7	13.5	14.1	13.2
REA	R0112XF	0.1	24	54.1	21.7	40.3	10.3	13.9	--
REA	R0422XF	0.4	17	53.6	21.2	40.7	8.6	--	--
REA	RX00912	00.9	19	53.7	21.0	40.6	9.5	10.8	--
Xitavo	XO 0101E	0.1	16	52.8	20.4	41.5	8.1	--	--
Xitavo	XO 0213E	0.2	18	53.6	21.1	40.1	9.7	--	--
Xitavo	XO 0311E	0.3	19	52.9	19.8	41.3	8.8	--	--
Xitavo	XO 0573E	0.5	18	54.5	21.7	39.9	8.2	--	--
Xitavo	XO 0602E	0.6	15	53.9	18.9	41.6	7.5	--	--
Xitavo	XO 0731E	0.7	17	53.6	20.2	40.4	6.6	--	--
Mean			19	53.8	20.7	40.8	9.1	12.5	12.2
CV %			10	1.7	1.9	0.9	15.0	14.4	--
LSD 0.05			3	1.3	0.6	0.5	2.0	NS	--
LSD 0.10			2	1.1	0.5	0.4	1.6	NS	--

Planted: May 24. Harvested: Oct. 19. Previous crop: oat.

**Table 35. 2022 Soybean - Irrigated, Enlist, RR and Xtend - Nesson Valley (Williston REC) - Authors, J. Jacobs, T. Tjelde and A. Turnquist.**

Company/ Brand	Variety	Maturity Group	Plant Height (inch)	Test Weight (lb/bu)	Seed Protein (%)	Seed Yield (bu/a)	
						2022	2-yr. Avg.
Dyna-Gro	S009XF33	00.9	26	55.6	36.5	81.3	--
Dyna-Gro	S009XT68	00.9	33	56.5	37.9	67.6	--
Dyna-Gro	S01XF43	0.1	31	55.7	30.4	85.2	--
Golden H.	GH00982XF	00.9	28	55.6	37.0	78.0	--
Golden H.	GH0272XF	0.2	29	56.1	36.6	78.1	--
Integra	70212	0.2	35	56.0	38.4	68.7	--
Integra	40300N	0.3	32	56.0	38.1	74.0	67.0
Integra	50309 R2X	0.3	30	56.9	38.4	69.2	--
NDSU	ND17009GT	00.9	29	56.9	39.8	70.5	59.5
NDSU	ND21008GT20	00.8	30	56.2	37.3	69.9	60.2
NDSU	ND2108GT73	0.8	30	57.4	37.7	81.7	72.3
REA	R0112XF	0.1	38	56.1	38.1	77.2	66.0
REA	R0422XF	0.4	31	56.3	38.6	71.1	--
REA	RX00912	00.9	28	55.9	36.3	67.1	58.5
Xitavo	XO 0101E	0.1	27	55.6	39.2	53.4	--
Xitavo	XO 0213E	0.2	28	55.9	37.8	69.6	--
Xitavo	XO 0311E	0.3	28	55.6	38.4	80.2	--
Xitavo	XO 0593E	0.5	26	56.9	39.1	63.5	--
Xitavo	XO 0602E	0.5	28	57.5	38.0	72.4	--
Xitavo	XO 0731E	0.7	29	57.2	38.8	76.6	--
Mean			30	56.3	37.6	72.8	63.9
CV %			--	--	1.6	10.4	3.4
LSD 0.05			--	--	1.0	12.5	5.6
LSD 0.10			--	--	0.8	10.4	4.4

Planted: May 19. Harvested: Oct. 19. Previous crop: barley.

**Table 36. 2022 Soybean - Enlist, RR and Xtend - Ransom and Sargent Counties - Authors, B. Zimprich, M. Seykora, H. Kandel and C. Deplazes.**

Company/ Brand	Variety	Mt. Group	Lisbon (Ransom County)				Proper (Cass County)				Combined 2022			
			Test Weight	Seed Protein	Seed Oil	Seed Yield	Test Weight	Seed Protein	Seed Oil	Seed Yield	Test Weight	Seed Protein	Seed Oil	Seed Yield
			(lb/bu)	(%)	(%)	(bu/a)	(lb/bu)	(%)	(%)	(bu/a)	(lb/bu)	(%)	(%)	(bu/a)
Farmer's BN	PL2E061	0.6	57.3	30.6	19.9	52.3	58.2	33.5	18.7	66.5	57.7	32.1	19.3	59.4
Farmer's BN	PL2E101	1.0	56.4	32.7	20.4	57.5	57.4	33.1	17.6	83.1	56.9	32.9	19.0	70.3
Farmer's BN	PL2E141	1.4	57.6	31.9	19.3	53.9	57.5	34.1	19.1	73.5	57.6	33.0	19.2	63.7
Golden H.	GH-0653XF	0.6	57.6	31.9	18.9	48.7	57.7	33.7	17.9	68.9	57.6	32.8	18.4	58.8
Golden H.	GH-0693E	0.6	57.1	32.3	20.0	44.1	57.1	34.1	18.6	74.0	57.1	33.2	19.3	59.0
Golden H.	GH-0803XF	0.8	57.0	33.5	19.6	51.5	57.4	35.0	18.6	68.3	57.2	34.2	19.1	59.9
Golden H.	GH-1323XF	1.3	57.6	33.6	18.6	61.9	57.1	34.4	18.4	73.2	57.3	34.0	18.5	67.6
Hefty	H08XF2	0.8	57.0	29.3	19.0	48.8	57.1	34.2	18.2	67.9	57.0	31.8	18.6	58.4
Hefty	Z0801E	0.8	57.0	31.7	19.7	58.5	57.2	33.5	18.3	70.6	57.1	32.6	19.0	64.6
Hefty	H09XF3	0.9	57.4	29.6	19.6	45.0	57.3	33.6	18.3	65.7	57.4	31.6	18.9	55.4
Hefty	H11XF2	1.1	57.2	31.6	19.6	43.6	57.0	34.2	18.5	75.8	57.1	32.9	19.0	59.7
Legacy	LS084-22XF	0.8	57.5	31.0	19.0	53.3	57.4	34.0	18.0	64.1	57.4	32.5	18.5	58.7
Legacy	LS092-22E	0.9	57.4	30.3	20.5	46.1	57.2	33.2	18.7	78.6	57.3	31.8	19.6	62.3
Legacy	LS094-20XF	0.9	56.8	31.2	19.4	43.6	57.2	34.3	17.8	69.1	57.0	32.8	18.6	56.3
Legacy	LS102-22E	1.0	57.1	31.4	19.7	49.8	57.6	33.6	18.3	73.3	57.3	32.5	19.0	61.6
Legacy	LS122-21E	1.2	57.9	29.8	20.3	46.9	58.2	32.6	18.6	71.7	58.0	31.2	19.4	59.3
REA	R0632XF	0.6	57.6	32.1	18.3	53.8	57.1	34.8	17.4	62.8	57.3	33.4	17.8	58.3
REA	R0843XF	0.8	57.6	32.2	19.1	52.7	57.6	34.3	18.0	65.8	57.6	33.3	18.5	59.3
REA	R1042XF	1.0	56.8	33.3	19.5	49.4	57.4	34.2	18.8	70.4	57.1	33.7	19.1	59.9
REA	R1532XF	1.5	57.5	32.0	19.3	60.2	56.4	33.8	19.3	73.0	57.0	32.9	19.3	66.6
Mean			57.3	31.6	19.5	51.1	57.4	33.9	18.4	70.8	57.3	32.8	18.9	60.9
C.V. %			0.6	2.9	3.6	9.1	0.8	1.3	2.9	5.2	0.8	2.7	3.5	8.9
LSD 0.05			0.6	1.5	1.2	7.7	0.7	0.8	0.9	6.0	0.5	1.0	0.7	6.2
LSD 0.10			0.5	1.3	1.0	6.4	0.6	0.6	0.7	5.0	0.4	0.8	0.6	5.2

Planted: May 23. Harvested: Oct. 4. Previous crop: corn at Lisbon and spring wheat at Prosper.



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