

# North Dakota Soybean Variety Trial Results for 2016 and Selection Guide

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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 more risky 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**

Soybeans 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 percent of the pods have reached the mature color. Varieties may have 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 is 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 dry and normal rainfall conditions is the best way to pinpoint a variety that does relatively well, regardless of weather fluctuations.

### **Phytophthora**

Phytophthora root rot 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. Management tools available to reduce Phytophthora root rot include selection of a resistant variety, use of a fungicide seed treatment, tile drainage and crop rotation.

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* is a variable pathogen, and many races of the pathogen exist in North Dakota. No 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 likely has overcome the gene being used, and the gene should not be used in future plantings.

Similarly, continually rotating effective genes is very important. Lack of gene or crop rotation can speed the development of new 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 seasonlong control and should be used in combination with resistance. Crop rotation may help reduce inoculum of *Phytophthora* but will not eradicate it from soil.

### **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 soybeans 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, are 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 in 2016, IDC scores 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 soybeans. Nematodes often are undetected because above-ground symptoms are uncommon until a 15 to 30 percent yield loss has occurred.

As of 2015, SCN has been confirmed in 19 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 actively managing SCN.

Crop rotation and resistance are the most important management tools against this disease. Two sources of resistance to SCN can be found in North Dakota: PI88788 and Peking. These sources are effective in the vast majority of the soybean fields in the state. However, the level of resistance in each variety is variable, so selecting the most resistant variety possible and monitoring the field for SCN is important.

A minimum of a two-year rotation is critical for SCN management, although a rotation out of soybean for two years is beneficial. Dry edible beans are susceptible to SCN and should not be used as a rotation crop for managing SCN.

## General Information About Tables

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). The agronomic data presented in this publication are from replicated research plots using experimental designs that enable the use of statistical analysis. The least significant difference (LSD) numbers beneath the columns in tables are derived from the statistical analyses and only apply to the numbers in the column in which they appear. If the difference between two varieties exceeds the LSD 0.10 or 0.05 value, it means that with 90 or 95 percent probability, the higher-yielding variety has a significant yield advantage. If the difference between two varieties is less than the LSD value, then the variety yields are considered similar.

The abbreviation NS is used to indicate no significant difference for that trait among any of the varieties. The CV is a measure of variability in the trial. The CV stands for coefficient of variation and is expressed as a percentage. Large CVs indicate that a large amount of variation could not be attributed to differences in the varieties.

In the tables, the mean indicates the average of the observations in the column. Soybean yield, and oil and protein information are adjusted to 13 percent moisture content in the seed. Maturity date indicates physiological maturity, which is the date when 95 percent of the pods are brown or tan. At Langdon, the maturity date indicates the day when one pod on the main stem obtained the mature brown or tan color.

Look for trends for the desired trait among different experimental sites and years. Table 2 provides the full company name, abbreviated company name used in the tables and a website for the company.

Presentation of data for the varieties tested does not imply approval or endorsement by the authors or agencies conducting the tests. NDSU approves the reproduction of any table in this publication only if no portion is deleted, appropriate footnotes are given, the order of the data is not rearranged and NDSU is credited for the data.

**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>
Jim	00.6	early	short	yellow	6
ND Henson	0.0	early	med.	black	5
Ashtabula	0.4	med.	med.	yellow	1, 3
ND1406HP	0.6	med.	med.	yellow	6, 7
Prosoy	0.8	med. late	tall	yellow	2, 6, 7
ND Bison	0.7	med. late	med.	yellow	1, 3
Sheyenne	0.7	med. late	med.	yellow	1, 4

<sup>1</sup> Remarks: 1 = Good iron chlorosis resistance; 2 = Plant early; 3 = Resistant to races 1-4 of Phytophthora root rot; 4 = Resistant to races 1, 2 and 3 of Phytophthora root rot; 5 = Resistant to races 3 and 4 of Phytophthora; 6 = Susceptible to Phytophthora root rot; 7 = Tofu bean.

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

Company	Abbreviated	Website
Asgrow	Asgrow	www.asgrowanddekalb.com
Bayer CropScience (Bayer)	Bayer	www.bayercropscience.us/crops/soybean
Brushvale Seed Inc.	Brushvale	www.brushvaleseed.com
Channel Bio	Channel	www.channelbio.com
Dahlman Seed Co.	Dahlman	www.dahlmanseed.com
Dairyland Seed Co. Inc.	Dairyland	www.dairylandseed.com
DuPont Pioneer	Pioneer	www.pioneer.com
Dyna-Gro Seed	Dyna-Gro	www.dynagroseed.com
Hefty Seed Co.	Hefty	www.heftyseed.com
Integra Fortified Seed	Integra	www.integraseed.com
Legacy Seeds Inc.	Legacy	www.legacyseeds.com
Legend Seeds Inc.	Legend	www.legendseeds.net
Mycogen Seeds	Mycogen	www.mycogen.com
NorthStar Genetics	NorthStar	www.northstargenetics.com
N.D. Foundation Seed	NDSU	www.ag.ndsu.edu/fss/
NuTech Seed	NuTech	www.nutechseed.com
Peterson Farms Seed (PFS)	Peterson	www.petersonfarmsseed.com
Prairie Seed	Prairie	www.prairiebrandseed.com
Proseed Inc.	Proseed	www.proseed.net
REA	REA	www.rea-hybrids.com
Richland Organics	Richland	http://richlandifc.com/
Rob-See-Co.	Rob SC	www.robseeco.com/
South Dakota State University	SDSU	www.sdstate.edu/agronomy-horticulture-plant-science/
Soyko International	Soyko	www.soykointernational.com/
Stine Seed Co.	Stine	www.stinseed.com
Syngenta NK Brand	Syng NK	www.syngenta-us.com/seed
Terning Seeds	Terning	www.terningseeds.com
Thunder Seed Inc.	Thunder	www.thunderseeds.com
Wensman Seed	Wensman	www.wensmanseed.com
WinField Croplan	Croplan	www.winfield.com/Farmer/Croplan/FindSeed/Soybean/

**Table 3. 2016 NDSU Roundup Ready Soybean Iron-deficiency Chlorosis Trial - Author, T. Helms (Page 1 of 2).**

Company	Variety	4-site		4-site		Company	Variety	4-site	
		Mean	IDC <sup>1</sup>	Mean	IDC <sup>1</sup>			Mean	IDC <sup>1</sup>
Asgrow	AG 00932 (check)	1.4		Peterson	17X04N	1.8	Proseed	50-60N	2.0
Pioneer	P01T06R	1.4		Integra	20468	1.8	Proseed	XT603	2.0
Pioneer	P005T13R	1.4		Integra	20600	1.8	Wensman	W30085NR2	2.0
Pioneer	P008T22R2	1.5		Legend	11R760N	1.8	Asgrow	AG 0732 (check)	2.0
Channel	0205R2	1.5		Syngenta	NKS08-M2	1.8	Channel	0507R2	2.0
Hefty	H009R5	1.5		Prairie	PB-1257R2	1.8	Dairyland	DSR-0305/R2Y	2.0
Legacy	LS-0334RR2	1.5		Peterson	16R01	1.8	Dyna-Gro	S04XT77	2.0
REA	R0815	1.5		Peterson	16X07N	1.8	Hefty	H03X7	2.0
Hefty	H008R3	1.5		REA	R00727	1.8	Dyna-Gro	SX16006R	2.0
REA	R0216	1.5		Wensman	W1037RX	1.8	Hefty	H02X7	2.0
Wensman	W1016RX	1.6		Wensman	W30048R2	1.8	Prairie	PB-0987R2	2.0
REA	64G94	1.6		Wensman	W3031NR2	1.8	Thunder	SB8707N	2.0
Dyna-Gro	S005RY87	1.6		Dyna-Gro	S06XT87	1.9	Hefty	H009X7	2.0
Syngenta	NKS12-R3	1.6		Hefty	H13X7	1.9	Integra	20915N	2.0
Northstar	NS 0080R2	1.6		Terning	TS 4090NRR2Y	1.9	Legacy	LS-0337NRRXT	2.0
Channel	1108R2	1.6		Mycogen	X56035NR2	1.9	Mycogen	X56083NR2	2.0
Northstar	NS 0200NR2	1.6		Wensman	W30065NR2	1.9	Syngenta	NKS007-Y4	2.0
Wensman	W30099R2	1.6		Asgrow	AG 0835 (check)	1.9	Northstar	NS 0090R2	2.0
Mycogen	5B024R2	1.7		Mycogen	5G007R2	1.9	Thunder	3601 R2Y	2.0
Wensman	W10063NRX	1.7		Syngenta	NKS02-B4	1.9	Integra	20097	2.0
Northstar	NS 0072R2	1.7		Peterson	15R07N	1.9	Integra	20775N	2.0
Proseed	XT6007	1.7		Proseed	10-08	1.9	Prairie	PB-0676R2	2.0
Wensman	W1071NRX	1.7		REA	69G14	1.9	Peterson	16R008N	2.0
Legacy	LS-00937RRXT	1.7		Dyna-Gro	S03RY36	1.9	Proseed	XT604	2.0
Prairie	PB-00727R2	1.7		Dyna-Gro	S09RY24	1.9	Wensman	W3024R2	2.0
Integra	20090	1.7		Northstar	NS 0480NR2	1.9	Dairyland	DSR-0988/R2Y	2.0
Integra	50447	1.7		Thunder	3511 R2YN	1.9	Legacy	LS-1134NRR2	2.0
Northstar	NS 1040NR2	1.7		Wensman	W3072NR2	1.9	Legend	06R665N	2.0
NuTech	6048	1.7		Asgrow	AG 0832 (check)	1.9	Legend	004R752	2.0
Prairie	PB-00950R2	1.7		Terning	TS 4061NRR2Y	1.9	Legend	12R24N	2.0
Peterson	16R06N	1.7		Dyna-Gro	S007XT27	1.9	Wensman	W1048NRX	2.0
Channel	0709R2	1.8		Legend	08R765N	1.9	Wensman	W1129NRX	2.0
Pioneer	P006T46R	1.8		Mycogen	5G009R2	1.9	Channel	0209R2	2.1
Thunder	3503 R2Y	1.8		Northstar	NS 0052R2	1.9	Dairyland	DSR-0619/R2Y	2.1
Integra	50098R2X	1.8		Northstar	NS 0111R2	1.9	Legend	006R760N	2.1
Syngenta	NKS06-Q9	1.8		Northstar	NS 0651NR2	1.9	Mycogen	5B033R2	2.1
Thunder	3606 R2YN	1.8		Proseed	30-20	1.9	Syngenta	NKS13-H5	2.1
Peterson	17X009	1.8		Proseed	50-08	1.9	Dairyland	DST04-003/R2Y	2.1
Peterson	17X03	1.8		Proseed	XT607	1.9	Dyna-Gro	S07RY45	2.1
Proseed	XT6009	1.8		Hefty	H007X7	2.0	Hefty	H00R6	2.1
Terning	TS 4111NRR2	1.8		Legacy	LS-0214RR2	2.0	Legacy	LS-0836N RR2	2.1
Hefty	H006R7	1.8		Legacy	LS-0837N	2.0	Syngenta	NKS02-R2	2.1
Hefty	H03R5	1.8		NuTech	6097R2	2.0	Proseed	XT610	2.1
Mean		2.0		Mean		2.0	Mean		2.0
LSD 0.05		0.30		LSD 0.05		0.30	LSD 0.05		0.30
LSD 0.10		0.21		LSD 0.10		0.21	LSD 0.10		0.21

**Table 3. 2016 NDSU Roundup Ready Soybean Iron-deficiency Chlorosis Trial - Author, T. Helms (Page 2 of 2).**

Company	Variety	4-site	Company	Variety	4-site	Company	Variety	4-site
		Mean			Mean			Mean
		IDC <sup>1</sup>			IDC <sup>1</sup>			IDC <sup>1</sup>
Thunder	3606 R2YN	2.1	Mycogen	5N078R2	2.2	Hefty	H08X7	2.5
Thunder	3614 R2YN	2.1	Channel	0807R2	2.2	Integra	20215	2.5
Asgrow	AG 0333 (check)	2.1	Dairyland	DSR-0404/R2Y	2.2	Mycogen	5N091R2	2.5
Dairyland	DSR-0807/R2Y	2.1	Legend	04R560	2.2	Legend	09R606N	2.5
Dyna-Gro	S009RY56	2.1	Proseed	40-07	2.2	Syngenta	NKS006-W5	2.5
Legend	10R551N	2.1	Thunder	3408 R2YN	2.2	Peterson	16R10	2.6
Northstar	NS 0318R2	2.1	Wensman	W3018R2	2.2	Hefty	H009R3	2.6
Channel	00806R2	2.1	Thunder	SB8704	2.2	Peterson	16R09N	2.6
Dyna-Gro	S09RY64	2.1	Dairyland	DSR-0225/R2Y	2.3	Dairyland	DSR-1120/R2Y	2.7
Hefty	H01R4	2.1	Hefty	H008R6	2.3	Stine <sup>2</sup>	0480 (check)	2.7
Mycogen	5B082R2	2.1	Hefty	H02R3	2.3	Stine <sup>2</sup>	0480 (check2)	2.7
Mycogen	X56131NR2	2.1	Legacy	LS-0833N RR2	2.3			
Northstar	NS 0081NR2	2.1	Mycogen	5B013R2	2.3			
Prairie	PB-0598R2	2.1	Proseed	30-80	2.3			
Peterson	17X13	2.1	Dahlman	6709XN	2.3			
Dairyland	DSR-C918/R2Y	2.1	Dairyland	DSR-1313/R2Y	2.3			
Proseed	20-30	2.1	Legacy	LS-1335NRR2	2.3			
Legacy	LS-0237RRXT	2.1	Northstar	NS 1390NR2	2.3			
Legend	13R700N	2.1	Prairie	PB-00856R2	2.3			
Prairie	PB-0397R2	2.1	Hefty	H09X7	2.3			
Thunder	SB8703	2.1	Legacy	LS-00835NRR2	2.3			
Wensman	W1067RX	2.1	Northstar	NS 0941NR2	2.3			
Wensman	W3143NR2	2.1	Integra	20087	2.3			
Legacy	LS-0135RR2	2.2	Integra	20300	2.3			
NuTech	6008R2	2.2	Prairie	PB-X16061R2	2.3			
Prairie	PB-0146R2	2.2	Integra	20967N	2.3			
Proseed	41-10	2.2	Legend	007R653	2.4			
Dyna-Gro	S06RY47	2.2	Legend	008R660N	2.4			
Dyna-Gro	S12RY44	2.2	Syngenta	NKS04-D3	2.4			
Syngenta	NKS07-B6	2.2	Thunder	SB8713N	2.4			
NuTech	7127R2	2.2	Peterson	15R04	2.4			
Thunder	3505 R2YN	2.2	Peterson	17X09N	2.4			
Wensman	W3080NR2	2.2	Dyna-Gro	S01RY86	2.4			
Hefty	H05X8	2.2	Northstar	NS 0012R2	2.4			
Integra	20126	2.2	Dairyland	DSR-0711/R2Y	2.4			
Legacy	LS-00834RR2	2.2	Mycogen	5B040R2	2.4			
Prairie	PB-0441R2	2.2	Thunder	SB8710N	2.4			
Prairie	PB-0777R2	2.2	Wensman	W3100NR2	2.4			
Hefty	H05X7	2.2	Dahlman	6713XN	2.4			
Hefty	H12X7	2.2	Prairie	PB-0863R2	2.4			
Legacy	LS-0635N RR2	2.2	Peterson	16X12N	2.5			
Legacy	LS-0935NRR2	2.2	Wensman	W1106NRX	2.5			
Mean		2.0	Mean		2.0	Mean		2.0
LSD 0.05		0.30	LSD 0.05		0.30	LSD 0.05		0.30
LSD 0.10		0.21	LSD 0.10		0.21	LSD 0.10		0.21

<sup>1</sup>IDC score was 1-5, with 1-green, 3-yellow, 5-dead tissue.<sup>2</sup>Duplicate check cultivars to validate data.

**Table 4. 2016 NDSU Conventional and Liberty Link Soybean Iron-deficiency Chlorosis Trial - Author, T. Helms.**

Company	Variety	4-site Mean IDC <sup>1</sup>	Company	Variety	4-site Mean IDC <sup>1</sup>
Dyna-Gro	S04LL37	1.3	NuTech	3066L	2.1
Asgrow check <sup>2</sup>	AG 00932	1.4	Richland	MK0249	2.1
Check variety	A11 (early)	1.5	Richland	MK0508	2.1
Dyna-Gro	S06LL26	1.6	NuTech	3115L	2.1
NDSU	ND1100S	1.6	NDSU	Trail	2.1
Peterson	L07-16N	1.7	Proseed	40-51N	2.2
Dyna-Gro	SX16206L	1.8	Asgrow check <sup>2</sup>	AG 0333	2.2
Terning	TS2010	1.9	Peterson	L02-16N	2.2
Asgrow check <sup>2</sup>	AG 0835	1.9	Bayer	CZ 0525 LL	2.2
Stine	02LC26	1.9	Thunder	5401LL	2.2
Proseed	40-71N	1.9	NDSU	ND Henson	2.2
Bayer	CZ 0301 LL	1.9	Bayer	CZ 0201 LL	2.3
Thunder	5605LLN	1.9	Integra	30607N	2.3
Peterson	L11-13N	1.9	Richland	MK0603	2.3
Rob-See Co.	EX0620	1.9	Rob-See Co.	EX0310	2.3
Thunder	5411LLN	2.0	Peterson	L12-16N	2.3
Proseed	50-31N	2.0	Rob-See Co.	EX1240	2.3
Hefty	H008L3	2.0	Peterson	L04-16	2.3
Proseed	40-42N	2.0	NDSU	ProSoy	2.3
NDSU	ND Bison	2.0	Richland	MK9101	2.3
NDSU	Sheyenne	2.0	Thunder	5615LLN	2.3
Integra	20090	2.0	Richland	MK808CN	2.4
Hefty	H03L7	2.0	Richland	MK1016	2.4
Stine	01LH22	2.0	Unity	CA 1403	2.4
Richland	MK9404CN	2.1	Richland	MK41	2.5
Rob-See Co.	EX0830	2.1	Rob-See Co.	EX1450	2.5
NDSU	Ashtabula	2.1	Richland	MK42	2.5
Bayer	CZ 0121 LL	2.1	NDSU	ND1406HP	2.6
Hefty	H007X7	2.1	Check variety <sup>3</sup>	Sargent	2.6
NuTech	2086L	2.1	Check variety <sup>3</sup>	Sargent (2)	2.7
Mean		2.1	Mean		2.1
LSD 0.05		0.22	LSD 0.05		0.22
LSD 0.10		0.20	LSD 0.10		0.20

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

<sup>2</sup>Roundup Ready Asgrow Seed check varieties.

<sup>3</sup>Duplicate check cultivars to validate data.

Varieties that were only entered in the "Southern" tests were accidentally left out of the IDC tests this year.



**Table 5. 2016 NDSU Roundup Ready Soybean Iron-deficiency Chlorosis Yield Trial - Author, T. Helms.**

Company/Brand	Variety	Maturity <sup>1</sup> (date)	IDC Score <sup>2</sup> (1-5)	2016 Seed Yield			
				Leonard	Colfax	Erie	3-site Avg.
Channel	0507R2	9/14	1.9	40.5	74.2	53.8	56.2
Channel	0709R2	9/20	1.8	52.6	79.2	45.6	59.2
Channel	0807R2	9/23	2.1	48.1	75.5	51.8	58.5
Dyna-Gro	S03RY36	9/13	1.8	52.0	77.9	34.1	54.7
Dyna-Gro	S06RY47	9/19	1.9	45.4	84.4	58.5	62.7
Integra	20775N	9/21	1.9	55.0	88.4	55.9	66.4
Integra	20915N	9/23	1.9	52.4	90.4	69.1	70.6
Legacy	0334	9/17	1.7	56.1	86.8	56.1	66.3
Legacy	0635N	9/18	1.8	48.5	82.7	53.9	61.7
Legacy	0837N	9/23	1.9	52.5	83.7	61.7	66.0
Legacy	0935N	9/24	1.9	49.1	75.8	59.2	61.4
Legend	004R752	9/7	1.8	38.5	63.9	28.7	43.7
Legend	03R650	9/13	1.8	49.9	75.7	31.0	52.2
Legend	11R760N	9/24	2.2	53.7	86.6	61.3	67.2
Legend	08R765N	9/26	2.0	46.9	70.2	56.4	57.8
Peterson	15R07N	9/19	1.7	56.0	85.1	63.5	68.2
Peterson	16R09N	9/25	2.2	50.3	76.1	52.7	59.7
Prairie	PB-0397R2	9/13	1.6	56.0	75.5	43.3	58.3
Prairie	PB-X16061R2	9/18	1.9	48.5	81.7	51.6	60.6
Prairie	PB-0987R2	9/23	1.8	55.1	81.9	61.1	66.0
REA	64G94	9/13	1.4	50.5	73.6	49.7	57.9
REA	R0216	9/13	2.0	48.8	70.1	34.2	51.0
REA	R0815	9/21	1.7	61.0	85.3	67.8	71.4
Syng NK	NKS06-Q9	9/15	1.7	51.5	81.1	62.4	65.0
Syng NK	NKS08-M2	9/19	1.7	65.5	84.5	59.3	69.7
Syng NK	NKS12-R3	9/24	1.5	55.0	90.3	64.8	70.0
Thunder	3503R2Y	9/12	1.5	52.4	81.2	47.7	60.4
Thunder	3601R2Y	9/13	1.9	49.1	67.9	54.5	57.2
Thunder	3606R2YN	9/17	1.8	49.0	80.6	52.3	60.6
Wensman	W3031NR2	9/14	3.0	55.5	67.0	49.0	57.2
Mean		9/18	1.9	51.5	79.2	53.0	61.3
CV %		4.5	44.8	17.4	9.2	22.6	15.4
LSD 0.05		2	0.7	10.6	8.5	13.9	6.5
LSD 0.10		2	0.6	9	7.2	11.8	5.5

Planted: May 18. Harvested: Oct. 11.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.<sup>2</sup>Iron-deficiency chlorosis visual score based on one site. Score was 1-5, with 1-green, 3-yellow, 5-dead tissue.

**Table 6. 2016 NDSU Roundup Ready Soybean Cyst Nematode Yield Trial - Author, T. Helms.**

Company	Variety	Maturity <sup>1</sup> (date)	Yield		
			Galesburg	Wyndmere	2-site Avg.
Channel	0507R2	9/15	68.0	59.1	63.6
Channel	0709R2	9/21	65.6	62.1	63.9
Channel	0807R2	9/23	63.8	65.7	64.8
Dalhman	56009NRR2Y	9/10	61.1	52.7	56.9
Dyna-Gro	S06RY47	9/17	63.1	62.3	62.7
Dyna-Gro	S07RY45	9/22	74.3	62.9	68.6
Dyna-Gro	S09RY64	9/24	75.8	66.9	71.4
Integra	20775N	9/21	76.1	63.5	69.8
Integra	20915N	9/23	79.0	72.9	76.0
Legacy	0635N	9/16	55.4	60.4	57.9
Legacy	0837N	9/22	78.3	71.0	74.7
Legacy	0935N	9/22	71.5	61.8	66.7
Legacy	1134N	9/25	69.3	65.9	67.6
Legend	06R665N	9/16	58.8	58.3	58.6
Legend	09R606N	9/22	71.1	69.7	70.4
Legend	10R551N	9/26	78.6	67.0	72.8
Prairie	PB-0598R2	9/16	69.5	58.5	64.0
Prairie	PB-0676R2	9/17	64.1	58.9	61.5
Prairie	0987R2	9/24	70.6	64.0	67.3
Prairie	PB-X16061R2	9/17	68.5	58.8	63.7
REA	64G94	9/17	63.8	52.6	58.2
REA	69G14	9/21	76.1	70.9	73.5
REA	R0815	9/21	73.4	67.7	70.6
Syng NK	NKS06-Q9	9/16	66.4	62.7	64.6
Syng NK	NKS08-M2	9/20	72.3	73.3	72.8
Syng NK	NKS12-R3	9/25	76.3	68.7	72.5
Syng NK	NKS14-A6	9/26	74.2	65.2	69.7
Thunder	3505R2XN	9/17	67.8	54.0	60.9
Thunder	36008R2XN	9/11	51.7	44.5	48.1
Thunder	3606R2YN	9/16	56.7	62.6	59.7
Wensman	3031NR2	9/15	56.2	54.5	55.4
Wensman	3072NR2	9/14	61.2	59.1	60.2
Check	Susceptible	9/22	60.0	59.5	59.8
Mean		9/19	67.2	62.4	65.1
CV %		3.4	14.1	10.6	12.7
LSD 0.05		2	13.1	9.2	8.1
LSD 0.10		2	11.1	7.8	6.9

Galesburg - Planted: May 6. Harvested: Oct. 12. Wyndmere - Planted: May 7. Harvested: Oct. 12.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.**Table 7. 2016 NDSU Liberty Link and Conventional Soybean Cyst Nematode Yield Trial - Author, T. Helms.**

Company	Variety	Maturity <sup>1</sup> (date)	Yield		
			Galesburg	Wyndmere	2-site Avg.
Brushvale	BS1511	9/26	67.2	67.4	67.3
Brushvale	BS1512	9/27	72.4	66.2	69.3
Dyna-Gro	S06LL26	9/17	52.8	50.7	51.8
Dyna-Gro	S08LL84	9/24	73.4	64.9	69.2
Dyna-Gro	SX16206L	9/19	65.7	60.8	63.3
NDSU	ND Bison	9/19	57.4	55.7	56.6
Richland	MK808CN	9/18	69.0	66.3	67.7
Richland	MK9404CN	9/17	50.6	52.8	51.7
Soyko	JJ101	9/14	36.4	40.2	38.3
Soyko	JJ103	9/14	40.6	42.3	41.5
Thunder	5605LLN	9/18	66.0	59.7	62.9
Thunder	6707LLN	9/12	45.0	47.0	46.0
NDSU	Susceptible chk	9/17	57.6	58.0	57.8
Mean		9/18	58.0	56.3	57.2
CV %		2.9	8.6	10.3	9.5
LSD 0.05		2	8.0	9.4	6.2
LSD 0.10		2	6.8	8.0	5.3

Galesburg - Planted: May 6. Harvested: Oct. 12. Wyndmere - Planted: May 7. Harvested: Oct. 12.

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

**Table 8. 2016 NDSU Combined Central Roundup Ready Soybean Locations in North Dakota - Author, T. Helms (Page 1 of 2).**

Company/ Brand	Variety	Maturity <sup>1</sup> (date)	Lodging <sup>2</sup> (0-9)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield					
							North- wood	Arthur <sup>3</sup>	Grandin	2016 2-site Avg.	2016 3-site Avg.	2-yr. Avg.
							------(bu/a)-----					
Channel	0507R2	9/19	1.0	35	18.6	40.3	67.7	68.0	42.8	55.3	59.5	65.9
Channel	0709R2	9/24	1.0	37	18.1	39.9	68.3	68.3	39.4	53.9	58.7	65.8
Dairyland	DSR-0305/R2Y	9/17	1.3	33	20.3	38.7	63.2	72.3	43.2	53.2	59.6	64.2
Dairyland	DSR-0619/R2Y	9/23	1.0	34	19.3	42.1	65.7	70.6	43.4	54.6	59.9	67.7
Dairyland	DSR-0711/R2Y	9/22	1.0	36	19.7	39.0	72.7	62.4	45.6	59.2	60.2	64.1
Dairyland	DST04-003	9/21	1.3	35	18.8	40.9	65.1	68.5	43.9	54.5	59.2	--
Dyna-Gro	S04XT77	9/15	1.0	32	19.6	40.1	69.5	--	39.6	54.6	--	--
Dyna-Gro	S06RY47	9/23	1.3	33	19.3	42.1	65.1	69.3	40.7	52.9	58.4	--
Dyna-Gro	S06XT87	9/22	2.0	41	19.4	39.5	63.1	--	39.9	51.5	--	--
Dyna-Gro	S07RY45	9/24	1.3	38	19.1	38.6	76.2	76.6	43.6	59.9	65.5	69.9
Hefty	H02X7	9/17	1.0	36	19.6	38.3	62.1	--	44.5	53.3	--	--
Hefty	H03X7	9/15	1.0	32	19.6	40.9	68.9	--	37.6	53.3	--	--
Hefty	H05X7	9/19	1.0	36	19.2	38.1	72.3	--	42.7	57.5	--	--
Hefty	H05X8	9/25	1.0	31	19.4	40.3	62.8	--	37.3	50.1	--	--
Integra	20775N	9/23	1.0	36	19.0	39.2	76.5	75.5	44.6	60.6	65.5	70.5
Legacy	LS-0135	9/12	1.7	36	21.0	40.1	64.8	55.3	44.6	54.7	54.9	--
Legacy	LS-0334	9/20	1.0	35	18.9	40.3	72.8	74.4	44.4	58.6	63.9	63.8
Legacy	LS-0635N	9/19	1.0	35	19.1	41.7	68.5	70.7	42.9	55.7	60.7	68.4
Legacy	LS-0833N	9/25	1.7	37	19.3	38.3	71.6	73.1	44.4	58.0	63.0	--
Legend	08R765N	9/22	1.0	34	18.9	40.5	68.5	59.0	40.6	54.6	56.0	--
Legend	04R560	9/18	1.3	36	19.9	38.5	70.7	73.0	42.6	56.7	62.1	67.6
Legend	06R665N	9/20	1.0	36	17.8	42.2	73.0	71.0	43.6	58.3	62.5	--
Legend	09R606N	9/26	1.3	35	18.9	39.1	75.6	75.5	44.6	60.1	65.2	--
Mycogen	5B033R2	9/19	1.3	34	19.8	39.4	75.2	68.0	43.2	59.2	62.1	--
Mycogen	5B040R2	9/18	1.0	34	18.9	39.6	72.0	73.8	46.6	59.3	64.1	68.2
Mycogen	5N078R2	9/20	1.0	35	18.5	41.7	71.0	73.1	41.6	56.3	61.9	--
Mycogen	X56035NR2	9/20	1.0	34	19.0	40.4	68.2	72.1	42.9	55.6	61.0	--
NuTech	6048	9/16	1.0	35	19.6	42.0	65.0	62.7	42.5	53.8	56.7	--
NuTech	6008R2	9/4	1.0	34	20.5	38.1	63.7	55.7	39.3	51.5	52.9	59.5
Peterson	17X04N	9/17	1.0	32	19.0	39.6	70.1	--	40.3	55.2	--	--
Peterson	15R07N	9/22	1.3	37	18.8	39.2	73.6	76.3	43.1	58.4	64.3	67.4
Peterson	16R06N	9/20	1.0	35	18.9	40.4	70.5	69.2	41.9	56.2	60.5	66.2
Prairie	PB-0676R2	9/19	1.0	36	18.9	40.2	73.7	71.2	44.4	59.1	63.1	--
Prairie	PB-0441R2	9/19	1.0	34	18.4	41.4	69.7	73.7	46.3	58.0	63.2	--
Prairie	PB-0777R2	9/24	1.0	38	19.3	39.2	76.3	70.2	42.6	59.5	63.0	--
Prairie	PB-X16061R2	9/19	1.0	35	18.8	39.2	72.8	66.2	41.2	57.0	60.1	--
Proseed	30-80	9/24	1.7	36	19.0	39.8	72.5	79.8	43.7	58.1	65.3	67.9
Proseed	50-60N	9/21	1.0	35	18.5	41.9	65.1	71.8	44.3	54.7	60.4	--
Proseed	XT607	9/22	1.0	40	19.1	39.8	66.8	--	40.4	53.6	--	--
REA	64G94	9/19	1.8	35	20.9	38.8	65.8	66.6	39.8	52.8	57.4	66.8
REA	R0216	9/12	2.0	34	21.2	40.0	61.3	62.2	47.7	54.5	57.1	62.7
Syng NK	NKS06-Q9	9/19	1.0	30	18.7	40.7	72.0	73.2	43.1	57.6	62.8	67.4
Mean		9/19	1.2	35	19.3	40.1	69.1	69.5	42.4	55.7	60.7	66.1
CV %		4.0	35	6	2.1	2.0	5.5	7.2	5.9	5.8	6.4	--
LSD 0.05		3	0.7	3	1.4	1.9	6.1	8.0	4.0	3.7	6.1	--
LSD 0.10		3	0.6	3	1.2	1.6	5.2	6.8	3.4	3.1	5.2	--

**Table 8. 2016 NDSU Combined Central Roundup Ready Soybean Locations in North Dakota - Author, T. Helms (Page 2 of 2).**

Company/ Brand	Variety	Maturity <sup>1</sup> (date)	Lodging <sup>2</sup> (0-9)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield					
							North- wood	Arthur <sup>3</sup>	Grandin	2016 2-site Avg.	2016 3-site Avg.	2-yr. Avg.
Syng NK	NKS07-B6	9/19	1.3	36	19.7	37.5	72.7	73.4	45.3	59.0	63.8	65.6
Syng NK	NKS08-M2	9/20	1.0	34	18.4	41.4	70.4	74.9	45.3	57.9	63.5	--
Terning	TS 4061NRR2Y	9/21	1.0	33	19.2	40.5	69.6	66.2	39.8	54.7	58.5	--
Thunder	3505R2XN	9/19	1.0	33	18.5	40.5	75.1	71.3	39.7	57.4	62.0	--
Thunder	3606 R2YN	9/23	1.3	33	18.3	41.3	66.6	73.0	39.2	52.9	59.6	66.1
Thunder	SB8704	9/11	1.0	33	19.3	41.4	71.5	--	40.9	56.2	--	--
Thunder	SB8707N	9/5	1.3	31	20.4	40.6	60.3	54.5	40.3	50.3	51.7	--
Wensman	W1037RX	9/19	1.0	36	19.3	39.6	64.2	--	39.6	51.9	--	--
Wensman	W1048NRX	9/18	1.0	35	18.7	40.9	67.3	--	41.7	54.5	--	--
Wensman	W1071NRX	9/21	1.7	39	19.2	40.0	70.1	--	39.1	54.6	--	--
Wensman	W3018R2	9/12	1.0	36	21.1	39.4	63.7	66.1	43.3	53.5	57.7	63.3
Mean		9/19	1.2	35	19.3	40.1	69.1	69.5	42.4	55.7	60.7	66.1
CV %		4.0	35	6	2.1	2.0	5.5	7.2	5.9	5.8	6.4	--
LSD 0.05		3	0.7	3	1.4	1.9	6.1	8.0	4.0	3.7	6.1	--
LSD 0.10		3	0.6	3	1.2	1.6	5.2	6.8	3.4	3.1	5.2	--

Planted: Northwood, May 6; Arthur and Grandin, May 9. Harvested: Northwood, Oct. 5; Arthur, Oct. 8; Grandin, Oct. 9.

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

<sup>2</sup>Lodging: 1-upright, 3-leaning at 45 degree angle, 5-flat on ground.

<sup>3</sup>Xtend variety plots were roto-tilled out at Arthur, N.D. because in mid-July, these were not approved for export to the EU countries.

**Table 9. 2016 NDSU Combined Central Conventional and Liberty Link Soybean Locations in North Dakota - Author, T. Helm**

Company/ Brand	Variety	Maturity <sup>1</sup> (date)	Lodging <sup>2</sup> (0-9)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield				2-yr. Avg.
							North- wood	Arthur	Grandin	2016 3-site Avg.	
Bayer	CZ 0121 LL	9/13	1.0	33	20.6	38.2	64.1	46.5	43.8	51.5	--
Bayer	CZ 0201 LL	9/9	1.0	32	21.5	37.9	58.9	58.7	42.2	53.3	--
Bayer	CZ 0301 LL	9/16	1.0	33	20.9	38.7	73.5	59.4	42.2	58.4	--
Bayer	CZ 0525 LL	9/21	1.0	32	20.6	39.7	73.0	72.2	42.7	62.6	65.1
Dyna-Gro	S04LL37	9/17	1.0	35	19.7	39.6	63.7	61.0	41.0	55.2	--
Dyna-Gro	S06LL26	9/17	1.0	35	20.1	38.8	66.2	66.7	42.6	58.5	--
Dyna-Gro	S07LL57	9/22	1.3	36	19.7	39.6	67.3	71.8	42.5	60.5	--
Integra	30607N	9/19	1.0	31	20.3	40.6	68.4	64.9	41.5	58.3	--
NDSU	Ashtabula	9/14	1.0	34	21.1	37.5	63.3	52.7	41.5	52.5	57.8
NDSU	ND Bison	9/17	1.0	32	20.7	37.8	68.2	58.2	40.0	55.5	61.5
NDSU	ND Henson	9/7	1.0	30	21.1	38.9	63.7	49.4	40.1	51.1	54.7
NDSU	ND1100S	9/14	2.6	32	19.5	39.1	59.7	53.1	36.3	49.7	--
NDSU	ND1406HP	9/12	1.2	33	17.5	44.3	59.8	58.4	40.2	52.8	56.4
NDSU	ProSoy	9/24	2.3	39	17.7	43.7	59.3	62.8	37.8	53.3	57.9
NDSU	Sheyenne	9/19	1.0	37	20.3	38.1	67.3	63.2	41.3	57.3	61.8
NuTech	3066L	9/19	1.0	32	20.6	40.5	73.4	66.1	41.8	60.4	65.3
Peterson	L02-16N	9/11	1.0	31	19.9	41.2	58.1	54.7	39.4	50.7	52.7
Peterson	L04-16	9/19	1.0	33	19.9	41.2	67.8	71.5	42.8	60.7	58.1
Proseed	40-42N	9/13	1.0	31	21.0	37.7	61.8	60.1	39.9	53.9	--
Proseed	40-51N	9/18	1.0	30	20.7	40.1	74.5	65.0	40.4	60.0	60.9
Proseed	40-71N	9/21	1.0	35	19.3	38.5	71.5	75.9	43.3	63.6	65.6
Proseed	50-31N	9/17	1.0	33	20.5	39.1	76.2	71.6	41.5	63.1	--
Richland	MK 0249	9/13	1.0	31	19.8	38.1	62.3	53.6	40.3	52.1	50.4
Richland	MK 0508	9/22	2.0	33	18.6	38.2	58.2	59.0	36.9	51.4	50.9
Richland	MK 0603	9/21	2.5	36	17.3	40.6	67.1	62.8	39.6	56.5	52.6
Thunder	5401LL	9/10	1.0	31	21.2	38.4	62.0	50.0	43.0	51.7	56.6
Thunder	5605LLN	9/19	1.0	32	20.0	41.0	73.4	70.5	46.3	63.4	64.8
Thunder	5707 LLN	9/9	1.2	29	20.0	39.7	60.3	50.6	36.5	49.1	--
Unity	CA1403	9/16	1.0	30	20.8	38.7	60.7	58.1	38.8	52.5	--
Mean		9/16	1.2	33	20.0	39.5	65.6	61.0	40.9	55.8	58.4
CV %		5.4	23	11	2.3	2.2	6.5	9.2	6.0	7.8	--
LSD 0.05		3	0.5	4	1.4	1.8	6.9	9.1	4.0	4.0	--
LSD 0.10		2	0.4	3	1.1	1.5	5.8	7.7	3.4	3.4	--

Planted: Northwood, May 6; Arthur and Grandin, May 9. Harvested: Northwood, Oct. 5; Arthur, Oct. 8; Grandin, Oct. 9.

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

<sup>2</sup>Lodging: 1-upright, 3-leaning at 45 degree angle, 5-flat on ground.

**Table 10. 2016 NDSU Combined Southern Roundup Ready Soybean Locations in North Dakota - Author, T. Helms (Page 1 of 2).**

Company/ Brand	Variety	Maturity <sup>1</sup> (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Fairmount	Milnor	Walcott	2016 3-site Avg.	2-yr. Avg.
						------(bu/a)-----				
Channel	0807R2	9/17	37	20.6	38.9	57.1	66.3	60.3	61.2	64.2
Channel	1108R2	9/21	41	20.8	40.1	56.6	65.4	64.9	62.3	67.2
Dahlman	6709XN	9/20	37	20.3	39.9	49.5	70.7	64.0	61.4	--
Dahlman	6713XN	9/20	39	20.1	38.9	53.8	48.2	66.3	56.1	--
Dairyland	DSR-0807/R2Y	9/17	35	20.1	40.9	35.7	66.3	56.9	53.0	--
Dairyland	DSR-0988/R2Y	9/16	37	21.7	35.5	54.4	66.8	66.1	62.4	--
Dairyland	DSR-1120/R2Y	9/20	37	20.3	39.0	31.8	69.3	59.5	53.5	60.6
Dyna-Gro	S06RY47	9/14	34	19.5	42.4	46.8	59.5	57.1	54.5	--
Dyna-Gro	S07RY45	9/17	36	20.3	39.5	63.6	71.1	65.7	66.8	68.5
Dyna-Gro	S09RY64	9/19	39	19.8	39.3	59.9	63.5	65.6	63.0	65.2
Dyna-Gro	S12RY44	9/18	39	19.8	42.3	53.0	71.3	70.0	64.8	67.9
Hefty	H08X7	9/19	37	19.8	40.8	46.4	60.7	70.5	59.2	--
Hefty	H09X7	9/18	38	20.2	39.5	45.8	64.6	66.6	59.0	--
Hefty	H12X7	9/19	34	20.8	38.7	58.8	76.2	61.5	65.5	--
Hefty	H13X7	9/22	36	19.7	38.8	55.5	58.3	60.8	58.2	--
Integra	20775N	9/16	37	21.0	38.4	49.6	68.0	64.3	60.6	--
Integra	20915N	9/17	32	20.2	39.2	57.4	65.2	59.0	60.5	64.5
Legacy	LS-0837N	9/18	37	20.1	38.7	56.8	65.7	61.6	61.4	--
Legacy	LS-0935N	9/17	41	20.0	39.6	56.2	69.3	68.2	64.6	68.2
Legacy	LS-1134N	9/20	36	21.2	40.4	55.2	70.8	57.3	61.1	66.6
Legacy	LS-1335N	9/21	40	21.4	37.2	56.5	73.6	69.6	66.6	66.7
Legend	10R551N	9/20	43	20.9	40.6	51.9	66.4	52.2	56.8	--
Legend	11R760N	9/20	36	19.5	40.0	53.2	61.1	59.4	57.9	--
Legend	12R24N	9/19	36	20.2	40.9	58.2	66.2	64.1	62.8	--
Legend	13R700N	9/22	38	20.2	39.3	61.8	69.5	67.7	66.3	--
Mycogen	5B082R2	9/16	38	21.6	40.2	38.9	63.2	64.8	55.6	61.1
Mycogen	5N091R2	9/16	36	20.4	39.7	41.8	65.2	67.0	58.0	62.6
Mycogen	X56083NR2	9/13	36	19.7	42.0	49.6	62.1	62.0	57.9	--
Mycogen	X56131NR2	9/20	36	20.5	41.1	52.1	69.5	65.6	62.4	--
NuTech	6048	9/8	36	19.6	42.7	40.0	54.3	52.2	48.8	--
NuTech	6097R2	9/17	38	21.9	37.9	31.0	55.9	77.1	54.7	62.7
NuTech	7127R2	9/21	36	19.1	41.4	49.7	67.4	58.0	58.4	--
Peterson	16R09N	9/17	38	20.4	39.2	61.2	65.1	67.0	64.4	66.0
Peterson	16X12N	9/18	38	19.9	40.4	45.3	58.6	76.2	60.0	--
Peterson	17X09N	9/20	33	19.6	40.9	53.8	71.0	66.6	63.6	--
Prairie	PB-0676R2	9/14	37	19.6	42.9	45.7	68.7	58.1	57.5	--
Prairie	PB-0863R2	9/17	36	20.5	40.5	47.4	62.8	67.5	59.2	--
Prairie	PB-0987R2	9/18	36	20.1	38.2	58.4	72.5	61.0	64.0	--
Prairie	PB-1257R2	9/22	39	20.1	38.4	57.5	72.9	60.9	63.8	--
Proseed	30-80	9/16	36	20.8	37.9	57.2	65.2	65.7	62.7	60.8
Proseed	41-10	9/19	37	19.8	40.5	39.2	69.2	69.2	59.2	66.0
Proseed	XT610	9/20	38	19.6	40.6	55.3	64.9	67.9	62.7	--
Proseed	XT612	9/4	35	20.6	41.6	43.0	34.6	51.7	43.1	--
Mean		9/18	37	20.3	39.9	51.6	65.0	63.6	60.1	65.0
CV %		6.0	9.2	2.1	1.9	10.1	8.6	11.3	15.1	--
LSD 0.05		5	5	1.3	1.6	8.3	13.3	9.6	7.0	--
LSD 0.10		4	5	1.1	1.3	7.1	10.1	8.2	5.9	--

**Table 10. 2016 NDSU Combined Southern Roundup Ready Soybean Locations in North Dakota - Author, T. Helms (Page 2 of 2).**

Company/ Brand	Variety	Maturity <sup>1</sup> (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Fairmount	Milnor	Walcott	2016 3-site Avg. (bu/a)	2-yr. Avg.
REA	69G14	9/17	35	20.2	39.6	52.3	63.9	69.8	62.0	65.3
REA	R0815	9/17	39	20.3	39.4	58.7	65.4	71.4	65.2	67.3
Syng NK	NKS06-Q9	9/11	35	19.5	41.8	55.2	60.2	60.4	58.6	--
Syng NK	NKS08-M2	9/15	37	19.7	40.4	47.7	67.6	66.3	60.5	--
Syng NK	NKS12-R3	9/19	35	20.1	40.3	57.0	65.0	62.1	61.4	--
Syng NK	NKS13-H5	9/19	34	20.0	39.8	55.1	62.2	65.5	60.9	--
Terning	TS4090NRR2Y	9/18	37	19.7	39.8	59.1	66.9	61.5	62.5	--
Terning	TS4111NRR2	9/21	41	20.4	40.1	54.4	65.3	57.7	59.1	--
Thunder	3408R2XN	9/17	38	20.5	39.2	55.9	68.3	62.3	62.2	65.5
Thunder	3511 R2X	9/20	42	20.6	39.7	54.1	58.6	62.6	58.4	--
Thunder	SB8710N	9/20	38	19.6	40.5	47.8	67.0	69.0	61.3	--
Thunder	SB8713N	9/19	40	21.5	36.6	52.4	61.5	61.0	58.3	--
Wensman	W1071NRX	9/13	37	20.8	40.2	50.1	56.1	50.6	52.3	--
Wensman	W1106NRX	9/20	40	19.8	40.2	47.8	67.0	59.2	58.0	--
Wensman	W1129NRX	9/21	41	20.0	39.3	53.5	77.1	73.8	68.1	--
Wensman	W3080NR2	9/15	38	20.1	40.1	53.3	67.3	62.1	60.9	63.5
Mean		9/18	37	20.3	39.9	51.6	65.0	63.6	60.1	65.0
CV %		6.0	9.2	2.1	1.9	10.1	8.6	11.3	15.1	--
LSD 0.05		5	5	1.3	1.6	8.3	13.3	9.6	7.0	--
LSD 0.10		4	5	1.1	1.3	7.1	10.1	8.2	5.9	--

Planted: Fairmount, May 17; Milnor, May 9; Walcott, May 7. Harvested: Fairmount, Oct. 10; Milnor, Oct. 7; Walcott, Oct. 6.

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

**Table 11. 2016 NDSU Combined Southern Conventional and Liberty Link Soybean Locations in North Dakota - Author, T. Helms.**

Company/ Brand	Variety	Maturity <sup>1</sup> (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield			2016 3-site Avg.	2-yr. Avg.
						Fairmount	Milnor	Walcott		
Bayer	CZ 0525LL	9/15	33	21.0	41.3	34.3	63.5	60.3	52.7	60.3
Bayer	CZ 1201LL	9/24	37	20.7	39.5	47.2	70.2	73.6	63.7	--
Bayer	CZ 1332LL	9/24	31	19.6	40.0	53.3	64.5	60.4	59.4	62.3
Brushvale	BS 0808	9/14	32	19.7	41.4	39.7	60.3	51.4	50.5	--
Brushvale	BS 1206	9/18	30	19.6	42.5	44.6	59.3	52.8	52.2	--
Brushvale	BS 1511	9/19	32	20.3	40.7	44.8	58.7	59.2	54.2	--
Brushvale	BS 1512	9/21	40	19.4	41.9	54.7	66.9	67.4	63.0	--
Dyna-Gro	S06LL26	9/14	32	20.2	40.5	25.3	53.1	46.5	41.6	--
Dyna-Gro	S07LL57	9/15	34	19.9	38.9	35.7	64.2	60.0	53.3	--
Dyna-Gro	S08LL84	9/19	31	20.0	40.6	37.0	57.3	57.0	50.4	57.5
Integra	31007N	9/13	31	20.2	38.4	27.6	65.0	56.9	49.8	58.5
NDSU	Asthabula	9/7	32	21.8	38.5	23.6	56.6	50.3	43.5	53.0
NDSU	ND Bison	9/15	30	21.1	38.6	29.5	51.3	55.0	45.3	53.3
NDSU	ND1100S	9/6	29	20.1	39.0	18.0	51.0	48.8	39.3	--
NDSU	ND1406HP	9/10	37	18.2	44.8	32.7	41.5	53.4	42.5	49.5
NDSU	ProSoy	9/17	42	18.6	44.2	35.2	52.2	55.1	47.5	53.9
NDSU	Sheyenne	9/13	37	20.6	39.7	33.6	56.0	57.5	49.0	55.9
NuTech	3066L	9/16	28	20.9	42.0	31.5	51.4	67.1	50.0	58.7
NuTech	3115L	9/23	36	19.4	40.9	48.3	69.9	68.2	62.1	--
Peterson	L07-16N	9/14	25	20.1	38.9	31.2	60.1	53.3	48.2	56.1
Peterson	L11-13N	9/20	36	20.3	40.7	40.7	68.2	67.0	58.6	61.4
Peterson	L12-16N	9/23	37	19.0	41.4	53.8	79.8	74.9	69.5	--
Proseed	21-00	9/19	37	21.5	40.1	42.3	61.4	71.4	58.4	--
Proseed	41-31N	9/22	32	20.6	40.4	50.4	70.5	67.6	62.8	68.0
Proseed	51-21N	9/24	34	19.8	40.4	51.0	68.0	74.2	64.4	--
Richland	MK 0508	9/14	30	18.6	39.4	15.6	43.7	49.4	36.2	44.7
Richland	MK 0603	9/14	35	17.5	40.9	22.1	57.1	54.1	44.4	51.4
Richland	MK 0808CN	9/17	35	20.8	39.1	43.8	48.5	57.3	49.9	--
Richland	MK 1016	9/15	36	18.3	41.5	23.2	54.8	50.1	42.7	46.6
SDSU	Codington	9/16	34	20.3	41.6	14.2	48.3	50.4	37.6	49.1
SDSU	Roberts	9/16	34	20.5	40.3	30.3	59.8	58.8	49.6	55.6
Soyko	JJ101	9/10	30	19.6	41.7	25.6	37.9	43.3	35.6	--
Soyko	JJ103	9/11	28	19.8	41.5	26.9	38.7	45.5	37.0	--
Terning	TS2010	9/20	35	19.8	40.8	45.0	55.7	66.8	55.8	--
Thunder	5411LLN	9/17	37	20.5	41.7	44.0	58.5	63.1	55.2	61.7
Mean		9/17	33	20.0	40.7	35.9	57.8	58.5	50.7	55.6
CV %		1/6	10.3	2.2	2.1	15.5	17.3	11.4	15.1	--
LSD 0.05		5	5.0	1.4	1.8	8.8	15.7	10.6	7.0	--
LSD 0.10		4	5.0	1.1	1.5	7.4	8.0	8.9	5.9	--

Planted: Fairmount, May 17; Milnor, May 9; Walcott, May 7. Harvested: Fairmount, Oct. 10; Milnor, Oct. 7; Walcott, Oct. 6.

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



**Table 12. 2016 Soybean - Dryland, Roundup Ready - Carrington - Authors, M. Ostlie and B. Schatz (Page 1 of 2).**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
										2016	3-yr. Avg.
Channel	0205R2	0.2	9/2	3	23	2,519	56.7	16.1	35.2	36.6	--
Channel	0209R2	0.2	9/5	4	25	3,229	56.4	17.1	34.6	38.6	--
Channel	0507R2	0.5	9/12	4	25	3,044	56.5	15.5	36.2	48.8	--
Dairyland	DSR-C918/R2Y	00.9	9/5	3	22	3,019	56.5	16.1	34.4	42.4	44.9
Dairyland	DSR-0305/R2Y	0.3	9/12	4	26	3,023	56.3	15.7	35.5	55.9	53.2
Dairyland	DST04-003/R2Y	0.4	9/18	5	26	2,751	57.3	16.0	35.2	56.4	--
Dairyland	DSR-0619/R2Y	0.6	9/15	4	24	2,936	56.3	15.3	35.7	54.4	--
Dyna-Gro	S03RY36	0.3	9/15	4	27	2,583	56.3	15.7	36.4	54.4	--
Dyna-Gro	S04XT77	0.4	9/11	4	26	2,927	56.7	16.1	35.3	53.2	--
Dyna-Gro	S06RY47	0.6	9/17	5	24	2,996	56.7	15.3	35.9	51.4	--
Dyna-Gro	S06XT87	0.6	9/16	7	30	3,026	56.9	15.9	34.3	51.6	--
Integra	20215	0.1	9/14	3	23	3,120	56.8	15.2	35.5	48.1	--
Integra	20300	0.3	9/15	4	24	3,213	56.8	15.8	34.5	55.1	53.1
Integra	20468	0.4	9/15	5	25	2,885	56.6	15.7	34.9	47.1	--
Integra	50098	0.4	9/10	5	26	3,284	57.3	15.6	34.7	42.5	--
Legacy	LS-0334 RR2	0.3	9/16	5	24	3,235	57.2	15.9	35.0	61.1	54.4
Legacy	LS-0635N RR2	0.6	9/18	4	27	2,861	56.6	15.5	35.7	47.7	--
Legacy	LS-0833N RR2	0.8	9/20	6	27	2,873	56.7	15.7	34.6	57.0	48.5
Legacy	LS-0837N RR2	0.8	9/20	6	26	3,177	57.1	15.6	33.9	56.8	--
Legacy	LS-0935N RR2	0.9	9/21	5	26	2,743	56.8	15.5	34.2	58.8	--
Mycogen	5B013R2	0.1	9/5	4	25	3,252	56.4	17.3	34.0	44.9	--
Mycogen	5B024R2	0.2	9/4	4	25	2,422	57.1	16.0	35.3	44.3	45.3
Mycogen	5B033R2	0.3	9/14	5	25	3,114	57.0	16.5	33.4	57.3	55.6
Mycogen	5B040R2	0.4	9/16	5	27	3,218	57.0	15.8	34.4	60.0	55.2
Mycogen	X56035NR2	0.6	9/17	4	26	2,788	57.7	15.4	35.6	53.5	--
NorthStar	NS 0111R2	0.1	9/4	4	24	3,287	56.7	17.3	34.1	43.2	--
NorthStar	NS 0200NR2	0.2	9/17	5	29	3,338	57.1	15.4	35.0	53.4	--
NorthStar	NS 318R2	0.3	9/17	5	24	3,285	56.7	15.5	35.4	61.1	--
NorthStar	NS 0480NR2	0.4	9/18	5	28	3,041	56.7	15.3	35.7	58.7	--
NorthStar	NS 0651NR2	0.6	9/19	6	26	2,975	56.4	15.9	33.8	51.1	--
NuTech	6097R2	0.9	9/18	4	23	2,654	56.4	17.8	32.4	48.8	--
Peterson	17X03	0.3	9/13	3	30	2,925	56.6	15.4	35.7	49.5	--
Peterson	17X04N	0.4	9/12	3	27	3,051	56.7	16.0	35.3	51.3	--
Peterson	16R06N	0.6	9/15	5	25	2,956	57.0	16.2	34.5	51.5	--
Prairie	PB-0441R2	0.4	9/16	3	24	3,248	56.8	16.0	34.3	56.7	--
Prairie	PB-0676R2	0.6	9/15	5	27	2,897	56.8	15.5	35.7	50.7	--
Prairie	X16061R2	0.6	9/18	6	26	2,992	57.1	15.7	35.0	59.1	--
Prairie	PB-0777R2	0.7	9/20	5	25	2,885	57.0	15.6	33.8	54.9	--
Prairie	PB-0987R2	0.8	9/22	7	29	3,238	56.8	15.9	33.7	60.6	--
Proseed	XT603	00.3	9/10	4	29	3,028	57.0	17.0	34.1	48.9	--
Proseed	XT604	00.4	9/9	5	24	3,011	57.0	15.6	35.6	46.9	--
Proseed	50-60N	00.6	9/14	5	24	2,895	56.8	16.5	34.5	50.8	--
Proseed	30-20	0.2	9/14	5	28	2,991	56.2	16.3	34.7	52.5	--
REA	R0815	0.8	9/22	5	28	3,168	56.5	16.8	33.9	68.7	--
REA	R0216	0.2	9/7	5	27	3,313	56.4	17.1	34.3	45.6	--
REA	64G94	0.4	9/18	5	27	2,709	56.6	15.9	34.2	56.5	--
Mean			9/13	5	26	3,012	56.8	16.0	34.8	51.5	50.8
CV %			1.8	32	11.2	3.3	0.9	1.9	1.4	11.1	--
LSD 0.05			3.0	2.0	4.0	137	0.7	0.4	0.7	7.9	--
LSD 0.10			2.6	1.7	3.3	115	0.6	0.4	0.6	6.6	--

**Table 12. 2016 Soybean - Dryland, Roundup Ready - Carrington - Authors, M. Ostlie and B. Schatz (Page 2 of 2).**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
										2016	3-yr. Avg.
Thunder	3601	0.1	9/4	5	23	3,352	56.2	15.7	36.3	40.5	--
Thunder	3503	0.3	9/14	4	25	2,702	57.1	15.7	35.2	47.7	51.3
Thunder	SB8703	0.3	9/11	4	27	2,963	56.9	17.6	34.0	53.6	--
Thunder	3505N	0.5	9/18	5	26	3,102	57.0	15.2	35.9	54.7	--
Thunder	3606N	0.6	9/18	5	25	2,934	56.9	16.2	34.6	53.8	51.8
Wensman	W1016RX	0.1	9/9	4	26	3,236	57.0	15.5	34.6	51.5	--
Wensman	W3018R2	0.1	9/3	5	25	3,284	56.7	16.2	34.9	39.8	--
Wensman	W3024R2	0.2	9/3	5	24	2,989	56.6	17.6	33.9	45.1	46.1
Wensman	W1048NRX	0.4	9/11	3	25	2,950	56.7	16.4	34.4	46.9	--
Mean			9/13	5	26	3,012	56.8	16.0	34.8	51.5	50.8
CV %			1.8	32	11.2	3.3	0.9	1.9	1.4	11.1	--
LSD 0.05			3.0	2.0	4.0	137	0.7	0.4	0.7	7.9	--
LSD 0.10			2.6	1.7	3.3	115	0.6	0.4	0.6	6.6	--

Planted: May 12. Harvested: Sept. 27. Previous crop: corn.

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

**Table 13. 2016 Soybean - Irrigated, Roundup Ready - Carrington - Authors, M. Ostlie, B. Schatz and G. Endres.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Yield	
									2016	3-yr. Avg.
									----- (bu/a) -----	
Dairyland	DSR-0305/R2Y	0.3	9/19	1	21	2	3,211	56.7	61.0	--
Dairyland	DST04-003/R2Y	0.4	9/22	2	23	1	2,789	57.6	61.2	--
Dairyland	DSR-0619/R2Y	0.6	9/22	3	23	2	2,898	56.9	51.1	--
Dairyland	DSR-0711/R2Y	0.7	9/25	2	24	1	2,885	57.0	52.4	52.0
Dyna-Gro	S03RY36	0.3	9/20	1	20	1	2,651	57.0	55.5	--
Dyna-Gro	S04XT77	0.4	9/19	2	21	2	3,111	56.8	54.6	--
Dyna-Gro	S06RY47	0.6	9/22	2	25	2	2,928	56.9	53.7	--
Dyna-Gro	S06XT87	0.6	9/24	4	29	2	3,071	57.1	59.4	--
Integra	20468	0.4	9/21	2	25	2	3,022	56.9	53.1	--
Integra	50098	0.4	9/19	1	21	2	3,359	57.2	55.9	--
Legacy	LS-0334 RR2	0.3	9/22	3	25	1	3,225	56.7	71.8	55.9
Legacy	LS-0635N RR2	0.6	9/22	2	22	2	2,900	57.1	46.6	--
Legacy	LS-0833N RR2	0.8	9/27	2	26	2	2,975	57.1	68.7	51.0
Legacy	LS-0837N RR2	0.8	9/27	3	28	2	3,224	57.0	69.9	--
Legacy	LS-0935N RR2	0.9	9/28	3	28	2	2,895	57.4	66.0	--
NuTech	6097R2	0.9	9/27	1	21	2	2,710	56.9	52.4	--
Peterson	17X03	0.3	9/20	1	23	2	3,093	56.8	49.1	--
Peterson	17X04N	0.4	9/20	2	22	2	3,058	56.6	57.0	--
Peterson	16R06N	0.6	9/22	1	24	2	2,887	56.7	59.4	--
Prairie	PB-0397R2	0.3	9/22	2	23	2	3,043	57.2	52.6	--
Prairie	PB-0598R2	0.5	9/22	1	24	3	3,161	57.0	56.3	--
Prairie	PB-0676R2	0.6	9/22	1	21	2	2,882	57.0	49.1	--
Prairie	PB-0777R2	0.7	9/26	2	27	1	2,973	57.2	75.1	59.7
Prairie	PB-0987R2	0.8	9/27	3	29	1	3,260	56.9	67.4	--
REA	R0216	0.2	9/18	1	21	2	3,093	56.8	51.4	--
REA	64G94	0.4	9/23	2	24	1	2,804	57.1	55.2	--
REA	R0815	0.8	9/27	3	28	2	3,291	56.8	68.9	--
Thunder	3601	0.1	9/19	1	21	2	3,040	56.8	50.7	--
Thunder	3503	0.3	9/21	1	21	2	2,641	56.6	54.7	53.1
Thunder	SB8703	0.3	9/20	1	24	1	3,006	56.5	57.6	--
Thunder	3505N	0.5	9/22	2	25	2	3,146	57.0	58.4	--
Thunder	3606N	0.6	9/22	1	21	2	2,928	57.2	47.7	--
Wensman	W3024R2	0.2	9/18	1	22	2	2,972	56.4	53.7	50.0
Wensman	W1048NRX	0.4	9/19	1	21	1	3,066	56.6	52.4	--
Wensman	W1071NRX	0.7	9/23	2	25	2	3,048	57.2	57.3	--
Wensman	W3072NR2	0.7	9/22	1	23	1	2,919	56.7	52.1	--
Mean			9/22	2	24	2	3,004	56.9	57.3	53.6
CV %			1.1	41.6	8.4	37	2.0	0.5	10.2	--
LSD 0.05			1.9	1.1	2.8	1	86	0.4	8.2	--
LSD 0.10			1.6	0.9	2	1	72	0.4	6.8	--

Planted: May 18. Harvested: Oct. 13. Previous crop: barley.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.

**Table 14. 2016 Soybean - Dryland, Conventional - Carrington - Authors, M. Ostlie, B. Schatz and J. Nielsen.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
											2016	3-yr. Avg. ---(bu/a)---
NDSU	Ashtabula	0.4	9/16	2	27	1	3,331	56.7	16.9	34.1	62.4	53.2
NDSU	Cavalier	00.7	9/6	1	23	1	2,687	56.8	15.5	35.4	39.7	40.5
NDSU	ND Bison	0.7	9/20	2	26	1	3,296	56.3	15.1	34.5	57.2	50.2
NDSU	ND Henson	0.0	9/10	1	23	2	3,214	56.9	16.5	35.0	52.6	46.5
NDSU	Sheyenne	0.7	9/19	3	29	1	3,254	57.0	15.4	34.8	63.5	51.7
Richland	MK0249	0.2	9/18	2	25	3	5,037	56.7	15.2	34.3	56.1	47.3
Richland	MK0508	0.8	9/20	2	27	4	5,652	57.5	14.1	35.5	53.7	44.0
Richland	MK0603	0.6	9/21	3	29	3	5,636	56.9	13.2	37.2	50.7	--
Richland	MK42	0.7	9/20	2	30	2	2,727	56.9	13.8	38.3	55.1	--
Richland	MK808CN	0.8	9/20	3	30	2	3,551	56.8	15.4	35.3	58.1	--
Richland	MK9404CN	0.6	9/19	2	31	2	2,993	56.2	15.8	34.8	54.6	--
Mean			9/18	2	27	2	3,762	56.8	15.2	35.4	54.9	47.6
CV %			0.8	34	9.2	31	2.1	1.1	1.7	1.1	6.2	--
LSD 0.05			1.5	1.1	3.6	0.8	111	NS	0.4	0.6	5.0	--
LSD 0.10			1.2	0.9	3.0	0.7	92	NS	0.3	0.5	4.1	--

Planted: May 17. Harvested: Sept. 29. Previous crop: corn. (See footnotes below)

**Table 15. 2016 Soybean - Dryland, Liberty Link - Carrington - Authors, M. Ostlie, B. Schatz and J. Nielsen.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
											2016	3-yr. Avg. ---(bu/a)---
Bayer	CZ0121LL	0.1	9/6	2	26	0.8	2,484	55.1	16.4	35.5	41.5	--
Bayer	CZ0201LL	0.2	9/8	2	26	0.8	2,762	56.4	16.8	34.6	45.2	--
Bayer	CZ0301LL	0.3	9/14	3	26	0.3	2,721	55.9	16.8	34.9	57.8	--
Bayer	CZ0525LL	0.5	9/18	2	26	1.0	2,566	56.2	16.0	36.3	60.0	--
Bayer	CZ0601LL	0.6	9/19	3	28	1.0	2,468	56.5	15.3	34.4	60.0	--
NuTech	2086L	0.8	9/21	3	25	1.0	2,659	55.8	15.8	35.3	57.3	52.9
NuTech	3066L	0.6	9/18	2	25	1.0	2,622	56.1	16.0	36.3	58.7	58.0
Rob SC	RS0314-LL	0.3	9/12	3	26	0.5	2,779	55.6	16.6	35.1	59.8	--
Rob SC	RS0665-LL	0.6	9/19	2	28	1.0	2,487	56.2	15.1	34.5	62.0	--
Thunder	5605LLN	0.5	9/18	2	27	0.8	2,583	56.4	15.8	36.9	55.3	--
Mean			9/15	2	26	0.8	2,613	56.0	16.1	35.4	55.6	55.4
CV %			1.0	28	5.1	64	2.9	0.6	1.8	1.1	6.6	--
LSD 0.05			1.8	NS	1.9	NS	112	0.5	0.4	0.6	5.3	--
LSD 0.10			1.5	NS	1.6	NS	93	0.4	0.4	0.5	4.4	--

Planted: May 17. Harvested: Sept. 30. Previous crop: corn.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.

**Table 16. 2016 Soybean - Irrigated, Liberty Link - Carrington - Authors, M. Ostlie, B. Schatz and E. Aberle.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
											2016	2-yr. Avg.
Bayer	CZ0121LL	0.1	9/24	1	17	0.3	2,924	53.9	16.1	33.7	35.3	37.7
Bayer	CZ0201LL	0.2	9/24	2	19	1.3	3,071	53.9	15.8	34.1	31.8	--
Bayer	CZ0301LL	0.3	9/29	2	21	0.5	3,021	53.6	16.1	33.8	42.7	--
Bayer	CZ0525LL	0.5	10/1	2	22	0.8	2,817	56.3	15.6	34.8	58.1	55.3
Bayer	CZ0601LL	0.6	10/1	3	23	1.3	2,849	54.6	14.5	33.6	50.6	--
NuTech	3066L	0.6	10/1	3	23	0.8	2,848	55.7	15.2	34.0	56.9	53.4
NuTech	2086L	0.8	10/1	4	24	0.8	3,033	55.3	15.5	34.7	56.2	52.1
Peterson	L04-16	0.4	10/1	2	23	1.0	2,750	54.6	15.5	36.1	43.8	--
Rob SC	EX0310	0.3	9/28	2	22	1.0	3,030	54.6	16.1	34.1	50.6	--
Rob SC	EX0620	0.6	10/1	3	25	1.3	2,846	55.8	14.8	33.6	54.2	--
Thunder	5605LLN	0.5	9/30	2	21	1.3	2,949	55.9	15.6	35.2	55.2	--
Mean			9/29	2	22	0.9	2,922	54.9	15.5	34.3	48.7	49.6
CV %			0.5	31	5.9	47	3.1	2.4	1.7	1	7.8	8.0
LSD 0.05			1.0	2.2	1.9	0.6	129	NS	0.4	0.5	5.5	5.6
LSD 0.10			0.9	1.8	1.5	0.5	107	1.6	0.3	0.4	4.5	4.6

Planted: May 18. Harvested: Oct. 13. Previous crop: field pea. Impacted by hail storm on July 9 that caused significant defoliation.

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

<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.

**Table 17. 2016 Soybean - Irrigated, Conventional - Carrington - Authors, M. Ostlie, B. Schatz and E. Aberle.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Test Weight (lb/bu)	Seed Yield	
								2016	3-yr. Avg.
NDSU	Ashtabula	0.4	9/24	1	19	0.3	56.4	39.0	42.6
NDSU	Cavalier	0.7	9/22	2	17	0.3	56.8	21.6	33.4
NDSU	ND Bison	0.7	10/1	2	20	1.0	57.0	39.3	39.9
NDSU	ND Henson	0.0	9/21	3	18	1.3	57.5	38.5	40.4
NDSU	Sheyenne	0.7	9/27	2	20	0.8	56.6	44.9	42.9
Mean			9/23	2	19	0.7	56.9	36.7	39.8
CV %			0.8	41	12.2	60	0.7	10.2	--
LSD 0.05			1.4	NS	3.4	0.6	0.6	5.7	--
LSD 0.10			1.2	NS	2.9	0.5	0.5	4.7	--

Planted: May 18. Harvested: Oct. 13. Previous crop: field pea.

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

<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.

**Table 18. 2016 Soybean - Dryland, Roundup Ready - Dazey (Carrington REC) - Authors, M. Ostlie, B. Schatz and T. Indergaard.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield		
											2016	2-yr. Avg.	3-yr. Avg.
Dairyland	DSR-0619/R2Y	0.6	9/7	4	38	2.0	2,863	54.4	14.9	36.0	64.1	58.2	--
Dairyland	DSR-0711/R2Y	0.7	9/11	3	37	2.3	2,814	55.4	16.2	33.2	67.8	58.1	54.4
Dairyland	DSR-0807/R2Y	0.8	9/12	4	38	1.3	2,804	55.2	15.5	35.1	61.9	--	--
Dairyland	DSR-0988/R2Y	0.9	9/14	5	39	2.5	3,018	55.1	15.2	33.4	70.0	--	--
Dyna-Gro	S06RY47	0.6	9/7	3	37	2.0	2,900	54.5	14.9	35.8	61.5	--	--
Dyna-Gro	S06XT87	0.6	9/7	4	44	3.8	2,800	54.8	15.6	33.4	64.2	--	--
Dyna-Gro	S07RY45	0.7	9/12	4	37	2.8	2,996	54.4	15.4	33.7	69.0	63.5	62.1
Integra	20775N	0.7	9/12	4	38	2.8	2,987	55.1	15.6	33.9	71.9	63.7	--
Legacy	LS-0635N RR2	0.6	9/8	3	37	1.8	2,858	54.6	15.0	35.8	64.9	58.0	--
Legacy	LS-0833N RR2	0.8	9/10	3	38	2.0	2,844	55.2	15.6	34.1	68.7	61.1	59.3
Legacy	LS-0837N RR2	0.8	9/14	5	39	2.3	2,983	55.0	15.2	33.4	69.0	--	--
Legacy	LS-0935N RR2	0.9	9/13	3	40	2.3	2,672	55.1	15.4	33.2	71.2	63.8	--
Legacy	LS-1134N RR2	1.1	9/16	4	39	3.5	2,896	54.6	15.8	33.7	62.7	--	--
Legacy	LS-1335N RR2	1.3	9/15	5	39	2.5	2,788	54.9	15.9	33.6	73.0	--	--
NorthStar	NS 0480NR2	0.4	9/6	4	36	1.8	2,917	54.4	15.3	35.2	66.1	--	--
NorthStar	NS 0651NR2	0.6	9/8	3	36	1.8	2,869	54.3	15.0	36.1	57.3	54.1	--
NorthStar	NS 0941NR2	0.9	9/12	5	37	2.0	2,814	54.6	15.9	33.7	66.1	62.2	--
NuTech	6097R2	0.9	9/7	3	35	1.8	2,675	54.8	17.2	31.8	62.3	58.4	--
Peterson	16R06N	0.6	9/7	4	37	1.5	2,879	54.7	15.1	36.0	61.1	57.2	--
Peterson	15R07N	0.7	9/10	4	40	2.3	2,974	55.1	15.4	34.0	70.4	63.5	61.6
Peterson	16X07N	0.7	9/7	3	43	2.8	2,756	54.7	15.5	33.9	61.5	--	--
Peterson	16R09N	0.9	9/11	4	39	2.5	2,680	54.9	15.4	33.7	65.9	61.9	--
Prairie	PB-0676R2	0.6	9/7	3	37	2.3	2,876	54.6	15.2	35.9	61.3	57.0	--
Prairie	X16061R2	0.6	9/7	5	38	1.8	2,750	54.8	15.6	34.3	65.8	--	--
Prairie	PB-0777R2	0.7	9/11	3	40	2.3	2,834	55.1	15.6	34.5	72.8	64.7	62.0
Proseed	XT607	0.7	9/7	4	43	1.5	2,818	54.8	15.8	33.4	63.3	--	--
Proseed	30-80	0.8	9/11	3	39	1.8	2,800	55.0	15.6	34.3	68.3	61.9	61.5
Proseed	XT610	1.0	9/13	4	38	1.3	3,038	54.2	15.5	33.6	69.3	--	--
REA	R0815	0.8	9/10	3	38	2.3	3,005	54.5	17.1	33.1	70.7	64.1	62.9
REA	64G94	0.4	9/6	3	38	3.3	2,766	54.1	15.6	33.6	62.0	56.7	54.4
Thunder	3606N	0.6	9/7	3	36	1.8	2,852	54.7	15.0	35.8	63.1	58.9	57.7
Thunder	SB8707N	0.7	9/4	4	35	1.0	3,133	54.3	15.4	34.6	70.0	--	--
Thunder	3408N	0.8	9/9	4	41	2.8	2,870	54.7	15.9	33.4	68.4	--	--
Wensman	W1048NRX	0.4	9/4	3	37	1.0	2,820	54.4	15.4	35.0	67.2	--	--
Wensman	W1067RX	0.6	9/9	3	38	1.8	3,065	55.0	15.0	33.9	73.1	--	--
Wensman	W3072NR2	0.7	9/8	3	37	1.8	2,787	54.0	14.9	36.2	63.8	58.1	--
Wensman	W3080NR2	0.8	9/12	4	40	2.5	3,001	54.7	15.7	33.3	73.5	64.5	62.0
Mean			9/9	4	38	2.1	2,870	54.7	15.5	34.3	66.6	60.5	59.8
CV %			1.3	25	4.7	29	2.6	1.0	1.7	1.3	6.7	--	--
LSD 0.05			2.2	1.3	2.5	0.9	78.0	NS	0.4	0.6	6.3	--	--
LSD 0.10			1.8	1.1	2.1	0.7	66	NS	0.3	0.5	5.2	--	--

Planted: May 13. Harvested: Sept. 30. Previous crop: spring wheat.

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

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

**Table 19. 2016 Soybean - Irrigated, Liberty Link - Oakes (Carrington REC) - Authors, K. Cooper, L. Besemann and H. Eslinger**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Plant Lodge <sup>2</sup> (0-9)	Plant Height (inch)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield 2016 2-yr. ---(bu/a)---	
Bayer	CZ0525LL	0.5	9/14	4	22	2,309	56.7	19.1	34.6	57.6	66.1
Bayer	CZ0601LL	0.6	9/14	4	25	2,203	57.0	18.4	33.0	52.7	--
Bayer	CZ1201LL	1.2	9/22	8	25	2,179	57.0	18.3	34.4	56.4	--
Bayer	CZ1332LL	1.3	9/19	6	23	2,289	42.4	17.7	34.6	55.0	69.1
NuTech	2086L	0.8	9/19	6	28	2,491	55.8	18.5	34.3	48.3	61.0
NuTech	3115L	1.1	9/21	7	24	2,187	57.2	18.3	34.5	61.7	--
Rob SC	RS0828-LL	0.8	9/18	3	27	2,472	55.9	18.5	34.6	50.3	--
Rob SC	RS1231-LL	1.2	9/21	8	25	2,193	42.5	18.5	34.2	59.0	--
Rob SC	RS1452-LL	1.4	9/23	7	27	2,071	56.8	18.3	33.5	66.0	--
Thunder	5411LLN	1.1	9/17	6	22	2,430	55.9	19.3	34.0	50.4	62.0
Thunder	5615LLN	1.5	9/23	8	27	2,723	56.4	18.6	33.2	51.6	--
Mean			9/19	6	25	2322	54.0	18.5	34.1	55.4	64.5
CV %			0.5	20.4	10.6	2.4	21.4	0.7	0.7	5.1	--
LSD 0.05			0.9	1.8	3.8	82	16.6	0.2	0.4	4.1	--
LSD 0.10			0.7	1.5	3.2	67	13.8	0.2	0.3	3.4	--

Planted: May 17. Harvested: Oct. 1. Previous crop: spring wheat. (See footnotes below Table 18).

**Table 20. 2016 Soybean - Irrigated, Conventional - Oakes (Carrington REC) - Authors, K. Cooper, L. Besemann and H. Eslinger**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Plant Lodge <sup>2</sup> (0-9)	Plant Height (inch)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield (bu/a)
Richland	MK0603	0.6	9/16	9	18	5,378	57.3	16.6	35.2	41.1
Richland	MK0508	0.8	9/16	8	19	5,328	57.6	17.2	33.6	41.3
Richland	MK1016	1.0	9/16	8	20	5,114	57.9	17.1	35.2	45.4
Richland	MK9101	1.0	9/18	6	28	2,149	56.7	20.2	34.8	48.1
Richland	MK42	0.7	9/14	6	21	2,236	55.9	17.7	36.2	44.2
Richland	MK41	1.1	9/20	5	30	2,288	57.7	17.3	35.9	56.4
Richland	MK9404CN	0.6	9/14	6	21	2,604	56.6	21.5	34.9	48.3
Richland	MK808CN	0.8	9/14	6	21	3,098	57.0	19.1	33.1	46.9
Mean			9/16	7	22	3524	57.1	18.3	34.9	46.5
CV %			1.1	16.1	9.4	4.1	1.2	2.2	1.6	12.1
LSD 0.05			2.0	1.5	3.0	210	1.0	0.6	0.8	8.4
LSD 0.10			1.7	1.3	2.5	174	0.9	0.5	0.7	6.9

Planted: May 17. Harvested: Oct. 3. Previous crop: spring wheat. (See footnotes below Table 18).

**Table 21. 2016 Soybean - Conventional - Dazey (Carrington REC) - Authors, M. Ostlie, B. Schatz, and T. Indergaard.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Plant Lodge <sup>2</sup> (0-9)	Plant Height (inch)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield 2016 2-yr. ---(bu/a)---	
NDSU	Ashtabula	0.4	9/7	3.0	38.8	2,752	55.4	17.2	33.4	60.1	46.8
NDSU	ND Bison	0.7	9/11	1.0	36.8	2,862	56.6	16.3	33.5	67.5	50.5
NDSU	ND Henson	0.0	9/2	2.0	33.1	2,869	57.0	17.0	33.6	59.1	46.3
NDSU	Sheyenne	0.7	9/9	1.8	40.0	2,791	56.1	16.2	33.8	63.3	48.6
Richland	MK0249	0.2	9/7	2.5	35.6	4,549	56.1	15.7	33.7	57.5	45.6
Richland	MK0508	0.8	9/10	4.5	36.8	4,948	56.0	15.2	34.6	50.1	42.4
Richland	MK0603	0.6	9/13	4.0	38.6	5,084	56.1	14.5	35.0	53.8	44.4
Richland	MK1016	1.0	9/9	3.3	42.1	4,989	56.8	15.2	35.1	53.2	44.2
Richland	MK41	1.1	9/15	1.3	38.4	2,371	57.2	14.7	36.0	69.7	--
Richland	MK42	0.7	9/10	2.0	38.4	2,279	56.4	14.6	37.3	62.8	50.0
Richland	MK808CN	0.8	9/8	3.8	37.8	3,078	56.3	16.8	33.2	63.3	--
Richland	MK9101	1.0	9/14	2.3	42.9	2,257	56.5	15.1	36.7	56.4	46.6
Richland	MK9404CN	0.6	9/10	2.8	41.5	2,512	56.2	16.8	34.2	58.6	--
Mean			9/7	2.4	38.4	3,066	56.1	16.2	34.3	60.6	46.5
CV %			1.6	37.6	4.5	4.3	0.9	2.1	1.9	6.4	--
LSD 0.05			2.7	1.3	2.5	184	0.7	0.5	0.9	5.5	--
LSD 0.10			2.2	1	2	154	0.6	0.4	0.8	4.5	--

Planted: May 13. Harvested: Oct. 10. Previous crop: spring wheat.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.<sup>2</sup>Lodging score: 0-upright, 9-flat on ground.

**Table 22. 2016 Soybean - Dryland, Liberty Link - Dazey (Carrington REC) - Authors, M. Ostlie, B. Schatz and T. Indergaard.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
											2016	3-yr. Avg. ----- (bu/a) -----
Bayer	CZ0121LL	0.1	9/5	3	34	2.0	2,432	54.7	16.2	33.8	65.3	53.7
Bayer	CZ0201LL	0.2	9/3	3	34	2.3	2,581	54.7	16.5	33.7	60.9	--
Bayer	CZ0301LL	0.3	9/7	3	35	2.5	2,415	54.4	16.6	34.7	69.8	--
Bayer	CZ0525LL	0.5	9/10	3	36	1.3	2,319	55.8	15.7	35.6	69.1	60.4
Bayer	CZ0601LL	0.6	9/15	3	39	1.8	2,257	55.5	15.1	33.8	74.5	--
Bayer	CZ1201LL	1.2	9/18	4	39	1.0	2,185	56.4	15.5	35.1	75.4	--
Bayer	CZ1332LL	1.3	9/18	3	38	0.5	2,127	56.0	15.0	35.5	78.1	68.6
NuTech	2086L	0.8	9/16	4	34	0.0	2,536	55.3	16.0	34.6	67.1	60.1
NuTech	3066L	0.6	9/12	3	36	1.3	2,315	54.3	15.7	36.1	72.7	60.6
Mean			9/12	3	36	1.4	2,352	55.2	15.7	34.9	70.3	60.7
CV %			1.7	28	5.1	53	2.7	2.3	2.3	1.7	6.8	--
LSD 0.05			3.1	NS	2.7	1.0	92	NS	0.5	0.8	6.9	--
LSD 0.10			2.6	NS	2.2	0.9	76	NS	0.4	0.7	5.7	--

Planted: May 13. Harvested: Oct. 10. Previous crop: spring wheat.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.<sup>2</sup>Lodging: 0-none, 9-lying flat on the ground.**Table 23. 2016 Soybean - Dryland, Organic - Carrington - Authors, S. Zwinger and S. Schaubert.**

Company/ Brand	Variety	Mat. Group	Maturity <sup>1</sup> (date)	Pod Height (cm)	Plant Height (inch)	Plant Lodge <sup>2</sup> (0-9)	1,000 KWT (gram)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Yield
										3-yr. Avg.
NDSU	Ashtabula	0.4	9/10	7.0	19.3	0.3	150	3,020	56.4	56.4
NDSU	Cavalier	00.9	8/26	5.3	14.5	0.3	157	2,897	56.1	56.1
NDSU	Jim	00.6	8/26	6.3	16.1	0.0	142	3,193	55.8	--
NDSU	ND Bison	0.7	9/16	7.8	20.9	0.0	153	2,966	56.7	56.7
NDSU	ND Henson	0.0	9/3	6.8	18.8	0.0	157	2,898	57.2	57.2
NDSU	ND1406HP	0.6	9/10	6.3	20.3	0.0	170	2,674	56.8	--
NDSU	ProSoy	0.8	9/20	7.8	25.0	0.5	166	2,730	57.2	--
NDSU	Sheyenne	0.8	9/10	8.3	24.9	0.0	155	2,922	56.8	56.8
NDSU	Traill	0.0	8/27	5.0	14.9	0.0	148	3,066	57.1	57.1
Mean			9/7	6.7	19.4	0.1	155	2,930	56.7	56.7
CV %			0.9	17.1	7.7	263	2.3	2.3	0.6	--
LSD 0.05			2.3	1.7	2.3	0.5	5	101	0.5	--
LSD 0.10			1.9	1.4	1.9	0.4	4.1	84	0.4	--

Planted: May 9. Harvested: Sept. 29. Previous crop: oats.

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



**Table 24. 2016 Soybean - Dryland, Roundup Ready - LaMoure (Carrington REC) - Authors, T. Helms and B. Schatz.**

Company/ Brand	Variety	Maturity Group	Maturity <sup>1</sup> (date)	Plant Lodge <sup>2</sup> (0-9)	Seed Oil (%)	Seed Protein (%)	2016	2-yr. Avg.	3-yr. Avg.
							------(bu/a)-----		
Dairyland	DSR-0807/R2Y	0.8	9/19	1.3	17.5	35.5	81.8	--	--
Dairyland	DSR-0988/R2Y	0.9	9/18	2.0	--	--	76.5	--	--
Dairyland	DSR-1120/R2Y	1.1	9/17	2.0	18.3	34.1	72.4	58.5	62.0
Dyna-Gro	S06RY47	0.6	9/10	1.0	16.5	36.3	72.7	--	--
Dyna-Gro	S07RY45	0.7	9/16	1.7	17.5	33.4	86.8	66.3	70.0
Dyna-Gro	S09RY64	0.9	9/15	1.3	17.1	34.0	81.2	65.8	69.9
Integra	20775N	0.7	9/16	1.7	17.1	34.3	82.9	--	--
Integra	20815N	0.8	9/14	1.0	17.6	34.3	84.3	--	--
Integra	20915N	0.9	9/16	2.3	17.3	33.7	81.2	--	--
Legacy	LS-0837N RR2	0.8	9/14	1.0	17.9	33.2	74.4	--	--
Legacy	LS-0833N RR2	0.8	9/14	1.0	17.8	35.0	78.4	61.2	65.5
Legacy	LS-0935N RR2	0.9	9/16	1.0	16.5	36.4	78.2	62.9	--
Legacy	LS-1134N RR2	1.1	9/21	2.3	18.1	34.0	72.0	59.6	65.6
Legacy	LS-1335N RR2	1.3	9/18	1.7	17.7	33.3	79.9	63.5	--
NorthStar	NS 0651NR2	0.6	9/14	1.7	--	--	80.3	--	--
NorthStar	NS 0941NR2	0.9	9/15	1.3	17.7	34.1	86.4	67.0	--
NorthStar	NS 1040NR2	1.1	9/20	2.2	18.6	34.0	69.5	58.9	--
NorthStar	NS 1390NR2	1.3	9/23	2.7	17.1	35.6	74.3	--	--
NuTech	6097R2	0.9	9/15	1.3	19.4	33.1	83.2	65.7	--
NuTech	7127R2	1.2	9/18	1.3	--	--	83.2	--	--
Peterson	15R07N	0.7	9/11	1.3	17.6	34.5	79.5	63.4	70.5
Peterson	16R09N	0.9	9/17	1.7	16.9	33.8	78.3	61.5	--
Peterson	16R10	1.0	9/19	1.7	17.7	34.2	83.7	64.3	--
Prairie	PB-0676R2	0.6	9/12	1.0	16.8	36.1	78.8	63.8	--
Prairie	PB-0777R2	0.7	9/17	1.3	17.3	34.9	78.9	--	--
Prairie	PB-0863R2	0.8	9/17	1.0	17.7	34.8	78.3	59.7	--
Prairie	PB-0987R2	0.9	9/15	1.7	17.2	34.4	83.2	--	--
Proseed	20-70	0.7	8/31	1.3	17.3	34.9	57.3	--	--
REA	R0815	0.8	9/14	1.3	17.3	34.4	82.1	62.7	65.3
REA	69G14	0.9	9/14	1.0	17.7	34.5	78.1	--	--
Thunder	SB8707N	0.7	9/2	1.0	17.3	34.7	62.6	--	--
Thunder	3408N	0.8	9/15	1.0	17.0	34.6	73.0	--	--
Thunder	3614N	1.4	9/22	2.0	17.3	34.1	88.0	--	--
Wensman	W3072NR2	0.7	9/11	1.7	16.3	36.4	70.6	59.4	--
Wensman	W3080NR2	0.8	9/17	2.3	17.7	34.3	85.1	67.0	67.8
Wensman	W3100NR2	1.0	9/16	1.7	16.9	34.9	79.6	60.4	--
Mean			9/15	1.5	17.4	34.6	78.2	62.7	67.1
CV %			1.3	41.1	--	--	8.9	--	--
LSD 0.05			5.5	1.0	--	--	11.4	--	--
LSD 0.10			4.6	0.9	--	--	9.5	--	--

Planted: May 5. Previous crop: corn.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.

**Table 25. 2016 Soybean - Dryland, Conventional and Liberty Link - LaMoure (Carrington REC) - Authors, T. Helms and B. Schatz.**

Company/ Brand	Variety	Maturity		Plant Lodge <sup>2</sup>	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)				2016 ----- (bu/a) -----	3-yr. Avg.
<b>Conventional</b>								
NDSU	ND1406HP	0.6	9/9	1.3	15.7	38.3	63.5	48.2
NDSU	ND Bison	0.7	9/13	1.1	18.4	33.4	71.6	--
NDSU	Sheyenne	0.7	9/13	1.0	18.2	34.1	73.3	59.5
NDSU	ProSoy	0.8	9/17	3.8	16.3	37.9	59.5	48.9
Richland	MK0603	0.6	9/15	3.0	14.9	36.1	67.7	--
Richland	MK9404CN	0.6	9/14	1.0	19.0	33.1	61.7	--
Richland	MK42	0.7	9/14	2.3	16.5	38.0	67.3	--
Richland	MK0508	0.8	9/13	3.2	17.5	31.9	61.8	46.5
Richland	MK808CN	0.8	9/13	2.0	18.7	33.8	65.7	--
Richland	MK1016	1.0	9/10	2.0	16.9	34.9	54.3	48.2
Richland	MK9101	1.0	9/19	1.3	16.3	37.4	62.3	51.4
Richland	MK41	1.1	9/20	1.7	16.1	35.8	72.9	--
<b>Liberty Link</b>								
Bayer	CZ0525LL	0.5	9/15	1.0	18.1	35.5	82.3	--
Bayer	CZ0601LL	0.6	9/10	1.3	18.5	33.2	75.0	--
Bayer	CZ1201LL	1.2	9/23	2.3	16.9	35.5	75.9	--
Bayer	CZ1332LL	1.3	9/23	1.7	16.8	35.2	79.9	--
Rob SC	RS0828-LL	0.8	9/19	1.0	16.9	35.9	75.0	--
Rob SC	RS1231-LL	1.2	9/25	2.7	17.2	34.7	77.6	--
Thunder	5411LLN	1.1	9/21	3.0	17.8	35.5	76.7	--
Thunder	5615LLN	1.5	9/26	1.7	17.3	33.7	73.6	--
Mean			9/15	1.9	17.4	35.0	69.9	50.5
CV %			1.0	28.4	--	--	8.1	--
LSD 0.05			4.4	0.9	--	--	9.4	--
LSD 0.10			3.7	0.7	--	--	7.8	--

Planted: May 5. Previous crop: corn

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.

**Table 26. 2016 Soybean - Dryland, Roundup Ready - Wishek (Carrington REC) - Authors, M. Ostlie, B. Schatz and T. Indergaard.**

Company/ Brand	Variety	Maturity Group	Maturity <sup>1</sup> (date)	Pod Ht (cm)	Plant Ht (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield ----- (bu/a) -----	3-yr. Avg.
Channel	0709R2	0.7	9/1	3	33	0.0	3,256	57.3	15.9	34.8	44.8	--
Channel	0807R2	0.8	9/1	3	32	0.3	3,257	57.4	16.3	35.0	41.2	--
Channel	1108R2	1.1	9/3	3	34	0.3	3,617	57.5	16.7	34.9	45.1	49.7
Integra	20300	0.3	8/29	3	31	0.3	3,758	56.8	16.2	35.3	46.8	--
Integra	20468	0.4	8/29	4	33	0.3	3,295	56.7	16.4	35.3	47.5	--
Integra	20600	0.4	8/31	4	32	0.8	3,495	57.2	16.3	34.6	47.8	55.1
Integra	20775N	0.7	9/1	3	31	0.0	3,670	56.8	16.1	35.0	44.5	--
Legacy	LS-0635N RR2	0.6	8/31	3	32	0.5	3,398	56.9	16.0	35.6	42.7	--
Legacy	LS-0833N RR2	0.8	9/1	3	33	0.5	3,326	57.2	16.5	34.5	46.1	--
Legacy	LS-0837N RR2	0.8	9/2	3	33	0.0	3,639	57.0	15.9	35.1	43.6	--
Legacy	LS-0935N RR2	0.9	9/1	3	29	0.3	3,245	57.2	16.6	34.3	45.8	--
Legacy	LS-1134N RR2	1.1	9/6	3	37	1.0	3,450	57.4	16.5	35.0	48.7	--
Mycogen	5B033R2	0.3	8/28	3	32	0.3	3,435	56.2	16.4	35.2	47.9	--
Mycogen	5B040R2	0.4	8/30	3	29	0.3	3,689	56.9	16.2	35.4	46.4	--
Mycogen	5N078R2	0.7	8/29	3	30	0.0	3,475	56.6	16.0	35.6	41.4	--
Mycogen	5B082R2	0.8	8/31	2	30	0.0	3,246	57.0	16.6	36.2	45.7	--
Mycogen	5N091R2	0.9	9/2	3	32	0.5	3,495	57.3	16.1	35.8	46.5	58.2
NuTech	6097R2	0.9	8/30	2	28	0.3	3,081	56.7	17.2	34.0	45.3	--
NuTech	7127R2	1.2	9/5	3	31	0.8	3,203	57.9	15.3	35.9	45.9	--
Peterson	16R06N	0.6	8/30	3	30	0.3	3,315	56.8	16.0	36.0	43.2	--
Peterson	15R07N	0.7	8/31	3	32	0.3	3,608	57.0	16.3	34.8	51.2	53.3
Proseed	XT604	0.4	8/28	3	30	0.5	3,401	56.3	16.6	36.0	45.9	--
Proseed	50-60	0.6	8/30	3	32	0.5	3,321	56.6	16.1	36.2	51.1	--
Proseed	XT607	0.7	8/31	3	38	0.8	3,497	56.8	16.1	34.4	41.2	--
REA	66G14	0.6	9/1	3	31	0.5	3,625	56.8	15.7	35.7	49.8	52.5
REA	69G14	0.9	9/1	2	32	0.3	3,537	57.5	16.1	35.1	49.5	58.4
REA	R0815	0.8	9/2	3	32	0.5	3,307	56.9	16.5	34.5	51.9	56.0
Thunder	SB8710N	1.0	9/5	3	33	0.5	3,644	56.9	16.1	35.4	46.0	--
Thunder	SB8713N	1.3	9/4	3	34	1.0	3,385	57.0	16.2	35.4	52.2	--
Thunder	3614N	1.4	9/3	3	35	0.5	3,316	57.4	16.4	34.7	55.0	--
Wensman	W1071NRX	0.7	8/29	3	36	0.8	3,484	57.0	16.4	34.5	44.5	--
Wensman	W3072NR2	0.7	8/30	3	34	0.5	3,299	56.6	15.7	36.5	46.8	--
Wensman	W3080NR2	0.8	9/2	4	35	0.5	3,620	56.7	15.9	35.5	52.1	55.0
Wensman	W1106NRX	1.0	9/2	4	33	0.3	3,611	57.2	15.9	35.6	46.4	--
Wensman	W3100NR2	1.0	9/2	3	33	0.3	3,150	57.4	16.2	34.4	46.2	--
Wensman	W1129NRX	1.2	9/4	4	38	1.0	3,320	56.9	15.8	35.4	55.5	--
Mean			9/1	3	33	0.4	3,430	57	16.2	35.2	47.0	54.8
CV %			2.1	22.8	11.2	127	5.2	0.6	2.4	1.8	8.4	--
LSD 0.05			3.4	NS	NS	NS	248	0.5	0.5	0.9	5.5	--
LSD 0.10			2.9	NS	4	NS	208	0.4	0.5	0.7	4.6	--

Planted: May 9. Harvested: Oct. 3. Previous crop: spring wheat.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.

**Table 27. 2016 Soybean - Dryland, Conventional and Liberty Link - Wishek (Carrington REC) - Authors, M. Ostlie, B. Schatz and T. Indergaard.**

Company/ Brand	Variety	Maturity		Maturity <sup>1</sup> (date)	Pod	Plant	Plant	Seeds/	Test	Seed	Seed	Seed
		Group	Type		Ht	Ht	Lodge <sup>2</sup>	Pound	Weight	Oil	Protein	Yield
					(inch)	(inch)	(0-9)	(seeds)	(lb/bu)	(%)	(%)	(bu/a)
NDSU	Ashtabula	0.4	Conv.	8/29	2.6	34.6	0.5	3,203	56.2	17.7	33.7	53.1
NDSU	ND Bison	0.7	Conv.	9/4	3.1	32.1	0.0	3,054	57.3	16.6	34.3	54.9
NDSU	ND Henson	0.0	Conv.	8/27	2.6	29.9	0.5	3,269	57.3	17.1	35.2	57.0
NDSU	Sheyenne	0.7	Conv.	9/5	2.6	34.3	0.8	3,177	57.1	16.9	33.8	43.4
Richland	MK0603	0.6	Conv.	9/8	3.5	36.4	1.5	5,016	57.0	14.5	36.4	54.4
Richland	MK0508	0.8	Conv.	9/6	3.7	34.1	2.5	5,069	56.5	15.1	35.7	54.8
Richland	MK1016	1	Conv.	9/5	3.1	38.8	1.5	5,354	56.2	15.2	35.9	48.6
Richland	MK41	1.1	Conv.	9/9	2.8	34.3	0.0	2,517	57.4	15.2	36.0	56.4
Richland	MK42	0.7	Conv.	9/5	3.0	36.6	1.0	2,466	56.4	14.5	38.6	55.9
Richland	MK808CN	0.8	Conv.	9/4	2.8	35.6	1.0	3,300	56.9	17.1	34.2	56.2
Richland	MK9101	1	Conv.	9/10	5.3	41.1	0.8	2,206	57.3	15.3	37.1	50.1
Richland	MK9404CN	0.6	Conv.	9/2	3.3	39.4	1.0	2,978	56.7	17.0	35.2	49.7
NuTech	2086L	0.8	LL	9/10	3.5	33.1	0.0	2,775	56.8	16.0	35.6	62.0
NuTech	3115L	1.1	LL	9/15	3.5	34.4	0.8	2,216	56.1	15.8	35.1	66.2
Thunder	5411LLN	1.1	LL	9/10	4.3	35.4	0.3	2,810	56.5	16.7	35.0	65.7
Thunder	5615LLN	1.5	LL	9/16	5.9	38.2	0.5	2,462	57.0	15.7	34.9	69.6
Mean				9/6	3	35.2	1	3,237	56.9	16.2	35.3	56.6
CV %				1.5	20.1	6.3	67.5	3.2	1.6	1.6	1.6	9.9
LSD 0.05				2.5	1.0	3.1	0.7	147	NS	0.4	0.8	7.9
LSD 0.10				2.0	0.8	2.6	0.6	121	NS	0.3	0.7	6.6

Planted: May 16. Harvested: Oct. 3. Previous crop: spring wheat.

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

<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.

**Table 28. 2016 Soybean - Irrigated, Roundup Ready - Oakes (Carrington REC) - Authors, K. Cooper, L. Besemann and H. Eslinger.**

Company/ Brand	Variety	Maturity		Plant Height (inch)	Plant Lodge <sup>2</sup> (0-9)	Seeds/ Pound (seeds)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity <sup>1</sup> (date)							2016 ----(bu/a)----	2-yr. Avg.
Dairyland	DSR-0711/R2Y	0.7	9/18	23	6	2,451	55.2	19.2	33.0	49.4	62.2
Dairyland	DSR-0807/R2Y	0.8	9/19	23	5	2,392	55.3	18.3	34.5	53.5	--
Dairyland	DSR-0988/R2Y	0.9	9/17	25	7	2,661	55.7	18.6	32.6	49.1	--
Dairyland	DSR-1120/R2Y	1.1	9/20	26	8	2,214	55.1	19.5	33.1	48.6	62.4
Dairyland	DSR-1313/R2Y	1.3	9/20	25	7	2,589	55.1	19.0	33.0	59.7	--
Dyna-Gro	S07RY45	0.7	9/18	22	6	2,690	55.2	18.9	33.1	56.4	--
Dyna-Gro	S09RY64	0.9	9/18	22	7	2,615	55.5	18.6	33.0	57.6	69.1
Dyna-Gro	S12RY44	1.2	9/17	23	5	2,528	56.0	18.4	34.5	54.3	66.5
Integra	20775N	0.7	9/20	22	6	2,713	55.5	18.7	33.4	54.4	--
Integra	20915N	0.9	9/21	24	7	2,629	56.2	18.5	33.0	57.1	69.8
Legacy	LS-0836N RR2	0.8	9/21	25	6	2,659	55.5	18.7	33.3	54.0	--
Legacy	LS-0833N RR2	0.8	9/14	24	5	2,673	55.9	18.6	32.7	56.3	66.9
Legacy	LS-0935N RR2	0.9	9/18	23	7	2,486	55.7	18.8	33.1	56.0	67.6
Legacy	LS-1134N RR2	1.1	9/18	22	9	2,620	55.9	19.3	33.4	51.6	63.3
Legacy	LS-1335N RR2	1.3	9/19	25	7	2,582	55.6	19.0	32.9	55.9	70.1
NorthStar	NS 0941NR2	0.9	9/19	24	5	2,592	55.2	19.0	33.0	59.0	68.3
NorthStar	NS 1040NR2	1.1	9/19	22	8	2,661	56.3	19.2	33.6	55.8	66.4
NorthStar	NS 1390NR2	1.3	9/22	26	7	2,281	56.9	18.4	34.6	53.2	67.8
NuTech	6097R2	0.9	9/19	22	7	2,297	55.7	20.5	30.6	52.4	63.5
NuTech	7127R2	1.2	9/18	29	6	2,436	56.4	18.2	33.8	53.2	--
Peterson	16X12N	1.2	9/19	25	7	2,648	55.2	18.3	34.1	48.6	--
Peterson	17X13	1.3	9/21	22	6	2,483	55.0	18.9	33.5	61.9	--
Prairie	PB-0777R2	0.7	9/20	21	7	2,549	56.2	18.6	33.4	53.1	65.9
Prairie	PB-0987R2	0.8	9/17	26	7	2,631	55.4	18.6	33.1	52.7	--
Prairie	PB-1257R2	1.2	9/19	22	9	2,773	55.6	18.7	32.3	57.3	--
Proseed	XT607	0.7	9/19	24	6	2,543	56.1	19.0	33.1	42.1	--
Proseed	XT610	1.0	9/19	25	4	2,596	55.8	18.2	34.5	54.3	--
REA	R0815	0.8	9/19	23	6	2,504	55.2	19.0	33.0	51.4	65.0
REA	69G14	0.9	9/17	24	6	2,693	56.0	18.8	33.2	55.4	68.2
Thunder	3614N	1.4	9/20	25	7	2,549	56.1	19.1	32.9	59.8	71.1
Thunder	SB8710N	1.0	9/21	24	6	2,681	55.7	18.4	34.4	49.3	--
Thunder	SB8713N	1.3	9/18	21	8	2,518	55.8	18.8	33.4	57.4	--
Wensman	W1106NRX	1.0	9/21	24	4	2,622	56.5	18.1	34.4	54.1	--
Wensman	W1129NRX	1.2	9/21	23	7	2,545	55.4	18.8	33.3	58.2	--
Wensman	W3080NR2	0.8	9/20	24	6	2,738	55.2	18.8	33.1	55.7	67.7
Wensman	W3100NR2	1.0	9/19	21	8	2,434	55.6	18.7	32.8	54.1	66.3
Wensman	W3143NR2	1.4	9/19	24	6	2,539	55.9	18.9	33.3	58.5	71.9
Mean			9/19	24	6	2,562	55.7	18.8	33.3	54.4	67.0
CV %			0.7	10.1	21	3	1.2	0.7	0.8	6.7	--
LSD 0.05			1.2	3.3	1.9	91	0.9	0.2	0.4	5.1	--
LSD 0.10			1.0	2.8	1.6	76	0.8	0.2	0.3	4.3	--

Planted: May 17. Harvested: Sept. 30 and Oct. 1.

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

<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.

**Table 29. 2016 Soybean - Roundup Ready - Langdon - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/ Brand	Variety	Maturity		Plant Lodge <sup>2</sup> (0-9)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity <sup>1</sup> (date)					2016	2-yr. Avg. ----(bu/a)----
Croplan	R2T00516	00.5	9/17	1.9	35	14.8	35.6	62.1	--
Croplan	R2C00766	00.7	9/18	2.6	32	15.1	33.9	60.2	--
Croplan	R2T00700	00.7	9/17	1.8	35	15.3	34.5	61.7	--
Dyna-Gro	S005RY87	00.5	9/14	1.4	36	15.1	35.3	65.9	--
Dyna-Gro	S006RY97	00.6	9/16	1.9	33	15.4	34.1	66.0	--
Dyna-Gro	S009RY56	00.9	9/19	1.3	35	14.8	35.5	61.5	60.2
Hefty	H006R7	00.6	9/17	2.7	33	15.1	34.7	61.1	--
Hefty	H008R6	00.8	9/20	1.5	35	14.4	36.2	58.0	--
Hefty	H00R6	0.0	9/21	2.5	41	15.1	35.2	64.0	--
Integra	20087	00.8	9/17	1.5	32	14.1	36.5	72.9	64.9
Integra	20097	00.9	9/21	1.8	40	15.1	35.2	74.0	--
Integra	20215	00.9	9/23	0.1	34	13.6	36.6	68.8	--
Legacy	LS-0135 RR2	0.1	9/22	2.5	40	14.8	35.4	71.2	63.7
Legacy	LS-00835N RR2	00.8	9/20	1.9	36	14.4	35.9	56.3	55.7
Legacy	LS-0214 RR2	0.2	9/23	1.6	37	13.7	36.1	72.0	65.0
Legacy	LS-00834 RR2	00.8	9/17	0.6	33	14.4	35.4	65.5	59.8
Legend	LS 004R752	00.4	9/15	2.0	36	15.2	35.2	63.0	--
Legend	LS 006R760N	00.6	9/17	2.9	34	14.9	34.1	60.6	--
Legend	LS 007R653	00.7	9/14	1.2	37	15.4	32.8	60.6	--
Legend	LS 008R660N	00.8	9/19	1.5	36	14.1	36.5	61.0	59.5
NorthStar	NS 0012R2	00.1	9/4	0.0	33	15.7	34.0	54.0	--
NorthStar	NS 0052R2	00.5	9/15	2.7	37	15.1	35.6	63.1	--
NorthStar	NS 0072R2	00.7	9/23	0.9	36	14.4	36.2	67.2	--
NorthStar	NS 0081NR2	00.8	9/21	1.3	36	13.7	36.4	63.3	60.3
NuTech	6008R2	00.8	9/17	0.9	36	15.2	33.2	55.8	56.5
Peterson	16R008N	00.8	9/22	1.5	34	13.9	36.7	59.6	60.7
Peterson	16R01	0.1	9/22	2.4	41	14.6	36.0	69.8	61.5
Pioneer	P005T13R	00.5	9/11	0.0	29	14.9	35.9	52.7	--
Pioneer	P006T46R	00.6	9/12	0.5	31	15.6	34.1	56.9	--
Pioneer	P008T22R2	00.8	9/21	1.5	37	14.7	36.2	65.1	60.8
Pioneer	P01T06R	0.1	9/21	1.0	32	15.2	34.6	61.3	--
Prairie	PB-00727R2	00.7	9/17	2.5	33	15.3	34.6	61.7	--
Prairie	PB00856R2	00.9	9/20	1.8	37	14.4	36.3	60.6	61.9
Prairie	PB00950R2	00.9	9/18	2.2	38	14.5	35.8	65.8	63.7
Prairie	PB-0146R2	0.1	9/21	2.3	38	15.0	35.6	70.1	66.2
Proseed	10-08	00.8	9/19	2.1	37	14.2	35.9	66.5	66.2
Proseed	40-07	00.7	9/12	1.6	39	13.5	35.8	61.8	--
Proseed	50-08	00.8	9/21	2.1	36	14.4	35.6	62.6	60.2
REA	R00727	00.7	9/17	2.2	37	14.8	35.2	63.0	--
REA	R0216	0.2	9/23	2.5	41	14.9	35.6	72.0	66.8
Stine	02RD00	0.2	9/24	0.1	34	13.4	36.6	69.8	65.0
Syng NK	S006-W5	00.6	9/10	0.5	35	15.0	36.2	62.8	--
Syng NK	S007-Y4	00.7	9/11	0.6	31	15.0	34.8	61.2	57.5
Thunder	34006	00.6	9/16	0.9	36	14.3	35.4	71.3	62.3
Thunder	36008	00.8	9/20	1.8	36	14.3	36.0	61.3	60.0
Thunder	3601	0.1	9/22	2.7	42	15.1	35.4	71.8	--
Wensman	W30065NR2	00.6	9/16	2.0	33	15.1	34.3	59.0	--
Wensman	W30085NR2	00.8	9/20	1.3	36	14.0	36.5	61.6	61.2
Wensman	W3024R2	0.2	9/20	1.7	35	14.1	35.7	68.4	64.5
Mean			9/18	1.6	36	14.7	35.4	63.8	61.8
CV %			6.4	41	6.1	1.7	1.2	9.1	--
LSD 0.05			1.6	0.9	3.0	0.5	0.9	8.1	--
LSD 0.10			1.4	0.8	3	0.4	0.7	6.8	--

Planted: May 19 . Harvested: Oct. 3.

<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 score: 1-upright, 9-flat on ground.

**Table 30. 2016 Soybean - Roundup Ready 2 Xtend - Langdon - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/ Brand	Variety	Maturity		Plant Lodge <sup>2</sup>	Plant Height	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)					2016	2 site Avg. <sup>3</sup> (bu/a)
Dyna-Gro	S007XT27	00.7	9/19	0.5	35	13.8	36.3	68.7	67.7
Hefty	H007X7	00.7	9/21	0.8	35	14.2	36.2	60.8	58.0
Hefty	H009X7	00.9	9/19	1.8	39	13.4	36.5	65.0	66.4
Integra	50098 R2X	00.9	9/22	2.0	40	13.3	36.7	66.8	70.1
Legacy	LS-00937 RRXT	00.9	9/20	2.0	38	13.5	35.7	71.0	72.4
Legacy	LS-0237 RRXT	0.2	9/21	2.0	42	13.9	36.2	72.0	76.0
Peterson	17X009	00.9	9/17	1.8	40	13.5	36	70.4	73.3
Proseed	XT6007	00.7	9/21	1.0	35	13.8	36	67.4	67.6
Proseed	XT6009	00.9	9/22	2.0	38	13.3	36.1	70.1	71.5
Wensman	W10063NRX	00.6	9/21	0.8	34	13.9	35.7	67.3	67.4
Wensman	W1016RX	0.1	9/21	1.8	39	13.2	36.5	68.1	71.6
Mean			9/20	1.5	38	13.6	36.2	68.0	69.2
CV %			16.7	50	5.8	1.7	0.9	6.4	4.3
LSD 0.05			NS	1.1	3.2	0.5	NS	NS	6.6
LSD 0.10			NS	0.9	2.6	0.4	NS	5.2	5.4

Planted: May 25. Harvested: Sept. 29.

<sup>1</sup>Date of physiological maturity at R7 stage (one brown pod on the main stem is mature brown or tan color).<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.<sup>3</sup>Two-site average of our Langdon REC and Pembina County (Cavalier).**Table 31. 2016 Soybean - Conventional and Libery Link - Langdon - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/ Brand	Variety	Maturity		Plant Lodge <sup>2</sup>	Plant Height	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)					2016	2-yr. Avg. (bu/a)
<b>Conventional</b>									
Asgrow (RR CK)	AG 00632	00.6	9/20	1.8	34	14.2	35.6	52.1	50.6
Asgrow (RR CK)	AG 00932	00.9	9/21	1.3	36	14.1	35.8	57.0	55.1
NDSU	Ashtabula	0.4	9/26	0.3	37	15.2	35.2	59.9	61.6
NDSU	ND Henson	0.0	9/19	0.8	34	15.4	35.5	53.5	54.0
Richland	MK0249	0.2	9/26	1.4	31	13.7	35.5	38.1	46.0
<b>Libery Link</b>									
NorthStar	NS 0095LL	0.9	9/18	1.2	30	14.8	36.0	47.6	48.7
NorthStar	NS 0129LL	0.1	9/25	0.5	32	14.4	35.4	62.6	57.8
Stine	01LH22	0.1	9/20	0.2	34	14.8	35.3	55.8	--
Stine	02LC26	0.1	9/25	0.3	34	15.3	34.5	56.3	--
Thunder	5401	0.1	9/25	0.8	35	14.9	35.0	62.7	--
Mean			9/22	1	35	14.7	35.4	55.5	53.4
CV %			4.6	53	5.2	1.7	1.2	5.8	--
LSD 0.05			1.5	0.9	2.6	0.5	0.9	4.6	--
LSD 0.10			1.2	0.7	2.1	0.4	0.7	3.8	--

Planted: May 19. Harvested: Oct. 13.

<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 score: 1-upright, 9-flat on ground.

**Table 32. 2016 Soybean - Roundup Ready - Park River (Langdon REC) - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/ Brand	Variety	Maturity		Plant	Plant	Seed	Seed	Seed Yield	
		Group	Maturity <sup>1</sup> (date)	Height (inch)	Lodge <sup>2</sup> (0-9)	Oil (%)	Protein (%)	2016 -----	2-yr. Avg. <sup>3</sup> -----
								(bu/a)	
Channel	00806R2	00.8	9/16	43	0.9	15.3	34.7	70.0	63.9
Channel	0205R2	0.2	9/18	46	1.9	15.0	34.7	76.0	67.7
Channel	0209R2	0.2	9/18	46	3.9	16.7	32.8	74.7	67.8
Dairyland	DSR-C918/R2Y	00.9	9/16	36	0.9	15.3	34.5	72.9	68.0
Dairyland	DSR-0225/R2Y	0.2	9/17	50	4.7	16.4	33.1	75.0	--
Dairyland	DSR-0305/R2Y	0.3	9/19	38	0.9	15.8	33.4	76.7	72.6
Dairyland	DST04-003/R2Y	0.4	9/23	38	0.2	14.9	34.3	78.5	--
Dairyland	DSR-0404/R2Y	0.4	9/22	39	0.6	15.1	34.1	74.8	68.4
Dyna-Gro	S009RY56	00.9	9/18	37	1.8	15.5	34.2	63.6	63.1
Dyna-Gro	S01RY86	0.1	9/18	46	4.1	16.8	32.5	67.6	66.1
Dyna-Gro	S03RY36	0.3	9/21	39	3.6	15.2	34.7	67.6	65.2
Hefty	H02R3	0.2	9/21	38	1.2	15.1	33.9	74.2	66.6
Hefty	H03R5	0.3	9/21	37	2.1	15.2	35.4	66.3	--
Integra	20087	00.8	9/16	35	0.9	14.8	35.6	71.6	64.4
Integra	20097	00.9	9/18	42	4.4	16.2	33.6	72.6	--
Integra	20126	0.1	9/18	42	3.1	15.1	34.9	68.6	64.4
Integra	20215	00.9	9/20	39	0.4	14.5	35.5	69.1	--
Legacy	LS-0135 RR2	0.1	9/18	48	3.6	16.3	33.7	74.7	69.7
Legacy	LS-00835N RR2	00.8	9/17	39	3.4	15.0	35.1	63.9	61.7
Legacy	LS-0214 RR2	0.2	9/17	40	3.1	15.1	35.1	71.6	65.5
Legacy	LS-00834 RR2	00.8	9/16	35	0.9	14.7	35.2	71.7	--
Legacy	LS-0334 RR2	0.3	9/22	42	4.1	14.9	35.1	76.7	71.9
Mycogen	5B013R2	0.1	9/17	47	5.3	16.7	33.0	72.4	--
Mycogen	5B024R	0.2	9/17	42	1.9	15.1	34.7	71.2	64.4
Mycogen	5G009R2	00.9	9/18	42	2.3	15.1	34.1	70.4	--
Mycogen	5G007R2	00.7	9/15	36	1.2	14.9	34.5	66.9	--
NorthStar	NS 0072R2	00.7	9/18	41	1.6	14.9	34.9	66.6	--
NorthStar	NS 0081NR2	00.8	9/17	35	2.4	14.9	34.9	70.3	--
NorthStar	NS 0111R2	0.1	9/18	45	4.7	16.3	32.9	73.5	68.6
NorthStar	NS 0200NR2	0.2	9/21	49	3.6	14.9	33.8	69.2	64.5
NorthStar	NS 0480NR2	0.4	9/23	40	2.4	14.9	34.8	75.0	71.4
Peterson	16R01	0.1	9/18	47	4.9	16.0	33.8	72.7	63.9
Prairie	PB00856R2	00.9	9/18	41	3.7	15.2	34.9	63.2	63.0
Prairie	PB-0146R2	0.1	9/19	45	4.4	16.5	33.5	70.7	67.6
Prairie	PB-0397R2	0.3	9/22	40	2.7	14.9	34.4	72.6	--
Prairie	PB-0441R2	0.4	9/22	39	0.5	14.9	33.7	76.2	--
Proseed	30-20	0.2	9/19	41	4.3	15.2	34.7	73.6	69.9
Proseed	10-08	00.8	9/18	43	3.3	15.5	33.5	63.4	--
REA	R0216	0.2	9/18	46	5.3	16.4	33.0	76.5	70.4
REA	64G94	0.4	9/21	43	4.8	16.3	32.5	67.6	66.1
Stine	02RD00	0.2	9/21	33	0.5	15.0	34.4	70.3	65.9
Syng NK	S02-B4	0.2	9/17	41	1.5	16.0	33.7	68.3	--
Syng NK	S04-D3	0.4	9/19	41	1.5	15.0	33.7	71.8	67.2
Thunder	34006	00.6	9/15	37	0.7	15.5	33.9	65.4	--
Thunder	36008	00.8	9/18	37	2.3	15.4	34.8	60.9	60.6
Thunder	3601	0.1	9/18	43	5.0	16.5	33.2	73.6	69.4
Thunder	Astro	00.8	9/17	41	2.3	14.9	33.8	66.8	63.7
Wensman	W300099R2	00.9	9/18	41	1.7	16.0	33.7	66.2	65.2
Wensman	W3018R2	0.1	9/17	49	4.5	16.6	33.2	72.4	68.2
Mean			9/18	41	2.7	15.5	34.1	70.7	66.6
CV %			5.5	8.0	42	1.8	1.4	6.3	--
LSD 0.05			1.4	4.6	1.5	0.6	0.9	6.3	--
LSD 0.10			1.2	3.9	1.3	0.5	0.8	5.3	--

Planted: June 2 . Harvested: Oct. 11.

<sup>1</sup>Date of physiological maturity at R7 stage (one brown pod on the main stem is mature brown or tan color).<sup>2</sup>Lodging score: 1-upright, 9-flat on ground.



**Table 33. 2016 Soybean - Conventional and Liberty Link - Park River (Langdon REC) - Authors, B. Hanson, T. Hakanson and L. Henry**

Company/		Maturity		Plant	Plant	Seed	Seed	Seed Yield	
Brand	Variety	Group	Maturity <sup>1</sup>	Lodge <sup>2</sup>	Height	Oil	Protein	2016	2-yr. Avg.
			(date)	(0-9)	(inch)	(%)	(%)	----(bu/a)----	
<b>Conventional</b>									
Asgrow (RR CK)	AG 00632	00.6	9/16	0.8	31	15.3	35.2	62.2	53.3
Asgrow (RR CK)	AG 00932	00.9	9/17	0.5	36	15.2	35.0	65.1	51.7
NDSU	ND Henson	0.0	9/14	1.3	32	16.4	34.7	64.5	54.1
NDSU	Ashtabula	0.4	9/21	2.3	40	16.6	33.3	65.9	56.0
Richland	MK0249	0.2	9/23	4.3	34	15.5	33.6	62.2	52.8
<b>Liberty Link</b>									
NorthStar	NS 0095LL	00.9	9/16	2.0	32	16.4	34.6	62.0	--
NorthStar	NS 0129LL	00.1	9/21	2.0	36	16.5	33.1	67.6	56.7
NorthStar	NS 0361LL	0.3	9/22	1.3	36	16.4	34.3	79.0	66.6
Stine	01LH22	0.1	9/16	0.0	33	16.5	34.2	62.1	--
Stine	02LC26	0.1	9/18	0.5	35	16.7	32.9	65.2	--
Thunder	5401	0.1	9/20	1.5	39	16.5	32.9	69.5	59.8
Mean			9/18	2	35	16.2	34.0	65.9	56.4
CV %			7.7	67	13.2	1.5	1.3	5.8	--
LSD 0.05			2.0	1.9	NS	0.5	0.9	5.4	--
LSD 0.10			1.6	1.6	NS	0.4	0.7	4.5	--

Planted: May 26. Harvested: Oct. 6.

<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 score: 1-upright, 9-flat on ground.**Table 34. 2016 Soybean - Roundup Ready 2 Xtend - Park River (Langdon REC) - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/		Maturity		Plant	Plant	Seed	Seed	Seed Yield	
Brand	Variety	Group	Maturity <sup>1</sup>	Lodge <sup>2</sup>	Height	Oil	Protein	2016	2-site Avg. <sup>3</sup>
			(date)	(0-9)	(inch)	(%)	(%)	----- (bu/a) -----	
Dyna-Gro	S04XT77	0.4	9/19	2.3	39	15.2	34.8	70.5	73.4
Hefty	H02X7	0.2	9/20	6.8	50	15.5	33.8	71.0	71.4
Hefty	H03X7	0.3	9/20	3.3	40	15.1	34.1	66.4	67.0
Integra	50098 R2X	00.9	9/19	5.0	46	14.3	34.3	66.3	70.2
Legacy	LS-00937 RRXT	00.9	9/17	5.0	48	14.7	34.1	68.6	69.6
Legacy	LS-0237 RRXT	0.2	9/18	5.5	50	15.6	33.5	73.0	73.3
Legacy	LS-0337 RRXT	0.3	9/19	2.3	44	15.7	34.0	71.7	70.7
Peterson	17X03	0.3	9/20	6.8	50	15.0	34.0	71.7	--
Proseed	XT6009	00.9	9/18	4.0	47	13.9	34.7	67.2	69.6
Proseed	XT603	0.3	9/20	6.5	49	15.0	34.4	76.5	75.3
Proseed	XT604	0.4	9/19	1.8	38	15.1	34.7	71.4	73.3
Wensman	W1016RX	0.1	9/19	4.3	45	14.0	34.5	67.3	69.8
Wensman	W1037RX	0.3	9/20	6.8	50	15.3	33.7	68.5	70.1
Mean			9/20	4.6	46	14.9	34.2	70	71.1
CV %			7.5	26	7.9	2	1.7	5.8	3.1
LSD 0.05			NS	1.7	5.2	0.6	NS	5.8	NS
LSD 0.10			NS	1.4	4.3	0.5	NS	4.8	3.9

Planted: June 2. Harvested: Oct. 11.

<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 score: 1-upright, 9-flat on ground.<sup>3</sup>Two-site average of Walsh County (Park River) and Nelson County (Pekin).

**Table 35. 2016 Soybean - Roundup Ready - Cavalier (Langdon REC) - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/ Brand	Variety	Maturity		Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity <sup>1</sup> (date)				2016	2-yr. Avg. ------(bu/a)-----
Dyna-Gro	S005RY87	00.5	9/8	39	16.4	33.7	67.9	--
Dyna-Gro	S006RY97	00.6	9/10	33	16.3	32.3	71.8	--
Dyna-Gro	S009RY56	00.9	9/16	39	15.8	33.8	68.6	64.6
Hefty	H006R7	00.6	9/12	33	16.3	32.9	61.0	--
Hefty	H008R6	00.8	9/15	36	15.9	33.8	72.3	--
Hefty	H00R6	0.0	9/17	41	16.8	33.0	80.3	--
Integra	20087	00.8	9/16	33	15.1	34.4	80.7	--
Integra	20097	00.9	9/17	42	16.7	33.1	81.0	--
Legacy	LS-0135 RR2	0.1	9/17	43	16.4	33.5	79.1	66.8
Legacy	LS-00835N RR2	00.8	9/16	39	15.6	34.3	74.5	65.7
Legacy	LS-0214 RR2	0.2	9/18	41	16.0	33.3	84.9	67.5
Legacy	LS-00834 RR2	00.8	9/9	31	15.9	32.5	64.6	60.4
NorthStar	NS 0012R2	00.1	8/30	31	16.8	31.8	54.8	--
NorthStar	NS 0052R2	00.5	9/9	35	16.2	34.2	63.4	--
NorthStar	NS 0072R2	00.7	9/16	39	15.9	33.7	70.2	--
NorthStar	NS 0081NR2	00.8	9/13	37	15.9	33.2	71.4	66.8
NuTech	6008R2	00.8	9/11	35	16.9	31.7	57.1	56.5
Peterson	16R008N	00.8	9/15	39	16.1	33.4	69.2	60.9
Peterson	16R01	0.1	9/17	41	16.8	32.6	79.7	67.6
Prairie	PB-00727R2	00.7	9/11	34	16.7	32.6	58.0	--
Prairie	PB00856R2	00.9	9/16	37	15.6	34.4	72.5	67.2
Prairie	PB00950R2	00.9	9/15	39	15.9	33.3	66.3	58.9
Prairie	PB-0146R2	0.1	9/17	42	16.7	33.0	80.4	69.5
Proseed	10-08	00.8	9/15	39	15.9	33.1	67.5	58.2
Proseed	40-07	00.7	9/2	36	15.9	32.5	60.6	--
Proseed	50-08	00.8	9/15	39	15.8	34.1	74.9	66.0
REA	R00727	00.7	9/7	34	15.9	32.8	67.8	--
REA	R0216	0.2	9/17	43	16.6	32.9	68.6	62.8
Stine	02RD00	0.2	9/18	33	15.3	34.0	80.0	--
Syng NK	S006-W5	00.6	9/6	28	16.7	33.0	60.7	--
Syng NK	S007-Y4	00.7	9/8	30	16.3	33.3	64.7	59.4
Thunder	34006	00.6	9/10	35	16.3	33.0	69.0	59.0
Thunder	36008	00.8	9/16	38	15.6	33.6	69.9	65.2
Thunder	3601	0.1	9/16	43	16.5	33.5	81.7	--
Thunder	Astro	00.8	9/16	38	15.3	33.4	69.9	64.2
Thunder	3503	0.3	9/17	37	15.2	35.0	80.3	--
Wensman	W30048R2	00.4	9/8	35	16.3	33.7	60.7	--
Wensman	W30085NR2	00.8	9/15	38	15.5	34.5	75.7	64.3
Mean			9/13	37	16.1	33.3	70.6	63.6
CV %			3.8	5.7	1.9	1.4	8.8	--
LSD 0.05			2.3	3.0	0.6	1.0	8.6	--
LSD 0.10			2.0	2.5	0.5	0.8	7.2	--

Planted: May 25. Harvested: Sept. 29.

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

**Table 36. 2016 Soybean - Roundup Ready 2 Xtend - Cavalier (Langdon REC) - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/ Brand	Variety	Maturity		Plant Height	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)				2016	2-site Avg. <sup>2</sup> (bu/a)
Dyna-Gro	S007XT27	00.7	9/10	34	16.1	32.6	66.6	67.7
Hefty	H007X7	00.7	9/10	31	16.3	32.1	55.1	58.0
Hefty	H009X7	00.9	9/16	40	15.3	33.2	67.7	66.4
Integra	50098 R2X	00.9	9/17	40	15.0	33.9	73.4	70.1
Legacy	LS-00937 RRXT	00.9	9/16	39	15.1	33.6	73.7	72.4
Legacy	LS-0237 RRXT	0.2	9/16	44	15.7	33.4	79.9	76.0
Peterson	17X009	00.9	9/16	41	15.2	34	76.2	73.3
Proseed	XT6007	00.7	9/10	35	16.1	33	67.7	67.6
Proseed	XT6009	00.9	9/16	41	15.1	33.6	72.9	71.5
Wensman	W10063NRX	00.6	9/10	36	16	33.1	67.4	67.4
Wensman	W1016RX	0.1	9/16	41	14.9	33.9	75.0	71.6
Mean			9/14	38	15.5	33.3	70.5	69.2
CV %			5.8	4.9	2.3	1.6	4.0	4.3
LSD 0.05			1.2	2.7	0.8	NS	4.1	6.6
LSD 0.10			1	2.3	0.6	1	3.4	5.4

Planted: May 25. Harvested: Sept. 29.

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

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

**Table 37. 2016 Soybean - Roundup Ready 2 Xtend - Pekin (Langdon REC) - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/ Brand	Variety	Maturity		Plant Lodge <sup>2</sup>	Plant Height	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)					2016	2-site Avg. <sup>3</sup> (bu/a)
Dyna-Gro	S04XT77	0.4	9/20	0.8	35	14.9	35.5	76.3	73.4
Hefty	H02X7	0.2	9/21	1.0	40	14.9	34.9	71.8	71.4
Hefty	H03X7	0.3	9/21	1.3	35	15.0	35.0	67.6	67.0
Integra	50098 R2X	00.9	9/20	1.0	36	14.6	34.7	74.1	70.2
Legacy	LS-00937 RRXT	00.9	9/20	1.5	36	14.4	35.1	70.5	69.6
Legacy	LS-0237 RRXT	0.2	9/20	1.5	38	15.2	34.6	73.5	73.3
Legacy	LS-0337 RRXT	0.3	9/21	0.5	35	14.6	35.5	69.7	70.7
Proseed	XT6009	00.9	9/19	1.8	37	14.1	35.6	71.9	69.6
Proseed	XT603	0.3	9/20	1.5	40	15.3	34.2	74.1	75.3
Proseed	XT604	0.4	9/21	0.3	35	15	35.3	75.1	73.3
Wensman	W1016RX	0.1	9/20	2.3	36	14.3	35	72.2	69.8
Wensman	W1037RX	0.3	9/20	2.0	42	15	34.6	71.7	70.1
Mean			9/20	1.3	37	14.8	35	72.4	71.1
CV %			5.4	53	4.8	1.9	1	5.9	3.1
LSD 0.05			NS	1	2.6	0.6	0.8	NS	NS
LSD 0.10			NS	0.8	2.1	0.5	0.6	NS	3.9

Planted: May 20. Harvested: Sept. 30.

<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 score: 1-upright, 9-flat on ground.

<sup>3</sup>Two-site average of Walsh County (Park River) and Nelson County (Pekin).

**Table 38. 2016 Soybean - Roundup Ready - Pekin (Langdon REC) - Authors, B. Hanson, T. Hakanson and L. Henry.**

Company/ Brand	Variety	Maturity Group	Maturity <sup>1</sup> (date)	Plant Lodge <sup>2</sup> (0-9)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
								2016	2-yr. Avg. ----- (bu/a) -----
Dairyland	DSR-C918/R2Y	00.9	9/17	0.0	29	14.4	35.9	70.2	58.6
Dairyland	DSR-0305/R2Y	0.3	9/19	0.2	33	15.4	34.4	74.7	65.9
Dairyland	DST04-003/R2Y	0.4	9/22	0.1	33	14.6	35.7	69.2	--
Dairyland	DSR-0404/R2Y	0.4	9/20	0.5	31	14.9	34.2	66.8	60.9
Dyna-Gro	S009RY56	00.9	9/16	0.5	31	15.0	35.6	52.8	50.4
Dyna-Gro	S01RY86	0.1	9/16	0.5	35	16.0	34.7	72.9	63.8
Dyna-Gro	S03RY36	0.3	9/20	0.0	33	14.5	36.6	72.6	64.6
Hefty	H02R3	0.2	9/20	0.0	32	15.0	34.5	73.3	62.5
Hefty	H03R5	0.3	9/19	0.0	32	14.5	36.4	66.4	--
Integra	20087	00.8	9/17	0.1	29	14.6	35.9	68.7	57.7
Integra	20097	00.9	9/16	1.0	37	15.9	34.4	69.8	--
Integra	20126	0.1	9/20	0.5	36	14.9	35.1	73.2	61.4
Integra	20215	00.9	9/19	0.0	32	14.6	35.6	62.5	--
Legacy	LS-0135 RR2	0.1	9/16	1.0	37	16.0	34.5	69.8	59.8
Legacy	LS-00835N RR2	00.8	9/16	0.2	31	14.8	35.8	53.9	50.2
Legacy	LS-0214 RR2	0.2	9/19	0.6	35	14.8	35.4	69.1	61.9
Legacy	LS-00834 RR2	00.8	9/14	0.0	27	14.9	35.3	62.7	--
Legacy	LS-0334 RR2	0.3	9/22	0.0	35	14.7	35.7	80.5	68.0
Mycogen	5B013R2	0.1	9/18	1.7	37	15.9	34.6	72.2	--
Mycogen	5B024R	0.2	9/16	0.5	38	14.8	35.9	66.4	60.0
Mycogen	5G009R2	00.9	9/16	0.7	34	15.1	35.4	66.9	--
Mycogen	5G007R2	00.7	9/14	0.2	28	14.9	35.3	67.4	--
NorthStar	NS 0081NR2	00.8	9/17	0.6	31	14.8	35.8	59.1	--
NorthStar	NS 0111R2	0.1	9/18	0.7	35	15.7	34.7	69.8	62.6
NorthStar	NS 0200NR2	0.2	9/21	1.2	38	14.2	35.6	66.2	58.9
NorthStar	NS 0480NR2	0.4	9/21	1.4	34	14.5	35.3	64.8	59.9
Peterson	16R01	0.1	9/16	1.2	36	15.8	34.4	71.7	60.6
Peterson	15R04	0.4	9/22	0.4	32	14.9	34.4	70.4	61.1
Prairie	PB00856R2	00.9	9/16	0.3	32	14.5	36.1	54.3	53.8
Prairie	PB-0146R2	0.1	9/18	1.5	35	16.1	33.9	73.3	60.8
Prairie	PB-0397R2	0.3	9/21	0.1	37	14.5	35.7	69.0	--
Prairie	PB-0441R2	0.4	9/20	0.3	32	14.8	34.5	67.8	--
Proseed	30-20	0.2	9/19	0.6	36	14.8	35.2	73.7	64.7
REA	R0216	0.2	9/17	0.8	35	15.7	34.6	70.9	62.6
REA	64G94	0.4	9/20	0.6	34	16.4	33.0	63.4	59.8
Stine	02RD00	0.2	9/18	0.0	32	14.7	35.8	69.8	60.0
Syng NK	S02-B4	0.2	9/15	0.6	33	15.3	34.3	68.2	--
Syng NK	S04-D3	0.4	9/19	0.3	34	15.1	34.0	64.3	58.9
Thunder	34006	00.6	9/13	0.0	30	15.0	34.9	67.2	--
Thunder	36008	00.8	9/18	0.5	33	14.8	35.7	52.9	50.1
Thunder	3601	0.1	9/16	0.8	37	16.0	34.6	73.1	63.7
Thunder	Astro	00.8	9/16	0.0	32	14.6	34.9	66.2	55.6
Thunder	3503	0.3	9/20	0.0	34	14.3	36.6	76.0	65.0
Wensman	W30085NR2	00.8	9/17	0.4	31	14.9	35.6	55.2	53.2
Wensman	W3024R2	0.2	9/15	0.1	29	14.8	35.5	70.0	64.8
Mean			9/17	0.4	33	15.0	35.2	67.5	60.1
CV %			8.9	134	5.7	1.3	1.1	5.0	--
LSD 0.05			2.2	1	2.7	0.4	0.7	4.7	--
LSD 0.10			1.8	1	2.2	0.3	0.6	3.9	--

Planted: May 20. Harvested: Sept. 30.

<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 score: 1-upright, 9-flat on ground.

**Table 39. 2016 Soybean - Roundup Ready - Minot (North Central REC) - Authors, E. Eriksmoen, J. Tarasenko and J. Effertz (Pg. 1 of 2).**

Company/ Brand	Variety		Maturity Group	IDC Rating <sup>1</sup> (1-5)	Maturity (date)	Plant Height (inches)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield 2016 2-yr. Avg. -----(bu/a)----	
Dairyland	DSR-0225/R2Y	RR	0.2	2.3	9/12	35	57.6	16.9	32.4	52.2	--
Dairyland	DSR-C918/R2Y	RR	00.9	2.1	9/14	23	57.2	15.0	34.7	47.7	55.7
Dyna-Gro	S006RY97	RR	00.6	2.0	9/12	27	56.9	16.1	33.7	42.5	--
Dyna-Gro	S009RY56	RR	00.9	2.1	9/17	26	57.1	15.4	34.5	49.0	53.8
Dyna-Gro	S01RY86	RR	0.1	2.4	9/19	30	57.3	16.2	33.4	48.3	--
Dyna-Gro	S03RY36	RR	0.3	1.9	9/9	26	57.5	15.2	34.9	44.8	55.9
Hefty	H006R7	RR	00.6	1.8	9/9	27	57.4	16.5	32.8	42.0	--
Hefty	H007X7	Xtend	00.7	2.1	9/9	26	58.3	15.7	33.4	37.2	--
Hefty	H008R3	RR	00.8	1.5	9/14	27	56.4	17.0	32.5	39.1	47.5
Hefty	H008R6	RR	00.8	2.3	9/15	28	56.7	16.0	33.3	43.0	47.2
Hefty	H009R3	RR	00.9	2.6	9/18	25	57.6	15.9	33.0	47.1	52.5
Hefty	H009R5	RR	00.9	1.5	9/14	31	56.4	17.5	31.8	34.5	39.2
Hefty	H009X7	Xtend	00.9	2.0	9/11	30	58.1	15.6	32.6	45.5	--
Hefty	H00R6	RR	0.0	--	9/15	31	57.2	16.7	32.8	44.4	--
Hefty	H01R4	RR	0.1	2.1	9/17	27	57.6	15.9	33.6	40.8	--
Hefty	H02R3	RR	0.2	2.3	9/19	29	57.2	15.7	33.1	44.3	--
Hefty	H02X7	Xtend	0.2	2.0	9/15	34	57.4	16.1	32.7	45.6	--
Hefty	H03X7	Xtend	0.3	2.0	9/18	27	57.3	15.9	33.6	47.8	--
Hefty	H05X7	Xtend	0.5	2.2	9/20	31	58.4	15.4	33.2	50.1	--
Integra	20090	RR	00.9	1.7	9/16	30	57.9	15.6	33.9	49.4	47.4
Integra	20097	RR	00.9	2.0	9/16	33	57.7	16.3	33.6	50.4	--
Integra	20126	RR	0.1	2.2	9/16	32	56.7	16.4	31.8	52.6	--
Integra	20215	RR	0.1	2.5	9/10	25	57.6	15.2	34.1	48.3	52.9
Legacy	LS-00834 RR2	RR	00.8	2.2	9/11	25	57.3	15.4	32.6	42.7	--
Legacy	LS-00835N RR2	RR	00.8	2.3	9/15	30	56.4	15.0	35.1	49.4	51.6
Legacy	LS-0135 RR2	RR	0.1	2.2	9/18	35	57.3	16.3	33.7	54.3	57.1
Legacy	LS-0214 RR2	RR	0.2	2.0	9/14	31	57.0	15.8	34.2	52.1	57.5
Legacy	LS-0334 RR2	RR	0.3	1.5	9/22	29	57.4	15.4	34.7	52.8	57.1
Legacy	LS-0337N RRXT	Xtend	0.3	2.0	9/16	30	57.6	15.9	33.6	47.8	--
Mycogen	5B013R2	RR	0.1	2.3	9/12	36	57.1	16.7	32.3	53.5	--
Mycogen	5B024R2	RR	0.2	1.7	9/16	32	58.1	15.5	34.0	46.9	53.2
Mycogen	5B033R2	RR	0.3	2.1	9/19	31	57.5	15.7	33.9	57.2	--
Mycogen	5G007R2	RR	00.7	1.9	9/13	25	57.2	15.4	33.7	47.6	--
Mycogen	5G009R2	RR	00.9	1.9	9/16	32	58.3	15.5	32.9	51.4	56.2
NorthStar	NS 0052R2	RR	00.5	1.9	9/11	34	57.1	15.9	34.0	47.7	--
NorthStar	NS 0072R2	RR	00.7	1.7	9/16	30	57.2	15.6	33.9	46.7	--
NorthStar	NS 0080R2	RR	00.6	1.6	9/16	28	57.8	15.2	34.6	53.0	55.4
NorthStar	NS 0081NR2	RR	00.8	2.1	9/13	30	57.1	15.3	35.2	55.5	53.5
NorthStar	NS 0090R2	RR	00.9	2.0	9/17	26	57.0	15.5	32.8	47.0	--
NorthStar	NS 0111R2	RR	0.1	1.9	9/10	34	57.2	16.5	33.8	47.7	--
Peterson	16R008N	RR	00.8	2.0	9/10	29	56.6	15.6	34.7	45.4	50.6
Peterson	16R01	RR	0.1	1.8	9/15	33	57.1	16.5	33.1	51.4	49.7
Peterson	17X009	Xtend	00.9	1.8	9/19	30	57.7	14.9	34.1	50.7	--
Prairie	PB-00727R2	RR	00.7	1.7	9/15	26	57.5	15.9	33.2	41.2	--
Prairie	PB-00856R2	RR	00.8	2.3	9/13	28	56.5	15.6	33.8	43.9	48.8
Prairie	PB-0146R2	RR	0.1	2.2	9/15	35	57.4	16.6	33.2	51.1	57.8
Prairie	PB-0441R2	RR	0.4	2.2	9/19	29	57.5	15.9	34.1	50.7	61.2
Proseed	10-08	RR	00.8	1.9	9/12	32	57.9	15.5	33.2	43.1	51.4
Proseed	20-30	RR	0.3	2.1	9/16	27	57.2	16.0	33.5	51.3	63.6
Proseed	30-20	RR	0.2	1.9	9/24	30	57.8	15.5	34.0	50.0	56.9
Proseed	XT6007	Xtend	00.7	1.7	9/9	29	58.4	15.4	33.7	46.7	--
Proseed	XT6009	Xtend	00.9	1.8	9/17	32	58.0	15.1	33.6	50.7	--
Mean				2.0	9/15	30	57.4	15.8	33.5	47.2	53.1
CV %				--	9.6	5.9	0.7	2.5	1.7	7.7	--
LSD 0.05				0.3	2	3.0	0.6	0.7	0.9	5.9	--
LSD 0.10				0.2	2	2	0.5	0.5	0.8	4.9	--

**Table 39. 2016 Soybean - Roundup Ready - Minot (North Central REC) - Authors, E. Eriksmoen, J. Tarasenko and J. Effertz (Pg. 2 of 2).**

Company/ Brand	Variety	Maturity Group	IDC Rating <sup>1</sup>	Maturity (date)	Plant Height (inches)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
									2016	2-yr. Avg.
			(1-5)						----- (bu/a) -----	
Proseed	XT603	Xtend	0.3	9/17	33	57.5	15.7	32.9	43.9	--
REA	R00727	RR	0.7	9/13	33	57.0	16.2	32.1	45.2	--
REA	R0216	RR	0.2	9/16	34	57.2	16.7	32.2	51.1	55.3
Syng NK	S006-W5	RR	0.6	9/8	28	56.2	16.7	34.1	45.3	--
Syng NK	S007-Y4	RR	0.5	9/11	28	57.1	16.7	32.9	43.5	--
Syng NK	S02-R2	RR	0.2	9/15	25	57.8	15.3	33.6	50.1	--
Syng NK	S04-D3	RR	0.4	9/17	25	57.8	15.3	33.5	41.2	--
Wensman	W1016RX	Xtend	0.1	9/17	33	58.1	15.0	33.5	51.0	--
Wensman	W30085NR2	RR	0.8	9/13	28	57.0	15.8	34.4	44.9	49.2
Wensman	W30099R2	RR	0.9	9/16	30	57.6	16.1	32.5	41.3	--
Wensman	W3024R2	RR	0.2	9/10	25	57.7	15.7	32.9	42.1	48.7
Mean			2.0	9/15	30	57.4	15.8	33.5	47.2	53.1
CV %			--	9.6	5.9	0.7	2.5	1.7	7.7	--
LSD 0.05			0.3	2	3.0	0.6	0.7	0.9	5.9	--
LSD 0.10			0.2	2	2	0.5	0.5	0.8	4.9	--

Planted: June 2. Harvested: Oct. 19. Previous crop: wheat.

<sup>1</sup>Iron deficiency chlorosis rating: 1-green, 3-yellow, 5-dead tissue.**Table 40. 2016 Soybean - Conventional - Minot (North Central REC) - Authors, E. Eriksmoen, J. Tarasenko and J. Effertz**

Company/ Brand	Variety	Maturity Group	IDC Rating <sup>1</sup>	Maturity (date)	Plant Height (inches)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
									2016	2-yr. Avg.
			(1-5)						----- (bu/a) -----	
Asgrow (RR CKAG 00632		00.6	--	9/19	34	56.4	14.6	33.6	35.8	40.7
Asgrow (RR CKAG 00932		00.9	1.4	9/18	33	57.2	14.1	34.7	42.4	44.4
Asgrow (RR CKAG 0732		0.6	2.0	9/27	32	56.4	14.1	35.5	45.2	--
Asgrow (RR CKAG 0832		0.9	1.9	9/29	36	56.2	14.2	36.2	43.0	51.4
Hefty	H008L3	00.8	2.0	9/17	31	56.8	15.6	34.3	40.3	43.1
Hefty	H03L7	0.3	2.0	9/26	33	56.1	14.6	35.8	49.2	--
NDSU	Ashtabula	0.4	2.1	9/18	35	56.6	16.2	32.4	48.2	50.8
NDSU	ND Bison	0.7	2.0	9/22	30	57.6	15.9	30.1	41.0	48.0
NDSU	ND Henson	0.0	2.2	9/16	31	57.2	15.4	35.4	48.9	51.2
NDSU	Sheyenne	0.7	2.0	9/23	35	56.5	14.5	34.5	47.1	54.1
Mean			2.0	9/20	33	56.7	14.9	34.3	44.1	48.0
CV %			--	9.3	8.6	0.9	2.2	2.1	10.9	--
LSD 0.05			0.2	3	5.0	0.8	0.6	1.2	7.6	--
LSD 0.10			0.2	3	4.0	0.7	0.5	1.0	6.3	--

Planted: June 2. Harvested: Oct. 19. Previous crop: wheat.

<sup>1</sup>Iron deficiency chlorosis rating: 1-green, 3-yellow, 5-dead tissue.**Table 41. 2016 Soybean - Conventional - Rugby (North Central REC) - Authors, E. Eriksmoen, J. Tarasenko and J. Effertz**

Company/ Brand	Variety	Maturity Group	IDC Rating <sup>1</sup>	Maturity (date)	Plant Height (inches)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
									2016	2-yr. Avg.
			(1-5)						----- (bu/a) -----	
NDSU	Ashtabula	0.4	2.1		29	57.1	16.4	32.8	55.6	47.5
NDSU	ND Bison	0.7	2.0		28	57.4	15.3	33.5	62.6	56.9
NDSU	ND Henson	0.0	2.2		28	58.5	16.1	34.5	65.3	53.0
NDSU	Sheyenne	0.7	2.0		32	57.4	15.5	33.1	68.9	57.2
Mean			2.1		29	57.4	15.8	33.7	62.4	53.6
CV %			--		0.7	0.5	1.2	0.7	4.7	8.2
LSD 0.05			NS		2.0	0.4	0.3	0.3	4.5	NS
LSD 0.10			NS		2.0	0.3	0.2	0.3	3.7	NS

Planted: May 24. Harvested: Oct. 14. Previous crop: wheat

<sup>1</sup>Iron deficiency chlorosis rating: 1-green, 3-yellow, 5-dead tissue.

**Table 42. 2016 Soybean - Roundup Ready - Garrison (North Central REC) - Authors, E. Eriksmoen, J. Tarasenko and J. Effertz**

Company/ Brand	Variety	Herbicide System	Maturity Group	IDC Rating <sup>1</sup>	Plant Height	Test Weight	Seed Oil	Seed Protein	Seed Yield	
									2016	2-yr. Avg.
									----- (bu/a) -----	
Hefty	H006R7	RR	00.6	1.8	22	56.6	16.7	32.1	32.6	--
Hefty	H008R3	RR	00.8	1.5	21	56.7	16.4	32.0	31.8	30.2
Hefty	H008R6	RR	00.8	2.3	24	57.3	16.2	32.0	34.7	32.6
Hefty	H009R3	RR	00.9	2.6	22	58.1	15.8	32.8	38.8	31.7
Hefty	H009R5	RR	00.9	1.5	22	56.6	16.9	32.4	31.1	26.2
Hefty	H00R6	RR	00	--	29	57.7	16.9	32.1	35.2	--
Hefty	H01R4	RR	0.1	2.1	22	57.8	15.4	32.6	36.3	--
Hefty	H02R3	RR	0.2	2.3	24	57.9	15.7	32.1	42.0	--
Hefty	H009X7	Xtend	00.9	2.0	27	57.9	15.9	32.1	36.6	--
Hefty	H02X7	Xtend	0.2	2.0	29	57.6	16.7	31.4	36.4	--
Hefty	H03X7	Xtend	0.3	2.0	23	57.2	16.5	31.5	37.4	--
Hefty	H05X7	Xtend	0.5	2.2	24	58.3	15.6	31.4	38.2	--
Integra	20215	RR	0.1	2.5	23	57.6	15.3	33.0	35.6	34.5
Integra	20126	RR	0.1	2.2	23	56.9	16.0	32.9	33.7	41.8
Integra	20300	RR	0.3	2.3	22	57.7	15.6	33.1	34.1	36.2
Integra	20468	RR	0.4	1.8	25	57.8	15.4	33.0	36.9	--
Legacy	LS-0334 RR2	RR	0.3	1.5	23	57.3	15.9	32.3	41.0	41.2
Legacy	LS-0135 RR2	RR	0.1	2.2	26	57.1	16.6	32.2	37.3	34.1
Legacy	LS-00835N RR2	RR	00.8	2.3	24	57.0	15.9	33.3	34.4	36.5
Legacy	LS-0337N RRXT	Xtend	0.3	2.0	22	57.2	16.5	31.3	34.6	--
NorthStar	NS 0081NR2	RR	00.8	2.1	23	56.8	15.8	33.3	30.8	--
NorthStar	NS 0090R2	RR	00.9	2.0	20	57.3	15.8	32.9	30.4	--
NorthStar	NS 0111R2	RR	0.1	1.9	29	57.1	16.8	32.3	36.3	--
NorthStar	NS 0200NR2	RR	0.2	1.6	27	58.0	15.4	32.5	38.3	--
NorthStar	NS 0318R2	RR	0.3	2.1	24	57.7	15.3	32.6	42.1	--
NuTech	NT 6048	RR	0.4	1.7	24	58.0	15.9	33.1	36.9	--
Peterson	16R01	RR	0.1	1.8	27	57.5	16.6	32.4	32.8	34.4
Peterson	17X04N	Xtend	0.4	1.8	22	57.5	16.3	32.4	36.0	--
Prairie	PB-00856R2	RR	00.8	2.3	24	56.6	16.1	32.7	29.8	--
Prairie	PB-0146R2	RR	0.1	2.2	27	57.4	17.0	32.1	38.5	--
Prairie	PB-0397R2	RR	0.3	2.1	25	57.7	15.7	32.4	38.0	--
Prairie	PB-0441R2	RR	0.4	2.2	24	57.4	15.3	32.4	37.4	--
Proseed	XT6007	Xtend	00.7	1.7	22	57.5	16.1	32.2	31.3	--
Proseed	XT6009	Xtend	00.9	1.8	24	57.7	15.7	32.4	32.6	--
Proseed	XT603	Xtend	0.3	2.0	28	57.3	16.6	31.5	35.0	--
Proseed	30-20	RR	0.2	1.9	25	56.6	16.2	32.9	38.1	34.0
Proseed	10-08	RR	00.8	1.9	27	57.7	15.7	33.4	36.2	34.5
REA	R0216	RR	0.2	1.5	26	57.4	16.6	32.1	36.2	38.7
REA	64G94	RR	0.4	1.6	23	57.6	16.8	31.6	39.4	39.5
Syng NK	S006-W5	RR	00.6	2.5	21	56.1	16.6	33.9	37.5	--
Syng NK	S007-Y4	RR	00.5	2.0	22	57.0	16.9	32.5	32.4	--
Syng NK	S02-R2	RR	0.2	2.1	23	57.9	15.4	33.5	37.1	--
Syng NK	S04-D3	RR	0.4	2.4	24	57.8	16.0	31.9	34.7	--
Wensman	W30099R2	RR	00.9	1.6	23	57.7	16.7	31.1	32.5	--
Wensman	W1016RX	Xtend	0.1	1.6	24	57.8	15.8	31.8	38.4	--
Wensman	W1037RX	Xtend	0.3	1.8	27	57.6	16.3	32.4	33.4	--
Wensman	W3024R2	RR	0.2	2.0	22	57.4	15.9	32.3	31.6	33.2
Mean				2.0	24	57.4	16.1	32.4	35.6	35.0
CV %				--	8.0	0.7	1.9	2.5	12.2	--
LSD 0.05				0.3	3.0	0.5	0.4	1.1	6.1	--
LSD 0.10				0.2	2.0	0.4	0.4	1.0	5.1	--

Planted: June 2. Harvested: Oct. 13. Previous crop: canola.

<sup>1</sup>Iron deficiency chlorosis rating: 1-green, 3-yellow, 5-dead tissue.

**Table 43. 2016 Soybean - Roundup Ready - Mohall (North Central REC) - Authors, E. Eriksmoen, J. Tarasenko and J. Effertz**

Company/ Brand	Variety	Maturity Group	IDC Rating <sup>1</sup> (1-5)	Plant Height (inch)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
								2016 ----- (bu/a) -----	2-yr. Avg.
Dyna-Gro	S006RY97	00.6	2.0	27	56.9	33.3	16.1	51.3	--
Dyna-Gro	S009RY56	00.9	2.1	31	56.9	33.9	15.3	53.5	--
Hefty	H006R7	00.6	1.8	27	56.3	32.4	16.2	46.0	--
Hefty	H008R3	00.8	1.5	31	57.2	32.4	16.2	53.1	60.4
Hefty	H008R6	00.8	2.3	30	56.8	33.4	15.2	43.3	53.7
Hefty	H009R3	00.9	2.6	27	58.2	33.3	15.2	54.9	66.7
Hefty	H009R5	00.9	1.5	28	57.4	33.5	16.1	48.3	55.4
Hefty	H00R6	0.0	--	31	57.3	32.5	16.4	51.7	--
Hefty	H01R4	0.1	2.1	26	57.8	33.7	15.0	48.1	--
Hefty	H02R3	0.2	2.3	30	57.7	33.5	15.3	50.8	--
Hefty	H02X7	0.2	2.0	32	57.1	32.2	15.6	50.4	--
Hefty	H03X7	0.3	2.0	28	56.8	33.0	15.6	54.1	--
Hefty	H05X7	0.5	2.2	30	57.9	33.2	14.8	53.7	--
Integra	20087	00.8	2.3	25	57.0	33.7	15.3	52.8	--
Integra	20090	00.9	1.7	29	57.6	32.6	15.6	57.8	59.4
Integra	20097	00.9	2.0	30	56.8	33.1	16.4	46.7	--
Integra	20215	0.1	2.5	26	57.8	34.3	14.8	52.2	64.4
Legacy	LS-00834 RR2	00.8	2.2	25	57.2	33.4	15.6	48.9	--
Legacy	LS-00835N RR2	00.8	2.3	31	57.4	33.1	15.6	53.1	61.2
Legacy	LS-0135 RR2	0.1	2.2	34	57.2	33.5	16.1	57.7	61.2
Legacy	LS-0214 RR2	0.2	2.0	31	57.2	33.7	15.7	56.4	62.8
Mycogen	5B013R2	0.1	2.3	32	57.2	32.7	16.4	55.4	--
Mycogen	5G007R2	00.7	1.9	25	57.4	32.4	15.8	44.1	--
Mycogen	5G009R2	00.9	1.9	31	57.1	32.5	15.8	51.2	58.2
NorthStar	NS 0012R2	00.1	2.4	27	56.5	32.2	16.6	49.2	--
NorthStar	NS 0052R2	00.5	1.9	28	57.2	33.4	15.9	42.9	--
NorthStar	NS 0072R2	00.7	1.7	28	56.7	33.7	15.8	42.8	--
NorthStar	NS 0080R2	00.6	1.6	31	57.3	32.1	15.7	52.2	59.2
NorthStar	NS 0081NR2	00.8	2.1	30	56.7	32.8	15.5	51.1	55.9
NorthStar	NS 0090R2	00.9	2.0	28	57.1	33.4	15.4	50.4	--
Nutech	NT6048	0.4	1.7	29	57.6	33.2	15.7	47.6	--
Peterson	16R008N	00.8	2.0	29	57.1	33.1	15.5	48.2	58.9
Peterson	17X009	00.9	1.8	32	57.7	32.9	14.9	51.8	--
Prairie	PB-00727R2	00.7	1.7	27	57.1	32.8	15.8	59.2	--
Prairie	PB-00856R2	00.8	2.3	29	56.8	33.6	15.4	54.4	61.6
Prairie	PB-00950R2	00.9	1.7	30	57.7	33.1	15.6	57.7	60.7
Prairie	PB-0146R2	0.1	2.2	36	57.5	33.6	15.9	61.9	68.0
Proseed	10-08	00.8	1.9	32	57.0	32.4	15.6	50.5	57.7
Proseed	XT6007	00.7	1.7	28	57.8	31.8	15.9	49.3	--
Proseed	XT6009	00.9	1.8	34	58.0	32.9	15.0	52.2	--
REA	R00727	00.7	1.8	29	56.6	32.3	16.1	54.1	--
REA	R0216	0.2	1.5	33	57.0	32.8	16.2	56.2	57.9
Rob SC	IS00818	00.8	--	31	57.1	30.6	16.5	52.6	--
Rob SC	IS0386	0.3	--	32	58.2	34.1	15.1	51.2	--
Syngenta	S006-W5	00.6	2.5	28	57.0	34.1	16.4	53.1	--
Syngenta	S007-Y4	00.5	2.0	28	56.7	32.9	16.5	50.5	--
Syngenta	S02-R2	0.2	2.1	28	57.8	32.5	15.6	57.4	--
Syngenta	S04-D3	0.4	2.4	32	57.5	33.7	14.8	60.0	--
Wensman	W10063NRX	00.6	1.7	27	58.1	32.2	15.7	53.6	--
Wensman	W1016RX	0.1	1.6	33	57.7	33.9	14.4	60.9	--
Wensman	W30065NR2	00.6	1.9	27	57.5	32.1	16.3	47.4	--
Wensman	W30085NR2	00.8	2.0	29	56.9	33.8	15.3	54.0	62.1
Wensman	W3024R2	0.2	2.0	28	57.8	33.4	14.9	53.5	66.8
Mean			2.0	29	57.3	33.0	15.7	52.1	60.6
CV %			--	8.9	0.9	3.3	2.8	6.6	--
LSD 0.05			0.3	4	0.7	1.5	0.6	4.8	--
LSD 0.10			0.2	3	0.6	1.2	0.5	4.0	--

Planted: June 3. Harvested: Oct. 14. Previous crop: sunflower.

<sup>1</sup>Iron deficiency chlorosis rating: 1-green, 3-yellow, 5-dead tissue.



Table 44. 2016 Soybean - Wilton (North Central REC) - Authors, E. Eriksmoen, J. Tarasenko and J. Effertz										
Company/ Brand	Variety	Herbicide System	Maturity Group	IDC Rating <sup>1</sup>	Plant Height	Plant Lodge	Seed Oil	Seed Protein	Seed Yield	
									2016	2-yr. Avg.
									----- (bu/a) -----	
Hefty	H006R7	RR	00.6	1.8	26	0.0	16.4	32.8	43.0	--
Hefty	H008R3	RR	00.8	1.5	28	0.8	16.3	32.3	49.6	43.1
Hefty	H008R6	RR	00.8	2.3	29	0.8	15.6	33.8	38.5	40.7
Hefty	H009R3	RR	00.9	2.6	26	0.0	15.5	33.0	50.0	51.2
Hefty	H009R5	RR	00.9	1.5	31	1.5	16.3	33.7	44.2	37.1
Hefty	H00R6	RR	0.0	--	32	1.3	16.5	33.4	45.6	--
Hefty	H01R4	RR	0.1	2.1	27	0.0	15.3	33.3	49.1	--
Hefty	H02R3	RR	0.2	2.3	30	0.0	15.6	32.5	53.3	51.2
Hefty	H009X7	Xtend	00.9	2.0	32	0.3	15.4	32.7	46.9	--
Hefty	H02X7	Xtend	0.2	2.0	35	0.3	16.3	32.5	51.6	--
Hefty	H03X7	Xtend	0.3	2.0	29	0.5	16.2	32.3	47.8	--
Hefty	H05X7	Xtend	0.5	2.2	31	0.3	15.2	32.9	54.8	--
Integra	20215	RR	0.1	2.5	28	0.0	15.5	33.3	48.7	49.2
Integra	20300	RR	0.3	2.3	29	0.0	15.7	32.9	53.3	51.9
Integra	20468	RR	0.4	1.8	30	0.3	15.6	32.9	47.7	--
Integra	50098R2X	Xtend	0.4	1.8	33	0.5	15.2	33.1	49.0	--
Legacy	LS-0334 RR2	RR	0.3	1.5	29	0.3	15.7	33.4	58.8	57.4
Legacy	LS-0135 RR2	RR	0.1	2.2	36	1.0	16.6	33.4	49.0	47.0
Legacy	LS-00835N RR2	RR	00.8	2.3	29	0.3	15.8	33.8	47.1	41.8
Legacy	LS-0337N RRXT	Xtend	0.3	2.0	29	0.5	16.0	32.4	49.9	--
Mycogen	5B033R2	RR	0.3	2.1	28	0.3	16.3	32.3	52.8	55.6
Mycogen	5B024R2	RR	0.2	1.7	32	0.3	15.6	33.2	41.5	41.3
Mycogen	5B040R2	RR	0.4	2.4	28	0.0	15.7	32.6	53.3	--
Mycogen	5N078R2	RR	0.7	2.2	30	0.0	15.1	33.7	52.4	--
NorthStar	NS 0111R2	RR	0.1	1.9	35	1.3	16.7	33.3	49.3	--
NorthStar	NS 0200NR2	RR	0.2	1.6	37	1.3	15.2	32.7	48.6	--
NorthStar	NS 0318R2	RR	0.3	2.1	31	0.0	15.6	32.6	51.7	--
NorthStar	NS 0480NR2	RR	0.4	1.9	30	0.0	15.1	33.2	55.3	--
NuTech	NT6048	RR	0.4	1.7	32	0.8	15.7	34.0	50.9	--
Proseed	XT6007	Xtend	00.7	1.7	28	0.3	15.8	33.1	44.1	--
Proseed	XT6009	Xtend	00.9	1.8	33	0.3	15.5	33.1	45.6	--
Proseed	XT603	Xtend	0.3	2.0	35	0.0	16.1	32.7	52.5	--
Proseed	20-30	RR	0.3	2.1	28	0.0	15.5	33.3	58.3	--
Proseed	30-80	RR	0.8	2.3	31	1.3	15.8	34.0	52.5	--
Proseed	10-08	RR	00.8	1.9	30	0.5	15.6	33.8	49.6	--
REA	R0216	RR	0.2	1.5	33	1.0	16.8	33.1	46.3	--
REA	64G94	RR	0.4	1.6	32	1.3	16.9	31.6	54.8	--
Syng NK	S006-W5	RR	00.6	2.5	28	0.0	16.5	34.1	50.0	--
Syng NK	S007-Y4	RR	00.5	2.0	25	0.0	16.7	32.6	48.6	--
Syng NK	S02-R2	RR	0.2	2.1	31	0.8	15.2	34.4	54.5	--
Syng NK	S04-D3	RR	0.4	2.4	30	0.0	15.7	32.9	52.9	--
Wensman	W1016RX	Xtend	0.1	1.6	33	0.0	15.2	33.3	48.4	--
Wensman	W1037RX	Xtend	0.3	1.8	35	0.0	16.3	32.2	49.9	--
Wensman	W3024R2	RR	0.2	2.0	28	0.3	15.7	33.4	40.6	--
Wensman	W3031NR2	RR	0.3	1.8	36	0.5	15.1	33.1	47.7	--
Mean				2.0	31	0.4	15.8	33.1	49.6	47.3
CV %				--	6.3	167	2.0	1.6	8.2	--
LSD 0.05				0.3	3	1.0	0.4	0.7	5.7	--
LSD 0.10				0.2	2	1.0	0.4	0.6	4.7	--

Planted: June 2. Harvested: Sept. 30. Previous crop: soybean.

<sup>1</sup>Iron deficiency chlorosis rating: 1-green, 3-yellow, 5-dead tissue.

**Table 45. 2016 Soybean - Conventional - Hettinger - Authors, J. Rickertsen and R. Olson.**

Company/ Brand	Variety	Maturity		Plant Height (inch)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity <sup>1</sup> (date)					2016	2-yr. Avg.
NDSU	Ashtabula	0.4	9/7	20	50.6	18.7	31.2	23.6	24.7
NDSU	ND Bison	0.7	9/13	21	49.9	17.5	31.4	27.2	--
NDSU	ND-Henson	0.0	8/31	19	51.0	17.7	32.8	23.2	24.8
NDSU	Sheyenne	0.8	9/10	22	50.2	17.7	31.1	27.2	27.6
Mean			9/8	20.5	50.4	17.9	31.6	25.3	25.7
CV %			0.6	7.5	0.6	1.4	1.7	8.9	--
LSD 0.05			1.1	2.3	1.7	0.4	0.8	3.5	--
LSD 0.10			0.9	1.9	1.4	0.3	0.7	2.8	--

Planted: May 4. Harvested: Sept. 13. Previous crop: wheat.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.**Table 46. 2016 Soybean - Roundup Ready - Hettinger - Authors, J. Rickertsen and R. Olson.**

Company/ Brand	Variety	Maturity		Plant Height (inch)	Test Weight (lb/bu)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity <sup>1</sup> (date)					2016	2-yr. Avg.
Integra	20300	0.3	9/11	21	49.4	16.7	33.7	26.9	38.8
Integra	20418	0.4	9/6	24	49.5	17.3	33.2	27.0	--
Integra	20600	0.6	9/9	24	49.2	17.4	31.7	31.0	42.7
Integra	20775N	0.7	9/12	23	48.0	17.2	33	29.0	--
Legacy	LS-0135	0.1	8/30	22	49.6	17.4	34.1	19.7	--
Legacy	LS-0214	0.2	9/5	22	48.8	17.6	33.6	25.7	--
Legacy	LS-0334	0.3	9/12	21	49.5	17.2	33.1	27.5	40.5
Legacy	LS-0635N	0.6	9/9	24	49.9	16.9	33.4	30.1	42.6
Proseed	30-20	0.2	9/4	22	49.4	17.7	33.5	26.9	39.5
Proseed	XT605	0.5	9/9	23	48.4	16.8	34.1	26.2	--
REA	64G94	0.4	9/5	22	49.4	18.4	31.9	26.3	36.1
REA	66G14	0.6	9/10	24	48.2	16.8	32.9	30.5	41.2
REA	R0815	0.8	9/11	22	48.3	17.4	32.5	30.3	39.7
Mean			9/8	23	49.1	17.3	33.1	27.5	40.1
CV %			1	9.3	1.5	1.5	1.6	13.2	4.7
LSD 0.05			1.8	3	1.0	0.4	0.7	5.2	NS
LSD 0.10			1.6	2.5	0.9	0.3	0.6	4.3	3.6

Planted: May 4. Harvested: Sept. 13. Previous crop: safflower.

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

**Table 47. 2016 Soybean - Dryland, Roundup Ready - Williston - Authors, J. Bergman, G. Pradhan, E. Link and A. Link.**

Company/ Brand	Variety	Maturity		Plant Height	Test Weight	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)					2016	2-Yr. Avg.
Dyna-Gro	S009RY56	00.9	9/4	24	52.5	14.2	34.2	20.0	-
Dyna-Gro	S03RY36	0.3	9/9	20	54.1	13.5	37.4	18.8	22.0
Dyna-Gro	S04XT77	0.4	9/7	19	52.8	15.0	32.0	17.7	-
Integra	20090	00.9	9/3	22	52.7	14.6	32.9	19.0	20.1
Integra	20097	00.9	9/3	27	52.1	14.2	35.6	21.0	-
Integra	20215	0.1	9/10	17	53.6	14.1	34.2	19.4	-
Integra	20300	0.3	9/10	21	53.5	13.6	36.7	18.9	23.0
Integra	50098 R2XTEND	00.9	9/5	22	53.2	13.7	33.7	17.8	-
Legacy	LS-00834 RR2	00.8	9/2	20	51.8	14.2	34.4	18.2	-
Legacy	LS-00835N RR2	00.8	9/5	23	51.8	14.1	34.4	16.9	18.8
Legacy	LS-0135 RR2	0.1	9/3	26	52.6	14.5	35.2	19.1	21.3
Legacy	LS-0214 RR2	0.2	9/6	23	51.8	14.2	36.6	23.9	23.6
Legacy	LS-0334 RR2	0.3	9/12	20	53.5	14.1	35.6	20.0	24.7
NuTech	6008R2	00.8	9/2	22	53.1	14.6	33.1	17.9	-
REA	64G94	0.4	9/5	20	51.2	14.7	33.1	25.4	27.1
REA	66G14	0.6	9/13	21	53.1	13.9	34.7	21.7	25.7
REA	R00727	00.7	8/31	22	49.5	14.4	33.7	21.5	-
Mean			9/6	22	52.5	14.2	34.6	19.8	22.9
CV %			1.9	9.6	1.1	3.3	3.5	12.1	-
LSD 0.05			2.9	2.9	0.8	0.7	1.7	3.4	-
LSD 0.10			2.4	2.5	0.7	0.5	1.4	2.8	-

Planted: May 19. Harvested: Sept. 30. Previous crop: barley.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.**Table 48. 2016 Soybean - Dryland, Conventional - Williston - Authors, J. Bergman, G. Pradhan, E. Link and A. Link.**

Company/ Brand	Variety	Maturity		Plant Height	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)				2016	2-Yr. Avg.
NDSU	Ashtabula	0.4	9/3	27	14.2	34.4	24.7	29.6
NDSU	ND Henson	0.0	9/2	26	13.6	36.4	22.5	29.5
NDSU	Sheyenne	0.7	9/5	26	13.8	35.6	23.0	29.3
Mean			9/4	26	13.7	36.0	22.8	29.4
CV %			1.5	10.3	3.3	3.1	22.1	--
LSD 0.05			2.2	3.8	0.7	1.5	7.94	--
LSD 0.10			1.9	3.2	0.6	1.3	6.6	--

Planted: May May 19. Harvested: Oct. 13. Previous crop: barley.

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

**Table 49. 2016 Soybean - Irrigated, Roundup Ready - Nesson Valley (Williston REC) - Authors, T. Tjelde and J. Jacobs.**

Company/ Brand	Variety	Maturity		Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)			2016	2-Yr. Avg.
Dyna-Gro	S009RY56	00.9	9/11	32.0	30.5	52.9	--
Dyna-Gro	S03RY36	0.3	9/9	36.3	35.0	59.7	58.6
Integra	20215	0.1	9/12	37.6	36.7	69.7	59.6
Legacy	LS-00834 RR2	00.8	9/1	35.4	34.2	68.8	--
Legacy	LS-00835N RR2	00.8	9/10	31.8	30.3	52.8	50.3
Legacy	LS-0135 RR2	0.1	9/1	34.7	33.0	70.6	63.6
Legacy	LS-0214 RR2	0.2	9/8	36.9	35.9	76.2	66.9
Legacy	LS-0334 RR2	0.3	9/14	38.4	37.6	66.9	61.5
Legend	LS01R656	00.8	9/3	34.8	33.3	70.0	--
NuTech	6008R2	00.8	9/1	32.2	30.7	60.5	51.8
REA	64G94	0.4	9/5	32.2	30.3	66.1	--
REA	R00727	0.7	8/29	33.6	32.4	62.1	--
REA	R0216	0.2	9/2	35.5	34.0	66.8	57.2
Mean			9/5	34.8	33.5	66.4	58.7
CV %			2.1	5.6	6.4	16.7	--
LSD 0.05			3.4	2.8	3.1	15.6	--
LSD 0.10			2.8	2.3	2.6	13.0	--

Planted: May 17. Harvested: Oct. 14. Previous crop: barley.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.**Table 50. 2016 Soybean - Irrigated, Conventional - Nesson Valley (Williston REC) - Authors, T. Tjelde and J. Jacobs.**

Company/ Brand	Variety	Maturity		Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity <sup>1</sup> (date)			2016	2-Yr. Avg.
NDSU	Ashtabula	0.4	9/6	37.9	36.7	78.2	65.1
NDSU	ND Bison	0.7	9/12	37.7	36.8	80.8	66.4
NDSU	ND Henson	0.0	9/6	38.3	37.2	82.4	65.8
NDSU	Sheyenne	0.7	9/10	37.9	37.1	71.2	65.7
Mean			9/8	37.9	37.0	78.1	65.8
CV %			0.9	0.6	0.8	8.3	--
LSD 0.05			1.6	0.4	0.4	10.4	--
LSD 0.10			1.3	0.3	0.4	8.4	--

Planted: May 17. Harvested: Oct. 13. Previous crop: barley.

<sup>1</sup>Maturity is date of 95 percent brown or tan pods.**For more information on this and other topics, see [www.ag.ndsu.edu](http://www.ag.ndsu.edu)**NDSU encourages you to use and share this content, but please do so under the conditions of our Creative Commons license. You may copy, distribute, transmit and adapt this work as long as you give full attribution, don't use the work for commercial purposes and share your resulting work similarly. For more information, visit [www.ag.ndsu.edu/agcomm/creative-commons](http://www.ag.ndsu.edu/agcomm/creative-commons).County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. NDSU does not discriminate in its programs and activities on the basis of age, color, gender expression/identity, genetic information, marital status, national origin, participation in lawful off-campus activity, physical or mental disability, pregnancy, public assistance status, race, religion, sex, sexual orientation, spousal relationship to current employee, or veteran status, as applicable. Direct inquiries to Vice Provost for Title IX/ADA Coordinator, Old Main 201, NDSU Main Campus, 701-231-7708, [ndsu.eoaa.ndsu.edu](http://ndsu.eoaa.ndsu.edu). This publication will be made available in alternative formats for people with disabilities upon request, 701-231-7881.