

North Dakota Soybean Variety Trial Results for 2013 and Selection Guide

Hans Kandel, Ted Helms, Sam Markell, Berlin Nelson, Chad Deplazes, Grant Mehring and Joel Ransom (NDSU Main Station); Blaine Schatz, Mike Ostlie, Steve Schaubert, Tim Indergaard, Bob Smith and Todd Ingebretson (Carrington Research Extension Center); Leonard Besemann (Oakes Irrigation Site); John Rickertsen and Rick Olson (Hettinger Research Extension Center); Eric Eriksmoen, James Tarasenko and Joe Effertz (North Central Research Extension Center, Minot); Bryan Hanson and Travis Hakanson (Langdon Research Extension Center); Jerry Bergman, Chelsey Penuel and Diana Amiot (Williston Research Extension Center); Brian Zimprich (Ransom County); Jill Haakenson (Griggs County); Alicia Harstad (Steele County); Melissa Blawat (Sargent County); and Jason Goltz (Richland County).

ACKNOWLEDGEMENTS

We thank the following producer cooperators for contributing their time, labor, land and other material to the 2013 soybean yield trial program in the central and southern Red River Valley sites.

Gebeke Bros.	Arthur, N.D.
Jon McSparron	Grandin, N.D.
Jeff Leinen	Great Bend, N.D.
Tyler Speich.....	Milnor, N.D.
Scott and Willard Pedersen	Northwood, N.D.
Allen Lutgen.....	LaMoure, N.D.
Dave and Scott Glauslow.....	Walcott, N.D.

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.

Trials are supported in part by fees collected from entrants of private varieties. We acknowledge the support from the North Dakota Soybean Council for Helms' research project.

Research specialists and technicians helped with the field work and data compilation. Several secretaries assisted with this document by typing information. A special thank you goes to Lisa Johnson, Extension Plant Sciences secretary, for assisting in the compilation of this publication.

List of Tables

- Table 1. Agronomic Characteristics of Public Soybean Varieties Suitable for North Dakota Production.
- Table 2. Locations and Planting Dates, 2013 North Dakota Soybean Trials.
- Table 3. Full Company Name, Abbreviated Name Used in Tables and Website.
- Table 4. 2013 NDSU Roundup Ready Soybean Iron-deficiency Chlorosis Trial.
- Table 5. 2013 NDSU Conventional and Liberty Link Soybean Iron-deficiency Chlorosis Trial.
- Table 6. 2013 NDSU Soybean Iron-deficiency Chlorosis Yield Trial.
- Table 7. Resistance of Soybean Varieties to Soybean Cyst Nematode HG type 0.
- Table 8. 2013 NDSU Combined Central Roundup Ready Soybean Locations in North Dakota.
- Table 9. 2013 NDSU Combined Central Conventional and Liberty Link Soybean Locations in North Dakota.
- Table 10. 2013 NDSU Combined Southern Roundup Ready Soybean Locations in North Dakota.
- Table 11. 2013 NDSU Combined Southern Conventional and Liberty Link Soybean Locations in North Dakota.
- Table 12. 2013 Soybean - Dryland, Roundup Ready - Carrington.
- Table 13. 2013 Soybean - Irrigated, Roundup Ready - Carrington.
- Table 14. 2013 Soybean - Dryland, Conventional and Liberty Link - Carrington.
- Table 15. 2013 Soybean - Irrigated, Conventional - Carrington.
- Table 16. 2013 Soybean - Dryland, Roundup Ready - Dazey (Carrington REC).
- Table 17. 2013 Soybean - Dryland, Conventional and Liberty Link - Dazey (Carrington REC).
- Table 18. 2013 Soybean - Dryland, Conventional, Organic - Carrington.
- Table 19. 2013 Soybean - Dryland, Roundup Ready - LaMoure (Carrington REC).
- Table 20. 2013 Soybean - Dryland, Conventional and Liberty Link - LaMoure (Carrington REC).
- Table 21. 2013 Soybean - Dryland, Roundup Ready - Wishek (Carrington REC).
- Table 22. 2013 Soybean - Irrigated, Roundup Ready - Oakes (Carrington REC).
- Table 23. 2013 Soybean - Irrigated, Conventional - Oakes (Carrington REC).
- Table 24. 2013 Soybean - Roundup Ready - Langdon.
- Table 25. 2013 Soybean - Liberty Link - Langdon.
- Table 26. 2013 Soybean - Conventional - Langdon.
- Table 27. 2013 Soybean - Roundup Ready - Cavalier (Langdon REC).
- Table 28. 2013 Soybean - Liberty Link - Park River (Langdon REC).
- Table 29. 2013 Soybean - Conventional - Park River (Langdon REC).
- Table 30. 2013 Soybean - Roundup Ready - Park River (Langdon REC).
- Table 31. 2013 Soybean - Roundup Ready - Lakota (Langdon REC).
- Table 32. 2013 Soybean - Roundup Ready - Minot (North Central REC).
- Table 33. 2013 Soybean - Conventional - Minot (North Central REC).
- Table 34. 2013 Soybean - Roundup Ready - Garrison (North Central REC).
- Table 35. 2013 Soybean - Roundup Ready - Mohall (North Central REC).
- Table 36. 2013 Soybean - Conventional - Hettinger.
- Table 37. 2013 Soybean - Roundup Ready - Hettinger.
- Table 38. 2013 Soybean - Dryland, Roundup Ready - Williston.
- Table 39. 2013 Soybean - Dryland, Conventional - Williston.
- Table 40. 2013 Soybean - Roundup Ready - Ransom County.
- Table 41. 2013 Soybean - Roundup Ready - Sargent County.
- Table 42. 2013 Soybean Yield at Five Locations: Dwight, N.D. (Richland County), Gwinner, N.D. (Sargent County), Lisbon, N.D. (Ransom County), Barnesville, Minn. (Clay/Wilkin Counties), and Fergus Falls, Minn. (Ottertail/Grant Counties).
- Table 43. 2013 Soybean - Roundup Ready - Steele and Griggs Counties.

Soybean Variety Selection and Adaptation

Hans Kandel, hans.kandel@ndsu.edu, Extension Agronomist
Sam Markell, samuel.markell@ndsu.edu, Extension Plant Pathologist
Ted Helms, ted.helms@ndsu.edu, NDSU Soybean Breeder

Selection

Soybean variety selection should be based on maturity, yield, seed quality, lodging, iron-deficiency chlorosis tolerance and disease reaction. 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 cultivars 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 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 is primarily grown in the northern Red River Valley and the north-central area of North Dakota. Maturity group 0 is adapted to Traill, Cass and Richland counties and other counties with similar latitudes. Maturity group 1 primarily is suitable for southern areas. These maturity groups are further subdivided. For example, a 0.1 maturity group is an early group 0 variety and a 0.9 is a late-maturity group 0 variety.

The best way to select a high-yielding variety is to use data averaged across several locations and years. Because weather conditions are unknown in advance, averaging across several years' data will identify how a variety might perform across different weather conditions. Selecting a variety that has performed well in dry and moist 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.

Most varieties have Phytophthora root rot-resistance genes. Each gene for resistance 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.

According to a survey of *Phytophthora* races done by NDSU's soybean pathologist, Berlin Nelson, races 3 and 4 are most common in North Dakota. However, numerous other races are found in the state. Based on these findings, resistance genes RPS 6 and RPS 1K (commonly called the K gene) are the most likely genes to provide resistance against the races common in North Dakota. Although selection of RPS 6 or RPS 1K does not guarantee control, selection of one of these two resistance genes will increase the likelihood of some protection against Phytophthora root rot.

Because *Phytophthora* races capable of overcoming genes exist, monitoring your field for Phytophthora root rot is very important. If the root rot is widespread, switch to a different gene the next time soybean is grown in that field.

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 past history of causing problems. The same pathogen causing white mold in soybeans causes white mold in other crops (dry bean, sunflower, pea, canola, etc.); therefore, recent white mold problems in any crop in that field should be noted.

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 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 2013, IDC scores are provided in Tables 4-5.

Soybean Cyst Nematode

The soybean cyst nematode (SCN), *Heterodera glycines*, is a small parasitic roundworm that attacks the roots of soybeans. Soybean cyst nematode has been found and verified in Richland (2003), Cass (2007), Dickey (2009), LaMoure (2010), Ransom (2010), Barnes (2010), Grand Forks (2010), Traill (2011), Sargent (2011), Steele (2011), Pembina (2011) and Emmons (2011) counties of North Dakota. The soybean cyst nematode likely exists in other counties as well. Growers should consider testing their soils for SCN.

Soybean cyst nematode causes yield losses in infested fields. Nematodes often are undetected because above-ground symptoms are uncommon until a 15 to 30 percent yield loss has occurred. Crop rotation and resistance are the most important practices growers must use to manage the disease. If a nematode problem is in the field, resistant soybean varieties should be planted.

General Information About the Tables

Variety trial data from all NDSU Research Extension Centers for all crops can be found at 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 value, it means that with 90 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, oil and protein information are adjusted to 13 percent moisture content in the seed. Maturity date indicates physiological maturity, which is the date 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 3 provides the full company name, abbreviated company name used in the tables and a website for the company.

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

Variety	Maturity Group	Fargo Relative Maturity	Height	Hilum Color	Remarks ¹
Jim	00.6	early	short	yellow	7
Cavalier	00.7	early	short	yellow	1, 5
Traill	0.0	early med.	med.	yellow	1, 7
Walsh	0.0	early med.	med.	yellow	1, 5
Nornatto	0.3	med.	short	yellow	3, 7, 9
Nannonatto	0.3	med.	short	yellow	3, 7, 9
Ashtabula	0.4	med.	med.	yellow	1, 5
Prosoy	0.8	med. late	tall	yellow	4, 7, 10
Sheyenne	0.8	med. late	med.	yellow	1, 6
Hamlin	0.9	late	med.	black	1, 4, 5
Surge	0.9	late	med.	imp. black	1, 4
Deuel	1.0	late	med.	black	5
SD1093RR	1.0	late	med.	imp. black	2, 8

¹ Remarks 1 = Good iron chlorosis resistance; 2 = Moderate tolerance to iron chlorosis; 3 = Sensitive to iron chlorosis on high-pH soils; 4 = Plant early; 5 = Resistant to races 1-4 of phytophthora root rot; 6 = Resistant to races 1, 2 and 3 of phytophthora root rot; 7 = Susceptible to phytophthora root rot; 8 = Roundup Ready variety; 9 = Natto bean; 10 = Tofu bean.

Table 2. Locations and Planting Dates, 2013 North Dakota Soybean Trials.			
Location	Author/Investigator	Material Tested	Planting Date
Arthur, N.D.	Ted Helms	Roundup Ready and conventional	June 3
Grandin, N.D.	Ted Helms	Roundup Ready and conventional	May 10
Milnor, N.D.	Ted Helms	Roundup Ready and conventional	May 29
Northwood, N.D.	Ted Helms	Roundup Ready and conventional	May 23
Walcott, N.D.	Ted Helms	Roundup Ready and conventional	June 3
SCN sites	Ted Helms	Roundup Ready	May 16, June 6
IDC sites	Ted Helms	Roundup Ready	June 3
Carrington Research Extension Center	Blaine Schatz, Mike Ostlie, Steve Schaubert, Bob Smith	Dryland Organic Dryland and irrigated Roundup Ready Dryland and irrigated conventional	May 24 May 28 May 29
Barnes County trials, Dazey, N.D.	Blaine Schatz, Mike Ostlie, Tim Indergaard	Dryland Roundup Ready and conventional	June 3
LaMoure County trials	Ted Helms and Blaine Schatz	Roundup Ready and conventional	May 27
Wishek, N.D.	Blaine Schatz, Mike Ostlie, Tim Indergaard	Roundup Ready	June 6
Oakes Research site	Blaine Schatz, Leonard Besemann	Irrigated Roundup Ready and conventional	May 28
Langdon Research Extension Center	Bryan Hanson, Travis Hakanson	Roundup Ready, conventional and Liberty Link	May 29
Pembina County, Cavalier, N.D.	Bryan Hanson, Travis Hakanson	Roundup Ready	June 6
Walsh County, Park River, N.D.	Bryan Hanson, Travis Hakanson	Roundup Ready, conventional and Liberty Link	May 28
Nelson County, Lakota, N.D.	Bryan Hanson, Travis Hakanson	Roundup Ready	June 3
North Central Research Extension Center, Minot, N.D.	Eric Eriksmoen, James Tarasenko, Joe Effertz	Roundup Ready	May 28
Garrison and Mohall, N.D.	Eric Eriksmoen, James Tarasenko, Joe Effertz	Roundup Ready, Garrison Roundup Ready, Mohall	June 7 June 13
Hettinger Research Extension Center	John Rickertsen, Rick Olson	Roundup Ready and conventional	May 17
Williston Research Extension Center	Jerry Bergman, Diana Amiot, Chelsey Penuel	Dryland Roundup Ready and conventional	May 16
Ransom County	Brian Zimprich, Hans Kandel, Joel Ransom, Chad Deplazes, Grant Mehring	Roundup Ready	May 31
Sargent County	Melissa Blawat, Hans Kandel, Joel Ransom, Chad Deplazes, Grant Mehring	Roundup Ready	May 31
Griggs and Steele Counties	Jill Haakenson, Alicia Harstad, Grant Mehring, Chad Deplazes, Hans Kandel, Joel Ransom	Roundup Ready	May 27
Five Locations: Dwight, Gwinner and Lisbon, N.D., Barnesville and Fergus Falls, MN	Grant Mehring, et al.	Roundup Ready, Ransom Roundup Ready, Sargent Roundup Ready, Richland	May 31 May 31 May 30

Table 3. Full Company Name, Abbreviated Name Used in Tables and Website.

Company	Abbreviated	Website
Asgrow	Asgrow	www.asgrowanddekab.com
Brushvare Seed, Inc.	Brushvare	www.brushvareseed.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
G2 Genetics	G2 Genetics	www.nutechseed.com
Gold Country Seeds	Gold Cntry	www.goldcountryseed.com
Hefty Seed Co.	Hefty	www.heftyseed.com
Hyland Seeds	Hyland	www.hylandseeds.com
Integra Seed	Integra	www.integraseed.com
Kruger Seeds Inc.	Kruger	www.krugerseed.com
Legend Seeds Inc.	Legend	www.legendseeds.net
Mustang Brand Seeds	Mustang	www.mustangseeds.com
Mycogen Seeds	Mycogen	www.mycogen.com
NorthStar Genetics	NorthStar	www.northstargenetics.com
N.D. Foundation Seed	NDSU	www.ag.ndsu.nodak.edu/aginfo/seedstock/fss/
Nuseed	Nuseed	www.nuseed.com
NuTech Seed	NuTech	www.nutechseed.com
Peterson Farms Seed (PFS)	Peterson	www.petersonfarmsseed.com
Prairie Brand Seed	Prairie	www.prairiebrandseed.com
Proseed Inc.	Proseed	www.proseed.net
REA Hybrids	REA	www.rea-hybrids.com
Renk Seeds	Renk	www.renkseed.com
Richland Organics	Richland	www.richlandorganics.com
Seeds 2000	Seeds 2000	www.seeds2000.net
SK Food International	SK Food	www.skfood.com
SoDak Genetics	SoDak	www.roughridergenetics.com/So_Dak.htm
South Dakota State University	SDSU	www.sdstate.edu/ps/sdfssd/index.cfm
Soyko International	Soyko	www.circlecseeds.com
Stine Seed Co.	Stine	www.stinseed.com
SunOpta	Sunopta	www.sunopta.com
Syngenta NK Brand	Syng NK	www.syngenta.com/country/us/en/agriculture/seeds/soybean/Pages/nk-soybeans.aspx
Terning Seed	Terning	www.terningseeds.com
Thunder Seed	Thunder	www.thunderseeds.com
Wensman Seed	Wensman	www.wensmanseed.com
WinField Croplan	Croplan	www.winfield.com/Farmer/Croplan/FindSeed/Soybean/

Table 4. 2013 NDSU Roundup Ready Soybean Iron-deficiency Chlorosis Trial - Author, T. Helms (Page 1 of 2).

Company	Variety	4-site	Company	Variety	4-site	Company	Variety	4-site
		Mean			Mean			Mean
		IDC ¹			IDC ¹			IDC ¹
NorthStar	0088R2	1.5	Legend	LS 12R24N	2.1	Proseed	10-20	2.3
Thunder	3114R2Y	1.6	Mycogen	5B005R2	2.1	Thunder	3307R2Y	2.3
Dairyland	DSR-C905/R2Y	1.6	NorthStar	0537R2	2.1	NuTech/G2	G2 6143	2.3
Prairie	PB-00844R2	1.7	Peterson	12R05	2.1	Hefty	H007Y12	2.3
Dyna-Gro	S008RY43	1.7	Proseed	11-05	2.1	Kruger	K2-0601	2.3
Croplan	R2T00832	1.7	Integra	20600 R2Y	2.1	NorthStar	0080R2	2.3
Thunder	33009R2YN	1.7	Syng NK	NK S14-J7	2.1	Prairie	PB-00950R2	2.3
Channel	0205R2	1.8	NorthStar	0057R2	2.1	Peterson	13R04	2.3
Hefty	H008R3	1.8	Croplan	R2T0041	2.2	Thunder	3211R2Y	2.3
Renk	RS053R2	1.8	Mycogen	5B130R2	2.2	Asgrow	AG 0430	2.3
Kruger	K2-0101	1.8	Prairie	PB-0391R2	2.2	NuTech/G2	6098	2.3
Proseed	20-08	1.8	REA	53G32	2.2	Syng NK	NK S10-G7	2.3
Stine	01RD66	1.8	Asgrow	AG 0432	2.2	Proseed	20-70	2.3
Asgrow	AG 00932	1.9	Channel	00806R2	2.2	Terning	TS4060RR2Y	2.3
Wensman	W 3030R2	1.9	Integra	20031	2.2	Thunder	31009R2Y	2.3
Dyna-Gro	30RY04	1.9	Legend	LS 06R24N	2.2	Wensman	W 3102NR2	2.3
Mycogen	5B024R2	1.9	Legend	LS 13R21	2.2	Dairyland	DSR-0606/R2Y	2.4
REA	62G22	1.9	Mycogen	5B012R2	2.2	NuTech/G2	G2 7063	2.4
NuTech/G2	G6052	1.9	NorthStar	0077R2	2.2	Gold Cntry	0053	2.4
NuTech/G2	6093	1.9	Peterson	14R008	2.2	Hyland	HX 01RY41	2.4
Syng NK	NK S02-B4	1.9	NorthStar	0096R2	2.2	Mustang	11302	2.4
Dairyland	DSR-C506/R2Y	2.0	Asgrow	AG 00632	2.2	Proseed	PX11	2.4
Kruger	K2-0504	2.0	Asgrow	AG 0231	2.2	Asgrow	AG 1132	2.4
Legend	LS 02R21	2.0	NuTech/G2	0090	2.2	Dahlman	5108RR2Y	2.4
Prairie	PB-00560R2	2.0	Integra	21115N	2.2	Dyna Gro	S12RY44	2.4
Integra	20073	2.0	Mycogen	5B112R2	2.2	Legend	LS 03R22	2.4
Prairie	PB-00821R2	2.0	REA	65G22	2.2	Peterson	11R01	2.4
Wensman	W 30078R2	2.0	Stine	02RE03	2.2	Channel	1101R2	2.4
Dairyland	DSR-0305/R2Y	2.0	Thunder	3205R2Y	2.2	Hyland	HS 05RYS25	2.4
Mustang	06942	2.0	Asgrow	AG 0732	2.3	Mycogen	5G009R2	2.4
Mycogen	5B066R2	2.0	Croplan	R2T0091	2.3	Peterson	14R02	2.4
Mycogen	5B080R2	2.0	NuTech/G2	G2 6009	2.3	Proseed	PX01	2.4
Syng NK	NK S00-A7	2.0	NorthStar	1257R2	2.3	Thunder	32005R2Y	2.4
Prairie	PB-0551R2	2.0	Prairie	PB-0991R2	2.3	Wensman	W 3062NR2	2.4
Dyna-Gro	S007RY44	2.1	Proseed	11-50	2.3	Dahlman	5311NRR2Y	2.5
Integra	20085N	2.1	Thunder	3201R2Y	2.3	Integra	20810	2.5
Legend	LS 06R21	2.1	Wensman	W 30099R2	2.3	Proseed	10-08	2.5
Proseed	11-07	2.1	Wensman	W 3121NR2	2.3	Thunder	3303R2Y	2.5
Proseed	PX009	2.1	Asgrow	AG 0832	2.3	Asgrow	AG 0333	2.5
REA	61G21	2.1	NuTech/G2	7110	2.3	Dairyland	DSR-0404/R2Y	2.5
Dairyland	DSR-1215/R2Y	2.1	Integra	20090	2.3	Dyna-Gro	S06RY24	2.5
Integra	20052	2.1	Prairie	PB-0291R2	2.3	Integra	20300 R2Y	2.5
LSD (0.05)		0.23	LSD (0.05)		0.23	LSD (0.05)		0.23

Table 4. 2013 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 ¹			IDC ¹			IDC ¹
Kruger	K2-0052	2.5	Syng NK	NK S05-M8	2.6	REA	66G14	2.8
Peterson	13R08N	2.5	Prairie	PB-0866R2	2.6	REA	69G13	2.8
Peterson	14R06N	2.5	Prairie	PB-0441R2	2.7	Thunder	3406R2YN	2.8
REA	58G82	2.5	SoDak	SD 2091R2Y	2.7	Mustang	08824	2.9
NuTech/G2	6005	2.5	Hyland	HX 10RY43	2.7	Channel	1207R2	2.9
Kruger	K2-1301	2.5	Prairie	PB-0777R2	2.7	Dairyland	DSR-0747/R2Y	2.9
Legend	LS 09R23N	2.5	Peterson	14R13	2.7	Integra	20107	2.9
Mustang	04403	2.5	Proseed	10-80	2.7	Nuseed	2093 RR2YN	2.9
Peterson	11R10	2.5	Proseed	2-140	2.7	Prairie	PB-0609R2	2.9
Peterson	13R03	2.5	Renk	RS033R2	2.7	Channel	0707R2	2.9
Peterson	14R11N	2.5	Wensman	W 3128R2	2.7	Integra	20902 R2Y	2.9
Proseed	20-30	2.5	REA	71G20	2.7	Stine	02RD00	2.9
Stine	03RD66	2.5	Channel	0906R2	2.7	Terning	TS4062NRR2Y	2.9
Wensman	W 30084R2	2.5	Legend	LS 08R22N	2.7	NuTech/G2	6043	2.9
Wensman	W 3032R2	2.5	Mycogen	5B081R2	2.7	NorthStar	0108R2	2.9
Wensman	W 3076R2	2.5	Prairie	PB-1234R2	2.7	NorthStar	0629NR2	2.9
Channel	0507R2	2.6	Peterson	14R09N	2.7	Prairie	PB-00961R2	2.9
Dyna-Gro	S02RY74	2.6	Kruger	K2-0901	2.8	Proseed	PX12	2.9
Dyna-Gro	S08RY23	2.6	Prairie	PB-0863R2	2.8	Thunder	3202R2Y	2.9
Dyna-Gro	S09RY64	2.6	Terning	TS4083RR2Y	2.8	Integra	20109 R2Y	3.0
Hefty	H02R3	2.6	Kruger	K2-0302	2.8	Kruger	K2-1102	3.0
Legend	LS 01R24	2.6	Kruger	K2-0801	2.8	Integra	20815 R2Y	3.0
Proseed	PX02	2.6	Kruger	K2-1001	2.8	Wensman	W 3058R2	3.0
Hyland	HS 09RYS12	2.6	Mycogen	5N091R2	2.8	Dahlman	5306NRR2Y	3.0
Kruger	K2-1103	2.6	NorthStar	1079R2	2.8	Mustang	07724	3.0
Syng NK	NK S06-R9	2.6	Nuseed	2122RR2YN	2.8	REA	71G14	3.0
SoDak	SD 2101R2Y	2.6	Proseed	20-90	2.8	Thunder	3408R2YN	3.0
Thunder	3302R2Y	2.6	REA	55G14	2.8	Asgrow	AG 1431	3.1
Wensman	W 3024R2	2.6	Stine	01RE00	2.8	Hefty	H01R3	3.1
Wensman	W 3090NR2	2.6	Mustang	12224	2.8	Peterson	PFS 12R06	3.1
Asgrow	AG 0801(check)	2.6	Syng NK	NK S08-G1	2.8	Channel	0605R2	3.1
Asgrow	AG 0803(check)	2.6	Peterson	14R10	2.8	Dahlman	5309NRR2Y	3.1
Dairyland	DSR-0904/R2Y	2.6	Proseed	PX06	2.8	NuTech/G2	6088	3.2
Dyna-Gro	S02RY74	2.6	REA	69G14	2.8	Dairyland	DSR-1120/R2Y	3.2
Integra	20215 R2Y	2.6	Stine	06RE02	2.8	Syng NK	NK S04-D3	3.4
Kruger	K2-0092	2.6	Syng NK	NK S10-P9	2.8			
Mycogen	5B040R2	2.6	Nuseed	2071RR2YN	2.8			
LSD (0.05)		0.23	LSD (0.05)		0.23	LSD (0.05)		0.23

¹IDC score was 1-5 scale with 1-green, 5-dead.

Table 5. 2013 NDSU Conventional and Liberty Link Soybean Iron-deficiency Chlorosis Trial - Author, T. Helms.

Company	Variety	4-site Mean IDC ¹	Company	Variety	4-site Mean IDC ¹
Control	A11(early) ²	1.6	NDSU	Sheyenne	2.4
Asgrow	AG 0732RR ³	2.0	Brushvale	BS53	2.5
NorthStar	0129LL	2.0	Brushvale	BS86	2.5
Thunder	5411LL	2.0	Peterson	L009-13	2.5
NDSU	ND1100S	2.1	SDSU	Deuel	2.5
Thunder	5210NLL	2.1	Soyko	JJ4705	2.5
NorthStar	0095LL	2.1	Peterson	L05-11N	2.5
Proseed	LL11-61	2.1	Proseed	LL10-81	2.5
Richland	MK 850	2.1	Richland	Challenger	2.5
Proseed	LLPX07	2.1	SDSU	Surge	2.5
Richland	MK 0249	2.2	Thunder	5205NLL	2.5
Peterson	L03-12N	2.2	Brushvale	BS72	2.6
SK Food	SK 066	2.2	NDSU	ProSoy	2.6
Brushvale	BS44	2.2	Richland	MK 1016	2.6
Peterson	L11-13N	2.2	Asgrow	AG 0231 ³	2.6
Proseed	PX09LL	2.2	NDSU	ND1005T	2.6
Integra	30080LL	2.3	Peterson	L01-14	2.6
Proseed	PX05LL	2.3	Proseed	LL11-51	2.6
Richland	MK 0205	2.3	SDSU	Roberts	2.6
Richland	MK 0508	2.3	Soyko	JJExp13	2.6
Peterson	L08-14	2.3	SK Food	SK 0007	2.6
Hefty	H008L3	2.3	SK Food	SK 0635	2.6
Integra	30500	2.3	Richland	MK 9101	2.6
Proseed	LL10-31	2.3	NDSU	Cavalier	2.7
SunOpta	Bravado	2.3	SK Food	SK 9801	2.7
Thunder	5303NLL	2.3	Proseed	LLPX14	2.7
Integra	30300NLL	2.4	SK Food	SK 095	2.7
NDSU	Traill	2.4	SK Food	SK 007	2.7
SDSU	Codington	2.4	Pioneer	91M10	2.8
Hefty	H03L3	2.4	SK Food	SK 0786	2.9
SK Food	SK 923	2.4	NDSU	Sargent	2.9
NDSU	Ashtabula	2.4	Richland	MK 831	3.1
Proseed	LL21-00	2.4			
LSD (0.05)		0.33	LSD (0.05)		0.33

¹IDC score was 1-5 with 1-green, 5-dead.

²A11 is not a commercially grown genotype.

³These RR types were included as additional checks for comparisons.

Table 6. 2013 NDSU Soybean Iron-deficiency Chlorosis Yield Trial, Author, T. Helms.

Company/Brand	Variety	Maturity (date)	IDC Score ¹ (1-5)	2013 Seed Yield (bu/a)			
				Hunter	Leonard	Colfax	Average
Asgrow	AG 00932	9/20	1.6	30.2	25.4	41.6	32.4
Asgrow	AG 0432	9/27	2.1	30.4	22.4	41.9	31.6
Asgrow	AG 0833	10/5	2.1	30.7	25.5	47.0	34.4
Channel	0605R2	10/3	2.4	31.6	21.7	44.4	32.6
Dahlman	5108RR2Y	10/4	2.3	35.2	20.8	45.4	33.8
Dyna-Gro	35Y01	9/19	1.4	39.0	28.9	52.2	40.0
G2	G2 7063	9/27	2.1	32.0	23.2	47.7	34.3
Integra	20600	9/28	1.8	42.9	31.6	49.0	41.2
Integra	20810	10/3	2.1	29.8	18.5	44.3	30.9
Kruger	K2-0302	9/28	2.2	40.2	21.7	48.2	36.7
Kruger	K2-0504	10/1	1.6	33.4	28.2	42.8	34.8
Kruger	K2-0901	10/6	2.4	40.1	19.4	54.4	37.9
Legend	LS02R21	9/21	1.6	32.9	25.3	42.9	33.7
Legend	LS06R21	9/21	2.0	24.5	18.0	40.1	27.5
Legend	LS06R24N	9/30	2.0	40.1	28.7	52.9	40.6
Mycogen	5B040R2	9/29	2.1	37.3	26.1	47.3	36.9
Mycogen	5B080R2	9/25	1.7	34.8	26.5	39.1	33.5
Mycogen	5B112R2	10/7	1.9	34.3	22.9	57.6	38.3
NorthStar	NS 0537R2	9/30	1.9	41.8	26.0	48.2	38.6
NorthStar	NS 0839NR2	10/7	2.8	25.7	13.3	46.3	28.4
NorthStar	NS 1079R2	10/5	2.3	30.7	25.5	49.6	35.3
Nuseed	2071RR2YN	10/2	2.2	36.8	19.6	58.8	38.4
Nuseed	2093RR2YN	10/4	2.5	31.2	23.4	53.2	35.9
Peterson	14R10	10/7	2.8	22.0	15.8	42.7	26.8
Prairie	PB-0991R2	10/5	1.8	36.8	28.1	54.3	39.7
Prairie	PB-0441R2	9/28	1.8	43.3	26.9	54.2	41.5
Prairie	PB-0551R2	9/28	1.7	41.9	28.7	48.4	39.7
Syng NK	NK S02-B4	9/21	1.7	33.3	23.7	42.8	33.3
Syng NK	NK S06-H5	9/27	2.2	31.5	24.3	50.8	35.5
Syng NK	NK S08-G1	10/3	2.5	34.8	18.8	51.5	35.0
Thunder	31009R2Y	9/22	2.0	33.5	22.7	39.9	32.0
Thunder	3205R2Y	9/28	1.7	35.6	31.4	50.4	39.1
Thunder	3303R2Y	10/3	2.4	24.6	19.3	47.7	30.5
Wensman	W30099R2	9/23	1.8	35.6	23.7	47.0	35.4
Wensman	W3030R2	9/23	1.5	33.1	27.6	40.3	33.7
Wensman	W3032R2	9/30	2.0	37.7	23.7	54.8	38.7
Average		29-Sep	2.0	34.1	23.8	47.8	35.2
CV %		5	18.6	16.7	20.6	14.7	16.8
LSD (0.05)		2	0.3	8.0	6.8	9.7	4.8

¹Iron-deficiency chlorosis visual score based on one site: 1-green, 3- yellow, 5- dead.

Table 7. Resistance of Soybean Varieties to Soybean Cyst Nematode HG type 0 - Authors, B. Nelson and T. Helms.

Company	Variety	Female Index¹	Resistance²
Asgrow	AG 0732	16	R
Asgrow	AG 0833	3	HR
Asgrow	AG 00932	10	R
Dahlman	5306NRR2Y	10	R
Dahlman	5311NRR2Y	15	R
Dahlman	5309NRR2Y	10	R
Dyna-Gro	S09RY64	13	R
Dyna-Gro	S06RY24	5	HR
G2 Genetics	G2 7110	2	HR
G2 Genetics	G2 7063	1	HR
Integra	21115N	9	HR
Kruger	K2-0302	6	HR
Kruger	K2-1103	4	HR
Legend	LS06R24N	13	R
Legend	LS09R23N	13	R
Legend	LS08R22N	39	MR
Legend	LS12R24N	11	R
Mycogen	5N110R2	14	R
Mycogen	5N091R2	53	LR
NorthStar	NS 0839NR2	16	R
Nuseed/Seeds 2000	2071RR2YN	11	R
Nuseed/Seeds 2000	2093RR2YN	10	R
Nuseed/Seeds 2000	2122RR2YN	4	HR
Peterson	14R09N	12	R
Prairie	PB-0609R2	16	R
Prairie	PB-0863R2	45	LR
Prairie	PB-1234R2	23	R
Prairie	PB-0777R2	3	HR
Syng NK	NK S06-H5	9	HR
Thunder	3408R2YN	3	HR
Thunder	3406R2YN	10	R
Susceptible check	Barnes	100	

Testing conducted under controlled conditions in greenhouse.

Only varieties reported with SCN resistance were evaluated.

Barnes is the standard susceptible check.

¹Female Index (FI) = numbers of females on the test variety divided by the number of females on the susceptible check times 100.

²Illinois system for classifying resistance:

FI <10 = Highly resistant (HR)

FI 10-24 = Resistant (R)

FI 25-39 = Moderately resistant (MR)

FI 40-59 = Low resistance (LR)

FI >60 = No resistance.

Table 8. 2013 NDSU Combined Central Roundup Ready Soybean Locations in North Dakota - Author, T. Helms (Page 1 of 2).

Company/ Brand	Variety	Maturity ¹ (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield			2013 Average	2-yr. Avg.
						Northwood	Arthur	Grandin		
						------(bu/a)-----				
Asgrow	AG 0231	9/17	28	18.5	34.2	47.9	47.3	30.0	41.7	45.2
Asgrow	AG 0430	9/17	24	18.6	34.1	59.5	52.5	46.7	52.9	54.3
Asgrow	AG 0333	9/21	26	19.2	33.3	54.3	52.6	37.9	48.2	
Asgrow	AG 0732	9/26	21	18.9	33.5	41.1	33.6	33.9	36.2	47.8
Channel	0507R2	9/21	29	18.5	33.9	60.7	54.6	37.4	50.9	--
Channel	0605R2	9/22	28	18.0	33.8	64.4	66.3	47.1	59.3	54.4
Channel	0707R2	9/23	28	17.9	34.1	52.3	52.1	34.1	46.2	--
Dahlman	5306NRR2Y	9/21	25	18.2	34.2	51.7	52.4	33.4	45.8	--
Dahlman	5108RR2Y	9/24	26	19.1	32.4	51.5	50.8	34.5	45.6	--
Dairyland	DSR-0305/R2Y	9/19	27	19.2	33.2	54.5	50.3	39.5	48.1	--
Dairyland	DSR-0404/R2Y	9/20	29	18.9	34.4	51.8	49.7	36.7	46.1	51.4
Dairyland	DSR-0606/R2Y	9/22	27	18.7	33.5	53.2	55.6	31.5	46.8	49.8
Dairyland	DSR-0747/R2Y	9/26	25	17.7	36.2	54.9	44.1	46.7	48.6	--
Dyna-Gro	S02RY74	9/13	26	18.5	34.1	51.5	45.9	38.8	45.4	--
Dyna-Gro	S06RY24	9/24	28	18.0	34.8	62.9	59.7	46.6	56.4	--
G2	G2 0090	9/13	24	20.1	33.0	54.8	40.1	44.8	46.6	--
G2	G2 7063	9/19	23	18.3	34.6	45.5	38.6	30.5	38.2	45.1
G2	G2 6043	9/21	27	19.7	33.4	57.6	51.5	38.0	49.0	49.4
Integra	20600	9/21	28	19.1	32.2	58.1	54.9	41.0	51.3	54.6
Integra	20300	9/22	24	19.0	33.4	54.6	51.4	33.7	46.6	--
Kruger	K2-0302	9/20	29	18.5	33.2	55.4	50.2	43.1	49.6	--
Kruger	K2-0601	9/23	27	18.3	33.9	56.8	51.0	42.5	50.1	--
Kruger	K2-0504	9/24	20	19.2	33.5	45.5	32.3	39.9	39.3	--
Kruger	K2-0901	9/25	27	18.6	34.4	60.1	52.6	39.3	50.6	52.4
Legend	LS 02R21	9/15	26	18.9	33.1	53.0	38.4	42.2	44.5	--
Legend	LS 03R22	9/20	26	18.0	35.2	55.3	54.9	35.2	48.5	52.7
Legend	LS 06R21	9/20	28	18.4	33.7	51.0	55.9	30.1	45.7	--
Legend	LS 06R24N	9/22	29	16.7	35.8	68.7	62.5	47.8	59.7	--
Mustang	06942	9/21	27	18.4	34.6	51.8	54.1	33.4	46.4	49.1
Mustang	07724	9/22	28	18.4	34.0	57.5	45.0	44.2	48.9	--
Mustang	04403	9/22	29	18.7	34.1	55.3	56.7	35.4	49.1	54.3
Mycogen	5B024R2	9/14	27	17.8	35.0	47.1	36.8	40.4	41.4	--
Mycogen	5B080R2	9/20	27	18.8	32.9	49.0	45.9	34.0	43.0	--
Mycogen	5B040R2	9/20	28	19.3	34.7	55.7	57.8	38.1	50.5	--
Mycogen	5B066R2	9/21	25	17.6	34.7	52.0	45.6	38.0	45.2	50.6
NorthStar	NS 0537R2	9/19	30	18.4	33.5	57.5	55.1	39.1	50.6	--
NorthStar	NS 0839NR2	9/25	30	18.2	34.2	59.8	53.5	40.6	51.3	--
Nuseed	2071 RR2YN	9/22	24	18.2	33.8	55.9	53.8	42.8	50.8	--
Peterson	13R04	9/20	30	17.8	34.0	57.2	52.9	36.9	49.0	--
Peterson	12R05	9/21	30	18.7	33.9	56.8	61.4	36.1	51.4	52.6
Peterson	13R03	9/21	28	18.8	33.4	58.3	57.5	37.3	51.0	--
Peterson	12R06	9/23	27	18.6	33.3	56.6	58.2	34.6	49.8	52.5
Mean		9/21	27	18.5	33.8	55.0	51.4	38.1	48.2	51.1
CV %		5.5	--	3.8	8.4	12.1	21.5	21.2	18.2	--
LSD 0.10		5	--	1.1	4.6	9	14.7	11	6.8	--

Table 8. 2013 NDSU Combined Central Roundup Ready Soybean Locations in North Dakota - Author, T. Helms (Page 2 of 2).

Company/ Brand	Variety	Maturity ¹ (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield			2013 Average	2-yr. Avg.
						Northwood	Arthur	Grandin		
						------(bu/a)-----				
Prairie	PB-0291R2	9/18	28	17.8	34.3	55.3	50.0	44.5	49.9	--
Prairie	PBR-0391R2	9/19	27	19.0	32.9	60.9	51.3	45.4	52.5	--
Prairie	PB-0441R2	9/21	29	18.1	34.1	60.7	51.7	43.6	52.0	54.5
Prairie	PB-0609R2	9/22	21	18.5	33.7	56.9	50.0	42.6	49.8	--
Prairie	PB-0777R2	9/24	28	18.0	34.3	52.7	50.5	34.7	46.0	--
Proseed	PX06	9/22	22	18.0	34.1	50.9	45.3	38.3	44.9	--
Proseed	11-50	9/23	31	18.9	33.8	62.2	65.1	37.5	55.0	52.6
Proseed	20-70	9/23	24	18.5	34.9	54.9	51.3	32.3	46.2	--
Stine	06RE02	9/21	25	18.5	34.3	57.9	54.4	42.9	51.7	--
Stine	03RD66	9/21	25	18.5	33.7	53.6	45.3	37.4	45.5	--
Syng NK	NK S04-D3	9/14	27	17.9	34.5	59.5	52.1	40.1	50.6	--
Syng NK	NK S05-M8	9/18	25	18.5	33.8	53.7	42.3	42.0	46.0	--
Syng NK	NK S06-R9	9/18	25	18.7	32.5	45.1	43.4	26.5	38.4	44.5
Syng NK	NK S08-G1	9/23	28	19.2	33.5	54.0	49.0	40.4	47.8	--
Terning	TS4062NRR2Y	9/21	27	19.1	33.5	54.7	59.6	31.1	48.5	--
Terning	TS4060RR2Y	9/22	28	18.6	33.3	54.5	53.8	29.6	45.9	--
Terning	TS4083RR2Y	9/22	29	18.2	34.8	57.5	59.6	36.8	51.3	--
Thunder	3406R2YN	9/21	26	18.7	34.9	60.4	60.7	38.5	53.2	--
Thunder	3205R2Y	9/22	31	19.4	33.1	53.7	54.1	32.5	46.8	52.4
Thunder	3303R2Y	9/22	26	18.8	33.6	56.1	51.9	37.4	48.5	--
Thunder	3307R2Y	9/23	27	18.5	33.1	55.5	54.2	35.4	48.4	49.6
Wensman	W 3032R2	9/21	27	19.3	33.1	57.2	55.5	31.6	48.1	--
Wensman	W 3062NR2	9/23	25	17.9	35.5	51.0	46.5	37.0	44.8	--
Wensman	W 3058R2	9/24	26	17.1	34.7	61.0	55.5	39.7	52.1	54.4
Wensman	W 3076R2	9/24	24	18.4	34.3	48.3	53.7	38.4	47.0	51.0
Mean		9/21	26	18.5	33.8	55.0	51.4	38.1	48.2	51.1
CV %		5.5	--	3.8	8.4	12.1	21.5	21.2	18.2	--
LSD 0.10		5	--	1.1	4.6	9	14.7	11	6.8	--

¹Maturity is date of 95 percent brown or tan pods.

Table 9. 2013 NDSU Combined Central Conventional and Liberty Link Soybean Locations in North Dakota - Author, T. Helms.

Company/ Brand	Variety	Maturity ¹ (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield				
						Northwood	Arthur	Grandin	2013 Average	2-yr. Avg.
						------(bu/a)-----				
Asgrow	AG 0231RR ²	9/23	28	19.8	32.1	62.2	35.2	32.2	43.2	46.3
Asgrow	AG 0732RR ²	9/27	21	19.2	33.8	54.9	30.8	27.9	37.9	46.5
NDSU	Cavalier	9/16	17	18.0	34.2	47.9	23.2	31.8	34.3	37.4
NDSU	Traill	9/16	21	18.7	33.9	54.9	28.6	32.9	38.8	39.5
NDSU	ND1100S	9/18	22	18.9	33.3	48.3	24.6	29.5	34.1	37.6
NDSU	Ashtabula	9/20	22	19.9	32.8	54.3	28.1	33.7	38.7	42.9
NDSU	Sheyenne	9/25	26	20.5	32.2	69.8	38.9	41.7	50.1	53.4
NDSU	ProSoy	9/27	28	18.1	35.9	58.9	31.9	32.4	41.1	45.5
Peterson	L03-12N	9/20	22	18.4	35.0	56.5	27.1	39.9	41.2	44.4
Peterson	L05-11N	9/25	26	20.5	32.3	65.1	37.4	33.1	45.2	49.0
Proseed	LL11-61	9/24	24	18.6	34.9	53.7	30.7	25.6	36.7	45.2
Proseed	LL11-51	9/26	29	19.3	33.8	68.0	36.8	40.4	48.4	51.2
Proseed	LL10-81	9/28	24	18.1	34.0	60.5	33.3	33.5	42.4	49.5
Proseed	LLPX07	10/3	22	18.1	34.3	60.9	33.5	34.0	42.8	--
Richland	MK 0249	9/22	14	18.7	33.7	37.0	13.7	34.5	28.4	--
Richland	MK 0205	9/22	20	17.4	36.5	45.9	22.2	30.5	32.9	35.4
Richland	MK 831	9/22	22	17.8	34.9	58.5	27.2	44.3	43.3	--
Richland	MK 0508	9/26	19	18.7	33.1	51.9	27.1	31.6	36.9	41.6
SK Food	SK923	9/14	18	18.9	32.6	45.8	19.9	36.4	34.0	--
SK Food	SK0786	9/23	23	18.2	34.9	56.0	28.1	36.9	40.3	43.9
SK Food	SK0635	9/24	25	18.7	33.4	74.5	40.0	46.4	53.6	--
SK Food	SK066	9/25	21	17.2	35.3	51.6	28.7	25.9	35.4	--
Soyko	JJExp13	9/23	23	16.2	37.8	40.6	17.9	30.5	29.7	--
Soyko	JJ4705	9/27	22	15.1	38.8	49.2	24.6	33.0	35.6	--
Thunder	5303NLL	9/21	24	18.9	35.0	62.6	35.8	31.6	43.3	--
Thunder	5205NLL	9/24	27	18.3	34.7	60.1	33.9	31.5	41.8	48.9
Mean		9/24	23	18.5	34.4	55.8	29.2	33.9	39.6	44.6
CV %		4.8	--	6.3	5.2	16.2	21.2	22.2	--	--
LSD 0.10		2	--	1.9	2.8	14.1	9.8	11.9	--	--

¹Maturity is date of 95 percent brown or tan pods.²These two varieties are Roundup Ready and were included as checks.

Table 10. 2013 NDSU Combined Southern Roundup Ready Soybean Locations in North Dakota - Author, T. Helms (Page 1 of 2).

Company/ Brand	Variety	Maturity ¹ (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	2013		2-yr. Avg.	
						Milnor	Walcott		
						Average			
						------(bu/a)-----			
Asgrow	AG 0732	9/26	26	18.4	34.1	43.8	44.0	43.9	53.4
Asgrow	AG 0832	9/26	33	18.5	34.9	63.1	48.9	56.0	62.2
Asgrow	AG 1431	9/28	31	19.1	32.9	57.1	50.5	53.8	59.8
Asgrow	AG 1132	9/28	32	18.1	33.4	61.4	58.6	60.0	64.5
Channel	0807R2	9/22	28	19.3	33.5	50.9	54.6	52.7	--
Channel	0906R2	9/25	28	18.0	34.1	57.6	52.0	54.8	60.9
Channel	1101R2	9/29	28	18.5	34.1	56.2	48.3	52.2	--
Dahlman	5309NRR2Y	9/22	29	18.8	34.3	59.9	54.4	57.1	--
Dahlman	5311NRR2Y	9/26	33	19.4	33.5	59.7	52.6	56.1	--
Dairyland	DSR-0747/R2Y	9/26	25	17.4	35.4	43.0	39.2	41.1	--
Dairyland	DSR-0904/R2Y	9/26	30	18.1	34.0	64.4	47.8	56.1	61.2
Dairyland	DSR-1120/R2Y	9/27	30	18.9	33.2	52.7	60.1	56.4	--
Dairyland	DSR-1215/R2Y	9/29	30	18.6	33.4	55.7	58.9	57.3	62.3
Dyna-Gro	S09RY64	9/25	33	20.2	31.7	66.1	51.7	58.9	--
Dyna-Gro	S12RY44	9/27	30	18.3	34.1	62.0	59.8	60.9	--
G2	7063	9/21	31	18.7	32.7	62.6	48.6	55.6	--
G2	6088	9/23	27	17.9	31.8	59.0	47.0	53.0	60.8
G2	6093	9/24	26	18.1	34.8	52.7	39.8	46.2	--
G2	6143	9/26	33	18.3	35.4	58.3	42.8	50.5	--
Hyland	HS 09RYS12	9/24	30	18.9	33.2	55.6	51.8	53.7	59.4
Integra	20815	9/23	32	19.1	34.5	58.1	52.7	55.4	--
Integra	20810	9/24	25	18.0	34.2	53.5	50.9	52.2	58.5
Integra	21115N	9/28	30	18.6	33.9	64.6	54.3	59.4	--
Kruger	K2-0901	9/25	33	19.4	33.3	60.7	53.9	57.3	62.7
Kruger	K2-1103	9/27	29	19.5	33.2	51.5	53.5	52.5	--
Kruger	K2-0504	9/28	28	17.8	34.5	55.4	40.3	47.9	--
Kruger	K2-1102	9/28	29	18.0	35.1	57.6	48.8	53.2	61.5
Legend	LS 08R22N	9/23	30	18.4	34.4	54.7	46.1	50.4	60.3
Legend	LS 12R24N	9/25	30	17.9	33.8	52.6	50.4	51.5	--
Legend	LS 09R23N	9/26	28	19.3	34.0	57.6	57.1	57.3	--
Legend	LS 13R21	9/30	31	18.6	33.7	64.1	46.8	55.4	63.3
Mustang	08824	9/24	31	19.5	33.2	59.0	47.8	53.4	--
Mustang	12224	9/26	30	18.5	33.4	60.0	47.9	54.0	--
Mycogen	5N091R2	9/22	29	19.1	34.1	61.0	57.9	59.5	--
Mycogen	5B081R2	9/24	31	17.8	34.5	59.1	53.5	56.3	--
Mycogen	5B112R2	9/28	34	18.2	34.2	59.4	62.2	60.8	--
Mycogen	5B130R2	9/30	31	17.5	34.5	60.3	57.3	58.8	63.2
NorthStar	NS 1249NR2	9/27	31	19.8	32.8	58.3	50.6	54.4	--
NorthStar	NS 1257R2	9/27	33	18.1	34.3	65.4	59.3	62.3	62.8
Nuseed	2122RR2YN	9/22	35	19.3	33.0	68.4	56.9	62.6	--
Nuseed	2071RR2YN	9/22	27	18.8	32.9	53.0	52.3	52.7	--
Nuseed	2093RR2YN	9/25	31	18.7	33.4	65.0	56.5	60.8	--
Peterson	11R10	9/24	32	19.3	34.0	56.2	58.3	57.2	62.4
Mean		9/25	30	18.6	33.8	57.6	51.5	54.5	60.7
CV %		5.1	--	3.9	3.4	12.8	13.8	13.3	--
LSD 0.10		2.5	--	1.4	2.3	10	9.5	6.9	--

Table 10. 2013 NDSU Combined Southern Roundup Ready Soybean Locations in North Dakota - Author, T. Helms (Page 2 of 2).

Company/ Brand	Variety	Maturity ¹ (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	2013		2-yr. Avg.	
						Milnor	Colfax		Average (bu/a)
Peterson	13R08N	9/26	30	19.0	32.9	59.8	49.9	54.9	62.2
Peterson	14R09N	9/26	29	18.6	33.1	57.7	50.9	54.3	--
Peterson	14R10	9/26	29	18.6	33.4	60.2	47.3	53.8	--
Prairie	PB-0441R2	9/20	28	18.7	34.0	49.9	39.2	44.5	--
Prairie	PB-0609R2	9/21	24	18.7	33.4	50.8	46.0	48.4	--
Prairie	PB-0777R2	9/22	31	19.8	31.7	57.9	57.6	57.8	--
Prairie	PB-0866R2	9/24	30	18.7	32.6	53.8	49.9	51.8	--
Prairie	PBR-0991R2	9/23	30	18.8	33.4	59.3	54.5	56.9	--
Prairie	PBR-0863R2	9/25	30	18.8	34.0	57.4	48.9	53.1	60.6
Prairie	PBR-1234R2	9/26	33	18.0	33.8	60.6	48.5	54.5	--
Proseed	PX11	9/25	30	18.6	33.5	55.1	45.4	50.2	--
Proseed	20-90	9/26	28	18.3	34.0	58.3	49.9	54.1	58.7
Proseed	PX12	9/26	32	18.3	33.8	61.2	48.4	54.8	--
SoDak	SD 2101R2Y	9/24	27	18.6	34.2	46.8	48.0	47.4	57.8
SoDak	SD 2091R2Y	9/26	28	17.5	33.8	43.1	48.7	45.9	55.7
Syng NK	NK S08-G1	9/22	28	19.3	34.3	53.2	55.4	54.3	59.7
Syng NK	NK S10-P9	9/24	29	18.6	33.9	63.7	46.6	55.2	--
Syng NK	NK S10-G7	9/25	33	17.8	35.9	56.5	54.5	55.5	59.3
Syng NK	NK S14-J7	9/26	31	18.3	33.6	61.3	53.3	57.3	--
Thunder	3307R2Y	9/25	28	18.7	34.5	52.0	51.5	51.7	--
Thunder	3211R2Y	9/27	31	18.2	34.9	59.3	58.4	58.9	61.7
Thunder	3114R2Y	9/30	30	18.4	33.6	55.3	56.1	55.7	--
Wensman	W 3062NR2	9/21	30	18.7	34.3	57.4	56.7	57.1	--
Wensman	W 3076R2	9/23	31	18.1	35.4	58.1	51.1	54.6	62.5
Wensman	W 3090NR2	9/25	31	19.0	33.7	64.5	51.3	57.9	61.7
Wensman	W 3121NR2	9/26	30	18.8	35.0	63.1	56.0	59.6	--
Mean		9/25	30	18.6	33.8	57.6	51.5	54.5	60.7
CV %		5.1	--	3.9	3.4	12.8	13.8	13.3	--
LSD 0.10		2.5	--	1.4	2.3	10	9.5	6.9	--

¹Maturity is date of 95 percent brown or tan pods.

²Lodging score: 1-upright, 5-flat on ground.

Table 11. 2013 NDSU Combined Southern Conventional and Liberty Link Soybean Locations in North Dakota - Author, T. Helms.

Company/ Brand	Variety	Maturity ¹ (date)	Lodging ² (0-5)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield			
							Milnor	Walcott	Average	2-yr. Average
							------(bu/a)-----			
Asgrow	AG 0231RR ³	9/19	1.0	33	19.0	35.8	49.3	41.7	45.5	--
Asgrow	AG 0732RR ³	9/27	1.0	28	18.0	35.2	52.8	35.9	44.3	50.5
Brushvale	BS 44	9/22	1.3	31	17.3	37.1	46.6	37.3	42.0	--
Brushvale	BS 72	9/24	2.0	37	17.6	36.8	55.8	35.9	45.9	--
Brushvale	BS 86	9/25	2.0	37	18.1	35.3	52.2	44.8	48.5	--
Brushvale	BS 53	9/27	2.3	30	16.9	38.4	56.4	36.7	46.5	42.9
NDSU	ND1100S	9/16	2.0	26	18.5	34.7	40.8	33.3	37.0	34.5
NDSU	Ashtabula	9/22	1.0	29	19.2	34.0	57.3	37.9	47.6	49.0
NDSU	Sheyenne	9/26	1.7	32	19.0	34.3	60.8	46.9	53.8	55.5
NDSU	ProSoy	9/27	1.3	37	16.4	37.5	52.9	42.7	47.8	47.7
Peterson	L11-13N	9/29	2.0	32	18.4	33.9	55.4	51.7	53.6	55.8
Peterson	L08-14	9/30	1.0	24	18.3	34.7	63.1	44.5	53.8	--
Proseed	LL10-81	9/28	1.0	30	18.9	34.8	58.1	37.4	47.8	51.8
Proseed	LLPX07	10/1	1.0	24	18.2	34.3	45.5	39.2	42.4	--
Proseed	LLPX14	10/2	1.7	30	17.2	37.7	56.1	49.4	52.7	--
Richland	MK 831	9/24	1.7	28	19.2	34.3	50.9	37.9	44.4	41.3
Richland	MK 1016	9/27	2.0	31	17.4	34.3	56.2	25.1	40.6	--
Richland	MK 0508	9/27	1.7	32	17.4	37.2	56.2	24.4	40.3	39.8
Richland	Challenger	10/3	2.5	31	16.6	37.9	59.7	48.7	54.2	53.4
SK Food	SX 095	9/19	1.0	30	18.3	35.4	38.5	35.9	37.2	36.0
SK Food	SX 066	9/24	1.3	27	16.5	37.3	40.1	37.0	38.6	--
SK Food	SX 9801	9/25	1.0	25	18.7	33.8	56.3	39.8	48.1	51.4
SK Food	SX 0786	9/25	1.5	30	18.2	36.1	59.0	41.5	50.3	49
SK Food	SX 0635	9/26	2.5	41	19.4	32.1	67.4	44.5	56.0	--
SDSU	Roberts	9/26	2.0	34	17.8	35.8	59.7	41.7	50.7	--
SDSU	Deuel	9/28	2.0	33	18.8	33.8	59.5	48.5	54.0	56.3
SDSU	Surge	9/29	1.0	32	18.9	34.8	60.0	23.4	41.7	45.2
SDSU	Codington	9/30	1.0	32	18.6	34.5	59.5	37.5	48.5	--
Thunder	5411NLL	9/29	1.5	30	17.8	36.3	64.2	42.1	53.2	--
Thunder	5210NLL	10/1	1.0	30	19.5	32.8	57.7	42.0	49.9	53.4
Mean		9/26	1.5	31.0	18.1	35.3	54.9	39.5	47.2	47.9
CV %		4.3	38.7	13.2	5.4	4.0	17.9	14.5	17.0	--
LSD 0.10		2	1.0	6	2	2.8	14.8	9.1	8.9	--

¹Maturity is date of 95 percent brown or tan pods.

²Lodging score: 1-upright, 5-flat on ground.

³These two varieties are Roundup Ready and were included as checks.

Table 12. 2013 Soybean - Dryland, Roundup Ready - Carrington - Authors, B. Schatz, M. Ostlie and B. Smith (Page 1 of 2).

Company/ Brand	Variety	Mat. Group	Maturity ¹ (date)	Pod Ht (cm)	Plant Ht (inch)	Seeds/ Pound (seeds)	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield	
										2013	3-yr. Avg.
Asgrow	AG 0231	0.2	9/4	7	19	3,331	17.3	33.0	54.8	21.9	--
Asgrow	AG 0333	0.3	9/21	7	22	3,089	16.2	34.9	55.4	26.9	--
Asgrow	AG 0430	0.4	9/11	7	18	3,368	16.8	34.8	54.7	25.9	45.9
Channel	0507R2	0.5	9/17	6	21	2,861	16.4	36.3	56.2	33.7	--
Channel	0707R2	0.6	9/16	8	20	3,159	16.2	34.8	56.3	31.8	--
Dairyland	DSR-C905/R2Y	00.9	9/3	4	16	3,919	17.0	34.2	54.8	23.1	--
Dairyland	DSR-0305/R2Y	0.3	9/16	7	17	3,119	16.9	34.9	54.6	24.2	--
Dairyland	DSR-0404/R2Y	0.4	9/23	8	21	2,936	16.3	34.5	55.4	33.3	--
Dairyland	DSR-0606/R2Y	0.6	9/23	9	20	3,230	16.8	34.2	55.7	29.8	--
Dairyland	DSR-0747/R2Y	0.7	9/21	6	19	3,060	16.0	34.8	55.5	27.8	46.2
Dyna-Gro	S02RY74	0.2	9/8	9	20	3,241	16.5	35.9	55.3	34.0	--
Dyna-Gro	34RY03	0.3	9/3	6	19	2,899	16.7	34.2	53.8	22.1	46.6
Dyna-Gro	S06RY24	0.6	9/21	7	18	2,866	15.6	36.9	55.2	30.9	--
Gold Cntry	0943	--	9/25	7	20	2,757	16.7	34.2	54.7	32.7	--
Hyland	HX 01RY41	0.1	9/10	6	19	3,291	17.3	34.8	54.9	27.0	--
Hyland	HS 01RY02	0.1	9/4	6	19	2,878	16.5	34.0	56.0	21.4	--
Hyland	HX 03RY42	0.6	9/20	10	20	3,084	16.6	33.8	55.5	30.0	--
Integra	20109 R2Y	0.1	9/12	7	18	2,680	17.1	35.2	55.2	28.1	--
Integra	20215 R2Y	0.2	9/7	8	20	3,118	16.8	34.7	55.3	33.0	--
Integra	20300 R2Y	0.3	9/21	7	19	3,033	16.4	34.9	55.6	28.6	--
Integra	20600 R2Y	0.6	9/21	8	19	3,021	16.6	33.5	55.4	36.7	49.2
Kruger	K2-0052	00.5	8/29	6	16	2,955	16.6	33.5	54.3	23.2	--
Kruger	K2-0092	00.9	9/14	10	20	2,608	16.7	35.9	55.5	34.2	--
Kruger	K2-0101	0.1	9/5	6	21	2,798	17.1	34.0	55.1	29.7	46.4
Kruger	K2-0302	0.3	9/18	6	21	2,843	16.3	36.4	54.9	31.1	--
Kruger	K2-0504	0.5	9/27	7	16	2,813	16.2	35.0	54.2	27.7	--
Kruger	K2-0601	0.6	9/21	10	20	2,999	16.3	33.8	55.2	27.6	48.6
Kruger	K2-0801	0.8	9/23	7	17	2,940	16.4	34.4	55.3	26.0	47.7
Kruger	K2-0901	0.9	9/24	7	16	3,003	16.2	35.4	55.3	27.4	--
Kruger	K2-1001	1.0	9/26	6	17	2,831	15.8	36.1	55.2	32.3	49.9
Kruger	K2-1102	1.1	9/30	10	21	2,680	15.1	36.1	55.4	34.3	--
Kruger	K2-1103	1.1	9/25	10	21	2,759	16.6	34.8	54.8	33.5	--
Legend	LS 01R24	0.1	9/5	7	21	3,247	16.9	34.9	54.9	32.6	--
Legend	LS 03R22	0.3	9/23	7	21	3,036	16.6	34.2	55.7	30.2	--
Legend	LS 06R21	0.6	9/22	8	21	3,075	16.1	34.7	54.8	29.6	--
Legend	LS 06R24N	0.6	9/25	10	19	2,906	15.6	36.0	54.9	32.8	--
Mustang	04403	0.4	9/21	7	22	2,971	16.5	34.3	55.2	33.0	--
Mustang	06942	0.6	9/20	8	20	3,119	16.5	33.6	54.6	28.9	--
Mustang	07724	0.7	9/21	5	17	2,958	17.1	33.9	54.9	27.8	--
Mustang	08824	0.8	9/25	9	23	2,954	16.5	34.5	54.8	32.6	--
Mycogen	5B024R2	0.2	9/2	6	20	2,990	16.8	34.1	54.7	25.1	45.4
Mycogen	5B040R2	0.4	9/21	8	20	3,057	16.4	35.0	55.0	32.1	--
Mycogen	5B066R2	0.6	9/21	9	20	3,079	17.1	33.4	54.5	33.1	--
Mycogen	5B080R2	0.6	9/21	9	20	3,053	15.8	35.6	55.9	28.0	--
NorthStar	NS0537R2	0.5	9/18	5	19	3,203	16.2	35.0	54.1	28.1	--
NorthStar	NS1257R2	1.2	9/26	6	19	2,698	14.9	36.0	55.9	28.7	--
Nuseed	2071 RR2YN	0.7	9/24	5	16	2,944	17.1	33.9	55.6	28.6	--
NuTech/G2	6021	0.2	9/12	5	16	2,835	17.5	34.2	55.8	21.9	--
NuTech/G2	6043	0.4	9/16	9	19	2,885	17.6	33.4	54.9	25.0	--
NuTech/G2	6052	0.5	9/22	6	19	3,043	16.9	34.5	54.5	30.9	47.8
Mean			9/18	7	19	3,023	16.5	34.7	55.2	29.4	47.9
CV %			2.1	29	15	4.1	2.5	2.2	1.6	16.7	--
LSD 0.10			2.7	2	3	143	0.5	0.9	1.0	5.7	--

Table 12. 2013 Soybean - Dryland, Roundup Ready - Carrington - Authors, B. Schatz, M. Ostlie and B. Smith (Page 2 of 2).

Company/ Brand	Variety	Mat. Group	Maturity ¹ (date)	Pod		Seeds/ Pound	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield	
				Ht (cm)	Plant Ht (inch)					2013 -----(bu/a)----	3-yr. Avg.
NuTech/G2	7063	0.6	9/12	7	18	3,308	17.0	33.9	54.7	31.2	--
NuTech/G2	6088	0.8	9/24	7	17	3,095	16.0	35.0	54.5	29.0	46.9
NuTech/G2	6093	0.9	9/26	7	19	2,573	15.5	37.2	55.6	28.1	--
NuTech/G2	6098	0.9	9/25	7	19	2,826	17.1	32.9	55.9	30.1	49.8
Peterson	12R05	0.5	9/21	8	22	3,121	16.3	34.9	55.0	35.5	50.9
Peterson	12R06	0.6	9/24	5	17	3,020	16.0	34.4	55.6	28.9	45.8
Peterson	13R03	0.3	9/21	8	18	3,130	16.0	35.3	54.9	25.3	--
Pioneer	90Y50	0.5	9/17	8	19	3,079	17.7	34.6	55.3	29.5	47.7
Pioneer	90Y70	0.7	9/21	7	18	3,060	16.6	35.1	55.0	24.5	45.1
Prairie	PB-00950R2	00.9	9/5	7	20	2,917	17.1	34.2	55.0	28.5	--
Prairie	PB-0441R2	0.4	9/23	8	19	3,013	16.7	33.7	56.1	31.0	--
Prairie	PB-0551R2	0.5	9/22	9	19	2,995	16.2	34.1	55.5	36.6	--
Prairie	PB-0609R2	0.6	9/21	7	14	3,104	16.3	34.7	56.4	24.4	--
Prairie	PB-0777R2	0.7	9/25	7	20	2,955	16.5	34.8	56.2	36.1	--
Prairie	PB-0866R2	0.8	9/26	8	18	2,731	15.5	36.2	54.9	28.4	--
Proseed	20-30	0.3	9/20	7	18	3,041	16.6	34.1	55.6	32.3	--
Proseed	11-50	0.5	9/21	9	19	3,040	16.5	33.8	54.2	34.5	51.1
Proseed	PX06	0.6	9/19	8	16	2,876	16.6	34.7	55.6	35.7	--
Proseed	20-70	0.7	9/22	8	22	2,646	15.8	36.3	55.8	32.2	--
REA	62G22	0.2	9/3	7	21	2,972	17.1	34.0	54.4	23.8	--
REA	66G22	0.4	9/22	7	19	3,202	16.3	34.4	55.6	25.6	47.9
REA	65G22	0.5	9/21	6	17	3,139	16.2	34.2	54.6	26.0	--
REA	66G14	0.6	9/21	7	19	3,151	16.3	34.3	54.5	33.4	--
Renk	RS033R2	0.3	9/20	8	18	3,151	16.6	34.4	55.6	29.5	--
Renk	RS053R2	0.5	9/26	7	17	2,733	16.3	35.1	55.7	29.1	--
Stine	02RE03	0.2	9/12	7	17	3,204	15.5	36.2	54.9	27.8	--
Stine	03RD66	0.3	9/22	8	20	3,138	16.2	34.9	56.2	27.7	--
Thunder	32005R2Y	00.5	8/30	6	17	3,434	17.4	33.9	54.9	26.9	--
Thunder	31009R2Y	00.9	9/6	6	20	2,962	17.6	33.4	54.4	28.7	--
Thunder	33009R2Y	00.9	9/3	6	16	4,080	17.4	33.3	55.3	26.9	--
Thunder	3201R2Y	0.1	9/18	7	18	2,904	17.0	34.4	54.8	25.6	--
Thunder	3202R2Y	0.2	9/20	7	18	3,181	16.3	35.2	54.6	33.7	46.7
Thunder	3303R2Y	0.3	9/23	6	19	3,187	16.2	34.7	55.1	24.1	--
Thunder	3205R2Y	0.5	9/22	9	22	2,998	16.4	33.9	54.2	36.9	52.0
Thunder	3406R2YN	0.6	9/18	6	17	2,978	16.5	34.4	55.5	31.4	--
Wensman	W3032R2	0.4	9/24	7	20	2,989	16.6	34.1	56.1	32.0	--
Wensman	W3024NR2	0.5	9/7	8	18	3,177	17.0	34.7	54.9	29.2	--
Wensman	W3058R2	0.5	9/23	7	17	3,051	16.1	35.0	56.7	30.0	48.9
Wensman	W3062NR2	0.6	9/20	6	17	2,940	16.0	35.8	54.8	31.5	--
Wensman	W3076R2	0.7	9/25	7	21	2,866	15.9	35.1	54.8	26.6	47.3
Wensman	W3090NR2	0.8	9/23	6	21	2,910	16.3	34.7	56.3	29.7	--
Mean			9/18	7	19	3,023	16.5	34.7	55.2	29.4	47.9
CV %			2.1	29	15	4.1	2.5	2.2	1.6	16.7	--
LSD 0.10			2.7	2	3	143	0.5	0.9	1.0	5.7	--

Planted: May 28. Harvested: Oct. 18. Previous crop: spring wheat.

¹Maturity is date of 95 percent brown or tan pods

Table 13. 2013 Soybean - Irrigated, Roundup Ready - Carrington - Authors, B. Schatz, M. Ostlie and S. Schaubert (Page 1 of 2).

Company/ Brand	Variety	Mat. Group	Maturity ¹ (date)	Pod Ht (cm)	Plant Ht (inch)	Plant Lodge ² (0-9)	Seeds/ Pound (seeds)	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield	
											2013	3-yr. Avg.
											----(bu/a)-----	
Asgrow	AG 0231	0.2	9/19	6	37	3	2,437	15.4	35.8	55.9	62.7	--
Asgrow	AG 0333	0.3	9/22	8	39	3	2,694	14.5	37.0	55.2	62.1	--
Asgrow	AG 0430	0.4	9/26	9	38	3	2,820	14.6	36.6	55.9	67.1	63.2
Dairyland	DSR-C905/R2Y	00.9	9/16	7	36	6	3,120	15.0	36.3	55.4	59.3	--
Dairyland	DSR-0305/R2Y	0.3	9/22	9	37	3	2,766	15.6	35.6	56.1	67.3	--
Dairyland	DSR-0404/R2Y	0.4	9/23	9	38	3	2,700	14.6	36.7	55.7	72.6	--
Dairyland	DSR-0606/R2Y	0.6	9/27	7	37	4	3,111	15.1	35.5	55.9	65.8	--
Dairyland	DSR-0747/R2Y	0.7	9/28	8	41	2	2,662	13.9	37.3	56.3	63.5	57.5
Dyna-Gro	S02RY74	0.2	9/19	8	37	3	2,720	14.8	37.1	55.1	63.9	--
Dyna-Gro	34RY03	0.3	9/23	6	40	3	2,041	15.1	36.5	55.5	62.4	60.3
Dyna-Gro	S06RY24	0.6	9/24	8	39	5	2,689	14.0	38.7	54.9	61.1	--
Integra	20215 R2Y	0.2	9/18	7	35	3	2,735	15.3	37.0	55.8	63.8	--
Integra	20300 R2Y	0.3	9/25	6	37	3	2,682	14.5	36.6	55.7	64.0	--
Integra	20600 R2Y	0.6	9/25	7	40	4	2,599	14.8	35.9	55.5	65.7	--
Kruger	K2-0052	00.5	9/10	8	34	4	2,248	15.0	36.5	55.2	55.1	--
Kruger	K2-0092	00.9	9/21	10	34	3	2,477	15.0	36.8	56.5	73.0	--
Kruger	K2-0101	0.1	9/21	7	40	3	2,061	15.6	36.6	55.5	64.9	59.2
Kruger	K2-0302	0.3	9/24	8	39	2	2,637	14.8	37.0	55.8	71.7	--
Kruger	K2-0504	0.5	9/27	7	39	3	2,574	14.4	36.9	55.6	61.1	--
Kruger	K2-0601	0.6	9/25	8	39	3	2,627	14.7	35.8	55.9	69.9	63.4
Kruger	K2-0801	0.8	9/25	7	38	2	2,816	14.7	35.7	56.0	61.5	64.4
Kruger	K2-0901	0.9	9/28	8	40	1	2,473	14.7	36.2	55.8	74.1	--
Kruger	K2-1001	1.0	9/27	10	41	4	2,826	14.3	36.7	56.0	67.6	61.3
Kruger	K2-1102	1.1	10/1	9	43	3	2,680	14.3	37.1	56.4	65.5	--
Kruger	K2-1103	1.1	9/28	10	42	2	2,518	15.2	36.1	56.2	68.5	--
Nuseed	2071 RR2YN	0.7	9/26	8	35	3	2,876	14.8	36.4	56.5	63.0	--
NuTech/G2	6021	0.2	9/21	8	35	1	2,369	15.3	36.3	55.0	58.7	--
NuTech/G2	6043	0.4	9/25	9	40	1	2,321	15.4	36.2	55.4	66.8	--
NuTech/G2	6052	0.5	9/29	10	44	3	2,637	15.7	36.5	55.6	61.8	--
NuTech/G2	7063	0.6	9/24	7	39	3	2,905	15.7	35.1	55.6	58.6	--
NuTech/G2	6088	0.8	9/27	10	41	2	3,020	14.8	36.4	55.6	64.6	60.1
NuTech/G2	6093	0.9	9/28	8	37	5	2,429	14.6	37.7	55.7	57.8	--
NuTech/G2	6098	0.9	9/28	8	45	2	2,455	14.8	35.9	55.9	65.8	63.3
Peterson	14R02	0.2	9/22	8	38	1	2,624	13.9	37.8	55.1	67.8	--
Peterson	14R06N	0.6	9/25	8	36	3	2,616	14.0	38.5	55.5	67.6	--
Prairie	PB-0291R2	0.2	9/22	9	37	1	2,571	14.1	37.3	55.0	72.7	--
Prairie	PB-0441R2	0.4	9/24	8	40	3	2,751	14.6	36.5	55.5	61.5	--
Prairie	PB-0609R2	0.6	9/26	9	36	4	2,858	14.8	35.9	56.4	63.6	--
Prairie	PB-0863R2	0.8	9/28	7	39	2	2,664	14.6	35.9	56.1	60.4	--
Prairie	PB-0866R2	0.8	9/23	8	42	4	2,645	14.0	36.8	56.3	63.1	--
Prairie	PB-0991R2	0.9	9/29	10	40	3	2,915	14.3	37.1	56.5	58.6	--
REA	62G22	0.2	9/23	8	41	3	2,090	15.1	36.5	55.3	65.3	--
REA	66G22	0.4	9/26	7	38	5	2,932	14.5	36.9	56.1	54.0	63.5
REA	65G22	0.5	9/26	10	39	3	2,630	15.0	35.8	55.4	64.6	64.1
REA	66G14	0.6	9/27	7	38	2	2,831	14.2	37.3	56.1	61.3	--
Renk	RS033R2	0.3	9/24	9	40	2	2,861	14.8	36.7	55.6	70.8	--
Renk	RS053R2	0.5	9/29	8	41	3	2,613	14.4	37.5	55.4	62.6	--
Thunder	32005R2Y	00.5	9/10	5	34	6	2,697	15.5	36.2	55.3	54.6	--
Mean			9/24	7.8	39	3	2,668	14.7	36.6	55.7	63.9	61.4
CV %			2.6	23.0	5	36	3.2	2.5	1.4	1.0	9.1	--
LSD 0.10			3.6	2.1	2	1	101	0.4	0.6	0.7	6.8	--

Table 13. 2013 Soybean - Irrigated, Roundup Ready - Carrington - Authors, B. Schatz, M. Ostlie and S. Schaubert (Page 2 of 2).

Company/ Brand	Variety	Mat. Group	Maturity ¹	Pod	Plant	Plant	Seeds	Seed	Seed	Test	2013	Avg.
				Ht	Ht	Lodge ²	Pound	Oil	Protein	Weight		
				(cm)	(inch)	(0-9)	(seeds)	(%)	(%)	(lb/bu)		
Thunder	31009R2Y	00.9	9/20	7	39	3	2,367	15.4	36.2	55.3	69.6	--
Thunder	33009R2Y	00.9	9/18	5	34	6	3,131	15.2	36.2	55.9	57.4	--
Thunder	3201R2Y	0.1	9/26	8	42	4	2,675	15.8	35.5	56.0	60.8	--
Thunder	5401LL	0.1	9/25	8	39	3	2,682	14.6	37.0	55.8	61.1	--
Thunder	3202R2Y	0.2	9/27	11	40	3	2,999	14.6	37.3	55.6	56.6	57.8
Thunder	3303R2Y	0.3	9/26	8	40	2	2,695	14.2	36.7	56.0	58.5	--
Thunder	5303NLL	0.3	9/24	7	38	3	2,736	14.7	36.5	55.7	63.7	--
Thunder	3205R2Y	0.5	9/26	9	40	4	2,574	15.0	36.0	55.8	68.3	64.1
Thunder	5205NLL	0.5	9/24	8	39	4	2,794	14.4	37.0	55.8	64.0	--
Thunder	3406R2YN	0.6	9/23	8	35	2	2,770	14.8	36.3	56.4	68.8	--
Wensman	W3032R2	0.4	9/25	7	39	4	2,754	14.6	36.6	55.8	68.8	--
Wensman	W3024NR2	0.5	9/18	8	35	2	2,758	15.0	37.0	55.2	69.1	--
Wensman	W3058R2	0.5	9/24	8	36	5	2,861	14.3	37.3	55.6	53.3	61.0
Wensman	W3062NR2	0.6	9/25	9	37	4	2,680	14.0	38.7	55.0	66.7	--
Wensman	W3076R2	0.7	9/26	7	40	4	2,437	14.4	37.0	55.5	55.2	58.3
Wensman	W3090NR2	0.8	9/28	8	40	3	2,569	14.6	36.5	55.7	63.0	--
Mean			9/24	7.8	39	3	2,668	14.7	36.6	55.7	63.9	61.4
CV %			2.6	23.0	5	36	3.2	2.5	1.4	1.0	9.1	--
LSD 0.10			3.6	2.1	2	1	101	0.4	0.6	0.7	6.8	--

Planted: May 28. Harvested: Oct. 23. Previous crop: spring wheat.

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

Table 14. 2013 Soybean - Dryland, Conventional and Liberty Link - Carrington -Authors, B. Schatz, M. Ostlie and B. Smith.

Company/ Brand	Variety	Mat. Group	Maturity ¹ (date)	Pod		Seeds/ Pound (seeds)	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield	
				Ht (cm)	Plant Ht (inch)					2013 ---(bu/a)---	3-yr. Avg.
Integra	30300	0.3	9/10	4	18	3,075	15.7	36.1	56.6	24.6	--
Integra	30500	0.5	9/17	5	25	2,651	15.6	35.8	56.7	32.7	--
NDSU	Cavalier	00.9	9/6	7	22	3,337	14.6	35.7	57.2	30.3	38.3
NDSU	Ashtabula	0.4	9/9	3	23	3,425	15.9	34.1	56.9	30.5	42.9
NDSU	Traill	0	9/8	4	21	3,216	14.7	36.0	57.7	27.9	36.0
NDSU	Sheyenne	0.7	9/15	5	23	3,202	15.4	34.3	57.0	32.8	39.2
NDSU	ProSoy	0.8	9/15	5	25	2,744	14.6	37.3	57.0	35.7	38.0
NDSU	ND1005T	0.5	9/9	4	23	2,893	14.2	39.1	57.7	28.8	35.7
Peterson	L01-14	0.1	9/11	5	24	3,192	15.4	34.3	56.6	29.9	--
Peterson	L05-11N	0.5	9/17	5	25	2,618	15.2	36.6	56.5	30.8	41.4
Peterson	L03-12N	0.3	9/13	3	20	3,435	15.4	35.8	57.5	20.0	34.3
Pioneer	91M10	1.0	9/19	5	21	2,548	15.3	35.5	55.5	31.4	--
Richland	MK0205	0.2	9/17	2	24	4,066	14.4	36.7	57.7	12.6	25.5
Richland	MK0249	0.2	9/10	4	21	4,485	14.8	35.5	56.5	32.3	--
Richland	MK0508	0.8	9/18	4	20	4,214	14.1	36.1	57.2	32.7	33.9
Richland	MK831	0.8	9/16	4	18	3,877	14.3	36.0	58.0	25.9	--
Richland	MK850	0.8	9/16	3	20	3,700	15.3	35.7	56.9	26.1	--
SK Food	SK 0007	--	9/1	5	18	3,401	14.5	35.9	56.9	18.6	--
SK Food	SK066	0.6	9/18	4	25	3,978	12.8	39.0	56.5	32.0	--
SK Food	SK 923	0.0	9/4	4	21	4,291	15.7	32.6	56.2	29.3	--
SK Food	SK 0786	0.7	9/14	6	24	2,906	14.2	37.9	56.8	31.3	38.9
SK Food	SK 095	0.9	9/13	5	24	5,499	14.5	36.0	57.6	25.5	33.2
SK Food	SK 0635	0.6	9/15	5	25	3,022	15.6	33.8	56.9	33.6	--
Thunder	5303NLL	0.3	9/10	5	20	3,135	15.2	36.4	56.7	28.6	--
Thunder	5205NLL	0.5	9/17	5	23	2,650	15.2	36.1	56.6	36.1	--
Mean			9/12	4	22	3,422	14.9	35.9	56.9	28.8	36.4
CV %			1.5	38.7	13	5.4	2.7	2.0	0.7	14.6	--
LSD 0.10			1.8	NS	3	219	0.5	0.8	0.4	5.0	--

Planted: May 29. Harvested: Oct. 1. Previous crop: field pea.

¹Maturity is date of 95 percent brown or tan pods.**Table 15. 2013 Soybean - Irrigated, Conventional - Carrington - Authors, B. Schatz, M. Ostlie and S. Schaubert.**

Company/ Brand	Variety	Mat. Group	Maturity ¹ (date)	Pod		Plant Lodge (0-9)	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield	
				Ht (cm)	Plant Ht (inch)					2013 ---(bu/a)---	3-Yr Avg.
NDSU	Cavalier	00.9	9/17	8	39	6	14.7	36.9	57.3	57.5	51.5
NDSU	Ashtabula	0.4	9/27	10	42	5	16.0	35.0	56.5	58.3	58.3
NDSU	Traill	0.0	9/19	9	37	4	14.3	38.4	58.0	57.4	51.0
NDSU	Sheyenne	0.7	9/30	9	43	2	15.0	35.7	57.4	67.4	61.8
NDSU	ProSoy	0.8	10/2	8	42	6	13.6	40.1	56.7	48.5	45.6
NDSU	ND1005T	0.5	9/25	8	41	5	14.0	41.0	57.4	54.4	48.5
Pioneer	91M10	1.0	9/30	10	42	2	14.9	37.4	56.9	67.9	--
Thunder	5303NLL	0.3	9/24	7	34	3	14.6	38.7	56.3	60.4	--
Thunder	5205NLL	0.5	9/30	8	43	4	14.8	37.4	57.1	58.2	--
Mean			9/24	8	40	4	14.7	37.5	57.1	56.6	52.8
CV %			1.2	19.6	3.6	27.4	2.2	1.2	0.7	9.0	--
LSD 0.10			1.6	1.9	1.7	1.3	0.4	0.5	0.5	6.1	--

Planted: May 29. Harvested: Oct. 23. Previous crop: spring wheat.

¹Maturity is date of 95 percent brown or tan pods.

Table 16. 2013 Soybean - Dryland, Roundup Ready - Dazey (Carrington REC) - Authors, B. Schatz, M. Ostlie and T. Indergaard (Page 1 of 2).

Company/ Brand	Variety	Mat. Group	Pod Ht	Plant Ht	Maturity	Seeds/ Pound	Seed Oil	Seed Protein	Test Weight	Seed Yield		
										2013	2-yr. Avg.	3-yr. Avg.
										----- (bu/a) -----		
			(cm)	(inch)	(date)	(seeds)	(%)	(%)	(lb/bu)			
Channel	0605R2	0.7	5	25	9/21	2,791	16.0	34.8	55.2	51.7	56.2	--
Channel	0906R2	0.9	5	23	9/23	2,597	16.1	34.1	55.4	56.1	61.4	--
Dairyland	DSR-0305/R2Y	0.3	5	23	9/17	2,806	16.7	34.6	54.9	54.5	--	--
Dairyland	DSR-0404/R2Y	0.4	6	26	9/19	2,818	16.2	34.5	55.1	57.6	60.9	--
Dairyland	DSR-0606/R2Y	0.6	6	23	9/22	3,016	16.7	33.6	55.7	49.0	51.7	--
Dairyland	DSR-0747/R2Y	0.7	5	24	9/22	2,810	15.2	35.6	54.9	56.9	55.7	58.0
Dairyland	DSR-0904/R2Y	0.9	6	23	9/22	2,600	16.4	34.2	55.2	52.1	54.3	--
Dairyland	DSR-1120/R2Y	1.1	7	26	9/26	2,388	16.9	32.9	55.4	54.2	--	--
Dairyland	DSR-1215/R2Y	1.2	8	27	9/27	2,651	15.2	34.9	56.2	61.6	55.9	--
Dyna-Gro	S06RY24	0.6	6	24	9/20	2,720	15.2	36.7	54.7	56.7	--	--
Dyna-Gro	S08RY23	0.8	6	26	9/23	2,622	16.0	34.3	55.2	54.5	57.2	--
Dyna-Gro	S09RY64	0.9	5	24	9/23	2,818	16.1	34.1	55.0	52.6	--	--
Gold Cntry	0943	--	6	25	9/23	2,653	16.3	34.2	55.4	56.4	--	--
Hyland	HS 05RYS25	0.5	7	24	9/20	2,616	16.2	34.0	55.0	51.0	52.7	--
Integra	20810	--	5	21	9/23	2,766	15.8	34.5	56.0	51.8	55.0	58.9
Integra	20815	--	5	26	9/23	2,703	16.6	33.9	55.2	57.9	--	--
Kruger	K2-0052	00.5	7	24	9/7	2,376	16.2	34.9	55.0	43.5	--	--
Kruger	K2-0092	00.9	6	23	9/16	2,405	16.6	35.5	54.8	51.3	50.5	--
Kruger	K2-0101	0.1	6	26	9/12	2,304	17.0	34.2	54.9	46.9	51.1	56.2
Kruger	K2-0302	0.3	5	27	9/18	2,504	16.0	36.2	54.4	53.2	--	--
Kruger	K2-0504	0.5	5	23	9/23	2,559	16.0	34.6	55.0	56.5	58.9	--
Kruger	K2-0601	0.6	5	25	9/18	2,835	16.6	33.7	54.9	50.9	52.2	56.0
Kruger	K2-0801	0.8	6	23	9/22	2,752	16.2	34.0	55.4	50.3	52.5	56.7
Kruger	K2-0901	0.9	6	25	9/23	2,650	16.2	34.4	55.3	51.8	54.3	--
Kruger	K2-1001	1.0	6	23	9/24	2,693	15.6	35.4	55.3	55.2	59.5	59.2
Kruger	K2-1102	1.1	6	27	9/27	2,391	15.1	36.3	55.1	53.4	--	--
Kruger	K2-1103	1.1	7	27	9/25	2,666	16.2	35.2	55.1	56.7	--	--
Legend	LS 03R22	0.3	5	24	9/17	2,898	16.5	34.2	55.0	49.4	--	--
Legend	LS 06R21	0.6	5	25	9/17	2,860	16.4	33.9	54.6	49.8	51.5	55.8
Legend	LS 06R24N	0.6	6	25	9/21	2,629	15.6	36.2	53.9	51.4	--	--
Legend	LS 08R22N	0.8	4	24	9/22	2,644	16.1	34.0	55.0	54.0	55.5	--
Legend	LS 09R23N	0.9	5	25	9/23	2,779	16.3	33.6	55.3	53.0	--	--
Mustang	04403	0.4	6	24	9/17	2,845	16.5	33.9	55.2	49.0	56.6	--
Mustang	06942	0.6	6	25	9/20	2,808	16.7	34.0	54.9	51.8	55.3	56.9
Mustang	07724	0.7	5	23	9/22	2,626	16.3	34.7	55.3	55.2	--	--
Mustang	08824	0.8	6	26	9/24	2,741	16.5	34.5	54.3	57.5	--	--
Mycogen	5B040R2	0.4	5	25	9/18	2,876	15.9	35.0	54.9	53.6	--	--
Mycogen	5B066R2	0.6	6	25	9/16	2,792	16.5	34.6	54.5	55.9	58.6	--
Mycogen	5B080R2	0.6	8	23	9/17	2,859	15.8	35.2	56.1	52.2	54.6	55.6
NorthStar	NS0537R2	0.5	5	26	9/18	2,829	16.5	34.0	54.6	52.3	--	--
Nuseed	2071 RR2YN	0.7	5	21	9/21	2,610	16.4	34.5	54.9	49.3	--	--
Nuseed	2093 RR2YN	0.9	6	25	9/23	2,728	16.7	34.1	55.4	56.8	--	--
NuTech/G2	6043	0.4	4	24	9/20	2,658	17.0	33.9	54.0	44.0	--	--
Mean			5	24	9/20	2,701	16.2	34.5	55.1	51.8	54.7	56.4
CV %			26.8	8.7	1.2	2.4	2.0	1.3	1.2	8.8	--	--
LSD 0.10			1.6	2.5	1.5	75	0.4	0.5	0.7	5.3	--	--

Table 16. 2013 Soybean - Dryland, Roundup Ready - Dazey (Carrington REC) - Authors, B. Schatz, M. Ostlie and T. Indergaard (Page 2 of 2).

Company/ Brand	Variety	Mat. Group	Pod Ht (cm)	Plant Ht (inch)	Maturity (date)	Seeds/ Pound (seeds)	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield		
										2013	2-yr. Avg.	3-yr. Avg.
NuTech/G2	6052	0.5	5	24	9/21	2,679	17.1	34.3	55.5	43.6	45.5	50.2
NuTech/G2	7063	0.6	4	21	9/15	3,038	16.6	33.6	55.5	42.7	46.4	--
NuTech/G2	6088	0.8	4	21	9/24	2,920	16.0	34.3	54.8	52.3	52.8	55.2
NuTech/G2	6093	0.9	5	23	9/24	2,301	15.9	35.8	55.5	52.2	--	--
NuTech/G2	6098	0.9	5	25	9/22	2,547	16.6	33.5	55.6	48.0	52.5	56.0
Peterson	12R06	0.6	4	21	9/20	2,843	15.9	34.4	55.2	47.3	52.3	56.1
Peterson	13R08N	0.8	6	24	9/23	2,602	16.1	34.0	55.4	49.1	--	--
Peterson	14R10	1.0	4	22	9/25	2,509	15.8	34.4	55.5	50.6	--	--
Prairie	PB-0441R2	0.4	6	25	9/19	2,904	16.1	34.4	55.6	49.4	57.8	--
Prairie	PB-0551R2	0.5	5	26	9/18	2,878	16.2	34.1	54.0	51.1	--	--
Prairie	PB-0609R2	0.6	5	21	9/20	2,677	16.2	34.9	55.5	47.9	--	--
Prairie	PB-0777R2	0.7	6	24	9/22	2,673	16.6	34.2	55.2	47.9	--	--
Prairie	PB-0863R2	0.8	5	26	9/23	2,555	15.9	34.5	55.3	58.7	58.0	--
Prairie	PB-0866R2	0.8	5	23	9/23	2,463	15.4	35.4	55.5	49.0	--	--
Proseed	20-30	0.3	5	23	9/17	2,937	16.1	34.9	55.1	52.4	55.0	--
Proseed	11-50	0.5	5	25	9/18	2,770	16.4	33.9	54.3	51.4	56.4	56.7
Proseed	PX06	0.6	5	20	9/21	2,605	16.4	34.7	55.4	42.4	--	--
Proseed	20-70	0.7	4	23	9/22	2,379	15.6	35.5	55.5	49.7	--	--
Proseed	PX08	0.8	6	24	9/19	2,891	16.0	34.6	55.3	55.7	--	--
Proseed	10-80	0.8	6	24	9/22	2,751	16.2	33.9	55.1	53.7	53.8	55.3
REA	66G22	0.4	5	24	9/21	2,862	15.6	35.0	55.1	48.9	53.4	--
REA	65G22	0.5	5	26	9/18	2,741	16.6	33.8	55.0	48.7	54.7	--
REA	66G14	0.6	6	25	9/20	2,741	16.1	34.4	55.3	50.6	--	--
REA	69G13	0.9	6	25	9/23	2,629	16.4	34.1	55.3	46.3	--	--
REA	69G14	0.9	5	24	9/23	2,649	16.5	34.3	54.9	54.5	--	--
Renk	RS033R2	0.3	4	24	9/17	2,866	16.3	34.0	55.1	50.4	57.6	--
Renk	RS053R2	0.5	5	24	9/23	2,556	15.7	34.6	54.7	56.1	57.2	--
Thunder	3205R2Y	0.5	7	27	9/17	2,818	16.7	33.7	55.1	52.7	55.8	57.2
Thunder	3406R2YN	0.6	6	22	9/21	2,654	16.1	34.6	55.8	54.2	--	--
Thunder	3307R2Y	0.7	5	24	9/21	2,452	15.6	36.0	55.3	51.1	56.5	--
Thunder	3408R2YN	0.8	5	26	9/22	2,691	16.7	34.3	55.1	54.9	--	--
Wensman	W3032R2	0.4	5	23	9/18	2,938	16.4	34.6	54.9	48.9	53.8	--
Wensman	W3058R2	0.5	5	24	9/21	2,845	15.7	34.8	55.8	47.8	49.8	56.7
Wensman	W3062NR2	0.6	6	24	9/20	2,647	15.7	36.4	54.1	52.7	--	--
Wensman	W3076R2	0.7	5	22	9/23	2,603	16.0	34.9	54.5	52.0	55.0	58.9
Wensman	W3090NR2	0.8	6	24	9/22	2,634	16.12	34.0	55.0	54.8	54.8	--
Mean			5	24	9/20	2,701	16.2	34.5	55.1	51.8	54.7	56.4
CV %			26.8	8.7	1.2	2.4	2.0	1.3	1.2	8.8	--	--
LSD 0.10			1.6	2.5	1.5	75	0.4	0.5	0.7	5.3	--	--

Planted: June 3. Harvested: Oct. 24. Previous crop: wheat.

¹Maturity is date of 95 percent brown or tan pods.

Table 17. 2013 Soybean - Dryland, Conventional and Liberty Link - Dazey (Carrington REC) - Authors, B. Schatz, M. Ostlie and T. Indergaard.

Company/ Brand	Variety	Mat. Group	Maturity ¹ (date)	Pod Ht (cm)	Plant Ht (inch)	Seeds/ Pound (seeds)	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield	
										2013	3-yr. Avg. (bu/a)
NDSU	Cavalier	00.9	9/11	5	16	2,724	16.6	35.9	56.8	35.2	44.9
NDSU	Ashtabula	0.4	9/17	4	18	2,964	17.1	34.6	55.7	26.6	49.5
NDSU	Traill	0.0	9/15	4	17	2,651	16.0	36.4	56.8	27.3	42.9
NDSU	Sheyenne	0.7	9/21	4	19	3,055	16.4	34.7	56.6	33.9	52.8
NDSU	ProSoy	0.8	9/20	4	20	2,854	15.7	38.0	56.0	36.5	45.5
NDSU	ND1005T	0.5	9/15	5	21	2,542	15.5	39.9	56.9	34.2	47.7
Pioneer	91M10	1.0	9/21	6	20	2,704	16.6	35.2	56.0	39.8	--
Richland	MK0205	0.2	9/19	4	21	3,655	16.1	36.0	58.0	31.6	44.3
Richland	MK0249	0.2	9/16	4	14	4,051	15.9	35.9	56.7	29.4	--
Richland	MK0508	0.8	9/19	4	19	3,904	15.7	36.3	57.0	37.8	48.4
Richland	MK831	0.8	9/19	4	18	3,514	15.5	36.7	57.0	35.9	43.9
Richland	MK850	0.8	9/19	3	18	3,596	16.6	35.9	56.3	32.5	--
Richland	MK1016	1.0	9/21	4	22	4,267	15.7	35.7	57.5	28.3	41.1
Richland	MK9101	1.1	9/22	5	19	2,185	14.8	38.2	56.9	38.5	--
Richland	Challenger	1.3	9/30	5	21	2,672	15.3	36.9	56.2	43.5	--
SK Food	SK066	0.6	9/22	7	20	3,907	14.5	37.0	56.9	36.2	--
SK Food	SK 923	0.0	9/12	4	19	3,441	16.8	34.7	56.2	31.0	--
SK Food	SK 0786	0.7	9/18	4	18	2,794	15.4	38.5	57.1	33.9	--
SK Food	SK 095	0.9	9/19	2	18	5,041	15.7	35.9	56.9	30.2	--
SK Food	SK 0635	0.6	9/20	5	22	2,754	16.3	35.5	56.6	41.5	--
Thunder	5205NLL ²	0.5	9/20	5	21	2,637	16.5	36.3	56.2	32.5	--
Mean			9/18	4	19	3,198	16.1	36.3	56.6	33.4	46.1
CV %			2.2	36.7	9.5	10.3	3.4	2.6	1.1	12.1	--
LSD 0.10			2.7	NS	2.1	390	0.6	1.1	0.7	4.8	--

Planted: June 3. Harvested: Oct. 24. Previous crop: spring wheat.

¹Maturity is date of 95 percent brown or tan pods.

²LL = Liberty Link.

Table 18. 2013 Soybean - Dryland, Conventional, Organic - Carrington - Author, Blaine Schatz.

Company/ Brand	Variety	Pod Height (cm)	Plant Height (inch)	Seeds/ Pound (seeds)	Seed Oil ¹ (%)	Seed Protein ¹ (%)	Test Weight (lb/bu)	Seed Yield (bu/a)
NDSU	Ashtabula	9	25	4,166	16.5	35.2	56.6	22.2
NDSU	Cavalier	9	24	3,706	15.5	35.9	57.3	26.0
NDSU	ND1005T	9	25	3,319	16.0	38.6	57.7	24.0
NDSU	ProSoy	11	27	3,168	15.6	37.8	56.7	26.3
NDSU	Sheyenne	10	24	4,249	16.0	35.8	57.6	22.6
NDSU	Traill	7	23	3,966	15.7	36.3	57.7	22.6
Mean		9	25	3,762	15.9	36.6	57.3	24.0
CV %		23.8	11.3	5.2	1.7	1.2	0.9	18.8
LSD 0.10		2.7	3.5	240	0.3	0.5	0.7	NS

Planted: May 24. Harvested: Oct. 3. Previous crop: sorghum, sudangrass cover crop.

Table 19. 2013 Soybean - Dryland, Roundup Ready - LaMoure (Carrington REC) - Authors, B. Schatz and T. Helms (Page 1 of 2).

Company/ Brand	Variety	Maturity		Seed Oil (%)	Seed Protein (%)	Seed Yield		
		Group	Maturity ¹ (date)			2013	2-yr. Avg. (bu/a)	3-yr. Avg.
Asgrow	AG0732	0.7	9/16	19.1	34.3	23.2	32.7	30.3
Asgrow	AG0832	0.8	9/16	16.9	38.0	22.0	31.8	30.2
Asgrow	AG1132	1.1	9/21	17.5	37.4	20.6	--	--
Asgrow	AG1431	1.3	9/21	19.1	34.4	31.8	--	--
Channel	0906R2	0.9	9/15	18.5	36.0	26.1	--	--
Channel	1101R2	1.1	9/23	18.1	35.4	21.1	--	--
Dairyland	DSR-0904/R2Y	0.9	9/13	18.1	35.5	24.5	33.2	--
Dairyland	DSR-1120/R2Y	1.1	9/17	19.6	34.0	26.2	--	--
Dairyland	DSR-1215/R2Y	1.2	9/27	18.8	32.9	24.3	33.3	--
Dyna-Gro	S06RY24	0.6	9/11	19.2	34.8	24.1	--	--
Dyna-Gro	S09RY64	0.9	9/16	18.0	35.4	28.0	--	--
Integra	20810	0.8	9/19	18.0	34.3	23.9	36.3	--
Integra	20815	0.8	9/14	18.9	34.5	23.0	--	--
Kruger	K2-0101	0.1	9/6	19.3	34.1	26.6	33.1	31.1
Kruger	K2-0302	0.3	9/10	18.5	35.7	24.2	--	--
Kruger	K2-0504	0.5	9/15	19.5	35.5	23.6	32.3	--
Kruger	K2-0601	0.6	9/12	18.0	34.6	25.7	32.1	31.6
Kruger	K2-0801	0.8	9/13	18.2	35.1	24.3	32.1	29.9
Kruger	K2-0901	0.9	9/14	18.5	36.4	27.0	34.0	--
Kruger	K2-1001	1.0	9/17	17.5	37.1	26.0	35.0	32.7
Kruger	K2-1102	1.1	9/19	17.8	37.1	18.6	31.0	29.8
Kruger	K2-1103	1.1	9/18	19.0	35.2	28.4	--	--
Kruger	K2-1301	1.3	9/24	18.4	34.6	23.3	--	--
Legend	LS 06R21	0.6	9/11	17.5	35.4	27.3	--	--
Legend	LS 06R24N	0.6	9/14	18.5	34.8	26.4	--	--
Legend	LS 08R22N	0.8	9/14	18.6	35.7	23.4	33.4	--
Legend	LS 09R23N	0.9	9/16	18.7	35.3	30.0	--	--
Legend	LS 12R24N	1.2	9/16	18.6	36.1	26.6	--	--
Mustang	08824	0.8	9/17	17.0	37.3	24.5	--	--
Mustang	11302	1.1	9/20	19.9	34.3	26.2	--	--
Mustang	12224	1.2	9/18	19.5	34.9	30.0	--	--
Mycogen	5B040R2	0.4	9/13	17.4	35.3	23.1	--	--
Mycogen	5B066R2	0.6	9/11	17.8	35.0	26.9	34.9	--
Mycogen	5B080R2	0.6	9/14	18.0	35.3	22.8	31.1	29.5
Nuseed	2071 RR2YN	0.7	9/14	19.5	33.8	24.6	--	--
Nuseed	2093 RR2YN	0.9	9/14	19.4	34.0	27.6	--	--
Nuseed	2122 RR2YN	1.2	9/18	19.0	35.6	25.7	--	--
NuTech/G2	7063	0.6	9/10	19.0	34.2	24.2	33.6	--
NuTech/G2	6088	0.8	9/18	17.9	36.4	22.0	32.0	32.3
NuTech/G2	6093	0.9	9/15	17.2	37.0	18.2	--	--
NuTech/G2	6098	0.9	9/14	18.7	34.8	25.0	32.3	32.3
NuTech/G2	7110	1.1	9/14	17.4	36.2	21.2	28.0	--
NuTech/G2	6143	1.4	9/18	19.2	33.2	28.5	39.1	--
Peterson	13R08N	0.8	9/16	19.2	34.8	29.2	32.4	--
Peterson	14R10	1.0	9/16	17.1	37.4	22.3	--	--
Peterson	11R10	1.0	9/14	18.7	35.2	24.8	34.8	32.8
Peterson	14R11N	1.1	9/15	18.8	35.6	21.6	--	--
Prairie	PB-0441R2	0.4	9/10	--	--	19.1	--	--
Prairie	PB-0609R2	0.6	9/14	18.7	34.9	24.5	--	--
Mean			9/15	18.5	35.2	24.6	32.6	30.5
CV %			14.5	--	--	14.5	--	--
LSD 0.10			3.0	--	--	4.8	--	--

Table 19. 2013 Soybean - Dryland, Roundup Ready - LaMoure (Carrington REC) - Authors, B. Schatz and T. Helms (Page 2 of 2).

Company/ Brand	Variety	Maturity		Seed Oil (%)	Seed Protein (%)	Seed Yield		
		Group	Maturity ¹ (date)			2013	2-yr. Avg.	3-yr. Avg.
Prairie	PB-0777R2	0.7	9/13	17.3	36.5	23.7	--	--
Prairie	PB-0863R2	0.8	9/15	19.0	36.2	23.3	--	--
Prairie	PB-0866R2	0.8	9/16	18.7	34.1	28.4	--	--
Prairie	PB-0991R2	0.9	9/18	19.2	34.8	25.3	--	--
Prairie	PB-1234R2	1.2	9/20	19.1	35.3	25.3	--	--
Proseed	11-50	0.5	9/10	18.6	35.3	25.7	--	--
Proseed	PX06	0.6	9/13	19.0	34.6	29.3	--	--
Proseed	20-70	0.7	9/13	18.0	36.9	23.7	--	--
Proseed	10-80	0.8	9/14	18.1	34.1	23.5	32.7	28.2
REA	66G14	0.6	9/11	19.2	34.8	24.7	--	--
REA	69G13	0.9	9/12	19.0	33.5	24.0	30.4	--
REA	69G14	0.9	9/18	18.2	36.3	26.0	--	--
REA	71G14	1.1	9/15	17.8	36.6	25.8	--	--
REA	71G20	1.1	9/15	18.6	35.4	22.7	32.9	32.0
Thunder	3211R2Y	1.1	9/18	17.7	35.9	26.4	31.8	29.3
Thunder	3114R2Y	1.4	9/28	18.4	35.2	25.9	35.2	--
Wensman	W3058R2	0.5	9/12	18.3	35.6	20.7	26.6	27.9
Wensman	W3062NR2	0.6	9/12	18.7	35.8	25.8	--	--
Wensman	W3076R2	0.7	9/16	18.8	34.2	24.7	28.7	28.0
Wensman	W3090NR2	0.8	9/15	18.6	36.7	27.0	31.3	--
Wensman	W3121NR2	1.2	9/20	18.3	34.5	28.1	--	--
Mean			9/15	18.5	35.2	24.6	32.6	30.5
CV %			14.5	--	--	14.5	--	--
LSD 0.10			3.0	--	--	4.8	--	--

Planted: May 27. Harvested: Sept 26..

¹Maturity is date of 95 percent brown or tan pods.**Table 20. 2013 Soybean - Dryland, Conventional and Liberty Link - LaMoure (Carrington REC) - Authors, B. Schatz and T. Helms.**

Company/ Brand	Variety	Maturity		Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity ¹ (date)			2013	3-yr. Avg.
NDSU	Sheyenne	0.7	9/16	20.6	33.1	30.1	29.5
NDSU	Ashtabula	0.4	9/11	21.1	31.4	25.0	24.3
NDSU	ProSoy	0.8	9/15	18.0	37.2	26.4	--
Richland	MK0508	0.8	9/18	17.9	34.9	19.0	21.5
Richland	MK831	0.8	9/15	17.7	36.6	21.8	24.9
Richland	MK850	0.8	9/15	18.9	36.2	12.2	--
Richland	MK1016	1.0	9/16	19.2	33.4	20.5	21.3
Richland	MK9101	1.1	9/28	16.9	40.1	23.9	23.6
Richland	Challenger	1.3	9/29	17.2	38.7	24.7	--
SK Food	SK 066	0.6	9/18	14.2	40.9	21.3	--
SK Food	SK 923	0.0	9/11	19.3	32.7	19.0	--
SK Food	SK 0786	0.7	9/15	19.0	36.8	25.5	--
SK Food	SK 095	0.9	9/14	19.6	35.2	21.1	--
SK Food	SK 0635	0.6	9/14	19.3	34.8	27.5	--
Peterson	L08-14 ¹	0.8	9/28	18.2	35.8	25.3	--
Peterson	L11-13N ¹	1.1	9/26	18.2	37.4	23.6	--
Thunder	5210NLL ¹	1.0	9/24	17.7	35.8	24.0	--
Thunder	5411LL ¹	1.1	9/26	19.1	33.8	25.8	--
Mean			9/19	18.4	35.8	23.2	24.2
CV %			10.6	--	--	12.4	--
LSD .10			2.7	--	--	4.0	--

Planted: May 27. Harvested: Sept. 26.

¹LL = Liberty Link.

Table 21. 2013 Soybean - Dryland, Roundup Ready - Wishek (Carrington REC) - Authors, B. Schatz, M. Ostlie and T. Indergaard

Company/ Brand	Variety	Maturity Group	Seed Oil (%)	Seed Protein (%)	Seeds/ Pound	Test Weight (lb/bu)	Seed Yield ----- (bu/a)	2-yr. Avg.
Asgrow	AG0732	0.7	15.7	38.2	2,654	55.3	20.7	--
Asgrow	AG0832	0.8	15.6	38.4	2,378	54.8	21.5	--
Asgrow	AG1132	1.1	14.9	38.1	2,500	54.9	23.7	--
Asgrow	AG1431	1.4	14.8	39.0	2,604	55.5	27.9	--
Integra	20600 R2Y	0.6	15.7	37.3	2,966	54.2	23.0	30.8
Integra	20815 R2Y	0.8	15.4	38.3	2,793	55.7	25.7	--
Integra	20902 R2Y	0.9	15.4	38.2	2,594	55.4	27.6	36.7
Kruger	K2-0101	0.1	15.8	36.9	2,688	55.3	23.7	27.8
Kruger	K2-0302	0.3	14.9	40.3	2,824	55.2	25.3	--
Kruger	K2-0504	0.5	14.4	39.5	2,407	54.3	22.7	28.9
Kruger	K2-0601	0.6	14.8	38.5	2,859	55.2	27.7	34.3
Kruger	K2-0801	0.8	14.6	38.4	2,542	55.3	32.3	32.4
Kruger	K2-0901	0.9	14.7	38.7	2,598	55.0	24.9	29.2
Kruger	K2-1001	1.0	14.1	39.4	2,737	54.7	30.1	35.8
Kruger	K2-1102	1.1	14.4	38.7	2,428	55.5	33.7	34.6
Kruger	K2-1103	1.1	14.8	39.1	2,634	55.6	30.9	--
Kruger	K2-1301	1.3	14.3	37.9	2,650	54.7	22.3	27.7
Legend	LS 06R21	0.6	15.5	37.4	2,956	55.0	24.1	--
Legend	LS 06R24N	0.6	14.4	39.7	2,737	54.8	26.0	--
Legend	LS 08R22N	0.8	15.7	37.7	2,652	55.4	18.8	--
Legend	LS 09R23N	0.9	14.9	37.8	2,619	55.6	26.5	--
Legend	LS 12R24N	1.2	15.0	39.2	2,626	55.3	19.6	--
Mustang	08824	0.8	14.6	38.9	2,844	55.5	26.7	--
Mustang	11302	1.1	14.3	38.9	2,427	55.1	21.1	--
Mustang	12224	1.2	15.3	39.0	2,641	54.8	32.3	--
Mycogen	5B066R2	0.6	15.3	38.0	3,061	54.9	26.3	--
Mycogen	5B080R2	0.6	15.0	37.8	2,935	55.7	28.6	40.5
Mycogen	5N091R2	0.9	15.6	37.6	2,671	54.6	28.7	--
NorthStar	NS1257R2	1.2	14.4	38.5	2,520	55.7	23.5	31.2
Nuseed	2071 RR2YN	0.7	15.2	37.7	3,204	55.4	24.3	--
Nuseed	2093 RR2YN	0.9	14.9	38.9	2,920	55.3	26.4	--
Nuseed	2122 RR2YN	1.2	14.9	39.1	2,709	55.1	28.1	--
NuTech/G2	7063	0.6	15.4	36.9	3,220	55.4	27.5	--
NuTech/G2	6088	0.8	15.4	37.6	2,837	55.8	28.3	30.3
NuTech/G2	6093	0.9	14.4	39.3	2,541	55.4	26.5	--
NuTech/G2	6098	0.9	15.1	38.6	2,757	55.4	24.4	30.2
NuTech/G2	7110	1.1	14.5	38.5	2,374	55.4	29.0	29.9
NuTech/G2	6143	1.4	14.8	38.2	2,824	55.8	23.2	28.5
Peterson	14R06N	0.6	14.4	39.9	2,736	54.7	30.3	--
Peterson	13R08N	0.8	15.1	37.7	2,591	55.4	26.9	--
Proseed	11-50	0.5	15.1	37.5	2,847	54.5	25.9	34.8
Proseed	PX06	0.6	15.4	37.7	2,992	55.6	33.9	--
Proseed	20-70	0.7	14.3	39.6	2,711	55.6	30.1	--
Proseed	PX08	0.8	15.0	38.6	2,699	55.0	18.2	--
REA	66G14	0.6	15.4	37.6	3,140	55.4	20.0	--
REA	69G13	0.9	14.9	38.5	2,622	55.7	20.1	26.9
REA	69G14	0.9	15.4	38.2	2,715	55.1	21.7	--
REA	71G14	1.1	15.1	39.0	2,643	55.0	21.3	--
REA	71G20	1.1	14.7	38.8	2,639	55.8	25.9	32.5
Thunder	3211R2Y	1.1	14.4	38.9	2,483	55.3	29.0	28.9
Thunder	3114R2Y	1.4	14.2	38.5	2,607	55.4	26.8	29.6
Wensman	W3062NR2	0.6	14.9	39.3	2,840	54.8	29.0	--
Wensman	W3076R2	0.7	15.1	38.3	2,651	55.3	34.1	36.2
Wensman	W3090NR2	0.8	14.8	38.4	2,769	55.6	29.4	32.4
Wensman	W3102NR2	1	15.6	36.9	2,728	55.8	26.8	--
Wensman	W3121NR2	1.2	15.1	37.8	2,663	55.6	32.4	--
Wensman	W3128R2	1.2	14.6	38.9	2,444	55.2	24.9	--
Mean			15	38.4	2,711	55.2	25.8	31.7
CV %			3.9	2.4	4.5	1	23.3	--
LSD 0.10			0.7	1.1	141	0.7	7	--

Planted: June 6. Harvested: Oct. 28. Previous crop: spring wheat.

'Maturity is date of 95 percent brown or tan pods.

Table 22. 2013 Soybean - Irrigated, Roundup Ready - Oakes (Carrington REC) - Authors, L. Besemann and B. Schatz (Page 1 of 2).

Company/ Brand	Variety	Maturity		Plant Height	Plant Lodge ²	Seed Oil	Seed Protein	Test Weight	Seed Yield	
		Group	Maturity ¹ (date)						2013	2-yr. Avg. (bu/a)
Asgrow	AG0732	0.7	9/24	38	0	18.9	35.2	56.3	69.6	--
Asgrow	AG0832	0.8	9/24	41	1	18.6	35.9	55.8	72.1	--
Asgrow	AG1132	1.1	9/28	37	0	18.2	35.4	56.6	78.7	--
Asgrow	AG1431	1.4	10/1	38	3	18.4	36.0	56.7	80.7	--
Channel	1101R2	1.1	9/29	39	1	18.4	35.1	56.4	73.1	--
Channel	1207R2	1.2	9/30	36	2	18.6	35.5	56.6	80.3	--
Dairyland	DSR-0747/R2Y	0.7	9/30	36	2	17.7	36.3	56.2	72.9	70.6
Dairyland	DSR-0904/R2Y	0.9	9/25	39	1	18.6	35.2	56.3	74.9	--
Dairyland	DSR-1120/R2Y	1.1	10/1	40	5	19.0	34.9	56.1	77.4	--
Dairyland	DSR-1215/R2Y	1.2	9/30	41	1	18.2	35.1	56.2	73.1	75.8
Dyna-Gro	S08RY23	0.8	9/28	39	1	18.5	35.4	56.1	73.6	--
Dyna-Gro	S09RY64	0.9	9/30	40	2	18.3	35.0	56.1	74.7	--
Dyna-Gro	S12RY44	1.2	9/29	39	1	18.1	35.8	56.3	71.6	--
Integra	20810	--	9/25	37	0	18.3	34.7	58.0	73.8	--
Integra	20815	--	9/27	38	1	18.6	35.1	56.1	73.7	--
Kruger	K2-0101	0.1	9/21	34	1	18.6	35.6	55.5	65.5	64.5
Kruger	K2-0302	0.3	9/22	39	1	18.4	36.1	55.5	70.0	--
Kruger	K2-0504	0.5	9/22	37	0	18.6	35.3	55.2	78.2	--
Kruger	K2-0601	0.6	9/21	37	2	18.5	35.0	55.6	69.2	68.6
Kruger	K2-0801	0.8	9/24	38	0	18.5	35.3	56.6	78.7	74.4
Kruger	K2-0901	0.9	9/28	40	1	18.4	35.4	56.6	75.7	--
Kruger	K2-1001	1.0	9/27	39	4	17.8	36.0	56.4	70.9	69.8
Kruger	K2-1102	1.1	10/1	40	2	17.8	36.5	56.9	72.5	69.0
Kruger	K2-1103	1.1	9/30	38	1	18.6	35.5	56.5	74.9	--
Kruger	K2-1301	1.3	9/29	44	4	17.6	36.2	56.0	76.1	--
Nuseed	2071 RR2YN	0.7	9/25	35	0	18.5	35.3	57.1	75.8	--
Nuseed	2093 RR2YN	0.9	9/27	36	1	18.2	35.7	56.7	78.0	--
Nuseed	2122 RR2YN	1.2	9/30	39	1	18.7	35.8	56.3	77.8	--
NuTech/G2	7063	0.6	9/23	38	1	19.0	34.2	55.9	68.7	--
NuTech/G2	6088	0.8	9/24	34	1	18.7	35.3	55.9	77.7	77.1
NuTech/G2	6093	0.9	9/24	37	1	19.0	35.8	56.3	68.2	--
NuTech/G2	6098	0.9	9/30	39	1	18.4	35.5	56.1	70.1	71.0
NuTech/G2	7110	1.1	9/28	38	3	18.4	35.8	55.5	68.8	68.9
NuTech/G2	6143	1.4	10/1	40	2	17.9	36.2	56.5	73.4	--
Peterson	14R10	1.0	9/29	37	1	17.8	35.6	56.8	67.6	--
Peterson	14R13	1.3	9/30	38	0	18.0	36.1	56.0	68.7	--
Proseed	20-90	0.9	9/25	39	1	18.2	35.9	56.2	74.9	--
Proseed	PX11	1.1	9/22	38	1	18.4	35.9	56.1	75.2	--
Proseed	PX12	1.2	9/29	38	0	18.8	35.9	56.1	80.2	--
Proseed	2-140	1.4	10/2	44	2	18.6	35.7	57.3	82.8	--
REA	66G14	0.6	9/24	37	1	18.0	35.9	56.4	65.9	--
REA	69G13	0.9	9/26	39	2	18.5	35.4	56.4	72.4	--
REA	69G14	0.9	9/29	39	1	18.7	35.0	56.7	79.5	--
Mean			9/27	38	1	18.3	35.6	56.3	73.8	70.7
CV %			0.6	5.0	87.9	1.1	1.0	0.8	6.8	--
LSD 0.10			2	2.2	1	0.2	0.4	0.5	5.8	--

Table 22. 2013 Soybean - Irrigated, Roundup Ready - Oakes (Carrington REC) - Authors, L. Besemann and B. Schatz (Page 2 of 2).

Company/ Brand	Variety	Maturity		Plant Height	Plant Lodge ²	Seed Oil	Seed Protein	Test Weight	Seed Yield	
		Group	Maturity ¹ (date)						2013	2-yr. Avg.
REA	71G14	1.1	9/29	38	2	18.8	35.2	57.0	81.6	--
REA	71G20	1.1	9/27	40	4	17.9	35.9	56.4	71.9	--
Thunder	3211R2Y	1.1	9/29	40	3	17.4	37.1	56.1	69.7	68.2
Thunder	3114R2Y	1.4	9/30	43	4	17.7	36.0	56.9	74.5	--
Wensman	W3062NR2	0.6	9/18	36	1	17.5	37.4	55.3	69.6	--
Wensman	W3076R2	0.7	9/23	39	1	18.2	35.8	56.2	70.6	--
Wensman	W3090NR2	0.8	9/24	39	0	18.6	35.3	55.9	73.6	--
Wensman	W3102NR2	1.0	9/29	39	1	18.2	35.1	56.6	77.5	--
Wensman	W3121NR2	1.2	9/29	39	1	18.0	36.0	57.1	76.4	--
Wensman	W3128R2	1.2	9/26	38	1	18.2	36.0	56.0	67.6	--
Mean			9/27	38	1	18.3	35.6	56.3	73.8	70.7
CV %			0.6	5	87.9	1.1	1.0	0.8	6.8	--
LSD 0.10			2	2	1	0.2	0.4	0.5	5.8	--

Planted: May 28. Harvested: Oct. 22. Previous crop: spring wheat.

¹Maturity is date of 95 percent brown or tan pods.²Lodging is from 0 to 9; 0 is erect, 9 is flat.**Table 23. 2013 Soybean - Irrigated, Conventional - Oakes (Carrington REC) - Authors, L. Besemann and B. Schatz.**

Company/Brand	Variety	Mat.		Plant Height	Plant Lodge ²	Seed Oil	Seed Protein	Test Weight	Seed Yield	
		Group	Maturity ¹ (date)						2013	Avg.
Richland	MK0508	0.8	9/26	29	3	17.2	36.2	58.6	50.1	45.9
Richland	MK831	0.8	9/24	33	2	17.3	36.9	58.9	59.8	57.5
Richland	MK850	0.8	9/30	32	2	18.6	36.5	57.7	44.1	--
Richland	MK1016	1.0	10/1	37	3	16.5	38.1	59.0	39.3	52.0
Richland	MK9101	1.1	10/1	37	2	18.9	36.3	57.0	62.2	--
Richland	Challenger	1.3	10/9	41	3	17.5	38.8	57.6	63.7	--
SK Food	SK 0786	0.7	9/29	34	4	17.4	39.1	56.5	57.7	--
SK Food	SK095	0.9	9/24	36	2	16.4	38.1	58.9	51.8	--
SK Food	SK 0635	0.6	9/28	29	3	19.6	34.2	56.3	67.7	--
Thunder	5210NLL3	1.0	10/1	41	1	18.5	35.3	57.5	68.6	--
Thunder	5411LL3	1.1	10/2	40	2	18.5	35.8	57.2	64.2	--
Mean			9/29	35	2	17.8	36.8	57.7	57.2	51.8
CV %			0.4	5	49.2	1.3	0.8	0.7	7.8	--
LSD 0.10			1.2	2.1	1.4	0.3	0.4	0.5	5.4	--

Planted: May 28. Harvested: Oct. 22. Previous crop: spring wheat.

¹Maturity is date of 95 percent brown or tan pods.²Lodging is from 0 to 9; 0 is erect, 9 is flat.

Table 24. 2013 Soybean - Roundup Ready - Langdon - Authors, B. Hanson and T. Hakanson.

Company/ Brand	Variety	Maturity Group	Maturity ¹ (date)	Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield ----(bu/a)----	
							2013	2-yr. Avg.
Asgrow	AG 00632	00.6	9/18	39	15.1	35.5	52.6	46.4
Asgrow	AG 00932	00.9	9/18	38	14.3	35.5	52.7	46.5
Channel	00806R2	00.8	9/18	37	15.5	35.1	55.5	--
Channel	0205R2	0.2	9/21	43	15.2	35.1	52.4	--
Croplan	R2T0041	00.4	9/17	34	15.6	34.7	48.1	48.3
Croplan	R2T00832	00.8	9/19	40	15.2	34.8	58.5	51.5
Croplan	R2T0091	00.9	9/18	39	15.4	34.2	55.9	50.1
Dyna-Gro	30RY04	00.4	9/17	36	15.4	35.4	51.2	46.8
Dyna-Gro	S007RY44	00.7	9/18	34	14.9	36.2	51.4	--
Dyna-Gro	S02RY74	0.2	9/23	37	14.6	35.4	55.6	--
Gold Cntry	0053	00.5	9/15	35	14.8	35.3	52.2	--
Hefty	H007Y12	00.7	9/18	38	15.2	36.3	51.6	47.1
Hefty	H008R3	00.8	9/20	37	15.6	34.6	52.9	--
Hefty	H00Y12	0.0	9/20	32	14.7	37.3	48.8	45.8
Hefty	H01R3	0.1	9/26	35	13.7	37.0	45.9	--
Hefty	H02R3	0.2	10/4	40	13.8	35.5	47.8	--
Integra	20052	00.5	9/16	37	14.7	35.0	51.2	47.6
Integra	20031	00.7	9/17	36	15.0	34.7	56.5	48.3
Integra	20085N	00.8	9/16	32	14.9	35.7	49.7	--
Integra	20090	00.9	9/20	39	15.7	33.9	57.2	49.5
Integra	20107	0.0	9/27	37	13.7	36.9	47.3	--
Mycogen	5B005R2	00.5	9/18	37	15.5	35.7	55.6	50.1
Mycogen	5G009R2	00.9	9/19	40	14.9	34.7	55.4	--
NorthStar	0057R2	00.5	9/17	38	14.1	36.3	49.7	49.2
NorthStar	0077R2	00.7	9/18	38	15.5	36.7	52.9	50.1
NorthStar	0080R2	00.7	9/18	39	15.1	34.7	60.8	--
NuTech/G2	6005	00.5	9/16	30	16.0	35.3	47.9	44.3
NuTech/G2	0090	00.9	9/19	36	16.0	36.4	51.9	46.8
NuTech/G2	6009	00.9	9/18	33	16.6	34.7	46.6	44.8
NuTech/G2	6021	0.2	9/23	35	15.3	36.1	45.8	--
Peterson	14R008	00.8	9/15	33	15.1	36.0	50.5	--
Peterson	11R01	0.1	9/19	38	15.7	34.5	51.0	46.9
Peterson	14R02	0.2	9/28	39	14.2	36.2	48.7	--
Prairie	PB-00560R2	00.5	9/16	35	16.0	34.5	51.3	50.2
Prairie	PB-00821R2	00.7	9/15	33	15.0	35.6	46.3	--
Prairie	PB-00844R2	00.8	9/22	38	15.2	35.1	52.1	48.2
Prairie	PB-00950R2	00.9	9/20	39	15.3	35.0	59.8	--
Prairie	PB-0291R2	0.2	9/27	39	14.4	35.3	51.4	--
Proseed	11-05	00.5	9/16	34	16.1	34.1	49.8	48.8
Proseed	11-07	00.7	9/18	39	16.0	34.7	48.0	45.3
Proseed	10-08	00.8	9/17	41	15.3	34.5	56.5	48.7
Proseed	20-08	00.8	9/20	40	15.1	34.8	54.7	50.1
Proseed	PX009	00.9	9/15	32	15.2	35.2	43.4	--
REA	53G32	00.3	9/15	32	15.7	34.9	47.3	46.0
REA	55G14	00.5	9/16	39	14.9	35.3	46.7	--
REA	58G82	00.8	9/22	38	15.3	34.3	47.9	45.2
REA	61G21	0.1	9/17	40	15.9	34.2	52.4	48.0
Syng NK	NK S00-A7	00.7	9/18	40	16.1	35.4	51.2	49.0
Syng NK	NK S02-B4	00.2	9/19	41	15.2	35.1	57.2	48.0
Wensman	W 30078R2	00.7	9/16	33	15.2	35.9	50.8	--
Wensman	W 30084R2	00.8	9/21	42	14.9	35.4	60.8	48.8
Wensman	W 30099R2	00.9	9/22	43	15.6	34.5	53.3	48.1
Wensman	W 3024R2	0.2	9/23	39	14.2	36.3	57.9	--
Wensman	W 3030R2	0.2	9/23	43	14.5	36.2	55.5	--
Mean			9/19	37	15.2	35.4	52.0	47.8
CV %			1.9	5.6	2.0	1.6	7.7	--
LSD 0.10			2.5	2.5	0.5	0.9	4.7	--

Planted: May 29. Harvested: Oct. 9.

¹Days to physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).

Table 25. 2013 Soybean - Liberty Link - Langdon - Authors, B. Hanson and T. Hakanson.

Company/ Brand	Variety	Maturity		Plant Height	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity ¹ (date)				2013	2-yr. Avg. ----(bu/a)----
Hefty	H008L3	00.8	9/15	30	16.0	36.1	50.7	54.0
Integra	30080LL	00.8	9/15	31	16.1	34.9	54.5	56.5
NorthStar	0095LL	00.9	9/14	29	16.9	35.1	51.8	--
Peterson	L009-13	00.9	9/15	29	16.2	35.4	51.0	53.3
Proseed	PX09LL	00.9	9/15	31	16.0	35.4	53.5	--
Mean			9/15	30	16.2	35.4	52.1	54.6
CV %			1.1	4.3	2.1	1.9	6.4	--
LSD 0.10			NS	1.4	NS	NS	NS	--

Planted: May 29. Harvested: Oct. 4.

¹Days to physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).**Table 26. 2013 Soybean - Conventional - Langdon - Authors, B. Hanson and T. Hakanson.**

Company/ Brand	Variety	Maturity		Plant Height	Seed Oil	Seed Protein	Seed Yield	
		Group	Maturity ¹ (date)				2013	2-yr. Avg. ----(bu/a)----
NDSU	Cavalier	00.9	9/18	38	14.9	35.6	47.9	50.2
NDSU	Ashtabula	0.4	9/25	39	15.6	34.4	51.7	51.5
NDSU	Traill	0.0	9/19	37	14.9	35.8	44.4	46.1
Richland	MK0249	0.2	9/24	35	13.8	37.0	42.9	--
SK Food	SK0007	000.7	9/7	28	15.2	37.5	38.7	40.6
SK Food	SK923	00.9	9/17	35	15.7	34.4	46.9	--
SunOpta	Bravado	00.9	9/17	36	15.2	35.1	47.3	50.2
RR Check	AG 00932	00.9	9/19	38	14.6	35.0	54.3	--
Mean			9/19	36	14.9	35.7	46.8	47.7
CV %			1.3	4.7	1.8	1.4	8.2	--
LSD 0.10			1.8	2.0	0.5	0.9	4.7	--

Planted: May 29. Harvested: Oct. 4.

¹Days to physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).

Table 27. 2013 Soybean - Roundup Ready - Cavalier (Langdon REC) - Authors, B. Hanson and T. Hakanson.

Company/ Brand	Variety	Maturity	Plant	Seed	Seed	Seed Yield		
		Group	Maturity ¹ (date)	Height (inch)	Oil (%)	Protein (%)	2013	2-yr. Avg. ------(bu/a)-----
Asgrow	AG 00632	00.6	9/14	34	16.1	34.5	57.2	51.1
Asgrow	AG 00932	00.9	9/15	32	15.9	34.5	57.7	51.3
Asgrow	AG 0231	0.2	9/17	33	16.4	33.1	57.4	--
Dyna-Gro	30RY04	00.4	9/13	30	17.4	33.7	57.6	48.6
Dyna-Gro	S007RY44	00.7	9/13	31	16.7	33.8	58.6	--
Dyna-Gro	S02RY74	0.2	9/17	31	16.4	33.9	66.0	--
Gold Cntry	0053	00.5	9/12	32	16.3	33.7	58.4	--
Hefty	H007Y12	00.7	9/12	30	17.2	34.2	61.4	52.6
Hefty	H008R3	00.8	9/15	31	16.2	33.5	58.8	--
Hefty	H00Y12	0.0	9/15	28	16.3	34.7	55.9	49.0
Hefty	H01R3	0.1	9/18	32	15.6	34.9	55.2	--
Hefty	H02R3	0.2	9/23	32	15.4	34.7	59.9	--
Integra	20052	00.5	9/12	31	15.4	34.4	55.4	--
Integra	20031	00.7	9/14	33	16.2	33.3	65.2	58.5
Integra	20085N	00.8	9/12	29	16.6	33.7	54.1	--
Integra	20090	00.9	9/16	34	16.5	32.9	58.7	--
Integra	20107	0.0	9/19	33	15.0	35.6	54.3	--
Mycogen	5B005R2	00.5	9/14	31	16.9	34.4	57.1	53.2
Mycogen	5G009R2	00.9	9/16	33	16.3	33.4	60.6	53.5
NorthStar	0057R2	00.5	9/12	29	15.5	34.2	53.3	51.0
NorthStar	0077R2	00.7	9/13	32	16.8	34.8	57.7	51.4
NorthStar	0080R2	00.7	9/14	34	16.2	33.5	62.9	--
NorthStar	0088R2	00.8	9/16	32	16.3	33.9	60.1	--
NuTech/G2	6005	00.5	9/15	29	16.8	34.1	54.6	51.1
NuTech/G2	0090	00.9	9/15	32	17.3	35.1	53.4	50.7
NuTech/G2	6009	00.9	9/13	31	17.9	32.6	56.7	51.5
NuTech/G2	6021	0.2	9/20	29	16.1	35.0	56.7	--
Peterson	14R008	00.8	9/12	29	16.7	33.4	55.1	--
Peterson	11R01	0.1	9/15	33	17.1	32.3	58.2	52.3
Peterson	14R02	0.2	9/20	33	15.1	35.3	65.6	--
Prairie	PB-00560R2	00.5	9/11	29	17.3	33.8	54.8	52.3
Prairie	PB-00821R2	00.7	9/11	27	16.8	34.0	56.2	--
Prairie	PB-00844R2	00.8	9/15	30	16.7	33.9	56.1	49.4
Prairie	PB-00950R2	00.9	9/16	36	16.3	34.3	67.8	--
Prairie	PB-0291R2	0.2	9/20	32	15.3	34.6	62.4	--
Proseed	11-05	00.5	9/10	27	16.9	33.7	54.4	48.1
Proseed	11-07	00.7	9/12	31	16.9	34.6	59.2	54.0
Proseed	10-08	00.8	9/15	33	16.7	32.8	58.8	49.3
Proseed	20-08	00.8	9/15	32	16.0	34.0	62.2	51.1
Proseed	PX009	00.9	9/12	28	16.3	34.0	59.4	--
REA	53G32	00.3	9/11	26	17.0	33.4	52.6	47.6
REA	55G14	00.5	9/13	32	15.8	34.3	57.0	--
REA	58G82	00.8	9/17	34	16.8	32.5	58.0	51.0
REA	61G21	0.1	9/15	33	16.7	32.8	59.0	53.6
Stine	01RE00	0.0	9/18	31	15.9	34.6	63.0	--
Stine	01RD66	0.0	9/14	29	17.0	34.5	62.3	53.2
Syng NK	NK S00-A7	00.7	9/12	31	17.0	34.7	57.2	53.6
Syng NK	NK S02-B4	00.2	9/14	35	17.2	32.8	65.5	57.5
Wensman	W 30078R2	00.7	9/12	30	16.1	33.9	54.9	--
Wensman	W 30084R2	00.8	9/17	35	16.4	33.8	60.0	52.4
Wensman	W 30099R2	00.9	9/18	36	16.7	33.2	64.4	54.9
Wensman	W 3024R2	0.2	9/17	30	16.4	34.2	64.7	--
Wensman	W 3030R2	0.3	9/16	35	16.6	34.1	58.1	--
Mean			9/15	31	16.5	34.0	58.4	51.9
CV %			1.3	5.7	1.8	1.3	6.8	--
LSD 0.10			1.5	2.1	0.5	0.8	4.7	--

Planted: June 6. Harvested: Oct. 8.

¹Days to physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).

Table 28. 2013 Soybean - Liberty Link - Park River (Langdon REC) - Authors, B. Hanson and T. Hakanson.

Brand	Variety	Maturity		Plant Height	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity ¹ (date)				2013	2-yr. avg. (bu/a)
Hefty	H008L3	00.8	9/13	27	17.8	33.3	49.8	53.2
Integra	30080LL	00.8	9/13	27	18.0	32.9	50.5	53.4
NorthStar	0499KK	0.4	9/13	27	18.0	32.9	46.6	--
NorthStar	0129LL	0.1	9/16	33	18.1	31.5	65.6	--
Peterson	L01-14	0.1	9/14	33	17.3	33.1	60.4	--
Peterson	L03-12N	0.3	9/17	29	17.2	34.3	54.1	51.5
Proseed	LL11-31LL	0.3	9/17	28	18.1	32.7	41.2	--
Proseed	PX05LL	0.4	9/22	28	17.9	32.5	58.5	--
Mean			9/15	29	17.8	32.8	53.3	52.7
CV %			1.0	9.7	2.8	2.4	13.2	--
LSD 0.10			2.0	NS	NS	NS	NS	--

Planted: May 28. Harvested: Oct. 2.

¹Days to physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).**Table 29. 2013 Soybean - Conventional - Park River (Langdon REC) - Authors, B. Hanson and T. Hakanson.**

Brand	Variety	Maturity		Plant Height	Seed Oil (%)	Seed Protein (%)	Seed Yield		
		Group	Maturity ¹ (date)				2013	2-yr. avg. (bu/a)	2-site Avg. ²
NDSU	Cavalier	00.9	9/14	31	15.9	35.1	52.2	--	50.1
NDSU	Ashtabula	0.4	9/18	32	17.2	33.2	52.4	50.2	52.1
NDSU	Traill	0.0	9/14	31	16.2	36.0	50.2	52.4	47.3
Richland	MK0249	0.2	9/17	27	17.2	32.8	45.4	--	44.2
SK Food	SK0007	000.7	9/4	22	15.9	36.3	33.0	31.5	35.9
SK Food	SK923	00.9	9/10	29	16.7	34.3	48.7	--	47.8
SunOpta	Bravado	00.9	9/8	27	17.8	32.4	41.9	44.0	44.6
RR Check	AG 00932	00.9	9/15	31	16.7	33.8	53.7	--	54.0
Mean			9/13	29	16.8	34.1	47.9	44.5	47.0
CV %			1.7	7.3	3.4	2.7	11.5	--	--
LSD 0.10			2.6	3.0	1.0	1.7	7.8	--	--

Planted: May 14. Harvested: Sept. 18.

¹Days to physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).²A 2-site average of Walsh County (Park River) and Langdon REC.

Table 30. 2013 Soybean - Roundup Ready - Park River (Langdon REC) - Authors, B. Hanson and T. Hakanson.

Company/ Brand	Variety	Maturity		Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity ¹ (date)				2013 ------(bu/a)-----	2-yr. Avg.
Asgrow	AG 00632	00.6	9/9	34	17.5	32.7	46.0	47.4
Asgrow	AG 00932	00.9	9/9	37	16.7	33.3	56.9	54.7
Asgrow	AG 0231	0.2	9/12	34	17.2	32.5	47.6	50.3
Asgrow	AG 0333	0.3	9/21	36	15.9	34.7	60.5	60.8
Channel	00806R2	00.8	9/9	33	16.9	33.4	46.1	--
Channel	0205R2	0.2	9/10	34	17.5	32.6	51.6	--
Dyna-Gro	30RY04	00.4	9/6	30	17.7	33.1	42.9	46.7
Dyna-Gro	S007RY44	00.7	9/6	26	17.3	32.7	43.1	--
Dyna-Gro	S02RY74	0.2	9/13	31	17.2	33.6	48.1	--
Hefty	H007Y12	00.7	9/7	32	17.6	33.4	47.0	47.7
Hefty	H008R3	00.8	9/7	32	16.9	33.5	48.3	--
Hefty	H00Y12	0.0	9/12	26	16.2	35.8	43.8	49.4
Hefty	H01R3	0.1	9/12	27	16.5	33.4	42.7	--
Hefty	H02R3	0.2	9/19	32	16.2	34.1	55.0	--
Integra	20031	00.7	9/9	31	17.1	32.6	48.2	47.6
Integra	20085N	00.8	9/5	27	16.8	33.6	45.3	--
Integra	20090	00.9	9/9	33	18.0	31.1	46.5	44.2
Integra	20107	0.0	9/13	30	16.8	33.8	46.9	--
Integra	20109	0.2	9/18	28	16.8	34.0	53.0	49.9
Mycogen	5G009R2	00.9	9/11	36	17.0	33.3	49.0	46.0
Mycogen	5H009R2	00.9	9/8	33	16.7	33.7	50.1	--
Mycogen	5B012R2	0.1	9/10	35	17.0	34.4	49.2	--
NorthStar	0080R2	00.7	9/8	35	17.3	32.3	50.6	51.7
NorthStar	0088R2	00.8	9/8	32	16.7	33.7	50.4	--
NorthStar	0096R2	00.9	9/11	35	17.8	32.0	51.6	50.7
NorthStar	0108R2	0.1	9/13	28	16.6	34.2	42.1	43.4
NuTech/G2	6005	00.5	9/6	28	17.4	33.6	43.9	--
NuTech/G2	0090	00.9	9/10	33	17.7	33.9	41.2	44.1
NuTech/G2	6009	00.9	9/7	31	17.4	33.1	40.7	43.0
NuTech/G2	6021	0.2	9/13	30	17.3	33.6	51.5	--
Peterson	14R008	00.8	9/7	28	17.1	32.9	44.2	--
Peterson	11R01	0.1	9/9	31	18.1	31.3	47.3	47.7
Peterson	14R02	0.2	9/14	31	15.5	35.5	52.1	--
Peterson	13R03	0.3	9/20	32	16.6	33.9	53.4	51.8
Prairie	PB-00821R2	00.7	9/6	28	17.2	32.9	41.4	--
Prairie	PB-00844R2	00.8	9/10	31	17.3	32.4	49.0	51.4
Prairie	PB-00950R2	00.9	9/9	34	17.3	33.5	49.5	49.8
Prairie	PB-00961R2	00.9	9/5	31	15.0	36.5	44.2	--
Prairie	PB-0291R2	0.2	9/15	32	15.9	34.9	53.4	--
Proseed	10-08	00.8	9/12	34	17.5	32.0	51.7	49.2
Proseed	PX01	0.1	9/15	31	15.8	34.2	51.2	--
Proseed	PX02	0.2	9/15	36	16.8	34.5	58.1	--
Proseed	20-30	0.2	9/19	30	16.6	33.1	51.7	--
Proseed	10-20	0.2	9/12	36	17.0	32.5	52.6	49.9
REA	55G14	00.5	9/5	35	16.9	33.2	47.1	--
REA	58G82	00.8	9/12	35	17.0	32.0	55.1	53.5
REA	61G21	0.1	9/9	34	17.6	32.2	48.5	45.2
REA	62G22	0.2	9/10	35	17.6	32.9	45.5	47.7
Stine	02RE03	0.2	9/15	33	15.5	35.1	56.9	--
Stine	02RD00	0.2	9/15	28	17.2	34.1	55.8	51.4
Syng NK	NK S00-A7	00.7	9/5	33	17.4	33.6	42.4	45.4
Syng NK	NK S02-B4	00.2	9/8	35	17.6	32.0	50.7	47.4
Syngenta	NK S04-D3	0.4	9/10	33	16.7	33.0	49.1	--
Wensman	W 30078R2	00.7	9/5	28	17.1	33.2	44.1	--
Wensman	W 30099R2	00.9	9/10	35	17.8	31.9	55.1	54.8
Wensman	W 3024R2	0.2	9/13	32	17.0	34.0	53.6	--
Wensman	W 3030R2	0.2	9/10	35	17.4	32.7	48.2	--
Mean			9/10	32	17.0	33.4	49.0	49.1
CV %			1.8	7.4	2.8	2.7	11.5	--
LSD 0.10			2.3	2.8	0.8	1.5	6.5	--

¹Days to physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).

Table 31. 2013 Soybean - Roundup Ready - Lakota (Langdon REC) - Authors, B. Hanson and T. Hakanson (Page 1 of 2).

Company/ Brand	Variety	Maturity		Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity ¹ (date)				2013	2-yr. Avg. (bu/a)
Asgrow	AG 00932	00.9	9/13	29	16.0	34.3	45.7	55.4
Asgrow	AG 0231	0.2	9/18	28	16.5	32.6	44.3	57.6
Asgrow	AG 0333	0.3	9/24	28	15.4	33.8	50.3	56.8
Asgrow	AG 0430	0.4	9/16	24	16.2	33.5	45.4	54.8
Dairyland	DSR-C506/R2Y	00.5	9/11	24	16.9	34.3	39.5	53.9
Dairyland	DSR-C905/R2Y	00.9	9/10	26	15.7	34.7	46.9	55.0
Dairyland	DSR-0305/R2Y	0.3	9/24	28	16.4	33.1	56.7	--
Dairyland	DSR-0404/R2Y	0.4	9/22	28	15.9	33.5	56.7	61.7
Dyna-Gro	30RY04	00.4	9/8	25	17.2	33.9	43.3	51.2
Dyna-Gro	S007RY44	00.7	9/10	21	16.6	32.5	41.2	--
Dyna-Gro	S02RY74	0.2	9/15	26	15.9	34.0	52.2	--
Gold Cntry	0053	00.5	9/9	27	16.4	33.6	45.0	--
Hefty	H007Y12	00.7	9/8	26	16.7	34.8	42.7	50.8
Hefty	H008R3	00.8	9/12	24	16.9	33.5	47.9	--
Hefty	H00Y12	0.0	9/13	22	16.8	35.0	49.0	56.5
Hefty	H01R3	0.1	9/17	25	16.2	34.3	35.7	--
Hefty	H02R3	0.2	9/25	29	15.6	33.6	55.9	--
Integra	20031	00.7	9/11	25	16.4	33.1	48.6	58.5
Integra	20073	00.7	9/10	25	17.4	33.3	43.0	--
Integra	20085N	00.8	9/8	25	16.9	32.8	42.1	--
Integra	20090	00.9	9/12	27	16.7	32.7	42.7	53.1
Integra	20107	0.0	9/18	26	16.4	33.3	43.2	--
Mycogen	5G009R2	00.9	9/14	28	17.0	47.1	47.1	56.5
Mycogen	5H009R2	00.9	9/11	25	16.9	46.1	46.1	--
Mycogen	5B012R2	0.1	9/12	28	16.5	49.4	49.4	--
Mycogen	5B024R2	0.2	9/14	28	16.6	45.6	45.6	55.7
NorthStar	0080R2	00.7	9/12	26	16.7	48.7	48.7	--
NorthStar	0088R2	00.8	9/12	25	16.7	42.6	42.6	--
NorthStar	0096R2	00.9	9/12	26	17.2	48.0	48.0	56.4
NorthStar	0108R2	0.1	9/19	23	16.3	41.6	41.6	52.6
NuTech/G2	6005	00.5	9/10	21	17.4	35.6	35.6	--
NuTech/G2	0090	00.9	9/12	26	16.7	46.7	46.7	52.0
NuTech/G2	6009	00.9	9/10	24	16.7	37.7	37.7	48.7
NuTech/G2	6021	0.2	9/18	23	16.2	44.2	44.2	--
Peterson	14R008	00.8	9/8	22	16.1	34.6	39.2	--
Peterson	11R01	0.1	9/13	27	17.0	32.6	45.7	56.0
Peterson	14R02	0.2	9/18	27	15.4	34.7	57.7	--
Peterson	13R03	0.3	9/24	24	15.9	33.6	53.1	58.3
Prairie	PB-00821R2	00.7	9/9	22	16.1	34.4	41.0	--
Prairie	PB-00844R2	00.8	9/10	26	16.4	34.2	40.2	55.0
Prairie	PB-00950R2	00.9	9/14	29	17.0	31.9	56.8	61.6
Prairie	PB-00961R2	00.9	9/10	25	14.9	36.1	40.0	--
Prairie	PB-0291R2	0.2	9/17	26	15.5	34.9	52.0	--
Proseed	PX009	00.9	9/13	22	16.2	34.1	38.7	--
Proseed	PX01	0.1	9/22	28	15.6	33.0	58.7	--
Mean			9/14	26	16.5	45.9	46.5	55.5
CV %			2.2	9.2	2.5	11.5	11.5	--
LSD 0.10			2.7	2.8	0.7	6.2	6.2	--

Table 31. 2013 Soybean - Roundup Ready - Lakota (Langdon REC) - Authors, B. Hanson and T. Hakanson (Page 2 of 2).

Company/ Brand	Variety	Maturity		Plant Height (inch)	Seed Oil (%)	Seed Protein (%)	Seed Yield	
		Group	Maturity (date) ¹				2013	2-yr. Avg. ----- (bu/a) -----
Proseed	PX02	0.2	9/24	31	16.7	32.8	52.8	--
Proseed	20-30	0.2	9/26	26	16.2	33.2	54.1	59.6
Proseed	10-20	0.2	9/15	28	16.3	33.1	47.0	55.8
REA	55G14	00.5	9/11	27	16.7	33.4	42.7	--
REA	58G82	00.8	9/16	26	16.4	32.7	46.8	53.9
REA	61G21	0.1	9/13	28	17.2	32.7	50.9	57.3
REA	62G22	0.2	9/16	29	16.6	33.6	48.3	56.8
Syng NK	NK S00-A7	00.7	9/9	24	17.2	33.8	46.0	52.2
Syng NK	NK S02-B4	00.2	9/12	28	17.1	31.8	45.0	55.2
Syng NK	NK S04-D3	0.4	9/11	25	16.0	35.0	44.4	--
Wensman	W 30078R2	00.7	9/9	21	16.8	32.4	40.7	--
Wensman	W 30099R2	00.9	9/14	25	17.3	32.7	46.5	55.3
Wensman	W 3024R2	0.2	9/13	28	16.3	34.8	55.4	--
Wensman	W 3030R2	0.2	9/14	29	16.8	33.1	47.1	--
Mean			9/14	26	16.5	45.9	46.5	55.5
CV %			2.2	9.2	2.5	11.5	11.5	--
LSD 0.10			2.7	2.8	0.7	6.2	6.2	--

Planted: June 3. Harvested: Oct. 10.

¹Days to physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).

Table 32. 2013 Soybean - Roundup Ready - Minot (North Central REC) - Authors, E. Eriksmoen and J. Tarasenko

Company/ Brand	Variety	Maturity Group	IDC Rating ¹	Maturity ² (date)	Lodging ³ (0-9)	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield (bu/a)	
									2013	2-yr. Avg.
Asgrow	AG00932	00.9	1.9	9/25	2	13.9	37.0	57.3	53.0	46.0
Asgrow	AG0231	0.2	2.2	10/2	2	14.3	36.7	59.7	49.5	47.4
Asgrow	AG0333	0.3	2.5	10/3	2	14.0	36.6	59.4	52.5	45.1
Channel	00806R2	00.8	2.2	9/25	1	14.8	36.5	58.8	49.6	46.8
Channel	0205R2	0.2	1.8	9/29	4	14.1	37.0	59.5	45.4	--
Dyna-Gro	S008RY43	00.8	1.7	9/29	6	14.1	36.7	58.8	38.2	43.0
Dyna-Gro	34RY03	0.3	--	9/30	1	15.4	37.2	60.2	47.9	--
Dyna-Gro	S02RY74	0.2	2.6	9/25	1	14.0	37.1	56.6	57.9	--
Gold Cntry	0053	00.5	2.4	9/23	3	13.7	37.8	57.1	52.6	--
Integra	20090	00.9	2.3	9/29	3	15.0	35.2	58.3	56.8	55.0
Integra	20107	0.1	2.9	9/30	1	14.1	37.1	58.0	45.8	--
Integra	20215	0.2	2.6	10/1	1	14.3	37.1	57.4	55.9	--
Integra	20300	0.3	2.5	10/5	2	14.1	36.7	58.7	51.2	59.4
Mycogen	5B005R2	00.5	2.1	9/22	3	15.2	36.4	57.2	45.1	51.1
Mycogen	5G009R2	00.9	2.4	9/29	3	14.7	36.2	57.6	50.1	51.8
Mycogen	5B012R2	0.1	2.2	9/29	4	14.1	37.7	57.8	46.8	--
NorthStar	0080R2	00.7	2.3	9/29	7	14.1	36.6	58.4	50.7	--
NorthStar	0057R2	00.5	2.1	9/30	3	13.6	37.6	59.8	41.4	48.1
NorthStar	0096R2	00.9	2.2	9/30	3	14.9	35.5	58.2	55.9	56.8
NorthStar	0108R2	0.1	2.9	10/2	2	13.7	37.7	58.6	46.4	--
NuTech/G2	0090	00.9	2.2	9/24	6	15.1	37.7	57.3	44.6	45.0
NuTech/G2	6021	0.2	--	9/30	1	14.1	38.0	58.0	44.0	--
NuTech/G2	6043	0.4	2.9	10/3	1	14.5	36.4	58.0	50.0	--
NuTech/G2	6052	0.4	1.9	10/1	3	15.0	36.4	58.6	51.7	--
Peterson	14R008	00.8	2.2	9/22	2	14.5	36.5	57.5	54.6	--
Peterson	11R01	0.1	2.4	9/25	2	14.9	36.2	58.1	53.2	--
Peterson	14R02	0.2	2.4	10/1	1	13.4	37.9	57.8	49.6	--
Proseed	10-08	00.8	2.5	9/28	5	14.5	35.8	58.5	57.9	50.0
Proseed	20-08	00.8	1.8	9/29	7	14.5	36.6	58.1	46.5	47.6
Proseed	11-07	00.7	2.1	9/25	4	15.0	37.3	56.7	52.5	54.4
Proseed	10-20	0.2	2.3	9/27	4	14.3	36.4	59.0	48.9	42.8
Proseed	PX01	0.1	2.4	9/22	1	13.6	37.1	57.2	50.4	--
Proseed	PX02	0.2	2.6	10/1	3	14.1	37.3	58.4	49.9	--
Seeds 2000	0091RR2Y	00.9	--	9/21	2	14.6	39.8	58.8	41.8	42.4
Thunder	32005R2Y	00.5	2.4	9/24	8	15.1	35.9	56.7	50.3	51.8
Thunder	31009R2Y	00.9	2.3	9/24	4	14.6	36.1	56.9	59.9	54.5
Thunder	33009R2YN	00.9	1.7	10/1	8	14.4	36.7	58.5	37.5	39.3
Thunder	3201R2Y	0.1	2.3	9/30	3	15.0	36.5	58.4	47.9	47.9
Thunder	3202R2Y	0.2	2.9	10/3	5	14.3	36.7	60.2	45.3	47.2
Mean				9/28	3	14.4	36.9	58.2	49.5	48.8
CV %				1	38	2.2	2	0.7	5.3	--
LSD 0.10				2	2	0.4	1	0.6	3.6	--

Planted: May 17 with a seeding rate of 200,000 pure live seed. Harvested: Oct. 26.

*See footnotes in table 33.

Table 33. 2013 Soybean - Conventional - Minot (North Central REC) - Authors, E. Eriksmoen and J. Tarasenko

Company/ Brand	Variety	Maturity Group	IDC Rating ¹	Maturity ² (date)	Lodging ³ (0-9)	Seed Oil (%)	Seed Protein (%)	Test Weight (lb/bu)	Seed Yield (bu/a)	
									2013	2-yr. Avg.
Integra	30080LL	00.8	2.3	9/19	1	15.4	37.9	58.1	51.1	--
Integra	30300NLL	0.3	2.4	9/24	2	15.4	37.3	58.2	47.3	49.2
NDSU	ProSoy	0.8	2.6	9/23	1	15.1	36.8	58.1	41.7	38.0
NDSU	Traill	0.0	2.4	9/20	2	14.4	38.3	58.7	43.6	39.8
NDSU	Ashtabula	0.4	2.4	9/21	2	14.7	39.3	57.8	39.3	41.7
NDSU	Sheyenne	0.7	2.4	9/19	1	15.0	38.8	58.1	41.3	45.2
NDSU	Cavalier	00.9	2.7	9/19	1	15.7	37.0	58.3	40.6	42.8
Northstar	0095LL	00.9	2.1	9/17	2	15.4	37.5	58.4	51.1	--
Peterson	L03-12N	0.3	2.2	9/22	2	15.1	38.0	59.7	49.4	48.9
Peterson	L01-14	0.1	2.6	9/24	2	15.2	37.1	57.8	52.1	--
SK Food	SK007	000.4	2.7	9/13	2	15.4	39.2	58.2	35.5	--
SK Food	SK923	0.0	2.4	9/16	2	16.1	35.7	58.3	44.7	--
Mean				9/20	2	15.1	37.9	58.4	45.8	43.7
CV %				3.1	41	2.4	1.3	1.0	4.7	--
LSD 0.10				5	NS	0.4	0.6	0.7	2.6	--

Planted: May 17 with a seeding rate of 200,000 pure live seeds. Harvested: Oct. 26.

¹IDC rating = Iron deficiency chlorosis rating: 1 - green, 3 - yellow, 5 - dead.²Days to physiological maturity at R7 stage (one brown pod on the main stem obtains mature brown or tan color).³Lodging: 0 = none, 9 = lying flat on the ground.

Company/Brand	Variety	Maturity	IDC	Test	Seed	Seed	Seed Yield
		Group	Rating ¹	Weight	Oil	Protein	2013
			(1-5)	(lb/bu)	(%)	(%)	(bu/a)
Asgrow	AG0231	0.2	2.2	59.1	15.2	33.4	35.1
Asgrow	AG0333	0.3	2.5	57.9	15.2	32.9	45.6
Channel	00806R2	00.8	2.2	58.5	15.5	34.4	24.2
Channel	0205R2	0.2	1.8	58.7	15.1	34.9	40.8
Integra	20107	0.1	2.9	58.9	15.1	33.8	40.7
Integra	20109	0.1	3.0	58.7	15.2	33.2	48.7
Integra	20215	0.2	2.6	58.6	15.3	33.1	42.7
Integra	20300	0.3	2.5	57.7	15.1	32.9	35.9
Mycogen	5G009R2	00.9	2.4	58.8	15.6	32.8	35.8
Mycogen	5B012R2	0.1	2.2	58.3	16.0	34.1	42.3
NorthStar	0080R2	00.7	2.3	58.6	15.5	32.8	38.7
NorthStar	0096R2	00.9	2.2	58.8	15.9	32.8	39.9
NorthStar	0108R2	0.1	2.9	57.9	15.0	33.9	39.8
NuTech/G2	0090	00.9	2.2	58.2	17.2	33.5	34.5
NuTech/G2	6021	0.2	--	57.9	15.4	34.1	28.9
NuTech/G2	6043	0.4	2.9	58.1	15.7	32.2	35.3
NuTech/G2	6052	0.4	1.9	58.5	16.6	31.9	44.2
Peterson	14R008	00.8	2.2	58.8	15.5	34.5	37.2
Peterson	11R01	0.1	2.4	58.9	16.1	32.9	39.0
Peterson	14R02	0.2	2.4	58.4	14.9	33.6	42.3
Proseed	10-08	00.8	2.5	58.4	15.5	33.3	42.1
Proseed	20-08	00.8	1.8	58.6	15.9	33.3	32.2
Proseed	11-07	00.7	2.1	58.2	16.5	33.8	32.1
Proseed	10-20	0.2	2.3	58.6	15.4	33.4	40.4
Proseed	PX01	0.1	2.4	58.3	14.9	34.0	36.8
Proseed	PX02	0.2	2.6	58.2	15.6	33.7	43.9
Seeds 2000	0091R2Y	00.9	--	59.1	16.2	31.9	26.1
Thunder	3202R2Y	0.2	2.9	57.1	14.7	35.2	35.9
Mean			--	58.4	15.6	33.4	37.9
CV %			--	1.0	2.0	1.9	10.3
LSD 0.10			--	0.7	0.4	0.7	4.6

Planted: June 7 with a seeding rate of 200,000 pure live seeds. Harvested: Oct. 24.

Company/Brand	Variety	Maturity	IDC	Test	Seed	Seed	Seed Yield
		Group	Rating ¹	Weight	Oil	Protein	2013
			(1-5)	(lb/bu)	(%)	(%)	(bu/a)
Asgrow	AG00932	00.9	1.9	59.1	13.5	36.6	37.7
Integra	20031	00.5	2.2	58.6	14.3	35.0	48.2
Integra	20085	00.8	2.1	58.7	14.3	36.0	39.8
Integra	20052	00.5	2.1	58.9	13.3	36.9	39.7
Integra	20090	00.9	2.3	59.3	15.0	34.8	46.2
Mycogen	5B005R2	00.5	2.1	58.4	14.8	36.0	40.1
Mycogen	5G009R2	00.9	2.4	59.0	14.6	34.6	45.1
NorthStar	0080R2	00.7	2.3	58.5	14.4	34.2	47.5
NorthStar	0057R2	00.5	2.1	58.8	13.4	36.2	43.5
NorthStar	0096R2	00.9	2.2	58.9	14.9	34.0	38.9
NuTech/G2	0090	0.9	2.2	58.6	15.2	35.4	30.7
NuTech/G2	6021	0.2	--	58.2	14.1	36.6	38.3
Peterson	14R008	00.8	2.2	58.6	14.8	36.0	38.7
Peterson	11R01	0.1	2.4	58.9	15.1	34.0	40.6
Peterson	14R02	0.2	2.4	58.5	13.4	35.4	37.8
Proseed	10-08	0.8	2.5	58.8	14.5	34.9	41.4
Proseed	20-08	0.8	1.8	58.8	14.6	34.8	37.4
Proseed	11-07	0.7	2.1	58.1	14.7	36.4	40.4
Proseed	10-20	0.2	2.3	58.6	14.5	34.2	31.1
Proseed	PX01	0.1	2.4	58.8	13.7	35.2	38.3
Proseed	PX02	0.2	2.6	58.4	14.4	35.5	42.8
Seeds 2000	0091 R2Y	00.9	--	59.2	14.5	34.6	46.8
Mean			--	58.7	14.4	35.3	40.5
CV %			--	0.7	2.1	1.3	7.3
LSD 0.10			--	0.5	0.4	0.5	3.5

Planted: June 13 with a seeding rate of 200,000 pure live seeds. Harvested: Nov. 13.

¹IDC rating = Iron deficiency chlorosis rating: 1 - green, 3 - yellow, 5 - dead.

Table 36. 2013 Soybean - Conventional - Hettinger - Authors, J. Rickertsen and R. Olson.

Company/ Brand	Variety	Maturity Group	Plant Height	Test Weight	Seed Oil	Seed Protein	Seed 2013	Yield 3-Yr. Avg.
			(inch)	(lb/bu)	(%)	(%)	-----	-----
							(bu/a)	
NDSU	Ashtbula	0.4	34	55.4	15.9	39.1	46.1	39.2
NDSU	Cavalier	00.9	27	55.8	16.3	35.5	42.6	36.9
NDSU	ND06-4642	0.5	28	56.3	15.9	35.6	47.2	--
NDSU	ND1005T	0.5	30	56.4	14.6	39.5	43.1	36.3
NDSU	ProSoy	0.8	35	55.9	16.3	35.4	38.3	35.7
NDSU	Sheyenne	0.7	33	55.6	16.3	36.0	47.1	43.2
NDSU	Traill	0.0	30	57.6	16.1	36.8	44.4	34.9
Mean			31	56.2	15.9	36.8	44.1	37.7
CV %			3.9	0.9	2.4	1.8	5.9	--
LSD 0.10			1	0.6	0.5	0.8	1.7	--

Planted: May 15. Harvested: Sept. 17. Previous crop: no-till green fallow spring wheat.

Table 37. 2013 Soybean - Roundup Ready - Hettinger - Authors, J. Rickertsen and R. Olson.

Company/ Brand	Variety	Maturity Group	Plant Height	Test Weight	Seed Oil	Seed Protein	Seed 2013	Yield 2-Yr. Avg.
			(inch)	(lb/bu)	(%)	(%)	-----	-----
							(bu/a)	
Integra	20090 -RR2Y	00.9	29	55.4	16.4	34.1	46.1	--
Integra	20300 - RR2Y	0.3	30	55.6	15.0	37.9	40.5	--
Integra	20600 - RR2Y	0.6	31	55.8	15.2	36.9	43.1	--
Integra	20902 - RR2Y	0.9	31	55.7	15.0	38.0	39.6	--
Proseed	PX 02	0.2	31	54.9	15.4	38.1	49.0	46.3
Proseed	PX 06	0.6	28	56.3	15.4	36.6	43.3	41.1
Mean			30	55.6	15.4	36.9	43.6	43.7
CV %			4.9	0.9	1.9	0.8	6.2	--
LSD 0.10			2	0.6	0.4	0.3	3.3	--

Planted: May 15. Harvested: Sept. 22. Previous crop: no-till green fallow spring wheat.

Table 38. 2013 Soybean - Dryland, Roundup Ready - Williston - Authors, J. Bergman, C. Penuel and D. Amiot.

Company/ Brand	Variety	Days to Flower (DAP) ¹	Plant Height (inch)	Seed Oil (%)	Test Weight (lb/bu)	Seed Yield 2013 ---(bu/a)---	
Integra	20090 RR2Y	35	23	18.7	56.1	28.5	
Integra	20109 RR2Y	36	23	17.7	56.8	30.2	
Integra	20215 RR2Y	39	24	17.7	56.2	31.3	
Integra	20300 RR2Y	39	23	17.8	56.3	24.4	
NorthStar	0057R2	35	21	17.4	55.7	34.1	
NorthStar	0080R2	36	23	18.5	55.2	25.9	
NorthStar	0096R2	35	23	18.8	55.7	28.8	
NuTech/G2	6021	36	20	19.0	55.8	31.9	
NuTech/G2	6043	36	23	18.3	57.2	28.8	
NuTech/G2	6052	37	25	18.1	57.5	28.0	
NuTech/G2	7063	36	24	18.3	56.6	29.3	
Peterson	13R03	37	23	17.8	56.5	24.8	
Proseed	10-08	35	23	18.8	55.8	25.9	
Proseed	PX01	38	22	17.7	56.3	27.1	
Proseed	PX02	36	25	17.3	55.3	28.2	
Proseed	PX09	36	19	18.1	55.4	21.8	
Syng NK	S00-A7	35	20	19.1	54.3	32.0	
Syng NK	S02-B4	35	22	18.9	55.7	27.5	
Syng NK	S04-D3	35	23	18.5	55.7	28.8	
Mean		36.0	23	18.2	56.0	28.3	
CV %		3.5	6.4	2.7	0.8	12.1	
LSD 0.10		1.5	1.7	0.6	0.6	4.1	

Planted: May 16. Harvested: Oct. 1. Previous crop: spring wheat.

¹DAP = Days after planting.**Table 39. 2013 Soybean - Dryland, Conventional - Williston - Authors, J. Bergman, C. Penuel and D. Amiot.**

Company/ Brand	Variety	Days to Flower (DAP) ¹	Plant Height (inch)	Seed Oil (%)	Test Weight (lb/bu)	Seed yield 2013 3-yr. Avg. ------(bu/a)-----	
NDSU	Ashtabula	36	22	20.1	55.3	26.8	18.8
NDSU	Cavalier	35	19	20.1	57.1	20.4	16.0
NDSU	ND06-4642	35	16	19.9	57.3	20.0	--
NDSU	ND1005T	35	21	18.7	57.0	22.6	18.5
NDSU	ProSoy	38	24	18.9	57.0	25.4	18.6
NDSU	Sheyenne	38	22	19.5	56.9	26.4	20.2
NDSU	Traill	35	20	19.2	57.1	21.7	17.2
Proseed	PX09LL	35	18	20.2	54.5	23.8	--
Mean		35.8	20	19.6	56.5	23.4	18.2
CV %		1.7	8.1	2.1	0.8	16.6	--
LSD 0.10		0.7	2.0	0.5	0.5	4.7	--

Planted: May 16. Harvested: Oct. 1. Previous crop: spring wheat.

¹DAP = Days after planting.

Table 40. 2013 Soybean - Roundup Ready - Ransom County - Authors, B. Zimprich H. Kandel, J. Ransom, C. Deplazes and G. Mehring

Company/Brand	Variety	Maturity Group	Test Weight	Seed Oil	Seed Protein	Seed Yield 2013
			(lb/bu)	(%)	(%)	(bu/a)
Early						
Asgrow	AG0732	0.7	56.3	17.7	30.5	42.4
NorthStar	NS0537R2	0.5	56.4	17.3	31.5	50.8
Nuseed/Seeds 2000	2071 RR2YN	0.7	57.0	17.5	31.1	55.5
Prairie	PB-0777R2	0.7	56.8	17.6	31.4	56.6
Prairie	PB-0863R2	0.7	56.4	17.4	30.9	56.6
Stine	05RC68	0.5	56.4	16.7	33.0	46.4
Thunder	3307 R2Y	0.7	56.7	17.1	32.2	43.8
Mean			56.6	17.3	31.5	50.3
CV			0.4	1.3	1.1	8.9
LSD 0.10			NS	NS	0.8	9.9

Company/Brand	Variety	Maturity Group	Test Weight	Seed Oil	Seed Protein	Seed Yield 2013
			(lb/bu)	(%)	(%)	(bu/a)
Medium						
Channel	0906R2	0.9	56.8	17.2	31.5	39.2
Hyland	HS 09RYS12	0.9	57.2	17.1	32.2	39.5
Integra	20810	0.8	57.4	16.8	32.1	37.2
Integra	20815	0.8	57.4	16.9	31.8	37.6
NorthStar	NS0839NR2	0.8	56.3	16.6	32.9	39.2
Nuseed/Seeds 2000	2093 RR2YN	0.9	56.6	17.2	32.1	41.9
NuTech	6088	0.8	57.1	17.0	31.7	41.1
NuTech	6093	0.9	56.8	16.8	33.2	37.5
NuTech	6098	0.9	56.8	16.9	32.1	30.1
Peterson	11R08	0.8	56.6	16.8	31.8	37.5
Peterson	13R08N	0.8	57.1	17.0	32.1	38.8
Peterson	14R09N	0.9	57.1	17.2	31.5	40.0
Prairie	PB-0866R2	0.8	56.8	17.1	32.0	42.6
Proseed	PX08	0.8	55.9	17.4	32.1	42.4
REA	69G14	0.9	56.8	16.9	32.2	39.0
Renk	RS082R2	0.8	56.8	16.5	32.3	37.9
Thunder	3408 R2YN	0.8	56.3	17.4	31.6	40.1
Mean			56.8	17.0	32.1	38.9
CV			0.6	1.1	1.1	5.1
LSD 0.10			NS	0.4	0.8	3.9

Company/Brand	Variety	Maturity Group	Test Weight	Seed Oil	Seed Protein	Seed Yield 2013
			(lb/bu)	(%)	(%)	(bu/a)
Late						
Asgrow	AG1431	1.4	55.8	17.4	32.1	34.6
Hyland	HS 11RY07	1.4	56.4	16.7	31.9	36.4
Integra	21115N	1.1	55.7	17.4	32.3	38.0
NorthStar	NS1249NR2	1.2	56.4	17.5	32.0	36.6
NorthStar	NS1257R2	1.1	56.0	16.9	32.1	35.6
Nuseed/Seeds 2000	2122 RR2YN	1.2	55.8	17.3	32.0	35.4
NuTech	6143	1.4	52.2	16.7	32.2	31.6
Peterson	12R12	1.2	55.8	16.6	32.4	30.0
Prairie	PB-1234R2	1.2	55.7	17.4	32.0	36.6
Proseed	2-140	1.4	55.9	17.4	31.0	33.7
Proseed	PX11	1.1	55.7	17.0	32.4	42.9
Proseed	PX12	1.2	57.0	17.3	32.0	41.0
REA	71G14	1.1	56.7	17.0	32.4	37.5
REA	71G20	1.1	57.2	17.0	32.2	37.2
Stine	11RD00	1.1	55.8	16.3	32.6	33.0
Thunder	3114 R2Y	1.4	55.5	16.7	30.5	38.0
Thunder	3211 R2Y	1.1	56.5	16.4	32.7	37.9
Mean			55.9	17.0	32.1	36.2
CV			1.7	1.1	1	6.9
LSD 0.10			NS	0.4	0.6	6.2

Table 41. 2013 Soybean - Roundup Ready - Sargent County - Authors, M. Blawat, H. Kandel, J. Ransom, C. Deplazes and G. Mehring

Company/Brand	Variety	Maturity Group	Test Weight	Seed Oil	Seed Protein	Seed Yield 2013
Early			(lb/bu)	(%)	(%)	(bu/a)
Asgrow	AG0732	0.7	56.6	18.1	31.2	43.9
NorthStar	NS0537R2	0.5	56.5	17.5	31.6	46.1
Nuseed/Seeds 2000	2071 RR2YN	0.7	56.8	17.9	30.8	50.9
Prairie	PB-0777R2	0.7	56.9	17.9	31.4	46.4
Prairie	PB-0863R2	0.7	56.4	17.6	31.4	44.5
Stine	05RC68	0.5	56.7	17.3	32.1	45.2
Thunder	3307 R2Y	0.7	56.2	17.2	32.3	45.8
Mean			56.6	17.6	31.5	46.1
CV			0.4	0.8	0.8	8.8
LSD 0.10			NS	0.3	0.6	4.4

Company/Brand	Variety	Maturity Group	Test Weight	Seed Oil	Seed Protein	Seed Yield 2013
Medium			(lb/bu)	(%)	(%)	(bu/a)
Channel	0906R2	0.9	56.5	17.5	31.4	46.4
Hyland	HS 09RYS12	0.9	56.1	17.7	31.2	46.8
Integra	20810	0.8	56.8	17.6	30.9	43.0
Integra	20815	0.8	56.4	17.9	31.2	49.2
NorthStar	NS0839NR2	0.8	56.4	18.1	31.0	46.7
Nuseed/Seeds 2000	2093 RR2YN	0.9	56.8	18.0	31.1	46.4
NuTech	6088	0.8	56.5	17.8	31.1	48.2
NuTech	6093	0.9	57.1	17.2	33.3	42.5
NuTech	6098	0.9	56.8	18.4	30.4	45.1
Peterson	11R08	0.8	56.8	17.5	31.4	42.5
Peterson	13R08N	0.8	57.4	17.6	31.6	46.5
Peterson	14R09N	0.9	55.9	17.5	31.2	47.5
Prairie	PB-0866R2	0.8	56.9	17.4	31.5	42.9
Proseed	PX08	0.8	57.2	17.5	31.3	44.3
REA	69G14	0.9	57.0	18.0	31.3	44.7
Renk	RS082R2	0.8	57.1	17.4	31.9	45.3
Thunder	3408 R2YN	0.8	57.8	17.8	31.1	48.8
Mean			56.8	17.7	31.3	45.7
CV			0.5	1.2	1.2	6.9
LSD 0.10			1	0.53	0.9	NS

Company/Brand	Variety	Maturity Group	Test Weight	Seed Oil	Seed Protein	Seed Yield 2013
Late			(lb/bu)	(%)	(%)	(bu/a)
Asgrow	AG1431	1.4	55.8	17.5	32.0	46.6
Hyland	HS 11RY07	1.4	52.7	17.4	30.5	46.0
Integra	21115N	1.1	56.6	17.6	31.7	45.1
NorthStar	NS1249NR2	1.2	56.0	17.9	31.9	40.6
NorthStar	NS1257R2	1.1	56.1	17.5	31.5	39.2
Nuseed/Seeds 2000	2122 RR2YN	1.2	55.7	18.4	31.0	38.3
NuTech	6143	1.4	56.3	17.3	32.1	39.0
Peterson	12R12	1.2	55.5	16.9	31.8	39.4
Prairie	PB-1234R2	1.2	55.5	17.6	32.1	43.8
Proseed	2-140	1.4	56.1	18.0	30.9	43.3
Proseed	PX11	1.1	56.4	17.8	31.4	37.8
Proseed	PX12	1.2	55.8	18.2	31.2	43.0
REA	71G14	1.1	56.2	17.9	31.7	42.6
REA	71G20	1.1	56.5	17.0	32.3	42.8
Stine	11RD00	1.1	56.5	17.4	31.7	40.4
Thunder	3114 R2Y	1.4	56.7	18.0	31.0	43.8
Thunder	3211 R2Y	1.1	55.7	17.3	32.3	38.0
Mean			55.9	17.6	31.6	41.7
CV			1.9	2	1.2	4.8
LSD 0.10			NS	NS	0.6	4.4

Table 42. 2013 Soybean Yield at Five Locations: Dwight, N.D. (Richland County), Gwinner, N.D. (Sargent County), Lisbon, N.D. (Ransom County), Barnesville, Minn. (Clay/Wilkin Counties), and Fergus Falls, Minn. (Ottertail/Grant Counties) - Authors, J. Goltz M. Blawat, B. Zimprich, G. Mehring and C. Deplazes.

Company/ Brand	Variety	Maturity Group	Seed yield			
			Dwight	Lisbon	Gwinner	Five Site Avg.
Early			------(bu/a)-----			
Asgrow	AG 0732	0.7	25.4	42.4	43.9	37.7
NorthStar	0537R2	0.5	27.5	50.8	46.1	42.5
Nuseed	2071 RR2YN	0.7	21.3	55.5	50.9	42.3
Prairie	PB-0777R2	0.7	19.8	56.6	46.4	43.6
Prairie	PB-0863R2	0.7	22.6	56.6	44.5	42.8
Stine	05RC68	0.5	25.3	46.4	45.2	39.6
Thunder	3307 R2Y	0.7	22.8	43.8	45.8	39.8
Mean			23.5	50.3	46.1	41.2
CV %			9.4	8.9	8.8	12.5
LSD 0.10			NS	9.9	4.4	NS
Medium			------(bu/a)-----			
Channel	0906R2	0.9	28.7	39.2	46.4	41.2
Hyland	HS 09RYS12	0.9	25.5	39.5	46.8	40.1
Integra	20810	0.8	25.9	37.2	43.0	35.9
Integra	20815	0.8	31.9	37.6	49.2	40.6
NorthStar	NS 0839NR2	0.8	32.1	39.2	46.7	40.2
Nuseed	2093 RR2YN	0.9	31.5	41.9	46.4	41.9
NuTech	6088	0.8	28.5	41.1	48.2	39.0
NuTech	6093	0.9	22.5	37.5	42.5	37.0
NuTech	6098	0.9	18.7	30.1	45.1	35.0
Peterson	11R08	0.8	24.3	37.5	42.5	33.8
Peterson	13R08N	0.8	27.4	38.8	46.5	39.9
Peterson	14R09N	0.9	31.2	40.0	47.5	40.1
Prairie	PB-0866R2	0.8	27.4	42.6	42.9	38.7
Proseed	PX08	0.8	28.8	42.4	44.3	41.4
REA	69G14	0.9	31.3	39.0	44.7	39.0
Renk	RS082R2	0.8	28.1	37.9	45.3	39.8
Thunder	3408 R2YN	0.8	30.6	40.1	48.8	39.9
Mean			27.9	38.9	45.7	39.0
CV %			7.4	5.1	6.9	8.8
LSD 0.10			4.4	3.9	NS	2.7
Late			------(bu/a)-----			
Asgrow	AG1431	1.4	30.1	34.6	46.6	38.6
Hyland	HS 11RY07	1.4	29.7	36.4	46.0	39.7
Integra	21115N	1.1	34.0	38.0	45.1	39.6
NorthStar	NS 1249NR2	1.2	27.9	36.6	40.6	37.9
NorthStar	NS 1257R2	1.1	32.4	35.6	39.2	38.6
Nuseed	2122 RR2YN	1.2	29.0	35.4	38.3	35.4
NuTech	6143	1.4	25.9	31.6	39.0	36.6
Peterson	12R12	1.2	31.0	30.0	39.4	35.5
Prairie	PB-1234R2	1.2	29.1	36.6	43.8	36.7
Proseed	2-140	1.4	30.2	33.7	43.3	38.1
Proseed	PX11	1.1	28.4	42.9	37.8	37.1
Proseed	PX12	1.2	27.9	41.0	43.0	38.5
REA	71G14	1.1	26.3	37.5	42.6	37.1
REA	71G20	1.1	28.2	37.2	42.8	38.1
Stine	11RD00	1.1	27.8	33.0	40.4	35.1
Thunder	3114 R2Y	1.4	32.1	38.0	43.8	40.0
Thunder	3211 R2Y	1.1	29.9	37.9	38.0	38.2
Mean			29.4	36.2	41.7	37.7
CV %			5.9	6.9	4.8	7.7
LSD 0.10			3.0	6.2	4.4	2.6

Table 43. 2013 Soybean - Roundup Ready - Steele and Griggs Counties - Authors, A. Harstad, J. Haakenson, H. Kandel, J. Ransom, C. Deplazes and G. Mehring.

Company/ Brand	Variety	Maturity Group	Seed Oil		Seed Protein		Seed Yield	
			Steele	Griggs	Steele	Griggs	Steele	Griggs ¹
			-----(%)-----		-----(%)-----		----- (bu/a)-----	
Asgrow	AG 0333	0.3	16.3	--	34.3	--	46.9	--
Asgrow	AG 0434	0.4	16.7	--	33.1	--	47.5	--
Asgrow	AG 0634	0.6	16.7	--	34.3	--	52.0	--
Asgrow	AG 0732	0.7	16.6	--	33.7	--	48.9	--
Croplan	R2T0231	0.2	17.1	17.2	33.6	35.1	50.4	25.7
Croplan	R2T0400	0.4	16.5	16.3	34.4	36.4	47.5	24.2
Hyland	HS 05RY52	0.5	16.0	16.2	33.8	36.1	50.1	23.5
Hyland	HX 06RY24	0.6	16.0	16.4	34.4	36.6	57.0	23.3
Integra	20300	0.3	16.3	16.1	34.6	37.8	48.1	21.2
Integra	20600	0.6	16.4	16.0	33.6	36.0	53.6	29.4
Legend	LS01R24	0.1	--	16.7	--	35.9	--	26.6
Legend	LS02R21	0.2	--	17.0	--	35.1	--	28.9
Legend	LS03R22	0.3	--	16.0	--	36.7	--	24.4
Legend	LS06R21	0.3	--	16.3	--	36.1	--	22.5
Mustang	04403	0.4	15.9	15.8	34.6	36.2	53.6	--
Mustang	06942	0.6	16.2	16.2	34.1	36.2	51.6	28.5
Mustang	07724	0.7	16.1	17.0	34.2	34.9	51.4	25.6
NorthStar	0419R2	0.4	16.0	16.5	33.3	35.7	49.8	30.1
NorthStar	0537R2	0.5	16.2	16.3	33.8	36.8	55.9	21.6
NorthStar	0629NR	0.6	16.9	16.0	34.3	36.7	58.5	25.6
NorthStar	0839NR	0.8	16.4	16.5	34.3	36.6	57.2	26.3
NuTech	6043	0.4	17.0	16.8	33.6	35.0	49.4	21.8
NuTech	6093	0.9	16.0	16.7	36.1	35.4	49.6	24.7
NuTech	6098	0.9	16.3	16.5	33.7	36.2	48.2	21.4
NuTech	7063	0.6	17.2	17.4	33.1	33.7	49.3	28.1
Peterson	12R06	0.6	16.0	16.5	34.6	36.7	48.4	21.3
Peterson	13R03	0.3	16.5	16.0	34.0	36.6	48.0	--
Peterson	13R04	0.4	16.2	15.8	34.5	36.4	48.3	20.9
Peterson	14R02	0.2	15.8	15.9	34.8	36.8	52.7	21.0
Stine	03RD66	0.3	16.4	16.2	34.4	36.7	46.6	21.4
Stine	06RE02	0.6	16.2	17.1	33.8	35.0	56.9	27.2
Thunder	3205 R2Y	0.5	16.4	16.5	34.4	35.7	55.0	28.3
Thunder	3303 R2Y	0.3	15.9	15.9	34.4	36.8	50.6	25.1
Thunder	3307 R2Y	0.7	16.1	15.9	35.1	36.6	51.4	25.2
Thunder	3406 R2YN	0.6	16.3	16.8	33.9	34.2	53.2	29.6
Mean			16.3	16.4	34.2	36.0	51.2	24.9
CV %			1.3	1.3	0.8	1.7	5.1	16.3
LSD 0.10			0.5	0.5	0.7	1.2	5.6	NS

¹Lower yield due to some insect feeding. Insects were uniformly found throughout entire experimental area.

For more information on this and other topics, see 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.

North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, sex, sexual orientation, status as a U.S. veteran, race or religion. Direct inquiries to the Vice President for Equity, Diversity and Global Outreach, 205 Old Main, (701) 231-7708.

County Commissions, NDSU and U.S. Department of Agriculture Cooperating. This publication will be made available in alternative formats for people with disabilities upon request, (701) 231-7881.

1.6M-12-13