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Soybean Variety Trial Archive

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SOUP DEATH SECTION Annually 2003 Crop Performance Results



South Dakota State University \(\) Cooperative Extension Service \(\) U.S. Department of Agriculture

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EC 775—Precision PlantedSoybeans 2003 Crop Performance Results is available electronically on the internet

http://agbiopubs.sdstate.edu/articles/EC775-03.pdf



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Soybeans

2003 South Dakota Precision Planted Soybean Variety Performance Trials

Robert G. Hall, Extension agronomist, crops; manager, crop testing Kevin K. Kirby, agricultural research manager, crop testing

Table A – Traits of some public soybean varieties.

Table B – Gene race resistance to *Phytophthora* root rot.

Table C – Conventional soybean entries with yield table numbers.

Table D – Roundup ReadyTM entries with yield table numbers.

Table E – Seed Company (brand name) mailing addresses (after yield tables).

Successful soybean production in a given growing area is greatly affected by variety selection. This publication reports the agronomic performance of entries in the 2003 South Dakota performance trials for conventional (non-Roundup Ready™) and Roundup Ready™ soybean varieties.

Important factors in variety selection include yield, maturity, plant height, lodging resistance, and *Phytophthora* root rot resistance. In the case of public varieties, additional information including emergence, shattering, and iron chlorosis scores (Table A) are given.

General

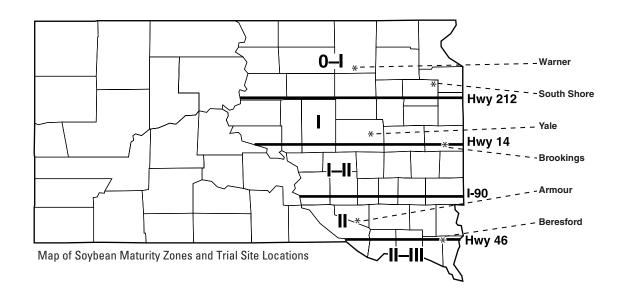
Soybean varieties are classified according to maturity groups that, in turn, are adapted to maturity zones. Maturity zones are based on day length and are therefore greatly affected by latitude. Consequently, maturity group 00 varieties are best suited to Canada and bordering regions of the U.S., while maturity groups 0, I, and II varieties are suited to South Dakota. Groups III through VIII are suited to Iowa, Nebraska, and southward into Texas.

These soybean performance trial results are reported according to the prevalent maturity zones in South Dakota (see map). Conventional soybean variety trials were conducted at the following locations: Group 0 at South Shore and Brookings; group I at South Shore, Brookings, and Beresford; and group II at Brookings and Beresford.

Roundup Ready™ soybean variety trials were conducted at the following locations: Group 0 at Warner, South Shore, Yale, and Brookings; group I at Warner, South Shore, Yale, Brookings, Armour, and Beresford; and group II at Yale, Brookings, Armour, and Beresford.

Note there are transition areas where varieties of two maturity groups may perform similarly. In such cases other mitigating factors like rainfall and elevation may moderate the effect of

The efforts of G. Piechowski, Brookings; J. Smolik and A. Heuer, NE Research Farm; and R. Berg and staff, SE Research Farm, in obtaining the data are gratefully acknowledged. The comments regarding *Phytophthora* root rot race resistance and tolerance by Marty Draper, Extension plant pathologist, are appreciated. In addition, the assistance and cooperation of our farmer co-operators: Allen and Inel Ryckman, Warner; Mark and Cletus Wiechmann, Armour; and Kim Tschetter, Yale; are gratefully acknowledged.



latitude on maturity. In most cases, an earlier maturity group may be seeded in a zone suited to a later maturity group. Generally, this is only practical if seeding is delayed, when reseeding following hail, or if double cropping.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. However, resistance to *Phytophthora* root rot is fungus-race specific. This means resistance to one race does not necessarily impart resistance to other races. Knowledge of the races of PRR fungus prevalent in your area is helpful. If a field is suspected of having PRR and the specific race(s) involved is unknown, then it is strongly suggested that you select varieties having genes that impart a wide range of race resistance (Table B). The specific race resistance to PRR for a given variety, as reported by the entering seed company, is indicated in Tables C and D.

An alternative method of control is the use of "tolerant varieties." Tolerant varieties are not resistant to PRR in the seedling stage. Therefore, a *Phytophthora* specific fungicide must be applied to protect them. Presently, we have no information on the field tolerance of varieties adapted to this region. Therefore, field tolerance ratings are not given in this publication.

Certified seed is the best source of seed and the only way to be assured of the genetic purity of the variety seeded.

In addition, inoculation of seed with the appropriate nitrogen-fixing bacterium is a good fundamental practice. Inoculation must be practiced if soybeans are seeded in soils not previously cropped with soybeans. Even on soils previously cropped to soybeans there is no guarantee that beneficial bacteria will be present to naturally inoculate planted seed. Therefore, inoculation of seed at planting is an inexpensive means of increasing the percentage of plants that will fix nitrogen in the current crop year.

Yield

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested at a given location. In addition, both 2-year and 3-year averages are included where varieties have been tested for 2 or more years. Yields, test averages, and Least Significant Difference (LSD) values are printed at the bottom of each yield column for each location and are rounded off to the nearest bushel.

The LSD value can be used to determine whether varieties differ in yield potential. For example, assume variety A yields 30 bushels, variety B yields 25 bushels, and the calculated LSD value is 4 bushels. The yield difference between varieties A and B is 5 bushels per acre. Since the yield difference of 5 bushels is greater than the test LSD value of 4 bushels, the

yield of variety A (30 bushels) is significantly higher than the yield of variety B (25 bushels).

If variety A yielded 28 bushels and variety B yielded 25 bushels, the yield difference would be 3 bushels per acre. In this case, both varieties would have a similar yield because their yield difference of 3 bushels is less than the test LSD value of 4 bushels per acre.

Use LSD values to identify the best-yielding varieties. The LSD value indicated at the bottom of each yield column is used to calculate the **minimum top-yield value**. For example, if the highest yield within a column is 50 bushels and the LSD value for that yield column is 5 bushels, then the minimum top-yield value equals 45 bushels (50-5=45). Within a yield column, varieties with yields equal to or higher than this minimum top-yield value are the best-yielding varieties.

Entries at each location are numerically sorted from highest to lowest yields according to whether they have been tested for 3, 2, or 1 years.

Note: Entries tested for 3 years may also have a top-yield group value in the 2-yr (2002-03) and 2003 yield columns. Likewise, entries tested for 2 years may also have a top-yield group value in the 2003 yield column.

Note: Participating companies pick the locations where their entries are tested. Entries are placed into either maturity group 0, I, or II test trials. The company selects the appropriate maturity group trial (0, I, or II) for its entries at each location. Generally, each company has one or more varieties that are used as maturity group checks for the varieties they market. However, there are no standard regional or national check varieties for maturity.

Consequently, a late group I variety from one company may be similar in maturity to an early group I variety from another company because each company uses different check varieties for maturity. As a result, this testing program cannot guarantee that all entries are placed in the proper maturity trial.

In some trials, borderline entries with maturity group ratings at or near the arbitrary breaks between late group 0 and early group I and between the late group I and early group II test trials may crossover at a given location. When evaluating the performance of any entry in a given trial it is strongly suggested that you take note of the reported maturity of the entry. Since all entries at a given location are seeded on the same day, you can compare the relative difference in maturity (days after maturity) between varieties. If the maturity rating for an entry in a group I test is similar to the rating for a variety in the group II test at the same test location, then you might conclude they are similar in maturity regardless of their company maturity rating.

Use caution when comparing the maturity rating of a given variety from one location to a rating obtained at other locations. Should early-season soil moisture and soil temperature values differ greatly, then ratings may differ between locations; therefore, maturity comparisons of a variety over many locations may be misleading.

Protein and Oil Content

The protein and oil values are for the 2002 cropping season. At all locations, one replication of every variety in each trial was tested for protein and oil. The analysis was conducted by near-infrared-reflectance-spectroscopy (NIRS).

General Test Procedures

General test procedures outlined below apply to both conventional non-Roundup Ready™ and Roundup Ready™ soybean entries with one exception: Weed control in the Roundup Ready™ test consisted of an application of Roundup Ultra (32 oz/A) when weeds were 4-5 inches tall followed by the same application again 21 days later. In non-Roundup Ready™ test trials, pre-emergence herbicides consisted of Lasso II at South Shore and Brookings and Dual at Beresford. In addition, a post-emergence tank mix of Synchrony/Pinnacle was applied at Beresford. Chemicals were applied according to label instructions.

Test procedures: A row spacing of 30 inches was used at all locations. Seeding rate was 165,000 seeds per acre for all varieties and locations. Test plots consisted of 4-row plots, 20 feet long, with three replications at all locations. Soybean inoculation was accomplished by applying Nitragin brand Soybean Soil Implant down the seed tube, according to label instructions and rates, during seeding. Seeding at all locations was accomplished using a Monosem precision row crop planter. The use of this planter this year resulted in very uniform seed spacing within the seed row. The center two rows of each plot were harvested for yield.

Yield: Plots were harvested at 15% seed moisture or less. Yields were calculated on a 13% moisture content basis and expressed in bushels per acre. Harvest was by a Massey Ferguson 8XP small plot combine.

Reporting Variety Maturity

The maturities of varieties are reported as "days after seeding." Entries are considered mature when 95% of the pods have turned brown. Each maturity value was obtained by

determining the average number of days from seeding to maturity for two replicates and expressing it as "days after seeding." If the maturity value is missing, the entry did not reach maturity before the first killing frost at that location.

Height: Height was measured from the soil surface to the top node of the main stem.

Lodging score: Scores at maturity are based on average erectness of the main stem of plants within each variety: 1 = all plants erect, 2 = slight lodging, 3 = lodging at a 45 degree angle, 4 = severe lodging, and 5 = all plants flat.

Phytophthora: The gene resistance traits of entries to the many *Phytophthora* races were supplied by the participating seed companies (proprietary entries) or obtained from the USDA Uniform Soybean Tests, Northern States (public entries). A key to *Phytophthora* gene resistance and the race resistance of each gene is indicated in Table B.

Race resistances of entries are listed either in Table C (non-Roundup Ready™) or Table D (Roundup Ready™). Presently, races 1, 3, and 4 are most common in South Dakota.

Soybean Traits of Public Entries

Evaluations of public soybean variety characteristics conducted by regional universities and USDA are reported in Table A. Evaluations and locations include emergence (Ames, Iowa), shattering (Manhattan, Kan.), and iron chlorosis (Rosemount, Minn., group 0; Waseca, Minn., groups I and II). A discussion of these evaluations follows:

Emergence: Scores are related to hypocotyl elongation and are measured following emergence after 12 days from a 4 1/2-inch depth in sand maintained at 77° F (a critical temperature for differentiating strains). Scores are 1 = 95% or more emerged, 2 = 91-94% emerged, 3 = 85-90% emerged, 4 = 76-84% emerged, and 5 = less than 76% emerged.

A score of 4 or 5 indicates the variety exhibits slow emergence. It does not mean the variety is inferior.

Shattering: This number indicates the percentage of pods that had opened and shattered 2 weeks after maturity. Scores are 1 = no shattering, 2 = 1 - 10% shattered, 3 = 11 - 25% shattered, 4 = 26 - 50% shattered, and 5 = over 50% shattered.

Iron chlorosis: Varieties are evaluated on high pH soils; scores range from 1 = little or no yellowing, 3 = moderate yellowing, to 5 = severe yellowing.

PRECISION PLANTED SOYBEANS: PERFORMANCE TRIAL RESULTS

Conventional non-Roundup Ready™ Soybeans

Note: Yields are reported as 3-year (2001-03), 2-year (2002-03), or 1-year (2003) averages.

SOUTH SHORE (NE Research Farm)

Combined Groups 0 & I (Table 1): Group 0 and I tests were combined because there were few entries this year. Yield averages for the 3-year, 2-year, and 1-year data were 34, 35, and 25 bushels per acre, respectively. Varieties had to average at least 24 bushels to be in the top-yield group for 1 year. There were no significant differences among varieties tested for 3-year or 2-year periods. The top yield group for the 3-year, 2-year, and 1-year periods included 2, 4, and 7 entries, respectively.

BROOKINGS (SDSU Agronomy Farm)

Combined Groups 0 & I (Table 2): Group 0 and I tests were combined because there were few entries this year. Yield averages for the 3-year, 2-year, and 1-year data were 42, 45, and 36 bushels per acre, respectively. Varieties had to average at least 36 bushels to be in the top-yield group for 1 year. There were no significant differences among the varieties tested for the 3-year or 2-year periods. The top yield group for the 3-year, 2-year, and 1-year periods included 2, 4, and 9 entries, respectively.

Group II (Table 3): Yield averages for the 3-year, 2-year, and 1-year data were 43, 46, and 34 bushels per acre, respectively. Varieties had to average at least 42 bushels for the 3-year or 35 bushels per acre for the 1-year period to be in the top-yield group. There were no significant differences among the varieties tested for the 2-year period. The top-yield groups for the 3-year, 2-year, and 1-year periods included 3, 9, and 5 entries, respectively.

BERESFORD (SE Research Farm)

Group I (Table 4): Yield averages for the **3-year, 2-year, and 1-year data were 47, 45, and 49 bushels per acre,** respectively. There were no significant differences among the varieties tested for any of the 3-year, 2-year, or 1-year test periods. The top-yield groups for the 3-year, 2-year, and 1-year periods included 3, 3, and 6 entries, respectively.

Group II (Table 5): Yield averages for the **3-year, 2-year, and 1-year data were 49, 46, and 46 bushels per acre,** respectively. Varieties had to average at least 48 bushels for the 3-year period to be in the top-yield group. There were no significant differences among the varieties tested for the 2-year and 1-year test periods. The top-yield groups for the 3-year, 2-year, and 1-year periods included 5, 12, and 23 entries, respectively.

Roundup Ready™ Soybeans

Note: Yields are reported as 3-year (2001-03), 2-year (2002-03), or 1-year (2003) averages.

WARNER, NO-TILL (Allen and Inel Ryckman Farm)

Group 0 (Table 6): The yield average for this new test location in 2003 was 47 bushels per acre. Varieties had to average at least 48 bushels to be in the top-yield group. The top-yield group for 2003 included 29 entries.

Group I (Table 7): Yield average for this new test location in **2003 was 38 bushels per acre.** Varieties had to average at least 39 bushels to be in the top-yield group. The top yield group for 2003 included 26 entries.

SOUTH SHORE (NE Research Farm)

Group 0 (Table 8): Yield averages for the 3-year, 2-year, and 1-year data were 37, 35, and 21 bushels per acre, respectively. Varieties had to average at least 20 bushels to be in the top-yield group for one year. There were no significant differences among the varieties tested for 3-year or 2-year periods. The top-yield group for the 3-year, 2-year, and 1-year periods included 10, 23, and 41 entries, respectively.

Group I (Table 9): Yield averages for the 3-year, 2-year, and 1-year data were 32, 32, and 19 bushels per acre, respectively. There were no significant differences among the varieties tested for the 3-year, 2-year, and 1-year periods. The top-yield groups for the 3-year, 2-year, and 1-year periods included 8, 17, and 63 entries, respectively.

YALE, NO-TILL (Kim Tschetter Farm)

Trials were moved from Frankfort in 2003.

Group 0 (Table 10): Yield averages for the 3-year, 2-year, and 1-year data were 34, 32, and 25 bushels per acre, respectively. Varieties had to average at least 29 bushels for the 1-year period to be in the top-yield group. There were no significant differences among the varieties tested for the 3-year and 2-year periods. The top-yield group for the 3-year, 2-year, and 1-year periods included 9, 15, and 8 entries, respectively.

Group I (Table 11): Yield averages for the **3-year, 2-year, and 1-year data were 38, 31, and 22 bushels per acre,** respectively. Varieties had to average at least 25 bushels for the 1-year period to be in the top-yield group. There were no significant differences among the varieties tested for the 3-year and 2-year periods. The top-yield group for the 3-year, 2-year, and 1-year periods included 6, 27, and 19 entries, respectively.

Group II (Table 12): The yield average for this new maturity test **in 2003 was 23 bushels per acre.** Varieties had to average at least 28 bushels to be in the top-yield group. The top yield group for 2003 included 3 entries.

BROOKINGS (SDSU Agronomy Farm)

Group 0 (Table 13): Yield averages for the 3-year, 2-year, and 1-year data were 42, 43, and 41 bushels per acre, respectively. Varieties had to average at least 41 bushels for the 1-year period to be in the top-yield group. There were no significant differences among the varieties tested for the 3-year and 2-year periods. The top-yield groups for the 3-year, 2-year, and 1-year periods included 7, 15, and 25 entries, respectively.

Group I (Table 14): Yield averages for the **3-year, 2-year, and 1-year data were 45, 46, and 43 bushels per acre,** respectively. Varieties had to average at least 48 bushels for the 3-year and 2-year or 44 bushels per acre for the 1-year period to be in the top-yield group. The top-yield groups for the 3-year, 2-year, and 1-year periods included 4, 15, and 35 entries, respectively.

Group II (Table 15): Yield averages for the 3-year, 2-year, and 1-year data were 49, 52, and 44 bushels per acre, respectively. Varieties had to average at least 48 bushels for the 3-year, 52 bushels for the 2-year, or 44 bushels per acre for the 1-year period to be in the top-yield group. The top-yield groups for the 3-year, 2-year, and 1-year periods included 6, 20, and 34 entries, respectively.

BERESFORD (SE Research Farm)

Group I (Table 16): Yield averages for the 3-year, 2-year, and 1-year data were 54, 52, and 49 bushels per acre, respective-

ly. Varieties had to average at least 51 bushels for both the 2-year and 1-year periods to be in the top-yield group. There were no significant differences among the varieties tested for the 3-year period. The top-yield groups for the 3-year, 2-year, and 1-year periods included 5, 11, and 11 entries, respectively.

Group II (Table 17): Yield averages for the 3-year, 2-year, and 1-year data were 50, 47, and 45 bushels per acre, respectively. Varieties had to average at least 49 bushels for the 3-year, 47 bushels for the 2-year, and 51 bushels per acre for the 1-year period to be in the top-yield group. The top-yield groups for the 3-year, 2-year, and 1-year periods included 14, 26, and 14 entries, respectively.

ARMOUR, NO-TILL (Mark and Cletus Wiechmann Farm) Group I (Table 18): Yield averages for the 3-year, 2-year, and 1-year data were 38, 32, and 20 bushels per acre, respectively. Varieties had to average at least 24 bushels for the 1-year period to be in the top-yield group. There were no significant differences among the varieties tested for the 3-year and 2-year periods. The top-yield groups for the 3-year, 2-year, and 1-year periods included 2, 9, and 4 entries, respectively.

Group II (Table 19): Yield averages for the 3-year, 2-year, and 1-year data were 37, 34, and 26 bushels per acre, respectively. Varieties had to average at least 35 bushels for the 3-year and 30 bushels per acre for the 1-year period to be in the top-yield group. There were no significant differences among the varieties tested for the 2-year period. The top-yield groups for the 3-year, 2-year, and 1-year periods included 10, 33, and 23 entries, respectively.

Table A. Traits of some public soybean varieties.

Variety	Emergence	Shattering	Iron Chlorosis
** 7 ' 1	1	1	1 5
Hendricks	Τ	Ţ	1.7
MN0901	3	2	3.7
Spink	1	1	2.4
Stride	1	1	3.7
Surge	1	1	2.7
Turner SCN	1	2	3.0
SDG 1081RR*	1	1	2.5
SDG 1091RR*	1	1	2.7

^{*} Indicates Roundup Ready variety.

Emergence: 1=> 95%, 2= 91-94%, 3= 85-90%, 4= 76-84%, and 5=< 75%. Shattering: 1= none, 2= 1-10%, 3= 11-25%, 4= 26-50%, and 5> 50%. Iron Chlorosis: 1= little or no yellowing, 3= moderate yellowing, and 5= severe yellowing.

See additional comments in evaluation methods.

Table B. Genes for race resistance to Phytophthora root rot.

Source	Gene	Race resistance
Williams	rps1	None
Mukden	Rps1 (Rps1a)	1-2,10-11,13,15-18,24
Sanga	Rps1b	1,3-9,13-15,18,21-22
Mack	Rps1c	1-3,6-11,13,15,17,21,23-24
Kingwa	Rps1k	1-11,13-15,17-18,21-22,24
CNS2	Rps2	1-5,9-20
PI171442	Rps3	1-5,8-9,11,13-14,16,18,23,25
PI86050	Rps4	1-4,10,12-16,18-21,25
PI91160	Rps5	1-5,8-9,11-14,18,20,25
Altona	Rps6	1-4,10,12,14-16,18-21,25
Harosoy	RpsH	12,16
Archer	Rps1k, Rps6	1-22,24-25
Keller Winchester	Rps1c, Rps3 Rps1b, Rps3 Unknown Not reported	1-10,13-18,22-25 1-9,13-16,18,21-23,25 Unknown Not reported by seed source

Table C. 2003 Conventional soybean entries by brand/variety, yield table number(s), and *Phytophthora* root rot race resistance.

		Table	Mat.	Phytophthora
No.	Brand / Variety	Number(s)	Grp.	Race resistance
1	COYOTE/9123	3,5	II	1-2,10-11,13,15-18,24
2	COYOTE/9525	5	II	Unknown
3	COYOTE/9723	3,5	II	1-2,10-11,13,15-18,24
1	SANDS/SOI 234	3,5	II	1-2,10-11,13,15-18,24
5	SANDS/SOI 288	5	II	No Resistance
6	SANDS/SOI 187	1,2	I	1-2,10-11,13,15-18,24
7	SANDS/SOI 247N	5	II	No Resistance
3	SANDS/SOI 256	5	II	No Resistance
)	SANDS/EXP281	5	II	1-11,13-15,17-18,21-22,24
LO	SANDS/SOI 284N	5	II	1-2,10-11,13,15-18,24
L1	LATHAM/392	4	I	No Resistance
L2	LATHAM/830	5	II	No Resistance
L3	LATHAM/570	3	II	No Resistance
14	LATHAM/690	5	II	No Resistance
15	LATHAM/280	4	I	No Resistance
16	LATHAM/EXP-E1840T	2,4	I	No Resistance
L7	LATHAM/EXP-E2478T	5	II	No Resistance
L8	GOLD COUNTRY/BISCAY	1	I	Not Reported
L9	GOLD COUNTRY/2318	1,2	I	Not Reported
20	PRAIRIE BR./PB202	3,5	II	Not Reported
21	PRAIRIE BR./PB217	3	II	Not Reported
22	PRAIRIE BR./PB230	3,5	II	1-2,10-11,13,15-18,24
23	PRAIRIE BR./PB256	5	II	1-2,10-11,13,15-18,24
24	PRAIRIE BR./PB278	5	II	Not Reported
25	PRAIRIE BR./PB178	1,2	I	Not Reported
26	PRAIRIE BR./PB183	1,2	I	Not Reported
27	GARST/1549	2	I	No Resistance
28	GARST/2918	5	II	No Resistance
29	JACOBSEN/J750	3	II	Not Reported
3 0	JACOBSEN/J772	5	II	Not Reported
31	JACOBSEN/J814	5	II	Not Reported
32	JACOBSEN/J826	5	II	Not Reported
33	THOMPSON/T-3222	3	II	Not Reported
34	THOMPSON/T-3182	2,4	I	1-2,10-11,13,15-18,24
35	THOMPSON/T-3221	3	II	1-11,13-15,17-18,21-22,24
36	THOMPSON/T-3251	3	II	Not Reported
37	THOMPSON/T-3288	5	II	Not Reported
38	THOMPSON/T-3189	2,4	I	Not Reported
39	THOMPSON/T-3263	5	II	Not Reported
10	PUBLIC/HENDRICKS	1,2	I	1-2,10-11,13,15-18,24
11	PUBLIC/MN 0901	1,2	I	1-2,10-11,13,15-18,24
42	PUBLIC/SPINK	1,2	I	1-2,10-11,13,15-18,24
43	PUBLIC/STRIDE	1,2,4	I	1-2,10-11,13,15-18,24
44	PUBLIC/SURGE	1,2	I	1-2,10-11,13,15-18,24
45	PUBLIC/TURNER-SCN	3,5	II	1-3,6-11,13,15,17,21,23-24

Table 1. South Shore, combined maturity group 0 & I soybean test results, 2001-2003. NE Research Farm, seeded May 27.

							200	3
Drand / Entre	(13%	mois	bu/a ture)			Ht.	Ldg. Sc.~	
Brand / Entry	3yr	ZYL	2003	pct+	pct+	тп.	SC.~	seeding
			Ent	ries tes	sted th	ree ye	ars	
GOLD COUNTRY/BISCAY	37	36	26	35.6	18.7	28	1	119
PUBLIC/STRIDE	32	31	26	34.2	19.6	27	1	113
			Er	ntries te	ested to	wo yea	rs	
PRAIRIE BR./PB178		38	27	36.4	18.1	24	1	120
SANDS/SOI 187		37	24	33.8	19.1	30	1	120
			Er	ntries te	ested or	ne yea	r	
PRAIRIE BR./PB183			28	•		26	1	117
GOLD COUNTRY/2318			27	•	•	23	1	120
PUBLIC/SURGE			24	•	•	25	1	113
PUBLIC/SPINK	•		23	•	•	29	1	109
PUBLIC/HENDRICKS	•		23	•	•	24	1	113
PUBLIC/MN 0901	•	•	21	•	•	29	1	107
Test average:	34	35	25	35.0	18.9	26	1	114
LSD(5%) value (\$):	NS	NS	4					
Min.top yield value (\$):	: 32	31	24					
Coef. of variation (#):	10	9	9					

^{\$/+} See yield / protein & oil sections, respectively.

[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Brookings, combined maturity group 0 & I soybean test results, 2001-2003. SDSU Agronomy Farm, seeded May 27.

							2003	3
								Maturity:
	Yie	1d -	bu/a	2002	2002			Days
	(13%	mois	ture)	Prot.	Oil	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			Ent	ries tes	sted th	ree ye	ars	
THOMPSON/T-3182	46	49	37	35.5	18.5	32	1	118
PUBLIC/STRIDE	38	39	33	37.7	17.7	29	1	115
			E1	ntries te	ested to	wo yea	rs	
PRAIRIE BR./PB178		47	36	36.8	18.5	30	1	121
SANDS/SOI 187		46	36	35.8	18.7	35	1	120
			E1	ntries te	ested of	ne yea	r	
PRAIRIE BR./PB183			41	•		32	1	119
LATHAM/EXP-E1840T			40	•		31	1	121
GARST/1549			38	•		34	1	119
PUBLIC/SPINK			37	•		31	1	110
THOMPSON/T-3189			37	•		33	1	122
GOLD COUNTRY/2318			36			30	1	119
PUBLIC/MN 0901			35			32	1	116
PUBLIC/HENDRICKS			35		•	29	1	117
PUBLIC/SURGE			33			31	1	116
Test average:	42	45	36	36.5	18.4	31	1	117
LSD(5%) value (\$):	NS	NS	5					
Min.top yield value (\$):		39	36					
Coef. of variation (#):	15	9	8					

^{\$/+} See yield / protein & oil sections, respectively.
~ Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Table 3. Brookings, maturity group II soybean test results, 2001-2003. SDSU Agronomy Farm, seeded May 27.

							200	3
Brand / Entry*			bu/a sture) 2003	2002 Prot. pct+	2002 Oil pct+	Ht. in.	Ldg. Sc.~	
			Ent	ries tes	sted th	ree ye	ars	
PRAIRIE BR./PB202	45	49	36	36.3	17.7	34	1	128
PRAIRIE BR./PB230	43	46	35	36.2	17.8	30	1	128
PRAIRIE BR./PB217	43	46	33	36.4	17.9	32	1	130
PUBLIC/TURNER-SCN	40	43	33	36.3	18.1	36	1	126
			Er	ntries te	ested to	wo yea	rs	
LATHAM/570		46	36	36.7	17.6	28	1	129
COYOTE/9723		46	34	35.8	18.2	30	1	127
THOMPSON/T-3221		46	32	34.3	18.1	36	1	123
COYOTE/9123		46	33	35.0	18.9	35	1	125
THOMPSON/T-3251		44	30	35.9	18.2	30	1	130
			Er	ntries te	ested o	ne yea	r	
JACOBSEN/J750			38			31	1	129
THOMPSON/T-3222			37			33	1	128
SANDS/SOI 234	•	•	34	•	•	31	1	127
Test average:	43	46	34	35.9	18.1	32	1	127
LSD(5%) value (\$): Min.top yield value (\$): Coef. of variation (#):	3 : 42 7	NS 43 6	3 35 6					

^{*} SCN = Soybean cyst nematode resistant.

^{\$/+} See yield / protein & oil sections, respectively.

 $[\]sim$ Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Table 4. Beresford, maturity group I soybean test results, 2001-2003. SE Research Farm, seeded May 21.

							200	3
Brand / Entry			bu/a ture) 2003	2002 Prot. pct+	2002 Oil pct+	Ht. in.	Ldg. Sc.~	
			Ent	ries tes	sted th	ree ye	ars	
LATHAM/392	49	47	48	36.4	17.7	33	1	128
THOMPSON/T-3182	49	46	49	33.3	19.8	35	1	120
PUBLIC/STRIDE	43	41	48	33.9	19.5	31	1	114
			En	tries te	ested or	ne year	r	
LATHAM/EXP-E1840T			54			33	1	122
LATHAM/280			51			32	1	123
THOMPSON/T-3189	•	•	50	•	•	34	1	121
Test average:	47	45	49	34.5	19.0	32	1	119
LSD(5%) value (\$):	NS	NS	NS					
Min.top yield value (\$)	: 43	41	44					
<pre>Coef. of variation (#):</pre>	5	7	9					

^{\$/+} See yield / protein & oil sections, respectively.

[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat.

NS - Indicates differences between values within a column are not significant.

Measure of experimental error: values of < 15% are desired.

Table 5. Beresford, maturity group II soybean test results, 2001-2003. SE Research Farm, seeded May 21.

							200	
	37.	1.3	bu/a	2002	2002			Maturity:
			/ -	2002	2002	TT+	T 2 00	Days
Drand / Entrart			sture)			Ht.	Ldg.	after
Brand / Entry*	3yr	Zyr	2003	pct+	pct+	in.	Sc.~	seeding
				ntries tes		_		
SANDS/SOI 288	52	47	44	35.7	17.4	32	1	126
PRAIRIE BR./PB278	52	49	50	36.4	17.6	31	1	128
PRAIRIE BR./PB202	50	46	47	36.3	18.5	35	1	125
PRAIRIE BR./PB230	49	45	48	36.3	18.3	33	1	123
PRAIRIE BR./PB256	49	46	46	35.7	18.7	33	1	125
COYOTE/9525	47	44	45	33.9	19.4	45	3	126
COYOTE/9123	47	46	44	34.1	19.7	38	1	122
PUBLIC/TURNER-SCN	44	42	42	35.5	19.5	37	3	123
				Entries te	ested t	wo yea	rs	
THOMPSON/T-3288		49	49	34.0	18.0	39	2	131
SANDS/SOI 256		46	48	34.9	18.9	28	1	124
COYOTE/9723		45	46	35.7	18.9	33	1	123
SANDS/SOI 247N		45	47	35.7	19.3	33	1	130
				Entries te	ested o	ne yea	r	
JACOBSEN/J826			51			32	1	129
JACOBSEN/J814			49			34	1	125
GARST/2918			47			33	1	130
LATHAM/690			47			30	1	125
LATHAM/EXP-E2478T	•		46			34	1	129
SANDS/SOI 234			46			30	1	124
THOMPSON/T-3263			46			32	1	130
JACOBSEN/J772			46			36	1	124
SANDS/EXP281			46			39	2	130
LATHAM/830			46			31	1	130
SANDS/SOI 284N	•	•	41			37	1	131
Test average:	49	46	46	35.4	18.7	34	1	126
LSD(5%) value (\$):	4	NS	NS					
Min.top yield value (\$)	: 48	42	41					
Coef. of variation (#):	6	7	7					

^{*} SCN = Soybean cyst nematode resistant.

^{\$/+} See yield / protein & oil sections, respectively.

 $[\]sim$ Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Table D. 2003 Roundup-Ready™ soybean entries by brand/variety, yield table number(s), and *Phytophthora* root rot race resistance.

No.	Brand / Variety	Table Number(s)	Mat. Grp.	Phytophthora Race resistance
1	ASGROW/AG0801	6,8	0	1-11,13-15,17-18,21-22,24
2	ASGROW/AG2302	12,15,17,19	II	1-11,13-15,17-18,21-22,24
3	ASGROW/AG1401	9	I	1-11,13-15,17-18,21-22,24
4	ASGROW/AG1701	9,11,14	I	1-3,6-11,13,15,17,21,23-24
5	ASGROW/AG2106	7,9,11,14	I	1-11,13-15,17-18,21-22,24
6	ASGROW/AG2107	12,15,19	II	1-11,13-15,17-18,21-22,24
7	ASGROW/AG2403	12,17,19	II	1-11,13-15,17-18,21-22,24
8	ASGROW/AG2801	17,19	II	1-2,10-11,13,15-18,24
9	COYOTE/9419RR	14	I	1-11,13-15,17-18,21-22,24
10	COYOTE/9626RR	17,19	II	1-11,13-15,17-18,21-22,24
11	COYOTE/9524RR	15,17,19	II	1-11,13-15,17-18,21-22,24
12	COYOTE/9728RR	17	II	Unknown
13	COYOTE/EXP721RR	15,19	II	1-11,13-15,17-18,21-22,24
14	COYOTE/EXP625RR	17,19	II	Unknown
15	COYOTE/EXP527RR	17,19	II	1-11,13-15,17-18,21-22,24
16 17	MUSTANG/M-091RR	6,8,10,13	0	1 2 6 11 12 15 17 21 22 24
18	MUSTANG/M-151RR	7,9,11,14 19	I	1-3,6-11,13,15,17,21,23-24
19	MUSTANG/M-222RR MUSTANG/M-101RR	7,9,11,14	II I	1-3,6-11,13,15,17,21,23-24
20	MUSTANG/M-101RR MUSTANG/M-201RR	12,15,17	II	1-11,13-15,17-18,21-22,24
21	MUSTANG/M-201RK MUSTANG/M-083RR	6,8,10,13	0	1-11,13-13,17-10,21-22,24
22	MUSTANG/M-003RR MUSTANG/M-092RR	6,8,10,13	0	
23	MUSTANG/M-153RR	7,9,11,14	I	
24	MUSTANG/M-163RR	7,9,11,14	I	
25	MUSTANG/M-203RR	12,15,17,19	II	
26	MUSTANG/M-243RR	15,17	II	1-11,13-15,17-18,21-22,24
27	MUSTANG/M-273RR	17,19	II	1 11,13 10,17 13,21 22,21
28	MUSTANG/M-053RR	6,8	0	
29	MUSTANG/M-054RR	6,8	0	1-11,13-15,17-18,21-22,24
30	MUSTANG/M-073RR	6,8	0	, , , , , ,
31	MUSTANG/M-094RR	6,8,10,13	0	
32	MUSTANG/M-124RR	7,9,11,14	I	
33	MUSTANG/M-174RR	7,9,11,14	I	1-11,13-15,17-18,21-22,24
34	MUSTANG/M-194NRR	14	I	1-11,13-15,17-18,21-22,24
35	MUSTANG/M-224RR	12,15,17,19	II	1-11,13-15,17-18,21-22,24
36	MUSTANG/M-234RR	12,15,17,19	II	
37	MUSTANG/M-253RR	17,19	II	
38	MUSTANG/M-284RR	17,19	II	
39	DEKALB/DKB26-52	17	II	1-2,10-11,13,15-18,24
40	DEKALB/DKB10-51	6,8,10,13	0	
41	DEKALB/DKB22-51	12,15	II	
42	DEKALB/DKB25-51	17,19	II	1-11,13-15,17-18,21-22,24
43	DEKALB/DKB07-52	6,8,13	0	
44	DEKALB/DKB19-52	7,9,11,14,16	,1I	1-11,13-15,17-18,21-22,24
45	DEKALB/DKB28-52	17,19	II	1-3,6-11,13,15,17,21,23-24
46	SANDS/SOI 1515RR	9,14	I	
47	SANDS/SOI 226RR	17,19	II	
48	SANDS/SOI 2143RR	15,17,19	II	1-11,13-15,17-18,21-22,24
49	SANDS/SOI 2541RR	17,19	II	
50	SANDS/SOI 2642NRR	17,19	II	1-2,10-11,13,15-18,24

Table D. 2003 Roundup Ready™ soybean entries (continued)

NT -	D	Table	Mat.	Phytophthora
No.	Brand / Variety	Number(s)	Grp.	Race resistance
51	SANDS/SOI 2872RR	17,19	II	
52	SANDS/SOI 0931RR	8,13	0	1-2,10-11,13,15-18,24
53	SANDS/SOI 1050RR	8,13	0	
54	SANDS/SOI 1441RR	9,14	I	
55	SANDS/SOI 1730RR	9,14	I	1-11,13-15,17-18,21-22,24
6	SANDS/EXP 1751RR	9,14	I	1-11,13-15,17-18,21-22,24
7	SANDS/SOI 2141ARR	15,17,19	ΙI	
8	SANDS/SOI 2353RR	17,19	II	
9	SANDS/SOI 2501RR	17,19	II	
0	SANDS/SOI 2749RR	17,19	II	1-11,13-15,17-18,21-22,24
1	SANDS/EXP 2856NRR	17,19	ΙI	
2	SANDS/SOI 2858NRR	17,19	II	1-3,6-11,13,15,17,21,23-24
3	HY-VIGOR/H-174RR	14	I	1-11,13-15,17-18,21-22,24
4	HY-VIGOR/H-223RR	17	II	1-11,13-15,17-18,21-22,24
5	HY-VIGOR/199XRR	14	I	Not Reported
6	HY-VIGOR/EXP-2R12	19	II	1-11,13-15,17-18,21-22,24
7	HY-VIGOR/2R44	17,19	II	Not Reported
8	HY-VIGOR/2720NR	17	II	1-11,13-15,17-18,21-22,24
9	HY-VIGOR/EXP-2R55	17,19	II	Not Reported
0	DESOY/191+RR	14,16	I	Not Reported
1	DESOY/191RR	7,9,11,14	I	Not Reported
2	DESOY/041RR	6,8	0	Not Reported
3	DESOY/055RR	6,8	0	Not Reported
4	DESOY/077RR	6,8	0	Not Reported
75	DESOY/090RR	6,8,10,13	0	Not Reported
6	DESOY/161RR/SCN	7,9,11,14	I	Not Reported
77	DESOY/194RR	7,9,11,14	I	Not Reported
8	DESOY/260RR	15,17,19	II	Not Reported
9	DESOY/270ARR	17,19	II	Not Reported
30	KRUGER/099+RR	6,8,10,13	0	Not Reported
31	KRUGER/250RR	15,17,19	II	Not Reported
32	KRUGER/222+RR	14,16,18	I	Not Reported
3	KRUGER/199+RR	16	I	1-11,13-15,17-18,21-22,24
34	KRUGER/269RR	15,17,19	II	Not Reported
35	KRUGER/091-1RR	8,10,13	0	Not Reported
6	KRUGER/121+RR	6,8,10,13	0	Not Reported
7	KRUGER/223+RR	7,9,11,14,1	6,1I	Not Reported
88	KRUGER/262-2RR	15,17,19	ΙI	1-11,13-15,17-18,21-22,24
39	KRUGER/060RR	6,8	0	Not Reported
0 (KRUGER/090RR	6,10,13	0	Not Reported
1	KRUGER/155+RR	7,9,11	I	Not Reported
2	KRUGER/166RR	7,9,11	I	Not Reported
13	KRUGER/191RR	16,18	I	1-11,13-15,17-18,21-22,24
94	KRUGER/211RR	15,17,19		1-11,13-15,17-18,21-22,24
95	KRUGER/211+RR	7,9,11,14,1		1-11,13-15,17-18,21-22,24
6	KRUGER/223RR	7,9,11,14,1		1-11,13-15,17-18,21-22,24
7	KRUGER/202+RR	7,9,11,14,1		1-11,13-15,17-18,21-22,24
8	KRUGER/268RR	15,19	II	1-11,13-15,17-18,21-22,24
9	KRUGER/270RR	15,17,19	II	Not Reported
L00	KRUGER/066RR	6,8	0	1-3,6-11,13,15,17,21,23-24

Table D. 2003 Roundup Ready™ soybean entries (continued)

No.	Brand / Variety	Table Number(s)	Mat. Grp.	Phytophthora Race resistance
101	KRUGER/077RR	6,8	0	Not Reported
102	KRUGER/082+RR	6,8	0	Not Reported
103	KRUGER/091RR	6,8,10,13	0	Not Reported
104	KRUGER/100RR	6,8,10,13	0	Not Reported
105	KRUGER/101RR	6,8,10,13	0	1-11,13-15,17-18,21-22,24
106	KRUGER/121ARR	10,13	0	Not Reported
107	KRUGER/149RR	7,9,11	I	Not Reported
108	KRUGER/171RR	7,9,11,14	I	Not Reported
109	KRUGER/171ARR	7,9,11,14	I	Not Reported
110	KRUGER/222A	7,9,11,14,1	6,1I	1-11,13-15,17-18,21-22,24
111	KRUGER/230RR	15,17,19	II	Not Reported
112	KRUGER/233+RR	15,19	II	1-11,13-15,17-18,21-22,24
113	KRUGER/251RR	15,17,19	II	Not Reported
114	KRUGER/252RR	15,17,19	II	1-2,10-11,13,15-18,24
115	KRUGER/289+RR	17	II	1-11,13-15,17-18,21-22,24
116	KRUGER/292RR	17	II	1-11,13-15,17-18,21-22,24
117	LATHAM/457RR	17,19	II	
118	LATHAM/418RR	16	I	1-11,13-15,17-18,21-22,24
119	LATHAM/497RR	17	II	1-11,13-15,17-18,21-22,24
120	LATHAM/647RR	17	II_	1-11,13-15,17-18,21-22,24
121	LATHAM/L2136R	15,17,19	II	
122	LATHAM/678RR	15	II	
123	LATHAM/EXP-E0710R	13	0	
124	LATHAM/EXP-E0830R	13	0	1-11,13-15,17-18,21-22,24
125	LATHAM/EXP-E0835R	13	0	1-11,13-15,17-18,21-22,24
126	LATHAM/L0930R	13	0	
127	LATHAM/EXP-E1030R	14	I	
128	LATHAM/148RR	14	I	
129	LATHAM/EXP-E1750R	14,16	I	1-11,13-15,17-18,21-22,24
130	LATHAM/EXP-E1800R	14,16	I	
131	LATHAM/367RR	14	I	1-11,13-15,17-18,21-22,24
132	LATHAM/EXP-E2145R	17	II	1-11,13-15,17-18,21-22,24
133	LATHAM/EXP-E2200R	17	II	
134	LATHAM/EXP-E2300R	17	II	
135	LATHAM/EXP-E2336R	15	II	
136	LATHAM/EXP-E2350R	15	II	1-11,13-15,17-18,21-22,24
137	LATHAM/EXP-E2530R	17	II	
138	LATHAM/EXP-E2780R	17	II	
139	GOLD COUNTRY/6016RR	7,9	I	1-3,6-11,13,15,17,21,23-24
140	GOLD COUNTRY/6117RR	11	I	Not Reported
141	GOLD COUNTRY/3809RR	6	0	Not Reported
142	GOLD COUNTRY/2315RR	9	I	Not Reported
143	GOLD COUNTRY/1319RR	14	I	1-11,13-15,17-18,21-22,24
144	GOLD COUNTRY/6221RR	15	II	1-11,13-15,17-18,21-22,24
145	GOLD COUNTRY/2409RR	6,8	0	1-11,13-15,17-18,21-22,24
146	GOLD COUNTRY/2305RR	6	0	Not Reported
147	GOLD COUNTRY/2424RR	17	II	1-11,13-15,17-18,21-22,24
148	DAIRYLAND/DSR-130/RR	9	I	
149	DAIRYLAND/DSR-075/RR	8,10,13	0	1-11,13-15,17-18,21-22,24
150	DAIRYLAND/DSR-101/RR	14,16	I	

Table D. 2003 Roundup Ready™ soybean entries (continued)

		Table	Mat.	Phytophthora
No.	Brand / Variety	Number(s)	Grp.	Race resistance
151	DAIRYLAND/DSR-221/RR	17	II	1-11,13-15,17-18,21-22,24
152	DAIRYLAND/DSR-040/RR	6,8	0	
153	DAIRYLAND/DSR-050/RR	6,8,10	0	
154	DAIRYLAND/DSR-155/RR	11,14	I	1-11,13-15,17-18,21-22,24
155	DAIRYLAND/DSR-199/RR	14,16,18	I	1-11,13-15,17-18,21-22,24
156	DAIRYLAND/DSR-132/RR	9,11	I	1-11,13-15,17-18,21-22,24
157	DAIRYLAND/DSR-234/RR	15,17,19	II	1-11,13-15,17-18,21-22,24
158	DAIRYLAND/DSR-245/RR	17,19	II	1-11,13-15,17-18,21-22,24
159	TOP FARM/6202RR	9,11,18	I	,
160	TOP FARM/6072RR	8,13	0	1-11,13-15,17-18,21-22,24
161	TOP FARM/6102RR	8,13	0	1-2,10-11,13,15-18,24
162	TOP FARM/EXP34043BRR	9,14	I	1 2/10 11/10/10 10/21
163	TOP FARM/EXP321044RR	12,15	II	
164	TOP FARM/EXP35260RR	9,11,14,18	I	
165	KALTENBERG/KB161RR	14	I	1-3,6-11,13,15,17,21,23-24
166	KALTENBERG/KB261RR	17,19	II	1-11,13-15,17-18,21-22,24
167	KALTENBERG/KB172RR	14	I	1-11,13-15,17-18,21-22,24
168	KALTENBERG/KB153RR	14	I	Not Reported
169	KALTENBERG/KB241RR	19	II	Not Reported
170	KALTENBERG/KB275RR	17,19	II	Not Reported
171	KALTENBERG/KB244RR	17	II	Not Reported
172	STINE/S1918-4	14,16	I	Not Reported
173	STINE/S0846-4	8	0	
174	STINE/S0943-4	7,9	I	1-11,13-15,17-18,21-22,24
175	STINE/S1100-4	7,9,11	I	1 11,13 13,17 10,21 22,24
176	STINE/S2116-4	12,15,17	II	1-11,13-15,17-18,21-22,24
177	STINE/S2400-4	15,17,19	II	
178	STINE/S2640-4	17,19	II_	
179	PRAIRIE BR./PB-0920RR	6,8,10	0	Not Reported
180	PRAIRIE BR./PB-1030RR	6,8,10	0	1-3,6-11,13,15,17,21,23-24
181	PRAIRIE BR./PB-1620RR	7,9,11,14	I	1-3,6-11,13,15,17,21,23-24
182	PRAIRIE BR./PB-2397RR	12,15,17,19	II	Not Reported
183	PRAIRIE BR./PB-1241RR	7,9,11,14	I	Not Reported
184	PRAIRIE BR./PB-2141RR	12,15,19	II	1-11,13-15,17-18,21-22,24
185	PRAIRIE BR./PB-2421RR	12,15,17,19	II	1-11,13-15,17-18,21-22,24
186	PRAIRIE BR./PB-2821RR	17,19	II	Not Reported
187	PRAIRIE BR./PB-0732RR	6,8	0	Not Reported
188	PRAIRIE BR./PB-0812RR	6,8,10,13	0	Not Reported
189	PRAIRIE BR./PB-1452RR	7,9,11,14	I	Not Reported
190	PRAIRIE BR./PB-1552RR	7,9,11,14	I	Not Reported
191	PRAIRIE BR./PB-1921RR	7,9,11,14	I	1-11,13-15,17-18,21-22,24
192	PRAIRIE BR./PB-2112RR	7,9,11,14,16	.1I	Not Reported
193	PRAIRIE BR./PB-2352RR	12,15,17,19	, II	1-11,13-15,17-18,21-22,24
194	PRAIRIE BR./PB-2552RR	15,17,19	II	Not Reported
195	PRAIRIE BR./PB-2832RR	17	II	Not Reported
196	PRAIRIE BR./PB-0623RR	6,8	0	1-3,6-11,13,15,17,21,23-24
197	PRAIRIE BR./PB-0923RR	6,8,10,13	0	1-11,13-15,17-18,21-22,24
198	PRAIRIE BR./EXP1003RR	6,8,10	0	1-3,6-11,13,15,17,21,23-24
199	PRAIRIE BR./PB-1043RR	6,8,10,13	0	Not Reported
200	PRAIRIE BR./PB-1063RR	6,8,10,13	0	Not Reported
				-

Table D. 2003 Roundup Ready™ entries (continued)

No.	Brand / Variety	Table Number(s)	Mat. Grp.	Phytophthora Race resistance
201	PRAIRIE BR./PB-1943RR	7,9,11,14,16	5,1I	1-11,13-15,17-18,21-22,24
202	PRAIRIE BR./PB-2243RR	12,15,17,19	II	1-11,13-15,17-18,21-22,24
203	PRAIRIE BR./PB-2343RR	12,15,17,19	II	Not Reported
204	PRAIRIE BR./PB-2443RR	15	II	1-11,13-15,17-18,21-22,24
205	PRAIRIE BR./PB-2643RR	17,19	II	1-11,13-15,17-18,21-22,24
206	PRAIRIE BR./PB-2732RR	17,19	II	1-11,13-15,17-18,21-22,24
207	GARST/0901RR	8,13	0	
208	GARST/XR18P04	9,14	I	1-3,6-11,13,15,17,21,23-24
209	GARST/2834RR	17	II	1-11,13-15,17-18,21-22,24
210	GARST/2903RR	17	II	
211	MIDWEST SEED/GR1710	9	I	1-3,6-11,13,15,17,21,23-24
212	MIDWEST SEED/GR2037	12,15,17,19	II	
213	MIDWEST SEED/GR2627	17,19	II	
214	DYNA-GRO/DG 3223RR	12,15,17,19	II	
215	DYNA-GRO/DG 33M14RR	7,9,11,14	I	
216	DYNA-GRO/DG 38J12RR	7,9,11,14	I	1-3,6-11,13,15,17,21,23-24
217	DYNA-GRO/DG 3200RR	12,15,17,19	II	
218	DYNA-GRO/DG 38K28RR	17,19	II	
219	DYNA-GRO/DG 31C15RR	7,9,11,14	I	
220	DYNA-GRO/DG 3190RR	7,9,11,14	I	1-11,13-15,17-18,21-22,24
221	DYNA-GRO/DG 3218RR	12,15,17,19	II	
222	DYNA-GRO/DG 3232RR	12,15,17,19	II	1-11,13-15,17-18,21-22,24
223	DYNA-GRO/DG 3263RR	17,19	II	1-11,13-15,17-18,21-22,24
224	ZILLER/BT 7150R	9,14	I	1-3,6-11,13,15,17,21,23-24
225	ZILLER/BT 7106R	9	I	1-3,6-11,13,15,17,21,23-24
226	ZILLER/BT 7193R	14,16	I	
227	ZILLER/BT 7084R	8,13	0	
228	ZILLER/BT 7143R	9,14	I	
229	ZILLER/BT 7213R	17	II	
230	JACOBSEN/EXP J730NR	15	II	1-11,13-15,17-18,21-22,24
231	JACOBSEN/EXP J733R	15,17	II	1-11,13-15,17-18,21-22,24
232	JACOBSEN/J725R	17,19	II	Not Reported
233	JACOBSEN/J828R	17,19	II	Not Reported
234	JACOBSEN/EXP J839R	17,19	II	Not Reported
235	WENSMAN/W 2093RR	6,8	0	Not Reported
236	WENSMAN/W 2145RR	11,14	I	Not Reported
237	WENSMAN/W 2162RR	11,14	I	1-2,10-11,13,15-18,24
238	WENSMAN/W 2186RR	11,14	I	1-11,13-15,17-18,21-22,24
239	WENSMAN/W 2062RR	6,8	0	Not Reported
240	WENSMAN/W 2085RR	6,8	0	1-11,13-15,17-18,21-22,24
241	WENSMAN/W 2103RR	6,8,10,13	0	1-11,13-15,17-18,21-22,24
242	WENSMAN/W 2211RR	12,15	II	1-11,13-15,17-18,21-22,24
243	DEN BESTEN/DB0900RR	6,8,10,13	0	
244	DEN BESTEN/DB2601RR	17,19	II	1-11,13-15,17-18,21-22,24
245	DEN BESTEN/DB1902RR	7,9,11,14,16		1-11,13-15,17-18,21-22,24
246	DEN BESTEN/DB1303RR	7,9,11,14	I	
247	DEN BESTEN/DB2303RR	12,15,17,19	II	
248	DEN BESTEN/DB2503RR	17,19	II	
249	DEN BESTEN/DB2803RR	17,19	II	
250	THOMPSON/T-7205RR	11,14,16	I	1-11,13-15,17-18,21-22,24

Table D. 2003 Roundup Ready™ entries (continued)

No. Brand Variety Number (s) Grp. Race resistance			malal r	7/C - 1-	District and high house
THOMPSON/T-7217RR	No	Brand / Wariate	Table	Mat.	Phytophthora
THOMPSON/T-7225RR	INO.	praim / variety	Mulliper (S)	Grp.	race resistance
THOMPSON/T-7225RR	251	THOMPSON/T-7217RR	11,14	I	1-11,13-15,17-18,21-22,24
THOMPSON/T-7214RR	252			II	, , , , ,
THOMPSON/T-7254RR					
255 THOMPSON/T-7252RR 19 II 1-11,13-15,17-18,21-22,24 256 THOMPSON/T-7252RR 15,17,19 II 257 THOMPSON/EXP7213RR 11,14,16 I Unknown 259 THOMPSON/EXP725PRR 15,17 II Unknown 260 THOMPSON/EXP725PRR 15,17 II Unknown 261 THOMPSON/EXP723PRR 15,17,19 II 1-2,10-11,13,15-18,24 262 THOMPSON/EXP723PRR 15,17,19 II 1-2,10-11,13,15-18,24 263 THOMPSON/EXP723PRR 15,17,19 II 1-2,10-11,13,15-18,24 264 NORTHSTAR/NS 0954RR 6,8,10,13 0 Unknown 265 NORTHSTAR/NS 1624RR 7,9,11,14 I 1-3,6-11,13,15,17,12,12,23-24 266 NORTHSTAR/NS 1207RR 7,9,11,14 I 1-11,13-15,17-18,21-22,24 267 NOKHSTAR/NS 1207RR 7,9,11,14 I 1-11,13-15,17-18,21-22,24 268 RENK/RS123RR 15,17 II 1-11,13-15,17-18,21-22,24 270 R					1-11,13-15,17-18,21-22,24
256					
257 THOMPSON/T-7284RR 17,19 II			-		1 11,10 10,17 10,21 22,21
258 THOMPSON/EXP7213RR 11,14,16 I Unknown 259 THOMPSON/EXP7221RR 15,17 II Unknown 260 THOMPSON/EXP7225RR 15,17 II 1-11,13-15,17-18,21-22,24 261 THOMPSON/T-7293RR 17,19 II 1-2,10-11,13,15-18,24 262 THOMPSON/T-7293RR 15,17,19 II 1-2,10-11,13,15-18,24 263 THOMPSON/EXP7239R 15,17,19 II 1-2,10-11,13,15-18,24 264 NORTHSTAR/NS 0954RR 6,8,10,13 0 Unknown 265 NORTHSTAR/NS 1624RR 7,9,11,14 I 1-3,6-11,13,15,17,21,23-24 267 NORTHSTAR/NS 1407RR 7,9,11,14 I Unknown 268 NORTHSTAR/NS 1207RR 7,9,11,14 I 1-11,13-15,17-18,21-22,24 269 RENK/RS199RR 14 I 1-11,13-15,17-18,21-22,24 269 RENK/RS123RR 15,17 II 1-11,13-15,17-18,21-22,24 271 RENK/RS123RR 15,17 II 1-11,13-15,17-18,21-22,24 272 RENK/RS23RR 15,17,19 II 1-11,13-15,17-18,21-22,24 273 RENK/RS213RR 17,19 II 1-11,13-15,17-18,21-22,24 274 CROWS/C1630R 14 I 1-3,6-11,13,15,17,21,23-24 275 CROWS/C1630R 17,19 II Not Reported 276 CROWS/C2506R 17,19 II 1-11,13-15,17-18,21-22,24 277 RENK/RS213RR 166 I 278 BIO GENE/BG1700RR 16,18 I 1-3,6-11,13,15,17-18,21-22,24 279 MERSCHMAN/VARNUS RR 166 I 280 MERSCHMAN/VARNUS RR 166 I 281 MERSCHMAN/VARNUS RR 166 I 282 MERSCHMAN/VARACHE VIIIRR 17 II 282 MERSCHMAN/VARACHE VIIIRR 17 II 282 MERSCHMAN/VARACHE VIIRR 17 II 1-11,13-15,17-18,21-22,24 284 MERSCHMAN/VARACHE VIIRR 17 II 1-11,13-15,17-18,21-22,24 285 MERSCHMAN/MOHAWK RR 17 II 1-11,13-15,17-18,21-22,24 286 EXCEL/8193RR 14 I 1-11,13-15,17-18,21-22,24 287 MERSCHMAN/MOHAWK RR 17 II 1-11,13-15,17-18,21-22,24 288 EXCEL/8193RR 14 I 1-11,13-15,17-18,21-22,24 289 EXCEL/813RR 17 II 1-11,13-15,17-18,21-22,24 290 EXCEL/813RR 17 II 1-11,13-15,17-18,21-22,24 291 EXCEL/813RR 17 II 1-11,13-15,17-18,21-22,24 292 EXCEL/813RR 17 II 1-11,13-15,17-18,21-22,24 293 EXCEL/8236NR 17 II 1-11,13-15,17-18,21-22,24 294 EXCEL/8236NR 17 II 1-11,13-15,17-18,21-22,24 295 EXCEL/8236NR 17 II 1-11,13-15,17-18,21-22,24 296 EXCEL/8236NR 17 II 1-11,13-15,17-18,21-22,24 297 SABRE/145RR 9,14 II 1-11,13-15,17-18,21-22,24 298 SABRE/145RR 9,14 II 1-11,13-15,17-18,21-22,24 299 SABRE/145RR 9,14 II 1-11,13-15,17-18,21-22,24 299 SABRE/145RR 9,14					
THOMPSON/EXP7259RR					Unknown
260 THOMPSON/EXP7259RR 15,17 II THOMPSON/T-7233RR 17,19 II 1-11,13-15,17-18,21-22,24 THOMPSON/T-7243RR 15,17,19 II 1-2,10-11,13,15-18,24 THOMPSON/T-7243RR 15,17,19 II 1-2,10-11,13,15-18,24 THOMPSON/EXP7239RR 15,17,19 II 1-2,10-11,13,15-18,24 THOMPSON/EXP7239RR 15,17,19 II 1-2,10-11,13,15-18,24 THOMPSON/EXP7239RR 6,8,10,13 0 Unknown ONCTHSTAR/NS 0923RR 6,8,10,13 0 Unknown ONCTHSTAR/NS 1624RR 7,9,11,14 I 1-3,6-11,13,15,17,21,23-24 NORTHSTAR/NS 1207RR 7,9,11,14 I Unknown ONCTHSTAR/NS 1207RR 7,9,11,14 I 1-11,13-15,17-18,21-22,24 ENRK/RS19PRR 14 I 1-11,13-15,17-18,21-22,24 II 1-11,13-15,17-18,21-22,24 II 1-11,13-15,17-18,21-22,24 II 1-11,13-15,17-18,21-22,24 II 1-11,13-15,17-18,21-22,24 II 1-11,13-15,17-18,21-22,24 II I 1-11,13-15,17-18,21-22,24 II II I 1-11,13-15,17-18,21-22,24 II I 1-11,13-15,17-18					
261 THOMPSON/T-7243RR 15,17,19 II 1-11,13-15,17-18,21-22,24					01111110 1111
262 THOMPSON/T-7243RR 15,17,19 II 1-2,10-11,13,15-18,24 263 THOMPSON/EXP7239RR 15,17,19 II 1 264 NORTHSTAR/NS 0923RR 6,8,10,13 0 Unknown 265 NORTHSTAR/NS 1624RR 7,9,11,14 I Unknown 266 NORTHSTAR/NS 1624RR 7,9,11,14 I Unknown 267 NORTHSTAR/NS 1407RR 7,9,11,14 I Unknown 268 NORTHSTAR/NS 1207RR 7,9,11,14 I Unknown 269 RENK/RS19RR 14 I 1-11,13-15,17-18,21-22,24 270 RENK/RS19RR 15,17 II 1-11,13-15,17-18,21-22,24 271 RENK/RS172RR 15,17 II 1-11,13-15,17-18,21-22,24 272 RENK/RS23RR 15,17,19 II 1-11,13-15,17-18,21-22,24 273 RENK/RS23RR 17,19 II 1-11,13-15,17-18,21-22,24 274 CROWS/C1630R 14 I 1-11,13-15,17-18,21-22,24 275 CROWS/C1630R 15,19 II 276 CROWS/C2506R 17,19 277 BIO GENE/BG091RR 6,8,10,13 0 1-11,13-15,17-18,21-22,24 278 BIO GENE/BG091RR 16,18 I 1-11,13-15,17-18,21-22,24 279 MERSCHMAN/MARS VIIRR 16 I 1-11,13-15,17-18,21-22,24 279 MERSCHMAN/APACHE VIIIRR 17 II 280 MERSCHMAN/APACHE VIIIRR 17 II 281 MERSCHMAN/APACHE VIIIRR 17 II 282 MERSCHMAN/MOHAWK RR 17 II 1-11,13-15,17-18,21-22,24 283 MERSCHMAN/MOHAWK RR 17 II 1-11,13-15,17-18,21-22,24 284 MERSCHMAN/MOHAWK RR 17 II 1-11,13-15,17-18,21-22,24 285 MERSCHMAN/MOHAWK RR 17 II 1-11,13-15,17-18,21-22,24 286 EXCEL/8120RR 7,9 I Not Reported 287 EXCEL/8131RR 7 II 1-11,13-15,17-18,21-22,24 288 EXCEL/8046RR 6 0 Not Reported 280 EXCEL/8045RR 17 II 1-11,13-15,17-18,21-22,24 281 EXCEL/8046RR 6 0 Not Reported 282 EXCEL/8046RR 6 0 Not Reported 283 EXCEL/8037RR 17 II 1-11,13-15,17-18,21-22,24 284 EXCEL/803RR 17 II Not Reported 285 EXCEL/8037RR 17 II Not Reported 286 EXCEL/8027RR 17 II Not Reported 287 EXCEL/8037RR 17 II Not Reported 288 EXCEL/8027RR 17 II Not Reported 298 EXCEL/8027RR 17 II Not Reported 299 EXCEL/8027RR 17 II Not Reported 290 EXCEL/8027RR 17 II Not Reported 291 EXCEL/8027RR 17 II Not Reported 292 EXCEL/8028RR 17 II Not Reported 293 EXCEL/8028RR 17 II 1-11,13-15,17-18,21-22,24 294 EXCEL/8028RR 17 II 1-11,13-15,17-18,21-22,24 295 EXCEL/8028RR 17 II 1-11,13-15,17-18,21-22,24 296 EXCEL/8028RR 17 II 1-11,13-15,17-18,21-22,24 297 EXCEL/8058RR 17 II 1-11,13-15,17-18,21-22,					1-11.13-15.17-18.21-22.24
263 THOMPSON/EXP7239RR					
264 NORTHSTAR/NS 0923RR 6,8,10,13 0 Unknown 265 NORTHSTAR/NS 1624RR 7,9,11,14 I 1-3,6-11,13,15,17,21,23-24 267 NORTHSTAR/NS 1624RR 7,9,11,14 I 1-3,6-11,13,15,17,21,23-24 268 NORTHSTAR/NS 1207RR 7,9,11,14 I Unknown 268 NORTHSTAR/NS 1207RR 7,9,11,14 I 1-11,13-15,17-18,21-22,24 269 RENK/RS199RR 14 I 1-11,13-15,17-18,21-22,24 270 RENK/RS212RR 15,17 II 1-11,13-15,17-18,21-22,24 271 RENK/RS223RR 15,17,19 II 1-11,13-15,17-18,21-22,24 272 RENK/RS253RR 17,19 II 1-11,13-15,17-18,21-22,24 273 RENK/RS253RR 17,19 II 1-11,13-15,17-18,21-22,24 274 CROWS/C1630R 14 I 1-3,6-11,13,15,17,21,23-24 275 CROWS/C2506R 17,19 II 276 CROWS/C2506R 17,19 II 277 BIO GENE/BG0710RR 16,18 I 1-11,13-15,17-18,21-22,24 278 BIO GENE/BG1700RR 16,18 I 1-11,13-15,17-18,21-22,24 279 MERSCHMAN/MARS VIIRR 16 I 1 280 MERSCHMAN/APACHE VIIIRR 17 II 281 MERSCHMAN/APACHE VIIIRR 17 II 282 MERSCHMAN/APACHE VIIIRR 17 II 283 MERSCHMAN/APACHE VIIRR 17 II 284 MERSCHMAN/CHICKASAW 8RR 17 II 1-11,13-15,17-18,21-22,24 285 MERSCHMAN/CHICKASAW 8RR 17 II 1-3,6-11,13,15,17,21,23-24 286 EXCEL/8120RR 7,9 I Not Reported 287 EXCEL/8131RR 7,9 I Not Reported 288 EXCEL/8200RR 15 II 1-11,13-15,17-18,21-22,24 289 EXCEL/805SRR 6 0 Not Reported 290 EXCEL/805SRR 17 II 1-11,13-15,17-18,21-22,24 291 EXCEL/8131RR 7 II Not Reported 292 EXCEL/805RR 17 II Not Reported 293 EXCEL/8227RR 15 II 1-11,13-15,17-18,21-22,24 294 EXCEL/8236RR 17 II Not Reported 295 EXCEL/8237RR 17 II Not Reported 296 EXCEL/8237RR 17 II Not Reported 297 EXCEL/8237RR 17 II Not Reported 298 EXCEL/8258RR 17 II 1-11,13-15,17-18,21-22,24 299 EXCEL/8258RR 17 II Not Reported 290 EXCEL/8237RR 17 II Not Reported 291 EXCEL/8237RR 17 II Not Reported 294 EXCEL/8258RR 17 II Not Reported 295 EXCEL/8258RR 17 II Not Reported 296 EXCEL/8258RR 17 II Not Reported 297 EXCEL/8258RR 17 II Not Reported 298 EXCEL/8258RR 17 II Not Reported 299 EXCEL/8258RR 17 II Not Reported 290 EXCEL/8258RR 17 II Not Reported 291 EXCEL/8258RR 17 II 1-11,13-15,17-18,21-22,24 298 SABRE/145RR 9 II 1-11,13-15,17-18,21-22,24					1 2,10 11,13,13 10,24
265 NORTHSTAR/NS 0954RR 6,8,10,13 0 Unknown 266 NORTHSTAR/NS 1624RR 7,9,11,14 I 1-3,6-11,13,15,17,21,23-24 Unknown 268 NORTHSTAR/NS 1207RR 7,9,11,14 I Unknown 268 NORTHSTAR/NS 1207RR 7,9,11,14 I 1-11,13-15,17-18,21-22,24 269 REMK/RS199RR 14 I 1-11,13-15,17-18,21-22,24 271 RENK/RS212RR 15,17 II 1-11,13-15,17-18,21-22,24 272 RENK/RS212RR 15,17,19 II 1-11,13-15,17-18,21-22,24 273 RENK/RS223RR 15,17,19 II Not Reported 274 CROWS/C1630R 14 I 1-3,6-11,13,15,17,12,123-24 275 CROWS/C2130R 15,19 II Not Reported 276 CROWS/C2506R 17,19 II Not Reported 277 BIO GENE/BG091RR 6,8,10,13 0 1-11,13-15,17-18,21-22,24 278 BIO GENE/BG091RR 6,8,10,13 0 1-11,13-15,17-18,21-22,24 279 MERSCHMAN/VENUS RR 16 I 1-11,13-15,17-18,21-22,24 279 MERSCHMAN/VENUS RR 16 I 1-11,13-15,17-18,21-22,24 284 MERSCHMAN/VENUS RR 16 I 1-11,13-15,17-18,21-22,24 284 MERSCHMAN/MUNSEE IVRR 17 II 1-11,13-15,17-18,21-22,24 285 MERSCHMAN/MUNSEE IVRR 17 II 1-11,13-15,17-18,21-22,24 286 MERSCHMAN/MUNSEE IVRR 17 II 1-11,13-15,17-18,21-22,24 286 MERSCHMAN/MUNSEE IVRR 17 II 1-11,13-15,17-18,21-22,24 286 MERSCHMAN/MUNGEE IVRR 17 II 1-11,13-15,17-18,21-22,24 286 MERSCHMAN/MUNGEE IVRR 17 II 1-11,13-15,17-18,21-22,24 286 MERSCHMAN/MUNGER 10 Not Reported 287 EXCEL/8193RR 14 I 1-11,13-15,17-18,21-22,24 288 EXCEL/820RR 17 II Not Reported 290 EXCEL/805SRR 6 0 Not Reported 291 EXCEL/8131RR 7 II Not Reported 291 EXCEL/8131RR 7 II Not Reported 292 EXCEL/805RR 17 II Not Reported 294 EXCEL/8227RR 15 II 1-11,13-15,17-18,21-22,24 295 EXCEL/8236NRR 17 II Not Reported 294 EXCEL/8236NRR 17 II Not Reported 294 EXCEL/8237RR 17 II Not Reported 294 EXCEL/8237RR 17 II Not Reported 295 EXCEL/8258RR 17 II Not Reported 296 EXCEL/8258RR 17 II Not Reported 297 EXCEL/8258RR 17 II Not Reported 298 EXCEL/8258RR 17 II Not Reported 299 EXCEL/8258RR 17 II Not Reported 298 EXCEL/8258RR 17 II Not Reported 298 EXCEL/8258RR 17 II Not Reported 299 EXCEL/8258RR 17 II Not Reported 298 EXCEL/8258RR 17 II Not Reported 299 EXCEL/8258RR 17 II 1-11,13-15,17-18,21-22,24 299 SABRE/145RR 9 II 1-11,13-15,17-18,21-22,2					IInknown
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267 NORTHSTAR/NS 1407RR 7,9,11,14 I Unknown 268 NORTHSTAR/NS 1207RR 7,9,11,14 I 1-11,13-15,17-18,21-22,24 269 RENK/RS199RR 14 I 1-11,13-15,17-18,21-22,24 270 RENK/RS212RR 15,17 II 1-11,13-15,17-18,21-22,24 271 RENK/RS172RR 14 I 1-11,13-15,17-18,21-22,24 272 RENK/RS23RR 15,17,19 II 1-11,13-15,17-18,21-22,24 273 RENK/RS233RR 17,19 II Not Reported 274 CROWS/C1630R 14 I 1-3,6-11,13,15,17,21,23-24 275 CROWS/C2130R 15,19 II 276 CROWS/C2506R 17,19 II 277 BIO GENE/BG091RR 6,8,10,13 0 1-11,13-15,17-18,21-22,24 278 BIO GENE/BG091RR 16,18 I 1-11,13-15,17-18,21-22,24 279 MERSCHMAN/MARS VIIRR 16 I 280 MERSCHMAN/VENUS RR 16 I 281 MERSCHMAN/S1OUX IIRR 17 II 282 MERSCHMAN/S1OUX IIRR 17 II 282 MERSCHMAN/GIOUX IIRR 17 II 1-11,13-15,17-18,21-22,24 283 MERSCHMAN/MONSEE IVRR 17 II 1-11,13-15,17-18,21-22,24 284 MERSCHMAN/CHICKASAW 8RR 17 II 1-11,13-15,17-18,21-22,24 285 MERSCHMAN/MONAWK RR 17 II 286 EXCEL/8120RR 7,9 I Not Reported 287 EXCEL/8193RR 14 I 1-11,13-15,17-18,21-22,24 288 EXCEL/8200RR 15 II 1-11,13-15,17-18,21-22,24 289 EXCEL/8055RR 6 0 Not Reported 290 EXCEL/8031RR 7 I 1-11,13-15,17-18,21-22,24 291 EXCEL/8131RR 7 I 1-11,13-15,17-18,21-22,24 292 EXCEL/8237RR 17 II Not Reported 293 EXCEL/8237RR 17 II Not Reported 294 EXCEL/8237RR 17 II Not Reported 295 EXCEL/8237RR 17 II Not Reported 296 EXCEL/8237RR 17 II Not Reported 297 EXCEL/825RR 17 II Not Reported 298 EXCEL/825RR 17 II Not Reported 299 EXCEL/825RR 17 II Not Reported 290 EXCEL/8237RR 17 II Not Reported 291 EXCEL/8237RR 17 II Not Reported 293 EXCEL/8238RR 17 II Not Reported 294 EXCEL/8237RR 17 II Not Reported 295 EXCEL/825RR 17 II Not Reported 296 EXCEL/825RR 17 II Not Reported 297 EXCEL/825RRR 17 II Not Reported 298 SABRE/195RR 9 II 1-11,13-15,17-18,21-22,24 299 SABRE/195RR 9 II 1-11,13-15,17-18,21-22,24 299 SABRE/195RR 9 II 1-11,13-15,17-18,21-22,24					
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274 CROWS/C1630R 14					
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278 BIO GENE/BG1700RR 16,18 I 1-11,13-15,17-18,21-22,24 279 MERSCHMAN/MARS VIIRR 16 I 280 MERSCHMAN/VENUS RR 16 I 281 MERSCHMAN/APACHE VIIIRR 17 II 282 MERSCHMAN/SIOUX IIRR 17 II 1-11,13-15,17-18,21-22,24 283 MERSCHMAN/MUNSEE IVRR 17 II 1-3,6-11,13,15,17-18,21-22,24 284 MERSCHMAN/MOHAWK RR 17 II 285 MERSCHMAN/MOHAWK RR 17 II 286 EXCEL/8120RR 7,9 I Not Reported 287 EXCEL/820RR 15 II 1-11,13-15,17-18,21-22,24 288 EXCEL/820RR 15 II 1-11,13-15,17-18,21-22,24 289 EXCEL/8055RR 6 0 Not Reported 291 EXCEL/8131RR 7 I 1-3,6-11,13,15,17,21,23-24 292 EXCEL/8237RR 11,14 I Not Reported 293 EXCEL/8227RR 15 II					1_11 13_15 17_19 21_22 24
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281 MERSCHMAN/APACHE VIIIRR 17 II					
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285 MERSCHMAN/MOHAWK RR 17 II 286 EXCEL/8120RR 7,9 I Not Reported 287 EXCEL/8193RR 14 I 1-11,13-15,17-18,21-22,24 288 EXCEL/8200RR 15 II 1-11,13-15,17-18,21-22,24 289 EXCEL/8046RR 6 0 Not Reported 290 EXCEL/8055RR 6 0 Not Reported 291 EXCEL/8131RR 7 I 1-3,6-11,13,15,17,21,23-24 292 EXCEL/8173RR 11,14 I Not Reported 293 EXCEL/8226RR 17 II Not Reported 294 EXCEL/8227RR 15 II 1-11,13-15,17-18,21-22,24 295 EXCEL/8237RR 17 II 1-11,13-15,17-18,21-22,24 296 EXCEL/8258RR 17 II Not Reported 297 EXCEL/8258RR 17 II 1-11,13-15,17-18,21-22,24 298 SABRE/145RR 9 I 1-11,13-15,17-18,21-22,24 299 SABRE/195RR 9,14 I 1-11,13-15,17-18,21-22,24					
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292 EXCEL/8173RR 11,14 I Not Reported 293 EXCEL/8226RR 17 II Not Reported 294 EXCEL/8227RR 15 II 1-11,13-15,17-18,21-22,24 295 EXCEL/8236NRR 17 II 1-11,13-15,17-18,21-22,24 296 EXCEL/8237RR 17 II Not Reported 297 EXCEL/8258RR 17 II 1-11,13-15,17-18,21-22,24 298 SABRE/145RR 9 I 1-11,13-15,17-18,21-22,24 299 SABRE/195RR 9,14 I 1-11,13-15,17-18,21-22,24					-
293 EXCEL/8226RR 17 II Not Reported 294 EXCEL/8227RR 15 II 1-11,13-15,17-18,21-22,24 295 EXCEL/8236NRR 17 II 1-11,13-15,17-18,21-22,24 296 EXCEL/8237RR 17 II Not Reported 297 EXCEL/8258RR 17 II 1-11,13-15,17-18,21-22,24 298 SABRE/145RR 9 I 1-11,13-15,17-18,21-22,24 299 SABRE/195RR 9,14 I 1-11,13-15,17-18,21-22,24					
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296 EXCEL/8237RR 17 II Not Reported 297 EXCEL/8258RR 17 II 1-11,13-15,17-18,21-22,24 298 SABRE/145RR 9 I 1-11,13-15,17-18,21-22,24 299 SABRE/195RR 9,14 I 1-11,13-15,17-18,21-22,24					
297 EXCEL/8258RR 17 II 1-11,13-15,17-18,21-22,24 298 SABRE/145RR 9 I 1-11,13-15,17-18,21-22,24 299 SABRE/195RR 9,14 I 1-11,13-15,17-18,21-22,24					
298 SABRE/145RR 9 I 1-11,13-15,17-18,21-22,24 299 SABRE/195RR 9,14 I 1-11,13-15,17-18,21-22,24					
299 SABRE/195RR 9,14 I 1-11,13-15,17-18,21-22,24					
300 SABRE/215RR 15 II 1-11,13-15,17-18,21-22,24					
	300	SABRE/215RR	15	II	1-11,13-15,17-18,21-22,24

Table D. 2003 Roundup Ready™ entries (continued)

No.	Brand / Variety	Table Number(s)	Mat. Grp.	Phytophthora Race resistance
301	SABRE/238RR	17	II	1-11,13-15,17-18,21-22,24
302	SABRE/282RR	17	II	
303	PETERSON/PFS 0410RR	7,9,11,14	I	1-11,13-15,17-18,21-22,24
304	PETERSON/PFS 0408RR	6,8,10,13	0	
305	PETERSON/EXP 0307RR	6,8,10,13	0	
306	SODAK GENETICS/SD1081RR	6,8,10,13	0	1-2,10-11,13,15-18,24
307	SODAK GENETICS/SD1091RR	6,8,10,13	0	1-2,10-11,13,15-18,24



Table 6. Warner, maturity group 0 Roundup Ready™ soybean test results, 2001-2003. Allen and Inel Ryckman Farm, seeded May 23.

							200	3
			bu/a sture)	2002 Prot.	2002 Oil	Ht.	Ldg.	Maturity Days after
Brand / Entry			2003	pct+	pct+	in.	Sc.~	
			E	Entries to	ested o	ne yea:	r	
DESOY/077RR			55			29	1	114
KRUGER/099+RR			52	•		30	1	116
KRUGER/066RR			50	•		28	1	116
ASGROW/AG0801			50	•		38	2	112
KRUGER/060RR		•	50		•	35	1	114
GOLD COUNTRY/2409RR			50			30	1	117
WENSMAN/W 2093RR			50	•		33	1	115
MUSTANG/M-094RR			50			32	1	118
GOLD COUNTRY/2305RR			50			37	1	113
NORTHSTAR/NS 0923RR	•		50	•	•	30	1	115
PRAIRIE BR./PB-0923RR			50			32	1	117
EXCEL/8055RR			50			31	1	116
DAIRYLAND/DSR-050/RR			50	•		33	1	114
WENSMAN/W 2062RR			49	•		34	1	115
PRAIRIE BR./PB-0623RR			49		•	27	1	115
KDUGED (001 DD			10			2.2	1	117
KRUGER/091RR	•	•	49		•	33	1	117
DEKALB/DKB10-51	•	•	49		1	31		115
MUSTANG/M-053RR	•		49 49		1	34	1 1	115
PRAIRIE BR./PB-0732RR			49		•	28	1	116
PETERSON/EXP 0307RR			48			34	2	115
GOLD COUNTRY/3809RR		•	48		•	33	1	115
DEN BESTEN/DB0900RR	•	•	48		•	28	1	115
KRUGER/101RR		•	48	•	•	32	1	116
MUSTANG/M-091RR	•	•	48	•	•	29	1	116
DESOY/055RR			4.0			2.1	1	111
DEKALB/DKB07-52			48	:	:	3 3	1	113
KRUGER/090RR			48			33	1	115
PRAIRIE BR./PB-1063RR			48	•		32	1	116
PRAIRIE BR./PB-1030RR	•	٠	47	•	•	31	1	118
PRAIRIE BR./PB-0920RR			47			30	1	114
SODAK GENETICS/SD1091R			47			35	1	118
MUSTANG/M-083RR			47			33	1	117
DAIRYLAND/DSR-040/RR			47			32	1	115
KRUGER/077RR			46			32	1	114

Table 6. Warner, maturity group 0 Roundup Ready™ test results (continued).

							2003	3
								Maturity:
	Yie	ld -	bu/a	2002	2002			Days
	(13%	mois	sture)	Prot.	Oil	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			Er	ntries te	ested o	ne yea	r	
SODAK GENETICS/SD1081R			46			32	1	116
WENSMAN/W 2103RR			46		•	32	2	116
DESOY/041RR			46			30	1	108
PRAIRIE BR./EXP1003RR			46		•	29	1	118
PRAIRIE BR./PB-1043RR	٠	•	46	•	•	31	1	117
MUSTANG/M-073RR			45			27	1	116
PETERSON/PFS 0408RR			45			24	1	116
WENSMAN/W 2085RR			45	•		27	1	118
MUSTANG/M-092RR			44			31	1	115
NORTHSTAR/NS 0954RR	•		44	•	•	29	1	120
KRUGER/100RR			44			33	1	114
PRAIRIE BR./PB-0812RR			44			32	1	115
KRUGER/082+RR			43		•	26	1	114
KRUGER/121+RR			43			32	1	116
DESOY/090RR			43		•	33	1	115
EXCEL/8046RR			42			32	2	115
MUSTANG/M-054RR			39			24	1	117
BIO GENE/BG091RR			39			32	1	113
Test average:	\ .\		47			32	1	115
LSD(5%) value (\$):			7					
Min.top yield value (\$):	: .		48					
Coef. of variation (#):			9					

^{\$/+} See yield / protein and oil sections, respectively.

[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat.

[#] Measure of experimental error: values of < 15% are desired.

Table 7. Warner, maturity group I Roundup Ready™ soybean test results, 2001-2003. Allen and Inel Ryckman Farm, seeded May 23.

							200	3
								Maturity:
			bu/a				_	Days
			ture)			Ht.		after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			E:	ntries te	ested o	ne yea:	r	
PRAIRIE BR./PB-1620RR			47			40	1	119
PETERSON/PFS 0410RR			46			30	1	117
KRUGER/223+RR			45			29	1	119
KRUGER/211+RR			44			32	1	120
MUSTANG/M-153RR		•	43	•	•	29	1	117
DYNA-GRO/DG 31C15RR			43			28	1	118
PRAIRIE BR./PB-1552RR	•		43		·	30	1	118
DEN BESTEN/DB1902RR	•		43	•	•	29	1	119
DEKALB/DKB19-52	•		43	•	•	32	1	120
KRUGER/223RR			43			29	1	121
1110 0211, 220111	•	•	10	·	·		_	
PRAIRIE BR./PB-1452RR			42			32	1	116
DYNA-GRO/DG 38J12RR			42			38	1	117
DESOY/161RR/SCN			42			27	1	118
KRUGER/202+RR			41			29	1	120
STINE/S0943-4			40			30	1	118
MUSTANG/M-101RR		•	40		1	32	1	114
MUSTANG/M-151RR		•	40		1	39	1	116
KRUGER/166RR	•	•	40		1	29	1	116
EXCEL/8120RR	()	•	40			36	1	117
EXCELLY 012 OUT			40		i	30	<u> </u>	117
DYNA-GRO/DG 33M14RR			40			32	1	116
STINE/S1100-4			39			33	1	116
NORTHSTAR/NS 1407RR			39			28	1	117
PRAIRIE BR./PB-1241RR			39			31	1	114
NORTHSTAR/NS 1207RR			39	•	•	30	1	115
PRAIRIE BR./PB-2112RR			39			31	1	121
PRAIRIE BR./PB-1943RR			38			30	1	120
ASGROW/AG2106			38			31	1	121
MUSTANG/M-163RR			38			34	1	119
MUSTANG/M-124RR			37			32	1	116
KRUGER/149RR			27			2 /	1	117
, -	•	•	37	•	•	34	1	117
EXCEL/8131RR	•	•	36	•	•	35	1	115
GOLD COUNTRY/6016RR	•	•	36	•	•	40	1 1	116
KRUGER/155+RR	•	•	36	•	•	33		116
DEN BESTEN/DB1303RR	•	•	36	•	•	33	1	116

Table 7. Warner, maturity group I Roundup Ready™ test results (continued).

						2003	3
Brand / Entry	mois	bu/a sture) 2003	2002 Prot. pct+	2002 Oil pct+	Ht. in.	Ldg. Sc.~	
		En	tries te	ested or	ne yea	r	
DESOY/191RR		36			33	1	122
DESOY/194RR		35			34	1	120
KRUGER/171ARR		34			30	1	119
KRUGER/171RR		33	•	•	29	1	118
MUSTANG/M-174RR		32			31	1	119
DYNA-GRO/DG 3190RR		32			31	1	122
NORTHSTAR/NS 1624RR		31			34	2	119
KRUGER/222A		31			35	1	121
PRAIRIE BR./PB-1921RR		30		•	32	1	121
Test average:		38	•		33	1	118
LSD(5%) value (\$):		8					
Min.top yield value (\$)		39					
<pre>Coef. of variation (#):</pre>		12					

^{\$/+} See yield / protein and oil sections, respectively.

[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. # Measure of experimental error: values of < 15% are desired.

Table 8. South Shore, maturity group 0 Roundup Ready™ soybean test results, 2001-2003. NE Research Farm, seeded May 27.

							200	3
Brand / Entry			bu/a sture) 2003	2002 Prot. pct+	2002 Oil pct+	Ht. in.	Ldg. Sc.~	Maturity: Days after seeding
				tries te	sted th	ree ye	ars	
DEKALB/DKB10-51	39	39	22	34.5	18.5	24	1	115
NORTHSTAR/NS 0954RR	39	38	23	35.9	18.6	23	1	114
KRUGER/091-1RR	37	36	22	35.1	18.4	24	1	113
KRUGER/099+RR	37	36	23	36.2	18.8	24	1	112
ASGROW/AG0801	37	34	19	33.7	18.7	25	1	111
MUSTANG/M-091RR	36	36	22	35.6	18.5	23	1	112
PRAIRIE BR./PB-0920RR	36	35	23	35.7	18.7	24	1	114
PRAIRIE BR./PB-1030RR	36	36	20	34.9	18.5	27	1	116
DEN BESTEN/DB0900RR	35	34	21	35.5	19.2	24	1	112
SODAK GENETICS/SD1091R	34	34	19	36.6	18.9	25	1	114
	Entries tested two years							
MUSTANG/M-083RR		37	23	36.6	19.1	25	1	116
PRAIRIE BR./PB-0732RR		37	20	35.1	18.9	19	1	113
DAIRYLAND/DSR-040/RR		36	21	34.2	18.9	26	1	111
KRUGER/060RR		36	23	35.1	18.6	24	1	110
MUSTANG/M-092RR		36	22	36.0	18.8	24	1	114
STINE/S0846-4		35	21	36.0	19.2	25	1	113
WENSMAN/W 2093RR		35	19	35.8	18.7	23	1	114
PRAIRIE BR./PB-0812RR		34	22	35.6	19.1	27	1	113
BIO GENE/BG091RR		34	19	35.4	18.6	25	1	112
TOP FARM/6102RR		34	21	35.2	19.4	22	1	114
SODAK GENETICS/SD1081R		33	21	33.9	19.9	25	1	113
DAIRYLAND/DSR-050/RR	•	32	21	33.5	19.2	21	1	113
TOP FARM/6072RR	•	30	18	34.6	18.9	22	1	113
10F 1'ARM/00/2KK	٠	30		ntries te			-	113
GOLD COUNTRY/2409RR			24			24	1	116
MUSTANG/M-053RR	•		24	•		27	1	112
NORTHSTAR/NS 0923RR	•	•	24	•	•	25	1	114
DESOY/077RR			23	· ·		22	1	114
KRUGER/121+RR	•		23	•	•	23	1	116
III.OODII/ IZII IIII	•	•	25	•	•	25	<u> </u>	110
MUSTANG/M-094RR			22			23	1	115
SANDS/SOI 0931RR			22			22	1	113
KRUGER/066RR			22			22	1	111
WENSMAN/W 2085RR			22			21	1	118

Table 8. South Shore, maturity group 0 Roundup Ready™ test results (continued).

							200	3
Brand / Entry		mois	bu/a sture) 2003	2002 Prot. pct+		Ht. in.	Ldg. Sc.~	Maturity: Days after seeding
Brand / Bircry							50.	
				tries te	ested o			
SANDS/SOI 1050RR	•		21	•	•	24	1	116
PRAIRIE BR./EXP1003RR		•	21	•	•	24	1	116
DEKALB/DKB07-52		•	21		•	25	1	110
PRAIRIE BR./PB-0623RR		•	21	•	•	20	1	112
WENSMAN/W 2062RR	•	•	21	•	•	26	1	111
PRAIRIE BR./PB-0923RR			21			22	1	115
KRUGER/101RR			21			23	1	116
ZILLER/BT 7084R			21			22	1	114
GARST/0901RR			20			24	1	116
DAIRYLAND/DSR-075/RR	•	•	20	•		23	1	113
DESOY/090RR			20			23	1	115
WENSMAN/W 2103RR			20			23	1	116
PRAIRIE BR./PB-1063RR			20			23	1	115
DESOY/055RR			19			23	1	110
PRAIRIE BR./PB-1043RR			19			22	1	116
KRUGER/091RR			19			23	1	113
DESOY/041RR	•	•	19			22	1	111
KRUGER/077RR	•	•	18			23	1	111
PETERSON/EXP 0307RR			18			23	1	111
Fillinger, Ext. 030 / file						23	_	111
MUSTANG/M-073RR			18			20	1	114
MUSTANG/M-054RR		•	17		•	20	1	114
KRUGER/082+RR			17			20	1	114
PETERSON/PFS 0408RR	٠	•	17	•	•	18	1	113
Test average:	37	35	21	35.2	18.9	24	1	113
LSD(5%) value (\$):	NS	NS	4					
Min.top yield value (\$):	34	30	20					
Coef. of variation (#):	10	11	13					

^{\$/+} See yield / protein and oil sections, respectively.

 $[\]sim$ Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Table 9. South Shore, maturity group I Roundup Ready™ soybean test results, 2001-2003. NE Research Farm, seeded May 27.

•							200	3
December 1 / Debens	(13%	mois	bu/a sture)	2002 Prot.		Ht.	Ldg.	
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			Ent	ries tes	sted th	ree ye	ars	
DEN BESTEN/DB1902RR	35	36	21	33.6	19.7	22	1	123
DAIRYLAND/DSR-130/RR	34	32	18	35.0	18.9	26	1	115
ZILLER/BT 7150R	34	33	21	33.3	19.3	29	1	117
PRAIRIE BR./PB-1620RR	34	35	22	33.5	18.8	29	1	116
MUSTANG/M-151RR	33	35	20	33.1	19.2	27	1	116
GOLD COUNTRY/6016RR	33	33	21	33.5	19.1	27	1	118
PRAIRIE BR./PB-1241RR	31	29	20	36.3	19.2	21	1	115
MUSTANG/M-101RR	30	30	18	35.4	19.0	24	1	115
				itries te			rs	
KRUGER/211+RR		37	21	34.3	18.9	23	1	122
KRUGER/166RR		35	18	35.2	18.6	22	1	120
ZILLER/BT 7106R	•	34	21	34.6	18.8	22	1	115
KRUGER/202+RR		34	19	33.9	19.2	19	1	122
ASGROW/AG1401	•	34	22	32.8	19.8	26	1	115
KRUGER/155+RR		34	19	36.3	19.2	25	1	116
EXCEL/8120RR		33	16	35.1	19.0	27	1	115
MUSTANG/M-153RR		33	19	35.2	18.8	23	1	119
PRAIRIE BR./PB-1921RR		33	19	35.0	18.9	23	1	124
NORTHSTAR/NS 1407RR		32	19	36.4	18.6	25	1	116
DESOY/191RR		32	18	34.1	19.5	22	1	124
DYNA-GRO/DG 38J12RR		32	18	37.0	17.5	26	1	116
PRAIRIE BR./PB-1552RR		32	18	35.6	18.6	23	1	120
ASGROW/AG1701		32	16	34.4	19.3	22	1	119
DEN BESTEN/DB1303RR		30	18	36.7	18.8	23	1	116
PRAIRIE BR./PB-1452RR		30	18	36.7	18.8	25	1	117
MUSTANG/M-163RR		30	19	36.0	18.1	22	1	120
GOLD COUNTRY/2315RR		30	18	34.5	18.9	23	1	120
DYNA-GRO/DG 33M14RR		29	19	37.0	19.1	23	1	116
				itries te	ested o			
MIDWEST SEED/GR1710	•		22	•	•	26	1	117
PRAIRIE BR./PB-1943RR	•	•	21	•	•	21	1	122
SANDS/SOI 1515RR	•		21	•	•	26	1	118
MUSTANG/M-174RR	•		21	•	•	23	1	121
STINE/S1100-4	•	٠	21	•	•	22	1	116
SABRE/145RR			21			24	1	118
KRUGER/223+RR		•	21			21	1	123
NORTHSTAR/NS 1207RR	•		21	•	•	26	1	115

Table 9. South Shore, maturity group I Roundup Ready™ test results (continued).

							200	3
Brand / Entry			bu/a ture) 2003	2002 Prot. pct+	2002 Oil pct+	Ht. in.	Ldg. Sc.~	Maturity: Days after seeding
			Er	ntries te	ested o	ne yea	 r	
KRUGER/149RR			21			26	1	116
KRUGER/171RR			20	•	•	21	1	121
DEKALB/DKB19-52			20			24	1	121
STINE/S0943-4	٠	٠	20	٠	•	24	1	116
TOP FARM/EXP34043BRR			20			24	1	116
SANDS/EXP 1751RR			19			22	1	121
DAIRYLAND/DSR-132/RR			19		•	26	1	119
MUSTANG/M-124RR			19		•	22	1	116
KRUGER/223RR			19	•	•	21	1	124
SANDS/SOI 1441RR			19			24	1	116
GARST/XR18P04			19		•	26	1	121
PETERSON/PFS 0410RR			19			22	1	114
ZILLER/BT 7143R			19			23	1	115
DESOY/161RR/SCN			19		•	22	1	121
SABRE/195RR			19			23	1	123
SANDS/SOI 1730RR	•		19		1	21	1	121
TOP FARM/EXP35260RR	•	•	19			24	1	123
KRUGER/171ARR			19			22	1	121
ASGROW/AG2106			19			22	1	124
NORTHSTAR/NS 1624RR			18			25	1	124
DYNA-GRO/DG 3190RR			18			23	1	125
KRUGER/222A			18	•	•	25	1	125
PRAIRIE BR./PB-2112RR			18			23	1	123
DESOY/194RR			18	•		23	1	124
TOP FARM/6202RR			17		•	22	1	121
DYNA-GRO/DG 31C15RR	•	•	16	•	•	22	1	120
Test average:	32	32	19	35.1	19.0	24	1	119
LSD(5%) value (\$):	NS	NS	NS					
Min.top yield value (\$):		28	16					
Coef. of variation (#):	8	10	11					

^{\$/+} See yield / protein and oil sections, respectively.

 $[\]sim$ Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Table 10. Yale, maturity group 0 Roundup Ready™ soybean test results, 2001-2003. Kim Tschetter Farm, seeded May 22.

							200	3		
							200	Maturity:		
	Yie	ld -	bu/a	2002	2002			Days		
	(13%	mois	ture)	Prot.	Oil	Ht.	Ldg.	after		
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding		
			Ent	ries tes	sted th	ree ve	ars			
DEKALB/DKB10-51	37	34	24	33.2	19.9	24	1	113		
KRUGER/121+RR	35	31	19	34.0	20.3	22	1	113		
SODAK GENETICS/SD1091R	35	31	20	35.1	19.8	25	1	115		
PRAIRIE BR./PB-1030RR	34	30	29	33.3	19.8	24	1	112		
DEN BESTEN/DB0900RR	34	32	24	33.5	20.4	25	1	113		
PRAIRIE BR./PB-0920RR	34	31	24	34.2	19.5	25	1	115		
MUSTANG/M-091RR	33	31	26	34.3	20.3	26	1	115		
KRUGER/099+RR	33	29	21	33.8	19.9	23	1	115		
NORTHSTAR/NS 0954RR	33	30	21	35.1	19.1	23	1	115		
	Entries tested two years									
KRUGER/090RR		36	31	34.9	19.7	30	1	117		
DAIRYLAND/DSR-050/RR		35	35	32.9	19.9	28	1	114		
SODAK GENETICS/SD1081R		33	27	33.3	20.7	28	1	114		
PRAIRIE BR./PB-0812RR		32	23	34.9	20.2	27	1	114		
MUSTANG/M-092RR		32	29	34.7	20.3	24	1	116		
(0.5	0.1	22.6	100			112		
BIO GENE/BG091RR	•	26	21	33.6	19.8	26	1	113		
	/			ntries te	ested or			445		
PRAIRIE BR./PB-1063RR	•	•	32		•	27	1	117		
PRAIRIE BR./EXP1003RR	•	•	29		•	28	1	118		
MUSTANG/M-094RR	•		29		•	23	1	113		
KRUGER/091RR		•	29		-	28	1	113		
DESOY/090RR			28			26	1	116		
PETERSON/EXP 0307RR			28			26	1	113		
NORTHSTAR/NS 0923RR			24			25	1	115		
PETERSON/PFS 0408RR			24			22	1	115		
MUSTANG/M-083RR			23			26	1	114		
WENSMAN/W 2103RR			22			23	1	114		
PRAIRIE BR./PB-1043RR	•		22	•		27	1	114		
DAIRYLAND/DSR-075/RR	•		22	•		23	1	111		
KRUGER/091-1RR	•	•	21	•	•	26	1	111		
KRUGER/121ARR	•	•	20	•	•	23	1	116		
VVOGEV / ISTAVV	•	•	∠ ∪	•	•	43	Т	TT0		

Table 10. Yale, maturity group 0 Roundup Ready™ test results (continued).

							200	3 Maturity:
		ld - mois	bu/a sture)	2002 Prot.	2002 Oil	Ht.	Ldg.	Days
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			E1	ntries te	ested o	ne yea	r	
KRUGER/101RR			20	•		25	1	114
PRAIRIE BR./PB-0923RR			20	•		23	1	113
KRUGER/100RR			20	•	•	26	1	115
Test average:	34	32	25	34.1	20.0	26	1	114
LSD(5%) value (\$):	NS	NS	6					
Min.top yield value (\$):	: 33	26	29					
<pre>Coef. of variation (#):</pre>	9	10	16					

^{\$/+} See yield / protein and oil sections, respectively.

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[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Table 11. Yale, maturity group I Roundup Ready™ soybean test results, 2001-2003. Kim Tschetter Farm, seeded May 22.

							200	2003	
								Maturity:	
			bu/a	2002	2002			Days	
	(13%	mois	sture)	Prot.	Oil	Ht.	Ldg.	after	
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding	
			E1	ntries tes	sted th	ree ye	ars		
DEN BESTEN/DB1902RR	42	37	28	32.0	20.2	23	1	122	
KRUGER/223+RR	39	33	23	32.1	20.6	24	1	120	
PRAIRIE BR./PB-1620RR	38	34	25	31.6	19.9	28	1	117	
MUSTANG/M-151RR	37	32	27	31.9	20.2	32	1	118	
PRAIRIE BR./PB-1241RR	36	30	23	34.1	20.5	25	1	114	
GOLD COUNTRY/6117RR	36	29	20	32.7	21.1	32	1	121	
				Entries te		wo yea			
PRAIRIE BR./PB-2112RR		36	25	33.1	19.2	27	1	122	
MUSTANG/M-101RR		35	29	32.6	20.3	26	1	116	
NORTHSTAR/NS 1407RR		33	25	33.9	20.1	26	1	116	
MUSTANG/M-163RR		32	25	33.6	19.4	27	1	120	
KRUGER/155+RR	•	32	27	34.0	20.3	29	1	118	
KRUGER/202+RR		32	23	31.7	20.5	21	1	121	
DYNA-GRO/DG 33M14RR		31	21	33.7	20.5	24	1	116	
WENSMAN/W 2162RR		31	22	34.0	19.3	25	1	120	
DEN BESTEN/DB1303RR		31	19	33.4	20.5	26	1	115	
WENSMAN/W 2145RR		30	23	34.0	20.3	27	1	117	
DYNA-GRO/DG 38J12RR		30	25	34.1	19.3	27	1	116	
KRUGER/211+RR		30	21	32.7	20.0	25	1	122	
DESOY/191RR		29	16	32.2	20.0	27	1	123	
PRAIRIE BR./PB-1552RR		29	16	32.1	20.5	22	1	117	
PRAIRIE BR./PB-1452RR		29	21	34.0	20.6	24	1	117	
MUSTANG/M-153RR		29	18	33.1	20.1	23	1	116	
DAIRYLAND/DSR-155/RR		29	18	33.9	20.3	22	1	117	
ASGROW/AG1701		28	21	33.3	20.3	24	1	117	
KRUGER/166RR		27	18	32.2	20.4	23	1	118	
TOP FARM/6202RR		27	16	33.6	20.8	27	1	119	
PRAIRIE BR./PB-1921RR		26	15	32.2	20.1	26	1	124	
KRUGER/223RR			30	Entries to	·	ne yea 24	1	119	
DAIRYLAND/DSR-132/RR	•		29	•		27	1	117	
MUSTANG/M-124RR	•		28	•		28	1	117	
PRAIRIE BR./PB-1943RR			28	•		25	1	120	
WENSMAN/W 2186RR	•	•	27	•	•	27	1	122	
MYDOT7 M /NWLICHIA	•	•	∠ /	•	•	۷ /		144	

Table 11. Yale, maturity group I Roundup Ready™ test results (continued).

							2003	3
								Maturity:
		ld -	, -	2002	2002			Days
	(13%	mois	ture)	Prot.	Oil	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			En	tries te	ested o	ne yea	r	
DEKALB/DKB19-52			26			25	1	118
THOMPSON/T-7205RR			25			24	1	121
DESOY/161RR/SCN	•	•	25	•	•	22	1	119
NORTHSTAR/NS 1207RR			22	•		25	1	115
THOMPSON/EXP7213RR			22			31	1	121
PETERSON/PFS 0410RR			22			25	1	115
KRUGER/149RR			22			32	1	116
DESOY/194RR			21	•	•	26	1	120
STINE/S1100-4			21			27	1	117
TOP FARM/EXP35260RR			20			25	1	122
ASGROW/AG2106			19			25	1	119
KRUGER/171RR			19			23	1	119
THOMPSON/T-7217RR		•	18	•	•	30	1	124
EXCEL/8173RR			18			28	1	122
KRUGER/222A	\		17			28	1	121
MUSTANG/M-174RR			16			22	1	118
DYNA-GRO/DG 31C15RR			15			25	1	116
DYNA-GRO/DG 3190RR			15			25	1	124
KRUGER/171ARR			15			25	1	118
NORTHSTAR/NS 1624RR	•		14		•	28	1	118
Test average:	38	31	22	33.1	20.2	27	1	118
LSD(5%) value (\$):	NS	NS	5					
Min.top yield value (\$)	: 36	26	25					
Coef. of variation (#):		11	15					

^{\$/+} See yield / protein and oil sections, respectively.

 $[\]sim$ Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant.

[#] Measure of experimental error: values of < 15% are desired.

Yale, maturity group II Roundup Ready™ soybean test results, 2001-2003. Kim Tschetter Farm, seeded May 22.

Secucia May 22.								2
							200	3 Maturity:
	Yie	1d -	bu/a	2002	2002			Days
			sture)	Prot.		Ht.	Ldg.	
Brand / Entry	3yr		2003	pct+		in.	Sc.~	
			En	ntries te	ested o	ne vea	r	
PRAIRIE BR./PB-2243RR			32			24	1	123
MUSTANG/M-203RR			30		•	26	1	120
DEKALB/DKB22-51			30		•	26	1	122
MIDWEST SEED/GR2037			27			24	1	118
MUSTANG/M-201RR		•	26			23	1	120
PRAIRIE BR./PB-2343RR			25			26	1	124
TOP FARM/EXP321044RR			24			25	1	121
DYNA-GRO/DG 3200RR			24	•		23	1	121
STINE/S2116-4			24	•		24	1	120
PRAIRIE BR./PB-2141RR			22			25	1	121
MUSTANG/M-234RR			22			26	1	121
PRAIRIE BR./PB-2397RR			21	•		29	1	124
PRAIRIE BR./PB-2352RR			21			27	1	121
DYNA-GRO/DG 3218RR			21			29	1	122
ASGROW/AG2403		•	21			25	1	124
PRAIRIE BR./PB-2421RR			21			26	1	123
DEN BESTEN/DB2303RR			21			27	1	126
WENSMAN/W 2211RR			21			26	1	120
DYNA-GRO/DG 3223RR			20			27	1	125
ASGROW/AG2302		•	20			26	1	119
ASGROW/AG2107			20			27	1	119
DYNA-GRO/DG 3232RR			18			29	1	124
MUSTANG/M-224RR			15			24	1	125
Test average:		•	23			27	1	121
LSD(5%) value (\$):			4					
Min.top yield value (\$):	: .		28					
Coef. of variation (#):			11					

^{\$/+} See yield / protein and oil sections, respectively. ~ Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat.

[#] Measure of experimental error: values of < 15% are desired...

Table 13. Brookings, maturity group 0 Roundup Ready™ soybean test results, 2001-2003. SDSU Agronomy Farm, seeded May 20.

							200	3
								Maturity:
	Yie	1d - 1	bu/a	2002	2002			Days
	(13%	mois	ture)	Prot.	Oil	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
-	-	-		-	-			
			Ent	ries te	sted th	ree ye	ars	
KRUGER/121+RR	46	47	42	37.1	18.5	33	1	116
NORTHSTAR/NS 0954RR	44	45	44	37.0	18.1	28	1	117
DEKALB/DKB10-51	43	44	44	37.8	17.7	33	1	119
KRUGER/099+RR	42	43	41	38.1	18.6	28	1	114
MUSTANG/M-091RR	42	43	43	38.2	18.4	28	1	114
DEN BESTEN/DB0900RR	41	41	42	38.8	17.9	28	1	114
SODAK GENETICS/SD1091R	39	41	37	39.1	17.7	32	1	117
			En	tries to	ested to	wo yea	rs	
MUSTANG/M-083RR		44	44	38.2	18.5	32	1	118
PRAIRIE BR./PB-0812RR		44	44	38.8	18.0	32	1	117
SODAK GENETICS/SD1081R		44	40	38.5	17.2	32	1	118
TOP FARM/6102RR		42	43	37.6	18.3	31	1	115
KRUGER/090RR		42	43	39.0	18.3	32	1	116
, , , , , , , , , , , , , , , , , , , ,								
MUSTANG/M-092RR		42	39	38.4	18.1	30	1	116
BIO GENE/BG091RR		39	36	36.9	17.6	32	1	114
TOP FARM/6072RR		36	35	38.7	17.7	27	1	115
			En	tries to	ested or	ne yea	r	
KRUGER/101RR			46			29	1	119
KRUGER/091-1RR			46			30	1	118
LATHAM/EXP-E0710R			45			31	1	114
LATHAM/EXP-E0830R			45			29	1	115
PETERSON/PFS 0408RR			43			26	1	116
		•		·	•		_	
WENSMAN/W 2103RR			43			29	1	117
KRUGER/121ARR			43			32	1	117
GARST/0901RR			43	-		33	1	115
PRAIRIE BR./PB-1043RR			42			30	1	117
KRUGER/091RR			42	•	:	31	1	117
THEOGENE, OF THE	•	•	12	•	•	3 ±	_	
DEKALB/DKB07-52			42			31	1	111
PRAIRIE BR./PB-1063RR			41			30	1	117
PRAIRIE BR./PB-0923RR			41	•	•	30	1	119
ZILLER/BT 7084R	•	•	41	•		28	1	115
SANDS/SOI 0931RR	•	•	41	•	•	29	1	117
DUTCEO TOG VOLUM	•	•	# T	•	•	ムラ		T T /

Table 13. Brookings, maturity group 0 Roundup Ready™ test results (continued).

							200	3		
Brand / Entry		mois	bu/a ture) 2003	2002 Prot. pct+	2002 Oil pct+	Ht.	Ldg. Sc.~			
	Entries tested one year									
DESOY/090RR			40			31	1	117		
MUSTANG/M-094RR			40	•		31	1	117		
PETERSON/EXP 0307RR			39	•		30	1	114		
LATHAM/L0930R			39	•		31	1	117		
NORTHSTAR/NS 0923RR	•	•	38	•	•	29	1	115		
DAIRYLAND/DSR-075/RR			38			28	1	113		
SANDS/SOI 1050RR			38	•		31	1	118		
KRUGER/100RR			37	•		32	1	118		
LATHAM/EXP-E0835R		•	37		•	28	1	114		
Test average: LSD(5%) value (\$): Min.top yield value (\$) Coef. of variation (#):	42 NS : 39	43 NS 36 8	41 5 41 7	38.1	18.0	31	1	116		

^{\$/+} See yield / protein and oil sections, respectively.

 $[\]sim$ Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Table 14. Brookings, maturity group I Roundup Ready™ soybean test results, 2001-2003. SDSU Agronomy Farm, seeded May 20.

•							2003			
			bu/a sture)	2002 Prot.	2002 Oil	Ht.	Ldq.	Maturity: Days after		
Brand / Entry	3yr		2003	pct+	pct+	in.	Sc.~	seeding		
			7							
KDUGED /222 - DD				ries tes			ars 1	120		
KRUGER/223+RR	52 50	54 52	51 50	34.8 34.7	18.7 18.2	29 28	1	129 127		
DEN BESTEN/DB1902RR							1			
THOMPSON/T-7205RR	49	52	47	34.7	18.3	30	-	128		
THOMPSON/T-7217RR	48	49	43	36.1	18.2	34	1	131		
KRUGER/222+RR	46	47	38	37.1	17.5	33	1	128		
ZILLER/BT 7150R	46	48	47	34.5	18.3	34	2	123		
HY-VIGOR/H-174RR	46	46	42	37.2	16.8	30	1	122		
PRAIRIE BR./PB-1620RR	44	45	39	35.4	17.8	33	2	119		
NORTHSTAR/NS 1624RR	44	46	42	35.5	17.6	34	1	127		
PRAIRIE BR./PB-1241RR	43	43	39	37.2	18.4	29	1	115		
SANDS/SOI 1515RR	43	44	40	38.5	17.4	33	1	120		
MUSTANG/M-151RR	43	45	40	34.3	17.7	35	1	121		
COYOTE/9419RR	40	41	36	37.3	18.0	36	1	127		
001012, 3113141				tries te			_			
DESOY/191+RR		52	48	33.8	19.5	29	1	125		
STINE/S1918-4		51	46	34.9	18.6	29	1	127		
KALTENBERG/KB153RR		50	51	37.4	17.6	30	1	122		
DESOY/191RR		50	44	36.0	18.0	34	1	130		
KRUGER/202+RR		50	47	34.2	18.6	29	1	129		
MUSTANG/M-153RR		49	43	36.4	17.6	30	1	121		
DAIRYLAND/DSR-199/RR		49	44	36.7	17.9	34	1	129		
EXCEL/8193RR		48	45	36.0	18.1	33	1	130		
ZILLER/BT 7193R		48	44	36.1	17.8	32	1	131		
PRAIRIE BR./PB-2112RR	•	48	44	35.3	18.2	30	1	129		
MUSTANG/M-163RR		47	47	37.7	17.2	34	1	125		
PRAIRIE BR./PB-1552RR		47	47	35.6	18.2	29	1	123		
KRUGER/211+RR	•	47	45	35.0	18.4	30	1	129		
DAIRYLAND/DSR-155/RR		47	45	37.3	18.1	32	1	122		
GOLD COUNTRY/1319RR	•	47	43	36.6	17.9	33	1	130		
GOLD COUNTRY/1319RR	•	4 /	43	30.0	17.9	33	Τ.	130		
DYNA-GRO/DG 33M14RR		47	46	37.4	18.0	34	1	120		
PRAIRIE BR./PB-1921RR		47	44	35.8	17.6	32	1	129		
PRAIRIE BR./PB-1452RR		46	42	37.2	18.5	33	1	118		
KALTENBERG/KB172RR		46	41	36.2	18.3	32	1	125		
ASGROW/AG1701		46	43	37.0	17.8	31	1	122		

Table 14. Brookings, maturity group I Roundup Ready™ test results (continued).

							200	3
								Maturity:
			bu/a	2002	2002			Days
	(13%	mois	sture)	Prot.	Oil	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			E	Intries to	ested to	wo yea	rs	
WENSMAN/W 2145RR		45	42	37.4	18.4	34	1	117
MUSTANG/M-101RR		45	48	37.3	17.9	29	1	119
RENK/RS199RR		45	38	34.3	19.4	35	2	127
CROWS/C1630R		44	43	35.3	17.5	33	2	125
NORTHSTAR/NS 1407RR		44	43	37.7	18.1	33	1	119
KALTENBERG/KB161RR		44	38	35.2	18.1	36	1	119
DEN BESTEN/DB1303RR		44	46	37.9	17.9	33	1	119
WENSMAN/W 2186RR		43	41	36.9	18.1	30	1	127
WENSMAN/W 2162RR	•	43	42	37.7	17.1	27	1	123
RENK/RS172RR		41	39	38.0	17.5	31	1	125
KLIMIC/ KOT / ZIKIC	•	41		Intries to			_	123
DYNA-GRO/DG 31C15RR			48			27	1	123
SABRE/195RR	•		48	•	•	32	2	129
PRAIRIE BR./PB-1943RR	•		47	•		29	1	130
PETERSON/PFS 0410RR	•		47	•	•	29	1	121
DESOY/161RR/SCN	•	•	47			29	1	123
DESOT/TOTAK/SCN		·	4 /		1	29	1	123
TOP FARM/EXP34043BRR			46			35	1	120
THOMPSON/EXP7213RR			46			37	1	131
ASGROW/AG2106			45			31	1	129
KRUGER/223RR			45			29	1	130
SANDS/EXP 1751RR			45			28	1	121
MUSTANG/M-124RR			44			31	1	117
LATHAM/367RR			44			33	1	130
LATHAM/EXP-E1030R			44			30	1	121
MUSTANG/M-174RR			44			29	1	124
TOP FARM/EXP35260RR			43			32	1	126
DYNA-GRO/DG 3190RR			43			33	1	132
LATHAM/EXP-E1800R			43		•	34	1	129
KRUGER/222A			42	•		31	1	132
DESOY/194RR			42			31	2	130
EXCEL/8173RR	•		42	•		30	2	132
SANDS/SOI 1441RR			42			33	1	119
LATHAM/148RR			42		·	32	1	117
DAIRYLAND/DSR-101/RR	•		42	•	•	31	1	119
KRUGER/171RR	•	•	42	•	•	31	1	123
DEKALB/DKB19-52	•	•	41	•	•	31	1	127
$DTIVETID \setminus DIVDT 3 - 37$	•	•	4.7	•	•	JΙ	_	14/

Table 14. Brookings, maturity group I Roundup Ready™ test results (continued).

							2003	3
Brand / Entry		mois	bu/a sture) 2003	2002 Prot. pct+	2002 Oil pct+	Ht.	Ldg. Sc.~	
			En	tries te	ested o	ne vea	r	
ZILLER/BT 7143R			41			32	1	119
NORTHSTAR/NS 1207RR			40			31	1	117
LATHAM/EXP-E1750R			40			30	1	122
MUSTANG/M-194NRR			40			32	1	124
KRUGER/171ARR		•	40	•	•	29	1	125
DYNA-GRO/DG 38J12RR			39			32	1	117
GARST/XR18P04			38			32	1	127
PUBLIC/SD00-236R			37			34	2	120
HY-VIGOR/199XRR			36			36	1	127
SANDS/SOI 1730RR	•	٠	34	•	•	31	1	122
Test average:	45	46	43	36.3	18.0	32	1	124
LSD(5%) value (\$):	4	6	7					
Min.top yield value (\$)	: 48	48	44					
Coef. of variation (#):	10	10	10					

^{\$/+} See yield / protein and oil sections, respectively.

[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat.

[#] Measure of experimental error: values of < 15% are desired.

Table 15. Brookings, maturity group II Roundup Ready™ soybean test results, 2001-2003. SDSU Agronomy Farm, seeded May 20.

Social May 25.							200	3	
								Maturity:	
	Yie	ld -	bu/a	2002	2002			Days	
			sture)	Prot.		Ht.	Ldg.	_	
Brand / Entry	3yr		2003	pct+		in.	Sc.~		
			Ent	ries tes	sted th	ree ye	ars		
MUSTANG/M-201RR	52	54	48	35.0	18.3	31	1	130	
KRUGER/262-2RR	51	54	46	35.6	18.8	33	1	132	
PRAIRIE BR./PB-2141RR	51	56	49	34.3	18.9	28	1	129	
ASGROW/AG2302	50	52	42	36.2	18.4	33	1	127	
KRUGER/250RR	49	51	43	36.3	18.3	35	2	133	
PRAIRIE BR./PB-2397RR	49	53	46	37.3	17.7	36	2	138	
DYNA-GRO/DG 3223RR	46	49	42	36.7	17.9	35	2	132	
		Entries tested two years							
SANDS/SOI 2143RR		57	51	35.3	18.4	31	1	128	
LATHAM/L2136R		57	48	35.3	18.1	30	1	129	
MUSTANG/M-203RR		56	51	35.8	18.2	30	1	130	
GOLD COUNTRY/6221RR		55	46	36.0	17.7	30	1	130	
MUSTANG/M-243RR	•	54	48	34.5	18.8	32	1	133	
MIDWEST SEED/GR2037		54	49	36.5	17.6	31	1	130	
CROWS/C2130R		54	46	36.0	18.5	31	1	130	
PRAIRIE BR./PB-2552RR		54	48	37.8	16.6	34	1	134	
KRUGER/268RR		54	45	34.3	18.9	31	1	132	
KRUGER/269RR		54	47	37.3	17.2	34	1	135	
THOMPSON/T-7225RR		54	43	36.9	17.9	34	1	130	
KRUGER/211RR		53	44	36.0	17.8	31	1	129	
DEKALB/DKB22-51		53	43	36.0	18.0	31	1	131	
LATHAM/678RR		52	41	37.0	17.3	33	1	133	
PRAIRIE BR./PB-2352RR		52	46	33.7	18.6	36	1	129	
EXCEL/8200RR		51	42	36.1	18.2	33	1	132	
RENK/RS212RR		51	45	34.6	18.0	33	1	130	
DEN BESTEN/DB2303RR		50	42	36.6	17.8	32	1	138	
PRAIRIE BR./PB-2421RR		50	41	35.7	18.2	31	2	132	
DYNA-GRO/DG 3200RR		48	36	35.6	17.7	30	1	133	
22111 6116, 26 6266111				ntries te			-		
SABRE/215RR			50			30	1	128	
PRAIRIE BR./PB-2343RR			50			34	1	134	
RENK/RS223RR			49			32	1	130	
SANDS/SOI 2141ARR			49			31	1	130	
WENSMAN/W 2211RR			49			30	1	130	
STINE/S2400-4			48			33	1	135	
TOP FARM/EXP321044RR			47			32	1	130	

Table 15. Brookings, maturity group II Roundup Ready™ test results (continued).

							200	3
								Maturity:
			bu/a	2002	2002			Days
	•		sture)	Prot.	Oil	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			E	ntries te	ested or	ne yea	r	
KRUGER/233+RR			47		•	31	1	133
DAIRYLAND/DSR-234/RR			47			30	1	133
COYOTE/9524RR			47			31	1	132
LATHAM/EXP-E2350R			46			34	1	136
MUSTANG/M-234RR			46	•		29	1	133
MUSTANG/M-224RR			46	•		33	2	132
KRUGER/230RR			46			33	1	131
JACOBSEN/EXP J733R			45			33	1	131
PRAIRIE BR./PB-2243RR			45			33	1	130
STINE/S2116-4			44	•		27	1	132
LATHAM/EXP-E2336R			44			30	1	132
PRAIRIE BR./PB-2443RR	•		44	•		30	2	133
THOMPSON/T-7252RR	•	•	43	•	•	32	1	133
JACOBSEN/EXP J730NR	•	•	43	•	•	33	1	128
DYNA-GRO/DG 3218RR	•		43		_ :_	34	1	135
DINA-GRO/DG 5216KK		•	43			24	+	133
DESOY/260RR			43			35	1	133
DYNA-GRO/DG 3232RR		•	43			34	2	135
KRUGER/270RR	•	•	42		•	35	2	138
THOMPSON/EXP7259RR	•		42		•	33	2	137
	,				•			
THOMPSON/EXP7239RR	•	•	42		•	31	1	130
ASGROW/AG2107			42			32	1	127
EXCEL/8227RR			41			31	1	131
COYOTE/EXP721RR			40			31	1	129
THOMPSON/T-7243RR			40			35	2	132
KRUGER/252RR	•		40	•		34	1	134
KRUGER/251RR			39			36	1	137
THOMPSON/EXP7221RR			38		•	32	1	127
Test average:	49	52	44	36.0	18.1	33	1	131
LSD(5%) value (\$):	4	5	7					
Min.top yield value (\$)	: 48	52	44					
Coef. of variation (#):	8	8	10					

^{\$/+} See yield / protein and oil sections, respectively.
~ Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat.

[#] Measure of experimental error: values of < 15% are desired.

Table 16. Beresford, maturity group I Roundup Ready™ soybean test results, 2001-2003. S.E. Research Farm, seeded May 21.

							200	3
								Maturity:
	Yie	ld -	bu/a	2002	2002			Days
			sture)	Prot.	Oil	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			Ent	tries tes	sted th	ree ye	ars	
THOMPSON/T-7205RR	56	55	54	35.3	18.8	31	1	123
DEN BESTEN/DB1902RR	55	55	53	34.6	18.8	30	1	123
KRUGER/199+RR	54	53	50	35.5	18.9	31	1	122
KRUGER/223+RR	54	51	50	35.4	18.9	31	1	124
LATHAM/418RR	52	49	49	36.7	18.5	34	1	122
			Εì	ntries te	ested to	wo yea	rs	
DESOY/191+RR		56	53	33.9	19.4	28	1	120
STINE/S1918-4		56	56	36.2	18.4	34	1	123
KRUGER/202+RR		55	54	34.6	19.1	30	1	123
THOMPSON/T-7214RR		55	51	36.5	18.2	30	1	122
MERSCHMAN/MARS VIIRR		53	53	36.6	18.2	31	1	123
KRUGER/211+RR	•	52	52	35.8	18.5	32	1	122
PRAIRIE BR./PB-2112RR		51	53	36.0	18.1	32	1	122
KRUGER/191RR	•	50	48	34.6	18.9	33	1	123
KRUGER/222+RR	•	50	48	37.3	18.0	35	1	124
DAIRYLAND/DSR-199/RR		50	47	36.1		33	1	122
ZILLER/BT 7193R	- /	48	45	35.9	19.1	33	1	123
MERSCHMAN/VENUS RR		47	44	37.2	19.1	34	1	123
				ntries te	ested or	_	r	
KRUGER/223RR			52			30	1	122
PRAIRIE BR./PB-1943RR			51			30	1	123
LATHAM/EXP-E1800R			50			36	2	122
LATHAM/EXP-E1750R			49	•		30	1	122
THOMPSON/EXP7213RR			49	•		36	1	123
BIO GENE/BG1700RR			47			31	1	120
DEKALB/DKB19-52			47			31	1	118
KRUGER/222A			45		•	36	1	125
DAIRYLAND/DSR-101/RR	•		44	•		32	1	111
Test average:	54	52	49	35.8	18.7	33	1	121
LSD(5%) value (\$):	NS	5	5					
Min.top yield value (\$):	: 52	51	51					
Coef. of variation (#):	6	7	6					

^{\$/+} See yield / protein and oil sections, respectively.

[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Table 17. Beresford, maturity group II Roundup Ready™ soybean test results, 2001-2003. S.E. Research Farm, seeded May 21.

							200	3
		ld -	bu/a ture)	2002	2002	TT-	T 43	Maturity: Days
Brand / Entry	3yr		2003	Prot. pct+	Oil pct+	Ht. in.	Ldg. Sc.~	after seeding
			Ent	ries tes	sted th	ree ye	ars	
PRAIRIE BR./PB-2421RR	54	53	52	36.1	19.0	33	1	123
LATHAM/497RR	54	50	51	35.0	18.9	30	1	123
MUSTANG/M-201RR	53	51	47	35.9	18.7	29	1	123
PRAIRIE BR./PB-2397RR	52	50	45	35.8	18.8	38	1	123
LATHAM/647RR	52	50	49	35.5	19.3	31	1	123
KRUGER/262-2RR	51	49	44	35.6	19.4	31	1	120
SANDS/SOI 226RR	51	49	52	36.3	18.2	38	2	125
PRAIRIE BR./PB-2821RR	51	50	46	36.6	19.1	38	2	127
DEN BESTEN/DB2601RR	51	45	45	36.2	18.1	35	1	126
ASGROW/AG2302	50	48	47	35.9	19.0	34	1	122
DAIRYLAND/DSR-221/RR	49	46	44	35.9	19.0	23	1	123
DEKALB/DKB26-52	49	46	42	37.2	18.7	41	3	127
KRUGER/269RR	49	44	42	37.9	18.0	33	1	126
KRUGER/250RR	49	46	44	36.5	18.5	36	1	125
KALTENBERG/KB261RR	47	45	39	37.4	18.6	41	3	127
COYOTE/9626RR	46	45	44	36.4	17.8	34	1	126
			En	tries to	ested to	wo vea	rs	
COYOTE/9524RR		54	52	33.7	19.6	35	1	125
MIDWEST SEED/GR2037	\ \	52	51	35.1	18.9	31	1	122
SANDS/SOI 2143RR		52	54	35.0	18.9	32	1	123
KRUGER/211RR	— .	51	51	35.8	18.6	30	1	122
KRUGER/270RR		51	49	36.6	18.6	35	3	128
PRAIRIE BR./PB-2832RR		51	45	36.4	18.6	30	1	130
DEKALB/DKB25-51		51	49	34.2	19.5	34	1	124
SANDS/SOI 2642NRR		50	48	36.5	18.5	39	3	127
LATHAM/457RR	•	49	44	36.5	19.0	37	1	125
RENK/RS212RR		49	47	35.5	18.7	33	1	122
MUSTANG/M-243RR		49	46	34.5	18.9	33	1	124
MERSCHMAN/SIOUX IIRR		49	46	38.6	17.9	30	1	128
DYNA-GRO/DG 38K28RR		49	44	36.3	18.4	38	3	129
SANDS/SOI 2872RR	•	48	45	36.4	18.3	40	2	128
MUSTANG/M-203RR	•	48	51	36.3	18.3	30	1	121
TIOD ILMOVIT A CONTIN	•	±0) <u>T</u>	50.5	10.0	50	_	

Table 17. Beresford, maturity group II Roundup Ready™ test results (continued).

							2003		
					00			Maturity:	
			bu/a	2002	2002		_	Days	
			sture)	Prot.		Ht.	Ldg.	after	
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding	
			I	Entries to	ested to	wo yea	rs		
PRAIRIE BR./PB-2352RR		47	45	35.5	18.7	34	1	123	
DYNA-GRO/DG 3200RR		47	46	36.2	18.4	28	1	124	
MERSCHMAN/APACHE VIIIR		46	43	37.1	18.1	33	1	127	
PRAIRIE BR./PB-2552RR		44	42	36.9	18.0	33	1	126	
DEN BESTEN/DB2303RR	•	44	44	36.7	18.3	32	1	127	
DEN BESTEN/DB2803RR		43	39	35.1	18.8	35	2	127	
COYOTE/9728RR		43	37	35.1	19.1	36	1	126	
DEN BESTEN/DB2503RR	•	43	37	37.1	17.7	33	1	126	
MUSTANG/M-273RR		39	34	35.4	18.9	38	2	126	
			I	Entries to			.r		
LATHAM/L2136R			56			31	1	123	
PRAIRIE BR./PB-2243RR			54			33	1	122	
STINE/S2116-4			53			29	1	123	
JACOBSEN/EXP J733R			52			30	1	123	
PRAIRIE BR./PB-2643RR		•	51		•	36	1	130	
G1177G /GGT 01 41 3 7 7			F1			2.1	1	1.01	
SANDS/SOI 2141ARR			51		•	31	1	121 124	
HY-VIGOR/H-223RR		•	50	•	•	33	1		
ASGROW/AG2403	•	•	50		•	39	3	125 127	
KRUGER/251RR	•		49 49		•		1		
MERSCHMAN/MUNSEE IVRR	,	·	49		1	29	1	123	
RENK/RS223RR			49			31	1	122	
RENK/RS253RR			49			34	1	129	
PRAIRIE BR./PB-2732RR			48		•	32	1	127	
SABRE/282RR			48			38	4	127	
MUSTANG/M-284RR			48			32	1	129	
SANDS/SOI 2749RR			48			31	1	126	
LATHAM/EXP-E2300R	•	•	48	•		32	1	124	
LATHAM/EXP-E2145R	•	•	48	•	•	36	1	125	
KALTENBERG/KB275RR	•	•	48	•	•	37	2	127	
COYOTE/EXP527RR			47			34	2	130	
PRAIRIE BR./PB-2343RR			47			33	2	125	
GARST/2834RR	•	•	47	•	•	33	1	129	
KALTENBERG/KB244RR	•	•		•	•		1	129	
JACOBSEN/J828R	•	•	46 46	•	•	34 37	2	126	
•	•	•		•	•		1		
KRUGER/230RR	•	•	46	•	•	32	Т	123	

Table 17. Beresford, maturity group II Roundup Ready™ test results (continued).

							200		
								Maturity	
	Yiel	d -	bu/a	2002	2002			Days	
	(13%	mois	ture)	Prot.	Oil	Ht.	Ldg.	after	
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding	
			En	tries to	ested o	ne yea	r		
EXCEL/8236NRR			46			31	1	124	
DYNA-GRO/DG 3218RR			46			36	1	124	
KRUGER/289+RR			46	•		36	1	129	
THOMPSON/T-7284RR			46			38	3	128	
DAIRYLAND/DSR-234/RR			46	•	•	31	1	124	
EXCEL/8226RR			45			33	1	124	
STINE/S2400-4			45			32	1	123	
THOMPSON/EXP7239RR			45		•	32	1	124	
SANDS/SOI 2353RR			45			35	1	124	
DESOY/270ARR			45	•		39	2	127	
GOLD COUNTRY/2424RR			45			33	1	123	
SABRE/238RR	•		45	•		36	1	125	
HY-VIGOR/2R44	•		45	•	•	33	1	127	
SANDS/SOI 2541RR	•		45	•	•	36	2	127	
LATHAM/EXP-E2530R			45			38	2	127	
DYNA-GRO/DG 3223RR			45			32	1	124	
MIDWEST SEED/GR2627		•	44	•	1	35	1	128	
ZILLER/BT 7213R	•	•	44			32	1	121	
DYNA-GRO/DG 3232RR		•	44		•	35	1	121	
		·	44		•	33	1	128	
COYOTE/EXP625RR		•	44			33	1	128	
ASGROW/AG2801	•		44		·	33	2	130	
SANDS/SOI 2501RR			44		•	34	1	124	
THOMPSON/T-7293RR			43		•	31	1	128	
CROWS/C2506R			43		•	33	1	126	
DEKALB/DKB28-52	•		43	•	•	36	2	128	
MUSTANG/M-234RR			43			34	1	123	
THOMPSON/T-7252RR			43		•	31	1	126	
HY-VIGOR/EXP-2R55			42		•	35	1	128	
SANDS/EXP 2856NRR			42		•	37	3	130	
THOMPSON/EXP7259RR			42			37	3	125	
JACOBSEN/EXP J839R			42			31	1	128	
SANDS/SOI 2858NRR			42			36	1	130	
DESOY/260RR			42			36	1	126	
JACOBSEN/J725R	•	•	42		-	34	2	126	
KRUGER/292RR	•	•	41	•	•	31	1	127	
	•	•		•	•	Э т	_	 _ /	

Table 17. Beresford, maturity group II Roundup Ready™ test results (continued).

							3	
								Maturity:
			bu/a	2002	2002			Days
			sture)	Prot.	-	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			Er	ntries te	ested or	ne yea:	r	
EXCEL/8237RR			41		•	34	2	124
MUSTANG/M-253RR			41	•		34	1	127
DYNA-GRO/DG 3263RR			41			38	1	127
DAIRYLAND/DSR-245/RR			41	•		34	1	127
STINE/S2640-4	•		40	•	•	33	1	127
LATHAM/EXP-E2200R			40			36	2	124
MERSCHMAN/CHICKASAW 8R			39	•		35	1	130
LATHAM/EXP-E2780R			39			35	1	127
MERSCHMAN/MOHAWK RR			39			32	1	123
THOMPSON/T-7243RR			39	•	•	34	2	124
MUSTANG/M-224RR			39			33	1	123
EXCEL/8258RR			38	•		36	1	125
THOMPSON/EXP7221RR			38	•		34	1	118
KRUGER/252RR			37			44	1	123
GARST/2903RR			37		•	39	1	129
HY-VIGOR/2720NR			35			35	1	126
Test average: LSD(5%) value (\$): Min.top yield value (\$)	50 5 : 49	47 7 47	45 5 51	36.0	18.7	34	1	125

^{\$/+} See yield / protein and oil sections, respectively.

[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. # Measure of experimental error: values of < 15% are desired.

Table 18. Armour, maturity group I Roundup Ready™ soybean test results, 2001-2003. Mark and Cletus Wiechmann farm, seeded May 29.

							200	3
								Maturity:
	Yie	eld -	bu/a	2002	2002			Days
	(13%	mois	sture)	Prot.	Oil	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
			Ent	ries tes	sted th	ree ye	ars	
DEN BESTEN/DB1902RR	38	34	28	34.1	19.8	21	1	117
KRUGER/223+RR	37	31	19	35.4	19.1	21	1	120
			Er	itries te	ested to	wo yea	rs	
KRUGER/191RR		35	25	34.5		24	1	121
PRAIRIE BR./PB-2112RR		34	25	35.5	18.4	21	1	117
KRUGER/211+RR		32	24	36.0	18.5	22		119
KRUGER/222+RR		32	17	36.8	18.8			118
KRUGER/202+RR	•	30	23	34.2	19.6	21	1	117
TOP FARM/6202RR		30	19	36.9	18.6	23	1	115
DAIRYLAND/DSR-199/RR		29	18	35.9		25	1	117
			Er	itries te	ested or	ne yea	r	
DEKALB/DKB19-52			23			21	1	120
PRAIRIE BR./PB-1943RR			22		•	22		118
KRUGER/222A			21		•	23		121
KRUGER/223RR			19		•	20	1	114
TOP FARM/EXP35260RR			18			22	1	116
BIO GENE/BG1700RR	· /		12		+	21	1	116
Test average:	38	32	20	35.5	19.0	22	1	117
LSD(5%) value (\$):	NS	NS	4					
Min.top yield value (\$)	: 37	29	24					
Coef. of variation (#):	15	14	12					

^{\$/+} See yield / protein and oil sections, respectively.

[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant. # Measure of experimental error: values of < 15% are desired.

Table 19. Armour, maturity group II Roundup Ready™ soybean test results, 2001-2003. Mark and Cletus Wiechmann farm, seeded May 29.

Brand / Entry 3yr 2yr 2003 pct+ pct+ in. Sc.~ seed	ys ter ding 18 22 19 20 23
### Brand / Entry 3yr 2yr 2003 pct+ pct+ in. Sc.~ seed	ding 18 22 19 20 23
ASGROW/AG2302 41 40 33 35.4 19.6 27 1 12 PRAIRIE BR./PB-2141RR 40 39 29 35.2 19.4 22 1 12 KRUGER/250RR 40 35 24 35.0 19.2 27 1 12 LATHAM/457RR 39 36 27 34.8 19.8 25 1 12 DEN BESTEN/DB2601RR 39 35 28 32.9 19.9 27 1 12 PRAIRIE BR./PB-2821RR 38 34 27 34.0 19.3 27 1 12 SANDS/SOI 226RR 36 31 24 34.6 19.9 30 1 12 COYOTE/9626RR 36 32 25 34.6 19.0 29 1 12 PRAIRIE BR./PB-2397RR 36 32 28 35.1 19.7 27 1 12 PRAIRIE BR./PB-2421RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 KRUGER/262-2RR 39 37 30 37 20.3 27 1 12 MIDWEST SEED/GR2037 40 33 35.2 18.7 24 1 12 THOMPSON/T-7254RR 39 27 33.9 19.8 26 1 12 KRUGER/211RR 39 34 34.4 18.9 23 1 12 KRUGER/268RR 38 29 33.4 20.1 23 1 12 KRUGER/268RR 38 29 33.4 20.1 23 1 12 KRUGER/270RR 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR 37 27 34.2 19.7 32 1	22 19 20 23
ASGROW/AG2302 41 40 33 35.4 19.6 27 1 12 PRAIRIE BR./PB-2141RR 40 39 29 35.2 19.4 22 1 12 KRUGER/250RR 40 35 24 35.0 19.2 27 1 12 LATHAM/457RR 39 36 27 34.8 19.8 25 1 12 DEN BESTEN/DB2601RR 39 35 28 32.9 19.9 27 1 12 PRAIRIE BR./PB-2821RR 38 34 27 34.0 19.3 27 1 12 SANDS/SOI 226RR 36 31 24 34.6 19.9 30 1 12 COYOTE/9626RR 36 32 25 34.6 19.0 29 1 12 PRAIRIE BR./PB-2397RR 36 32 28 35.1 19.7 27 1 12 KRUGER/262-2RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 KRUGER/262-2RR 39 37 30 23 35.2 18.7 24 1 12 MIDWEST SEED/GR2037 40 33 35.2 18.7 24 1 12 THOMPSON/T-7254RR 39 27 33.9 19.8 26 1 12 KRUGER/211RR 39 34 34.4 18.9 23 1 12 KRUGER/268RR 38 29 33.4 20.1 23 1 12 KRUGER/268RR 38 29 33.4 20.1 23 1 12 KRUGER/270RR 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR 37 27 34.2 19.7 32 1	22 19 20 23
KRUGER/250RR 40 35 24 35.0 19.2 27 1 12 LATHAM/457RR 39 36 27 34.8 19.8 25 1 12 DEN BESTEN/DB2601RR 39 35 28 32.9 19.9 27 1 12 PRAIRIE BR./PB-2821RR 38 34 27 34.0 19.3 27 1 12 SANDS/SOI 226RR 36 31 24 34.6 19.9 30 1 12 COYOTE/9626RR 36 32 25 34.6 19.0 29 1 12 PRAIRIE BR./PB-2397RR 36 32 28 35.1 19.7 27 1 12 PRAIRIE BR./PB-2421RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 12 MIDWEST SEED/GR2037 . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 37 32 36.0 18.6 27 1 12 KRUGER/270RR RKRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1	19 20 23
LATHAM/457RR 39 36 27 34.8 19.8 25 1 12 DEN BESTEN/DB2601RR 39 35 28 32.9 19.9 27 1 12 PRAIRIE BR./PB-2821RR 38 34 27 34.0 19.3 27 1 12 SANDS/SOI 226RR 36 31 24 34.6 19.9 30 1 12 COYOTE/9626RR 36 32 25 34.6 19.0 29 1 12 PRAIRIE BR./PB-2397RR 36 32 28 35.1 19.7 27 1 12 PRAIRIE BR./PB-2421RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 Entries tested two years DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 12 THOMPSON/T-7254RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 37 32 36.0 18.6 27 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1	20 23 23
DEN BESTEN/DB2601RR 39 35 28 32.9 19.9 27 1 12 PRAIRIE BR./PB-2821RR 38 34 27 34.0 19.3 27 1 12 SANDS/SOI 226RR 36 31 24 34.6 19.9 30 1 12 COYOTE/9626RR 36 32 25 34.6 19.0 29 1 12 PRAIRIE BR./PB-2397RR 36 32 28 35.1 19.7 27 1 12 PRAIRIE BR./PB-2421RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 Entries tested two years DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 12 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/270RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1	23 23
PRAIRIE BR./PB-2821RR 38 34 27 34.0 19.3 27 1 12 SANDS/SOI 226RR 36 31 24 34.6 19.9 30 1 12 COYOTE/9626RR 36 32 25 34.6 19.0 29 1 12 PRAIRIE BR./PB-2397RR 36 32 28 35.1 19.7 27 1 12 PRAIRIE BR./PB-2421RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 MIDWEST SEED/GR2037 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 12 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/270RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	23
SANDS/SOI 226RR 36 31 24 34.6 19.9 30 1 12 COYOTE/9626RR 36 32 25 34.6 19.0 29 1 12 PRAIRIE BR./PB-2397RR 36 32 28 35.1 19.7 27 1 12 PRAIRIE BR./PB-2421RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 12 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/268RR . 37 21 34.2 19.4 28 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	
COYOTE/9626RR 36 32 25 34.6 19.0 29 1 12 PRAIRIE BR./PB-2397RR 36 32 28 35.1 19.7 27 1 12 PRAIRIE BR./PB-2421RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 12 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/270RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	
PRAIRIE BR./PB-2397RR 36 32 28 35.1 19.7 27 1 12 PRAIRIE BR./PB-2421RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 12 DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 12 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/270RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	16
PRAIRIE BR./PB-2421RR 36 30 22 35.1 20.0 23 1 12 KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 13 DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 13 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 13 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	23
KRUGER/262-2RR 33 30 23 34.2 19.8 23 1 Entries tested two years DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 13 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 13 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	19
DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 12 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	20
DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 11 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	19
DEKALB/DKB25-51 . 40 35 33.7 20.3 27 1 12 MIDWEST SEED/GR2037 . 40 33 35.2 18.7 24 1 11 THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 KRUGER/211RR . 39 34 34.4 18.9 23 1 12 KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	
THOMPSON/T-7254RR . 39 27 33.9 19.8 26 1 12 12 13 14 18.9 23 1 12 13 14 18.9 23 1 12 13 14 18.9 23 1 12 12 12 12 12 12 12 12 12 12 12 12 1	23
KRUGER/211RR . 39 34 34.4 18.9 23 1 KRUGER/268RR . 38 29 33.4 20.1 23 1 KRUGER/270RR . 37 21 34.2 19.4 28 1 KRUGER/269RR . 37 32 36.0 18.6 27 1 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1	19
KRUGER/268RR . 38 29 33.4 20.1 23 1 12 KRUGER/270RR . 37 21 34.2 19.4 28 1 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 1 12	20
KRUGER/270RR . 37 21 34.2 19.4 28 1 12 KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	19
KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	23
KRUGER/269RR . 37 32 36.0 18.6 27 1 12 SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	23
SANDS/SOI 2872RR . 37 27 34.2 19.7 32 1 12	22
	22
	21
DEN BESTEN/DB2803RR . 35 27 33.5 19.7 28 1 12	24
DEN BESTEN/DB2503RR . 35 21 35.6 19.3 23 1 12	23
	19
	22
	21
	18
SANDS/SOI 2642NRR . 33 24 35.1 19.5 34 1 12	21
	20
	21
	23
KALTENBERG/KB261RR . 30 19 34.5 19.9 29 1 12	

Table 19. Armour, maturity group II Roundup Ready™ test results (continued).

							200	3
								Maturity:
	Yie	1d -	bu/a	2002	2002			Days
	(13%	mois	sture)	Prot.	Oil	Ht.	Ldg.	after
Brand / Entry	3yr	2yr	2003	pct+	pct+	in.	Sc.~	seeding
				Entries to	ested t	wo yea	rs	
DYNA-GRO/DG 3200RR		29	28	35.0	19.2	23	1	120
PUBLIC/SD96-170RR-28L		29	23	35.1	20.3	29	1	110
				Entries to	ested o	ne yea	r	
COYOTE/EXP527RR			33			28	1	122
ASGROW/AG2107			33			28	1	118
THOMPSON/EXP7239RR			32			26	1	121
SANDS/SOI 2501RR			32	•		28	1	122
MUSTANG/M-234RR			31	•		23	1	121
DESOY/270ARR			31			33	1	121
	•	•	31	•	•	33 24	1	121
KRUGER/233+RR	•			•	•		_	
LATHAM/L2136R	•	•	31	•	•	23	1	119
SANDS/SOI 2143RR	•	•	31	•	•	25	1	121
PRAIRIE BR./PB-2343RR	•	•	30	•	•	26	1	121
ASGROW/AG2403			30			25	1	120
MUSTANG/M-253RR			30			_24	1	121
PRAIRIE BR./PB-2643RR			30			24	1	123
SANDS/SOI 2353RR			30			26	1	123
DAIRYLAND/DSR-234/RR			30			24	1	122
III III OD (OD 44			20			26	1	101
HY-VIGOR/2R44			30		•	26	1	121
DYNA-GRO/DG 3218RR			29			30	1	120
SANDS/SOI 2141ARR	•	•	29	•	•	24	1	119
THOMPSON/T-7252RR	•	•	29	•	•	25	1	122
COYOTE/EXP721RR	•	•	28	•	•	27	1	119
KRUGER/230RR			28			25	1	120
KALTENBERG/KB275RR			28			25	1	125
STINE/S2640-4			27			25	1	122
RENK/RS253RR			27			26	1	122
DESOY/260RR			27			29	1	123
MIJOMDCON /M 720 / DD			27			2.0	1	100
THOMPSON/T-7284RR	•	•		•	•	28 24		123
MIDWEST SEED/GR2627	•	•	27	•	•		1	122
CROWS/C2130R	•	•	26	•	•	24	1	120
KRUGER/252RR	•	•	26	•	•	25	1	123
PRAIRIE BR./PB-2732RR	•	•	26	•	•	24	1	124
DYNA-GRO/DG 38K28RR			26	•		26	1	123
KRUGER/251RR			26			31	1	123
DYNA-GRO/DG 3232RR			26		•	28	1	120

Table 19. Armour, maturity group II Roundup Ready™ test results (continued).

							200	3
	v: o	1.4	bu/a	2002	2002			Maturity: Days
			ture)	Prot.		Ht.	Ldg.	after
Brand / Entry	3yr		2003	pct+	pct+	in.	Sc.~	seeding
					pcc1	T11.	50.1	
				itries te	ested or			
JACOBSEN/EXP J839R	•		25			21	1	126
COYOTE/EXP625RR	•		25			24	1	124
MUSTANG/M-273RR			25			27	1	123
PRAIRIE BR./PB-2243RR			25			23	1	119
SANDS/SOI 2749RR	•		24	•	•	23	1	123
MUSTANG/M-222RR			24			26	1	119
RENK/RS223RR			24			21	1	118
HY-VIGOR/EXP-2R12			24			28	1	119
DAIRYLAND/DSR-245/RR			24			26	1	122
HY-VIGOR/EXP-2R55	•	•	24	•	•	24	1	122
JACOBSEN/J828R			23			28	1	123
DEKALB/DKB28-52			23			28	1	121
CROWS/C2506R			23			2.4	1	122
THOMPSON/T-7293RR			23			22	1	126
SANDS/EXP 2856NRR	•		23			27	1	122
BINDS/EII 2030IVIII			23			2,	±	122
SANDS/SOI 2858NRR			22			28	1	123
MUSTANG/M-224RR			22			23	1	123
STINE/S2400-4			22			25	1	120
MUSTANG/M-284RR			22			22	1	127
THOMPSON/T-7243RR			20			25	1	123
DYNA-GRO/DG 3263RR			20			24	1	124
ASGROW/AG2801	•		20	•		27	1	126
DYNA-GRO/DG 3223RR	•		19	•		26	1	120
JACOBSEN/J725R	•	•	19	•	•	25	1	121
	•	•	т <i>)</i>	·	•			
Test average:	37	34	26	34.0	19.6	26	1	121
LSD(5%) value (\$):	6	NS	5					
Min.top yield value (\$)	: 35	34	30					
Coef. of variation (#):	16	17	12					

^{\$/+} See yield / protein and oil sections, respectively.

[~] Lodging: 1= all plants erect, 3= some at 45 degrees, 5= all plants flat. NS - Indicates differences between values within a column are not significant.

[#] Measure of experimental error: values of < 15% are desired.

Table E. Mailing addresses of seed companies entered in the 2003 soybean trials.

Company name (brand name)

Monsanto (Asgrow & Dekalb), 3100 Sycamore Rd, Dekalb, IA 60115 Bio Gene Seeds (BioGene Brand), 5491 Tri-County Hwy, Sardinia, OH 45171 Coyote Seed Mills(Coyote Brand), Inc., PO Box 16, Bridgewater, SD 57319-0016 Crows Hybrid Corn Co. (Crows Hybrid Corn Co. Brand), 14575 University, Waukee, IA 50263 Dairyland Seed Co., Inc. (Dairyland Brand), PO Box 958, West Bend, WI 53095

Den Besten Seed Co., LLC (Den Besten Brand), Box 896, Platte, SD 57369 Desoy (Desoy Brand), 6131 North Fork Rd. Ames, IA 50010 Dyna-Gro (Dyna-Gro Brand), 104 Harrison, Emmetsburg, IA 50536 Excel Brand(Excel Brand), 116 E. State, Camp Point, IL 62320 Gold Country Seed Inc. (Gold Country Brand), PO Box 604, Hutchinson, MN 55350

Hy-Vigor Seeds Inc. (Hy-Vigor Brand), 4970 Redwood Ave, Paullina, IA 51046 Garst Seed Co.(Garst Brand), 1010 Christine Ave., Brookings, SD 57006 Kaltenberg Seeds (Kaltenberg Brand), PO Box 278, Waunakee, WI 53597 Kruger Seed Co. (Kruger Brand), Hwy 20 E Box A, Dike, IA 50624 Latham Seed Co.(Latham Brand), 131 180th St, Alexander, IA 50420-8028

Jacobsen Hybrid Corn Co., Inc. (Jacobsen Brand), 129 9th St., Lake View, IA 51450 Merschman Seeds, Inc. (Merschaman Brand), 103 Ave. D, West Point, IA 52656 Midwest Seed Genetics (Midwest Brand), 14475 University Ave, Waukee, IA 50263 Mustang Seeds (Mustang Brand), PO Box 466, Madison, SD 57042 Northstar Genetics (Northstar Genetics Brand), Box 40, Wanamingo, MN 55983

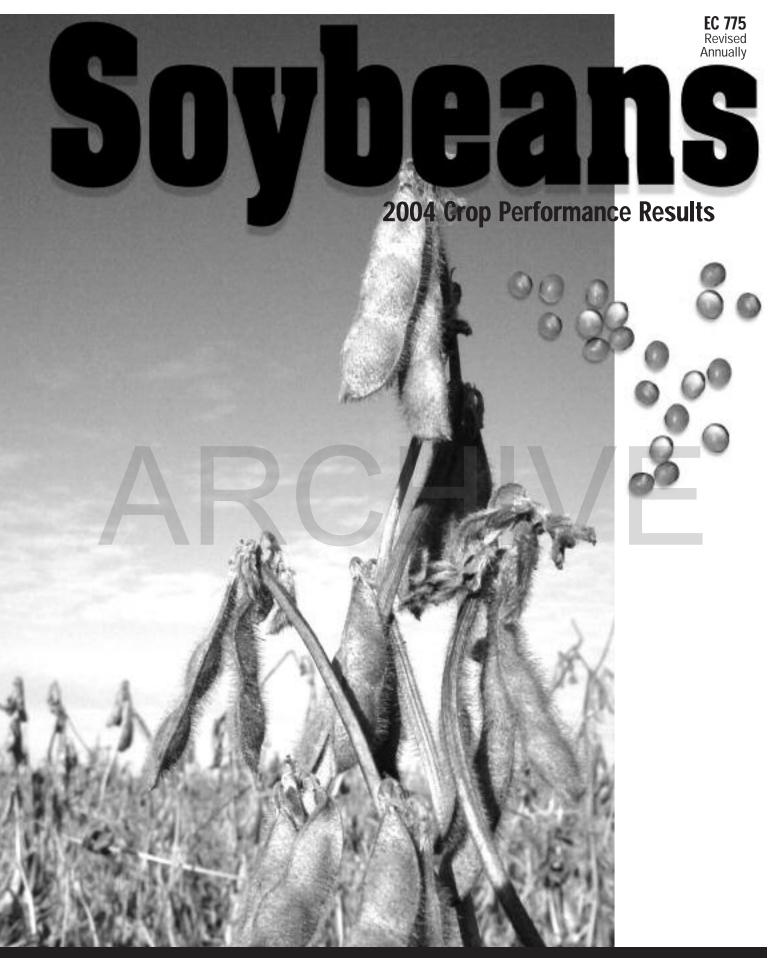
Peterson Farms Seed(Peterson Brand), 3104 164th Ave. SE, Harwood, ND 58042 Prairie Brand Seed Co. (Prairie Brand), 15 X Ave., Story City, IA 50248 Renk Seed Co. (Renk Brand), 6800 Wilburn Rd., Sun Prairie, WI 53590 Sabre Initiatives, LLC(Sabre Brand), 2508 Trott Ave. SW, Willmar, MN 56201 Sand Seed Service, Inc. (Sands Brand), Box 648, Marcus, IA 51035

Foundation Seed Stocks (Sodak Genetics Brand), Box 2207A, SDSU, Brookings, SD 57007 Stine Seed Co.(Stine Brand), 2225 Laredo Trail, Adel, IA 50003 Thompson Seeds Inc. (Thompson Brand), 40321 130th Ave., Leland, IA 50453 Top Farm Hybrids (Top Farm Hybrids Brand), PO Box 850, Cokato, MN 55321 Wensman Seed Co.(Wensman Brand), PO Box 190, Wadena, MN 56482

Ziller Seed Co. Inc.(Ziller Brand), 76374 380th St., Bird Island, MN 55310

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Tables for the 2004 Soybean Performance Trials

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EC 775—Precision PlantedSoybeans 2004 Crop Performance Results is available electronically on the internet

http://agbiopubs.sdstate.edu/articles/EC775-04.pdf



Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the USDA. Dr. Jerald Warmann, Director of Extension, Associate Dean, College of Agriculture & Biological Sciences, South Dakota State University, Brookings. Educational programs and materials offered without regard for race, color, creed, religion, national origin, ancestry, citizenship, age, gender, sexual orientation, disability, or Vietnam Era Veteran status.

Soybeans

2004 South Dakota Precision Planted Soybean Variety Performance Trials

Robert G. Hall, Extension agronomist, crops/Manager, crop testing Kevin K. Kirby, Agricultural research manager, crop testing

Table A – Traits of some public soybean varieties.

Table B – Gene race resistance to *Phytophthora* root rot.

Table C – Roundup Ready™ entries with yield table numbers.

Table D – Non-Roundup Ready™ entries with yield table numbers.

Table E – Seed company (brand name), mailing addresses (after yield tables).

Successful soybean production is greatly affected by variety selection for a given growing area. This publication reports the agronomic performance of entries in the 2004 South Dakota performance trials for conventional or non-Roundup ReadyTM and Roundup ReadyTM soybean varieties. Important factors in variety selection include yield, maturity, plant height, lodging resistance, and *Phytophthora* root rot resistance. In the case of public varieties, additional information including emergence, shattering, and iron chlorosis scores (Table A) are available.

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and are therefore greatly impacted by latitude. Consequently, maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. Groups III through VIII are suited to Iowa and Nebraska and southward into Texas.

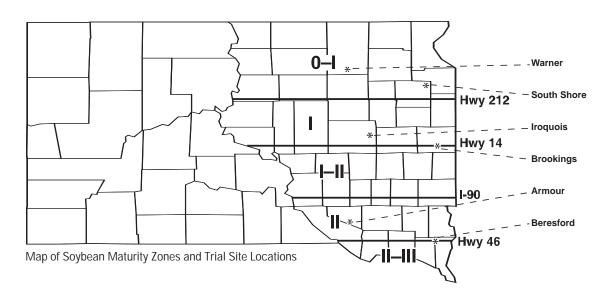
These soybean performance trial results are reported according to the prevalent maturity zones in South Dakota (see map). The Roundup-ReadyTM soybean variety trials are conducted in the following test zones at these locations: Northern test zone: Maturity group-0 and -I trials at South Shore and Warner; Central test zone: Maturity group-0, -I,

and -II trials at Brookings and Iroquois; Southern test zone: Maturity group-I and -II trials at Beresford and Armour.

Conventional soybean variety trials are only conducted on the following SDSU-affiliated research farms and locations: NE Research Farm, South Shore, Maturity group-0 and -I trials; Plant Science Research Farm, Brookings, Maturity group-0, -I, -II trials; and the South Dakota Agricultural Experiment Station (SDAES) Farm, Beresford, Maturity group -I and -II trials.

Note there are transition areas where varieties of two maturity groups may perform similarly. In such cases other mitigating factors like rainfall and/or elevation may moderate the effect of latitude on maturity. In most cases, an earlier maturity group may be seeded in a zone suited to a later maturity group. Generally, this is only practical if seeding is delayed, when reseeding follows hail, or if double cropping.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. However, the resistance to Phytophthora root rot is fungus-race specific. This means resistance to one race does not necessarily impart resistance to other races. Knowledge of the races of PRR fungus prevalent in your area is helpful. If you suspect a field has PRR and the specific race(s) involved is unknown, then select varieties



having genes that impart a wide range of race resistance (Table B). Specific race resistance to PRR for a given variety, as reported by the entering seed company, is indicated in Table C.

An alternative method of control is the use of "tolerant varieties." Tolerant varieties are not resistant to PRR in the seedling stage. Therefore, a *Phytophthora*-specific fungicide must be applied to protect them. Presently, we have no information on the field tolerance of varieties adapted to this region. Therefore, field tolerance ratings are not given in this publication.

Certified seed is the best source of seed and the only way to be assured of the genetic purity of the variety seeded. In addition, inoculation of seed with the appropriate nitrogenfixing bacterium is a good fundamental practice. Inoculation must be practiced if soybeans are seeded in soils not previously cropped with soybeans. Even on soils previously cropped to soybeans, there is no guarantee that beneficial bacteria will be present to naturally inoculate planted seed. Therefore, inoculation of seed at planting is an inexpensive means of increasing the percentage of plants that will fix nitrogen in the current crop year.

Yield

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested at a given location. In addition, 2-year averages are included where varieties have been tested for 2 years. Yields, test averages, and least significant difference (Lsd) values are printed at the bottom of each yield column for each location and are rounded off to the nearest bushel.

The Lsd value can be used to determine whether varieties differ in yield potential. For example, assume variety A yields 30 bushels, variety B yields 25 bushels, and the calculated Lsd value is 4 bushels. The yield difference between varieties A and B is 5 bushels per acre. Since the yield difference of 5 bushels is greater than the test Lsd value of 4 bushels, the yield of variety A (30 bushels) is significantly higher than the yield of variety B (25 bushels). In contrast, if variety A yielded 28 bushels and variety B yielded 25 bushels, the yield difference would be 3 bushels per acre. In this case, both varieties would have a similar yield because their yield difference of 3 bushels is less than the test Lsd value of 4 bushels per acre.

Use Lsd values to identify the best-yielding varieties. The Lsd value indicated at the bottom of each yield column is used to calculate the **minimum top yield value**. For example, if the highest yield within a column is 50 bushels and the LSD value for that yield column is 5 bushels, then the minimum top yield value equals 45 bushels (50-5=45). Within a yield column, varieties with yields equal to or higher than this minimum top-yield value are the best yielding varieties. Entries in all tables are sorted from highest to lowest values according to the variable(s) listed in the Brand/Variety column of each performance table. **Note: Entries tested for 2 years may also have a top yield group value in the 2004 yield column.**

Participating companies pick the locations where their entries are tested. Entries are placed into either maturity group-0, -I, or -II test trials, and the company selects the appropriate maturity group trial for its entries at each location. Generally, each company has one or more maturity group checks for the varieties it markets. However, there are no standard regional or national check varieties for maturity. Consequently, a late group-I variety from one company may be similar in maturity to an early group-I variety from another company because they use different check varieties for maturity.

As a result, this testing program can not guarantee that all entries are placed in the proper maturity trial. In some trials, borderline entries with maturity group ratings at or near the arbitrary breaks between the late group-0s and early group-Is and between the late group-Is and early-group-IIs may crossover at a given location.

When evaluating the performance of any entry in a given trial it is strongly suggested that you also note the reported maturity of the entry. Since all entries at a given location are seeded the same day, you can compare the relative difference in maturity (days after maturity) between varieties. If the maturity rating for an entry in a group-I test is similar to the rating for a variety in the group-II test at the same test location, then you might conclude they are similar in maturity regardless of their company maturity rating.

Use caution when comparing the maturity rating of a given variety from one location to the rating obtained at other locations. Should early-season soil moisture and soil temperature values differ greatly, then maturity ratings may differ between locations; therefore, maturity comparisons of a variety over many locations may be misleading.

The efforts of G. Piechowski, Brookings, J. Smolik and A. Heuer, NE Research Farm, South Shore, and R. Berg and staff, SE Research Farm, Beresford, in obtaining the data are gratefully acknowledged. The comments regarding *Phytophthora* root rot race resistance and tolerance by Marty Draper, Extension plant pathologist, are appreciated.

The assistance and cooperation of our farmer co-operators Allen and Inel Ryckman, Warner, Mark and Cletus Wiechmann, Armour, and S.D. and Kirk Aughenbaugh, Iroquois, are especially acknowledged.

Protein and Oil Content

The protein and oil values reported are for the 2004 cropping season. At all locations, one sub-sample from each replication (3 sub-samples total) of every variety in each trial was combined and a sample was then tested for protein and oil. The analysis was conducted using a FOSS TECATOR Model Infratec 1229 grain analyzer calibrated using company software. Samples of known protein and oil that had been tested by the SDSU Agricultural Experiment Station Biochemistry Laboratory were then used to verify the software calibration. All protein and oil values are adjusted to a 13% moisture basis.

General Test Procedures

The general test procedures outlined below apply to both conventional non-Roundup Ready™ and Roundup Ready™ soybean entries with one exception: Weed control in the Roundup Ready™ test consisted of an application of Roundup Ultra™ (32 oz/A) when weeds were 4-5 inches tall followed by the same application again 21 days later. In non-Roundup Ready™ test trials, pre-emergence herbicides consisted of banded Lasso II™ at South Shore and Brookings; and no pre-emergence herbicide at Beresford. In addition, a post-emergence tank mix of Pursuit/Flexstar™ for broadleaves and Select™ for grasses was applied at Beresford. At South Shore and Brookings post-emergence control consisted of a light cultivation. Chemicals were applied according to label instructions.

Test procedures: A row spacing of 30 inches was used at all locations. The seeding rate was 165,000 seeds per acre for all varieties and locations.

Test plots were 4-row plots, 20 feet long, with three replications at all locations. Soybean inoculation was accomplished by applying Nitragin™ brand Soybean Soil Implant down the seed tube, according to label instructions and rates, during seeding. Seeding at all locations was accomplished using a Monosem precision row crop planter. The use of this planter this year resulted in very uniform seed spacing within the seed row. The center two rows of each plot were harvested for yield.

Yield: Plots were harvested at 15% seed moisture or less. Yields were calculated on a 13% moisture content basis and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine.

Reporting variety maturity: Variety maturity is reported as "days to maturity" or DTM. Entries are mature when 95% of the pods have turned brown. Each maturity value is obtained by determining the average number of days from seeding to maturity for two replicates and expressing as DTM. If the DTM value is missing the entry did not reach maturity before the first killing frost and no value is given.

Height: Measured from the soil surface to the top node of the main stem.

Lodging score: Scores at maturity are based on average erectness of the main stem of plants within each variety. 1 = all plants erect, 2 = slight lodging, 3 = lodging at a 45 degree angle, 4 = severe lodging, and 5 = all plants flat.

Phytophthora: The gene resistance traits of entries to the many *Phytophthora* races was supplied by the participating seed company (proprietary entries) or obtained from the USDA, Uniform Soybean Tests, Northern States (public entries). A key to *Phytophthora* gene resistance and the race resistance of each gene is indicated in Table B. The race resistances of entries are listed either in Table C (Roundup ReadyTM) or Table D (non-Roundup ReadyTM). Presently, races 1, 3, and 4 are the most common races in South Dakota.

Soybean Traits of Public Entries

Evaluations of public soybean variety characteristics conducted by regional universities and USDA are reported in Table A. Evaluations and locations include emergence (Ames, Iowa), shattering (Manhattan, Kan.), and iron chlorosis (Rosemount, Minn. - Group 0, Waseca, Minn. - Groups I and II). A discussion of these evaluations follows:

Emergence: Scores are related to hypocotyl elongation and are measured following emergence after 12 days from a 4 1/2-inch depth in sand maintained at 77° F (a critical temperature for differentiating strains). Scores include 1=95% or more emerged, 2=91-94% emerged, 3=85-90% emerged, 4=76-84% emerged, and 5= less than 76% emerged.

A score of 4 or 5 indicates the variety exhibits slow emergence. It does not mean the variety is inferior.

Shattering: Indicates percentage of pods that had opened and shattered 2 weeks after maturity. Scores include 1 = no shattering, 2 = 1-10% shattered, 3 = 11-25% shattered, 4 = 26-50% shattered, and 5 = over 50% shattered.

Iron chlorosis: Varieties are evaluated on high pH soils, and scores range from 1 = little or no yellowing, 3 = moderate yellowing, to 5 = severe yellowing.

ROUNDUP READYTM SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

Note: Yields are reported as 2004 averages or 2-yr averages (2003-04).

NORTHERN TEST ZONE

SOUTH SHORE- Northeast Research Farm WARNER- No-till, Allen & Inel Ryckman Farm (cooperators)

South Shore, Group-0 (Tables 1a & 1b): The 2004 and 2-year test yield averages were **39 and 30 bushels** per acre, respectively (Table 1a). Varieties had to average 39 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 30 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 6 bushels in 2004 and 4 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were **33.5%**, **16.7%**, **and 1**, respectively (Table 1b).

Lodging score averages among the varieties were not significantly different from one another.

Warner, Group-0 (Tables 1a & 1b): The 2004 and 2-year test yield averages were 46 and 47 bushels per acre, respectively (Table 1a). Varieties had to average 48 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 45 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bushels in 2004 and 5 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 34.1%, 17.3%, and 1, respectively (Table 1b). Lodging score averages among the varieties were not significantly different from one another.

Northern test zone, Group-0 (Tables 1a & 1b): The 2004 and 2-year test yield averages in the Northern zone were 43 (57 entries) and 39 (19 entries) bushels per acre, respectively (Table 1a). Varieties had to average 45 bushels or higher to be in the top yield group for 2004. Variety yield averages had to differ by 4 bushels in 2004 to be significantly different. The 2004 protein, oil, and lodging score test averages were 33.9%, 17.0%, and 1, respectively (Table 1b). Lodging score averages among the varieties were not significantly different from one another.

South Shore, Group-I (Tables 2a & 2b): The 2004 and 2-year test yield averages were 41 and 30 bushels per acre, respectively (Table 2a). Varieties had to average 43 bushels or higher to be in the top yield group for 2004. The 2-year yield averages among varieties did not differ significantly. Therefore, the variety with the lowest 2-year yield of 29 bushels was still in the top yield group for 2 years. Variety yield averages had to differ by 5 bushels in 2004 to be significantly different, while for 2 years there was no yield difference among the varieties. The 2004 protein, oil, and lodging score test averages were 32.2, 17.2%, and 1, respectively (Table 2b). Although lodging score averages among the varieties were significant they were almost negligible because the Lsd value was almost zero. Lodging score averages had to be 1 to qualify for the top performance group.

Warner, Group-I (Tables 2a & 2b): The 2004 and 2-year test yield averages were 47 and 44 bushels per acre, respectively (Table 2a). Varieties had to average 49 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 43 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 6 bushels in 2004 for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 32.5%, 17.7%, and 1, respectively (Table 2b). Lodging score averages among the varieties were not significantly different from one another.

Northern test zone, Group-I (Tables 2a & 2b): The 2004 and 2-year test yield averages in the Northern zone were 45 (70 entries) and 38 (14 entries) bushels per acre, respectively (Table 2a). Varieties had to average 47 bushels or higher to be in the top yield group for 2004. Variety yield averages had to differ by 4 bushels in 2004 to be significantly different. The 2004 protein, oil, and lodging score test averages were 32.3%, 17.5%, and 1, respectively (Table 1b). Lodging score averages among the varieties were not significantly different from one another.

CENTRAL TEST ZONE

BROOKINGS- Plant Science Research Farm IROQUOIS- No-till, Augenbaugh Farm (cooperator)

Note: Test trials for maturity groups-0, -I, and -II were seeded at both Brookings and Iroquois. However, a custom

combine operator mistakenly harvested all three test trials at Iroquois and took them to the elevator. Therefore, these Central test zone results only include the Brookings trials.

Brookings, Group-0 (Tables 3a & 3b): The 2004 and 2-year test yield averages were 46 and 43 bushels per acre, respectively (Table 3a). Varieties had to average 47 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 44 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bushels in 2004 and for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 35.9%, 16.4%, and 2, respectively (Table 3b). Lodging score averages had to be 2 or less to be in the top performance group.

Iroquois, Group-0 (Tables 3a & 3b): Plots not harvested in 2004.

Central test zone, Group-0 (Tables 3a & 3b): Results not reported because only one location in the test zone was harvested.

Brookings, Group-I (Tables 4a & 4b): The 2004 and 2-year test yield averages were 46 and 45 bushels per acre, respectively (Table 4a). Varieties had to average 49 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 45 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bushels in 2004 and 5 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 35.3%, 16.5%, and 2, respectively (Table 4b). Lodging score averages had to be 2 or less to be in the top performance group. In addition, lodging scores had to differ by 1 in order to be significantly different from one another.

Iroquois, Group-I (Tables 4a & 4b): Plots not harvested in 2004

Central test zone, Group-I (Tables 4a & 4b): Results not reported because only one location in the test zone was harvested.

Brookings, Group-II (Tables 5a & 5b): The 2004 and 2-year test yield averages were 47 and 48 bushels per acre, respectively (Table 4a). Varieties had to average 52 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 46 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 3 bushels in 2004 and 6 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 35.3%, 16.5%, and 3, respectively (Table 5b). Lodging score averages had to be 2 or less to be in the top performance group. In addition, lodging scores had to differ by 1 in order to be significantly different from one another.

Iroquois, Group-II (Tables 4a & 4b): Plots not harvested in 2004.

Central test zone, Group-II (Tables 4a & 4b): Results not reported because only one location in the test zone was harvested.

SOUTHERN TEST ZONE

BERESFORD– South Dakota Agricultural Experiment Station Farm

ARMOUR- No-till, Mark & Cletus Wiechmann Farm (cooperator)

Beresford, Group-I (Tables 6a & 6b): The 2004 and 2-year test yield averages were 61 and 56 bushels per acre, respectively (Table 6a). Varieties had to average 67 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 55 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 5 bushels in 2004 and 6 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 32.2%, 17.8%, and 2, respectively (Table 6b). Lodging score averages had to be 2 or less to be in the top performance group. In addition, lodging scores had to differ by 1 in order to be significantly different from one another.

Armour, Group-I (Tables 6a & 6b): The 2004 and 2-year test yield averages were **37 and 29 bushels** per acre, respectively (Table 6a). Varieties had to average 37 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 28 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 5 bushels in 2004 and 4 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were **31.7%**, **19.6%**, **and 1**, respectively (Table 6b). There was no lodging observed in this trial for 2004.

Southern test zone, Group-I (Tables 6a & 6b): The 2004 and 2-year test yield averages in the Southern zone were **50** (**22 entries) and 42** (**6 entries) bushels** per acre, respectively (Table 6a). Varieties had to average 52 bushels or higher to be in the top yield group for 2004. Variety yield averages had to differ by 4 bushels in 2004 to be significantly different. The 2004 protein, oil, and lodging score test averages were **31.7%**, **18.7%**, **and 1**, respectively (Table 6b). Although lodging

score averages among the varieties were significant, they were almost negligible because the Lsd value was almost zero. Lodging score averages had to be 1 to qualify for the top performance group.

Beresford, Group-II (Tables 7a & 7b): The 2004 and 2-year test yield averages were 64 and 57 bushels per acre, respectively (Table 7a). Varieties had to average 68 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 54 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 5 bushels in 2004 and 8 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 32.9%, 17.2%, and 2, respectively (Table 7b). Lodging score averages had to be 2 or less to be in the top performance group. In addition, lodging scores had to differ by 1 in order to be significantly different from one another.

Armour, Group-II (Tables 7a & 7b): The 2004 and 2-year test yield averages were **39 and 34 bushels** per acre, respectively (Table 7a). Varieties had to average 40 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 33 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 6 bushels in 2004 and 4 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were **30.7%**, **20.0%**, **and 1**, respectively (Table 7b). Lodging score averages had to be 2 or less to be in the top performance group. There was no lodging observed in this trial for 2004.

Southern test zone, Group-II (Tables 7a & 7b): The 2004 and 2-year test yield averages in the Southern zone were 53 (72 entries) and 46 (20 entries) bushels per acre, respectively (Table 7a). Varieties had to average 54 bushels or higher to be in the top yield group for 2004. Variety yield averages had to differ by 4 bushels in 2004 to be significantly different. The 2004 protein, oil, and lodging score test averages (72 entries) were 31.8%, 18.6%, and 1, respectively (Table 7b). Although lodging score averages among the varieties were significant they were almost negligible because the Lsd value was almost zero. Lodging score averages had to be 1 to qualify for the top performance group; therefore, varieties with lodging score averages of 2 or higher were significantly more prone to lodge.

NON-ROUNDUP READY™ SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

Note: Yields are reported as 2004 averages or 2-year averages (2003-04).

SOUTH SHORE– Northeast Research Farm BROOKINGS– Plant Science Research Farm BERESFORD– South Dakota Agricultural Experiment Station Farm

South Shore, Group-0 (Tables 8a & 8b): The 2004 and 2-year test yield averages were 25 and 24 bushels per acre, respectively (Table 8a). Varieties had to average 25 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 24 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 3 bushels in 2004 and for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 35.1%, 16.2%, and 1, respectively (Table 8b). Lodging score averages among the varieties were not significantly different from one another.

South Shore, Group-I (Tables 8a & 8b): The 2004 and 2-year test yield averages were **29 and 25 bushels** per acre, respectively (Table 8a). Varieties had to average 34 bushels or higher to be in the top yield group for 2004. In this trial, only two varieties have been tested for 2 years and they were not significantly different in yield. Variety yield averages had to differ by 3 bushels or more in 2004 to be significantly different. The 2004 protein, oil, and lodging score test averages were **34.4%**, **16.7%**, **and 1**, respectively (Table 8b). Lodging score averages among the varieties tested were not significantly different from one another.

Brookings, Group-0 (Tables 9a & 9b): The 2004 and 2-year test yield averages were 44 and 39 bushels per acre, respectively (Table 9a). Varieties had to average 43 bushels or higher to be in the top yield group for 2004. There was no significant difference in yield among the six entries tested in 2004. Variety yield averages had to differ by 7 bushels in 2004 to be significantly different. The 2004 protein, oil, and lodging score test averages were 36.4%, 15.9%, and 1, respectively (Table 9b). Lodging score averages among the varieties were not significantly different from one another.

Brookings, Group-I (Tables 9a & 9b): The 2004 and 2-year test yield averages were 49 and 42 bushels per acre, respectively (Table 9a). Varieties had to average 53 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 41 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bushels in 2004 and 6 bushels for 2 years to be significantly

different. The 2004 protein, oil, and lodging score test averages were **35.8%**, **16.4%**, **and 1**, respectively (Table 9b). Lodging score averages among the varieties were not significantly different from one another.

Brookings, Group-II (Tables 9a & 9b): The 2004 and 2-year test yield averages were 47 and 42 bushels per acre, respectively (Table 9a). Varieties had to average 49 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 40 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bushels in 2004 and 5 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 36.4%, 15.9%, and 1, respectively (Table 9b). Although lodging score averages among the varieties were significant they were almost negligible because the Lsd value was almost zero. Lodging score averages had to be 1 to qualify for the top performance group.

Beresford, Group-I (Tables 10a & 10b): The 2004 and 2-year test yield averages were 59 and 55 bushels per acre, respectively (Table 10a). Varieties had to average 64 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 52 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 5 bushels in 2004 and 9 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 33.1%, 17.1%, and 2, respectively (Table 10b). Lodging score averages had to be 2 or lower to qualify for the top performance group; therefore, varieties with lodging score averages of 3 or higher were significantly more prone to lodge.

Beresford, Group-II (Tables 10a & 10b): The 2004 and 2-year test yield averages were 62 and 55 bushels per acre, respectively (Table 10a). Varieties had to average 63 bushels or higher to be in the top yield group for 2004. Likewise, varieties had to average 52 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 7 bushels in 2004 and 8 bushels for 2 years to be significantly different. The 2004 protein, oil, and lodging score test averages were 32.9%, 17.1%, and 3, respectively (Table 10b). Lodging score averages had to be 2 or lower to qualify for the top performance group; therefore, varieties with lodging score averages of 3 or higher were significantly more prone to lodge.

Table A. Traits of some public soybean varieties.

Variety	Emergence	Shattering	Iron Chlorosis	
Hendricks	1	1	1.7	
MN0901	3	2	3.7	
Spink	1	1	2.4	
Stride	1	1	3.7	
Surge	1	1	2.7	
Turner SCN	1	2	3.0	
SDG 1081RR*	1	1	2.5	
SDG 1091RR*	1	1	2.7	

^{*} Indicates Roundup Ready variety.

Emergence: 1=> 95%, 2= 91-94%, 3= 85-90%, 4= 76-84%, and 5=< 75%.

Shattering: 1= none, 2= 1-10%, 3= 11-25%, 4= 26-50%, and 5> 50%.

See additional comments in evaluation methods.

Table B. Genes for race resistance to Phytophthora root rot.

Source Gene Race resistance Williams rps1 None Mukden Rps1 (Rps1a) 1-2, 10-11, 13, 15-18, 24 Sanga Rps1b 1, 3-9, 13-15, 18, 21-22 Mack Rps1c 1-3, 6-11, 13, 15, 17, 21, 23-24 Kingwa Rps1k 1-11, 13-15, 17-18, 21-22, 24 CNS2 Rps2 1-5, 9-20 PI171442 Rps3 1-5, 8-9, 11, 13-14, 16, 18, 23, 25 PI86050 Rps4 1-4, 10, 12-16, 18-21, 25 PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
Mukden Rps1 (Rps1a) 1-2, 10-11, 13, 15-18, 24 Sanga Rps1b 1, 3-9, 13-15, 18, 21-22 Mack Rps1c 1-3, 6-11, 13, 15, 17, 21, 23-24 Kingwa Rps1k 1-11, 13-15, 17-18, 21-22, 24 CNS2 Rps2 1-5, 9-20 PI171442 Rps3 1-5, 8-9, 11, 13-14, 16, 18, 23, 25 PI86050 Rps4 1-4, 10, 12-16, 18-21, 25 PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
Mukden Rps1 (Rps1a) 1-2, 10-11, 13, 15-18, 24 Sanga Rps1b 1, 3-9, 13-15, 18, 21-22 Mack Rps1c 1-3, 6-11, 13, 15, 17, 21, 23-24 Kingwa Rps1k 1-11, 13-15, 17-18, 21-22, 24 CNS2 Rps2 1-5, 9-20 PI171442 Rps3 1-5, 8-9, 11, 13-14, 16, 18, 23, 25 PI86050 Rps4 1-4, 10, 12-16, 18-21, 25 PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
Sanga Rps1b 1, 3-9, 13-15, 18, 21-22 Mack Rps1c 1-3, 6-11, 13, 15, 17, 21, 23-24 Kingwa Rps1k 1-11, 13-15, 17-18, 21-22, 24 CNS2 Rps2 1-5, 9-20 PI171442 Rps3 1-5, 8-9, 11, 13-14, 16, 18, 23, 25 PI86050 Rps4 1-4, 10, 12-16, 18-21, 25 PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
Kingwa Rps1k 1-11, 13-15, 17-18, 21-22, 24 CNS2 Rps2 1-5, 9-20 PI171442 Rps3 1-5, 8-9, 11, 13-14, 16, 18, 23, 25 PI86050 Rps4 1-4, 10, 12-16, 18-21, 25 PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
CNS2 Rps2 1-5, 9-20 PI171442 Rps3 1-5, 8-9, 11, 13-14, 16, 18, 23, 25 PI86050 Rps4 1-4, 10, 12-16, 18-21, 25 PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
PI171442 Rps3 1-5, 8-9, 11, 13-14, 16, 18, 23, 25 PI86050 Rps4 1-4, 10, 12-16, 18-21, 25 PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
PI86050 Rps4 1-4, 10, 12-16, 18-21, 25 PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
PI86050 Rps4 1-4, 10, 12-16, 18-21, 25 PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
PI91160 Rps5 1-5, 8-9, 11-14, 18, 20, 25 Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
Altona Rps6 1-4, 10, 12, 14-16, 18-21, 25
, , , , , ,
, , , , , ,
Harosoy Rps7 16, 18, 19
Archer Rps1k, Rps6 1-22, 24-25
Keller Rps1c, Rps3 1-10, 13-18, 22-25
Winchester Rps1b, Rps3 1-9, 13-16, 18, 21-23, 25
Unknown Unknown
Not reported Not reported by seed source

Table C. 2004 Roundup Ready soybean entries by brand/variety, yield table number(s), and Phytophthora root rot race resistance.

Brand / Variety	Table Number(s)		Phytophthora Race resistance
400P0W/400004			
ASGROW/AG0801	1,3	0	Not Reported
ASGROW/AG1001	1,3	0	Not Reported
ASGROW/AG1401	2,4	I	Not Reported
ASGROW/AG1603	2,4,6	I	Not Reported
ASGROW/AG1903	2,4,6	Ι	Not Reported
ASGROW/AG2107	7	II	Not Reported
ASGROW/AG2203	5,7	II	Not Reported
ASGROW/AG2302	7	II	Not Reported
ASGROW/AG2403	5,7	II	Not Reported
ASGROW/AG2801	7	II	Not Reported
BIO GENE/BG0913RR	1,3	0	Not Reported
BIO GENE/BG100RR	1,3	0	Not Reported
BIO GENE/BG150RR	2,4	I	1-3,6-11,13,15,17,21,23-24
COYOTE/4523RR	5,7	II	1-11,13-15,17-18,21-22,24
COYOTE/4527RR	7	II	1-11,13-15,17-18,21-22,24
COYOTE/4719RR	4,6	I	1-11,13-15,17-18,21-22,24
COYOTE/9524RR	7	II	1-11,13-15,17-18,21-22,24
COYOTE/EX325RR	7	II	No Resistance
301012/ EX020111		11	no nostotanos
DAIRYLAND/DSR-040/RR	1	0	No Resistance
DAIRYLAND/DSR-050/RR	1,3	0	No Resistance
DAIRYLAND/DSR-091/RR	1	0	No Resistance
DAIRYLAND/DSR-130/RR	2	I	No Resistance
DAIRYLAND/DSR-155/RR	4	I	1-11,13-15,17-18,21-22,24
DAIRYLAND/DSR-184/RR	4	I	1-11,13-15,17-18,21-22,24
		I	
DAIRYLAND/DSR-199/RR	4		1-11,13-15,17-18,21-22,24
DAIRYLAND/DSR-234/RR	5,7 7	II	1-11,13-15,17-18,21-22,24
DAIRYLAND/DSR-2500/RR		II	1-11,13-15,17-18,21-22,24
DAIRYLAND/DSR-277/RR	7	II	1-11,13-15,17-18,21-22,24
DAIRYLAND/DST08-000/RR	1,3	0	No Resistance
DAIRYLAND/DST13-000/RR	2,4	I	No Resistance
DAIRYLAND/DST15-000/RR	2,4	I	No Resistance
DAIRYLAND/DST20-000/RR	5	II	1-11,13-15,17-18,21-22,24
DEKALB/DKB07-52	1,3	0	Not Reported
DEKALB/DKB19-52	2,4,6	I	Not Reported
DEKALB/DKB22-52	5,7	II	Not Reported
DEKALB/DKB25-51	7	II	Not Reported
DYNA-GRO/DG 31B08	1,3	0	1-11,13-15,17-18,21-22,24
DYNA-GRO/DG 31C15	2,4	I	No Resistance
DYNA-GRO/DG 32F12	2,4	I	No Resistance
DYNA-GRO/DG 32Y09	1,3	0	1-3,6-11,13,15,17,21,23-24
DYNA-GRO/DG 33R09	1,3	0	1-11,13-15,17-18,21-22,24
DYNA-GRO/DG 34R12	2,4	I	No Resistance
DINA-UNU/DU 34NIZ			NO NEOTOCUNOC

Table C. 2004 Roundup Ready soybean entries (Continued).

	Table	Mat.	Phytophthora
Brand / Variety	Number(s)	Grp.	Race resistance
EVCEL /9020DD	1	0	Not Paparted
EXCEL/8020RR EXCEL/8055RR	1		Not Reported
,		0	Not Reported
EXCEL/8151RR	2,4	I	Not Reported
EXCEL/8160RR	2,4	I	Not Reported
EXCEL/8192RR	4	I	1-11,13-15,17-18,21-22,24
EXCEL/8194RR	4	I	Not Reported
EXCEL/8211NRR	5	II	Not Reported
EXCEL/8236NRR	7	II	1-11,13-15,17-18,21-22,24
FARM ADVANTAGE/7192	4	I	No Resistance
FARM ADVANTAGE/7205	5	ΙI	1-2,10-11,13,15-18,24
FARM ADVANTAGE/7254N	7	ΙI	1-2,10-11,13,15-18,24
FARM ADVANTAGE/7264	7	II	1-11,13-15,17-18,21-22,24
GOLD COUNTRY/2509RR	1	0	No Resistance
GOLD COUNTRY/3512RR	2,4	I	1-3,6-11,13,15,17,21,23-24
GOLD COUNTRY/6016RR	2,4	Ι	1-3,6-11,13,15,17,21,23-24
GOLD COUNTRY/6117RR	2,4	Ι	No Resistance
GOLD COUNTRY/6221RR	5,7	ΙΙ	1-11,13-15,17-18,21-22,24
GOLD COUNTRY/EXP-318RR	4,6	I	No Resistance
GOLD COUNTRY/EXP-325RR	7	11	No Resistance
JACOBSEN/J642R	2	I	Not Reported
JACOBSEN/J647R	2	I	Not Reported
JACOBSEN/J730NR	5,7	II	Not Reported
JACOBSEN/J733R	5,7	ΙI	Not Reported
JACOBSEN/J744NR	7	ΙΙ	Not Reported
JACOBSEN/J828R	7	II	Not Reported
			·
KALTENBERG/KB153RR	6,6	I	No Resistance
KALTENBERG/KB203RR	7	ΙI	No Resistance
KALTENBERG/KB245RR	7	ΙI	1-2,10-11,13,15-18,24
KALTENBERG/KB275RR	7	II	1-3,6-11,13,15,17,21,23-24
KELTGEN AGVENTURE/AV 10J8RR	2	I	Not Reported
KRUGER/090RR	1,3	0	Not Reported
KRUGER/098RR	1,3	0	No Resistance
KRUGER/099+RR	1,3	0	No Resistance
KRUGER / 101RR	1,3	0	1-11,13-15,17-18,21-22,24
KRUGER / 125RR	2,4	I	1-11,13-15,17-18,21-22,24
KRUGER / 149+RR	2,4	I	1-11,13-15,17-18,21-22,24
KRUGER / 155+RR	4,6	I	No Resistance
KRUGER/191RR	2,4,6	I	1-11,13-15,17-18,21-22,24
KRUGER/192RR	2,4,6	I	No Resistance
KRUGER/195+RR/SCN	2	I	1-11,13-15,17-18,21-22,24
KRUGER/200RR	5,7	II	1-2,10-11,13,15-18,24
KRUGER/211+RR		I	1-11,13-15,17-18,21-22,24
KRUGER/223+RR	2,4,6 2,4,6	I	1-11,13-15,17-18,21-22,24
·		I	1-11,13-15,17-18,21-22,24
KRUGER/223RR	2,4,6	T	1-11,13-13,17-18,21-22,24

Table C. 2004 Roundup Ready soybean entries (Continued).

Brand / Variety	Table Number(s)		Phytophthora Race resistance
KRUGER / 233+RR	5,7	II	1-11,13-15,17-18,21-22,24
KRUGER / 252RR	5,7 5,7	II	1-11,13-15,17-18,21-22,24
	•		
KRUGER / 268+RR	5,7 7	II II	No Resistance No Resistance
KRUGER / 270RR	7		
KRUGER / 273RR	7	II	1-3,6-11,13,15,17,21,23-24 Not Reported
KRUGER/277+RR/SCN	7	II	· •
KRUGER / 289+RR		II	1-11,13-15,17-18,21-22,24
KRUGER / EXPOSPR	1,3	0	Unknown
KRUGER/EXP152RR	2	I	No Resistance
KRUGER/EXP167RR	2,4	I	Unknown
KRUGER/EXP234RR	5,7	II	1-11,13-15,17-18,21-22,24
KRUGER/EXP257RR	5,7	II	1-11,13-15,17-18,21-22,24
KRUGER/EXP268RR	5,7	ΙΙ	1-11,13-15,17-18,21-22,24
KRUGER/EXP287RR	7	II	1-11,13-15,17-18,21-22,24
LATHAM/497RR	7	II	1-5,9-20
LATHAM/738RR	7	ΙΙ	1-11,13-15,17-18,21-22,24
LATHAM/EXP-E1230R	2	I	No Resistance
LATHAM/EXP-E1330R	2	I	No Resistance
LATHAM/EXP-E1635R	4	I	1-11,13-15,17-18,21-22,24
LATHAM/EXP-E1936R	4,6	I	No Resistance
LATHAM/EXP-E2450R	7	ΙΙ	1-11,13-15,17-18,21-22,24
LATHAM/EXP-E2635R	7	II	1-3,6-11,13,15,17,21,23-24
LATHAM/EXP-E2646R	7	II	No Resistance
LATHAM/L2136R	5,7	II	No Resistance
LATHAM/L2857R	7	11	1-11,13-15,17-18,21-22,24
LATHAM/L2900R	7	II	No Resistance
MALLARD/EXP RR0914	1	0	1-11,13-15,17-18,21-22,24
MALLARD/EXP RR1111	2	I	No Resistance
MALLARD/EXP RR1314	2	I	1-3,6-11,13,15,17,21,23-24
MALLARD/EXP RR1512	2	I	1-11,13-15,17-18,21-22,24
MALLARD/EXP RR2411	7	II	No Resistance
MUSTANG/E-1852NRR	4	I	1-2,10-11,13,15-18,24
MUSTANG/M-053RR	1	0	No Resistance
MUSTANG/M-055RR	1	0	No Resistance
MUSTANG/M-075RR	1	0	1-2,10-11,13,15-18,24
MUSTANG/M-083RR		0	No Resistance
	1,3 1	0	No Resistance
MUSTANG/M-092RR MUSTANG/M-094RR		0	
·	1,3	0	No Resistance No Resistance
MUSTANG/M-095RR	1,3		
MUSTANG/M-115RR	2,4	I I	1-3,6-11,13,15,17,21,23-24
MUSTANG/M-124RR	2,4		No Resistance
MUSTANG/M-151RR	2,4	I	1-3,6-11,13,15,17,21,23-24
MUSTANG/M-153RR	2,4	I	No Resistance
MUSTANG/M-155RR	2,4	I	1-11,13-15,17-18,21-22,24
MUSTANG/M-174RR	2,4	I	1-11,13-15,17-18,21-22,24
MUSTANG/M-194NRR	4	I	1-11,13-15,17-18,21-22,24
MUSTANG/M-201RR	5,7	II	1-11,13-15,17-18,21-22,24

Table C. 2004 Roundup Ready soybean entries (Continued).

	Table	Mat.	Phytophthora
Brand / Variety	Number(s)	Grp.	Race resistance
MUSTANG/M-203RR	5,7	II	No Resistance
MUSTANG/M-223RR	5,7	II	No Resistance
MUSTANG/M-243RR	7	ΙΙ	1-11,13-15,17-18,21-22,24
MUSTANG/M-255RR	7	ΙΙ	No Resistance
MUSTANG/M-264RR	7	II	1-11,13-15,17-18,21-22,24
MUSTANG/M-284RR	7	II	1-11,13-15,17-18,21-22,24
NK BRAND/S14-A7	2,4	I	1-3,6-11,13,15,17,21,23-24
NK BRAND/S17-P9	2,4	I	1-3,6-11,13,15,17,21,23-24
NK BRAND/S19-R5	4,6	I	1-2,10-11,13,15-18,24
NK BRAND/S27-T7	7	II	No Resistance
NORTHSTAR/NS 0509RR	1	0	1-11,13-15,17-18,21-22,24
NORTHSTAR/NS 0517RR	1	0	No Resistance
NORTHSTAR/NS 0609RR	1	0	1-3,6-11,13,15,17,21,23-24
NORTHSTAR/NS 0805RR	1	0	1-11,13-15,17-18,21-22,24
NORTHSTAR/NS 0923RR	3	0	No Resistance
NORTHSTAR/NS 0954RR	1,3	0	No Resistance
·	•	I	1-11,13-15,17-18,21-22,24
NORTHSTAR/NS 1019RR	2,4	I	No Resistance
NORTHSTAR/NS 1407RR	2,4		
NORTHSTAR/NS 1409RR	2,4	I	1-11,13-15,17-18,21-22,24
NORTHSTAR/NS 1624RR	4	I	1-3,6-11,13,15,17,21,23-24
NORTHSTAR/NS 1710RR	4	I	Unknown
NORTHSTAR/NS 2009RR	5	ΙΙ	1-11,13-15,17-18,21-22,24
NUTECH/NT-0606RR	1	0	No Resistance
NUTECH/NT-0676+RR	1	0	1-2,10-11,13,15-18,24
NUTECH/NT-0711ARR	1	0	Not Reported
NUTECH/NT-0811RR	3	0	No Resistance
NUTECH/NT-0848RR	1,3	0	Not Reported
NUTECH/NT-0889RR	1,3	0	No Resistance
NUTECH/NT-0999RR	1,3	0	1-11,13-15,17-18,21-22,24
NUTECH/NT-1010RR	2,4	I	1-2,10-11,13,15-18,24
NUTECH/NT-1901RR	6	I	Not Reported
NUTECH/NT-1909RR	2,4,6	I	No Resistance
NUTECH/NT-2002RR	2,4,6	I	1-11,13-15,17-18,21-22,24
NUTECH/NT-2202RR	2,4,6	I	1-11,13-15,17-18,21-22,24
NUTECH/NT-2404RR	5,7	ΙΙ	1-11,13-15,17-18,21-22,24
NUTECH/NT-2505RR	7	II	No Resistance
NUTECH/NT-2550RR	7	ΙΙ	1-11,13-15,17-18,21-22,24
NUTECH/NT-2707RR	7	ΙΙ	1-3,6-11,13,15,17,21,23-24
NUTECH/NT-2790+RR	7	II	1-2,10-11,13,15-18,24
PETERSON/EXP 1.2RR	2,4	I	No Resistance
PETERSON/PFS 0410RR	2,4	I	1-11,13-15,17-18,21-22,24
PETERSON/PFS 0415RR	2,4	I	No Resistance
PETERSON/PFS 0511RR	2,4	I	No Resistance
PRAIRIE BR./PB-0812RR	1	0	Not Reported
PRAIRIE BR./PB-0923RR	1,3	0	1-11,13-15,17-18,21-22,24
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Table C. 2004 Roundup Ready soybean entries (Continued).

Donal / Vaniaty	Table		Phytophthora
Brand / Variety	Number(s)	Grp.	Race resistance
PRAIRIE BR./PB-0954RR	1,3	0	Not Reported
PRAIRIE BR./PB-1043RR	1	0	Not Reported
PRAIRIE BR./PB-1063RR	1	0	Not Reported
PRAIRIE BR./PB-1254RR	2	Ι	Not Reported
PRAIRIE BR./PB-1294RR	2,4	Ι	1-3,6-11,13,15,17,21,23-24
PRAIRIE BR./PB-1354RR	2	Ι	Not Reported
PRAIRIE BR./PB-1552RR	2,4	Ι	Not Reported
PRAIRIE BR./PB-1620RR	2,4	Ι	1-3,6-11,13,15,17,21,23-24
PRAIRIE BR./PB-1634RR	2,4	I	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-1754RR	2,4,6	Ι	Not Reported
PRAIRIE BR./PB-1914RR	2,4,6	I	Not Reported
PRAIRIE BR./PB-1921RR	4	I	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-1954RR	2,4,6	I	Not Reported
PRAIRIE BR./PB-2112RR	4,6	I	Not Reported
PRAIRIE BR./PB-2141RR	5,7	ΙΙ	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2243RR	5,7	ΙΙ	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2343RR	5,7	ΙΙ	Not Reported
PRAIRIE BR./PB-2374RR	5,7	ΙΙ	Not Reported
PRAIRIE BR./PB-2421RR	5,7	ΙΙ	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2443RR	7	II	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2474RR	5,7	II	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2534RR	5,7	II	Not Reported
PRAIRIE BR./PB-2643RR	7	ΙΙ	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2934RR	7	II	1-3,6-11,13,15,17,21,23-24
PUBLIC/MN-0904RR	1,3	0	1-11,13-15,17-18,21-22,24
PUBLIC/MN-1803RR	2,4,6	I	Not Reported
PUBLIC/SD00-1018R	2,6	Ι	Not Reported
PUBLIC/SD00-1037R	1,3	0	Not Reported
PUBLIC/SD00-1251R	1,3	0	Not Reported
PUBLIC/SD00-1258R	1,3	0	Not Reported
PUBLIC/SD00-236R	2,4,6	Ι	Not Reported
PUBLIC/SD01-1071R	3	0	Not Reported
PUBLIC/SD01-1075R	2,4,6	I	Not Reported
PUBLIC/SD01-1094R	2,4,6	I	Not Reported
PUBLIC/SD01-1120R	4,6	I	Not Reported
PUBLIC/SD01-1135R	5,7	ΙΙ	Not Reported
PUBLIC/SD01-1200R	3	0	Not Reported
PUBLIC/SD01-1253R	1	0	Not Reported
PUBLIC/SD01-1780R	1	0	Not Reported
PUBLIC/SD01-1792R	2,4,6	I	Not Reported
PUBLIC/SD01-187R	1,3	0	Not Reported
PUBLIC/SD01-2469R	5,7	II	Not Reported
PUBLIC/SD01-2475R	1,3	0	Not Reported
PUBLIC/SD01-2493R	5,7	II	Not Reported
PUBLIC/SD01-2509R	5,7	II	Not Reported
PUBLIC/SD01-2736R	1,3	0	Not Reported
PUBLIC/SD01-2961R	5,7	II	Not Reported
PUBLIC/SD01-3219R	2,4,6	I	Not Reported
			· · · · · · · · · · · · · · · · · · ·

Table C. 2004 Roundup Ready soybean entries (Continued).

	Table	Mat. Phytophthora
Brand / Variety	Number(s)	Grp. Race resistance
Brana / Tar 10 ty	Nambor (5)	dipi nase i seretanes
PUBLIC/SD01-3402R	2,6	I Not Reported
PUBLIC/SD01-3603R	5,7	II Not Reported
PUBLIC/SD01-5R	5,7	II Not Reported
PUBLIC/SD01-67R	2,4,6	I Not Reported
PUBLIC/SD01-76R	5,7	II Not Reported
PUBLIC/SD1091RR-4	1,3	O Not Reported
PUBLIC/SD93-1233T	1,3	O Not Reported
PUBLIC/SD93-828R	5,7	II Not Reported
PUBLIC/SD96-170RR-28L	2,4,6	I Not Reported
PUBLIC/SDX00-022R-23	2,4,6	I Not Reported
PUBLIC/SDX00-022R-53	2,4	I Not Reported
PUBLIC/SDX00-024R-14	2,4,6	I Not Reported
PUBLIC/SDX00-051R-23	5,7	II Not Reported
PUBLIC/SDX00-053R-46	2,4,6	I Not Reported
PUBLIC/SDX00R-014-50	5,7	II Not Reported
PUBLIC/SDX00R-015-4	5,7	II Not Reported
PUBLIC/SDX00R-022-66	4,6	I Not Reported
PUBLIC/SDX00R-029-3	2,6	I Not Reported
PUBLIC/SDX00R-030-16	5,7	II Not Reported
PUBLIC/SDX00R-035-12	2,4	I Not Reported
PUBLIC/SDX00R-035-24	3	O Not Reported
PUBLIC/SDXOOR-035-39	1,3	O Not Reported
PUBLIC/SDX00R-035-42	4,6	I Not Reported
PUBLIC/SDX00R-035-59	2,4,6	I Not Reported
PUBLIC/SDX00R-039-42	5,7	II Not Reported
RENK/RS159RR	4	I 1-3,6-11,13,15,17,21,23-24
RENK/RS199RR	4	I 1-11,13-15,17-18,21-22,24
RENK/RS223RR	5,7	II 1-11,13-15,17-18,21-22,24
RENK/RS234RR	7	II Not Reported
RENK/RS244NRR	7	II 1-2,10-11,13,15-18,24
RENK/RS253RR	7	II Not Reported
SANDS/EXP 0969RR	1,3	0 1-11,13-15,17-18,21-22,24
SANDS/EXP 1766RR	2,4	I 1-2,10-11,13,15-18,24
SANDS/EXP 2669RR	7	II 1-3,6-11,13,15,17,21,23-24
SANDS/SOI 0661RR	, 1,3	0 No Resistance
SANDS/SOI 0931RR	1,3	0 1-2,10-11,13,15-18,24
SANDS/SOI 1261RR	2,4	I 1-3,6-11,13,15,17,21,23-24
SANDS/SOI 1540RR	2,4	I No Resistance
SANDS/SOI 2143RR	5,7	II 1-11,13-15,17-18,21-22,24
SANDS/SOI 2151NRR	7	II 1-11,13-15,17-18,21-22,24
SANDS/SOI 2169RR	5,7	II 1-2,10-11,13,15-18,24
SANDS/SOI 226RR	7	II No Resistance
SANDS/SOI 2642NRR	7	II 1-2,10-11,13,15-18,24
SANDS/SOI 2754RR	7	II 1-11,13-15,17-18,21-22,24
SANDS/SOI 2872RR	7	II 1-3,6-11,13,15,17,21,23-24
SEEDS 2000/2090RR	1	O No Resistance
SEEDS 2000/2030NN SEEDS 2000/2130RR	2	I Unknown
52256 2000, 2100mm	_	1 Ominiown

Table C. 2004 Roundup Ready soybean entries (Continued).

Brand / Variety	Table Number(s)		Phytophthora Race resistance
Brana / variety	Number (3)	αι ρ.	nade resistance
SODAK GENETICS/SD1081RR	1,3	0	1-2,10-11,13,15-18,24
SODAK GENETICS/SD1091RR	1,3	0	1-2,10-11,13,15-18,24
SODAK GENETICS/SD1151RR	2,4,6	I	Not Reported
STINE/S0504-4	1	0	1-2,10-11,13,15-18,24
STINE/S0900-4	1	0	No Resistance
STINE/S0906-4	1,3	0	1-11,13-15,17-18,21-22,24
STINE/S0943-4	2,4	I	1-11,13-15,17-18,21-22,24
STINE/S0992-4	2	I	No Resistance
STINE/S1300-4	2,4	I	No Resistance
STINE/S1586-4	2,4	I	1-2,10-11,13,15-18,24
STINE/S1918-4	2,4,6	I	No Resistance
STINE/S2103-4	7	II	1-11,13-15,17-18,21-22,24
STINE/S2116-4	5,7	ΙΙ	1-11,13-15,17-18,21-22,24
STINE/S2403-4	7	ΙΙ	1-11,13-15,17-18,21-22,24
STINE/S2404-4	7	ΙΙ	No Resistance
STINE/S2783-4	7	II	1-11,13-15,17-18,21-22,24
TECH. DIRECT/TD-055RR	1	0	No Resistance
TECH. DIRECT/TD-077RR	1	0	1-2,10-11,13,15-18,24
TECH. DIRECT/TD-099RR	1,3	0	No Resistance
TECH. DIRECT/TD-199RR	2,4,6	I	1-11,13-15,17-18,21-22,24
TECH. DIRECT/TD-202RR	2,4,6	I	1-11,13-15,17-18,21-22,24
TECH. DIRECT/TD-233RR	7	ΙΙ	1-11,13-15,17-18,21-22,24
TECH. DIRECT/TD-255RR	7	II	No Resistance
TECH. DIRECT/TD-262RR	7	II	1-3,6-11,13,15,17,21,23-24
TECH. DIRECT/TD-266RR	7	II	1-2,10-11,13,15-18,24
THOMPSON/T-0889+RR	1,3	0	No Resistance
THOMPSON/T-1212RR/SCN	4	I	1-3,6-11,13,15,17,21,23-24
THOMPSON/T-1444RR	2	I	1-3,6-11,13,15,17,21,23-24
THOMPSON/T-1577RR	2	I	No Resistance
THOMPSON/T-1818RR/SCN	2,4	I	1-2,10-11,13,15-18,24
THOMPSON/T-1901RR	2,4	I	Not Reported
THOMPSON/T-2121RR/SCN	7	II	1-3,6-11,13,15,17,21,23-24
THOMPSON/T-2121RR/SCN	2	I	1-3,6-11,13,15,17,21,23-24
THOMPSON/T-2343RR	5,7	II	1-11,13-15,17-18,21-22,24
THOMPSON/T-2404+RR	7	II	1-11,13-15,17-18,21-22,24
THOMPSON/T-2422RR	7	II	1-11,13-15,17-18,21-22,24
THOMPSON/T-2505+RR	7	II	No Resistance
THOMPSON/T-2707+RR	7	II	1-3,6-11,13,15,17,21,23-24
THOMPSON/T-2790+RR	7	II	1-2,10-11,13,15-18,24
THOMPSON/T-7193RR/SCN	2,4	I	1-11,13-15,17-18,21-22,24
THOMPSON/T-7205RR	2,4,6	I	1-11,13-15,17-18,21-22,24
THOMPSON/T-7214RR	4,6	I	No Resistance
THOMPSON/T-7234ARR	5,7	II	1-11,13-15,17-18,21-22,24
THOMPSON/T-7234RR	2,4,6	Ι	1-11,13-15,17-18,21-22,24
THUNDER/2209RR	1	0	1-11,13-15,17-18,21-22,24
THUNDER/2413NRR	4	I	1-11,13-15,17-18,21-22,24

Table C. 2004 Roundup Ready soybean entries (Continued).

	Table	Mat	Phytophthora
Brand / Variety	Number(s)		Race resistance
OP FARM/6102RR	1,3	0	Not Reported
TOP FARM/6144RR	4	I	Not Reported
TOP FARM/6174RR	4	I	Not Reported
TOP FARM/E34104RR	5,5,7	ΙΙ	Not Reported
TOP FARM/E34412RR	5,7	ΙΙ	Not Reported
TOP FARM/E34514RR	4	I	Not Reported
ΓΟΡ FARM/E34520RR	5,7	II	Not Reported
TOP FARM/E34714RR	4,6	I	Not Reported
ΓΟΡ FARM/E34904RR	4,6	I	Not Reported
TOP FARM/E3M245RR	5,7	II	Not Reported
OP FARM/E3M278RR	5,7	ΙΙ	Not Reported
OP FARM/E3M321RR	4,6	I	Not Reported
ENSMAN/W 2062RR	1	0	Not Reported
ENSMAN/W 2090RR	1	0	Not Reported
ENSMAN/W 2103RR	1	0	1-11,13-15,17-18,21-22,24
ENSMAN/W 2121RR	2	I	1-3,6-11,13,15,17,21,23-24
/ENSMAN/W 2144RR	2,4	I	1-11,13-15,17-18,21-22,24
/ENSMAN/W 2163RR	4	I	1-2,10-11,13,15-18,24
WENSMAN/W 2211RR	5	II	1-11,13-15,17-18,21-22,24
WENSMAN/W 2400RR	5	11	1-11,13-15,17-18,21-22,24
ZILLER/BT 7145R	2,4	I	1-2,10-11,13,15-18,24
ZILLER/BT 7150R	4	I	1-3,6-11,13,15,17,21,23-24
ILLER/BT 7193R	4,6	I	1-2,10-11,13,15-18,24
ZILLER/BT 7215R	7	11	1-11,13-15,17-18,21-22,24
ZILLER/EXP33513R	2	I	1-2,10-11,13,15-18,24
ZILLER/EXP44310R	2	I	1-2,10-11,13,15-18,24

Table 1a. Roundup Ready maturity group-0 soybean variety yield averages- northern South Dakota locations, 2003-2004.

Brand/Variety		Northern Locations 2003-04 Yield Averages				Nontho	nn 70no
		South Shore		Warner		Northern Zone Averages	
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
NUTECH/NT-0999RR	126	45		52		49	
PRAIRIE BR./PB-0954RR	128	44		51		48	
KRUGER / 101RR	128	42	31	51	49	47	40
GOLD COUNTRY/2509RR	126	43		50		47	
DYNA-GRO/DG 33R09	126	44		49		47	
WENSMAN/W 2103RR	126	44	32	49	47	47	40
MUSTANG/M-094RR	127	44	33	48	49	46	41
MUSTANG/M-095RR	127	43		48		46	
KRUGER/098RR	126	42	30	50	50	46	40
KRUGER / 090RR	126	42		49		46	
PRAIRIE BR./PB-0923RR	126	40	30	51	50	46	40
DYNA-GRO/DG 37A10	126	41		51		46	
NORTHSTAR/NS 0954RR	127	45	34	46	45	46	40
NUTECH/NT-0889RR	126	43		47		45	
TECH. DIRECT/TD-099RR	127	43		46		45	
THOMPSON/T-0889+RR	126	42	<i>_</i>	47		45	
MUSTANG/M-092RR	127	39	31	48	46	44	39
MALLARD/EXP RR0914	125	40		47		44	
NUTECH/NT-0676+RR	125	41		46	-	44	
NUTECH/NT-0711ARR	129	42		45		44	
KRUGER / EXP089RR	126	44		43		44	
PRAIRIE BR./PB-1063RR	126	38	29	49	48	44	39
SEEDS 2000/2090RR	127	40		48		44	
BIO GENE/BG0913RR	127	40		48		44	
MUSTANG/M-075RR	124	40		45		43	
NUTECH/NT-0606RR	122	41		45		43	
TECH. DIRECT/TD-077RR	124	41		45		43	
STINE/S0900-4	127	41		45		43	j .
PRAIRIE BR./PB-1043RR	130	40	30	46	46	43	38
DYNA-GRO/DG 32Y09	123	39		46		43	

^{*} DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

Table 1a. Roundup Ready maturity group-0 soybean variety yield averages- northern South Dakota locations, 2003-2004 (continued).

				Location: ld Avera			_	
		South	Shore	Warı	ner	Northe Avera	rn Zone ages	
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr	
WENSMAN/W 2090RR	126	36		49		43		
NORTHSTAR/NS 0609RR	125	41		44		43		
ASGROW/AG0801	124	38	29	45	47	42	38	
ASGROW/AG1001	125	39		44		42	.	
MUSTANG/M-083RR	125	38	31	46	46	42	39	
DEKALB/DKB07-52	121	38	30	45	46	42	38	
NUTECH/NT-0848RR	126	42		42		42	.	
KRUGER/099+RR	126	40	32	44	48	42	40	
PRAIRIE BR./PB-0812RR	126	39	30	45	45	42	38	
NORTHSTAR/NS 0517RR	122	40		44		42		
SODAK GENETICS/SD1091RR	126	38	28	45	46	42	37	
MUSTANG/M-055RR	124	37		45		41		
TECH. DIRECT/TD-055RR	122	40		42		41	.	
WENSMAN/W 2062RR	122	37	29	44	47	41	38	
PUBLIC/SD01-1253R	123	37		45		41		
PUBLIC/SD1091RR-4	129	37		44		41		
PUBLIC/MN-0904RR	126	36	28	45	47	41	38	
MUSTANG/M-053RR	121	37	31	42	45	40	38	
PUBLIC/SDX00R-035-39	127	39		41	Ι.	40	.	
DYNA-GRO/DG 31B08	123	33		45		39		
BIO GENE/BG100RR	128	38		39		39		
PUBLIC/SD01-187R	128	34		43		39	.	
THUNDER/2209RR	126	35		41		38	.	
STINE/S0906-4	128	34		41		38	.	
SODAK GENETICS/SD1081RR	126	36	28	39	43	38	36	
PUBLIC/SD01-2736R	126	35		41		38		
PUBLIC/SD01-1780R	127	33		35		34	.	
SANDS/SOI 0931RR	126	40	31				.	
SANDS/EXP 0969RR	129	44					.	
SANDS/SOI 0661RR	126	35					.	

 $^{^{\}star}$ DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

Table 1a. Roundup Ready maturity group-0 soybean variety yield averages- northern South Dakota locations, 2003-2004 (continued).

			orthern l 3-04 Yie	Northern Zone			
		South	Shore	Warı	ner	Avera	
 Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
DAIRYLAND/DSR-040/RR	126	39	30				
DAIRYLAND/DSR-050/RR	122			48	49		.
DAIRYLAND/DST08-000/RR	130	36					.
DAIRYLAND/DSR-091/RR	124			42			.
TOP FARM/6102RR	126	36	29				
STINE/S0504-4	123			44			
NORTHSTAR/NS 0509RR	123	34					
NORTHSTAR/NS 0805RR	127	34					.
EXCEL/8055RR	122			48	49	.	.
EXCEL/8020RR	118			42			
PUBLIC/SD01-2475R	131	41					
PUBLIC/SD00-1037R	131	36	30				
PUBLIC/SD00-1251R	130	35	27				.
PUBLIC/SD00-1258R	133	37	27				
PUBLIC/SD93-1233T	130	38	30				·
Test avg.:	126	39	30	46	47	43	39
High value:	133	45	34	52	50	49	41
# Lsd (.05):		6	4	4	5	4	W .
## TPG-value:		39	30	48	45	45	
@ Coef. Var.:		9	10	6	7	8	.
No. Entries:		70	26	62	21	57	

^{*} DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-value= minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 1b. Roundup Ready maturity group-0 soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2004.

					ocation: & Lodgi			Name	.	7
		Sou	th Sho	ore	١	Warne	r		hern i verag	
Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	Oil	Lodging
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*
SODAK GENETICS/SD1091RR	126	36.3	16.0	1	36.8	16.9	1	36.6	16.5	1
NORTHSTAR/NS 0609RR	125	35.4	15.9	1	36.2	16.3	1	35.8	16.1	1
PUBLIC/SD01-1253R	123	35.9	15.2	1	35.2	16.5	1	35.6	15.9	1
PUBLIC/SD01-1780R	127	35.4	15.7	1	35.1	16.7	1	35.3	16.2	1
MUSTANG/M-094RR	127	34.9	16.0	1	35.2	16.6	1	35.1	16.3	1
KRUGER/099+RR	126	34.6	17.0	1	35.5	16.9	1	35.1	17.0	1
PUBLIC/SD1091RR-4	129	34.8	16.2	2	35.3	17.0	1	35.1	16.6	1
NORTHSTAR/NS 0954RR	127	34.4	17.0	1	35.5	17.0	1	35.0	17.0	1
SEEDS 2000/2090RR	127	34.6	16.4	1	35.2	16.7	1	34.9	16.6	1
BIO GENE/BG0913RR	127	34.3	16.6	1	35.3	16.5	1	34.8	16.6	1
DEKALB/DKB07-52	121	34.3	16.3	1	35.2	17.1	1	34.8	16.7	1
PRAIRIE BR./PB-1063RR	126	34.4	16.3	1	35.0	16.9	1	34.7	16.6	1
NUTECH/NT-0606RR	122	34.3	16.4	1	35.0	17.0	_ 1	34.7	16.7	1
PUBLIC/MN-0904RR	126	34.3	16.9	1	35.0	17.3	1	34.7	17.1	1
MUSTANG/M-083RR	125	34.3	17.0	1	34.9	17.5	1	34.6	17.3	1
MUSTANG/M-092RR	127	34.4	16.3	1	34.8	17.3	1	34.6	16.8	1
KRUGER/090RR	126	34.4	16.0	1	34.7	16.6	1	34.6	16.3	1
WENSMAN/W 2062RR	122	34.6	16.2	1	34.4	17.0	1	34.5	16.6	1
NORTHSTAR/NS 0517RR	122	34.3	16.4	1	34.7	17.2	1	34.5	16.8	1
PUBLIC/SD01-187R	128	33.6	17.0	1	35.1	17.3	1	34.4	17.2	1
NUTECH/NT-0848RR	126	33.8	16.8	1	34.9	17.3	1	34.3	17.1	1
MUSTANG/M-053RR	121	33.6	16.9	1	35.0	17.2	1	34.3	17.1	1
PRAIRIE BR./PB-0812RR	126	33.8	16.9	1	34.8	17.6	1	34.3	17.3	1
TECH. DIRECT/TD-055RR	122	34.0	16.7	1	34.3	17.1	1	34.2	16.9	1
KRUGER/EXP089RR	126	33.9	16.6	1	34.3	17.1	1	34.1	16.9	1
STINE/S0906-4	128	33.4	16.9	1	34.7	17.4	1	34.1	17.2	1
THUNDER/2209RR	126	34.0	17.1	1	33.9	17.5	1	34.0	17.3	1
NUTECH/NT-0711ARR	129	33.6	16.4	1	34.2	16.9	1	33.9	16.7	1
TECH. DIRECT/TD-077RR	124	33.9	16.2	1	33.8	17.1	1	33.8	16.7	1
MUSTANG/M-075RR	124	33.9	16.2	1	33.7	17.3	1	33.8	16.8	1

 $^{^{\}star}$ DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 1b. Roundup Ready maturity group-0 soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2004 (continued).

					_ocation: & Lodgi:					_
		Sou	th Sho	ore	\	Varne	r		hern i verag	
Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	Oil	Lodging
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*
MUSTANG/M-055RR	124	33.3	16.5	1	34.1	17.0	1	33.7	16.8	1
WENSMAN/W 2103RR	126	33.2	16.8	1	34.0	17.2	1	33.6	17.0	1
NUTECH/NT-0676+RR	125	33.8	16.2	1	33.4	17.1	1	33.6	16.7	1
PRAIRIE BR./PB-0923RR	126	32.6	17.0	1	34.2	17.3	1	33.4	17.2	1
PRAIRIE BR./PB-1043RR	130	33.0	17.6	1	33.7	18.0	1	33.4	17.8	1
NUTECH/NT-0999RR	126	32.9	16.9	1	33.8	17.2	1	33.3	17.1	1
KRUGER / 101RR	128	32.9	17.0	1	33.8	17.2	1	!	17.1	1
ASGROW/AG1001	125	33.2	16.8	1	33.2	17.7	1	33.2	17.3	1
DYNA-GRO/DG 37A10	126	32.8	16.9	1	33.6	17.3	1	33.2	17.1	1
PRAIRIE BR./PB-0954RR	128	32.7	17.4	1	33.6	17.8	1	33.2	17.6	1
GOLD COUNTRY/2509RR	126	32.8	17.3	1	33.5	17.8	1	33.2	17.6	1
BIO GENE/BG100RR	128	33.0	17.0	1	33.2	17.6	1	33.1	17.3	1
KRUGER / 098RR	126	32.8	17.1	1	33.3	17.8	1	33.1	17.5	1
PUBLIC/SD01-2736R	126	33.4	17.2	1	32.6	18.5	1	33.0	17.9	1
SODAK GENETICS/SD1081RR	126	32.7	17.2	1	33.1	18.2	1		17.7	1
NUTECH/NT-0889RR	126	32.8	17.5	1	33.0	 17.8	1	32.9	17.7	1
MUSTANG/M-095RR	127		17.2	7 1		17.7	1		17.5	1
TECH. DIRECT/TD-099RR	127	32.5		1		18.0	1		17.6	1
MALLARD/EXP RR0914	125		16.3	1		17.2	1		16.8	1
STINE/S0900-4	127	32.5	!	1	!	18.0	1		17.9	1
THOMPSON/T-0889+RR	126	32.4	17.4	1	33.2	18.0	1	32.8	17.7	1
WENSMAN/W 2090RR	126	32.3	17.2	1	33.2	17.8	1	32.8	17.5	1
DYNA-GRO/DG 33R09	126	!	16.3	1		16.8	1		16.6	1
DYNA-GRO/DG 32Y09	123	32.5	17.1	1	32.7	18.0	1	32.6	17.6	1
DYNA-GRO/DG 31B08	123	32.1	17.4	1	32.9	17.7	1		17.6	1
PUBLIC/SDX00R-035-39	127	31.9	17.6	1	31.9	18.8	1	31.9	18.2	1
ASGROW/AG0801	124	32.5	16.4	1	31.1	17.5	1	31.8	17.0	1
SANDS/SOI 0931RR	126	33.2	16.8	1					.	
SANDS/EXP 0969RR	129	32.1	16.7	1			į .	į .	į .	į .
SANDS/SOI 0661RR	126	35.3	16.2	1				.	.	

 $^{^{\}star}$ DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 1b. Roundup Ready maturity group-O soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2004 (continued).

		!		orthern I	Nonti	Northern Zone				
		Sou	th Sho	ore	V	Varner	•	Averages		
 Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	Oil	Lodging
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*
DAIRYLAND/DSR-040/RR	126	33.3	17.0	1						
DAIRYLAND/DSR-050/RR	122				33.3	17.5	1		.	
DAIRYLAND/DST08-000/RR	130	33.0	17.1	1					.	
DAIRYLAND/DSR-091/RR	124				34.9	17.1	1		.	
TOP FARM/6102RR	126	33.7	16.9	1		-			.	-
 STINE/S0504-4	123				33.3	17.0	1			
NORTHSTAR/NS 0509RR	123	33.7	17.0	1					.	
NORTHSTAR/NS 0805RR	127	31.9	17.3	1					.	
EXCEL/8055RR	122				33.3	17.5	1		.	
EXCEL/8020RR	118				34.1	16.9	1		-	
PUBLIC/SD01-2475R	131	31.8	17.2	1						
PUBLIC/SD00-1037R	131	31.6	17.0	1					.	
PUBLIC/SD00-1251R	130	34.3	16.7	1						
PUBLIC/SD00-1258R	133	34.1	16.2	1					.	
PUBLIC/SD93-1233T	130	34.7	16.2	1				l , , , ,		.
Test avg.:	126	33.5	16.7		1 34.1	17.3	3	1 33	.9 17.	0 1
High value:	133	36.3	17.7	:	36.8	18.8	3	1 36	.6 18.	2 1
# Lsd(.05):				N:	3		ı	vs		NS.
## TPG-value:					1			1		1
@ Coef. Var.:				19	9			0		7
No. Entries:		70	70	70	0 62	2 62	2 (62	57 5	7 57

^{*} DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a column are non-significant(NS), NS is indicated.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error, 15% or less is best.

Table 2a. Roundup Ready maturity group-I soybean variety yield averages- northern South Dakota locations, 2003-2004.

		!	orthern I 3-04 Yie			Nontho	on 7ono
		South	Shore	Warı	ner	Aver	rn Zone ages
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
KRUGER/223RR	132	46	32	55	49	51	41
KRUGER/223+RR		47	34	52	49	50	42
NUTECH/NT-2202RR		44		53		49	
KRUGER / 192RR	131	45		53		49	
STINE/S1918-4	132	46		52		49	
STINE/S1300-4	130	46		51		49	
PRAIRIE BR./PB-1754RR	131	44		53	_	49	
ASGROW/AG1903		45		50		48	
NUTECH/NT-1909RR	130	46		49		48	
TECH. DIRECT/TD-202RR		44		52		48	
KRUGER/191RR	_	48		48		48	_
KRUGER/211+RR	135	43	32	52	48	48	40
KRUGER/195+RR/SCN	130	43	-	52		48	
PRAIRIE BR./PB-1954RR	130	45		51		48	/
THOMPSON/T-7234RR	131	45		51		48	
NUTECH/NT-2002RR		47		46		47	
STINE/S0943-4	127	43	31	51	46	47	39
PRAIRIE BR./PB-1914RR	130	44		50		47	
PETERSON/PFS 0410RR	127	43	31	50	48	47	40
MUSTANG/M-151RR	129	41	30	50	45	46	38
NUTECH/NT-1010RR	126	45		46		46	_
THOMPSON/T-7205RR	129	44	_	47	_	46	
THOMPSON/T-7193RR/SCN		40		51	-	46	
NORTHSTAR/NS 1019RR	126	43		49	-	46	
PETERSON/PFS 0511RR	129	44		48		46	
MUSTANG/M-153RR	131	42	30	47	45	45	38
MUSTANG/M-124RR	128	40	29	49	43	45	36
MUSTANG/M-115RR	127	42		48		45	
NK BRAND/S17-P9	133	40		50		45	
MALLARD/EXP RR1314	128	41		49		45	١.

^{*} DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

Table 2a. Roundup Ready maturity group-I soybean variety yield averages- northern South Dakota locations, 2003-2004 (continued).

			orthern I 3-04 Yie				
		South	Shore	Warı	ner	Northe Aver	rn Zone ages
Brand/Variety	DTM	1	Bu/Acre		1 -	1	1
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
MALLARD/EXP RR1512	134	42		47		45	
TECH. DIRECT/TD-199RR	132	41		49		45	ļ .
KRUGER/EXP167RR	131	42		48		45	
PRAIRIE BR./PB-1620RR	130	42	32	47	47	45	40
PRAIRIE BR./PB-1294RR	129	41		48		45	
 WENSMAN/W 2121RR	129	41		48		45	
THOMPSON/T-1444RR	126	41		48		45	
SEEDS 2000/2130RR	128	41		48		45	
ASGROW/AG1401	127	41	31	46		44	
ASGROW/AG1603	129	42		45		44	
MUSTANG/M-155RR	130	41		46		44	
KRUGER / 149+RR	132	41		46		44	
GOLD COUNTRY/3512RR	129	39		48		44	١,
PRAIRIE BR./PB-1552RR	131	42	30	45	44	44	37
DYNA-GRO/DG 34R12	133	43		45		44	,
THOMPSON/T-1901RR		37		50		44	
PETERSON/PFS 0415RR	129	39	<i>A</i> .	49		44	
NK BRAND/S14-A7	126	39		47		43	W .
KRUGER/EXP152RR	129	38		47		43	
DAIRYLAND/DST13-000/RR	128	37		48		43	
STINE/S1586-4	132	42		43		43	
PRAIRIE BR./PB-1254RR	127	38		47		43	
JACOBSEN/J642R	127	41		45		43	
WENSMAN/W 2144RR	131	36		49		43	ļ .
THOMPSON/T-1577RR	130	38		48		43	
SODAK GENETICS/SD1151RR	127	41	30	45	43	43	37
KRUGER/125RR	125	40	.	44		42	
STINE/S0992-4	126	39	.	45		42	
DYNA-GRO/DG 31C15RR	133	39	28	45	44	42	36
PETERSON/EXP 1.2RR	125	39	.	44		42	

 $^{^{\}star}$ DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

Table 2a. Roundup Ready maturity group-I soybean variety yield averages- northern South Dakota locations, 2003-2004 (continued).

			orthern I 3-04 Yie		_		
		South	Shore	Warı	ner	Northei Avera	rn Zone ages
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
MALLARD/EXP RR1111	126	37		44		41	
GOLD COUNTRY/6016RR	128	37	29	45	41	41	35
DAIRYLAND/DST15-000/RR	129	37		45		41	
KELTGEN AGVENTURE/AV 10	126	36		44		40	
PRAIRIE BR./PB-1354RR	129	38		41		40	
PRAIRIE BR./PB-1634RR	131	34		45		40	
DYNA-GRO/DG 32F12	127	37		43		40	
THOMPSON/T-1818RR/SCN	١.	36		44		40	
THOMPSON/T-2121RR/SCN		37		43		40	
PUBLIC/MN-1803RR	135	38	28	42	39	40	34
MUSTANG/M-174RR		37	29		_		
DEKALB/DKB19-52				44	43	_	
SANDS/SOI 1540RR	134	43					
SANDS/SOI 1261RR	134	44					/
SANDS/EXP 1766RR) .	43					
PUBLIC/SDX00-022R-23	130	35				1	
PUBLIC/SDX00-022R-53	132	43					
PUBLIC/SDX00-024R-14				40			
LATHAM/EXP-E1230R	132	36					
LATHAM/EXP-E1330R	134	41					
GOLD COUNTRY/6117RR		25					
DAIRYLAND/DSR-130/RR	128			46			
PUBLIC/SDX00-053R-46	134	39					
ZILLER/EXP44310R	130	38	_	_		_	
ZILLER/EXP33513R	134	42					
ZILLER/BT 7145R	131	41			_		
JACOBSEN/J647R	133	39					
NORTHSTAR/NS 1407RR	126			44	42		
NORTHSTAR/NS 1409RR	132	39	·				
BIO GENE/BG150RR	134	41					
DIO GENE, DOTOOTHI	104				•		

 $^{^{\}star}$ DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

Table 2a. Roundup Ready maturity group-I soybean variety yield averages- northern South Dakota locations, 2003-2004 (continued).

		No	s ges	– Northern Zone				
		South	Shore	Warı	ner	Averages		
 Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr	
EXCEL/8151RR	132	39						
EXCEL/8160RR	135	38						
PUBLIC/SDX00R-035-12		30						
PUBLIC/SDX00R-035-59	134	37						
PUBLIC/SD01-3219R	127			42				
 PUBLIC/SD01-67R	132			44				
PUBLIC/SD96-170RR-28L	124			48				
PUBLIC/SD01-1075R	127			44				
PUBLIC/SD01-1094R				42				
PUBLIC/SD01-1792R	130	36						
PUBLIC/SD01-3402R	124			41				
PUBLIC/SD00-1018R	122			41	38	į .		
PUBLIC/SD00-236R	130	39	29				,	
PUBLIC/SDX00R-029-3				43				
Test avg.:	130	41	30	47	44	45	38	
High value:	135	48	34	55	49	51	42	
# Lsd (.05):	\	5	NS	6	6	4	7 .	
## TPG-value:		43	29	49	43	47	.	
@ Coef. Var.:		8	10	7	9	6		
No. Entries:		92	17	82	17	70		

^{*} DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a colum are non-significant(NS), NS is indicated.

^{##} TPG-value= minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 2b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2004.

THOMPSON/T-1818RR/SCN				No									
Brand/Variety (By zone protein) DTM* Protein Oil Lodging Circh College Protein Oil Lodging Protein Oil Lodging Circh Protein Oil Lodging Circh			2004	Prote	in, Oil,	& Lodgi	ng Av	erages	Nonti	honn '	70n0		
THOMPSON/T-1818RR/SCN			Sou	th Sh	ore	\	Varne	r					
KRUGER/125RR 125 34.5 16.7 1 33.8 17.6 1 34.6 16.9 KRUGER/125RR 129 34.3 16.8 1 34.0 17.1 1 34.2 17.0 MALLARD/EXP RR1111 1 26 34.1 17.1 1 33.9 17.6 1 34.0 17.1 KELTGEN AGVENTURE/AV 10 126 33.3 17.4 1 34.2 17.1 1 33.8 17.5 1 34.0 17.1 KELTGEN AGVENTURE/AV 10 126 33.3 17.4 1 34.2 17.1 1 33.8 17.3 JACOBSEN/J642R 127 33.6 16.9 1 33.9 17.1 1 33.8 17.0 17.1 1 33.8 17.0 FETERSON/EXP 1.2RR 125 33.5 17.1 1 33.5 17.1 1 33.6 17.9 FETERSON/EXP 1.2RR 125 33.5 17.1 1 33.8 17.5 1 33.6 17.3 MUSTANG/M-155RR 130 33.5 16.6 2 33.6 17.5 1 33.6 17.1 MALLARD/EXP RR1512 134 33.3 16.9 1 33.8 17.5 1 33.6 17.1 MALLARD/EXP RR1512 134 33.3 16.9 1 33.8 17.5 1 33.6 17.1 MALLARD/EXP RR1512 134 33.3 16.9 1 33.8 17.5 1 33.6 17.2 FRAIRIE BR./PB-1754RR 131 33.3 16.9 1 33.8 17.5 1 33.6 17.2 FRAIRIE BR./PB-1754RR 131 33.3 17.0 1 33.8 17.0 1 33.6 17.2 DAIRYLAND/DST15-000/BR 129 33.0 17.2 1 33.6 17.2 1 33.3 17.4 DAIRYLAND/DST15-000/BR 129 33.0 17.2 1 33.6 17.2 1 33.3 17.4 DAIRYLAND/DST15-000/BR 129 33.0 17.1 1 33.5 17.4 1 33.2 17.1 MASGROW/AG1603 129 32.4 17.5 1 33.5 17.6 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.7 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.7 1 33.0 17.7 STINE/S0992-4 126 32.7 17.3 1 33.2 17.9 1 33.0 17.7 STINE/S0993-4 127 32.4 16.9 1 33.3 17.9 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.2 1 32.8 17.1 ASGROW/AG1603 129 32.4 17.5 1 33.3 17.9 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.9 17.7 STINE/S0993-4 127 32.4 16.9 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1603 129 32.4 17.5 1 33.3 17.9 1 32.9 17.7 STINE/S0993-4 127 32.4 16.9 1 33.3 17.9 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.9 1 33.3 17.7 1 32.8 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.7 1 32.8 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.7 1 32.8 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.7 1 32.8 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.7 1 32.8 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.7 1 32.8 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.7	Brand/Variety		Protein	Oil	Lodging	Protein	0il	Lodging	Protein	Oil	Lodging		
KRUGER/125RR	By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*		
PRAIRIE BR./PB-1354RR 129	THOMPSON/T-1818RR/SCN		33.9	16.8	1	35.3	16.9	1	34.6	16.9	1		
MALLARD/EXP RR1111	(RUGER/125RR	125	34.5	16.7	1	33.8	17.6	1	34.2	17.2	1		
DYNA-GRO/DG 32F12	PRAIRIE BR./PB-1354RR	129	34.3	16.8	1	34.0	17.1	1	34.2	17.0	1		
KELTGEN AGVENTURE/AV 10 126 33.3 17.4 1 34.2 17.1 1 33.8 17.3 JACOBSEN/JG42R 127 33.6 16.9 1 33.9 17.1 1 33.8 17.0 THOMPSON/T-1901RR	MALLARD/EXP RR1111	126	34.1	17.1	1	33.9	17.6	1	34.0	17.4	1		
JACOBSEN J J G 4 2 R)YNA-GRO/DG 32F12	127	34.1	16.7	1	33.8	17.5	1	34.0	17.1	1		
THOMPSON/T-1901RR	(ELTGEN AGVENTURE/AV 10	126	33.3	17.4	1	34.2	17.1	1	33.8	17.3	1		
PETERSON/EXP 1.2RR	JACOBSEN/J642R	127	33.6	16.9	1	33.9	17.1	1	33.8	17.0	1		
MUSTANG/M-155RR 130 33.5 16.6 2 33.6 17.5 1 33.6 17.1 MALLARD/EXP RR1512 134 33.3 16.9 1 33.8 17.5 1 33.6 17.2 PRAIRIE BR./PB-1754RR 131 33.3 16.9 1 33.8 17.0 1 33.6 17.0 SODAK GENETICS/SD1151RR 127 34.0 16.8 1 33.0 17.3 1 33.5 17.1 KRUGER/149+RR 132 33.2 16.9 1 33.6 17.3 1 33.5 17.1 THOMPSON/T-2121RR/SCN . 33.3 17.0 1 33.4 17.8 1 33.3 17.4 DAIRYLAND/DST15-000/RR 129 33.0 17.2 1 33.6 17.2 1 33.3 17.4 1 33.1 17.4 PRAIRIE BR./PB-1634RR 131 32.1 17.4 1 34.1 17.4 1 33.1 17.4 WENSMAN/W 2144RR 131 32.6 17.2 1 33.6 17.4 1 33.1 17.4 WENSMAN/W 2144RR 131 32.6 17.2 1 33.6 17.4 1 33.1 17.3 KRUGER/EXP152RR 129 33.0 17.1 1 33.0 17.7 1 33.0 17.4 ASGROW/AG1603 129 32.4 17.5 1 33.5 17.6 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.7 STINE/S0992-4 126 32.7 17.3 1 33.2 17.6 1 33.0 17.7 STINE/S0943-4 128 32.6 18.0 1 33.3 17.9 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.8 17.9 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	HOMPSON/T-1901RR	.	34.0	16.6	1	33.5	17.1	1	33.8	16.9	1		
MALLARD/EXP RR1512	'ETERSON/EXP 1.2RR	125	33.5	17.1	1	33.7	17.5	1	33.6	17.3	1		
PRAIRIE BR./PB-1754RR 131 33.3 16.9 1 33.8 17.0 1 33.6 17.0 SODAK GENETICS/SD1151RR 127 34.0 16.8 1 33.0 17.3 1 33.5 17.1 KRUGER/149+RR 132 33.2 16.9 1 33.6 17.3 1 33.4 17.1 THOMPSON/T-2121RR/SCN . 33.3 17.0 1 33.6 17.3 1 33.4 17.1 THOMPSON/T-2121RR/SCN . 33.3 17.0 1 33.6 17.3 1 33.3 17.4 THOMPSON/T-2121RR/SCN . 33.3 17.0 1 33.6 17.3 1 33.3 17.4 THOMPSON/T-2121RR/SCN . 33.3 17.0 1 33.6 17.3 1 33.3 17.4 THOMPSON/T-15-000/RR 129 32.9 16.8 1 33.5 17.4 1 33.1 17.4 1 33.1 17.4 THOMPSON/T-15-000/RR 131 32.1 17.4 1 34.1 17.4 1 33.1 17.4 THOMPSON/T-15-000/RR 129 33.0 17.1 1 33.0 17.7 1 33.0 17.4 THOMPSON/T-15-000/RR 129 32.4 17.5 1 33.5 17.6 1 33.0 17.4 THOMPSON/T-15-000/RR 128 32.6 18.0 1 33.2 17.0 1 33.0 17.7 THOMPSON/T-15-000/RR 128 32.6 18.0 1 33.2 17.0 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.9 17.9 THOMPSON/T-15-000/RR 128 32.6 17.4 1 33.3 17.9 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	NUSTANG/M-155RR	130	33.5	16.6	2	33.6	17.5	1	33.6	17.1	1		
SODAK GENETICS/SD1151RR	MALLARD/EXP RR1512	134	33.3	16.9	1	33.8	17.5	1	33.6	17.2	1		
KRUGER/149+RR 132 33.2 16.9 1 33.6 17.3 1 33.4 17.1 THOMPSON/T-2121RR/SCN . 33.3 17.0 1 33.4 17.8 1 33.3 17.4 DAIRYLAND/DST15-000/RR 129 33.0 17.2 1 33.6 17.2 1 33.3 17.2 PETERSON/PFS 0410RR 127 32.9 16.8 1 33.5 17.4 1 33.2 17.1 PRAIRIE BR./PB-1634RR 131 32.1 17.4 1 34.1 17.4 1 33.1 17.4 WENSMAN/W 2144RR 131 32.6 17.2 1 33.6 17.4 1 33.1 17.4 KRUGER/EXP152RR 129 33.0 17.1 1 33.0 17.7 1 33.0 17.4 ASGROW/AG1603 129 32.4 17.5 1 33.5 17.6 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.7 <tr< td=""><td>RAIRIE BR./PB-1754RR</td><td>131</td><td>33.3</td><td>16.9</td><td>1</td><td>33.8</td><td>17.0</td><td>1</td><td>33.6</td><td>17.0</td><td>1</td></tr<>	RAIRIE BR./PB-1754RR	131	33.3	16.9	1	33.8	17.0	1	33.6	17.0	1		
THOMPSON/T-2121RR/SCN . 33.3 17.0 1 33.4 17.8 1 33.3 17.4 DAIRYLAND/DST15-000/RR 129 33.0 17.2 1 33.6 17.2 1 33.3 17.2 PETERSON/PFS 0410RR 127 32.9 16.8 1 33.5 17.4 1 33.2 17.1 PRAIRIE BR./PB-1634RR 131 32.1 17.4 1 34.1 17.4 1 33.1 17.4 WENSMAN/W 2144RR 131 32.6 17.2 1 33.6 17.4 1 33.1 17.3 KRUGER/EXP152RR 129 33.0 17.1 1 33.0 17.7 1 33.0 17.4 ASGROW/AG1603 129 32.4 17.5 1 33.5 17.6 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.3 1 33.2 18.0 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.4 MUSTANG/M-124RR 128 32.6 18.0 1 33.2 17.7 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	SODAK GENETICS/SD1151RR	127	34.0	16.8	1	33.0	17.3	1	33.5	17.1	1		
DAIRYLAND/DST15-000/RR 129 33.0 17.2 1 33.6 17.2 1 33.3 17.2 PETERSON/PFS 0410RR 127 32.9 16.8 1 33.5 17.4 1 33.2 17.1 PRAIRIE BR./PB-1634RR 131 32.1 17.4 1 34.1 17.4 1 33.1 17.4 WENSMAN/W 2144RR 131 32.6 17.2 1 33.6 17.4 1 33.1 17.3 KRUGER/EXP152RR 129 33.0 17.1 1 33.0 17.7 1 33.0 17.4 ASGROW/AG1603 129 32.4 17.5 1 33.5 17.6 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.3 1 33.2 18.0 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.4 MUSTANG/M-124RR 128 32.6 18.0 1 33.2 17.7 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7	(RUGER/149+RR	132	33.2	16.9	1	33.6	17.3	1	33.4	17.1	1		
PETERSON/PFS 0410RR 127 32.9 16.8 1 33.5 17.4 1 33.2 17.1 PRAIRIE BR./PB-1634RR 131 32.1 17.4 1 33.1 17.4 1 33.1 17.4 WENSMAN/W 2144RR 131 32.6 17.2 1 33.6 17.4 1 33.1 17.3 KRUGER/EXP152RR 129 33.0 17.1 1 33.0 17.7 1 33.0 17.4 ASGROW/AG1603 129 32.4 17.5 1 33.5 17.6 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 18.0 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.4 MUSTANG/M-124RR 128 32.6 18.0 1 33.2 17.7 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.9 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.2 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	THOMPSON/T-2121RR/SCN) -	33.3	17.0	1	33.4	17.8	1	33.3	17.4	1		
PRAIRIE BR./PB-1634RR	DAIRYLAND/DST15-000/RR	129	33.0	17.2	1	33.6	17.2	1	33.3	17.2	1		
WENSMAN/W 2144RR 131 32.6 17.2 1 33.6 17.4 1 33.1 17.3 KRUGER/EXP152RR 129 33.0 17.1 1 33.0 17.7 1 33.0 17.4 ASGROW/AG1603 129 32.4 17.5 1 33.5 17.6 1 33.0 17.6 STINE/S0992-4 126 32.7 17.3 1 33.2 18.0 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.4 MUSTANG/M-124RR 128 32.6 18.0 1 33.2 17.7 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.8 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAN	PETERSON/PFS 0410RR	127	32.9	16.8	1	33.5	17.4	1	33.2	17.1	1		
KRUGER/EXP152RR 129 33.0 17.1 1 33.0 17.7 1 33.0 17.4 ASGROW/AG1603 129 32.4 17.5 1 33.5 17.6 1 33.0 17.6 STINE/S0992-4 126 32.7 17.3 1 33.2 18.0 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.4 MUSTANG/M-124RR 128 32.6 18.0 1 33.2 17.7 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.9 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1903 . . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5	PRAIRIE BR./PB-1634RR	131	32.1	17.4	1	34.1	17.4	1	33.1	17.4	1		
ASGROW/AG1603 129 32.4 17.5 1 33.5 17.6 1 33.0 17.6 STINE/S0992-4 126 32.7 17.3 1 33.2 18.0 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.4 MUSTANG/M-124RR 128 32.6 18.0 1 33.2 17.7 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.9 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	VENSMAN/W 2144RR	131	32.6	17.2	1	33.6	17.4	1	33.1	17.3	1		
STINE/S0992-4 126 32.7 17.3 1 33.2 18.0 1 33.0 17.7 THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.4 MUSTANG/M-124RR 128 32.6 18.0 1 33.2 17.7 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.9 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1903 . . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	KRUGER/EXP152RR	129	33.0	17.1	1	33.0	17.7	1	33.0	17.4	1		
THOMPSON/T-1577RR 130 32.7 17.1 1 33.2 17.6 1 33.0 17.4 MUSTANG/M-124RR 128 32.6 18.0 1 33.2 17.7 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.9 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	ASGROW/AG1603	129	32.4	17.5	1	33.5	17.6	1	33.0	17.6	1		
MUSTANG/M-124RR 128 32.6 18.0 1 33.2 17.7 1 32.9 17.9 DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.9 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	STINE/S0992-4	126	32.7	17.3	1	33.2	18.0	1	33.0	17.7	1		
DYNA-GRO/DG 34R12 133 32.5 17.4 1 33.3 17.9 1 32.9 17.7 STINE/S0943-4 127 32.4 16.9 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	HOMPSON/T-1577RR	130	32.7	17.1	1	33.2	17.6	1	33.0	17.4	1		
STINE/S0943-4 127 32.4 16.9 1 33.3 17.3 1 32.8 17.1 ASGROW/AG1903 . 33.3 16.3 1 32.3 17.2 1 32.8 16.8 PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	MUSTANG/M-124RR	128	32.6	18.0	1	33.2	17.7	1	32.9	17.9	1		
ASGROW/AG1903	DYNA-GRO/DG 34R12	133	32.5	17.4	1	33.3	17.9	1	32.9	17.7	1		
ASGROW/AG1903	STINE/S0943-4	127	32.4	16.9	1	33.3	17.3	1	32.8	17.1	1		
PUBLIC/MN-1803RR 135 32.6 17.1 2 32.8 17.9 1 32.7 17.5 DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	,	.	33.3	16.3	1	32.3	17.2	1	32.8	16.8	1		
DAIRYLAND/DST13-000/RR 128 32.2 17.6 1 33.0 17.7 1 32.6 17.7	•	135			2			1	!	1	1		
		!	!	!	!	!		!	!	ļ	1		
STINE/S1300-4 130 32.2 17.5 1 32.7 18.0 1 32.5 17.8	STINE/S1300-4	130	I	l	1	I		1	1	1	1		

 $^{^{\}star}$ DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 2b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2004 (continued).

		2004			Location: & Lodgi								
		2004			α Lougii	ig Avi	erayes	Nort	nern 2	7one			
		Sou	th Sh	ore	١ ١	Warne	r		verag				
Brand/Variety		Protein	Oil	Lodging	Protein	0il	Lodging	Protein	0il	Lodging			
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*			
NORTHSTAR/NS 1019RR	126	31.9	16.8	1	33.0	17.2	1	32.5	17.0	1			
TECH. DIRECT/TD-202RR	.	32.1	17.6	2	32.7	17.9	1	32.4	17.8	1			
KRUGER/192RR	131	32.2	17.4	1	32.5	18.1	1	32.4	17.8	1			
THOMPSON/T-1444RR	126	32.5	16.8	1	32.2	17.0	1	32.4	16.9	1			
NUTECH/NT-1010RR	126	32.2	17.8	1	32.4	17.9	1	32.3	17.9	1			
STINE/S1918-4	132	32.2	17.6	1	32.3	17.9	1	32.3	17.8	1			
PRAIRIE BR./PB-1954RR	130	32.6	17.0	1	31.9	17.8	1	32.3	17.4	1			
NK BRAND/S14-A7	126	32.2	17.3	1	32.2	17.8	1	32.2	17.6	1			
NUTECH/NT-2202RR	.	31.8	17.6	1	32.3	18.2	1	32.1	17.9	1			
ASGROW/AG1401	127	32.1	17.5	1	31.9	18.1	1	32.0	17.8	1			
PRAIRIE BR./PB-1254RR	127	31.2	18.0	1	32.8	18.0	1	32.0	18.0	1			
THOMPSON/T-7234RR	131	32.0	17.7	1	32.0	18.2	1	32.0	18.0	1			
NUTECH/NT-1909RR	130	32.1	17.7	1	31.8	18.4	1	32.0	18.1	1			
KRUGER/211+RR	135	31.7	17.7	1	32.2	18.1	1	32.0	17.9	1			
PRAIRIE BR./PB-1914RR	130	31.5	17.8	1	32.4	18.3	1	32.0	18.1	1			
MUSTANG/M-153RR	131	31.0	17.5	1	32.6	17.2	1	31.8	17.4	1			
NUTECH/NT-2002RR		31.8	17.6	1	31.5	18.5	1	31.7	18.1	1			
KRUGER/191RR			17.3	1	31.3		1	31.7	17.7	1			
STINE/S1586-4	132	1	16.9	1	1	17.7	1	!	17.3	1			
PRAIRIE BR./PB-1552RR	131	31.0	16.9	1	32.0	17.7	1	31.5	17.3	1			
KRUGER/223RR	132	31.4	17.8	1	31.5	18.6	1	31.5	18.2	1			
KRUGER/223+RR	.	31.3	17.5	1	31.5	18.4	1	31.4	18.0	1			
DYNA-GRO/DG 31C15RR	133	1	17.3	1	32.0	17.5	1	31.4	17.4	1			
SEEDS 2000/2130RR	128	30.5	17.4	1	32.3	17.6	1	31.4	17.5	1			
KRUGER/EXP167RR	131	30.8	17.4	1	31.8	18.0	1	31.3	17.7	1			
THOMPSON/T-7193RR/SCN		31.1	18.5	1	31.5	18.7	1	31.3	18.6	1			
THOMPSON/T-7205RR	129	30.8	18.0	1	31.6	18.4	1	31.2	18.2	1			
KRUGER/195+RR/SCN	130	30.9	18.3	1	31.5	18.7	1	31.2	18.5	1			
TECH. DIRECT/TD-199RR	132	1	17.3	1	I	18.2	1	1	17.8	1			
PRAIRIE BR./PB-1620RR	130	30.9	17.1	1	31.2	17.5	1	31.1	17.3	1			

 $^{^{\}star}$ DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 2b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2004 (continued).

		2004		orthern l in, Oil,				I			
				, ,	α Lougii	ng Ave	erages	— Northern Zone			
		South Shore Warner					•		nern 2 verage		
Brand/Variety		Protein	0il	Lodging	Protein	Oil	Lodging	Protein	0il	Lodging	
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	
NK BRAND/S17-P9	133	30.9	16.9	1	31.0	17.5	1	31.0	17.2	1	
MUSTANG/M-151RR	129	30.6	17.0	1	31.2	17.4	1	30.9	17.2	1	
WENSMAN/W 2121RR	129	30.6	17.0	1	31.1	17.3	1	30.9	17.2	1	
PETERSON/PFS 0415RR	129	30.5	17.3	1	31.2	17.2	1	30.9	17.3	1	
PETERSON/PFS 0511RR	129	31.1	16.9	1	30.5	17.7	1	30.8	17.3	1	
MALLARD/EXP RR1314	128	30.6	16.7	1	30.9	17.4	1	30.8	17.1	1	
MUSTANG/M-115RR	127	30.5	17.1	1	30.6	17.6	1	30.6	17.4	1	
GOLD COUNTRY/6016RR	128	30.4	17.2	1	30.7	17.7	1	30.6	17.5	1	
PRAIRIE BR./PB-1294RR	129	29.7	17.3	1	31.0	17.5	1	30.4	17.4	1	
GOLD COUNTRY/3512RR	129	30.2	17.4	1	30.4	17.8	1	30.3	17.6	1	
MUSTANG/M-174RR		33.3	16.6	1							
DEKALB/DKB19-52					31.6	18.3	1				
SANDS/SOI 1540RR	134	32.4	16.8	1							
SANDS/SOI 1261RR	134	32.1	16.2	1							
SANDS/EXP 1766RR) .	33.7	16.6	1				-			
PUBLIC/SDX00-022R-23	130	33.5	16.8	1							
PUBLIC/SDX00-022R-53	132	33.1	17.2	1						ļ .	
PUBLIC/SDX00-024R-14					32.2	17.6	1				
LATHAM/EXP-E1230R	132	33.6	17.1	1							
LATHAM/EXP-E1330R	134	30.5	17.1	1							
GOLD COUNTRY/6117RR		35.5	16.1	1							
DAIRYLAND/DSR-130/RR	128				33.0	17.0	1				
PUBLIC/SDX00-053R-46	134	31.8	17.6	2							
ZILLER/EXP44310R	130	33.7	17.0	1							
ZILLER/EXP33513R	134	30.2	17.1	1							
ZILLER/BT 7145R	131	32.2	17.5	1							
JACOBSEN/J647R	133	31.6	17.4	1							
NORTHSTAR/NS 1407RR	126				32.6	17.8	1				
NORTHSTAR/NS 1409RR	132	32.2	17.0	1							
BIO GENE/BG150RR	134	I	16.9	1							

 $^{^{\}star}$ DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 2b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2004 (continued).

			Prote	in, Oil,	& Lodgir	ocations & Lodging Averages			- Northern Zone		
		50u	th Sh	ore	\ \ \	Varnei	r	A.	verage	es	
Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	Oil	Lodging	
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	
EXCEL/8151RR	132	33.9	16.7	1							
EXCEL/8160RR	135	31.7	17.2	1							
PUBLIC/SDX00R-035-12		31.8	16.6	2							
PUBLIC/SDX00R-035-59	134	33.5	16.9	1							
PUBLIC/SD01-3219R	127				31.8	17.3	1				
PUBLIC/SD01-67R	132				35.1	18.1	1				
PUBLIC/SD96-170RR-28L	124				32.8	17.9	1				
PUBLIC/SD01-1075R	127				32.9	18.3	1				
PUBLIC/SD01-1094R					32.6	18.4	1				
PUBLIC/SD01-1792R	130	34.2	16.4	1							
PUBLIC/SD01-3402R	124				36.4	16.0	1				
PUBLIC/SD00-1018R	122				31.3	18.2	1	_			
PUBLIC/SD00-236R	130	34.6	16.9	1							
PUBLIC/SDX00R-029-3) .				32.5	18.4	1				
Test avg.:	130	32.2	17.2	1	32.5	17.7	1	32.3	17.5	1	
High value:	135	35.5	18.5	2	36.4	18.7	1	34.6	18.6	1	
# Lsd(.05):				0			NS			NS	
## TPG-value:				1			1			1	
@ Coef.Var.:				28			11			20	
No. Entries:		92	92	92	82	82	82	70	70	70	

^{*} DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a column are non-significant (NS), NS is indicated.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error, 15% or less is best.

Table 3a. Roundup Ready maturity group-O soybean variety yield averages- central South Dakota locations, 2003-2004.

		Central Location 2003-04 Yield Averages		
		Brookings		
Brand/Variety		Bu/Acre	Bu/Acre	1
(By zone 2004 yield)	DTM*	2004	2-Yr	
MUSTANG/M-094RR	121	51	46	1
NUTECH/NT-0999RR	120	51		
KRUGER/090RR	118	51		
NORTHSTAR/NS 0954RR	118	51	47	
KRUGER/101RR	119	50	48	
THOMPSON/T-0889+RR	118	50		
MUSTANG/M-083RR	119	49	46	
TECH. DIRECT/TD-099RR	122	49		
DYNA-GRO/DG 37A10	118	49		
MUSTANG/M-095RR	119	48		
NUTECH/NT-0889RR	118	48		
BIO GENE/BG0913RR	119	48		
ASGROW/AG1001	120	47		
SANDS/EXP 0969RR	118	47		
NUTECH/NT-0811RR	119	47		
KRUGER/098RR	119	47	45	
PUBLIC/SDX00R-035-24	119	47		
DEKALB/DKB07-52	112	46	44	
KRUGER/099+RR	117	46	43	
TOP FARM/6102RR	116	46	44	
DYNA-GRO/DG 33R09	115	46		
PUBLIC/SD01-2475R	120	46		
SANDS/SOI 0931RR	117	45	43	
NUTECH/NT-0848RR	117	45		
DYNA-GRO/DG 32Y09	115	45		
BIO GENE/BG100RR	118	45		
PUBLIC/MN-0904RR	117	45	42	
ASGROW/AG0801	114	44		İ
DYNA-GRO/DG 31B08	115	44		
PUBLIC/SDX00R-035-39	119	43		

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

Table 3a. Roundup Ready maturity group-0 soybean variety yield averages- central South Dakota locations, 2003-2004 (continued).

		Central Location 2003-04 Yield Averages	
		Brool	kings
Brand/Variety		Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr
PUBLIC/SD01-1200R	117	43	
PUBLIC/SD00-1258R	121	43	39
DAIRYLAND/DST08-000/RR	118	42	
SODAK GENETICS/SD1081RR	117	42	41
SODAK GENETICS/SD1091RR	115	42	39
PUBLIC/SD93-1233T	116	42	40
PUBLIC/SD01-1071R	118	41	40
PUBLIC/SD1091RR-4	121	40	
PUBLIC/SD00-1251R	119	40	38
PUBLIC/SD00-1037R	120	38	37
SANDS/SOI 0661RR	116	37	•
Test avg.:	118	46	43
High value:	122	51	48
# Lsd (.05):		4	4
## TPG-value:		47	44
@ Coef. Var.:		5	6
No. Entries:		42	16

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-value= minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 3b. Roundup Ready maturity group-O soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2004.

		Central Location 2004 Protein, Oil, & Lodging Averages			
		Br	rookings	3	
		Protein	Oil	Lodging	
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*	
PUBLIC/SD00-1251R	119	38.5	15.4	3	
PUBLIC/SD93-1233T	116	38.2	15.3	2	
SODAK GENETICS/SD1091RR	115	38.1	15.8	2	
PUBLIC/SD01-1071R	118	38.0	15.3	2	
PUBLIC/SD1091RR-4	121	37.3	15.9	3	
MUSTANG/M-094RR	121	37.1	15.7	2	
KRUGER/099+RR	117	37.1	16.3	2	
NUTECH/NT-0811RR	119	37.0	16.2	2	
SANDS/SOI 0661RR	116	36.9	16.4	2	
BIO GENE/BG0913RR	119	36.9	15.6	2	
PUBLIC/MN-0904RR	117	36.8	16.4	2	
MUSTANG/M-083RR	119	36.7	16.5	2	
KRUGER/090RR	118	36.7	15.5	1	
NORTHSTAR/NS 0954RR	118	36.7	16.4	2	
PUBLIC/SD00-1258R	121	36.7	15.7	2	
SANDS/SOI 0931RR	117	36.1	16.3	2	
DEKALB/DKB07-52	112	35.8	16.5	2	
NUTECH/NT-0999RR	120	35.7	16.3	2	
PUBLIC/SD01-1200R	117	35.7	16.7	2	
TOP FARM/6102RR	116	35.6	16.5	1	
THOMPSON/T-0889+RR	118	35.6	16.7	3	
NUTECH/NT-0848RR	117	35.5	16.6	2	
TECH. DIRECT/TD-099RR	122	35.5	16.9	3	
KRUGER/101RR	119	35.5	16.5	2	
DYNA-GRO/DG 37A10	118	35.4	16.6	2	
MUSTANG/M-095RR	119	35.2	17.0	3	
NUTECH/NT-0889RR	118	35.2	16.6	2	
KRUGER/098RR	119	35.2	16.7	2	
DYNA-GRO/DG 32Y09	115	35.2	16.5	2	
BIO GENE/BG100RR	118	35.1	16.6	3	

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

 $^{^{\}star}$ Lodging, 1= all plants erect, 5= all plants flat.

Table 3b. Roundup Ready maturity group-O soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2004 (continued).

		Central Location 2004 Protein, Oil, & Lodging Averages				
		Br	rookings	3		
Brand/Variety (By protein)	DTM*	Protein (%)	0il (%)	Lodging (1-5)*		
ASGROW/AG1001	120	34.9	16.4	2		
DYNA-GRO/DG 31B08	115	34.9	17.1	2		
SODAK GENETICS/SD1081RR	117	34.9	17.0	1		
PUBLIC/SD00-1037R	120	34.8	16.5	3		
SANDS/EXP 0969RR	118	34.7	16.5	2		
DAIRYLAND/DST08-000/RR	118	34.7	17.1	2		
PUBLIC/SDX00R-035-24	119	34.7	16.3	3		
PUBLIC/SD01-2475R	120	34.6	16.5	3		
ASGROW/AG0801	114	34.5	16.2	2		
DYNA-GRO/DG 33R09	115	34.5	16.2	2		
PUBLIC/SDX00R-035-39	119	33.7	17.2	2		
Test avg.:	118	35.9	16.4	2		
High value:	122	38.5	17.2	3		
* Lsd(.05):				1		
## TPG-value:				2		
### Coef.Var.:	\			24		
No. Entries:		41	41	41		



 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a column are non-significant (NS), NS is indicated.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error, 15% or less is best.

Table 4a. Roundup Ready maturity group-I soybean variety yield averages- central South Dakota locations, 2003-2004.

		Central 2003-0 Avera	4 Yield	
		Brookings		
Brand/Variety		Bu/Acre	Bu/Acre	
(By 2004 yield)	DTM*	2004	2-Yr	
NK BRAND/S19-R5		53		
NORTHSTAR/NS 1019RR	120	53		
SANDS/EXP 1766RR	.	52		
KRUGER/191RR	.	51		
KRUGER/192RR	-	51		
LATHAM/EXP-E1936R		51		
TOP FARM/E34904RR	.	51		
PETERSON/PFS 0410RR	119	51	49	
MUSTANG/M-153RR	123	50	46	
MUSTANG/M-124RR	120	50	47	
KRUGER/223+RR		50	50	
KRUGER/223RR		50	48	
TOP FARM/E34714RR		50		
PRAIRIE BR./PB-1914RR	1 .1	50		
THOMPSON/T-7214RR		50		
THOMPSON/T-7193RR/SCN		50		
COYOTE/4719RR		49		
MUSTANG/M-194NRR		49	44	
NK BRAND/S14-A7	118	49		
FARM ADVANTAGE/7192	.	49		
THUNDER/2413NRR	120	49		
TECH. DIRECT/TD-199RR		49		
PRAIRIE BR./PB-1754RR		49		
PRAIRIE BR./PB-1954RR		49		
NORTHSTAR/NS 1407RR		49	46	
ASGROW/AG1903	122	48		
SANDS/SOI 1540RR		48		
NUTECH/NT-2002RR		48		
TOP FARM/6174RR		48		
PRAIRIE BR./PB-1552RR	•	48	48	

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

Table 4a. Roundup Ready maturity group-I soybean variety yield averages- central South Dakota locations, 2003-2004 (continued).

		Central Location 2003-04 Yield Averages		
		Brookings		
Brand/Variety		Bu/Acre	Bu/Acre	
(By 2004 yield)	DTM*	2004	2-Yr	
PRAIRIE BR./PB-2112RR		48	46	
WENSMAN/W 2163RR		48		
ASGROW/AG1603	.	47		
MUSTANG/M-115RR	123	47		
NUTECH/NT-1909RR	.	47		
KRUGER / 155+RR	122	47		
KRUGER/EXP167RR	.	47		
STINE/S1918-4	.	47	47	
PRAIRIE BR./PB-1921RR		47	46	
DYNA-GRO/DG 31C15RR	.	47	47	
DYNA-GRO/DG 34R12		47		
ZILLER/BT 7145R	123	47		
THOMPSON/T-7234RR		47		
PETERSON/EXP 1.2RR	119	47		
ASGROW/AG1401		46		
NUTECH/NT-1010RR	118	46		
NUTECH/NT-2202RR		46		
TECH. DIRECT/TD-202RR		46		
KRUGER/211+RR		46	46	
DAIRYLAND/DST13-000/RR	119	46		
TOP FARM/E3M321RR		46		
NORTHSTAR/NS 1710RR	123	46		
PETERSON/PFS 0415RR		46		
PUBLIC/SD96-170RR-28L	121	46		
NK BRAND/S17-P9		45	!	
KRUGER / 125RR	120	45		
TOP FARM/6144RR	121	45		
WENSMAN/W 2144RR		45		
THOMPSON/T-7205RR		45	1	
THOMPSON/T-1212RR/SCN		45		

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

Table 4a. Roundup Ready maturity group-I soybean variety yield averages- central South Dakota locations, 2003-2004 (continued).

		Central 2003-0 Aver	4 Yield	
		Brook	kings	
Brand/Variety		Bu/Acre	Bu/Acre	
(By 2004 yield)	DTM*	2004	2-Yr	
THOMPSON/T-1901RR		45		
NORTHSTAR/NS 1409RR	121	45		
SODAK GENETICS/SD1151RR	121	45	42	
MUSTANG/M-174RR	.	44	44	
MUSTANG/E-1852NRR	.	44		
SANDS/SOI 1261RR	122	44		
LATHAM/EXP-E1635R	.	44		
DAIRYLAND/DSR-155/RR	122	44	44	
DAIRYLAND/DSR-199/RR		44	44	
DAIRYLAND/DST15-000/RR		44		
TOP FARM/E34514RR		44		
DYNA-GRO/DG 32F12	120	44		
EXCEL/8160RR		44		
PUBLIC/SDX00R-035-59	123	44		
PUBLIC/MN-1803RR		44	41	
MUSTANG/M-151RR	122	43	42	
MUSTANG/M-155RR		43	42	
DAIRYLAND/DSR-184/RR		43		
PUBLIC/SDX00-053R-46	'	43		
BIO GENE/BG150RR	120	43		
Ell sene, baroom	123	-10		
EXCEL/8192RR	.	43		
EXCEL/8194RR	.	43		
PRAIRIE BR./PB-1294RR	.	42		
PRAIRIE BR./PB-1634RR	120	42		
ZILLER/BT 7150R	•	42	45	
ZILLER/BT 7193R	.	42	43	
RENK/RS199RR	.	42	40	
EXCEL/8151RR	.	42		
PETERSON/PFS 0511RR	.	42		
PUBLIC/SDX00R-022-66	119	42		

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

Table 4a. Roundup Ready maturity group-I soybean variety yield averages- central South Dakota locations, 2003-2004 (continued).

Brand/Variety yield)	(By 2004		Central I 2003-04 Avera	4 Yield
			Brool	kings
		DTM*	Bu/Acre 2004	Bu/Acre 2-Yr
PRAIRIE BR./P	B - 1620RR		41	40
RENK/RS159RR			41	
PUBLIC/SD00-2	36R	122	41	39
THOMPSON/T-18	18RR/SCN		40	
PUBLIC/SD01-1	120R		40	
PUBLIC/SDX00-	022R-53	119	39	
PUBLIC/SD01-1	792R	119	39	
PUBLIC/SDX00-	022R-23	119	38	
PUBLIC/SD01-3	387R	120	38	
	Test avg.:	121	46	45
	High value:	123	53	50
	# Lsd (.05):		4	5
	## TPG-value:		49	45
	### Coef.Var.:		6	7
	No. Entries:		99	25

^{*} DTM= days from seeding (Brookings- June 3, 2004) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-value= minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 4b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2004.

		Central Location 2004 Protein, Oil, & Lodging Averages			
		Ві	rookings	3	
		Protein	Oil	Lodging	
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*	
THOMPSON/T-1818RR/SCN		38.0	15.5	3	
DAIRYLAND/DSR-155/RR	122	37.7	16.6	3	
MUSTANG/E-1852NRR		37.6	15.9	3	
DAIRYLAND/DSR-199/RR		37.6	15.9	3	
ZILLER/BT 7193R		37.5	16.2	3	
PUBLIC/MN-1803RR		37.5	15.6	3	
PUBLIC/SD01-1792R	119	37.4	15.7	2	
PUBLIC/SD00-236R	122	37.4	16.3	3	
KRUGER/125RR	120	37.1	16.1	2	
PRAIRIE BR./PB-1634RR	120	37.1	16.0	2	
PETERSON/EXP 1.2RR	119	36.9	16.4	3	
SODAK GENETICS/SD1151RR	121	36.9	16.0	3	
PUBLIC/SDX00-022R-23	119	36.8	16.1	2	
PRAIRIE BR./PB-1754RR	J .	36.8	15.8	2	
PUBLIC/SD01-3387R	120	36.8	15.9	2	
DYNA-GRO/DG 32F12	120	36.7	16.2	2	
TOP FARM/E34514RR		36.6	16.3	3	
RENK/RS199RR		36.6	16.3	3	
MUSTANG/M-124RR	120	36.5	16.5	2	
MUSTANG/M-174RR		36.5	15.8	2	
SANDS/EXP 1766RR		36.5	16.0	2	
LATHAM/EXP-E1635R		36.5	16.3	3	
WENSMAN/W 2144RR		36.5	16.1	2	
WENSMAN/W 2163RR		36.5	15.7	2	
ASGROW/AG1603		36.4	16.0	2	
EXCEL/8151RR		36.4	16.0	1	
PUBLIC/SDX00R-035-59	123	36.4	16.1	3	
THOMPSON/T-1901RR		36.3	16.0	3	
MUSTANG/M-155RR		36.2	16.0	3	
DAIRYLAND/DST13-000/RR	119	36.0	16.6	2	

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.



^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 4b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2004 (continued).

			, 		
		Central Location 2004 Protein, Oil, & Lodging Averages			
		Ві	rookings	3	
		Protein	Oil	Lodging	
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*	
EXCEL/8192RR		36.0	16.0	2	
EXCEL/8194RR		35.9	16.9	2	
PUBLIC/SDX00-022R-53	119	35.8	16.1	3	
DYNA-GRO/DG 34R12		35.8	16.9	2	
EXCEL/8160RR		35.8	16.5	3	
PETERSON/PFS 0410RR	119	35.7	16.5	2	
NORTHSTAR/NS 1409RR	121	35.6	16.3	2	
TOP FARM/E34714RR		35.5	16.8	2	
NORTHSTAR/NS 1019RR	120	35.4	16.7	2	
PUBLIC/SD96-170RR-28L	121	35.4	16.5	3	
KRUGER/155+RR	122	35.3	16.7	1	
TOP FARM/6144RR	121	35.3	16.6	2	
PUBLIC/SD01-1120R		35.3	17.2	3	
PUBLIC/SDX00R-022-66	119	35.0	16.7	3	
MUSTANG/M-151RR	122	34.9	15.9	3	
NUTECH/NT-1010RR	118	34.9	17.2	2	
NUTECH/NT-2202RR		34.9	16.8	2	
KRUGER/211+RR		34.9	16.9	2	
KRUGER/223RR		34.9	16.3	1	
TOP FARM/E3M321RR		34.9	17.3	2	
THOMPSON/T-7234RR		34.9	17.3	1	
NORTHSTAR/NS 1407RR		34.9	16.9	2	
NORTHSTAR/NS 1710RR	123	34.9	16.3	3	
NK BRAND/S14-A7	118	34.8	16.8	1	
SANDS/SOI 1540RR		34.8	16.2	2	
THUNDER/2413NRR	120	34.8	!!!	2	
TOP FARM/E34904RR		34.8	17.0	2	
PRAIRIE BR./PB-1552RR		34.8	16.2	1	
PRAIRIE BR./PB-2112RR		34.8	16.9	2	
PRAIRIE BR./PB-1954RR		34.8	16.7	2	

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.



^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 4b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2004 (continued).

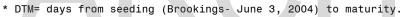
		г				
		Central Location				
		2004 Protein, Oil, &				
		Lodging Averages				
		Ві	rookings	3		
		Protein	Oil	Lodging		
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*		
ZILLER/BT 7145R	123	34.8	17.0	1		
LATHAM/EXP-E1936R		34.7	17.3	2		
DAIRYLAND/DSR-184/RR		34.7	17.0	2		
PUBLIC/SDX00-053R-46		34.7	16.7	4		
NK BRAND/S19-R5		34.6	16.4	2		
KRUGER/192RR	_	34.6	17.0	2		
DAIRYLAND/DST15-000/RR		34.6		2		
PRAIRIE BR./PB-1914RR	١.	34.6	17.2	1		
DYNA-GRO/DG 31C15RR	١.	34.6	!!!	1		
TECH. DIRECT/TD-202RR		34.5	17.2	1		
 MUSTANG/M-153RR	123	34.4	16.5	2		
RENK/RS159RR		34.4	15.8	3		
BIO GENE/BG150RR	120	34.4	15.6	2		
NK BRAND/S17-P9		34.3	16.2	2		
NUTECH/NT-1909RR		34.3	17.3	1		
KRUGER/EXP167RR		34.3	17.1	1		
TOP FARM/6174RR		34.3		1		
THOMPSON/T-7214RR		34.3		2		
NUTECH/NT-2002RR		34.2	!!!	2		
TECH. DIRECT/TD-199RR		34.2	17.1	1		
 STINE/S1918-4	_	34.2	17.0	2		
ZILLER/BT 7150R		34.2	!!!	2		
THOMPSON/T-7205RR		34.2	!!!	1		
PETERSON/PFS 0511RR		34.2		3		
PETERSON/PFS 0415RR		34.2	16.3	3		
ASGROW/AG1401		34.1	16.8	2		
PRAIRIE BR./PB-1620RR		34.1	16.4	3		
ASGROW/AG1903	122	34.0	16.4	2		
FARM ADVANTAGE/7192		34.0	17.1	1		
SANDS/SOI 1261RR	122	34.0	16.3	3		
	İ	L	L			

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 4b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2004 (continued).

		2004 Pro	al Locat otein, (ng Avera	oil, &		
		Ві	rookings	s		
		Protein				
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*		
MUSTANG/M-194NRR		33.9	17.7	2		
PRAIRIE BR./PB-1294RR		33.9	16.1	2		
COYOTE/4719RR		33.8	17.2	2		
THOMPSON/T-7193RR/SCN		33.8	17.5	2		
PRAIRIE BR./PB-1921RR		33.7	17.0	1		
MUSTANG/M-115RR	123	33.5	16.3	2		
KRUGER/223+RR		33.5	17.2	1		
KRUGER / 191RR		33.5	17.4	2		
THOMPSON/T-1212RR/SCN		33.4	16.5	2		
Test avg.:	121	35.3	16.5	2		
High value:	123	38.0	17.7	4		
* Lsd(.05):				1		
## TPG-value:				2		
@ Coef. Var.:				28		
No. Entries:		99	99	99		



^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a column are non-significant (NS), NS is indicated.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error, 15% or less is best.

Table 5a. Roundup Ready maturity group-II soybean variety yield averages- central South Dakota locations, 2003-2004.

		Central 2003-0 Avera	4 Yield	
		Brook	kings	
Brand/Variety		Bu/Acre	Bu/Acre	
(By 2004 yield)	DTM*	2004	2-Yr	
FARM ADVANTAGE/7205		55		
SANDS/SOI 2143RR	.	54	52	
SANDS/SOI 2169RR	.	54		
MUSTANG/M-203RR	.	53	52	
KRUGER/200RR	.	53		
LATHAM/L2136R		53	50	
GOLD COUNTRY/6221RR		53	49	
THOMPSON/T-7243RR	.	53	47	
NORTHSTAR/NS 2009RR	.	53		
ASGROW/AG2403		52		
DEKALB/DKB22-52		52		
PRAIRIE BR./PB-2243RR		52	48	
JACOBSEN/J730NR		52	48	
MUSTANG/M-201RR		51	49	
TOP FARM/E34412RR		51		
PRAIRIE BR./PB-2141RR		51	50	
RENK/RS223RR		51	50	
TOP FARM/E34104RR		50		
PRAIRIE BR./PB-2343RR	.	50	50	
JACOBSEN/J733R		50	48	
WENSMAN/W 2211RR		50	49	
MUSTANG/M-223RR		49		
DAIRYLAND/DSR-234/RR		48	47	
STINE/S2116-4	.	48	46	
KRUGER/233+RR		47	47	
TOP FARM/E34520RR		47		
PUBLIC/SDX00R-014-50	.	47		
PUBLIC/SD01-76R	.	47		
DAIRYLAND/DST20-000/RR	.	46		
PRAIRIE BR./PB-2421RR	.	46	43	

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

Table 5a. Roundup Ready maturity group-II soybean variety yield averages- central South Dakota locations, 2003-2004 (continued).

		Central 2003-0 Avera	4 Yield	
		Broo	kings	
Brand/Variety		Bu/Acre	Bu/Acre	
(By 2004 yield)	DTM*	2004	2-Yr	
PRAIRIE BR./PB-2374RR		46		1
THOMPSON/T-2343RR		46		
PUBLIC/SDX00R-039-42		46		
PUBLIC/SD01-5R		46		
PUBLIC/SD93-828R		46	40	
COYOTE/4523RR		45		
KRUGER/EXP234RR		45		
PRAIRIE BR./PB-2534RR		45		
EXCEL/8211NRR	Ċ.	45		
PUBLIC/SD01-2493R		45		
PUBLIC/SD01-2509R		45		
ASGROW/AG2203		44		
KRUGER/EXP268RR		43	44	
KRUGER/EXP257RR		43		
KRUGER/268+RR		43		
TOP FARM/E3M278RR		43		
PUBLIC/SDX00R-030-16		40		
TOP FARM/E3M245RR		39		
NUTECH/NT-2404RR		35		
PRAIRIE BR./PB-2474RR		35		
PUBLIC/SD01-3603R		35		
KRUGER/252RR		34		
WENSMAN/W 2400RR		34		
Test avg.:		47	48	
High value:		55	52	
# Lsd (.05):		3	6	l .
## TPG-value:		52	46	
@ Coef. Var.:		4	7	I .
	_	53	1	

^{*} DTM= days from seeding (Brookings- June 3, 2004) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-value= minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 5b. Roundup Ready maturity group-II soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2004.

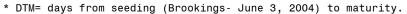
		Central Locations 2004 Protein, Oil, & Lodging Averages					
		Ві	rookings	3			
		Protein	Oil	Lodging			
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*			
PUBLIC/SDX00R-030-16		41.1	14.9	3			
TOP FARM/E34520RR		38.4	15.9	3			
KRUGER/268+RR		38.3	16.0	2			
PRAIRIE BR./PB-2534RR	.	38.3	15.9	3			
TOP FARM/E3M245RR		38.0	15.1	4			
WENSMAN/W 2400RR		38.0	15.2	3			
PRAIRIE BR./PB-2474RR		37.5	15.5	3			
NUTECH/NT-2404RR	.	37.3	15.4	3			
KRUGER/EXP234RR		37.2	16.5	3			
THOMPSON/T-2343RR		37.2	16.2	3			
PUBLIC/SD93-828R		37.0	16.3	2			
DAIRYLAND/DST20-000/RR		36.9	15.9	3			
KRUGER/252RR		36.8	16.5	3			
COYOTE / 4523RR		36.6	16.6	2			
PRAIRIE BR./PB-2343RR	1	36.3	16.1	2			
RENK/RS223RR		36.3	16.1	2			
EXCEL/8211NRR		36.2		4			
PRAIRIE BR./PB-2374RR		36.0	!!!	4			
PRAIRIE BR./PB-2421RR		35.9	15.8	3			
PUBLIC/SDX00R-014-50		35.8	17.2	3			
KRUGER/EXP257RR		35.2	17.1	3			
PUBLIC/SD01-2493R		35.1	16.4	2			
KRUGER/233+RR		34.8	16.4	3			
PUBLIC/SD01-5R		34.8	15.9	3			
PUBLIC/SD01-76R		34.8	16.5	3			
PUBLIC/SD01-3603R		34.8		4			
LATHAM/L2136R		34.7	17.0	2			
TOP FARM/E34412RR		34.7	16.9	2			
WENSMAN/W 2211RR		34.7	16.7	2			
MUSTANG/M-203RR	I	34.6	16.9	2			

 $^{^{\}star}$ DTM= days from seeding (Brookings- June 3, 2004) to maturity.

 $^{^{\}star}$ Lodging, 1= all plants erect, 5= all plants flat.

Table 5b. Roundup Ready maturity group-II soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2004 (continued).

		Centra	l Locati	ons
		2004 Pro	otein, C)il, &
		Lodgir	ng Avera	iges
		Ві	rookings	3
		Protein	Oil	Lodging
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*
TOP FARM/E34104RR		34.5	17.1	2
FARM ADVANTAGE/7205		34.4	16.8	4
DAIRYLAND/DSR-234/RR		34.4	15.7	3
PUBLIC/SD01-2509R		34.4	15.7	3
MUSTANG/M-223RR		34.3	17.0	1
DEKALB/DKB22-52		34.3	17.0	1
KRUGER/200RR		34.3	16.9	3
STINE/S2116-4		34.2	16.8	2
THOMPSON/T-7243RR		34.2	17.0	2
PRAIRIE BR./PB-2243RR		34.1	17.0	1
JACOBSEN/J733R		33.9	17.1	2
ASGROW/AG2403		33.8	17.0	_1
SANDS/SOI 2169RR		33.8	16.8	3
ASGROW/AG2203		33.7	17.7	3
MUSTANG/M-201RR		33.7	17.2	1
KRUGER/EXP268RR		33.7	17.1	3
TOP FARM/E3M278RR		33.7	17.0	3
JACOBSEN/J730NR	.	33.7	17.7	2
PRAIRIE BR./PB-2141RR		33.6	17.4	1
SANDS/SOI 2143RR		33.5	17.1	1
NORTHSTAR/NS 2009RR		33.1	17.9	2
GOLD COUNTRY/6221RR		33.0	17.7	1
PUBLIC/SDX00R-039-42		32.7	17.0	3
Test avg.:		35.3	16.5	3
High value:		41.1	17.9	4
* Lsd(.05):				1
## TPG-value:				2
### Coef.Var.:				19
No. Entries:		53	53	53
<u> </u>	L	L		



^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error, 15% or less is best.

Table 6a. Roundup Ready maturity group-I soybean variety yield averages- southern South Dakota locations, 2003-2004.

			outhern I 3-04 Yie				_	
		Bere	sford	Armo	our	Southern Zone Averages		
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr	
ASGROW/AG1903	122	68		44		56		
TECH. DIRECT/TD-199RR	122	68		43		56		
THOMPSON/T-7214RR	121	65	58	44		55		
NUTECH/NT-1909RR	123	67		41		54		
NUTECH/NT-2002RR	123	67		41		54		
KRUGER/211+RR	121	65	59	41	33	53	46	
PRAIRIE BR./PB-1954RR	118	67		38		53		
TECH. DIRECT/TD-202RR	122	64		39		52		
KRUGER/223+RR	118	67	59	37	28	52	4.	
KRUGER/191RR	121	65	56	38	32	52	4.	
KRUGER/223RR	118	63	57	40	29	52	4	
KRUGER / 192RR	121	64		39		52		
THOMPSON/T-7205RR	120	67	61	36		52		
NUTECH/NT-2202RR	122	62		39		51		
STINE/S1918-4	121	65	60	36		51		
THOMPSON/T-7234RR	119	65		35		50		
NK BRAND/S19-R5	117	66		32		49		
KRUGER / 155+RR	115	59		33		46		
KALTENBERG/KB153RR	117	61		31		46		
PUBLIC/MN-1803RR	122	53	46	37	28	45	3	
PUBLIC/SD01-3387R	114	51		30		41		
SODAK GENETICS/SD1151RR	116	51	48	29	21	40	3	
ASGROW/AG1603	112			34				
COYOTE/4719RR	112			34				
DEKALB/DKB19-52	111			35	29			
NUTECH/NT-1901RR	127	63						
PUBLIC/SDX00-022R-23	116	45						
PUBLIC/SDX00-024R-14	111			30				
LATHAM/EXP-E1936R	125	64						
				38			I	

 $[\]star$ DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

Table 6a. Roundup Ready maturity group-I soybean variety yield averages- southern South Dakota locations, 2003-2004 (continued).

		!	outhern I 3-04 Yie	Southe	rn Zone		
		Beres	sford	Armo	Armour		ages
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
TOP FARM/E34904RR	126	65					
TOP FARM/E3M321RR	126	72					
TOP FARM/E34714RR	120	58					
PRAIRIE BR./PB-2112RR	118			39	32		
PRAIRIE BR./PB-1754RR	112			38			.
 PRAIRIE BR./PB-1914RR	118	_		40	_		
PUBLIC/SDX00-053R-46	128	55					
ZILLER/BT 7193R	127	63	54		:		
PUBLIC/SDX00R-022-66	119	50					
PUBLIC/SDX00R-035-42	111			37			
PUBLIC/SDX00R-035-59	121	52	_	_	_	_	
PUBLIC/SD01-3219R	112			34			
PUBLIC/SD01-67R	116			34			
PUBLIC/SD96-170RR-28L	117	58					
PUBLIC/SD01-1075R	119			35			,
PUBLIC/SD01-1094R	121			36			
PUBLIC/SD01-1120R	128	57					N .
PUBLIC/SD01-1792R	119	46	7]				W .
PUBLIC/SD01-3402R	122	51					
PUBLIC/SD00-1018R	111			37			
PUBLIC/SD00-236R	118	50					
PUBLIC/SDX00R-029-3	117			33			
Test avg.:	119	61	56	37	29	50	42
High value:	128	72	61	44	33	56	46
# Lsd (.05):		5	6	7	5	4	
## TPG-value:		67	55	37	28	52	
@ Coef. Var.:		5	6	12	10	7	
No. Entries:		37	10	37	8	22	

^{*} DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-value= minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 6b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2004.

	Т	1									
					Location						
		2004 I	Prote:	in, Oil,	& Lodgi	ng Av	erages			_	
		Rai	resfo			Armou	n	Southern Zone Averages			
					Al IIIoul			^	Averages		
Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	Oil	Lodging	
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	
SODAK GENETICS/SD1151RR	116	32.8	17.6	3	33.3	18.7	1	33.1	18.2	2	
PUBLIC/SD01-3387R	114	32.6	17.3	2	33.3	19.3	1	33.0	18.3	2	
PUBLIC/MN-1803RR	122	33.5	17.4	4	32.4	19.7	1	33.0	18.6	2	
NK BRAND/S19-R5	117	31.9	17.6	1	33.3	18.3	1	32.6	18.0	1	
KRUGER / 155+RR	115	31.7	17.7	1	33.3	19.5	1	32.5	18.6	1	
NUTECH/NT-1909RR	123	32.2	18.1	2	32.3	19.7	1	32.3	18.9	1	
NUTECH/NT-2202RR	122	32.5	17.9	1	32.0	19.4	1	32.3	18.7	1	
TECH. DIRECT/TD-202RR	122	32.5	17.8	1	31.9	19.6	1	32.2	18.7	1	
KRUGER/211+RR	121	32.5	17.9	1	31.9	19.1	1	32.2	18.5	1	
PRAIRIE BR./PB-1954RR	118	32.0	17.7	2	32.0	19.5	1	32.0	18.6	2	
THOMPSON/T-7234RR	119	32.0	17.9	1	31.9	19.3	1	32.0	18.6	1	
KRUGER / 192RR	121	I	18.2	1	!	19.6	1	!	18.9	1	
KRUGER/223RR	118	I	18.0	_ 1	I	20.1	_ 1	I	19.1	1	
KALTENBERG/KB153RR	117		17.8	1		18.9	1		18.4	1	
THOMPSON/T-7214RR	121		18.0	1		20.2	1		19.1	1	
STINE/S1918-4	121	31.4	18.1	1	31.5	19.6	1	31.5	18.9	1	
NUTECH/NT-2002RR	123		18.1	1		20.4	1		19.3	1	
THOMPSON/T-7205RR	120		18.0	1		20.0	1		19.0	1	
ASGROW/AG1903	122		17.4	1		19.5	1		18.5	1	
KRUGER/223+RR	118	1	18.1	1	1	19.8	1	31.2	19.0	1	
KRUGER/191RR	121	31.2	18.0	1	31.1	19.8	1	31.2	18.9	1	
TECH. DIRECT/TD-199RR	122	32.1	!	1	!	20.1	1	!	18.9	1	
ASGROW/AG1603	112				1	19.5	1				
COYOTE/4719RR	112	_				19.8	1	_			
DEKALB/DKB19-52	111					20.2	1				
NUTECH/NT-1901RR	127	33.0	17.0	2			_			_	
PUBLIC/SDX00-022R-23	116	31.4	l	3		:			:		
PUBLIC/SDX00-024R-14	111			.	31.8	19.2	1				
LATHAM/EXP-E1936R	125	32 1	18.0	1	56						
GOLD COUNTRY/EXP-318RR	113	52.1		'.	31.7	19.3	1	:			
•											

 $^{^{\}star}$ DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 6b. Roundup Ready maturity group-I soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2004 (continued).

		!		outhern I	South	honn '	7000			
		Bei	resfo	rd	,	Armoui	r	Southern Zone Averages		
 Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	0il	Lodging
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*
TOP FARM/E34904RR	126	32.0	18.1	1						
TOP FARM/E3M321RR	126	32.2	17.9	1		.				
TOP FARM/E34714RR	120	32.2	17.5	1						
PRAIRIE BR./PB-2112RR	118				31.9	20.0	1			
PRAIRIE BR./PB-1754RR	112				33.1	18.7	1			
PRAIRIE BR./PB-1914RR	118				32.1	19.5	1			
PUBLIC/SDX00-053R-46	128	31.6	18.0	4						
ZILLER/BT 7193R	127	34.0	17.3	2						
PUBLIC/SDX00R-022-66	119	31.0	18.6	4						
PUBLIC/SDX00R-035-42	111				33.2	19.7	1			
PUBLIC/SDX00R-035-59	121	32.9	17.5	1						
PUBLIC/SD01-3219R	112				32.4	19.1	1			
PUBLIC/SD01-67R	116				31.9	20.1	1	_		
PUBLIC/SD96-170RR-28L	117	30.8	18.3	2						
PUBLIC/SD01-1075R	119				32.7	19.4	1			
PUBLIC/SD01-1094R	121				32.3	19.4	1			
PUBLIC/SD01-1120R	128	32.2	18.3	3						
PUBLIC/SD01-1792R	119	32.9	17.3	2						
PUBLIC/SD01-3402R	122	36.1	16.1	3	<u> </u>	.		Γ.		
PUBLIC/SD00-1018R	111				31.1	20.0	1			
PUBLIC/SD00-236R	118	33.6	17.7	3						
PUBLIC/SDX00R-029-3	117				31.8	19.9	1			
Test avg.:	119	32.2	17.8	2	31.7	19.6	1	31.7	18.7	1
High value:	128	36.1	18.6	4	33.3	20.4	1	33.1	19.3	2
* Lsd(.05):				1			1			0
## TPG-value:				2			1			1
@ Coef. Var.:				28			0			25
No. Entries:		37	37	37	37	37	37	22	22	22

^{*} DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a column are non-significant (NS), NS is indicated.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error, 15% or less is best.

Table 7a. Roundup Ready maturity group-II soybean variety yield averages- southern South Dakota locations, 2003-2004.

			outhern l -2004 Yie						
		Bere:	sford	Armo	our		Southern Zone Averages		
Donal (Maniaty		Du /Aana	Du / A a na	Du / A a n a	Du / A a na	Du / A one	Du / A a na		
Brand/Variety (By zone 2004 yield)	DTM*	2004	Bu/Acre 2-Yr	2004	Bu/Acre 2-Yr	Bu/Acre 2004	2-Yr		
SANDS/SOI 2754RR	128	72		43		58			
MUSTANG/M-201RR	122	73	60	41		57			
MUSTANG/M-284RR	129	73	60	40	31	57	46		
FARM ADVANTAGE/7264	127	69		44		57			
DEKALB/DKB25-51	125	70	60	44	39	57	50		
KRUGER/EXP268RR	125	68		45	37	57			
PRAIRIE BR./PB-2141RR	124	71		42	36	57			
ASGROW/AG2403	124	69	60	42	36	56	48		
MUSTANG/M-243RR	126	71	59	40		56			
MUSTANG/M-264RR	127	66		45		56			
STINE/S2103-4	122	72		40		56			
PRAIRIE BR./PB-2421RR	126	70	61	42	32	56	4		
PRAIRIE BR./PB-2643RR	127	67	59	44	37	56	4		
COYOTE/9524RR	125	68	60	41	36	55	4		
COYOTE / 4527RR	127	69		41		55			
SANDS/SOI 2143RR	122	70	62	39	35	55	4		
PRAIRIE BR./PB-2343RR	120	71	59	39	35	55	4		
MUSTANG/M-203RR	124	65	58	42	32	54	4		
SANDS/EXP 2669RR	125	65		42		54			
TECH. DIRECT/TD-266RR	129	63		44		54			
KRUGER/289+RR	129	64		44		54			
DAIRYLAND/DSR-234/RR	122	67	56	40	35	54	4		
DAIRYLAND/DSR-2500/RR	125	70		38		54			
RENK/RS253RR	126	66	57	41	34	54	4		
ASGROW/AG2203	122	61		44		53			
COYOTE/EX325RR	125	68		37		53			
MUSTANG/M-255RR	125	65		40		53			
MALLARD/EXP RR2411	125	66		39		53			
NUTECH/NT-2790+RR	127	65		41		53	İ		
KRUGER/233+RR	124	68		38	34	53			

 $^{^{\}star}$ DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

Table 7a. Roundup Ready maturity group-II soybean variety yield averages- southern South Dakota locations, 2003-2004 (continued).

		!		Locations eld Avera		Southo	rn Zone
		Beres	sford	Armour		Aver	
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
KRUGER/EXP257RR	126	65		40		53	
KRUGER/200RR	121	67		39		53	
KRUGER/252RR	127	63		42		53	
STINE/S2116-4	123	65	59	41		53	
PRAIRIE BR./PB-2443RR	122	66		40		53	
THOMPSON/T-7243RR	119	67	53	39	30	53	42
THOMPSON/T-2404+RR	126	66		40		53	
THOMPSON/T-2707+RR	125	68		38		53	
MUSTANG/M-223RR	123	62		41		52	
NK BRAND/S27-T7	126	67		37		52	
NUTECH/NT-2404RR	126	64		39		52	
NUTECH/NT-2707RR	125	62		41		52	
TECH. DIRECT/TD-233RR	128	64		40		52	
KRUGER/268+RR	125	63		40		52	
GOLD COUNTRY/EXP-325RR	124	62		42		52	,
PRAIRIE BR./PB-2243RR	123	67	60	36	31	52	46
PRAIRIE BR./PB-2374RR	124	64		39		52	
SANDS/SOI 2169RR	119	66		36		51	W i
TECH. DIRECT/TD-255RR	124	68		34		51	
TECH. DIRECT/TD-262RR	126	62		40		51	
KRUGER/270RR	128	61	55	41	31	51	43
KRUGER / 273RR	126	62		40		51	
KALTENBERG/KB275RR	127	60	54	41	34	51	44
STINE/S2783-4	127	63		38		51	
PRAIRIE BR./PB-2534RR	125	65		37		51	
JACOBSEN/J828R	128	62	54	40	32	51	43
THOMPSON/T-2790+RR	127	62		40	Ī .	51	
RENK/RS223RR	120	62	55	39	32	51	44
COYOTE / 4523RR	125	64		35		50	
SANDS/SOI 226RR	123	62	57	38	31	50	44

 $[\]star$ DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

Table 7a. Roundup Ready maturity group-II soybean variety yield averages- southern South Dakota locations, 2003-2004 (continued).

		1		Locations		Coutho	nn 70n0
		Beres	sford	Armo	our	Aver	rn Zone ages
Brand/Variety (By zone 2004 yield)	DTM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr
SANDS/SOI 2872RR	128	58	51	42	35	50	43
PRAIRIE BR./PB-2474RR	126	62		38		50	
NUTECH/NT-2505RR	125	62		36		49	
THOMPSON/T-2505+RR	124	61		37		49	
PUBLIC/SDX00R-039-42	126	60		37		49	
 KALTENBERG/KB245RR	126	54		41		48	
PRAIRIE BR./PB-2934RR	130	59		36		48	
PUBLIC/SD01-5R	120	60		36		48	
FARM ADVANTAGE/7254N	126	54		39		47	
KRUGER/277+RR/SCN	127	58		36		47	
SANDS/SOI 2642NRR	126	53	50	38	31	46	41
PUBLIC/SD01-3603R	131	54		38		46	
ASGROW/AG2302	119			41	37		
ASGROW/AG2107	115			40	37		
ASGROW/AG2801	130	60	52				
DEKALB/DKB22-52	126	66			١.	\	
SANDS/SOI 2151NRR	126	67					
NUTECH/NT-2550RR	127	66					
KRUGER/EXP234RR	122			41			
KRUGER/EXP287RR	128	60					
LATHAM/497RR	126	71	61				
LATHAM/L2136R	126	66	61				
LATHAM/EXP-E2450R	129	61					
LATHAM/738RR	129	66					
LATHAM/EXP-E2635R	128	62					
LATHAM/EXP-E2646R	129	62					
LATHAM/L2857R	132	60					
LATHAM/L2900R	133	67					
GOLD COUNTRY/6221RR	121			39			
DAIRYLAND/DSR-277/RR	124			44			
TOP FARM/E34412RR	125	62					
TOP FARM/E34520RR	130	67					
TOP FARM/E34104RR	127	69		.		.	.

^{*} DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

Table 7a. Roundup Ready maturity group-II soybean variety yield averages- southern South Dakota locations, 2003-2004 (continued).

F							
		!	outhern I -2004 Yi			Coutho	nn 70no
		Bere	sford	Armo	our	Aver	rn Zone ages
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
TOP FARM/E3M278RR	132	68					
TOP FARM/E3M245RR	128	55					
KALTENBERG/KB203RR	127	66					
STINE/S2404-4	129	64					
STINE/S2403-4	130	64					
PUBLIC/SDX00-051R-23	111			22			
ZILLER/BT 7215R	127	73					
JACOBSEN/J730NR	124	69	:				
JACOBSEN/J733R	126	64	58		.		
JACOBSEN/J744NR	125	62					
THOMPSON/T-7293RR	122		_	36	29	_	
THOMPSON/T-2343RR	127	63	•			<u>-</u>	l I
THOMPSON/T-2422RR	127	67			_ :	_ :	
RENK/RS234RR	127	68					
RENK/RS244NRR	129	56		•			
HEMX/HOZ44MIII	123		•	•	_ 1		
EXCEL/8236NRR	127	68	57				
PUBLIC/SDX00R-014-50	124	58		•		1	
PUBLIC/SDX00R-030-16	126	30		30		•	
PUBLIC/SD01-76R	124	57		00		·	
PUBLIC/SD01-1135R	117			38			
PUBLIC/SD01-2469R	116			33			
PUBLIC/SD01-2493R	117			33	•		
PUBLIC/SD01-2493R	129	67		33			
PUBLIC/SD01-2961R	131	53					
PUBLIC/SD93-828R	118	55	47				'
PUBLIC/SDX00R-015-4	111			26			r
Test avg.:	125	64	57	39	34	53	46
High value:	133	73	62	45	39	58	50
# Lsd (.05):		5	8	5	6	4	
## TPG-value:		68	54	40	33	54	
@ Coef. Var.:		5	6	8	11	6	
No. Entries:		107	29	84	26	72	

 $^{^{\}star}$ DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-value= minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 7b. Roundup Ready maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2004.

					Location: & Lodgi			01		7
		Be	resfo	rd	,	Armou	r		hern i verag	
Brand/Variety (By zone protein)	DTM*	Protein (%)	0il (%)	Lodging	Protein (%)	0il (%)	Lodging	Protein (%)	0il (%)	Lodging
(By Zone protein)	J	(0)	(0)	(10)	(0)	(0)	(10)	(0)	(0)	(10)
NUTECH/NT-2505RR	125	34.4	16.6	1	33.5	18.4	1	34.0	17.5	1
MUSTANG/M-255RR	125	35.3	16.4	1	32.5	19.1	1	33.9	17.8	1
COYOTE/EX325RR	125	35.0	16.6	2	32.7	18.9	1	33.9	17.8	1
KRUGER/277+RR/SCN	127	34.6	16.9	1	32.7	19.7	1	33.7	18.3	1
PRAIRIE BR./PB-2534RR	125	34.3	16.6	1	33.0	19.0	1	33.7	17.8	1
TECH. DIRECT/TD-255RR	124	1	16.6	1	32.8	18.9	1	!	17.8	1
THOMPSON/T-2505+RR	124	1	16.3	1	I	19.2	1	Į.	17.8	1
KALTENBERG/KB245RR	126	!	16.8	!	31.8	19.9	1	33.5	18.4	2
KRUGER/268+RR	125	34.2	16.9	1	32.7	19.1	1	33.5	18.0	1
FARM ADVANTAGE/7254N	126	34.6	16.9	3	32.1	19.8	1	33.4	18.4	2
SANDS/SOI 2642NRR	126	1	16.9	3	32.1	19.5	1	33.1	18.2	2
PRAIRIE BR./PB-2343RR	120	1	16.7	1	32.3	19.0	1	1	17.9	1
PRAIRIE BR./PB-2934RR	130	33.4	17.5	2	32.4	21.0	1	32.9	19.3	2
PRAIRIE BR./PB-2443RR	122	33.9	17.3	1	31.7	19.5	1		18.4	1
STINE/S2783-4	127	35.1	16.7	2	30.3	20.7	1	32.7	18.7	1
MALLARD/EXP RR2411	125	33.5	16.6	1	31.8	19.1	1	32.7	17.9	1
SANDS/SOI 226RR	123		17.2			19.4	1		18.3	2
RENK/RS253RR	126		17.3			20.0	1		18.7	1
KRUGER/233+RR	124		17.1	2		19.7	1		18.4	1
DAIRYLAND/DSR-234/RR	122	!	17.3	1	!	19.7	1	!	18.5	1
ASGROW/AG2203	122	34.1	16.9	2	30.6	20.1	1	32.4	18.5	2
NUTECH/NT-2707RR	125	33.4	17.0	2	31.1	20.3	1	32.3	18.7	1
THOMPSON/T-2707+RR	125	33.3	16.9	2	31.2	20.1	1	32.3	18.5	2
PUBLIC/SD01-3603R	131	33.7	16.8	4	30.6	20.3	1	32.2	18.6	3
TECH. DIRECT/TD-262RR	126	32.8	17.4	2	31.3	19.9	1	32.1	18.7	1
 KRUGER/EXP257RR	126	32.9	17.1	2	31.2	19.7	1		18.4	2
SANDS/EXP 2669RR	125	32.9	17.1	1		20.1	1	32.0	18.6	1
SANDS/SOI 2872RR	128	33.3	17.5	4	30.6	20.5	1	32.0	19.0	3
DAIRYLAND/DSR-2500/RR	125	32.9	17.3	2	31.0	19.7	1	32.0	18.5	1
TECH. DIRECT/TD-233RR	128	33.7	16.4	2	30.1	19.6	1	31.9	18.0	2
MUSTANG/M-223RR	123	32.4	17.6	1	31.4	19.7	1	31.9	18.7	1
KRUGER/273RR	126	1	17.3	1	30.7	20.2	1	31.9	18.8	1
C0Y0TE / 4523RR	125	33.4	16.9	2	I	19.7	1	31.8	18.3	1
KRUGER / 200RR	121	1	17.2	1	I	19.8	1	1	18.5	2
PRAIRIE BR./PB-2243RR	123	32.6	17.5	1	30.9	19.8	1	31.8	18.7	1

 $^{^{\}star}$ DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 7b. Roundup Ready maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2004 (continued).

		2004		outhern I				Court		7000
		Be	resfo	rd	,	Armou	r		nern 2 verag	
Brand/Variety (By zone protein)	DTM*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*
MUSTANG/M-284RR	129	33.7	17.2	2	29.7	20.8	1	31.7	19.0	1
KRUGER/270RR	128	33.0	17.3	4	30.3	20.3	1	31.7	18.8	2
PRAIRIE BR./PB-2421RR	126	32.5	17.6	1	30.7	20.4	1	31.6	19.0	1
NUTECH/NT-2404RR	126	33.3	16.8	2	29.9	20.3	1	31.6	18.6	2
THOMPSON/T-2404+RR	126	33.7	16.5	2	29.2	20.4	1	31.5	18.5	2
PRAIRIE BR./PB-2474RR	126	33.3	17.0	2	29.6	20.0	1	31.5	18.5	2
STINE/S2116-4	123	32.2	17.6	1	30.6	19.9	1		18.8	1
PRAIRIE BR./PB-2374RR	124	32.7	16.8	3	30.1	19.5	1	31.4	18.2	2
COYOTE/4527RR	127	32.6	17.4	1	30.2	20.3	1	31.4	18.9	1
MUSTANG/M-203RR	124	31.4	17.4	1	31.4	19.6	1	31.4	18.5	1
JACOBSEN/J828R	128	32.6	18.1	3	30.2	20.6	1	31.4	19.4	2
THOMPSON/T-7243RR	119	32.5	17.5	1	30.3	19.8	1	31.4	18.7	1
RENK/RS223RR	120	31.9	17.6	1	30.9	19.9	1	31.4	18.8	1
MUSTANG/M-201RR	122	32.3	17.6	1	30.4	20.4	1	31.4	19.0	1
NK BRAND/S27-T7	126	32.2	17.4	1	30.4	20.4	1	31.3	18.9	1
KALTENBERG/KB275RR	127	32.8	17.7	3	29.7	20.7	1	31.3	19.2	2
PUBLIC/SD01-5R	120	31.4	17.2	1	31.1	19.4	1	31.3	18.3	1
SANDS/SOI 2169RR	119	31.7	17.3	2	30.6	19.7	1	31.2	18.5	2
SANDS/SOI 2754RR	128	32.1	17.3	1	30.0	20.5	1	31.1	18.9	1
KRUGER/252RR	127	33.5	16.5	2	28.6	20.4	1	31.1	18.5	2
ASGROW/AG2403	124	31.4	17.6	1	30.6	20.5	1	31.0	19.1	1
PRAIRIE BR./PB-2141RR	124	31.8	17.6	1	30.1	20.0	1	31.0	18.8	1
MUSTANG/M-264RR	127	32.0	17.6	1	29.8	20.6	1	30.9	19.1	1
STINE/S2103-4	122	31.3	17.9	1	30.4	20.5	1	30.9	19.2	1
SANDS/SOI 2143RR	122	31.7	17.7	1	29.9	20.1	1	30.8	18.9	1
 PRAIRIE BR./PB-2643RR	127	31.7	17.8	2	29.9	20.4	1	30.8	19.1	2
FARM ADVANTAGE/7264	127	1	17.5	1	29.6	20.4	1	30.8	19.0	1
THOMPSON/T-2790+RR	127	32.2	16.4	4	29.2	19.7	1	30.7	18.1	2
KRUGER/289+RR	129	31.8	17.5	2	29.4	20.4	1	30.6	19.0	2
TECH. DIRECT/TD-266RR	129	31.5	16.7	4	29.6	20.0	1	30.6	18.4	3
NUTECH/NT-2790+RR	127	31.9	16.6	4	29.2	19.9	1	30.6	18.3	2
COYOTE/9524RR	125	!	18.0	Į.	!	20.8	1	!	19.4	1
GOLD COUNTRY/EXP-325RR	124	1	16.9	I	29.5	20.0	1	30.5	18.5	1
MUSTANG/M-243RR	126	1	17.9	1	!	20.8	1	!	19.4	1
KRUGER/EXP268RR	125	1	18.1	1	28.7	21.4	1	29.7	19.8	1

 $^{^{\}star}$ DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 7b. Roundup Ready maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2004 (continued).

		1			Location: & Lodgi			01		7
		Be	resfo	rd	,	Armou	r	!	hern i verag	
Brand/Variety		Protein	1		Protein	Oil		Protein	Oil	Lodging
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*
DEKALB/DKB25-51	125	30.7	18.0	2	28.4	21.1	1	29.6	19.6	1
PUBLIC/SDX00R-039-42	126	30.4	17.1	3	26.7	20.7	1	28.6	18.9	2
ASGROW/AG2302	119				30.5	19.7	1			
ASGROW/AG2107	115				31.0	20.7	1			
ASGROW/AG2801	130	34.8	16.0	2						
DEKALB/DKB22-52	126	31.8	17.9	1						
SANDS/SOI 2151NRR	126	31.4	18.1	1						
NUTECH/NT-2550RR	127	1	17.5	1		.			.	
KRUGER/EXP234RR	122	.	.		31.7	19.5	1			
KRUGER/EXP287RR	128	35.0	17.0	1						
LATHAM/497RR	126	31.2	17.5	1						
LATHAM/L2136R	126	!	17.7	1						
LATHAM/EXP-E2450R	129	33.4	16.8	_ 2						
LATHAM/738RR	129	33.0	17.5	1						
LATHAM/EXP-E2635R	128	33.0	17.2	1						
LATHAM/EXP-E2646R	129	32.3	17.0	2						
LATHAM/L2857R	132		17.6							
LATHAM/L2900R	133	32.9	17.0	1						
GOLD COUNTRY/6221RR	121				29.8	20.3	1			
DAIRYLAND/DSR-277/RR	124				30.6	20.6	1			
TOP FARM/E34412RR	125	31.6	17.7	1						
TOP FARM/E34520RR	130	33.4	17.1	1						
TOP FARM/E34104RR	127	33.1	17.2	2						
TOP FARM/E3M278RR	132	32.0	17.7	1						
TOP FARM/E3M245RR	128	34.1	16.5	3						
 KALTENBERG/KB203RR	127	32.4	17.4	1						
STINE/S2404-4	129	34.2	16.2	1	.					
STINE/S2403-4	130	33.0	16.9	2	.					
PUBLIC/SDX00-051R-23	111	.	.		31.0	19.5	1			
ZILLER/BT 7215R	127	31.8	17.7	1						
JACOBSEN/J730NR	124	31.5	18.1	1						
JACOBSEN/J733R	126	31.9	17.6	1	.					
JACOBSEN/J744NR	125	33.8	17.3	1	.					
THOMPSON/T-7293RR	122	.	.		30.7	20.2	1			
THOMPSON/T-2343RR	127	33.6	17.1	1	.	.			.	

 $^{^{\}star}$ DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 7b. Roundup Ready maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2004 (continued).

		2004 1	Sc Prote:	- Sout	Southern Zone						
		Beresford			/	Armour			Averages		
Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	Oil	Lodging	
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	
THOMPSON/T-2422RR	127	33.7	17.3	1							
RENK/RS234RR	127	32.4	17.2	1							
RENK/RS244NRR	129	34.4	16.5	2							
EXCEL/8236NRR	127	34.1	17.1	1							
PUBLIC/SDX00R-014-50	124	32.6	17.6	2							
PUBLIC/SDX00R-030-16	126				33.3	18.4	1				
PUBLIC/SD01-76R	124	31.0	17.0	2							
PUBLIC/SD01-1135R	117				32.1	19.0	1				
PUBLIC/SD01-2469R	116				29.5	20.2	1	.			
PUBLIC/SD01-2493R	117				30.4	19.9	1				
PUBLIC/SD01-2509R	129	30.8	16.9	2							
PUBLIC/SD01-2961R	131	34.0	16.7	3				.			
PUBLIC/SD93-828R	118	31.4	17.1	2							
PUBLIC/SDX00R-015-4	111				28.6	20.5	1				
Test avg.:	125	32.9	17.2	2	30.7	20.0	1	31.8	18.6	1	
High value:	133	35.3	18.1	4	33.5	21.4	1	34.0	19.8	3	
* Lsd(.05):	\			1			NS			0	
## TPG-value:				2			1			1	
@ Coef. Var.:				30			0			26	
No. Entries:		107	107	107	84	84	84	72	72	72	

 $^{^{\}star}$ DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a column are non-significant (NS), NS is indicated.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error, 15% or less is best.

Table D. 2004 Conventional soybean entries by brand/variety, yield table number(s), and Phytophthora root rot race resistance.

	Table	Mat.	Phytophthora
Brand / Variety	Number(s)	Grp.	Race resistance
COYOTE/9525	10	II	No Resistance
COYOTE/9723	9,10	ΙΙ	1-2,10-11,13,15-18,24
OY0TE/EX525	9,10	II	1-11,13-15,17-18,21-22,24
GOLD COUNTRY/5329CYS	ST 10	II	No Resistance
GOLD COUNTRY/6024FG	9,10	II	1-2,10-11,13,15-18,24
ACOBSEN/J772	9	II	Not Reported
JACOBSEN/J814	10	II	Not Reported
JACOBSEN/J826	10	II	Not Reported
ATHAM/1840	9,10	I	No Resistance
ATHAM/280	10	I	No Resistance
ATHAM/570	9	II	No Resistance
_ATHAM/EXP E1863	10	I	No Resistance
_ATHAM/EXP E2380	10	ΙΙ	No Resistance
ATHAM/EXP-E2980	10	II	No Resistance
USTANG/M-1185	9	I	No Resistance
MUSTANG/M-2255	10	II	1-11,13-15,17-18,21-22,24
NUTECH/NT-170	8-10	I	No Resistance
NUTECH/NT-180	8-10	I	No Resistance
IUTECH/NT-190	8	I	No Resistance
IUTECH/NT-242 SCN	10	II	No Resistance
UTECH/NT-282 SCN	10	II	No Resistance
ublic/HENDRICKS	8,9	0	1-2,10-11,13,15-18,24
Public/MN 0901	8,9	0	1-2,10-11,13,15-18,24
Public/SD00-141	8,9	0	Not Reported
ublic/SD00-1587	9,10	ΙΙ	Not Reported
ublic/SD00-1588	8,9	0	Not Reported
ublic/SD00-1638	8-10	I	Not Reported
Public/SD00-307	8-10	I	Not Reported
Public/SD00-314	9,10	II	Not Reported
Public/SD00-377	9,10	II	Not Reported
Public/SD00-405	8,9	0	Not Reported
Public/SD00-41	8,9	0	Not Reported
Public/SD00-533	8-10	I	Not Reported
Public/SD00-622	8-10	I	Not Reported
Public/SD00-632	9,10	II	Not Reported
	, · -		1

Table D. 2004 Conventional soybean entries (Continued).

	Table	Mat. Phytophthora
Brand / Variety	Number(s)	Grp. Race resistance
Public/SD00-732	9,10	II Not Reported
Public/SD00-735	8-10	I Not Reported
Public/SD00-746	9,10	II Not Reported
Public/SD96-135-3	8-10	I Not Reported
Public/SD98-99-2	9,10	II Not Reported
Public/SD99-1358	8,9	O Not Reported
Public/SD99-1909	8,9	O Not Reported
Public/SD99-700	8,9	O Not Reported
Public/SDX98-74331	8-10	I Not Reported
Public/SDX98-82302	8-10	I Not Reported
Public/SPINK	8,9	0 1-2,10-11,13,15-18,24
Public/STRIDE	8-10	I 1-2,10-11,13,15-18,24
Public/SURGE	8,9	0 1-2,10-11,13,15-18,24
Public/TURNER-SCN	9,10	II 1-3,6-11,13,15,17,21,23-24
SANDS/SOI 187	8,9	I 1-2,10-11,13,15-18,24
SANDS/SOI 228N	10	II No Resistance
SANDS/SOI 256	10	II No Resistance
SANDS/SOI 288	10	II No Resistance
THOMPSON/T-3182	8-10	I 1-2,10-11,13,15-18,24
THOMPSON/T-3189	8-10	I Not Reported
THOMPSON/T-3201	9	II No Resistance
THOMPSON/T-3222	9,10	II No Resistance
THOMPSON/T-3288	10	II 1-11,13-15,17-18,21-22,24

Table 8a. Non-Roundup Ready maturity group-0 and -I soybean variety yield averages- South Shore, South Dakota, 2003-2004.

		2003-04 Y	ield Average	es by Matur	ity Group
		MG	- 0	MG	- I
Brand/Variety (By maturity group		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
& 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr
PUBLIC/SD99-1909EXP	129	28			
PUBLIC/SD00-141EXP	131	27			
PUBLIC/SD00-41EXP	132	26			
PUBLIC/SD99-700EXP	130	26	27		
PUBLIC/SD00-719EXP	127	25			
PUBLIC/SD00-405EXP	130	24			
PUBLIC/SD00-1588EXP	130	24			
PUBLIC/SURGE	128	24	24		
PUBLIC/SPINK	124	23	23		
PUBLIC/SD99-1358EXP	127	23	25		
PUBLIC/MN 0901	129	22	21		
NUTECH/NT-170	133			37	
THOMPSON/T-3189	134			36	
NUTECH/NT-180	135			35	
SANDS/SOI 187	133			33	29
NUTECH/NT-190	135			33	
THOMPSON/T-3182	133			32	
PUBLIC/SD00-307EXP	131			31	
PUBLIC/SD00-735EXP	135			31	.
PUBLIC/SDX98-74331E	134			29	
PUBLIC/SD00-1638EXP	130			28	
PUBLIC/SD00-533EXP	130			27	
PUBLIC/SD96-135-3EX	131			26	
PUBLIC/SD00-622EXP	135			24	
PUBLIC/SDX98-82302E	128			22	
PUBLIC/STRIDE	132			18	22
Test avg.:	131	25	24	29	25
High value:	135	28	27	37	29
# Lsd (.05):		3	3	3	NS
## TPG-value:		25	24	34	22
@ Coef. Var.:		8	11	7	13
No. Entries:		11	5	15	2

 $^{^{\}star}$ DTM= days from seeding on May 21, 2004 to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a colum are non-significant(NS), NS is indicated.

^{##} TPG-value= minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 8b. Non-Roundup Ready maturity group-O and -I soybean variety protein, oil, and lodging score averages- South Shore, South Dakota, 2004.

		2004	Prote	in, Oil & Maturit		Aver	ages by
			MG-0			MG-I	
Brand/Variety (By maturity group		Protein	l	Lodging*	Protein	l .	Lodging*
& protein)	DTM*	%	%	(1-5)	%	%	(1-5)
PUBLIC/SD00-405EXP	130	37.5	15.3	1			
PUBLIC/SD99-1358EXP	127	36.2	15.6	1			
PUBLIC/SURGE	128	35.6	16.5	1			
PUBLIC/SD99-700EXP	130	35.5	16.5	1			
PUBLIC/SD00-719EXP	127	35.0	16.0	1			
PUBLIC/SD99-1909EXP	129	35.0	16.0	1			
PUBLIC/MN 0901	129	34.5	16.7	1		.	
PUBLIC/SD00-1588EXP	130	34.5	16.6	1			
PUBLIC/SD00-141EXP	131	34.0	16.1	1			
PUBLIC/SD00-41EXP	132	33.9	16.6	1			
 PUBLIC/SPINK	124	33.9	16.6	1			
PUBLIC/SDX98-82302E	128				38.4	14.6	1
PUBLIC/SDX98-74331E	134				37.7	15.7	1
NUTECH/NT-180	135				36.1	17.0	1
PUBLIC/SD00-735EXP	135				34.5	16.5	1
PUBLIC/SD00-533EXP	130		_		34.4	16.2	1
THOMPSON/T-3189	134		17.			16.9	1
SANDS/SOI 187	133					17.1	1
PUBLIC/SD00-1638EXP	130					16.8	1
PUBLIC/SD96-135-3EX	131				33.9		1
NUTECH/NT-190	135				33.8	16.5	1
PUBLIC/SD00-622EXP	135				33.6	17.2	1
PUBLIC/SD00-307EXP	131				33.4	17.4	1
THOMPSON/T-3182	133				33.2	17.1	1
PUBLIC/STRIDE	132				32.9	16.4	1
NUTECH/NT-170	133				32.7	16.9	1
Test avg.:	131	35.1	16.2	1	34.4	16.7	1
High value:	135	37.5	16.7	1	38.4	17.6	1
* Lsd(.05):				NS			NS
## TPG-value:				1			1
@ Coef. Var.:				0			0
No. Entries:		11	11	11	15	15	15

^{*} DTM= days from seeding on May 21, 2004 to maturity;

^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a column are non-significant(NS), NS is indicated.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error.

Table 9a. Non-Roundup Ready maturity group-0, -I & -II soybean variety yield averages- Brookings, South Dakota, 2003-2004.

		:	2003-04 Yie	eld Averag	es by Matur	rity Group	
		MG	-0	MG	- I	MG	-II
Brand/Variety (By maturity group		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
& 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
PUBLIC/SD99-1909EXP	138	50					
PUBLIC/SD00-719EXP	134	48					
PUBLIC/SD00-141EXP	135	46					
PUBLIC/SPINK	132	46	42				
PUBLIC/SD99-700EXP	136	46	41			•	
PUBLIC/SURGE	131	45	 39				
PUBLIC/SD00-41EXP	140	44					.
PUBLIC/SD00-405EXP	136	44	.				
PUBLIC/SD99-1358EXP	134	44	40		.		
PUBLIC/SD00-1588EXP	138	40					
PUBLIC/HENDRICKS	139	37	36				
PUBLIC/MN 0901	134	36	35				
NUTECH/NT-170	139			57			
_ATHAM/EXP-E1840T	140			55	47		l
NUTECH/NT-180	141			54			
MUSTANG/M-1185	139			53			
THOMPSON/T-3182	142			52	45		
SANDS/SOI 187	141			51	43		
THOMPSON/T-3189	141			51	44	w.	
PUBLIC/SD00-533EXP	135			49			
PUBLIC/SD00-307EXP	138			48			
PUBLIC/SD00-735EXP	142			47			
PUBLIC/SDX98-74331E	141		.	47			
PUBLIC/SD00-1638EXP	140		.	46			
PUBLIC/SD00-622EXP	143			44			
PUBLIC/SD96-135-3EX	136			43	37		
PUBLIC/SDX98-82302E	135			41			
PUBLIC/STRIDE	137		.	40	36		
JACOBSEN/J772]	53	
THOMPSON/T-3222				-		53	!
·		•				33	
PUBLIC/SD00-314EXP	.		.		[.	50	
_ATHAM/570	.		.		[.	49	42
PUBLIC/SD00-632EXP	.		.		[.	49	
PUBLIC/SD00-746EXP	.		.			49	.
COY0TE/9723	.		.			46	40

 $^{^{\}star}$ DTM= days from seeding on May 14, 2004 to maturity.

Table 9a. Non-Roundup Ready maturity group-0, -I & -II soybean variety yield averages- Brookings, South Dakota, 2003-2004 (continued).

		:	2003-04 Yie	eld Average	es by Matur	rity Group	
Brand Wanish.		MG	-0	MG	- I	MG	-II
Brand/Variety (By maturity group & 2004 yield)	DTM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr
PUBLIC/SD00-377EXP						46	
PUBLIC/SD98-99-2EXP					.	46	.
PUBLIC/SD00-1587EXP						46	-
COYOTE/EX525						45	-
GOLD COUNTRY/6024FG		•				45	
PUBLIC/SD00-732EXP						45	
THOMPSON/T-3201	.					44	.
PUBLIC/TURNER-SCN	.					44	39
Test avg.:	138	44	39	49	42	47	42
High value:	143	50	42	57	47	53	45
# Lsd (.05):		7	NS	4	6	4	5
## TPG-value:		43	35	53	41	49	40
@ Coef. Var.:		10	10	5	7	5	5
No. Entries:		12	6	16	6	15	4

^{*} DTM= days from seeding on May 14, 2004 to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a column are non-significant (NS), NS is indicated.

^{##} TPG-value= minimum value to qualify for top performance group.

^{###} Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 9b. Non-Roundup Ready maturity group-0, -I & -II soybean variety protein, oil, and lodging score averages- Brookings, South Dakota, 2004.

		200	04 Pro	otein, Oi	l, & Lod	ging /	Averages I	by Matur	ity G	roup
Bu and (Manifester			MG-0			MG-I			MG-I	Ι
Brand/Variety (By maturity group		Protein	Oi 1	Lodging*	Protoin	011	Lodging*	Protoin	Oil	Lodging*
& protein)	DTM*	(%)	(%)	(1-5)	(%)	(%)	(1-5)	(%)	(%)	(1-5)
	+					-			-	
PUBLIC/SD00-405EXP	136	!	15.0	1						
PUBLIC/SD00-41EXP	140	37.5	ı	1						
PUBLIC/SURGE	131	!	16.0	1						
PUBLIC/SD99-1358EXP	134	!	15.6	1						
PUBLIC/HENDRICKS	139	36.6	15.8	1						
PUBLIC/SD00-719EXP	134	36.4	15.9	1						
PUBLIC/SD99-700EXP	136	36.2	16.2	1						
PUBLIC/SD00-1588EXP	138	36.2	16.3	1						
PUBLIC/SD99-1909EXP	138	35.7	16.6	1						
PUBLIC/SD00-141EXP	135	35.2	16.5	1						
 PUBLIC/MN 0901	134	35.0	17.4	1						
PUBLIC/SPINK	132	34.6	16.6	1						
PUBLIC/SDX98-82302E	135				41.3	13.5	1			
PUBLIC/SDX98-74331E	141				40.1	15.4	1	_		
THOMPSON/T-3189	141		•		37.2	16.0	1			
PUBLIC/SD00-735EXP	142				36.5	16.2	1			
PUBLIC/SD00-533EXP	135				36.4	15.7	1			
NUTECH/NT-180	141			7 .	35.9	16.8	1			
PUBLIC/SD96-135-3EX	136				35.6	17.3	1			
LATHAM/EXP-E1840T	140				35.2	16.7	1			
PUBLIC/SD00-307EXP	138				35.0	17.0	1			
PUBLIC/SD00-622EXP	143				34.7	17.2	1			
SANDS/SOI 187	141				34.5	16.6	1			
PUBLIC/SD00-1638EXP	140				34.5	16.2	1			
PUBLIC/STRIDE	137				34.2	16.6	1			
NUTECH/NT-170	139				34.1	16.6	1			
MUSTANG/M-1185	139				!	16.8	1			
THOMPSON/T-3182	142				34.0	17.3	1			
PUBLIC/SD00-746EXP	.							38.5	14.7	2
PUBLIC/SD00-377EXP	.							!	16.2	1
PUBLIC/SD00-732EXP		_	_	_		_	_	38.2	15.1	1
THOMPSON/T-3222	[.		!	15.6	1
GOLD COUNTRY/6024FG	:	.	.			.		!	16.2	1
PUBLIC/TURNER-SCN	:	.	.			.		1	15.6	1
LATHAM/570	:	:		.	:	:	:	!	16.2	1
		<u> </u>		<u> </u>	<u> </u>		L			<u> </u>

^{*} DTM= days from seeding on May 14, 2004 to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 9b. Non-Roundup Ready maturity group-0, -I & -II soybean variety protein, oil, and lodging score averages- Brookings, South Dakota, 2004 (continued).

		2004 Protein, Oil, & Lodging Averages by Maturity Group									
			MG-0			MG-I		MG-II			
Brand/Variety (By maturity group & protein)	DTM*	Protein (%)	0il (%)	Lodging* (1-5)	Protein (%)	0il (%)	Lodging*	Protein (%)	0il (%)	Lodging*	
COYOTE/9723								36.2	15.2	1	
PUBLIC/SD00-1587EXP								36.0	16.1	1	
THOMPSON/T-3201								35.9	15.6	1	
PUBLIC/SD00-314EXP								35.7	16.0	2	
PUBLIC/SD00-632EXP								35.7	15.3	1	
COYOTE/EX525								34.7	16.1	2	
JACOBSEN/J772	.							34.6	16.6	1	
PUBLIC/SD98-99-2EXP								34.4	17.3	1	
Test avg.:	138	36.4	16.1	1	35.8	16.4	1	36.4	15.9	1	
High value:	143	39.3	17.4	1	41.3	17.3	1	38.5	17.3	2	
* Lsd(.05):				NS			NS			0	
## TPG-value:				1			1			1	
@ Coef. Var.:				0			14			25	
No. Entries:		12	12	12	16	16	16	15	15	15	

^{*} DTM= days from seeding on May 14, 2004 to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

If differences among values within a column are non-significant (NS), NS is indicated. ## TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error.

Table 10a. Non-Roundup Ready maturity group-I & -II soybean variety yield averages- Beresford, South Dakota, 2003-2004.

		2003-04 Y	ield Average	es by Matur	turity Group					
		MG	- I	MG	- I I					
Brand/Variety										
(By maturity group		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre					
& 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr					
NUTECH/NT-180	123	69								
LATHAM/EXP-E1840T	123	69	61							
LATHAM/280	123	68	59							
LATHAM/EXP E1863	121	68								
NUTECH/NT-170	121	67								
THOMPSON/T-3189	123	67	59		 					
PUBLIC/SD00-307EXP	120	61								
THOMPSON/T-3182	124	59	54							
PUBLIC/SD00-735EXP	124	58								
PUBLIC/SD00-622EXP	124	56								
PUBLIC/SDX98-74331E	122	55								
PUBLIC/SD00-533EXP	119	54								
PUBLIC/STRIDE	120	54	51							
PUBLIC/SD96-135-3EX	119	51	48							
PUBLIC/SDX98-82302E	116	44								
PUBLIC/SD00-1638EXP	121	43								
JACOBSEN/J826	126			70	6					
COYOTE/9723	126		7 .	69	5					
SANDS/SOI 288	129			69	5.					
COYOTE/EX525	131			68						
JACOBSEN/J814	126			67	5					
THOMPSON/T-3222	125			67						
PUBLIC/SD98-99-2EXP	123			67						
MUSTANG/M-2255	131			66						
NUTECH/NT-282 SCN	131			66						
NUTECH/NT-242 SCN	130			65						
PUBLIC/SD00-732EXP	123			65						
SANDS/SOI 256	126		.	64	5					
LATHAM/EXP-E2980	132			64						
PUBLIC/SD00-746EXP	124			64						

 $[\]mbox{\scriptsize \star}$ DTM= days from seeding on May 19, 2004 to maturity.

Table 10a. Non-Roundup Ready maturity group-I & -II soybean variety yield averages- Beresford, South Dakota, 2003-2004 (continued).

		2003-04 Y	ield Average	es by Matur	ity Group
		MG	- I	MG	-II
Brand/Variety		Pu / Aono	Bu /Aono	Bu / Aono	Bu / Aono
(By maturity group & 2004 yield)	DTM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr
& 2004 yield)	D I WI "	2004	2-11	2004	2-11
LATHAM/EXP E2380	131			63	
SANDS/SOI 228N	131			62	
GOLD COUNTRY/5329CY	129			62	
THOMPSON/T-3288	131			62	55
PUBLIC/SD00-632EXP	123			59	
 COYOTE/9525	129			58	51
GOLD COUNTRY/6024FG	128			57	
PUBLIC/SD00-1587EXP	125			56	
PUBLIC/TURNER-SCN	126			53	47
PUBLIC/SD00-314EXP	124			51	
PUBLIC/SD00-377EXP	121			44	
Test avg.:	125	59	55	62	55
High value:	132	69	61	70	60
# Lsd (.05):		5	9	7	8
## TPG-value:		64	52	63	52
@ Coef. Var.:		5	7	7	6
No. Entries:		16	6	25	8

^{*} DTM= days from seeding on May 19, 2004 to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-value= minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 10b. Non-Roundup Ready maturity group-I & -II soybean variety protein, oil, and lodging score averages- South Shore, South Dakota, 2004.

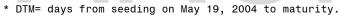
		2004 Protein, Oil, & Lodging Averge by Maturity Group									
			MG-I	IG-I MG-II							
Brand/Variety		Protein	Oil	Lodging*	Protein	Oil	Lodging*				
(By maturity group & protein)	DTM*	%	%	Lodging*	%	%	Lodging*				
PUBLIC/SDX98-82302E	116	37.9	15.3	4							
PUBLIC/SDX98-74331E	122	37.6	15.6	3							
THOMPSON/T-3189	123	34.3	16.3	2							
PUBLIC/SD00-735EXP	124	33.8	16.8	3							
LATHAM/280	123	33.7	17.1	1							
NUTECH/NT-180	123	33.4	17.0	1							
PUBLIC/SD96-135-3EX	119	33.3	18.1	2							
LATHAM/EXP-E1840T	123	33.2	17.1	2							
PUBLIC/SD00-533EXP	119	32.5	17.1	4							
PUBLIC/SD00-1638EXP	121	32.5	17.6	3							
LATHAM/EXP E1863	121	31.7	16.7	2							
PUBLIC/SD00-622EXP	124	31.7	18.1	1							
NUTECH/NT-170	121	31.2	16.9	2							
PUBLIC/STRIDE	120	30.9	17.6	2							
THOMPSON/T-3182	124	30.7	17.4	2							
PUBLIC/SD00-307EXP	120	30.6	18.1	2							
PUBLIC/SD00-377EXP	121		, .		35.2	17.4	2				
GOLD COUNTRY/6024FG	128				34.9	16.9	3				
NUTECH/NT-282 SCN	131				34.0	17.4	3				
PUBLIC/SD00-732EXP	123				33.8	17.0	2				
THOMPSON/T-3222	125				33.7	16.7	3				
PUBLIC/SD00-746EXP	124				33.7	17.1	2				
GOLD COUNTRY/5329CY	129	.	.		33.6	17.4	3				
LATHAM/EXP-E2980	132				33.5	17.4	3				
JACOBSEN/J826	126				33.5	16.8	1				
SANDS/SOI 228N	131				33.2	17.3	3				
LATHAM/EXP E2380	131	.			33.2	17.2	3				
PUBLIC/SD00-1587EXP	125	.	.		33.0	17.2	4				
JACOBSEN/J814	126				32.9	16.9	2				
COYOTE/9723	126	I	I	I	32.8	400	2				

^{*} DTM= days from seeding on May xx to maturity.

^{*} Lodging, 1= all plants erect, 5= all plants flat.

Table 10b. Non-Roundup Ready maturity group-I & -II soybean variety protein, oil, and lodging score averages- South Shore, South Dakota, 2004 (continued).

	2004 Protein, Oil, & Lodging Averge by Maturity Group										
			MG-I			MG-I	I				
Brand/Variety											
(By maturity group	l	Protein		Lodging*	l		Lodging*				
& protein)	DTM*	%	%	(1-5)	%	%	(1-5)				
NUTECH/NT-242 SCN	130				32.6	17.7	3				
SANDS/SOI 256	126				32.5	17.8	1				
SANDS/SOI 288	129				32.4	17.2	2				
THOMPSON/T-3288	131				32.2	17.2	4				
PUBLIC/SD00-632EXP	123				32.1	16.6	3				
 PUBLIC/TURNER-SCN	126				32.1	18.1	2				
PUBLIC/SD98-99-2EXP	123				32.0	18.1	2				
COYOTE/EX525	131				31.5	17.5	4				
MUSTANG/M-2255	131				31.2	17.5	3				
PUBLIC/SD00-314EXP	124				31.2	17.9	4				
COYOTE/9525	129	•			31.0	18.0	2				
Test avg.:	125	33.1	17.1	2	32.9	17.3	3				
High value:	132	37.9	18.1	4	35.2	18.1	4				
* Lsd(.05):				1			1				
## TPG-value:				2			2				
@ Coef. Var.:				31			17				
No. Entries:	\	16	16	16	25	25	25				



^{*} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error, 15% or less is best.

Company name (brand name)

Bio Gene Seeds (Bio Gene), 5491 Tri-County Hwy, Sardinia, OH 45171 Coyote Seed Mills (Coyote), Inc., PO Box 16, Bridgewater, SD 57319-0016 Dairyland Seed Co.,Inc. (Dairyland), PO Box 958, West Bend, WI 53095

Dyna-Gro (Dyna-Gro), 104 Harrison, Emmetsburg, IA 50536 Excel Brand (Excel), 116 E. State, Camp Point, IL 62320 Foundation Seed Stocks (Sodak Genetics), Box 2207A, SDSU, Brookings, SD 57007

Farm Advantage (Farm Advantage), 1275 Hwy 69, Belmont, IA 50421 Gold Country Seed Inc. (Gold Country), 16506 Hwy 15 N., Hutchinson, MN 55350 Jacobsen Hybrid Corn Co., Inc. (Jacobsen), 129 9th St., Lake View, IA 51450

Kaltenberg Seeds (Kaltenberg), PO Box 278, Waunakee, WI 53597 Keltgen Inc. (Agventure), 302 Spruce St., Henry, SD 57243

Kruger Seed Co. (Kruger), 33938 160th Ave., Dike, IA 50624

Latham Seed Co. (Latham), 131 180th St, Alexander, IA 50420-8028 Mallard Seed Co. (Mallard), Inc., PO Box 637, Plainview, MN 55964 Monsanto (Asgrow & Dekalb), 3100 Sycamore Rd, Dekalb, IA 60115

Mustang Seeds (Mustang), PO Box 466, Madison, SD 57042 NK (NK Brand), 1201 Holiday Drive, Canton, SD 57013 Northstar Genetics (Northstar), 605 E. 21st St., Sioux Falls, SD 57105

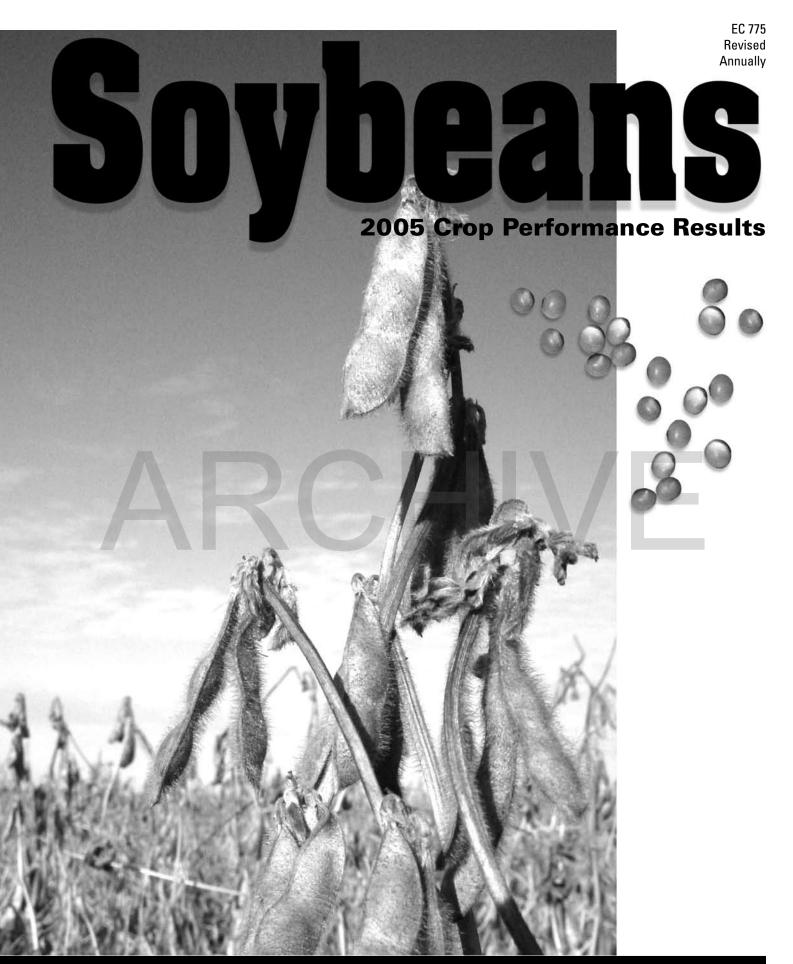
Peterson Farms Seed (Peterson), 3104 164th Ave. SE, Harwood, ND 58042 Prairie Brand Seed Co. (Prairie Brand), 15 X Ave., Story City, IA 50248 Renk Seed Co. (Renk), 6800 Wilburn Rd., Sun Prairie, WI 53590

Sand Seed Service, Inc. (Sands), Box 648, Marcus, IA 51035 Seeds 2000 (Seeds 2000), PO Box 200, Breckenridge, MN 56520 Stine Seed Co.(Stine), 2225 Laredo Trail, Adel, IA 50003

Technology Direct (Tech. Direct), PO Box 303, Urbandale, IA 50322 Thompson Seeds Inc. (Thompson), 40321 130th Ave., Leland, IA 50453 Thompson Seeds/Nutech (Nutech), 6131 North Fork Rd., Ames, IA 50010

Thunder Seed (Thunder), 3008 210th St. N., Hawley, MN 56549-9433 Top Farm Hybrids x(Top Farm Hybrids), PO Box 850, Cokato, MN 55321 Wensman Seed Co.(Wensman), PO Box 190, Wadena, MN 56482

Ziller Seed Co. Inc.(Ziller), 76374 380th St., Bird Island, MN 55310



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EC 775—Precision Planted Soybeans 2005 Crop Performance Results is available electronically on the internet

http://agbiopubs.sdstate.edu/articles/EC775-05.pdf



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Soybean Variety

Performance Trials

Robert G. Hall, Extension agronomist, crops; manager, crop testing Kevin K. Kirby, agricultural research manager, crop testing Glenda Piechowski, agricultural research specialist, crop testing

Table A – Nearest station precipitation averages and departures from normal for 2005.

Table B – Gene race resistance to *Phytophthora* root rot.

Table C − Roundup ReadyTM entries with yield table numbers.

Table D – Non-Roundup ReadyTM entries with yield table numbers.

Table E – Seed company (brand name) mailing addresses (after yield tables).

Successful soybean production is greatly affected by variety selection for a given growing area. This publication reports the agronomic performance of entries in the 2005 South Dakota performance trials for conventional or non-Roundup ReadyTM and Roundup ReadyTM soybean varieties. Important factors in variety selection include yield, maturity, plant height, lodging resistance, and *Phytophthora* root rot resistance. In the case of public varieties, additional information including emergence, shattering, and iron chlorosis scores (Table A) are available to assist in making variety selections.

General

Soybean varieties are classified according to maturity groups, which in turn are adapted to maturity zones. Maturity zones are based on day length and therefore are greatly impacted by latitude. Consequently, maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. Groups III through VIII are suited to Iowa, Nebraska, and southward into Texas.

These soybean performance trial results are reported according to the prevalent maturity zones in South Dakota (see

map). Roundup-Ready TM soybean variety trials are conducted in the following test zones and locations:

Northern test zone: Maturity group-0 and -I trials at South Shore and Warner.

Central test zone: Maturity group-0, -I, and –II trials at Brookings and Bancroft.

Southern test zone: Maturity group-I and -II trials at Beresford and Delmont.

The conventional soybean variety trials are only conducted on SDSU-affiliated research farms and locations:

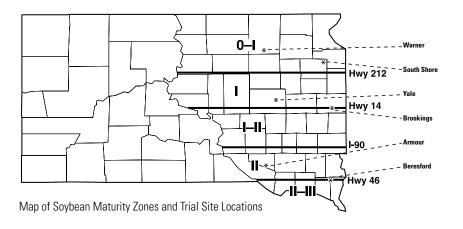
NE Research Farm, South Shore- Maturity group-0 and -I trials.

South Dakota Agricultural Experiment Station (SDAES) Farm, Beresford- Maturity group-I and –II trials.

Note there are transition areas where varieties of two maturity groups may perform similarly. In such cases other mitigating factors like rainfall and or elevation may moderate the effect of latitude on maturity.

In most cases, an earlier maturity group may be seeded in a zone suited to a later maturity group. Generally, this is only practical if seeding is delayed, when reseeding following hail, or if double cropping.

Phytophthora root rot (PRR) is an important soybean disease



in South Dakota and is often controlled or managed with the use of resistant varieties. However, the resistance to PRR is fungus-race specific. This means resistance to one race does not necessarily impart resistance to other races. Knowledge of the races of PRR fungus prevalent in your area is helpful. If a field is suspected of having PRR and the specific race(s) involved is unknown, then selection of varieties having genes that impart a wide range of race resistance is strongly suggested (see discussion of *Phytophthora* under General Test Procedures).

An alternative method of control is the use of "tolerant varieties." Tolerant varieties are not resistant to PRR in the seedling stage. Therefore, a *Phytophthora* specific fungicide must be applied to protect them. Presently, we have no information on the field tolerance of varieties adapted to this region. Therefore, field tolerance ratings are not given in this publication.

Certified seed is the best source of seed and the only way to be assured of the genetic purity of the variety seeded. In addition, inoculation of seed with the appropriate nitrogen-fixing bacterium is a good fundamental practice. Inoculate if soybeans are seeded in soils not previously cropped with soybeans. On soils previously cropped to soybeans there is no guarantee that beneficial bacteria will be present to naturally inoculate planted seed. Therefore, inoculation of seed at planting is an inexpensive means of increasing the percentage of plants that will fix nitrogen in the current crop year.

Yield

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested at a given location. In addition, 2-year averages are included where varieties have been tested for 2 years. Yields, test averages, and Least significant difference (Lsd) values are printed at the bottom of each yield column for each location and are rounded off to the nearest bushel.

The Lsd value can be used to determine whether varieties differ in yield potential. For example, assume Variety A yields 30 bu, Variety B yields 25 bu, and the calculated Lsd value is 4 bu. The yield difference between varieties A and B is 5 bu per acre. Since the yield difference of 5 bu is greater than the test Lsd value of 4 bu, the yield of Variety A (30 bu) is significantly higher than the yield of Variety B (25 bu).

But if Variety A yielded 28 bu and Variety B yielded 25 bu, the yield difference would be 3 bu per acre. In this case, both varieties would have a similar yield because their yield difference of 3 bu was less than the test Lsd value of 4 bu per acre.

Use Lsd values to identify the best-yielding varieties. The Lsd value indicated at the bottom of each yield column is used to calculate the **minimum top yield value**. For example, if the highest yield within a column is 50 bu and the LSD value for that yield column is 5 bu, then the minimum top yield value equals 45 bu (50-5=45). Within a yield column, varieties with yields equal to or higher than this minimum top yield value are the best yielding varieties.

Entries in all tables are sorted from highest to lowest values according to the variable(s) listed in the Brand/Variety column of each performance table. Note: Entries tested for 2 years may also have a top yield group value in the 2005 yield column.

Participating companies pick the locations where their entries are tested. Entries are placed into either maturity group-0, -I,

or -II test trials. A company selects the appropriate maturity group trial for its entries at each location. Generally, companies have one or more maturity group checks for the varieties they market. However, there are no standard regional or national check varieties for maturity. Consequently, a late group-I variety from one company may be similar in maturity to an early group-I variety from another company because they use different check varieties for maturity. As a result, this testing program can not guarantee that all entries are placed in the proper maturity trial. In some trials, borderline entries with maturity group ratings at or near the arbitrary breaks between late group-0 and early group-I and between late group-I and early group-II may crossover at a given location.

When evaluating the performance of any entry in a given trial it is strongly suggested that you also note the reported maturity of the entry. Since all entries at a given location are seeded the same day, you can compare the relative difference in maturity (days after maturity) between varieties. If the maturity rating for an entry in a group-I test is similar to the rating for a variety in the group-II test at the same test location, then you might conclude they are similar in maturity regardless of their company maturity rating.

Use caution when comparing the maturity rating of a given variety from one location to the rating obtained at other locations. Should early season soil moisture and soil temperature values differ greatly, then maturity ratings may differ between locations; therefore, maturity comparisons of a variety over many locations may be misleading.

The efforts of J. Smolik and A. Heuer, NE Research Farm, South Shore, and R. Berg and staff, SE Research Farm, Beresford, in obtaining the data is gratefully acknowledged. The comments regarding *Phytophthora* root rot race resistance and tolerance by Marty Draper, Extension plant pathologist is appreciated.

In addition, the assistance and cooperation of our farmer co-operators, Allen and Inel Ryckman, Warner, Richard Luebke, Delmont, and Erland Weerts, Bancroft, is gratefully acknowledged.

Protein and Oil Content

The protein and oil values reported are for the 2005 cropping season. At all locations, one sub-sample from each replication (3 sub-samples total) of every variety in each trial was tested for protein and oil, using a FOSS TECATOR Model Infratec 1229 grain analyzer calibrated using the manufacturer's software. Samples of known protein and oil that had been tested by the SDSU Agricultural Experiment Station Biochemistry Laboratory were then used to verify their software calibration. All protein and oil values are adjusted to a 13% moisture basis.

Weather and Seasonal Precipitation

In the spring of 2005, late May precipitation caused planting to be delayed until June 16 and June 20, respectively, at Beresford and Delmont. A best estimate of seasonal precipitation and its distribution is shown in Table A. As of August 28, all weather reporting stations nearest each test trial were reporting average or above rainfall accumulation. In July, Watertown and Huron reported below average rainfall but by late August had attained near average or above rainfall. It should be noted that the cooperator at Delmont indicated that less moisture was received by Delmont than at the nearest reporting station at Armour.

General Test Procedures

The general test procedures outlined below apply to both conventional non-Roundup ReadyTM and Roundup ReadyTM soybean entries with one exception: Weed control in the Roundup ReadyTM test consisted of both pre- and post-emergence treatments at the research farms.

Pre-emergence treatments consisted of 1 qt Dual II Magnum at South Shore and Brookings and 26 oz Roundup + 1 qt Dual + 1pt Select at Beresford. The post-emergence treatment consisted of an application of Roundup Ultra (32 oz/A) when weeds were 4-5 inches tall followed by the same application. In non-Roundup Ready™ test trials, pre-emergence herbicides consisted of 1 qt Dual II Magnum at South Shore and Brookings and 26 oz Roundup + 1 qt Dual + 1pt Select at Beresford. No post-emergence treatments were applied. Chemicals were applied according to label instructions.

Insecticide treatments were applied at all research farm test trials to control soybean aphid and bean leaf beetle. At South Shore, Asana was applied August 13; at Brookings, Warrior was applied August 13; and at Beresford, NuFos was applied on August 16, 2005, at recommended rates.

Test Procedures: A row spacing of 30 inches was used at all locations. The seeding rate was 165,000 seeds per acre for all varieties and locations. Test plots consist of 4-row plots, 20 feet long, with three replications at all locations. Soybean inoculation was accomplished by applying Nitragin brand Soybean Soil Implant down the seed tube, according to label instructions and rates, during seeding. Seeding at all locations was accomplished using a Monosem precision row crop planter. The use of this planter this year resulted in very uniform seed spacing within the

seed row. The center two rows of each plot were harvested for vield.

Yield: Plots were harvested at 15% seed moisture or less. Yields were calculated on a 13% moisture content basis and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine.

Reporting variety maturity: Variety maturity is reported as "Days To Maturity" or DTM. Entries are mature when 95% of the pods have turned brown. Each maturity value is obtained by determining the average number of days from seeding to maturity for two replicates. If the DTM value is missing, the entry did not reach maturity before the first killing frost and no value is given.

Height: Height was measured from the soil surface to the top node of the main stem.

Lodging Score: Scores at maturity are based on average erectness of the main stem of plants within each variety. 1 = all plants erect, 2 = slight lodging, 3 = lodging at a 45 degree angle, 4 = severe lodging, and 5 = all plants flat.

Phytophthora: The gene resistance traits of entries to the many *Phytophthora* races were supplied by the participating seed company (proprietary entries) or obtained from the USDA, Uniform Soybean Tests, Northern States (public entries). A key for each type of PRR gene and the race resistance it imparts to a variety is indicated in Table B. The specific race resistance to PRR for a given variety, as reported by the seed company, can be determined by noting the type of *Phytophthora* gene in tables C (Roundup Ready[™]) and D (non-Roundup Ready[™]) and referencing the gene type to table B to find the final race resistance. Presently, races 1, 3, and 4 are the most common races in South Dakota.

ROUNDUP READY™ SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

Note: Yields are reported as 2005 averages or 2-year averages (2004-05).

NORTHERN TEST ZONE

SOUTH SHORE- Northeast Research Farm WARNER- NO-TILL, Allen & Inel Ryckman Farm (cooperators)

South Shore, Group-0 (Tables 1a & 1b): The 2005 and 2-year test yield averages were 49 and 44 bu per acre, respectively (Table 1a). Varieties had to average 50 bu or higher to be in the top yield group for 2005. Varieties had to average 44 bu or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bu in 2005 and 5 bu for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 37.2%, 17.2% and 1, respectively (Table 1b). Lodging score averages of 1 indicated a variety qualified for the top performance group or did not exhibit any lodging.

Warner, Group-0 (Tables 1a & 1b): The 2005 and 2-year test yield averages were 50 and 49 bu per acre, respectively (Table 1a). Varieties had to average 50 bu or higher to be in the top yield group for 2005. Varieties had to average 47 bu or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 5 bu in 2005 and 5 bu for 2 years to be significantly different.

The 2005 protein, oil, and lodging score test averages were 34.5%, 18.5%, and 1, respectively (Table 1b). Lodging score averages among the varieties were not significantly different from one another.

Northern test zone, Group-0 (Tables 1a & 1b): The 2005 and 2-year test yield averages in the Northern zone were 49 and 47 bu per acre, respectively (Table 1a). Varieties had to average 51 bu or higher to be in the top yield group for 2005. Variety yield averages had to differ by 3 bu in 2005 to be significantly different. Varieties had to average 48 bu or higher to be in the top yield group for 2 years. The 2005 protein, oil, and lodging score test averages were 35.9%, 17.8%, and 1, respectively (Table 1b). Only a few entries exhibited any measurable lodging.

South Shore, Group-I (Tables 2a & 2b): The 2005 and 2-year test yield averages were 47 and 45 bu per acre, respectively (Table 2a). Varieties had to average 48 bu or higher to be in the top yield group for 2005. Varieties had to average 45 bu or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bu in 2005 and 3 bu for 2 years to be in the top performance group for yield. The 2005 protein, oil, and lodging score test averages were 36.9%, 17.2%, and 1, respectively (Table 2b). Although lodging scores were significant, an average of 1 indicated lodging was not a major factor in this trial.

Warner, Group-I (Tables 2a & 2b): The 2005 and 2-year test yield averages were 51 and 50 bu per acre, respectively (Table 2a). Varieties had to average 52 bu or higher to be in the top yield group for 2005. Varieties had to average 49 bu or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 5 bu in both 2005 and for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.0%, 18.6%, and 1, respectively (Table 2b). Although lodging score averages were significant, the amount of lodging present was not a major factor for this trial.

Northern test zone, Group-I (Tables 2a & 2b): The 2005 and 2-year test yield averages in the Northern zone were 49 and 48 bu per acre, respectively (Table 2a). Varieties had to average 51 bu or higher in 2005 and 47 bu for 2 years to be in the top yield group. Variety yield averages had to differ by 3 bu in both 2005 and for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 35.5%, 17.9%, and 1, respectively (Table 2b). Lodging score averages indicated lodging was not a major problem in 2005 in this trial.

CENTRAL TEST ZONE

BROOKINGS- Plant Science Research Farm BANCROFT- NO-TILL, Erland Weerts (cooperator)

Brookings, Group-0 (Tables 3a & 3b): The 2005 and 2-year test yield averages were 64 and 55 bu per acre, respectively (Table 3a). Varieties had to average 65 bu or higher to be in the top yield group for 2005. Varieties had to average 54 bu or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bu in 2005 and for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 36.1%, 17.3%, and 2, respectively (Table 3b). Lodging score averages had to equal 1 to be in the top performance group. On average, lodging was measurable but did not impact yield significantly.

Bancroft, Group-0 (Tables 3a & 3b): The 2005 yield average was 63 bu per acre (Table 3a). Likewise, varieties had to average 63 bu or higher to be in the top yield group for 2005. Variety yield averages had to differ by 5 bu in 2005 to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.9%, 17.5%, and 1, respectively (Table 3b). Although lodging score averages were significant, the amount of lodging present was not a major factor for this trial.

Central test zone, Group-0 (Tables 3a & 3b): The 2005 yield average was 64 bu per acre (Table 3a). Varieties had to average 65 bu or higher to be in the top yield group for 2005. Variety yield averages had to differ by 3 bu in 2005 to be significantly different. The 2005 protein, oil, and lodging score test averages were 35.5%, 17.3%, and 2, respectively (Table 3b). Although a few varieties exhibited moderate lodging score averages, lodging did not appear to impact yield significantly in this zone.

Brookings, Group-I (Tables 4a & 4b): The 2005 and 2-year test yield averages were 66 and 57 bu per acre, respectively (Table 4a). Varieties had to average 69 bu or higher to be in the top yield group for 2005. Varieties had to average 57 bu or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bu in 2005 and 3 bu for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 35.1%,

17.1%, and 2, respectively (Table 4b). A lodging score average of 2 indicated lodging was measurable and ranged from no lodging (1) to moderately severe lodging (4). A few varieties with a lodging score of 1 did not exhibit any tendency to lodge.

Bancroft, Group-I (Tables 4a & 4b): The 2005 yield average was 64 bu per acre (Table 4a). Varieties had to average 69 bu or higher to be in the top yield group for 2005. Variety yield averages had to differ by 4 bu in 2005 to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.4%, 18.9%, and 2, respectively (Table 4b). A lodging score average of 2 indicated lodging was measurable and ranged from no lodging (1) to moderate lodging (3). A few varieties with a lodging score of 1 did not exhibit any tendency to lodge.

Central test zone, Group-I (Tables 4a & 4b): The 2005 yield average was 66 bu per acre (Table 4a). Varieties had to average 69 bu or higher to be in the top yield group for 2005. Variety yield averages had to differ by 3 bu in 2005 to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.8%, 18.1%, and 2, respectively (Table 4b). Although most varieties exhibited some degree of lodging, it did not appear to impact yield significantly in this zone.

Brookings, Group-II (Tables 5a & 5b): The 2005 and 2-year test yield averages were 67 and 59 bu per acre, respectively (Table 5a). Varieties had to average 71 bu or higher in 2005 and 57 bu or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 4 bu in 2005 and 5 bu for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.6%, 17.9%, and 3, respectively (Table 5b). Lodging score averages had to be 2 or less to be in the top performance group. Although lodging was significant in this trial, yields were still significantly higher than average compared to other years.

Bancroft, Group-II (Tables 5a & 5b): The 2005 yield average was 68 bu per acre (Table 5a). Varieties had to average 69 bu or higher to be in the top yield group for 2005. Variety yield averages had to differ by 4 bu in 2005 to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.0%, 18.5%, and 2, respectively (Table 5b). A lodging score average of 2 indicated lodging was measurable and ranged from no lodging (1) to moderate lodging (3). A few varieties with a lodging score of 1 did not exhibit any tendency to lodge.

Central test zone, Group-II (Tables 5a & 5b): The 2005 yield average was 67 bushels per acre (Table 5a). Varieties had to average 70 bushels or higher to be in the top yield group for 2005. Variety yield averages had to differ by 3 bu in 2005 to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.2%, 18.3%, and 2, respectively (Table 5b). Although a few varieties exhibited moderate lodging yield averages were above average for this zone in 2005.

SOUTHERN TEST ZONE

BERESFORD– South Dakota Agricultural Experiment Station Farm

DELMONT- NO-TILL, Richard Luebke Farm (cooperator)

Note: The trials at Beresford and Delmont were seeded relatively late on June 16 and June 20, 2005, respectively, as the

result of a wet spring at these locations. The soybean trials at Delmont suffered due to a lack of much needed moisture in July and August.

Beresford, Group-I (Tables 6a & 6b): The 2005 and 2-year test yield averages were 51 and 58 bu per acre, respectively (Table 6a). Varieties had to average 50 bu or higher in 2005 and 55 bu or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 7 bu in both 2005 and for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.8%, 18.3%, and 1, respectively (Table 6b). Lodging was not a significant factor in 2005.

Delmont, Group-I (Tables 6a & 6b): The 2005 and 2-year test yield averages were 24 and 32 bu per acre, respectively (Table 6a). Varieties had to average 27 bu or higher in 2005 and 33 bu or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 4 bu in 2005 and 5 bu for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.5%, 17.3%, and 1, respectively (Table 6b). Lodging was not observed in this trial in 2005.

Southern test zone, Group-I (Tables 6a & 6b): The 2005 and 2-year test yield averages in the southern zone were 38 and 46 bu per acre, respectively (Table 6a). Varieties had to average 38 bu or higher in 2005 and 42 bu or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 4 bu in 2005 and 7 bu for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 34.6%, 17.8%, and 1, respectively (Table 6b). On average, lodging was not significant in this zone in 2005.

Beresford, Group-II (Tables 7a & 7b): The 2005 and 2-year test yield averages were 51 and 60 bu per acre, respectively (Table 7a). Varieties had to average 55 bu or higher in 2005 and 61 bu for 2 years to be in the top yield group. Variety yield averages had to differ by 6 bu in both 2005 and for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 35.2%, 18.0%, and 1, respectively (Table 7b). A lodging score average of 1 indicates lodging was not significant in this trial in 2005.

Delmont, Group-II (Tables 7a & 7b): The 2005 and 2-year test yield averages were 26 and 34 bu per acre, respectively (Table 7a). Varieties had to average 29 bu or higher in 2005 and 35 bu or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 4 bu in both 2005 and for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 32.8%, 17.8%, and 1, respectively (Table 7b). There was no lodging observed in this trial for 2005.

Southern test zone, Group-II (Tables 7a & 7b): The 2005 and 2-year test yield averages in the southern zone were 39 and 47 bu per acre, respectively (Table 7a). Varieties had to average 40 bu or higher in 2005 and 44 bu or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 4 bu in 2005 and 7 bu for 2 years to be significantly different. Yield averages differed significantly between locations for both 2005 and for 2 years. Growers are encouraged to look at both the 2005 and the 2-year yield averages at each location separately to evaluate average yield trends at a given location. The 2005 protein, oil, and lodging score test averages were 34.0%, 17.9%, and 1, respectively (Table 7b). On average, lodging was not a significant factor in this zone in 2005.

NON-ROUNDUP READY™ SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

SOUTH SHORE– Northeast Research Farm BERESFORD– South Dakota Agricultural Experiment Station Farm

Note: Yields are reported as 2005 averages or 2-year averages (2004-05). The trials at Beresford were seeded relatively late on June 16, 2005, as the result of a wet spring at that location.

South Shore, Group-0 (Tables 8a & 8b): The 2005 and 2-year test yield averages were 41 and 34 bu per acre, respectively (Table 8a). Varieties had to average 41 bu or higher in 2005 and 32 bu or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 4 bu in both 2005 and for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 38.5%, 16.5%, and 1, respectively (Table 8b). On average, lodging was not a significant factor in this trial in 2005.

South Shore, Group-I (Tables 8a & 8b): The 2005 and 2-year test yield averages were 43 and 35 bu per acre, respectively (Table 8a). Varieties had to average 47 bu or higher in 2005 and 34 bu or higher for 2 years to be in the top performance group for yield. Variety yield averages had to differ by 5 bu or more in 2005 to be significantly different. There was no difference in yield between the two varieties tested for 2 years. The 2005 protein, oil, and

lodging score test averages were 38.3%, 16.5%, and 1, respectively (Table 8b). Lodging was not a significant factor for the varieties in this trial in 2005.

Beresford, Group-I (Tables 9a & 9b): The 2005 and 2-year test yield averages were 45 and 53 bu per acre, respectively (Table 9a). Varieties had to average 45 bu or higher in 2005 and 51 bu or higher for 2 years to be in the top performance group for yield. Variety yield averages had to differ by 7 bu in 2005 and 9 bu for 2 years to be significantly different. The 2005 protein, oil, and lodging score test averages were 36.3%, 18.3%, and 1, respectively (Table 9b). Although lodging was significant, it did not have a major impact on yield in this trial in 2005.

Beresford, Group-II (Tables 9a & 9b): The 2005 and 2-year test yield averages were 43 and 53 bu per acre, respectively (Table 9a). Varieties had to average 43 bu or higher in 2005 and 46 bu or higher for 2 years to be in the top performance group for yield group. Variety yield averages had to differ by 5 bu in 2005 to be significantly different. There was no difference in yield average between the varieties tested for 2 years. The 2005 protein, oil, and lodging score test averages were 34.0%, 18.6%, and 1, respectively (Table 9b). Although lodging was significant, it did not have a major impact on yield in this trial in 2005.

Table A. Nearest weather station accumulated precipitation values for 2005 and their departures from normal (DFN)

Source: USDA-SD-Crop-Weather report & SD Automatic Weather Data Network.

Station	OF/DENI*		Accumu	lation from A	pril 1 up to the	date stated:	
Station	05/DFN*	Apr. 3	May 1	June 26	July 31	Aug. 28	Sept. 25
Aberdeen	'05	0.00	0.38	7.28	11.28	14.10	14.99
Airport	DFN*	-0.18	-1.64	0.17	1.02	1.92	1.00
Watertown	'05	0.00	1.50	9.12	10.34	13.02	16.11
Airport	DFN	-0.18	-0.76	0.82	-1.45	1.25	-0.06
Huron	'05	0.00	0.67	9.08	10.50	13.02	19.55
Airport	DFN	-0.18	-1.50	1.20	-0.48	0.25	5.13
Brookings	'05	0.00	2.03	11.50	15.32	18.34	25.91
2NE	DFN	-0.18	-0.12	2.72	2.66	3.16	8.20
Centerville	'05	0.00	2.73	14.45	16.60	17.85	21.11
6 SE	DFN	-0.18	0.37	5.05	3.29	1.89	2.63
Armour	'05	0.00	2.69	14.30	17.17	17.90	23.23
Airport	DFN	-0.21	0.26	5.41	4.65	3.43	6.55

^{*} DFN - how much a variable for year 2005 is greater or less (-) than the long-term average.

Table B. *Phytophthora* root rot strain resistance according to gene.

Gene	Strain Resistance
0	None
1a	1-2,10-11,13,15-18,24
1b	1,3-9,13-15,18,21-22
1c	1-3,6-11,13,15,17,21,23-24
1k	1-11,13-15,17-18,21-22,24
2	1-5,9-20
3	1-5,8-9,11,13-14,16,18,23,25
4	1-4,10,12-16,18-21,25
5	1-5,8-9,11-14,18,20,25
6	1-4,10,12,14-16,18-21,25
7	16,18,19
K6	1-22,24-25
C3	1-10,13-18,22-25
В3	1-9,13-16,18,21-23,25
MIX	Resistant & Susceptible Plants
NR	Not Reported

Table C. 2005 Roundup Ready soybean entries by brand/variety, maturity group, gene for *Phytophthora* root rot resistance, and performance table number(s).

Durand / Warrington	Mat.	Como Da eleter	Table	Duand (Naviate	Mat.	Cama Davista	Table	
Brand / Variety	Grp.	Gene Resistance	No.(s)	Brand / Variety	Grp.	Gene Resistance	No.(s)	
AGVENTURE/11T1RR	1	Not Reported	2,4	FARM ADVANTAGE/FA 7192	· I	Not Reported	4	
GVENTURE/15T5RR	- 1	Not Reported	2,4	FARM ADVANTAGE/FA 7205	Ш	Rps1 (Rps1a)	5	
GVENTURE/17T6RR	i	Not Reported	4	FARM ADVANTAGE/FA 7264	II.	Rps1k	7	
.GVENTURE/EXPXD15B	i	Not Reported	2	FARM ADVANTAGE/FA7244N	II.	Rps1c	7	
SGROW/AG1502	i	rps - None	2,4	GOLD COUNTRY/1619RR	i.	Rps1k	4	
SGROW/AG1702	·	Rps1k	2,4,6	GOLD COUNTRY/2509RR	0	rps - None	1	
SGROW/AG1903	i	Rps1k	2,4,6	GOLD COUNTRY/2726RR	II	Rps1c	7	
SGROW/AG2107	i	Rps1k	5,7	GOLD COUNTRY/3512RR	"	Rps1c	2	
ASGROW/AG2205	ii	Rps1k	5,7	GOLD COUNTRY/3615RR	i	Rps1k	2	
SGROW/AG2403	ii	Rps1k	5,7	GOLD COUNTRY/3618RR	i	rps - None	2,4	
OYOTE/4523RR	"	Rps1k	5,7	GOLD COUNTRY/6221RR		Rps1k	2,4	
		•	3, <i>1</i> 7		0	rps - None	1	
OYOTE/4527RR	II I	Rps1k		HEFTY/094R		•	1	
OYOTE/4719RR	, i	Rps1k	4,6	HEFTY/095R	0	Rps1k	1	
OYOTE/9524RR	II 	Rps1k	7	HEFTY/125R	 	rps - None	2	
OYOTE/EXP624	II	Rps1c	7	HEFTY/175R	. I	Rps1 (Rps1a)	4	
OYOTE/EXP922	II	rps - None	5,7	HEFTY/195R		rps - None	4	
AIRYLAND/DSR-050/RR	0	Not Reported	1	HEFTY/214R	II 	Rps1k	5	
AIRYLAND/DSR-0701/RR	0	Rps1k	1,3	HEFTY/EXP 226R	II 	Rps1 (Rps1a)	5	
AIRYLAND/DSR-1301/RR	l .	Not Reported	2,4	HEFTY/EXP 266R	II	Rps1c	Ę	
AIRYLAND/DSR-1500/RR	I	Not Reported	2,4	INTEGRA/PSI 95090RR	0	Not Reported	1,	
AIRYLAND/DSR-1900/RR	I	Rps1k	4	INTEGRA/PSI 95160RR	ı	Not Reported		
AIRYLAND/DSR-199/RR		Rps1k	4	INTEGRA/PSI 95200RR	II	Not Reported	7	
AIRYLAND/DSR-2100/RR	II	Not Reported	7	INTEGRA/PSI 96090RR	0	Not Reported	1,	
AIRYLAND/DSR-234/RR		Rps1k	7	INTEGRA/PSI 96100RR	I	Not Reported	4	
AIRYLAND/DSR-2500/RR	П	Rps1k	7	INTEGRA/PSI 96110RR	1	Not Reported	2,	
AIRYLAND/DSR-2600/RR	11	Rps1k	7	INTEGRA/PSI 96210RR	Ш	Not Reported	7	
AIRYLAND/DST09002RRSTS	0	Rps1k	1	INTEGRA/PSI 96230RR	\	Not Reported	7	
AIRYLAND/DST14-001/RR	1	Not Reported	2,4	INTEGRA/PSI 96260RR	ll l	Not Reported	7	
AIRYLAND/DST14000RRSTS	1	Not Reported	2	INTEGRA/PSI 96280RR	Ш	Not Reported	7	
EKALB/DKB08-51	0	Rps1k	1,3	KALTENBERG/KB135RR	- 1	Rps1c	4	
EKALB/DKB10-52	I	Rps1k	2,4	KALTENBERG/KB155RR	ı	Rps1k	4	
EKALB/DKB18-51	1	Rps1k	2,4	KALTENBERG/KB241RR	Ш	rps - None	7	
EKALB/DKB22-52	П	•	5,7	KALTENBERG/KB248RR	Ш	Rps1c	7	
EKALB/DKB25-51	П	Rps1k	7	KALTENBERG/KB256RR	Ш	Rps1k	7	
EKALB/DKB26-53	П	Rps1c	7	KALTENBERG/KB276RR	Ш	Rps1k	7	
YNA-GRO/3190RR	1	Not Reported	2,4	KRUGER/EXP080RR	0	Rps1k	1,	
YNA-GR0/31N27	Ш	Rps1k	7	KRUGER/EXP102RR	- 1	Not Reported	2,	
YNA-GR0/32C25	Ш	Not Reported	7	KRUGER/EXP150RR	- 1	Rps1k	4,	
YNA-GR0/33M14	ï	Not Reported	2,4	KRUGER/EXP180RR	Ĺ	Not Reported	4,	
YNA-GR0/35D15	i	Rps1k	2,4	KRUGER/EXP225RR	i II	Not Reported	.,	
YNA-GR0/37A10	0	Rps1k	1,3	KRUGER/EXP237RR	11	Not Reported	5	
YNA-GRO/EXP SX05123	II	Rps1 (Rps1a)	7	KRUGER/EXP238RR	 II	Not Reported	5	
YNA-GRO/EXP SX05317	1TR	Rps1k	2,4	KRUGER/EXP260RR	" 	Rps1k	7	
YNA-GRO/EXP SX05514	1	Rps1k	2,4	KRUGER/EXP280RR	" 	Rps1k	7	
YNA-GRO/EXP SX05611	ı I	Not Reported	2,4	KRUGER/K-056RR	0	Not Reported	1	
	1							
YNA-GRO/EXP SX05816	ı	Not Reported	2,4	KRUGER/K-098RR	0	Not Reported	1,	
ADMA ADMANITA CE /EA 7000	0	Nat Daniel		KRUGER/K-100RR		Rps1k	2,	
ARM ADVANTAGE/FA 7063	0	Not Reported	1	KRUGER/K-122RR		Not Reported	2,	
ARM ADVANTAGE/FA 7103		Not Reported	2	KRUGER/K-149+RR		Rps1k	2,4	
ARM ADVANTAGE/FA 7173		Rps1k	4	KRUGER/K-156RR		Rps1k	2,4	

Note: Strain or race resistance by gene type is reported in table D.

Table C. 2005 Roundup Ready soybean entries by brand/variety, maturity group, gene for *Phytophthora* root rot resistance, and performance table number(s) (Continued).

D 1/W 1 :	Mat.		Table	B 1/W : :	Mat.		Table
Brand / Variety	Grp.	Gene Resistance	No.(s)	Brand / Variety	Grp.	Gene Resistance	No.(s)
KRUGER/K-177RR		Not Reported	2,4,6	NORTHSTAR/NS 1509RR	<u> </u>	Not Reported	6
KRUGER/K-192RR	1	Not Reported	2,4,6	NORTHSTAR/NS 1624RR	- 1	Rps1c	6
KRUGER/K-195+RR/SCN	1	Rps1k	4,6	NORTHSTAR/NS 1809RR	- 1	Not Reported	6
KRUGER/K-200RR	İ	Rps1 (Rps1a)	5,7	NUTECH/NT-0886RR	0	rps - None	1
KRUGER/K-211+RR	II	Rps1k	5	NUTECH/NT-0889RR	0	rps - None	1
KRUGER/K-212RR	II	Rps1k	5,7	NUTECH/NT-0939RR	0	rps - None	1,3
KRUGER/K-223+RR	 II	Rps1k	5,7	NUTECH/NT-0999+RR	0	rps - None	1,3
KRUGER/K-233+RR	 II	Rps1k	5,7	NUTECH/NT-0999RR	0	Rps1k	1,3
KRUGER/K-255RR	 II	Not Reported	7	NUTECH/NT-1212RR/SCN	0	rps - None	1,3
KRUGER/K-270RR	 II	Rps1c	7	NUTECH/NT-1404RR	ı	Rps1k	2,4
	II	Rps1c	7			Rps1c	
KRUGER/K-273RR		•	7	NUTECH/NT-1516RR		•	2,4
KRUGER/K-289+RR	II 	Rps1k		NUTECH/NT-1555RR		Rps1k	2,4
LATHAM/497RR	II	Rps1k	7	NUTECH/NT-1909RR	!	rps - None	2,4,6
LATHAM/EXP-E1330R		rps - None	2	NUTECH/NT-1921RR	!	Rps1 (Rps1a)	2,4
_ATHAM/EXP-E1635R	l	Rps1k	2	NUTECH/NT-2100RR	l	rps - None	2,4
_ATHAM/EXP-E1756R		Rps1k	2	NUTECH/NT-2102RR	l	Not Reported	2,4
_ATHAM/EXP-E1935R	. !	Rps1k	4	NUTECH/NT-2202ARR	!	Rps1c	2,4
_ATHAM/EXP-E1936R	ı	rps - None	4	NUTECH/NT-2202RR	ı	Rps1k	2,4
_ATHAM/EXP-E2045R	II	Rps1k	5	NUTECH/NT-2324RR/SCN	II	Rps1c	5,7
_ATHAM/EXP-E2450R	II	Rps1k	7	NUTECH/NT-2330RR	II	Rps1c	5,7
_ATHAM/EXP-E2635R	II	Rps1c	7	NUTECH/NT-2333RR	II	Rps1 (Rps1a)	5
_ATHAM/L2136R		rps - None	7	NUTECH/NT-2424RR/SCN	II .	rps - None	5,7
_ATHAM/L2336R	П	rps - None	7	NUTECH/NT-2440RR	II	Not Reported	5
_ATHAM/L2900R	ll /	rps - None	7	NUTECH/NT-2626RR	II /	rps - None	5,7
MUSTANG/M-055RR	0	rps - None	1	NUTECH/NT-2707RR	ll l	Rps1c	5,7
MUSTANG/M-066RR	0	Rps1 (Rps1a)	1	NUTECH/NT-2790RR	II	rps - None	7
MUSTANG/M-075RR	0	Rps1 (Rps1a)	1	NUTECH/NT-2890RR	II	Rps1k	7
MUSTANG/M-094RR	0	rps - None	1,3	NUTECH/NT-2990RR	11	Rps1k	7
MUSTANG/M-095RR	0	rps - None	1,3	NUTECH/NT-2992RR	П	rps - None	7
MUSTANG/M-096RR	0	rps - None	1,3	NUTECH/NT-7205+RR	- 1	Rps1k	2,4
MUSTANG/M-115RR	I	Rps1c	4	PRAIRIE BR./PB-0725RR	0	Not Reported	1
MUSTANG/M-136RR	- 1	Rps1k	4	PRAIRIE BR./PB-0923RR	0	Rps1k	1,3
MUSTANG/M-155RR	1	Rps1k	4	PRAIRIE BR./PB-0954RR	0	Not Reported	1,3
MUSTANG/M-156RR	i	Rps1k	4	PRAIRIE BR./PB-0965RR	0	Not Reported	1,1
MUSTANG/M-176RR	i	Rps1 (Rps1a)	4	PRAIRIE BR./PB-1294RR	Ī	Rps1c	2,4
MUSTANG/M-201RR	il	Rps1k	5,7	PRAIRIE BR./PB-1525RR	·	Rps1k	2,4
MUSTANG/M-203RR	II	rps - None	5,7	PRAIRIE BR./PB-1725RR	i	Rps1k	2,4
MUSTANG/M-205RR	ii	Rps1 (Rps1a)	5,7	PRAIRIE BR./PB-1754RR	i	Not Reported	2,4
MUSTANG/M-226RR	 II	Rps1 (Rps1a)	5,7	PRAIRIE BR./PB-1914RR	i	Not Reported	2,4,6
MUSTANG/M-264RR	 II	Rps1k	7	PRAIRIE BR./PB-1954RR	i	Rps1 (Rps1a)	2,4,6
MUSTANG/M-284RR	II	rps - None	7	PRAIRIE BR./PB-2141RR	ı II	Rps1k	5,7
	II	•	7		II	Rps1k	5, <i>1</i> 7
MUSTANG/M-286NRR		Rps1c		PRAIRIE BR./PB-2183NRR		•	
NORTHSTAR/NS 0517RR	0	Not Reported	1	PRAIRIE BR./PB-2205RR	II II	Not Reported	5,7
NORTHSTAR/NS 0910RR	0	Not Reported	1	PRAIRIE BR./PB-2243RR	II ''	Rps1k	5,7
NORTHSTAR/NS 0920RR	0	Not Reported	1	PRAIRIE BR./PB-2343RR	II 	Not Reported	7
NORTHSTAR/NS 0954RR	0	Not Reported	1,3	PRAIRIE BR./PB-2345RR	II 	Not Reported	5,7
NORTHSTAR/NS 1010RR		Not Reported	2	PRAIRIE BR./PB-2385NRR	II 	Not Reported	7
NORTHSTAR/NS 1120RR	1	Rps1k	2,4	PRAIRIE BR./PB-2421RR	II 	Rps1k	5,7
NORTHSTAR/NS 1310RR	I	Not Reported	4	PRAIRIE BR./PB-2565RR	II	Rps1c	7
NORTHSTAR/NS 1409RR	1	Rps1k	4	PRAIRIE BR./PB-2625RR	Ш	Not Reported	7

Note: Strain or race resistance by gene type is reported in table B.

Table C. 2005 Roundup Ready soybean entries by brand/variety, maturity group, gene for *Phytophthora* root rot resistance, and performance table number(s) (Continued).

Brand / Variety		Mat.		Table Prond / Variety			Table
	Grp.	Gene Resistance	No.(s)	Brand / Variety	Grp.	Gene Resistance	No.(s)
PRAIRIE BR./PB-2643RR	ll ll	Rps1k	7	THUNDER/2608NRR	0	Rps1k	1
RENK/RS095RR	0	Rps1k	1	THUNDER/708RR	0	Rps1k	1
RENK/RS115RR	i	Rps1k	2	THUNDER/EXP709RR	0	Rps1k	1
RENK/RS124NRR	i	Rps1c	2,4	WENSMAN/W 2062RR	0	Not Reported	1
RENK/RS159RR	i	Rps1c	2,4	WENSMAN/W 2082RR	0	Rps1k	1
RENK/RS165RR		Rps1k	2,4	WENSMAN/W 2090RR	0	Not Reported	1
RENK/RS185RR	i	Not Reported	4	WENSMAN/W 2103RR	0	Rps1k	1
RENK/RS199RR		Rps1k	4		ı	Rps1c	2
	<u> </u>	•		WENSMAN/W 2121RR	-	•	
RENK/RS223RR	II 	Rps1k	5	WENSMAN/W 2142RR	!	Rps1k	2,4
RENK/RS253RR	II	Not Reported	7	WENSMAN/W 2150RR		Rps1k	2,4
RENK/RS265RR	II 	Rps1c	7	WENSMAN/W 2163RR	!	Rps1 (Rps1a)	4
SANDS/EXP 2669RR	II	Rps1c	7	WENSMAN/W 2170RR	ı	Rps1k	4
SANDS/SOI 2143RR	II	Rps1k	7	WENSMAN/W 2195NRR	I	Rps1k	4
SANDS/SOI 2151NRR	II	Rps1k	7	WENSMAN/W 2211RR	Ш	Rps1k	5
SANDS/SOI 2169RR	II	Rps1 (Rps1a)	7	WENSMAN/W 2253RR	П	Rps1c	5
SANDS/SOI 2448RR	Ш	Rps1k	7	ZILLER/BT 7115R	I	rps - None	2
SANDS/SOI 2467NRR	II	Rps1c	7	ZILLER/BT 7145R	- 1	Rps1 (Rps1a)	2,4
SANDS/SOI 2673RR	Ш	Rps1c	7	ZILLER/BT 7160R	- 1	Rps1k	2,4
SANDS/SOI 2754RR	Ш	Rps1k	7	ZILLER/BT 7215R	Ш	Rps1k	5,7
SANDS/SOI 2872RR	II	Rps1c	7	ZILLER/BT 7236R	II	Rps1k	7
SANDS/SOI 2884RR	II	Rps1k	7	,	••	po	•
SEEDS 2000/2090RR	0	Not Reported	1	PUBLIC EXPERIMENTALS:			
SEEDS 2000/2030RR	ı ı	Rps1k	2	EXP./SD01-1135R	II	Rps1c	7
	0	Rps1 (Rps1a)	1,3		"		
SODAK GEN./1091RR	0			EXP./SD01-1587R		Not Reported	4,6
SODAK GEN./1092RR	0	Rps1k	1,3	EXP./SD01-2509R	II	Rps1c	5
SODAK GEN./1151RR		Rps1k	2,4,6	EXP./SD01-3025R	II .	Not Reported	7
STINE/0708-4	0	rps - None	1	EXP./SD01-3219R	V!	Rps1k	2,4,6
STINE/0916-4	0	rps - None	1	EXP./SD01-3382R	1	Not Reported	2
STINE/0943-4	0	Rps1k	1,3	EXP./SD01-3387R	II	Not Reported	7
STINE/1300-4	I	Rps1k	2,4	EXP./SD01-3402R	I	Not Reported	2
STINE/1636-4	I	Rps1k	4	EXP./SD01-3477R	I	Rps1 (Rps1a)	4
STINE/1683-4	I	Rps1k	2,4	EXP./SD02R-1017	- 1	Not Reported	2
STINE/1918-4	I	rps - None	2,4,6	EXP./SD1091RR-4	- 1	Rps1k	2,4,6
STINE/2116-4	II	Rps1k	7	EXP./SD93-828R	- 1	Rps1k, Rps6	2,4,6
STINE/2402-4	II	rps - None	7	EXP./SD96-170RR-28L	1	Rps1 (Rps1a)	2,4,6
STINE/2688-4	II	rps - None	7	EXP./SDX00-011R-14	- 1	Not Reported	2
STINE/2743-4	ii.	Rps1k	7	EXP./SDX00R-017-52	i	Rps1k	2
THOMPSON/T-0889+RR	0	rps - None	1	EXP./SDX00R-020-41	i	Not Reported	2
THOMPSON/T-1777RR	ı	Rps1k	2,4	EXP./SDX00R-026-42N	i	Rps1 (Rps1a)	2,4,6
THOMPSON/T-2100RR	' 	rps - None	7	EXP./SDX00R-030-13		Not Reported	2,4,0
		•			0		
THOMPSON/T-2919RR/SCN	II II	rps - None	7	EXP./SDX00R-035-24	0	Not Reported	3
THOMPSON/T-3100RR	II ''	Rps1k	7	EXP./SDX00R-035-39	I 	Rps1 (Rps1a)	2,4,6
THOMPSON/T-3101RR	II	Rps1c	7	EXP./SDX00R-035-56	II 	Rps1 (Rps1a)	7
THOMPSON/T-7193RR/SCN	1	Rps1k	2,4	EXP./SDX00R-039-42	II 	Rps1k	5,7
THOMPSON/T-7205+RR		Rps1k	6	EXP./SDX00R-046-28	II	Not Reported	7
THOMPSON/T-7206RR	П	Rps1k	7	EXP./SDX02R-584	Ш	Not Reported	7
THOMPSON/T-7214RR	I	rps - None	4,6	EXP./SD00-1251R	0	Rps1k	1,3
THOMPSON/T-7234RR	I	Rps1k	2,4				
THUNDER/2512RR	I	Not Reported	2				
THUNDER/2513NRR		Not Reported	2				

Note: Strain or race resistance by gene type is reported in table B.

Table 1a. Roundup Ready $^{\text{TM}}$ maturity group-0 soybean variety yield averages- northern South Dakota locations, 2004-05.

		Northern Averages by Location Northern						
Brand/Variety (By 2-yr then 2005	DTM*	South	Shore	Wa	rner	Aver	ages	
zone yield)		Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	
WENSMAN/W 2103RR	112	53	48	53	51	53	50	
KRUGER/K-098RR	112	50	46	55	52	53	49	
MUSTANG/M-075RR	111	54	47	52	49	53	48	
MUSTANG/M-095RR	113	51	47	50	49	51	48	
DYNA-GRO/37A10	112	48	44	53	52	51	48	
NORTHSTAR/NS 0954RR	112	47	46	52	49	50	48	
MUSTANG/M-094RR	112	53	49	45	46	49	48	
GOLD COUNTRY/2509RR	112	48	45	50	50	49	48	
NUTECH/NT-0999RR	112	45	45	50	51	48	48	
NUTECH/NT-0889RR	112	48	45	52	49	50	47	
SEEDS 2000/2090RR	112	50	45	49	49	50	47	
PRAIRIE BR./PB-0923RR	112	47	43	51	51	49	47	
THOMPSON/T-0889+RR	112	47	45	51	49	49	47	
PRAIRIE BR./PB-0954RR	112	46	45	47	49	47	47	
WENSMAN/W 2090RR	112	49	42	51	50	50	46	
MUSTANG/M-055RR	111	46	42	52	48	49	45	
WENSMAN/W 2062RR	109	49	43	49	47	49	45	
NORTHSTAR/NS 0517RR	108	47	43	48	46	48	45	
SODAK GEN./1092RR	112	45	41	48	47	47	44	
SODAK GEN./1091RR	112	43	41	45	45	44	43	
PRAIRIE BR./PB-0725RR	109	54	71	54	13	54	40	
NUTECH/NT-0886RR	112	53		51		52		
INTEGRA/PSI 96090RR	113	51		53		52		
FARM ADVANTAGE/FA 7063	108	51		51		51		
HEFTY/095R	112	51		51		51		
INTEGRA/PSI 95090RR	113	50		52		51		
NUTECH/NT-0939RR	113	49		50	•	50	•	
NUTECH/NT-0999+RR	112	50	•	49	•	50	•	
HEFTY/094R	112	49	•	51	•	50	•	
KRUGER/EXP080RR	112	50	•	50	•	50	•	
DAIRYLAND/DSR-0701/RR	110	49	•	50	•	50		
	1	48		52	•	50		
STINE/0943-4	112	1						
MUSTANG/M-066RR	109	49		49		49		
MUSTANG/M-096RR	111	49		49		49		
NUTECH/NT-1212RR/SCN	114	46		52		49		
KRUGER/K-056RR	110	47		50	•	49		
PRAIRIE BR./PB-0965RR	113	48		50	•	49		
NORTHSTAR/NS 0910RR	112	48	•	49	•	49		
NORTHSTAR/NS 0920RR	112	49		47	•	48		
EXPERIMENTAL/SD00-1251R	113	46	41	49		48		
DEKALB/DKB08-51	109	45		48		47		
DAIRYLAND/DSR-050/RR	112	47		47	47	47		
DAIRYLAND/DST09002RRSTS	112	46		46		46		
WENSMAN/W 2082RR	112	46		43		45		
THUNDER/2608NRR	106			48				

Table 1a. Roundup Ready™ maturity group-O soybean variety yield averages- northern South Dakota locations, 2004-05 (continued).

			- Northern 2004-05 Yie	Northern Zone				
Brand/Variety (By 2-yr then 2005 zone yield)	DTM*	South	Shore	Wa	rner	Averages		
Zone yielu/		Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	
THUNDER/708RR	109			50				
THUNDER/EXP709RR	109			55				
STINE/0708-4	116	52						
STINE/0916-4	108			50				
RENK/RS095RR	114	51						
Test avg. :	111	49	44	50	49	49	47	
High avg. :	116	54	49	55	52	54	50	
Low avg. :	106	43	41	43	45	44	43	
# Lsd (.05):		4	5	5	5	3	2	
## TPG-avg.:		50	44	50	47	51	48	
@ Coef. Var.:		4	7	6	6	5	6	
No. Entries:		46	21	48	21			

^{*} DTM = average days from seeding (South Shore- May 20, Warner- June 1, 2005) to maturity.

[@] Coef. Var. = a measure of trial experimental error, 15% or less is best.



[#] Lsd, (.05) = amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

Table 1b. Roundup Ready $^{\text{TM}}$ maturity group-0 soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2005.

			Nort	Northern Zone Averag							
Brand/Variety (By 2005 zone	DTM*	Sc	outh Sh	ore		Warne	r	Nortner	Northern Zone Averages		
protein)		Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)**	
EXPERIMENTAL/SD00-1251R	113	39.0	16.7	1	36.3	18.1	1	37.7	17.4	1	
SODAK GEN./1091RR	112	38.3	17.1	1	36.0	18.4	1	37.2	17.8	1	
NORTHSTAR/NS 0954RR	112	38.1	16.6	1	36.0	18.2	1	37.1	17.4	1	
INTEGRA/PSI 95090RR	113	38.4	16.8	1	35.6	18.0	1	37.0	17.4	1	
NUTECH/NT-0886RR	112	38.1	17.3	1	35.2	18.5	1	36.7	17.9	1	
SEEDS 2000/2090RR	112	38.5	16.3	1	34.8	18.2	1	36.7	17.3	1	
KRUGER/K-098RR	112	37.9	17.0	1	35.2	18.2	1	36.6	17.6	1	
NORTHSTAR/NS 0920RR	112	38.7	16.1	1	34.3	18.3	1	36.5	17.2	1	
INTEGRA/PSI 96090RR	113	37.9	17.3	2	34.9	18.4	1	36.4	17.9	2	
PRAIRIE BR./PB-0923RR	112	38.0	17.1	1	34.8	18.7	1	36.4	17.9	1	
DYNA-GRO/37A10	112	37.9	16.6	1	34.9	18.5	1	36.4	17.6	1	
SODAK GEN./1092RR	112	38.1	17.4	1	34.6	18.8	1	36.4	18.1	1	
STINE/0943-4	112	37.9	16.4	1	34.8	18.6	1	36.4	17.5	1	
WENSMAN/W 2062RR	109	37.4	17.3	1	35.3	18.6	1	36.4	18.0	1	
NUTECH/NT-0999RR	112	38.2	16.9	1	34.4	18.8	1	36.3	17.9	1	
WENSMAN/W 2090RR	112	37.3	17.2	1	35.3	18.1	1	36.3	17.7	1	
NORTHSTAR/NS 0910RR	112	37.6	16.8	1	35.0	18.3	1	36.3	17.6	1	
GOLD COUNTRY/2509RR	112	37.8	17.1	1	34.7	18.6	1	36.3	17.9	1	
WENSMAN/W 2103RR	112	37.4	17.4	1	35.1	18.5	1	36.3	18.0	1	
WENSMAN/W 2082RR	112	37.2	17.3	1	35.3	18.4	1	36.3	17.9	1	
NORTHSTAR/NS 0517RR	108	37.1	17.6	1	35.1	18.7	1	36.1	18.2	1	
THOMPSON/T-0889+RR	112	37.2	16.9	1	34.9	18.3	1	36.1	17.6	1	
NUTECH/NT-0889RR	112	37.1	17.2	1	34.9	18.4	1	36.0	17.8	1	
HEFTY/094R	112	37.5	17.1	1	34.5	18.5	1	36.0	17.8	1	
KRUGER/EXP080RR	112	37.5	17.0	1	34.5	18.3	1	36.0	17.7	1	
PRAIRIE BR./PB-0954RR	112	37.4	17.0	1	34.6	18.5	1	36.0	17.8	1	
MUSTANG/M-095RR	113	37.2	17.3	1	34.7	18.4	1	36.0	17.9	1	
PRAIRIE BR./PB-0965RR	113	37.2	17.0	1	34.6	18.6	1	35.9	17.8	1	
MUSTANG/M-094RR	112	38.0	16.6	1	33.8	18.7	1	35.9	17.7	1	
MUSTANG/M-055RR	111	37.2	17.0	1	34.3	18.6	1	35.8	17.8	1	
MUSTANG/M-075RR	111	37.2	17.3	1	34.3	18.7	1	35.8	18.0	1	
MUSTANG/M-096RR	111	37.3	17.4	1	34.0	18.8	1	35.7	18.1	1	
NUTECH/NT-0939RR	113	36.5	17.2	1	34.7	18.4	1	35.6	17.8	1	
DAIRYLAND/DSR-050/RR	112	37.3	17.1	1	33.9	18.8	1	35.6	18.0	1	
NUTECH/NT-0999+RR	112	36.8	17.6	2	34.0	19.1	1	35.4	18.4	1	
HEFTY/095R	112	36.1	16.9	1	34.4	17.6	1	35.3	17.3	1	
DAIRYLAND/DSR-0701/RR	110	36.2	17.5	1	34.2	18.6	1	35.2	18.1	1	
DEKALB/DKB08-51	109	36.0	17.8	1	33.6	18.3	1	34.8	18.1	1	
DAIRYLAND/DST09002RRSTS	112	35.8	18.0	2	33.8	19.1	1	34.8	18.6	2	
KRUGER/K-056RR	110	35.5	18.2	1	33.0	19.3	1	34.3	18.8	1	
PRAIRIE BR./PB-0725RR	109	35.6	17.5	1	32.7	18.2	1	34.2	17.9	1	
MUSTANG/M-066RR	109	35.3	18.3	1	32.7	19.4	1	34.0	18.9	1	
FARM ADVANTAGE/FA 7063	108	35.8	17.1	1	32.1	18.2	1	34.0	17.7	1	
NUTECH/NT-1212RR/SCN	114	35.2	17.5	2	32.2	18.7	1	33.7	18.1	1	
THUNDER/2608NRR	106				34.4	18.4	1				

 $\textbf{Table 1b. Roundup Ready}^{\textbf{TM}} \ \textbf{maturity group-0 soybean variety protein, oil, and lodging score averages-northern}$

South Dakota locations, 2005 (continued).

Brand/Variety (By 2005 zone protein)			Nort	Northern Zone Averages						
	DTM*	So	outh Sh	iore		Warne	er	Nortner	Averages	
		Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)**
THUNDER/708RR	109				34.2	18.4	1			
THUNDER/EXP709RR	109				34.9	18.4	1			
STINE/0708-4	116	36.9	17.7	1						
STINE/0916-4	108				34.3	18.7	1			
RENK/RS095RR	114	36.0	16.9	1						
Test avg. :	111	37.2	17.2	1	34.5	18.5	1	35.9	17.8	1
High avg. :	116	39.0	18.3	2	36.3	19.4	1	37.7	18.9	2
Low avg. :	106	35.2	16.1	1	32.1	17.6	1	33.7	17.2	1
# Lsd(.05):				1			NS			
## TPG -avg. :				1			1			
@ Coef. Var. :				25			0			
No. Entries :		46	46	46	48	48	48			

^{*} DTM = average days from seeding (South Shore- May 20, Warner- June 1, 2005) to maturity.

^{##} TPG-avg. = minimum or maximum value to qualify for top performance group.



^{**} Lodging, 1 = all plants erect, 5= all plants flat.

[#] Lsd, (.05) = amount values in a column must differ to be significantly different, if differences are not significant(NS), NS is indicated.

Table 2a. Roundup Ready™ maturity group-I soybean variety yield averages- northern South Dakota locations, 2004-05.

		Nor	Northern Zone					
Brand/Variety (By 2-yr then 2005 zone	DTM*	South	Shore	Wa	rner	Averages		
yield)	DIN	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	
NUTECH/NT-1909RR	118	49	48	56	52	53	50	
PRAIRIE BR./PB-1914RR	119	49	47	56	53	53	50	
NUTECH/NT-2202RR	119	50	47	53	53	52	50	
KRUGER/K-192RR	119	49	47	54	53	52	50	
STINE/1300-4	115	48	47	55	53	52	50	
THOMPSON/T-7234RR	120	50	47	52	52	51	50	
WENSMAN/W 2121RR	114	49	45	56	52	53	49	
ASGROW/AG1903	119	48	47	53	51	51	49	
PRAIRIE BR./PB-1954RR	118	48	46	50	51	49	49	
SEEDS 2000/2130RR	116	47	44	54	51	51	48	
PRAIRIE BR./PB-1294RR	114	46	44	54	51	50	48	
PRAIRIE BR./PB-1754RR	117	48	46	47	50	48	48	
THOMPSON/T-7193RR/SCN	117	47	43	52	51	50	47	
GOLD COUNTRY/3512RR	114	47	43	50	49	49	46	
DAIRYLAND/DSR-1301/RR	115	44	41	53	50	49	46	
KRUGER/K-149+RR	115	47	44	48	47	48	46	
SODAK GEN./1151RR	114	43	42	49	47	46	45	
NUTECH/NT-1404RR	113	52		55		54		
NUTECH/NT-1516RR	115	50		56		53		
NUTECH/NT-7205+RR	119	50		55		53		
WENSMAN/W 2142RR	115	50		55		53		
ASGROW/AG1502	113	51		52		52		
ASGROW/AG1702	117	51		53		52		
AGVENTURE/11T1RR	114	51		53		52		
DEKALB/DKB10-52	111	52		52		52		
INTEGRA/PSI 96110RR	114	50		54		52		
KRUGER/K-100RR	113	51		52		52		
KRUGER/EXP102RR	113	50		54		52		
GOLD COUNTRY/3615RR	114	48		55		52		
PRAIRIE BR./PB-1525RR	113	49		54		52		
GOLD COUNTRY/3618RR	117	45		57		51		
DAIRYLAND/DST14000RRSTS	115	49		53		51		
DYNA-GRO/EXP SX05514	115	48		53		51		
KRUGER/K-122RR	112	47		52		50		
LATHAM/EXP-E1330R	114	47	44	53		50		
LATHAM/EXP-E1756R	116	46		54		50		
DYNA-GRO/EXP SX05611	112	48		52		50		
EXPERIMENTAL/SDX00R-035-39	113	47		53		50		
EXPERIMENTAL/SD1091RR-4	113	47		52		50		
FARM ADVANTAGE/FA 7103	114	45		52		49		
DEKALB/DKB18-51	117	47		51		49		
NUTECH/NT-1555RR	114	48		49		49		
NUTECH/NT-2100RR	120	44		53		49		
DYNA-GRO/33M14	115	47		50		49		
THOMPSON/T-1777RR	116	43		55		49		
EXPERIMENTAL/SDX00R-026-42N	116	46		51		49		
THUNDER/2512RR	110	47		49		48		
NUTECH/NT-1921RR	117	48		48		48		
HEFTY/125R	111	46		49		48		

Table 2a. Roundup Ready™ maturity group-I soybean variety yield averages- northern South Dakota locations, 2004-05 (continued).

		Nor	thern Avera	Northern Zone				
Brand/Variety (By 2-yr then 2005 zone	DTM*	South	Shore	Wa	rner	Averages		
yield)	Diw	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	
STINE/1683-4	117	46		50		48		
DYNA-GRO/35D15	115	45		51		48		
NORTHSTAR/NS 1010RR	113	49		46		48		
EXPERIMENTAL/SD01-3402R	111	47		48	44	48		
EXPERIMENTAL/SDX00R-017-52	116	45		50		48		
EXPERIMENTAL/SD93-828R	113	45		51		48		
EXPERIMENTAL/SDX00-011R-14	113	45		48		47		
KRUGER/K-156RR	113	47		47		47		
DAIRYLAND/DSR-1500/RR	116	43		51		47		
DAIRYLAND/DST14-001/RR	115	45		48		47		
DYNA-GRO/EXP SX05317	116	42		52		47		
NORTHSTAR/NS 1120RR	114	46		48		47		
EXPERIMENTAL/SDX00R-030-13	112	46		48		47		
NUTECH/NT-2102RR	120	43		49		46		
KRUGER/K-177RR	121	44		48		46		
LATHAM/EXP-E1635R	115	45		47		46		
PRAIRIE BR./PB-1725RR	116	45		46		46		
EXPERIMENTAL/SD01-3219R	116	43		49	45	46		
EXPERIMENTAL/SD96-170RR-28L	113	43		49	49	46		
THUNDER/2513NRR	112	44		45		45		
DYNA-GRO/EXP SX05816	117	43		46		45		
DYNA-GRO/3190RR	121	42		48		45		
AGVENTURE/EXPXD15B	117	45		42		44		
NUTECH/NT-2202ARR	123	40		47		44		
EXPERIMENTAL/SDX00R-020-41	114	42		45		44		
EXPERIMENTAL/SD01-3382R	115	42		44		43		
EXPERIMENTAL/SD02R-1017	113	42		42		42		
AGVENTURE/15T5RR	118	45						
STINE/1918-4	125	51	48		·		·	
ZILLER/BT 7145R	119	48	44	•			·	
ZILLER/BT 7115R	116	45				•		
ZILLER/BT 7160R	119	46						
WENSMAN/W 2150RR	120	47	•		·	•	•	
RENK/RS159RR	119	46						
RENK/RS124NRR	119	46						
RENK/RS165RR	120	49	•	•	•	•		
RENK/RS115RR	118	48			·			
Test avg. :	116	47	45	51	50	49	48	
High avg. :	125	52	48	57	53	54	50	
Low avg. :	110	40	41	42	44	42	45	
# Lsd (.05) :	''0	4	3	5	5	3	3	
# LSU (.03) . ## TPG-avg. :		48	45	52	49	51	47	
@ Coef. Var. :		6	7	7	6	6	8	
			!	1		U	O	
No. Entries :		86	20	76	20			

^{*} DTM= days from seeding (South Shore- May 20, Warner- June 1, 2005) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 2b. Roundup Ready $^{\text{TM}}$ maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2005.

			Northorn Zone Average							
Brand/Variety (By zone protein)	DTM*	Se	iore	Northern Zone Averages						
	DI IVI"	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)**
EXPERIMENTAL/SD01-3382R	115	40.6	15.7	2	38.0	16.6	1	39.3	16.2	2
NUTECH/NT-2102RR	120	39.3	16.1	2	36.6	17.7	1	38.0	16.9	2
EXPERIMENTAL/SDX00-011R-14	113	39.1	16.3	1	36.3	18.1	1	37.7	17.2	1
NUTECH/NT-1516RR	115	39.3	16.3	1	36.0	17.6	1	37.7	17.0	1
PRAIRIE BR./PB-1754RR	117	38.9	16.2	1	35.6	17.7	1	37.3	17.0	1
EXPERIMENTAL/SDX00R-020-41	114	38.5	16.7	1	36.0	17.8	1	37.3	17.3	1
EXPERIMENTAL/SDX00R-030-13	112	38.4	16.7	2	35.5	18.3	1	37.0	17.5	1
EXPERIMENTAL/SD1091RR-4	113	38.6	16.9	1	35.1	18.5	1	36.9	17.7	1
DAIRYLAND/DST14000RRSTS	115	38.3	17.2	1	35.4	18.7	1	36.9	18.0	1
NUTECH/NT-2100RR	120	38.0	17.0	2	35.4	18.4	1	36.7	17.7	2
DYNA-GRO/EXP SX05816	117	38.9	16.5	2	34.5	18.9	1	36.7	17.7	2
DAIRYLAND/DSR-1301/RR	115	38.1	16.7	1	35.2	18.0	1	36.7	17.4	1
DAIRYLAND/DSR-1500/RR	116	37.7	16.8	1	35.6	17.8	1	36.7	17.3	1
EXPERIMENTAL/SD01-3402R	111	38.5	17.1	2	34.6	18.7	1	36.6	17.9	1
KRUGER/K-149+RR	115	38.1	16.4	2	34.8	17.9	1	36.5	17.2	2
HEFTY/125R	111	37.6	16.7	1	35.2	18.1	1	36.4	17.4	1
LATHAM/EXP-E1635R	115	38.2	16.4	1	34.5	18.2	1	36.4	17.3	1
DYNA-GR0/35D15	115	38.0	16.5	1	34.4	18.1	1	36.2	17.3	1
THUNDER/2512RR	110	37.3	16.8	1	34.9	17.9	1	36.1	17.4	1
NUTECH/NT-2202RR	119	36.7	17.5	2	35.3	18.8	1	36.0	18.2	1
NORTHSTAR/NS 1010RR	113	38.3	17.2	1	33.7	19.0	1	36.0	18.1	1
THOMPSON/T-7234RR	120	36.9	17.4	2	35.0	18.2	1	36.0	17.8	1
KRUGER/K-156RR	113	37.2	16.8	1	34.6	18.2	1	35.9	17.5	1
DYNA-GRO/EXP SX05514	115	37.7	16.8	1	34.1	18.3	1	35.9	17.6	1
SODAK GEN./1151RR	114	37.0	17.1	2	34.8	18.2	2	35.9	17.7	2
PRAIRIE BR./PB-1914RR	119	36.7	17.4	1	35.0	19.5	1	35.9	18.5	1
NUTECH/NT-1909RR	118	36.2	17.6	_ i	35.1	19.1	1	35.7	18.4	1
NUTECH/NT-1404RR	113	37.2	17.0	1	34.1	18.2	1	35.7	17.6	1
DYNA-GRO/3190RR	121	36.9	16.9	1	34.4	19.1	1	35.7	18.0	1
EXPERIMENTAL/SD02R-1017	113	36.8	17.8	1	34.5	18.8	1	35.7	18.3	1
KRUGER/EXP102RR	113	37.1	17.2	1	34.0	18.8	1	35.6	18.0	1
NUTECH/NT-2202ARR	123	35.9	18.3	2	35.1	19.4	1	35.5	18.9	2
DAIRYLAND/DST14-001/RR	115	36.5	17.0	2	34.5	17.9	1	35.5	17.5	1
THOMPSON/T-1777RR	116	36.7	16.9	1	34.3	18.2	1 1	35.5	17.5	1
DYNA-GRO/EXP SX05611	112	37.0	17.1	1	33.8	18.6	1 1	35.4	17.9	1
ASGROW/AG1702	117	36.6	17.1	2	34.0	18.4	1	35.3	17.9	1
NUTECH/NT-7205+RR	119	36.5	17.4	1	34.1	18.9	1 1	35.3	18.1	1
KRUGER/K-100RR	113	36.9	17.3	1	33.7	19.0	1	35.3	18.4	1
EXPERIMENTAL/SDX00R-026-42N	116	36.7			33.8		1	35.3	17.5	1
AGVENTURE/11T1RR	114	37.0	16.7	2	33.4	18.2 19.1	1	35.2		1
			17.2	1					18.2	
KRUGER/K-192RR GOLD COUNTRY/3618RR	119 117	36.4 37.0	17.7 16.7	1	34.0 33.4	19.2 18.5	1	35.2 35.2	18.5	1
				2			1	l	17.6	2 1
EXPERIMENTAL/SD93-828R	113	37.0	17.0	1	33.4	18.7	1	35.2	17.9	-
DEKALB/DKB10-52	111	35.7	16.7	1	34.6	17.2	1	35.2	17.0	1
INTEGRA/PSI 96110RR	114	36.9	17.8	1	33.4	19.1	1	35.2	18.5	1
KRUGER/K-122RR	112	36.5	17.4	1	33.8	18.5	1	35.2	18.0	1
LATHAM/EXP-E1756R	116	36.7	17.0	2	33.4	18.5	1	35.1	17.8	1
DYNA-GRO/33M14	115	36.4	17.5	1	33.7	18.4	1	35.1	18.0	1
ASGROW/AG1903	119	36.5	16.9	1	33.5	18.6	1	35.0	17.8	1

Table 2b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2005 (continued).

			Nort	hern Avera	Northern Zone Averag					
Brand/Variety (By zone protein)	DTM*	So	outh Sh	iore		Warne	er	Nortner	n Zone	Averages
brand, variety (by 2011e protein)	DIW	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)**
KRUGER/K-177RR	121	37.1	17.2	2	32.9	19.2	1	35.0	18.2	1
NUTECH/NT-1921RR	117	36.5	17.4	2	33.4	18.8	1	35.0	18.1	1
STINE/1300-4	115	37.0	17.4	1	32.9	19.1	1	35.0	18.3	1
DYNA-GRO/EXP SX05317	116	36.2	17.1	1	33.7	18.5	1	35.0	17.8	1
EXPERIMENTAL/SD96-170RR-28L	113	36.9	17.0	1	32.8	19.0	1	34.8	18.0	1
GOLD COUNTRY/3615RR	114	36.5	17.7	1	33.1	19.1	1	34.8	18.4	1
PRAIRIE BR./PB-1525RR	113	36.2	17.6	1	33.4	19.0	1	34.8	18.3	1
WENSMAN/W 2142RR	115	36.1	17.6	1	33.5	18.8	1	34.8	18.2	1
AGVENTURE/EXPXD15B	117	36.2	17.8	1	33.3	19.2	1	34.8	18.5	1
STINE/1683-4	117	36.0	17.4	1	33.5	18.5	1	34.8	18.0	1
EXPERIMENTAL/SD01-3219R	116	36.1	17.1	2	33.4	18.5	1	34.8	17.8	1
DEKALB/DKB18-51	117	35.9	17.3	1	33.5	18.3	1	34.7	17.8	1
PRAIRIE BR./PB-1725RR	116	36.2	17.3	1	33.2	18.6	1	34.7	18.0	1
ASGROW/AG1502	113	36.4	17.7	1	32.8	19.4	1	34.6	18.6	1
PRAIRIE BR./PB-1954RR	118	35.6	17.7	1	33.5	18.6	1	34.6	18.2	1
SEEDS 2000/2130RR	116	36.7	17.0	1	32.4	19.0	1	34.6	18.0	1
THUNDER/2513NRR	112			1			1			1
•		35.7	17.8		33.2	18.9		34.5	18.4	1
NORTHSTAR/NS 1120RR	114	36.4	17.7	1	32.5	19.2	1	34.5	18.5	-
EXPERIMENTAL/SDX00R-017-52	116	36.5	18.2	2	32.4	19.4	1	34.5	18.8	2
NUTECH/NT-1555RR	114	36.3	17.9	1	32.5	19.3	1	34.4	18.6	1
THOMPSON/T-7193RR/SCN	117	36.0	18.1	1	32.7	19.9	1	34.4	19.0	1
EXPERIMENTAL/SDX00R-035-39	113	34.5	18.5	1	32.9	19.1	1	33.7	18.8	1
LATHAM/EXP-E1330R	114	35.1	17.3	2	32.0	18.7	1	33.6	18.0	1
WENSMAN/W 2121RR	114	34.4	17.5	1	32.3	18.6	1	33.3	18.1	1
GOLD COUNTRY/3512RR	114	34.7	17.6	1	31.9	18.6	1	33.3	18.1	1
PRAIRIE BR./PB-1294RR	114	34.2	17.5	1	32.2	18.6	1	33.2	18.1	1
FARM ADVANTAGE/FA 7103	114	34.3	17.4	1	31.7	18.8	1	33.0	18.1	1
AGVENTURE/15T5RR	118	37.9	16.7	2						
STINE/1918-4	125	36.9	17.7	1						
ZILLER/BT 7145R	119	36.9	17.5	1						
ZILLER/BT 7115R	116	35.1	17.4	1						
ZILLER/BT 7160R	119	36.7	17.1	1						
WENSMAN/W 2150RR	120	37.0	17.3	1						
RENK/RS159RR	119	34.9	17.4	1						
RENK/RS124NRR	119	35.2	17.5	2						
RENK/RS165RR	120	37.9	17.0	1						
RENK/RS115RR	118	36.5	18.2	1						
Test avg. :	116	36.9	17.2	1	34.0	18.6	1	35.5	17.9	1
High avg. :	125	40.6	18.5	2	38.0	19.9	2	39.3	19.0	2
Low avg. :	110	34.2	15.7	1	31.7	16.6	1	33.0	16.2	1
# Lsd(.05) :		<u>-</u>		1			1	-3.0		
## TPG-avg. :				1			1			
@ Coef.Var. :				32			11			
Secure Val		İ	l	J 02	I	I	'''	1	I	

^{*} DTM= days from seeding (South Shore- May 20, Warner- June 1, 2005) to maturity.

^{**} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum or maximum value to qualify for top performance group.

Table 3a. Roundup Ready™ maturity group-O soybean variety yield averages- central South Dakota locations, 2004-2005.

		Cer	ntral Averaç	Control 700			
Brand/Variety (By 2005 zone yield)	DTM*	Broo	kings	Ban	croft	Central Zoi	ne Averages
brand, variety (by 2003 2011e yreid)	Diw.	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr
PRAIRIE BR./PB-0923RR	114	68		68		68	
MUSTANG/M-096RR	115	67		66		67	
NUTECH/NT-0999+RR	115	69		65		67	
NUTECH/NT-0999RR	115	65	58	67		66	
MUSTANG/M-095RR	114	67	57	62		65	
KRUGER/K-098RR	114	64	56	65		65	
NORTHSTAR/NS 0954RR	113	65	58	65		65	
EXPERIMENTAL/SDX00R-035-24	114	63	55	66		65	
MUSTANG/M-094RR	114	65	58	63		64	
NUTECH/NT-1212RR/SCN	118	63		64		64	
INTEGRA/PSI 95090RR	114	64		63		64	
PRAIRIE BR./PB-0954RR	115	65		61		63	
SODAK GEN./1091RR	113	62	52	64		63	
NUTECH/NT-0939RR	114	64		60		62	
DAIRYLAND/DSR-0701/RR	110	62		62		62	
SODAK GEN./1092RR	113	60	52	63		62	
KRUGER/EXP080RR	113	64		55		60	
EXPERIMENTAL/SD00-1251R	113	58	49	57		58	
DEKALB/DKB08-51	112	60					
INTEGRA/PSI 96090RR	117	67					
STINE/0943-4	113			65			
DYNA-GRO/37A10	117	66	58				
Test avg.:	114	64	55	63		64	
High avg. :	118	69	58	68		68	
Low avg. :	110	58	49	55		58	
# Lsd (.05):		4		45	-	3	
## TPG-avg. :		65	54	63		65	
@ Coef. Var.:		4	4	5		5	
No. Entries:		21	10	19	0		

^{*} DTM= average days from seeding (Brookings- May 25, Bancroft- May 27, 2005) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 3b. Roundup Ready $^{\text{TM}}$ maturity group-0 soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2005.

			Cer	tral Averaç	Central Zone Averag					
Brand/Variety (By 2005 zone protein)	DTM*	В	Brookin	ıgs		Bancro	oft	Central	Zone /	Averages
brand, variety (by 2003 20ne protein)	J.I.W	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)**
SODAK GEN./1092RR	113	38.4	17.3	3	35.5	17.6	1	37.0	17.5	2
EXPERIMENTAL/SD00-1251R	113	37.6	16.8	3	36.3	17.4	2	37.0	17.1	2
SODAK GEN./1091RR	113	37.3	17.2	2	36.2	17.6	2	36.8	17.4	2
PRAIRIE BR./PB-0954RR	115	37.0	17.5	2	34.9	17.4	3	36.0	17.5	3
MUSTANG/M-094RR	114	36.2	16.8	1	35.6	17.0	1	35.9	16.9	1
INTEGRA/PSI 95090RR	114	36.0	16.9	1	35.8	17.0	1	35.9	17.0	1
MUSTANG/M-095RR	114	36.8	17.2	2	34.8	17.6	2	35.8	17.4	2
KRUGER/K-098RR	114	36.6	17.2	2	35.0	17.4	3	35.8	17.3	3
KRUGER/EXP080RR	113	36.0	17.0	1	35.6	17.0	1	35.8	17.0	1
NORTHSTAR/NS 0954RR	113	36.1	16.9	1	35.4	17.0	1	35.8	17.0	1
NUTECH/NT-0999RR	115	36.4	17.6	1	34.7	17.3	1	35.6	17.5	1
PRAIRIE BR./PB-0923RR	114	35.9	17.0	1	35.2	17.6	1	35.6	17.3	1
NUTECH/NT-0939RR	114	35.9	16.9	2	35.0	17.5	1	35.5	17.2	1
DAIRYLAND/DSR-0701/RR	110	36.5	17.5	2	34.2	17.6	1	35.4	17.6	1
NUTECH/NT-0999+RR	115	35.7	17.6	3	34.1	17.8	1	34.9	17.7	2
MUSTANG/M-096RR	115	35.3	17.4	3	34.5	17.9	2	34.9	17.7	2
EXPERIMENTAL/SDX00R-035-24	114	34.2	17.3	2	33.7	17.7	1	34.0	17.5	2
NUTECH/NT-1212RR/SCN	118	33.5	17.8	3	31.7	18.1	3	32.6	18.0	3
DEKALB/DKB08-51	112	34.9	17.6	2						
INTEGRA/PSI 96090RR	117	36.6	17.1	2		. 1				
STINE/0943-4	113				34.3	17.6	1			
DYNA-GRO/37A10	117	35.7	17.7	1						
Test avg. :	114	36.1	17.3	2	34.9	17.5	1	35.5	17.3	2
High avg.:	118	38.4	17.8	3	36.3	18.1	3	37.0	18.0	3
High avg.:	110	33.5	16.8	1	31.7	17.0	1	32.6	16.9	1
* Lsd(.05):				1			1			
## TPG-avg.:				1			1			
### Coef.Var. :				28			31			
No. Entries :		21	21	21	19	19	19			

^{*} DTM= average days from seeding (Brookings- May 25, Bancroft- May 27, 2005) to maturity.

^{**} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum or maximum value to qualify for top performance group.

Table 4a. Roundup Ready™ maturity group-I soybean variety yield averages- central South Dakota locations, 2004-2005.

		Cer	ntral Averaç	ges by Loca	tion	Central 7o	Zone Averages	
Brand/Variety (By 2005 zone yield)	DTM*	Broo	kings	Ban	croft	Gential Zui	ic Average	
Dianu/Vallety (by 2003 20116 yielu)	Diw	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	
NUTECH/NT-7205+RR	124	70		73		72		
KRUGER/K-195+RR/SCN	119	73		68		71		
NUTECH/NT-2202RR	126	68	57	71		70		
NUTECH/NT-2102RR	125	69		70		70		
STINE/1918-4	124	69	58	71		70		
WENSMAN/W 2195NRR	120	72		67		70		
THOMPSON/T-7193RR/SCN	122	71	60	69		70		
ASGROW/AG1903	123	69	58	68		69		
ASGROW/AG1702	117	69		68		69		
NUTECH/NT-1909RR	125	68	57	69		69	•	
NUTECH/NT-2100RR	124	70	0,	67		69	•	
HEFTY/175R	119	70 70		67		69	•	
PRAIRIE BR./PB-1754RR	118	70 70	60	68		69	•	
THOMPSON/T-7234RR	126	67	57	70		69	•	
MUSTANG/M-176RR	119	68		67		68	•	
DEKALB/DKB18-51	119	68		67		68		
				67 67		68		
HEFTY/195R	126	68			•		•	
KRUGER/K-192RR	125	66	58	69	•	68	•	
KRUGER/K-177RR	124	67		69		68		
PRAIRIE BR./PB-1914RR	125	66	58	70		68		
NORTHSTAR/NS 1310RR	114	72		64		68		
MUSTANG/M-136RR	115	66		68		67		
MUSTANG/M-156RR	116	68		66	•	67		
FARM ADVANTAGE/FA 7192	125	67	58	66		67		
NUTECH/NT-1555RR	115	68		65		67		
LATHAM/EXP-E1936R	123	65	58	69		67		
LATHAM/EXP-E1935R	123	67		66		67		
GOLD COUNTRY/3618RR	123	68		65		67		
GOLD COUNTRY/1619RR	122	68		65		67		
PRAIRIE BR./PB-1954RR	124	68	59	66		67		
PRAIRIE BR./PB-1525RR	116	68		65		67		
WENSMAN/W 2150RR	117	71		63		67		
FARM ADVANTAGE/FA 7173	121	66		66		66		
NUTECH/NT-1516RR	115	66		65		66		
NUTECH/NT-1921RR	124	65		67		66		
INTEGRA/PSI 96110RR	115	68		63		66		
KRUGER/K-100RR	114	67		64		66		
DAIRYLAND/DSR-1900/RR	124	66		65		66		
PRAIRIE BR./PB-1725RR	120	67		65		66		
WENSMAN/W 2163RR	118	65	57	67		66		
WENSMAN/W 2170RR	119	67		65		66		
THOMPSON/T-1777RR	122	66		66		66		
MUSTANG/M-115RR	117	65	56	64		65		
NUTECH/NT-1404RR	115	66		64		65		
NUTECH/NT-2202ARR	128	67		62		65	•	
INTEGRA/PSI 96100RR	114	65	•	65	•	65	•	
KRUGER/EXP102RR	115	65	•	64	·	65	•	
KITOOLIT/LAT TOZITI	116	67		63		65	•	

Table 4a. Roundup Ready™ maturity group-I soybean variety yield averages- central South Dakota locations, 2004-2005 (continued).

		Cei	ntral Avera	ges by Loca	tion	Control 7o	no Avorogoo
Brand/Variety (By 2005 zone yield)	DTM*	Broo	kings	Ban	croft	Central 20	ne Averages
brand, variety (by 2003 20the yield)		Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr
KRUGER/EXP150RR	116	66		63		65	
DAIRYLAND/DSR-1301/RR	118	66	56	63		65	
PRAIRIE BR./PB-1294RR	117	64	53	65		65	
WENSMAN/W 2142RR	115	68		61		65	
NORTHSTAR/NS 1120RR	115	66		63		65	
INTEGRA/PSI 95160RR	117	61		66		64	
KRUGER/K-149+RR	117	67		61		64	
DAIRYLAND/DSR-199/RR	121	65	55	62		64	
ASGROW/AG1502	114	66		59		63	
KRUGER/K-122RR	115	65		60		63	
KRUGER/EXP180RR	121	64		62		63	
EXPERIMENTAL/SDX00R-026-42N	120	64		62		63	
DAIRYLAND/DSR-1500/RR	118	63		60		62	
NORTHSTAR/NS 1409RR	116	64	55	60		62	
EXPERIMENTAL/SD1091RR-4	114	62		62		62	
MUSTANG/M-155RR	116	65	54	57		61	
EXPERIMENTAL/SD96-170RR-28L	114	63	55	59		61	
AGVENTURE/15T5RR	116	61		58		60	
EXPERIMENTAL/SDX00R-035-39	114	60		60		60	
EXPERIMENTAL/SD01-3219R	117	61		58		60	
EXPERIMENTAL/SD01-1587R	115	59		60		60	
DAIRYLAND/DST14-001/RR	118	60		57		59	
EXPERIMENTAL/SD01-3477R	119	61		56		59	
EXPERIMENTAL/SD93-828R	114	58		58		58	
SODAK GEN./1151RR	116	60	52	50		55	
COYOTE/4719RR	128	66	58				
AGVENTURE/11T1RR	117	65					
AGVENTURE/17T6RR	116			60		•	
DEKALB/DKB10-52	116	64	·		·		
KALTENBERG/KB135RR	118	69		•		•	
KALTENBERG/KB155RR	119	68		•		•	
STINE/1300-4	113			65	•	•	
STINE/1636-4	120	62			•		•
STINE/1683-4	114	02		66		•	
DYNA-GR0/33M14	116	65		00		•	
DYNA-GR0/35D15			•	•	•	•	
DYNA-GRO/EXP SX05611	119 117	61 66					
DYNA-GRO/EXP SX05514 DYNA-GRO/EXP SX05816	117	63 64					•
	121	64 65					•
DYNA-GRO/EXP SX05317	120	65 67	•	•	٠	•	•
DYNA-GRO/3190RR	127	67 67					
ZILLER/BT 7145R	116	67 61	57				
ZILLER/BT 7160R	120	61					
THOMPSON/T-7214RR	128	69	59				
RENK/RS159RR	119	63	52				

Table 4a. Roundup Ready™ maturity group-I soybean variety yield averages- central South Dakota locations, 2004-2005 (continued).

		Cer	ntral Averaç	Ct1.7-			
Brand/Variety (By 2005 zone yield)	DTM*	Broo	kings	Bancroft		Central Zo	ne Averages
Draini, variety (By 2003 2011e yieru)		Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr
RENK/RS199RR	119	64	53				
RENK/RS124NRR	118	66					
RENK/RS165RR	119	68					
RENK/RS185RR	126	69					
Test avg. :	119	66	57	64		66	
High avg. :	128	73	60	73		72	
Low avg. :	113	58	52	50		55	
# Lsd (.05):		4	3	4		3	
## TPG-avg.:		69	57	69		69	
### Coef.Var. :		4	4	4		4	
No. Entries :		94	26	76			

^{*} DTM= average days from seeding (Brookings- June 3, Bancroft- May 27, 2005) to maturity.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.



[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

Table 4b. Roundup Ready $^{\text{TM}}$ maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2005.

			Cer	ntral Averaç		Central Zone Averag				
Brand/Variety (By 2005 zone protein)	DTM*	E	Brookir	ngs		Central	Zone	Averages		
Brand/Variety (By 2005 2011e protein)	DIM	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)**
EXPERIMENTAL/SD01-1587R	115	37.1	17.4	3	36.4	17.7	3	36.8	17.6	3
DAIRYLAND/DSR-199/RR	121	37.3	16.0	2	36.1	17.1	1	36.7	16.6	2
NUTECH/NT-1516RR	115	36.6	16.3	2	36.4	17.8	1	36.5	17.1	2
EXPERIMENTAL/SD1091RR-4	114	36.4	17.3	2	36.2	17.9	2	36.3	17.6	2
DAIRYLAND/DSR-1500/RR	118	36.7	16.6	2	35.5	17.4	2	36.1	17.0	2
DAIRYLAND/DSR-1900/RR	124	37.0	16.6	3	35.2	17.4	2	36.1	17.0	2
NUTECH/NT-2100RR	124	36.4	17.3	3	35.6	17.7	3	36.0	17.5	3
MUSTANG/M-155RR	116	36.7	17.0	2	35.2	17.6	1	36.0	17.3	2
KRUGER/EXP180RR	121	36.4	18.0	3	35.3	18.2	2	35.9	18.1	2
WENSMAN/W 2163RR	118	36.1	16.4	3	35.5	17.6	1	35.8	17.0	2
MUSTANG/M-176RR	119	35.8	16.3	2	35.6	17.3	2	35.7	16.8	2
NORTHSTAR/NS 1409RR	116	36.0	16.3	2	35.4	17.0	2	35.7	16.7	2
NORTHSTAR/NS 1310RR	114	36.3	17.3	2	35.1	18.1	1	35.7	17.7	2
MUSTANG/M-136RR	115	35.4	16.7	2	35.8	17.2	1	35.6	17.0	2
DAIRYLAND/DSR-1301/RR	118	35.6	17.0	2	35.5	17.6	1	35.6	17.3	2
NUTECH/NT-2102RR	125	36.0	16.8	3	35.0	17.9	3	35.5	17.4	3
HEFTY/175R	119	35.5	16.3	2	35.5	17.2	1	35.5	16.8	2
KRUGER/K-100RR	114	35.9	17.4	2	35.1	18.5	1	35.5	18.0	1
PRAIRIE BR./PB-1754RR	118	35.3	16.3	3	35.6	17.4	2	35.5	16.9	2
EXPERIMENTAL/SD01-3219R	117	35.9	16.4	3	_35.0	17.4	_ 2	35.5	16.9	2
KRUGER/K-156RR	116	36.0	16.9	1	34.8	17.3	1	35.4	17.1	1
SODAK GEN./1151RR	116	35.8	16.5	3	35.0	17.6	3	35.4	17.1	3
KRUGER/K-149+RR	117	35.6	16.6	3	35.1	17.2	2	35.4	16.9	2
GOLD COUNTRY/1619RR	122	36.2	16.2	3	34.5	17.4	2	35.4	16.8	2
NORTHSTAR/NS 1120RR	115	36.4	17.8	1	34.3	18.6	1	35.4	18.2	1
NUTECH/NT-1404RR	115	35.6	16.6	1	34.8	17.3	1	35.2	17.0	1
EXPERIMENTAL/SD93-828R	114	35.7	16.6	3	34.6	18.0	2	35.2	17.3	3
INTEGRA/PSI 96110RR	115	36.0	17.7	2	34.2	18.4	1	35.1	18.1	2
KRUGER/K-122RR	115	36.0	17.3	3	34.2	17.7	1	35.1	17.5	2
EXPERIMENTAL/SDX00R-026-42N	120	35.5	16.8	3	34.7	17.4	2	35.1	17.1	3
ASGROW/AG1702	117	35.5	17.4	2	34.6	18.0	1	35.1	17.7	2
PRAIRIE BR./PB-1954RR	124	35.5	17.1	3	34.6	18.0	3	35.1	17.6	3
INTEGRA/PSI 96100RR	114	35.4	17.1	1	34.6	17.9	1	35.0	17.5	1
LATHAM/EXP-E1935R	123	35.0	15.8	2	35.0	17.0	1	35.0	16.4	1
WENSMAN/W 2150RR	117	35.8	17.3	2	34.2	18.4	1	35.0	17.9	2
AGVENTURE/15T5RR	116	34.7	16.1	3	35.2	17.6	2	35.0	16.9	2
THOMPSON/T-7234RR	126	35.6	17.9	3	34.1	18.0	2	34.9	18.0	3
MUSTANG/M-156RR	116	35.5	17.2	2	34.1	18.3	1	34.8	17.8	2
NUTECH/NT-1555RR	115	35.7	17.7	2	33.9	18.5	1	34.8	18.1	2
EXPERIMENTAL/SD01-3477R	119	35.4	17.6	3	34.2	18.3	3	34.8	18.0	3
KRUGER/EXP102RR	115	34.7	17.0	1	34.8	18.0	2	34.8	17.5	2
PRAIRIE BR./PB-1525RR	116	35.1	17.7	2	34.4	18.2	1	34.8	18.0	1
NUTECH/NT-2202RR	126	35.1	17.9	3	34.3	18.2	2	34.7	18.1	2
NUTECH/NT-1921RR	124	35.2	17.3	3	34.2	17.8	3	34.7	17.6	3
DAIRYLAND/DST14-001/RR	118	35.1	15.9	4	34.2	17.3	3	34.7	16.6	3
GOLD COUNTRY/3618RR	123	34.8	16.7	3	34.5	17.4	3	34.7	17.1	3
STINE/1918-4	124	35.1	17.9	3	34.1	18.1	2	34.6	18.0	2
NUTECH/NT-1909RR	125	34.7	17.4	3	34.1	17.9	2	34.4	17.7	3

Table 4b. Roundup Ready $^{\text{TM}}$ maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2005 (continued).

			Cei	ntral Averaç	Central Zone Average					
Prond/Moriety/Pr/2005 zone protein	DTM*	E	Brookii	ıgs		Bancr	oft	Central	Zone	Averages
Brand/Variety (By 2005 zone protein)	DINI	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)**
KRUGER/K-192RR	125	34.2	17.6	3	34.5	18.0	3	34.4	17.8	3
LATHAM/EXP-E1936R	123	34.4	17.3	2	34.2	17.8	2	34.3	17.6	2
ASGROW/AG1903	123	34.1	16.1	2	34.4	17.7	2	34.3	16.9	2
PRAIRIE BR./PB-1914RR	125	34.1	17.3	2	34.4	18.0	2	34.3	17.7	2
WENSMAN/W 2170RR	119	35.2	17.8	2	33.3	18.7	2	34.3	18.3	2
THOMPSON/T-7193RR/SCN	122	34.8	18.3	2	33.7	18.6	2	34.3	18.5	2
NUTECH/NT-7205+RR	124	34.7	18.0	2	33.7	18.1	1	34.2	18.1	2
WENSMAN/W 2142RR	115	34.2	17.0	2	34.1	18.5	1	34.2	17.8	1
WENSMAN/W 2195NRR	120	34.7	18.4	3	33.6	18.6	1	34.2	18.5	2
ASGROW/AG1502	114	33.5	17.2	2	34.8	18.3	1	34.2	17.8	2
KRUGER/EXP150RR	116	34.6	16.9	2	33.6	18.3	1	34.1	17.6	1
FARM ADVANTAGE/FA 7192	125	34.1	17.5	2	34.0	18.1	2	34.1	17.8	2
FARM ADVANTAGE/FA 7173	121	34.8	17.9	3	33.3	18.6	2	34.1	18.3	3
PRAIRIE BR./PB-1725RR	120	34.8	17.6	3	33.1	18.6	2	34.0	18.1	2
KRUGER/K-195+RR/SCN	119	34.3	18.2	2	33.5	18.5	1	33.9	18.4	2
THOMPSON/T-1777RR	122	34.8	17.7	3	33.0	18.3	2	33.9	18.0	2
EXPERIMENTAL/SD96-170RR-28L	114	34.5	17.5	3	33.2	18.4	1	33.9	18.0	2
HEFTY/195R	126	33.6	17.3	3	34.0	17.8	2	33.8	17.6	3
EXPERIMENTAL/SDX00R-035-39	114	33.9	17.8	3	33.5	18.3	2	33.7	18.1	2
KRUGER/K-177RR	124	34.3	17.5	2	33.0	18.4	1	33.7	18.0	2
DEKALB/DKB18-51	119	33.9	17.5	3	32.8	18.2	2	33.3	17.9	2
INTEGRA/PSI 95160RR	117	33.9	17.4	4	32.5	18.0	3	33.2	17.7	4
PRAIRIE BR./PB-1294RR	117	33.5	17.8	3	32.0	17.8	3	32.8	17.8	3
MUSTANG/M-115RR	117	33.0	18.0	3	31.8	18.1	3	32.4	18.1	3
NUTECH/NT-2202ARR	128	32.7	17.7	3	31.7	18.8	3	32.2	18.3	3
COYOTE/4719RR	128	33.5	17.1	2						
AGVENTURE/11T1RR	117	36.1	17.5	2						
AGVENTURE/17T6RR	116				33.7	18.1	2			
DEKALB/DKB10-52	116	35.7	16.3	3						
KALTENBERG/KB135RR	118	35.9	16.4	2						
KALTENBERG/KB155RR	119	34.7	16.2	1						
STINE/1300-4	113				34.4	18.2	1			
STINE/1636-4	120	34.9	15.9	3						
STINE/1683-4	114				33.3	18.2	2			
DYNA-GRO/33M14	116	35.9	17.6	2						
DYNA-GRO/35D15	119	35.0	16.1	2						
DYNA-GRO/EXP SX05611	117	34.7	16.8	2						
DYNA-GRO/EXP SX05514	117	35.7	16.9	1						
DYNA-GRO/EXP SX05816	121	36.9	17.5	3						
DYNA-GRO/EXP SX05317	120	33.8	17.3	2						
DYNA-GRO/3190RR	127	33.5	17.3	2						
ZILLER/BT 7145R	116	35.1	17.3	2						
ZILLER/BT 7160R	120	35.4	16.6	3				.		
THOMPSON/T-7214RR	128	35.1	18.1	3				.		
RENK/RS159RR	119	33.6	17.1	3				.		

Table 4b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2005 (continued).

			Cer	ntral Avera	C4	C					
Brand/Variety (By 2005 zone protein)	DTM*	Brookings Bancroft					oft	Centra	Central Zone Averag		
brand, variety (by 2003 20the protein)		Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)**	
RENK/RS199RR	119	33.2	18.8	3							
RENK/RS124NRR	118	32.7	17.8	3							
RENK/RS165RR	119	34.9	16.7	2							
RENK/RS185RR	126	34.8	17.7	3							
Test avg. :	119	35.1	17.1	2	34.4	17.9	2	34.8	17.5	2	
High avg.:	128	37.3	18.8	4	36.4	18.8	3	36.8	18.5	4	
Low avg.:	113	32.7	15.8	1	31.7	17.0	1	32.2	16.4	1	
* Lsd(.05):				1			1				
## TPG-avg.:				1			1				
@ Coef. Var. :				26			26				
No. Entries :		94	94	94	76	76	76				

^{*} DTM = average days from seeding (Brookings- May 25, Bancroft -May 27, 2005) to maturity.

^{##} TPG-value= minimum or maximum value to qualify for top performance group.



^{**} Lodging, 1 = all plants erect, 5 = all plants flat.

[#] Lsd,(.05) = amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

Table 5a. Roundup Ready™ maturity group-II soybean variety yield averages- central South Dakota locations, 2004-2005.

Brand/Variety (By 2005 zone yield)		Ce	entral Averag	on	Centra	l Zone	
	DTM*	Broo	kings	Ban	croft	Aver	ages
		Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr
NUTECH/NT-2626RR	130	75		71		73	
KRUGER/K-223+RR	125	72		73		73	
PRAIRIE BR./PB-2421RR	128	75	60	66		71	
DEKALB/DKB22-52	126	68	60	71		70	
NUTECH/NT-2330RR	128	70		70		70	
HEFTY/214R	126	67		72		70	
KRUGER/EXP225RR	126	68		71		70	
GOLD COUNTRY/6221RR	125	69	61	71		70	
PRAIRIE BR./PB-2243RR	126	67	59	72		70	
ASGROW/AG2107	121	69		68		69	
MUSTANG/M-203RR	124	66	59	71		69	
MUSTANG/M-205RR	123	71		67		69	
MUSTANG/M-226RR	127	67		71		69	
PRAIRIE BR./PB-2141RR	126	66	58	71		69	
WENSMAN/W 2211RR	126	66	58	72		69	
MUSTANG/M-201RR	128	67	59	68		68	
FARM ADVANTAGE/FA 7205	125	70	62	65		68	
KRUGER/K-211+RR	126	65		70		68	
KRUGER/EXP238RR	127	65		70		68	
PRAIRIE BR./PB-2205RR	127	65		71		68	
ASGROW/AG2403	125	67	59	66		67	
NUTECH/NT-2707RR	130	66		67		67	
NUTECH/NT-2440RR	127	68		65		67	
HEFTY/EXP 226R	126	65		68		67	
PRAIRIE BR./PB-2345RR	126	65	·	69		67	·
ASGROW/AG2205	123	66		66		66	
HEFTY/EXP 266R	130	66		66		66	
KRUGER/K-233+RR	127	65	56	67		66	
KRUGER/K-200RR	123	68	61	64	·	66	•
WENSMAN/W 2253RR	129	64	0.	68	•	66	•
NUTECH/NT-2324RR/SCN	128	64	•	65	•	65	•
KRUGER/EXP237RR	125	63	•	67	•	65	•
EXPERIMENTAL/SD01-2509R	129	64	54	65	•	65	•
NUTECH/NT-2333RR	125	62	0.	66	•	64	•
KRUGER/K-212RR	124	65	•	61	•	63	•
NUTECH/NT-2424RR/SCN	128	62	•	62	•	62	
LATHAM/EXP-E2045R	125	61	·	62	·	62	
EXPERIMENTAL/SDX00R-039-42	127	63	54	61	•	62	
COYOTE/4523RR	131	66	56	U1	•	UZ	
COYOTE/EXP922	128	69	30	•	•	•	•
GOTOTE/EAT JZZ	120	03		•	•		

Table 5a. Roundup Ready™ maturity group-II soybean variety yield averages- central South Dakota locations, 2004-2005 (continued).

		Ce	entral Averag	on	Centra	l Zone	
Brand/Variety (By 2005 zone yield)	DTM*	Broo	kings	Band	croft	Aver	ages
Braina, Variety (By 2003 2011e yiela)		Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr
ZILLER/BT 7215R	129	68					
RENK/RS223RR	125	69	60				
Test avg. :	126	67	59	68		67	
High value :	131	75	62	73		73	
Low avg. :	121	61	54	61		62	
# Lsd (.05):		4	5	4		3	
## TPG-avg.:		71	57	69		70	
@ Coef. Var. :		3	4	4		4	
No. Entries :		42	16	38			

^{*} DTM= average days from seeding (Brookings- May 25, Bancroft- May 27, 2005) to maturity.



[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 5b. Roundup Ready $^{\text{TM}}$ maturity group-II soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2005.

Protein Prot	e Averages	l Zana	Contro		ation	ges by Loc	ıtral Averaç	Cei			
Protein Oil Lodging Protein (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (1-5)* (%) (%) (1-5)* (%) (%) (1-5)* (%) (%) (1-5)* (%) (%) (1-5)* (%) (%) (1-5)* (%) (%) (1-5)* (%) (%) (%) (1-5)* (%) (%) (1-5)* (%)	e Averages	II Zone	Centra	oft	Bancro		ıgs	Brookii	I	DTM*	Brand Variety (By 2005 zone protein)
KRUGER/EXP225RR 126 35.8 16.9 3 35.4 17.5 2 35.6 1 KRUGER/K-233+RR 127 36.1 16.2 3 34.9 17.5 1 35.5 1 NUTECH/NT-2626RR 130 35.0 16.6 3 35.8 17.8 2 35.4 1 LATHAM/EXP-E2045R 125 35.8 16.0 3 34.8 17.2 2 35.3 1 PRAIRIE BR/PB-2205RR 127 35.3 16.7 2 35.3 17.8 2 35.3 1 RUGER/EXP237RR 125 35.3 16.6 3 35.0 18.0 2 35.2 1 NUTECH/NT-2440RR 127 35.7 16.7 3 34.2 18.0 1 35.0 1 HEFTY/EXP 266R 130 35.3 16.7 3 34.2 18.0 1 35.0 1 KRUGER/K-212RR 124 35.1 16.7 <td< th=""><th></th><th>Oil (%)</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>Diw</th><th>braild, variety (by 2003 2011e protein)</th></td<>		Oil (%)								Diw	braild, variety (by 2003 2011e protein)
KRUGER/K-233+RR	3 2	16.3	36.0	1	16.5	35.9	3	16.0	36.1	123	ASGROW/AG2205
NUTECH/NT-2626RR	2 2	17.2	35.6	2	17.5	35.4	3	16.9	35.8	126	KRUGER/EXP225RR
NUTECH/NT-2424RR/SCN 128 35.5 16.5 3 35.2 17.7 2 35.4 1 LATHAM/EXP-E2045R 125 35.8 16.0 3 34.8 17.2 2 35.3 1 PRAIRIE BR/PB-2205RR 127 35.3 16.7 2 35.3 17.8 2 35.3 1 RRUGER/EXP237RR 125 35.3 16.6 3 35.0 18.0 2 35.2 1 NUTECH/NT-2440RR 127 35.7 16.7 3 34.2 18.0 1 35.0 1 NUTECH/NT-2440RR 127 35.7 16.7 3 34.2 18.0 1 35.0 1 NUTECH/NT-2440RR 127 35.7 16.7 3 34.6 17.3 3 35.0 1 RRUGER/K-212RR 124 35.1 15.8 2 34.7 17.0 1 34.9 1 NUTECH/NT-270RR 130 35.5 16.5 3 34.7 17.5 2 34.9 1 NUTECH/NT-270RR 130 35.5 16.5 3 34.3 17.7 2 34.9 1 NUTECH/NT-2724RR/SCN 128 34.4 17.2 3 34.9 18.1 2 34.7 17.0 1 34.9 1 NUTECH/NT-272ARR/SCN 128 34.4 17.2 3 34.9 18.1 2 34.7 17.7 2 34.9 1 NUSTANG/M-203RR 124 34.2 17.2 3 34.2 17.9 1 34.2 1 RRUGER/K-200RR 123 34.1 17.4 2 34.3 17.6 2 34.2 17.9 1 34.2 1 BEKALB/DKB22-52 126 34.2 17.2 3 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR/PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR/PB-2421RR 126 34.2 17.4 2 33.7 33.6 18.0 1 34.1 1 RRUGER/K-2038RR 126 34.2 17.4 2 33.7 33.6 18.0 1 34.1 1 RRUGER/K-2038RR 126 34.2 17.4 2 33.7 33.6 18.0 1 34.1 1 RRUGER/K-212RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 1 1 1 1 1 1 1 1 1 1 1	9 2	16.9	35.5	1	17.5	34.9	3	16.2	36.1	127	KRUGER/K-233+RR
LATHAM/EXP-E2045R	2 2	17.2	35.4	2	17.8	35.8	3	16.6	35.0	130	NUTECH/NT-2626RR
PRAIRIE BR/PB-2205RR 127 35.3 16.7 2 35.3 17.8 2 35.3 1 KRUGER/EXP237RR 125 35.3 16.6 3 35.0 18.0 2 35.2 1 NUTECH/NT-2440RR 127 35.7 16.7 3 34.2 18.0 1 35.0 1 HEFTY/EXP 266R 130 35.3 16.7 3 34.6 17.3 3 35.0 1 KRUGER/K-212RR 124 35.1 15.8 2 34.7 17.0 1 34.9 1 WENSMAN/W 2253RR 129 35.1 16.4 3 34.7 17.5 2 34.9 1 NUTECH/NT-2707RR 130 35.5 16.5 3 34.3 17.7 2 34.9 1 NUTECH/NT-2324RR/SCN 128 34.4 17.2 3 34.9 18.1 2 34.7 17. ASGROW/AG2107 121 34.2 17.2 3 34.9 18.1 2 34.7 1 ASGROW/AG2107 121 34.2 17.2 3 34.9 18.1 2 34.2 1 MUSTANG/M-203RR 124 34.2 17.2 3 34.2 17.9 1 34.2 1 KRUGER/K-200RR 123 34.1 17.4 2 34.2 17.9 1 34.2 1 HEFTY/214R 126 34.0 17.2 2 34.3 17.6 2 34.2 1 HEFTY/214R 126 34.0 17.2 2 34.3 17.6 2 34.2 1 PRAIRIE BR/PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR/PB-2434SRR 126 34.2 17.4 2 33.7 18.0 17.9 2 34.1 1 KRUGER/K-211+RR 126 34.2 17.4 2 33.7 18.0 17.9 2 34.1 1 KRUGER/EX-213RRR 126 34.2 17.4 2 33.7 18.0 17.9 2 34.1 1 KRUGER/EX-P238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 KRUGER/EX-P238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 KRUGER/EX-P238RR 126 34.7 16.4 4 33.1 17.9 2 33.9 1 KRUGER/EX-P238RR 126 34.7 16.4 4 33.1 17.9 2 33.9 1 KRUGER/EX-P238RR 126 34.7 16.4 4 33.1 17.9 2 33.9 1 KRUGER/EX-P238RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 KRUGER/EX-P238RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 KRUGER/EX-P238RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 KRUGER/EX-P238RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 KRUGER/EX-P238RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 MUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 NUTECH/NT-2330RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 NUTECH/NT-2333RR 126 33.6 16.8 3 33.0 17.7 2 33.8 1 NUTECH/NT-2333RR 126 33.6 16.8 3 33.0 17.7 2 33.8 1 NUTECH/NT-2333RR 127 34.5 16.5 3 33.6 16.8 3 33.0 17.7 2 33.8 1 NUTECH/NT-2333RR 127 34.5 16.3 3 33.0 17.7 2 33.8 1 NUTECH/NT-2333RR 127 34.5 16.8 3 33.0 17.7 2 33.8 1 NUTECH/NT-2333RR 127 34.5 16.6 3 33.5 17.9 3 33.8 1 NUTECH/NT-2333RR 127 34.5 16.6 3 33.5 17.9 3 33	1 2	17.1	35.4	2	17.7	35.2	3	16.5	35.5	128	NUTECH/NT-2424RR/SCN
KRUGER/EXP237RR 125 35.3 16.6 3 35.0 18.0 2 35.2 1 NUTECH/NT-2440RR 127 35.7 16.7 3 34.2 18.0 1 35.0 1 HEFTY/EXP 266R 130 35.3 16.7 3 34.6 17.3 3 35.0 1 KRUGER/K-212RR 124 35.1 15.8 2 34.7 17.0 1 34.9 1 WENSMAN/W 2253RR 129 35.1 16.4 3 34.7 17.5 2 34.9 1 NUTECH/NT-2707RR 130 35.5 16.5 3 34.3 17.7 2 34.9 1 NUTECH/NT-2324RR/SCN 128 34.4 17.2 3 34.2 18.1 2 34.7 1 ASGROW/AG2107 121 34.2 17.2 3 34.2 18.3 2 34.2 1 KRUGER/K-200RR 123 34.1 17.4 2 34.2 17.9 1 34.2 1 HEFTY/214R 126 <td>6 3</td> <td>16.6</td> <td>35.3</td> <td>2</td> <td>17.2</td> <td>34.8</td> <td>3</td> <td>16.0</td> <td>35.8</td> <td>125</td> <td>LATHAM/EXP-E2045R</td>	6 3	16.6	35.3	2	17.2	34.8	3	16.0	35.8	125	LATHAM/EXP-E2045R
NUTECH/NT-2440RR	3 2	17.3	35.3	2	17.8	35.3	2	16.7	35.3	127	PRAIRIE BR./PB-2205RR
HEFTY/EXP 266R	3 2	17.3	35.2	2	18.0	35.0	3	16.6	35.3	125	KRUGER/EXP237RR
HEFTY/EXP 266R	4 2	17.4	35.0	1	18.0	34.2	3	16.7	35.7	127	NUTECH/NT-2440RR
KRUGER/K-212RR 124 35.1 15.8 2 34.7 17.0 1 34.9 1 WENSMAN/W 2253RR 129 35.1 16.4 3 34.7 17.5 2 34.9 1 NUTECH/NT-2707RR 130 35.5 16.5 3 34.3 17.7 2 34.9 1 NUTECH/NT-2324RR/SCN 128 34.4 17.2 3 34.9 18.1 2 34.7 1 ASGROW/AG2107 121 34.2 17.2 3 34.2 18.3 2 34.2 1 MUSTANG/M-203RR 124 34.2 17.2 3 34.2 17.9 1 34.2 1 KRUGER/K-200RR 123 34.1 17.4 2 34.2 17.9 1 34.2 1 HEFTY/214R 126 34.0 17.2 2 34.3 17.6 2 34.2 1 PRAIRIE BR/PB-2421RR 126 34.2 17.2 3 33.9 18.2 1 34.1 1 RUGER/K-211+RR 12	0 3	17.0		3	17.3	34.6		16.7	35.3	130	
WENSMAN/W 2253RR 129 35.1 16.4 3 34.7 17.5 2 34.9 1 NUTECH/NT-2707RR 130 35.5 16.5 3 34.3 17.7 2 34.9 1 NUTECH/NT-2324RR/SCN 128 34.4 17.2 3 34.9 18.1 2 34.7 1 ASGROW/AG2107 121 34.2 17.2 3 34.2 18.3 2 34.2 1 MUSTANG/M-203RR 124 34.2 17.2 3 34.2 17.9 1 34.2 1 KRUGER/K-200RR 123 34.1 17.4 2 34.2 17.9 1 34.2 1 HEFTY/214R 126 34.0 17.2 2 34.3 17.6 2 34.2 1 DEKALB/DKB22-52 126 34.2 17.2 3 33.9 18.2 1 34.1 1 PRAIRIE BR./PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 KRUGER/K-211+RR <td< td=""><td>4 1</td><td>16.4</td><td>34.9</td><td>1</td><td>17.0</td><td>34.7</td><td>2</td><td>15.8</td><td>35.1</td><td>124</td><td>KRUGER/K-212RR</td></td<>	4 1	16.4	34.9	1	17.0	34.7	2	15.8	35.1	124	KRUGER/K-212RR
NUTECH/NT-2707RR 130 35.5 16.5 3 34.3 17.7 2 34.9 1 NUTECH/NT-2324RR/SCN 128 34.4 17.2 3 34.9 18.1 2 34.7 1 ASGROW/AG2107 121 34.2 17.2 3 34.2 18.3 2 34.2 1 MUSTANG/M-203RR 124 34.2 17.2 3 34.2 17.9 1 34.2 1 KRUGER/K-200RR 123 34.1 17.4 2 34.2 17.9 1 34.2 1 HEFTY/214R 126 34.0 17.2 2 34.3 17.6 2 34.2 1 DEKALB/DKB22-52 126 34.2 17.2 3 33.9 18.2 1 34.1 1 PRAIRIE BR./PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR./PB-2434SRR 126 35.1 16.6	0 3	17.0	1	2	17.5	34.7		16.4	35.1	1	
NUTECH/NT-2324RR/SCN 128	1 3	17.1			17.7	34.3		16.5	35.5		
ASGROW/AG2107 121 34.2 17.2 3 34.2 18.3 2 34.2 1 MUSTANG/M-203RR 124 34.2 17.2 3 34.2 17.9 1 34.2 1 KRUGER/K-200RR 123 34.1 17.4 2 34.2 17.9 1 34.2 1 HEFTY/214R 126 34.0 17.2 2 34.3 17.6 2 34.2 1 DEKALB/DKB22-52 126 34.2 17.2 3 33.9 18.2 1 34.1 1 PRAIRIE BR./PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR./PB-2345RR 126 35.1 16.6 4 33.0 17.9 2 34.1 1 KRUGER/K-211+RR 126 34.2 17.4 2 33.7 18.0 1 34.0 1 KRUGER/EXP238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 HEFTY/EXP 226R 126 34.1 17.4 2 33.7 17.1 3 34.0 1 HEFTY/EXP 226R 126 34.1 17.4 2 33.7 17.1 1 33.9 1 WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.8 1 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 PRAIRIE BR./PB-2243RR 126	1	17.7	1							1	
MUSTANG/M-203RR 124 34.2 17.2 3 34.2 17.9 1 34.2 1 KRUGER/K-200RR 123 34.1 17.4 2 34.2 17.9 1 34.2 1 HEFTY/214R 126 34.0 17.2 2 34.3 17.6 2 34.2 1 DEKALB/DKB22-52 126 34.2 17.2 3 33.9 18.2 1 34.1 1 PRAIRIE BR/PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR/PB-2345RR 126 35.1 16.6 4 33.0 17.9 2 34.1 1 KRUGER/K-211+RR 126 34.2 17.4 2 33.7 18.0 1 34.0 1 KRUGER/K-2218RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 KRUGER/K-2211RR 126 34.7 16.4 4 33.1 17.9 2 33.9 1 WENSMAN/W 2211RR <td< td=""><td></td><td>17.8</td><td> </td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td></td<>		17.8							1		
KRUGER/K-200RR 123 34.1 17.4 2 34.2 17.9 1 34.2 1 HEFTY/214R 126 34.0 17.2 2 34.3 17.6 2 34.2 1 DEKALB/DKB22-52 126 34.2 17.2 3 33.9 18.2 1 34.1 1 PRAIRIE BR, PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR, PB-2345RR 126 35.1 16.6 4 33.0 17.9 2 34.1 1 KRUGER/K-211+RR 126 34.2 17.4 2 33.7 18.0 1 34.0 1 KRUGER/EXP238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 HEFTY/EXP 226R 126 34.7 16.4 4 33.1 17.9 2 33.9 1 WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 NUTECH/NT-2330RR <		17.6									
HEFTY/214R 126 34.0 17.2 2 34.3 17.6 2 34.2 1 DEKALB/DKB22-52 126 34.2 17.2 3 33.9 18.2 1 34.1 1 PRAIRIE BR/PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR/PB-2345RR 126 35.1 16.6 4 33.0 17.9 2 34.1 1 KRUGER/K-211+RR 126 34.2 17.4 2 33.7 18.0 1 34.0 1 KRUGER/EXP238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 HEFTY/EXP 226R 126 34.7 16.4 4 33.1 17.9 2 33.9 1 WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 MUSTANG/M-205RR		17.7									
DEKALB/DKB22-52 126 34.2 17.2 3 33.9 18.2 1 34.1 1 PRAIRIE BR./PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR./PB-2345RR 126 35.1 16.6 4 33.0 17.9 2 34.1 1 KRUGER/K-211+RR 126 34.2 17.4 2 33.7 18.0 1 34.0 1 KRUGER/EXP238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 HEFTY/EXP 226R 126 34.7 16.4 4 33.1 17.9 2 33.9 1 WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 PRAIRIE BR./PB-224		17.4									
PRAIRIE BR./PB-2421RR 128 34.5 16.5 3 33.6 18.0 1 34.1 1 PRAIRIE BR./PB-2345RR 126 35.1 16.6 4 33.0 17.9 2 34.1 1 KRUGER/K-211+RR 126 34.2 17.4 2 33.7 18.0 1 34.0 1 KRUGER/EXP238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 HEFTY/EXP 226R 126 34.7 16.4 4 33.1 17.9 2 33.9 1 WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.8 17.7 2 33.8 1 PARM ADVANTA		17.7									
PRAIRIE BR./PB-2345RR 126 35.1 16.6 4 33.0 17.9 2 34.1 1 KRUGER/K-211+RR 126 34.2 17.4 2 33.7 18.0 1 34.0 1 KRUGER/EXP238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 HEFTY/EXP 226R 126 34.7 16.4 4 33.1 17.9 2 33.9 1 WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.8 1 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR <td></td> <td>17.3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>·</td>		17.3									·
KRUGER/K-211+RR 126 34.2 17.4 2 33.7 18.0 1 34.0 1 KRUGER/EXP238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 HEFTY/EXP 226R 126 34.7 16.4 4 33.1 17.9 2 33.9 1 WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.8 1 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 FARM ADVANTAGE/FA 7205 </td <td></td> <td>17.3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		17.3									
KRUGER/EXP238RR 127 35.1 16.5 3 32.8 17.7 3 34.0 1 HEFTY/EXP 226R 126 34.7 16.4 4 33.1 17.9 2 33.9 1 WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.8 1 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 FARM ADVANTAGE/FA 7205 125 34.0 16.6 3 33.5 17.9 2 33.8 1 NUTECH/NT-2333RR<	1	17.7									
HEFTY/EXP 226R 126 34.7 16.4 4 33.1 17.9 2 33.9 1 WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.8 1 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 FARM ADVANTAGE/FA 7205 125 33.6 16.8 3 33.9 17.9 2 33.8 1 NUTECH/NT-2333RR 125 34.0 16.6 3 33.5 17.9 3 33.8 1		17.1							l		
WENSMAN/W 2211RR 126 34.1 17.4 2 33.7 17.1 1 33.9 1 GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.8 1 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 FARM ADVANTAGE/FA 7205 125 33.6 16.8 3 33.9 17.9 2 33.8 1 NUTECH/NT-2333RR 125 34.0 16.6 3 33.5 17.9 3 33.8 1		17.2							!		
GOLD COUNTRY/6221RR 125 34.4 16.8 3 33.4 17.8 1 33.9 1 NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.8 1 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 FARM ADVANTAGE/FA 7205 125 33.6 16.8 3 33.9 17.9 2 33.8 1 NUTECH/NT-2333RR 125 34.0 16.6 3 33.5 17.9 3 33.8 1		17.3	V								
NUTECH/NT-2330RR 128 34.1 17.3 3 33.6 18.4 2 33.9 1 MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.8 1 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 FARM ADVANTAGE/FA 7205 125 33.6 16.8 3 33.9 17.9 2 33.8 1 NUTECH/NT-2333RR 125 34.0 16.6 3 33.5 17.9 3 33.8 1		17.3									
MUSTANG/M-205RR 123 33.8 16.9 2 33.8 17.8 1 33.8 1 PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 FARM ADVANTAGE/FA 7205 125 33.6 16.8 3 33.9 17.9 2 33.8 1 NUTECH/NT-2333RR 125 34.0 16.6 3 33.5 17.9 3 33.8 1		17.9		2							
PRAIRIE BR./PB-2243RR 126 33.7 17.5 2 33.9 17.7 2 33.8 1 MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 FARM ADVANTAGE/FA 7205 125 33.6 16.8 3 33.9 17.9 2 33.8 1 NUTECH/NT-2333RR 125 34.0 16.6 3 33.5 17.9 3 33.8 1		17.4									
MUSTANG/M-226RR 127 34.5 16.3 3 33.0 17.7 3 33.8 1 FARM ADVANTAGE/FA 7205 125 33.6 16.8 3 33.9 17.9 2 33.8 1 NUTECH/NT-2333RR 125 34.0 16.6 3 33.5 17.9 3 33.8 1		17.6			_						
FARM ADVANTAGE/FA 7205 125 33.6 16.8 3 33.9 17.9 2 33.8 1 NUTECH/NT-2333RR 125 34.0 16.6 3 33.5 17.9 3 33.8 1		17.0									
NUTECH/NT-2333RR 125 34.0 16.6 3 33.5 17.9 3 33.8 1		17.4									
		17.3							!	!	
	ı	17.5	1	-							
		17.7	1								
	l l	17.6	1						1		
		17.6									
		16.9									
		17.8									
COYOTE/4523RR 131 35.3 16.6 3	, 4	17.0	30.7	3	10.0	30.5					
COYOTE/EXP922 128 35.7 16.7 3			•	•	•	•					

Table 5b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2005 (continued).

			Cei	ntral Averaç		Central Zone Averages					
Brand/Variety (By 2005 zone protein)	DTM*	Brookings				Bancroft			Gential Zone Averages		
		Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)**	
ZILLER/BT 7215R	129	34.4	16.8	3							
RENK/RS223RR	125	34.1	17.3	2							
Test avg. :	126	34.6	17.9	3	34.0	18.5	2	34.2	18.3	2	
High avg. :	131	36.1	17.5	4	35.9	18.6	3	36.0	17.9	4	
Low avg. :	121	30.9	15.8	2	30.5	16.5	1	30.7	16.3	1	
* Lsd(.05):				1			1				
## TPG-avg.:				1			1				
### Coef.Var. :				21			20				
No. Entries :		42	42	42	38	38	38				

^{*} DTM= average days from seeding (Brookings- May 25, Bancroft- May 27, 2005) to maturity.



^{**} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum or maximum value to qualify for top performance group.

Table 6a. Roundup Ready™ maturity group-I soybean variety yield averages- southern South Dakota locations, 2004-2005.

		Sout	thern Avera	ation	Southern Zone		
Brand/Variety (By 2-yr then 2005 zone	DTM*	Bere	sford	Delr	mont	Aver	ages
yield)	Divi	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr
ASGROW/AG1903	99	52	60	31	38	42	49
NUTECH/NT-1909RR	100	57	62	27	34	42	48
KRUGER/K-192RR	99	57	60	25	32	41	46
KRUGER/K-156RR	93	55		26		41	
THOMPSON/T-7205+RR	101	54		28		41	
KRUGER/EXP150RR	95	54		26		40	
PRAIRIE BR./PB-1914RR	102	51		29	35	40	
KRUGER/EXP180RR	99	52		25		39	
PRAIRIE BR./PB-1954RR	96	53	60	25	32	39	46
THOMPSON/T-7214RR	99	53	59	25	34	39	47
NORTHSTAR/NS 1809RR	98	49		29		39	
KRUGER/K-195+RR/SCN	97	53		22		38	
KRUGER/K-177RR	102	54		21		38	
EXPERIMENTAL/SDX00R-026-42N	97	52		24		38	
NORTHSTAR/NS 1624RR	97	50		24		37	
EXPERIMENTAL/SDX00R-035-39	94	51		22		37	
EXPERIMENTAL/SD96-170RR-28L	93	50	54	23		37	
EXPERIMENTAL/SD1091RR-4	95	50		21		36	
EXPERIMENTAL/SD93-828R	92	50		22		36	
NORTHSTAR/NS 1509RR	93	48		22		35	
KRUGER/K-149+RR	96	46		21		34	
EXPERIMENTAL/SD01-3219R	97	46		22	28	34	
SODAK GEN./1151RR	93	47	49	20	24	34	37
GOLD COUNTRY/3618RR	96	46		20	29	33	
EXPERIMENTAL/SD01-1587R	94	45		21		33	
ASGROW/AG1702	96			28	. \		
COYOTE/4719RR	100			25	30		
STINE/1918-4	102	53	59				
Test avg. :	97	51	58	24	32	38	46
High avg. :	102	57	62	31	38	42	49
Low avg. :	92	45	49	20	24	33	37
# Lsd (.05):		7	7	4	5	4	7
## TPG-avg.:		50	55	27	33	38	42
@ Coef. Var. :		9	7	11	12	10	18
No. Entries :		26	8	27	10		

^{*} DTM= average days from seeding (Beresford- June 16, Delmont- June 20, 2005) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 6b. Roundup Ready $^{\text{TM}}$ maturity group-I soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2005.

			Sou	thern Avera	iges by Lo	cation		Southern Zone Averages			
Brand/Variety (By 2005 zone protein)	DTM*	I	Beresf	ord		Delmo	nt	Souther	n Zone	Averages	
Brand, Variety (By 2003 2011e protein)	Diwi	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)**	
NORTHSTAR/NS 1509RR	93	36.6	16.6	1	36.3	15.4	1	36.5	16.0	1	
KRUGER/K-149+RR	96	36.6	17.6	1	35.7	15.8	1	36.2	16.7	1	
EXPERIMENTAL/SD01-1587R	94	36.5	18.3	1	35.8	16.4	1	36.2	17.4	1	
KRUGER/EXP180RR	99	36.1	18.2	1	36.1	17.1	1	36.1	17.7	1	
EXPERIMENTAL/SD1091RR-4	95	36.7	18.5	1	35.1	17.7	1	35.9	18.1	1	
NORTHSTAR/NS 1809RR	98	35.4	17.9	1	34.6	17.8	1	35.0	17.9	1	
NUTECH/NT-1909RR	100	34.5	18.1	1	35.3	16.1	1	34.9	17.1	1	
PRAIRIE BR./PB-1914RR	102	34.6	18.1	1	35.1	18.3	1	34.9	18.2	1	
EXPERIMENTAL/SD93-828R	92	34.7	18.8	1	35.0	17.2	1	34.9	18.0	1	
KRUGER/K-177RR	102	35.0	18.3	1	34.5	18.6	1	34.8	18.5	1	
ASGROW/AG1903	99	34.1	18.3	1	35.2	17.0	1	34.7	17.7	1	
THOMPSON/T-7205+RR	101	34.4	18.5	1	34.9	18.3	1	34.7	18.4	1	
SODAK GEN./1151RR	93	35.6	17.9	2	33.5	16.9	1	34.6	17.4	1	
KRUGER/K-156RR	93	35.0	18.5	1	34.0	17.3	1	34.5	17.9	1	
EXPERIMENTAL/SD01-3219R	97	35.1	18.2	1	33.7	16.9	1	34.4	17.6	1	
PRAIRIE BR./PB-1954RR	96	34.4	18.5	1	34.2	17.6	1	34.3	18.1	1	
KRUGER/K-192RR	99	34.6	18.5	1	33.7	17.3	1	34.2	17.9	1	
EXPERIMENTAL/SD96-170RR-28L	93	34.7	18.3	1	33.5	17.7	1	34.1	18.0	1	
KRUGER/K-195+RR/SCN	97	33.8	19.3	1	34.2	19.3	1	34.0	19.3	1	
THOMPSON/T-7214RR	99	33.4	18.8	1	34.6	17.4	1	34.0	18.1	1	
EXPERIMENTAL/SDX00R-026-42N	97	34.0	17.9	1	33.9	16.7	1	34.0	17.3	1	
EXPERIMENTAL/SDX00R-035-39	94	33.3	18.7	2	33.7	17.8	1	33.5	18.3	1	
KRUGER/EXP150RR	95	33.9	18.9	1	32.9	17.8	1	33.4	18.4	1	
GOLD COUNTRY/3618RR	96	33.9	18.3	1	32.2	17.3	1	33.1	17.8	1	
NORTHSTAR/NS 1624RR	97	32.3	19.0	1	32.7	16.8	1	32.5	17.9	1_	
ASGROW/AG1702	96				36.6	17.7	1				
COYOTE/4719RR	100				34.7	18.1	1				
STINE/1918-4	102	34.4	18.3	1							
Test avg. :	97	34.8	18.3	1	34.5	17.3	1	34.6	17.8	1	
High avg. :	102	36.7	19.3	2	36.6	19.3	1	36.5	19.3	1	
Low avg. :	92	32.3	16.6	1	32.2	15.4	1	32.5	16.0	1	
* Lsd(.05):				1			NS				
## TPG-avg.:				1			1				
@ Coef. Var. :				22			0				
No. Entries :		26	26	26	27	27	27				

^{*} DTM= average days from seeding (Beresford- June 16, Delmont- June 20, 2005) to maturity.

^{**} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum or maximum value to qualify for top performance group.

Table 7a. Roundup Ready $^{\text{TM}}$ maturity group-II soybean variety yield averages- southern South Dakota locations, 2003-2005.

		Sout	thern Avera	ges by Loca	ation	Southern Zone		
Brand/Variety (By 2-yr then 2005 zone	DTM*	Bere	sford	Delr	nont	Aver	ages	
yield)		Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	
DEKALB/DKB25-51	104	55	63	33	39	44	51	
PRAIRIE BR./PB-2141RR	102	56	63	30	36	43	50	
COYOTE/4527RR	105	55	62	31	36	43	49	
KRUGER/K-289+RR	105	55	60	31	37	43	49	
FARM ADVANTAGE/FA 7264	106	54	61	29	37	42	49	
SANDS/SOI 2754RR	104	52	62	29	36	41	49	
PRAIRIE BR./PB-2421RR	101	54	62	28	35	41	49	
MUSTANG/M-203RR	101	57	61	29	35	43	48	
KRUGER/K-233+RR	101	57	62	28	33	43	48	
COYOTE/9524RR	102	56	62	28	34	42	48	
MUSTANG/M-264RR	104	53	59	30	37	42	48	
PRAIRIE BR./PB-2343RR	101	55	63	26	33	41	48	
ASGROW/AG2403	102	57	63	23	32	40	48	
PRAIRIE BR./PB-2643RR	106	51	59	29	36	40	48	
SANDS/EXP 2669RR	103	51	58	29	36	40	47	
DAIRYLAND/DSR-234/RR	99	50	59	28	34	39	47	
DAIRYLAND/DSR-2500/RR	101	51	61	26	32	39	47	
KRUGER/K-270RR	102	54	57	29	35	42	46	
PRAIRIE BR./PB-2243RR	101	55	61	25	31	40	46	
SANDS/SOI 2143RR	101	50	60	24	32	37	46	
KRUGER/K-273RR	104	49	55	30	35	40	45	
SANDS/SOI 2169RR	96	49	58	26	31	38	45	
NUTECH/NT-2707RR	102	50	56	26	33	38	45	
KRUGER/K-200RR	96	52	59	23	31	38	45	
RENK/RS253RR	102	47	57	23	32	35	45	
SANDS/SOI 2872RR	103	50	54	26	34	38	44	
EXPERIMENTAL/SDX00R-039-42	102	45	53	26	31	36	42	
MUSTANG/M-205RR	97	58		30	01	44	12	
SANDS/SOI 2448RR	102	58	•	29	•	44		
SANDS/SOI 2151NRR	97	58	63	27	•	43		
LATHAM/L2336R	101	56	03	30	•	43	•	
COYOTE/EXP922	100	55	•	28	•	43		
•		54				42		
NUTECH/NT-2890RR INTEGRA/PSI 96280RR	105 105	53		29 30		42		
LATHAM/L2136R	100	58	62	23	•	42		
THOMPSON/T-2100RR	100	54	02	28		41		
					•			
THOMPSON/T-2919RR/SCN	107	51	•	30	•	41	•	
RENK/RS265RR	103	58	•	23	•	41	•	
SANDS/SOI 2673RR	103	53	•	26		40	•	
INTEGRA/PSI 95200RR	97	56	•	23	•	40		
INTEGRA/PSI 96210RR	100	55		25	•	40		
LATHAM/EXP-E2450R	102	54	58	26		40		
PRAIRIE BR./PB-2205RR	101	52		28		40		
DYNA-GR0/31N27	105	49		31		40		
NUTECH/NT-2626RR	102	53	.	25		39		

Table 7a. Roundup Ready™ maturity group-II soybean variety yield averages- southern South Dakota locations, 2003-2005 (continued).

		Sout	thern Avera	Southe	rn Zone		
Brand/Variety (By 2-yr then 2005 zone	DTM*	Bere	sford	Delr	nont	Aver	ages
yield)	DIW	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr
KRUGER/K-212RR	98	52		25		39	
KRUGER/EXP280RR	103	50		28		39	
GOLD COUNTRY/2726RR	104	50		28		39	
DAIRYLAND/DSR-2600/RR	100	50		27		39	
PRAIRIE BR./PB-2385NRR	100	49		28		39	
DYNA-GRO/32C25	103	50		27		39	
THOMPSON/T-7206RR	99	54		24		39	
EXPERIMENTAL/SDX00R-035-56	102	52		26		39	
COYOTE/EXP624	102	50		25		38	
FARM ADVANTAGE/FA7244N	101	53		22		38	
DEKALB/DKB26-53	105	53		22		38	
SANDS/SOI 2884RR	105	51		25		38	
NUTECH/NT-2330RR	102	52		23		38	
NUTECH/NT-2992RR	107	49		27		38	
NTEGRA/PSI 96230RR	98	50		25		38	
KRUGER/EXP260RR	104	46		30		38	
_ATHAM/EXP-E2635R	103	49	56	27		38	
LATHAM/L2900R	105	53	60	23		38	
DAIRYLAND/DSR-2100/RR	100	49		26		38	
PRAIRIE BR./PB-2565RR	103	51		25		38	
EXPERIMENTAL/SD01-1135R	96	52		24	31	38	
NUTECH/NT-2324RR/SCN	101	50		24		37	
NUTECH/NT-2424RR/SCN	99	48		26		37	
NUTECH/NT-2990RR	106	50		24		37	
KRUGER/K-223+RR	99	51		23		37	
PRAIRIE BR./PB-2183NRR	97	51		22		37	
PRAIRIE BR./PB-2345RR	97	48		25		37	
PRAIRIE BR./PB-2625RR	101	49		25		37	
MUSTANG/M-226RR	98	46		25		36	
SANDS/SOI 2467NRR	100	50		21		36	
NTEGRA/PSI 96260RR	102	46		25	•	36	
KRUGER/K-255RR	101	45	·	26	·	36	
_ATHAM/497RR	99	49	60	22	•	36	
STINE/2688-4	102	47	00	24		36	
NUTECH/NT-2790RR	103	45	·	24	·	35	
DYNA-GRO/EXP SX05123	97	48		21	•	35	
EXPERIMENTAL/SDX00R-046-28	102	44		25	•	35	
EXPERIMENTAL/SDXxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	105	42		24	•	33	
EXPERIMENTAL/SD01-3387R	99	44		22	•	33	
EXPERIMENTAL/SDX02R-584	98	40	•	24	•	32	•
		40	•		21	32	•
ASGROW/AG2107 ASGROW/AG2205	100 96			22 23	31		
		E1	57	ر کی	•		
COYOTE/4523RR	101	51	57 67	•	•		•
MUSTANG/M-201RR	104	61	67				
MUSTANG/M-284RR	104	49	61				
MUSTANG/M-286NRR	104	49			•		
DEKALB/DKB22-52	104	55	61	•	•		
KALTENBERG/KB241RR	104	52	•	•	•	•	•
KALTENBERG/KB248RR	101	48	•			•	
KALTENBERG/KB256RR	104	54					

Table 7a. Roundup Ready™ maturity group-II soybean variety yield averages- southern South Dakota locations, 2003-2005 (continued).

		Sout	thern Avera	ges by Loca	ation	Southern Zone		
Brand/Variety (By 2-yr then 2005 zone	DTM*	Bere	sford	Deli	nont	Aver	ages	
yield)		Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr	
KALTENBERG/KB276RR	107	54						
STINE/2116-4	97			24	33			
STINE/2402-4	100	50						
STINE/2743-4	108			28				
ZILLER/BT 7215R	101	57	65					
ZILLER/BT 7236R	102	49						
THOMPSON/T-3100RR	108	49						
THOMPSON/T-3101RR	108	52						
Test avg. :	102	51	60	26	34	39	47	
High avg. :	108	61	67	33	39	44	51	
Low avg. :	96	40	53	21	31	32	42	
# Lsd (.05):		6	6	4	4	4	7	
## TPG-avg.:		55	61	29	35	40	44	
@ Coef. Var. :		7	6	10	9	8	18	
No. Entries :		99	38	89	30			

^{*} DTM= average days from seeding (Beresford- June 16, Delmont- June 20, 2005) to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 7b. Roundup Ready $^{\text{TM}}$ maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2005.

			Sout	thern Avera	ges by Lo	cation		Southern Zone Averages			
Brand/Variety (By 2005 zone protein)	DTM*	E	Beresfo	ord		Delmo	nt	Southern Zone Averages			
oranu/variety (by 2003 2011e protein)	DIW	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)**	
EXPERIMENTAL/SD01-3387R	99	38.1	17.2	2	35.7	16.5	1	36.9	16.9	2	
KRUGER/K-212RR	98	36.8	16.8	1	36.0	15.8	1	36.4	16.3	1	
KRUGER/EXP260RR	104	36.9	17.7	1	34.8	18.2	1	35.9	18.0	1	
THOMPSON/T-2100RR	100	37.9	17.7	1	33.5	17.9	1	35.7	17.8	1	
KRUGER/K-255RR	101	36.3	17.5	1	34.9	18.3	1	35.6	17.9	1	
EXPERIMENTAL/SDX00R-046-28	102	36.9	16.9	3	34.1	16.9	1	35.5	16.9	2	
KRUGER/K-273RR	104	36.7	17.9	2	34.1	18.0	1	35.4	18.0	1	
GOLD COUNTRY/2726RR	104	35.9	17.6	2	34.7	17.9	1	35.3	17.8	1	
LATHAM/L2336R	101	35.8	18.4	1	34.6	17.6	1	35.2	18.0	1	
COYOTE/EXP624	102	36.3	18.0	1	33.9	18.3	1	35.1	18.2	1	
RENK/RS253RR	102	35.8	17.8	1	34.4	18.3	1	35.1	18.1	1	
PRAIRIE BR./PB-2625RR	101	35.7	17.8	1	34.2	17.5	1	35.0	17.7	1	
KRUGER/K-233+RR	101	36.5	18.1	1	33.3	17.6	1	34.9	17.9	1	
INTEGRA/PSI 96230RR	98	36.0	17.2	1	33.6	18.0	1	34.8	17.6	1	
DAIRYLAND/DSR-234/RR	99	36.9	18.1	1	32.6	17.3	1	34.8	17.7	1	
STINE/2688-4	102	36.4	18.4	2	33.1	18.1	1	34.8	18.3	1	
NUTECH/NT-2707RR	102	36.7	17.1	1	32.7	17.4	1	34.7	17.3	1	
INTEGRA/PSI 96260RR	102	36.5	17.3	1	32.9	17.8	1	34.7	17.6	1	
PRAIRIE BR./PB-2385NRR	100	35.7	17.9	2	33.6	18.3	1	34.7	18.1	1	
DAIRYLAND/DSR-2500/RR	101	35.5	17.7	1	_33.8	17.8	1	34.7	17.8	1	
KRUGER/K-270RR	102	34.9	18.5	3	34.2	18.1	1	34.6	18.3	2	
PRAIRIE BR./PB-2205RR	101	36.5	17.7	1	32.6	18.4	1	34.6	18.1	1	
EXPERIMENTAL/SD01-1135R	96	35.8	17.7	2	33.3	16.6	1	34.6	17.2	2	
NUTECH/NT-2330RR	102	34.6	18.2	1	34.4	18.1	1	34.5	18.2	1	
NUTECH/NT-2626RR	102	35.8	17.9	1	33.1	17.5	1	34.5	17.7	1	
NUTECH/NT-2992RR	107	34.9	17.7	1	34.0	17.9	1	34.5	17.8	1	
PRAIRIE BR./PB-2243RR	101	35.2	18.3	2	33.7	17.1	1	34.5	17.7	1	
NUTECH/NT-2790RR	103	37.1	17.9	2	31.7	17.8	1	34.4	17.9	2	
SANDS/EXP 2669RR	103	35.5	17.7	2	33.2	18.2	1	34.4	18.0	1	
PRAIRIE BR./PB-2565RR	103	36.5	17.5	1	32.2	17.6	1	34.4	17.6	1	
DYNA-GRO/EXP SX05123	97	36.1	16.8	1	32.6	17.4	1	34.4	17.1	1	
MUSTANG/M-203RR	101	33.9	18.4	1	34.8	17.2	1	34.3	17.8	1	
KRUGER/K-289+RR	105	35.9	18.4	2	32.8	17.1	1	34.3	17.8	1	
DYNA-GRO/32C25	103	35.5	18.1	1	33.0	17.1	1	34.3	17.6	1	
MUSTANG/M-226RR	98	36.1	17.1	1	32.3	18.6	1	34.2	17.9	1	
LATHAM/EXP-E2450R	102	35.8	16.8	2	32.6	18.2	1	34.2	17.5	2	
LATHAM/L2900R	105	35.2	18.2	1	33.2	17.1	1	34.2	17.7	1	
PRAIRIE BR./PB-2343RR	101	35.7	17.3	2	32.6	17.5	1	34.2	17.4	1	
MUSTANG/M-205RR	97	35.4	18.2	2	32.9	17.9	1	34.2	18.1	1	
DAIRYLAND/DSR-2100/RR	100	36.9	16.9	1	31.4	16.5	1	34.2	16.7	1	
PRAIRIE BR./PB-2345RR	97	35.8	16.8	1	32.5	18.1	1	34.2	17.5	1	
PRAIRIE BR./PB-2421RR	101	35.4	18.7	2	32.8	19.0	1	34.1	18.9	1	
SANDS/SOI 2754RR	104	34.7	18.8	2	33.4	18.0	1	34.1	18.4	1 1	
NUTECH/NT-2424RR/SCN	99	35.2	18.4	1	32.9	18.4	1	34.1	18.4	1	
KRUGER/EXP280RR	103	35.9	18.0	2	32.2	18.1	1	34.1	18.1	2	
LATHAM/497RR	99	35.0	18.3	1	33.1	18.3	1	34.1	18.3	1	
COYOTE/EXP922	100	35.4	17.9	1	32.5	17.9	1	34.0	17.9	1	
SANDS/S0I 2673RR	103	34.4	18.5	2	33.5	18.1	1	34.0	18.3	2	
DEKALB/DKB26-53	105	35.9	17.7	2	31.9	18.4		33.9		2	
KRUGER/K-200RR	96	34.5	18.4	1	33.0	17.9	1 1	33.9	18.1 18.2	1	

Table 7b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2005 (continued).

			Sout	thern Avera	ges by Lo	cation				_	
D 184 1 4 /D 222			Beresfo	ord		Delmo	nt	Southern Zone Averages			
Brand/Variety (By 2005 zone protein)	DTM*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)**	
THOMPSON/T-7206RR	99	34.5	18.6	1	32.9	18.1	1	33.7	18.4	1	
THOMPSON/T-2919RR/SCN	107	35.0	18.4	2	32.4	18.0	1	33.7	18.2	2	
EXPERIMENTAL/SD01-3025R	105	34.5	17.7	3	32.9	17.5	1	33.7	17.6	2	
SANDS/SOI 2872RR	103	35.1	18.6	2	32.1	17.7	1	33.6	18.2	2	
INTEGRA/PSI 96210RR	100	35.0	18.2	1	32.2	17.7	1	33.6	18.0	1	
LATHAM/EXP-E2635R	103	34.2	15.5	2	32.9	18.2	1	33.6	16.9	1	
NUTECH/NT-2990RR	106	35.2	18.0	2	31.8	19.1	1	33.5	18.6	2	
PRAIRIE BR./PB-2141RR	102	33.6	18.8	1	33.4	18.6	1	33.5	18.7	1	
PRAIRIE BR./PB-2643RR	106	33.5	18.5	2	33.5	17.9	1	33.5	18.2	1	
SANDS/SOI 2169RR	96	35.5	18.2	2	31.4	18.0	1	33.5	18.1	1	
SANDS/SOI 2467NRR	100	35.0	19.0	1	31.9	18.4	1	33.5	18.7	1	
KRUGER/K-223+RR	99	34.0	18.2	1	32.9	17.4	1	33.5	17.8	1	
COYOTE/4527RR	105	34.2	19.2	2	32.6	18.3	1	33.4	18.8	1	
FARM ADVANTAGE/FA7244N	101	34.6	18.7	1	32.2	18.0	1	33.4	18.4	1	
SANDS/SOI 2884RR	105	35.2	18.2	2	31.6	18.8	1	33.4	18.5	1	
LATHAM/L2136R	100	33.3	18.5	1	33.5	17.0	1	33.4	17.8	1	
NUTECH/NT-2324RR/SCN	101	34.7	18.8	1	31.9	18.9	1	33.3	18.9	1	
RENK/RS265RR	103	34.0	18.4	1	32.6	18.2	1	33.3	18.3	1	
EXPERIMENTAL/SDX02R-584	98	35.5	17.8	2	30.8	18.7	1	33.2	18.3	2	
SANDS/SOI 2143RR	101	34.1	17.9	_ 1	_32.1	17.9	1	33.1	17.9	1	
MUSTANG/M-264RR	104	32.8	18.6	1	33.2	17.3	1	33.0	18.0	1	
SANDS/SOI 2448RR	102	34.0	19.1	1	32.0	18.1	1	33.0	18.6	1	
NUTECH/NT-2890RR	105	34.5	18.6	2	31.5	17.9	1	33.0	18.3	2	
FARM ADVANTAGE/FA 7264	106	35.1	18.1	2	30.8	18.2	1	33.0	18.2	2	
INTEGRA/PSI 95200RR	97	34.5	19.1	1	31.3	18.9	1	32.9	19.0	1	
INTEGRA/PSI 96280RR	105	34.5	18.5	2	31.3	18.2	1	32.9	18.4	1	
PRAIRIE BR./PB-2183NRR	97	33.3	19.0	1	32.4	18.8	1	32.8	18.9	1	
COYOTE/9524RR	102	34.0	18.8	1	31.0	18.8	1	32.5	18.8	1	
SANDS/SOI 2151NRR	97	33.1	19.2	1	31.9	17.7	1	32.5	18.5	1	
EXPERIMENTAL/SDX00R-035-56	102	34.0	17.8	2	31.0	17.4	1	32.5	17.6	2	
DYNA-GRO/31N27	105	33.3	18.6	1	31.5	18.6	1	32.4	18.6	1	
DAIRYLAND/DSR-2600/RR	100	33.5	18.4	1	30.7	18.3	1	32.1	18.4	1	
ASGROW/AG2403	102	33.8	19.2	1	29.6	19.3	1	31.7	19.3	1	
DEKALB/DKB25-51	102	33.0	18.6	2	29.3	19.3	1	31.2	19.0	1	
EXPERIMENTAL/SDX00R-039-42	102	33.0	18.0	2	28.4	18.2	1	30.7	18.1	2	
ASGROW/AG2107	102	33.0	10.0		33.4	18.0	1	30.7	10.1		
ASGROW/AG2205	96			•	34.8	16.1	1	•	•	•	
COYOTE/4523RR	101	26.2	17.5	1	34.0	10.1	'		•	•	
		36.2		1	•	•	·		•	•	
MUSTANG/M-201RR MUSTANG/M-284RR	104 104	34.0 37.3	19.0	1 1		•	·		•		
						•	•	•	•	•	
MUSTANG/M-286NRR	104	35.6	17.7	2	•		•	•		•	
DEKALB/DKB22-52	104	34.5	18.1	2			•			٠	
KALTENBERG/KB241RR	104	35.4	17.9	1						•	
KALTENBERG/KB248RR	101	36.0	17.6	2							
KALTENBERG/KB256RR	104	36.5	18.0	2							
KALTENBERG/KB276RR	107	34.3	18.5	2			:				
STINE/2116-4	97				33.7	17.9	1	•	•		
STINE/2402-4	100	35.1	18.0	2				•	•		
STINE/2743-4	108			:	32.6	18.3	1		•		
ZILLER/BT 7215R	101	34.9	19.0	1							
ZILLER/BT 7236R	102	36.0	17.3	2		.			.		

Table 7b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2005 (continued).

			Sout	hern Avera	ges by Lo	cation		Caushan	. 7	A	
Brand/Variety (By 2005 zone protein)	DTM*	E	Beresfo	ord		Delmont			Southern Zone Averages		
brand, variety (by 2003 2011e protein)		Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)**	
THOMPSON/T-3100RR	108	35.0	18.0	1							
THOMPSON/T-3101RR	108	35.1	17.5	2							
Test avg. :	102	35.2	18.0	1	32.8	17.8	1	34.0	17.9	1	
High avg. :	108	38.1	19.2	3	36.0	19.3	1	36.9	19.3	2	
Low avg.:	96	32.8	15.5	1	28.4	15.8	1	30.7	16.3	1	
* Lsd(.05):				1			NS				
## TPG-avg.:				1			1				
@ Coef. Var. :				31			0				
No. Entries :		99	99	99	89	89	89				

^{*} DTM= average days from seeding (Beresford- June 16, Delmont- June 20, 2005) to maturity.



^{**} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum or maximum value to qualify for top performance group.

Table D. 2005 Conventional soybean entries by brand/variety, maturity group, gene for *Phytophthora* root rot resistance, and performance table number(s).

Drand / Naviety	Mat.	Como	Table
Brand / Variety	Grp.	Gene	No.(s)
COYOTE/5525	II	Rps1k	9
FARM ADVANTAGE/FA 1846	1	Not Reported	11
FARM ADVANTAGE/FA2145N	II	Not Reported	11
GOLD COUNTRY/2318	1	rps - None	9
LATHAM/EXP-E2400	II	rps - None	9
LATHAM/L1763	1	rps - None	9
LATHAM/L1840	1	rps - None	9
PUBLIC VARIETIES & EXPERIMENTALS:			
PUBLIC/HAMLIN	0	Rps1k	8
EXPERIMENTAL/SD00-1391	i	Not Reported	8,9
EXPERIMENTAL/SD00-1413	i	Not Reported	9
EXPERIMENTAL/SD00-1455	l ï	Not Reported	8,9
EXPERIMENTAL/SD00-1501	0	Not Reported	8
EXPERIMENTAL/SD00-1962	Ĭ	Not Reported	8,9
EXPERIMENTAL/SD00-314	l ii	Not Reported	9
EXPERIMENTAL/SD00-405	l ï	Not Reported	8,9
EXPERIMENTAL/SD00-533	l i	Not Reported	8,9
EXPERIMENTAL/SD00-632	l i	Not Reported	8,9
EXPERIMENTAL/SD00-732	II	Not Reported	9
EXPERIMENTAL/SD02-1045	0	Not Reported	8
EXPERIMENTAL/SD02-14	⊥ i	Not Reported	8,9
EXPERIMENTAL/SD02-22	l II	Not Reported	9
EXPERIMENTAL/SD02-26	l u	Not Reported	9
EXPERIMENTAL/SD02-829	0	Not Reported	8
EXPERIMENTAL/SD02-847	i	Not Reported	8,9
EXPERIMENTAL/SD02-906	1	Not Reported	8,9
EXPERIMENTAL/SD98-99-2	l II	Not Reported	9
EXPERIMENTAL/SD99-1909	0	Not Reported	8
EXPERIMENTAL/SDX98-74331	1	Not Reported	8,9
EXPERIMENTAL/SDX98-76192	0	Not Reported	8
EXPERIMENTAL/SDX98-82302	0	Not Reported	8
PUBLIC/SPINK	0	Rps1 (Rps1a)	8
PUBLIC/SURGE	0	Rps1 (Rps1a)	8
SANDS/S0I 256	II	Not Reported	9
SANDS/SOI 288	l II	Not Reported	9

Note: Strain or race resistance by gene type is reported in table B.

Table 8a. Non-Roundup Ready maturity group-0 and -I soybean variety yield averages- South Shore, South Dakota, 2004-2005.

		Averages by Maturity Group							
Brand/Variety (By maturity group &	DTM*	М	G-0	M	G-I				
2005 yield)		Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr				
EXPERIMENTAL/SD99-1909	115	45	36						
EXPERIMENTAL/SD02-829	112	44							
PUBLIC/SURGE	111	44	34						
PUBLIC/HAMLIN	111	43	35						
EXPERIMENTAL/SDX98-76192	115	41							
PUBLIC/SPINK	110	40	31						
EXPERIMENTAL/SD02-1045	117	40							
EXPERIMENTAL/SD00-1501	112	39							
EXPERIMENTAL/SDX98-82302	115	37							
GOLD COUNTRY/2318	120			52					
EXPERIMENTAL/SD00-632	118			45					
EXPERIMENTAL/SD02-14	119			45					
EXPERIMENTAL/SD02-906	118			45					
EXPERIMENTAL/SD00-533	117			44	35				
EXPERIMENTAL/SD00-1391	117			43					
EXPERIMENTAL/SD02-847	118			43					
EXPERIMENTAL/SD00-405	110			41					
EXPERIMENTAL/SD00-1455	118			40					
EXPERIMENTAL/SD00-1962	118			39					
EXPERIMENTAL/SDX98-74331	120			39	34				
Test avg.:	115	41	34	43	35				
High avg.:	120	45	36	52	35				
Low avg. :	110	37	31	39	34				
# Lsd (.05):		4	4	5	NS				
## TPG-value:		41	32	47	34				
@ Coef. Var.:		5	7	7	11				
No. Entries:		9	4	11	2				

^{*} DTM= average days from seeding on May 25, 2005 to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 8b. Non-Roundup Ready maturity group-O and -I soybean variety protein, oil, and lodging score averages- South Shore, South Dakota, 2005.

			2005	Averages	by Maturity	Group	
Brand/Variety (By maturity group &			MG-0			MG-I	
protein)	DTM*	Protein %	Oil %	Lodg- ing* (1-5)	Protein %	Oil %	Lodging** (1-5)
EXPERIMENTAL/SDX98-82302	115	42.5	14.5	2			
EXPERIMENTAL/SD00-1501	112	40.7	15.7	1			
EXPERIMENTAL/SDX98-76192	115	40.5	16.1	2			
EXPERIMENTAL/SD99-1909	115	38.5	16.4	1			
PUBLIC/SURGE	111	38.0	17.0	1			
PUBLIC/HAMLIN	111	37.4	17.3	1			
EXPERIMENTAL/SD02-829	112	36.9	16.8	1			
EXPERIMENTAL/SD02-1045	117	36.9	17.0	1			
PUBLIC/SPINK	110	35.2	18.0	1			
EXPERIMENTAL/SDX98-74331	120				41.0	15.9	1
EXPERIMENTAL/SD00-1455	118				40.5	16.1	2
EXPERIMENTAL/SD00-1962	118				40.1	14.9	1
GOLD COUNTRY/2318	120				38.3	17.0	1
EXPERIMENTAL/SD00-1391	117				38.0	17.0	1
EXPERIMENTAL/SD00-405	110				37.9	16.8	1
EXPERIMENTAL/SD02-847	118				37.8	16.8	2
EXPERIMENTAL/SD00-632	118				37.5	16.0	2
EXPERIMENTAL/SD02-14	119				37.2	16.5	1
EXPERIMENTAL/SD00-533	117				36.7	16.9	11
EXPERIMENTAL/SD02-906	118				36.0	18.0	1
Test avg. :	115	38.5	16.5	1	38.3	16.5	1
High avg.:	120	42.5	18.0	2	41.0	18.0	2
Low avg. :	110	35.2	14.5	1	36.0	14.9	1
* Lsd(.05):				1			
## TPG-avg. :				1			
@ Coef. Var. :				28			
No. Entries :		9	9	9	11	11	11

^{*} DTM= average days from seeding on May 25, 2005 to maturity;

If differences among values within a column are non-significant (NS), NS is indicated.

^{**} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different.

^{##} TPG-avg. = minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error.

Table 9a. Non-Roundup Ready maturity group-I & -II soybean variety yield averages- Beresford, South Dakota, 2004-2005.

		Averages by Maturity Grou			
Brand/Variety (By maturity group & 2005	DTM*	MG-I		MG-II	
yield)	Diw	Bu/Acre 2005	Bu/Acre 2-Yr	Bu/Acre 2005	Bu/Acre 2-Yr
LATHAM/L1840	126	52	60		
LATHAM/L1763	123	48	58		
EXPERIMENTAL/SD02-847	121	48			
EXPERIMENTAL/SD02-906	123	48			
EXPERIMENTAL/SD00-1962	123	47			
EXPERIMENTAL/SD00-632	125	46			
EXPERIMENTAL/SDX98-74331	125	45	50		
EXPERIMENTAL/SD00-1391	121	44			
EXPERIMENTAL/SD00-1455	121	44			
EXPERIMENTAL/SD02-14	125	43			
EXPERIMENTAL/SD00-533	122	36	45		
EXPERIMENTAL/SD00-405	119	35			
EXPERIMENTAL/SD02-22	126			48	
SANDS/S0I 256	127			45	55
LATHAM/EXP-E2400	128			45	
COYOTE/5525	133			43	56
EXPERIMENTAL/SD02-26	129			43	
EXPERIMENTAL/SD98-99-2	129			42	54
SANDS/S0I 288	130			41	55
EXPERIMENTAL/SD00-314	125			41	46
EXPERIMENTAL/SD00-732	126			40	52
EXPERIMENTAL/SD00-1413	126	.		38	
Test avg. :	125	45	53	43	53
High avg.:	133	52	60	48	56
Low avg.:	119	35	45	38	46
# Lsd (.05):		7	9	5	NS
## TPG-avg.:		45	51	43	46
@ Coef. Var. :		10	8	7	6
No. Entries :		12	4	10	6

^{*} DTM= average days from seeding on June 16, 2005 to maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 9b. Non-Roundup Ready maturity group-I & -II soybean variety protein, oil, and lodging score averages- Beresford, South Dakota, 2005.

		2005 Averages by Maturity Group					
Brand/Variety (By maturity group &	DTM*	MG-I			MG-II		
protein)		Protein %	Oil %	Lodging* (1-5)	Protein %	Oil %	Lodging** (1-5)
EXPERIMENTAL/SD00-1455	121	39.4	18.2	1			
EXPERIMENTAL/SDX98-74331	125	39.0	17.4	1			
EXPERIMENTAL/SD00-1962	123	38.3	17.2	1			
EXPERIMENTAL/SD00-1391	121	37.1	18.7	2			
EXPERIMENTAL/SD00-405	119	36.4	18.6	1			
EXPERIMENTAL/SD02-847	121	35.9	18.3	1			
LATHAM/L1840	126	35.8	19.1	1			
EXPERIMENTAL/SD00-533	122	35.4	17.5	2			
EXPERIMENTAL/SD00-632	125	35.3	17.8	1			
EXPERIMENTAL/SD02-906	123	34.6	19.0	1			
LATHAM/L1763	123	34.5	19.0	1			
EXPERIMENTAL/SD02-14	125	34.2	18.3	2			
EXPERIMENTAL/SD00-1413	126		.		38.3	17.5	1
EXPERIMENTAL/SD00-732	126				35.2	19.0	1
EXPERIMENTAL/SD02-26	129				35.2	17.5	1
LATHAM/EXP-E2400	128				35.1	19.0	1
EXPERIMENTAL/SD02-22	126				33.9	18.1	1
SANDS/SOI 256	127				33.8	18.9	1
COYOTE/5525	133				33.2	18.2	2
EXPERIMENTAL/SD00-314	125				32.8	20.0	1
EXPERIMENTAL/SD98-99-2	129		.		31.7	19.7	1
SANDS/S0I 288	130				31.1	18.4	1
Test avg. :	125	36.3	18.3	1	34.0	18.6	1
High avg.:	133	39.4	19.1	2	38.3	20.0	2
Low avg. :	119	34.2	17.2	1	31.1	17.5	1
* Lsd(.05):				1			1
## TPG-avg.:				1			1
@ Coef. Var. :				35			23
No. Entries :		12	12	12	10	10	10

^{*} DTM= average days from seeding on June 16, 2005 to maturity.

^{**} Lodging, 1= all plants erect, 5= all plants flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum or maximum value to qualify for top performance group.

[@] Coef. Var.= measure of trial experimental error.

Table E. Mailing addresses of seed companies entered in the 2005 soybean trials.

iable E. Mailing addresses C	n seeu companies	entereu in the 2005 soybean triais.
Company Name	Brand Name	Mailing Address
Coyote Seed Mills	Coyote	PO Box 16, Bridgewater, SD 57319-0016
Dairyland Seed Co.,Inc.	Dairyland	3570 Hwy H, West Bend, WI 53095
Dyna-Gro	Dyna-Gro	Emmetsburg, IA 50536
Foundation Seed Stocks	Sodak Genetics	Box 2207A, SDSU, Brookings, SD 57007
Farm Advantage	Farm Advantage	1275 Hwy 69, Belmont, IA 50421
Gold Country Seed Inc.	Gold Country	16506 Hwy 15 N., Hutchinson, MN 55350
Hefty Seed Co.	Hefty	47504 252nd St., Baltic, SD 57003
Integra Seed LTD	Integra	PO Box 40, Bozeman, MT 59771
Kaltenberg Seeds	Kaltenberg	5506 State Rd 19, Box 278, Waunakee, WI 53597
Keltgen Inc.	Agventure	302 Spruce St., Henry, SD 57243
Kruger Seed Co.	Kruger	33938 160th Ave.,PO Box A, Dike, IA 50624
Latham Seed Co.	Latham	131 180th St, Alexander, IA 50420-8028
Monsanto	Asgrow & Dekalb	4312 Carol Ave., Courtland, IL 60112
Mustang Seeds	Mustang	45122 Herman Blvd., Madison, SD 57042
Northstar Genetics	Northstar	Box 40, Wanamingo, MN 56553
Nutech Seed, LLC	Nutech	6131 North Fork Rd., Ames, IA 50010
Renk Seed Co.	Renk	6800 Wilburn Rd., Sun Prairie, WI 53590
Sansgaard Seed Farm, Inc.	Prairie Brand	15 X Ave., Story City, IA 50248
Sand Seed Service,Inc.	Sands	Box 648, Marcus, IA 51035
Seeds 2000	Seeds 2000	PO Box 200, Breckenridge, MN 56520
Stine Seed Co.	Stine	2225 Laredo Trail, Adel, IA 50003
Thompson Seeds	Thompson	40321 130th Ave., Leland, IA 50453
Thunder Seed	Thunder	3008 210th St. W., Hawley, MN 56549-9433
Wensman Seed Co.	Wensman	PO Box 190, Wadena, MN 56482
Ziller Seed Co.Inc.	Ziller	76374 380th St., Bird Island, MN 55310

ARCHIVE

SOYBEANS Variety Performance Trials-2006 Results



South Dakota State University • Cooperative Extension Service • U.S. Department of Agriculture

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EC 775—Precision Planted Soybeans 2006 Crop Performance Results is available electronically on the internet

http://agbiopubs.sdstate.edu/articles/EC775-06.pdf



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SOYBEAN Variety Performance Trials-2006 Results

Robert G. Hall, Extension agronomist - crops/Manager - crop testing Kevin K. Kirby, Agricultural research manager - crop testing

Table A - Nearest station precipitation and temperature averages and departures from normal for 2006.

Table B - Description of test locations.

Table C - Gene race resistance to Phytophthora root rot.

Table D - Roundup Ready™ entries with yield table numbers.

Table E - Non-Roundup Ready™ entries with yield table numbers.

Table F - Entrants (brand name) mailing addresses (after yield tables).

Successful soybean production is greatly affected by variety selection for a given growing area. This publication reports the agronomic performance of entries in the 2006 South Dakota performance trials for conventional and Roundup Ready™ soybean varieties. Important factors in variety selection include yield, maturity, plant height, lodging resistance, and *Phytophthora* root rot resistance. In the case of public varieties, additional information including emergence, shattering, and iron chlorosis scores (Table A) are available to assist in making variety selections.

General

Soybean varieties are classified according to maturity groups that are adapted to maturity zones. Maturity zones are based on day length and are therefore greatly impacted by latitude. Consequently, maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. Groups III through VIII are suited to Iowa, Nebraska, and southward into Texas.

These soybean performance trial results are reported according to the prevalent maturity zones in South Dakota (see map). The Roundup-Ready™ soybean variety trials are conducted in the following test zones and locations:

Northern test zone: Maturity group-0 and -I trials at South Shore and Warner.

Central test zone: Maturity group-0, -I, and -II trials at Brookings and Bancroft.

Southern test zone: Maturity group-I and -II trials at Beresford and Geddes.

The conventional soybean variety trials are only conducted on SDSU affiliated research farms and locations:

NE Research Farm, South Shore, maturity group-0 and -I trials.

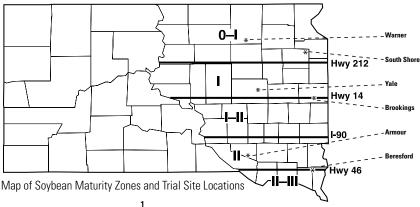
Plant Science Research Farm, Brookings, maturity group-0, -I, and -II trials

Southeast South Dakota Experiment Station, Beresford, maturity group-I and -II trials.

Note there are transition areas where varieties of two maturity groups may perform similarly. In such cases other factors like rainfall and/or elevation may moderate the effect of latitude on maturity. In most cases, an earlier maturity group may be seeded in a zone suited to a later maturity group. Generally, this is only practical if seeding is delayed, when reseeding following hail, or if double cropping.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed by using resistant varieties. However, the resistance to Phytophthora root rot is fungus-race specific. This means resistance to one race does not necessarily impart resistance to other races. Knowledge of the races of PRR fungus prevalent in your area is helpful. If a field is suspected of having PRR and the specific race(s) involved is unknown, then selection of varieties having genes that impart a wide range of race resistance is strongly suggested (see discussion of Phytophthora under General Test Procedures).

An alternative method of control is the use of "tolerant varieties." Tolerant varieties are not resistant to PRR in the seedling stage. Therefore, a *Phytophthora* specific fungicide must be applied to protect them. Presently, we have no information on



the field tolerance of varieties adapted to this region. Therefore, field tolerance ratings are not given in this publication.

Certified seed is the best source of seed and the only way to be assured of the genetic purity of the variety seeded. In addition, inoculation of seed with the appropriate nitrogen-fixing bacterium is a good fundamental practice. Inoculation must be practiced if soybeans are seeded in soils not previously planted to soybeans. On soils previously cropped to soybeans there is no guarantee that beneficial bacteria will be present to naturally inoculate planted seed. Therefore, inoculation of seed at planting is an inexpensive means of increasing the percentage of plants that will fix nitrogen in the current crop year.

Yield

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested at a given location. In addition, 2-year averages are included where varieties have been tested for 2 years. Yields, test averages, and least significant difference (Lsd) values are printed at the bottom of each yield column for each location and are rounded off to the nearest bushel.

The Lsd value can be used to determine whether varieties differ in yield potential. For example, assume Variety A yields 30 bushels, Variety B yields 25 bushels, and the calculated Lsd value is 4 bushels. The yield difference between varieties A and B is 5 bushels per acre. Since the yield difference of 5 bushels is greater than the test Lsd value of 4 bushels, the yield of Variety A (30 bushels) is significantly higher than the yield of Variety B (25 bushels). In contrast, if Variety A yielded 28 bushels and Variety B yielded 25 bushels, the yield difference would be 3 bushels per acre. In this case, both varieties would have a similar yield because their yield difference of 3 bushels was less than the test Lsd value of 4 bushels per acre.

Use Lsd values to identify the best-yielding varieties. The Lsd value indicated at the bottom of each yield column is used to calculate the **minimum top yield value.** For example, if the highest yield within a column is 50 bushels and the Lsd value for that yield column is 5 bushels, then the minimum top yield value equals 45 bushels (50-5=45). Within a yield column, varieties with yields equal to or higher than this minimum top yield value are the best yielding varieties.

Entries in all tables are sorted from highest to lowest values according to the variable(s) listed in the Brand/Variety column of each performance table. Note: Entries tested for 2 years may also have a top yield group value in the 2006 yield column.

Participating companies pick the locations where their entries are tested. Entries are placed into maturity group-0, -I, or -II test trials. The company selects the maturity group trial for its entries at each location.

Generally, each company has one or more maturity group checks for the varieties it markets. However, there are no standard regional or national check varieties for maturity. Consequently, a late group-I variety from one company may be similar in maturity to an early group-I variety from another company because they use different check varieties for maturity. As a result, this testing program can not guarantee that all entries are placed in the proper maturity trial. In some trials, borderline entries with maturity group ratings at or near the arbitrary breaks between the late group-0s and early group-Is and between the late group-Is and early-group-IIs may crossover at a given location.

When evaluating the performance of any entry in a given trial it is strongly suggested that you also note the reported maturity of the entry. Since all entries at a given location are seeded the same day then you can compare the relative difference in maturity (days after maturity) between varieties. If the maturity rating for an entry in a group-I test is similar to the rating for a variety in the group-II test at the same test location, then you might conclude they are similar in maturity regardless of their company maturity rating.

It is recommended that you use caution when comparing the maturity rating of a given variety from one location to the rating obtained at other locations. Should early season soil moisture and soil temperature values differ greatly, then maturity rating may differ between locations; therefore, maturity comparisons of a variety over many locations may be misleading.

The efforts of J. Smolik and A. Heuer, NE Research Farm, South Shore; T. Bortnem and staff, Plant Science Research Farm, Brookings; and R. Berg and staff, Southeast Experiment Farm, Beresford, in obtaining the data is gratefully acknowledged. The comments regarding *Phytophthora* root rot race resistance and tolerance by Marty Draper, Extension plant pathologist are appreciated.

In addition, the assistance and cooperation of our farmer co-operators, Allen and Inel Ryckman, Warner; Curtis Sybesma, Geddes; and Erland Weerts, Bancroft, is gratefully acknowledged.

Protein and Oil Content

The protein and oil values reported are for the 2006 cropping season. At all locations, one subsample from each replication (three subsamples total) of every variety in each trial was combined and a sample was then tested for protein and oil. The analysis was conducted using a FOSS TECATOR Model Infratec 1229 grain analyzer that was calibrated using the manufacturer's calibration software. Samples of known protein and oil that had been tested by the SDSU Agricultural Experiment Station Biochemistry Laboratory were then used to verify the software calibration. All protein and oil values are adjusted to a 13% moisture basis.

Weather and Seasonal Precipitation

A best estimate of seasonal precipitation and its distribution is shown in Table A. Growing season precipitation was near normal at all locations in April. However, most locations received below-average rainfall starting in May and continuing through the end of July. In August many locations received normal to above-average levels of rainfall, but in most cases this rainfall came during the latter half of August.

At some locations like Brookings, the later maturity group varieties performed better than the early maturity varieties because they caught a rainfall before development of their early reproductive stages had ceased. Consequently, the later-season varieties were unable to compensate for any earlier season losses in yield potential while the early season varieties that had already ceased reproductive development were unable to compensate for losses in yield potential.

Generally, the average seasonal temperatures were warmer than normal in April and near normal in May. At Aberdeen and Huron, the seasonal temperatures were about 2°F higher than average in June. In July, average temperatures ranged from a low of 3.3°F at Beresford and Brookings to 5.5 (Academy) and 6.6°F (Huron) above the long-term location average.

General Test Procedures

These test procedures generally apply to both conventional non-Roundup Ready and Roundup Ready™ soybean entries except for the chemical weed control imposed. Trial locations, soil type, tillage method, previous crop, pesticide usage, and seeding dates are indicated in Table B.

Test Procedures: A row spacing of 30 inches was used at all locations. The seeding rate was 165,000 seeds per acre for all varieties and locations. Test plots consisted of 4-row plots, 20 feet long, with three replications at all locations. Seeding at all locations was accomplished with a Monosem precision row crop planter. The use of this planter this year resulted in very uniform seed spacing within the seed row. The center two rows of each plot were harvested for yield.

Yield: Plots were harvested at 15% seed moisture or less. Yields were calculated on a 13% moisture content basis and expressed in bushels per acre. Harvest was by a Massey Ferguson 8XP small plot combine.

Reporting variety maturity: Variety maturity is reported as "Days to maturity" or DTM. Entries were mature when 95% of

the pods had turned brown. Each maturity value is obtained by determining the average number of days from seeding to maturity for two replicates. If the DTM value is missing, the entry did not reach maturity before the first killing frost and no value is given.

Lodging Score: Scores at maturity are based on average erectness of the main stem of plants within each variety. 1 = all plants erect, 2 = slight lodging, 3 = lodging at a 45 degree angle, 4 = severe lodging, and 5 = all plants flat.

Phytophthora: The gene resistance traits of entries to the many *Phytophthora* races was supplied by the participating seed company (proprietary entries) or obtained from the USDA, Uniform Soybean Tests, Northern States (public entries). A key for each type of *Phytophthora* gene and the race resistance it imparts to a variety is indicated in Table C. The specific race resistance to PRR for a given variety, as reported by the seed company, can be determined by noting the type of *Phytophthora* gene in tables D (Roundup Ready[™]) and E (non-Roundup Ready) and referencing the gene type to table C to find the final race resistance. Presently, races 1, 3, and 4 are the most common races in South Dakota.

ROUNDUP READY™ SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

Note: Yields are reported as 2006 averages or 2-year averages (2005-06).

NORTHERN TEST ZONE

SOUTH SHORE, Northeast Research Farm WARNER, No-till, Allen & Inel Ryckman Farm (cooperators)

South Shore, Group-0 (Tables 1a & 1b): The 2006 and 2-year test yield averages were 30 and 40 bushels per acre, respectively (Table 1a). Varieties had to average 30 bushels or higher to be in the top yield group for 2006. Varieties had to average 36 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 5 bushels in 2006 to be significantly different, while yield averages for 2 years were not significantly different. The 2006 protein, oil, and lodging score test averages were 37.1%, 18.9% and 1, respectively (Table 1b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not differ among entries.

Warner, Group-0 (Tables 1a & 1b): The 2006 and 2-year test yield averages were 33 and 42 bushels per acre, respectively (Table 1a). Varieties had to average 36 bushels or higher to be in the top yield group for 2006. Varieties had to average 39 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 4 bushels in 2006 to be significantly different, while yield averages for 2 years were not significantly different. In 2006, the protein, oil, and lodging score test averages were 36.2%, 19.7%, and 1, respectively (Table 1b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not differ among entries.

Northern test zone, Group-0 (Tables 1a & 1b): The 2006 and 2-year test yield averages in the northern zone were 32 and 41 bushels per acre, respectively (Table 1a). Varieties had to average 36 bushels or higher to be in the top yield group for 2006 and 42 bushels or higher to be in the top yield group for 2 years.

Variety yield averages had to differ by 3 bushels in 2006 to be significantly different. The 2006 protein, oil, and lodging score test averages were 36.6%, 19.3%, and 1, respectively, across both locations (Table 1b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not differ among entries across both locations.

South Shore, Group-I (Tables 2a & 2b): The 2006 and 2-year test yield averages were 27 and 37 bushels per acre, respectively (Table 2a). Varieties had to average 28 bushels and 34 bushels or higher to be in the top yield group for 2006 and for 2 years, respectively. Variety yield averages had to differ by 4 bushels in 2006 to be in the top performance group for yield, while the 2-year averages were not significantly different. The 2006 protein, oil, and lodging score test averages were 37.0%, 18.2%, and 1, respectively (Table 2b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not differ among entries.

Warner, Group-I (Tables 2a & 2b): The 2006 and 2-year test yield averages were 34 and 42 bushels per acre, respectively (Table 2a). Varieties had to average 24 bushels and 36 bushels or higher to be in the top yield group for 2006 and for 2 years, respectively. Variety yield averages had to differ by 5 bushels in 2006 to be significantly different, while the yield averages for 2 years did not differ significantly. The 2006 protein, oil, and lodging score test averages were 36.1%, 19.5%, and 1, respectively (Table 2b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not differ among entries.

Northern test zone, Group-I (Tables 2a & 2b): The yield averages were 31 and 40 bushels per acre for 2006 and for 2 years, respectively (Table 2a). Varieties had to average 33 bushels or higher in 2006 to be in the top yield group. Yield differences for 2 years could not be determined because of the high coefficient of variation (CV) of 29% for this zone. The high level of experimental error associated with this trial for 2 years indicated

any yield differences among varieties were not valid. Variety yield averages had to differ by 3 bushels in 2006 to be significantly different from one another. Again, the high CV associated with the 2-year yields prevented a valid determination of how much any two varieties had to differ in yield to be significantly different across both locations. The 2006 protein, oil, and lodging score test averages were 36.5%, 19.1%, and 1, respectively, across both locations (Table 1b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries across both locations.

CENTRAL TEST ZONE

BROOKINGS, Plant Science Research Farm BANCROFT, No-till, Erland Weerts (cooperator)

Note: The Bancroft trials were hit with hail on July 13, 2006. This resulted in 40-50% defoliation of the stands.

Brookings, Group-0 (Tables 3a & 3b): The 2006 and 2-year test yield averages were 51 and 58 bushels per acre, respectively (Table 3a). Varieties had to average 53 bushels or higher to be in the top yield group for 2006. Varieties had to average 57 bushels or higher to be in the top yield group for 2 years. Variety yield averages had to differ by 5 bushels in 2006 and for 2 years to be significantly different. The 2006 protein, oil, and lodging score test averages were 37.3%, 19.0%, and 1, respectively (Table 3b). Lodging score averages had to equal 1 to be in the top performance group. The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Bancroft, Group-0 (Tables 3a & 3b): The yield average was 45 for 2006 and 55 bushels for 2 years (Table 3a). Varieties had to average 43 and 51 bushels or higher to be in the top yield group for 2006 and for 2 years, respectively. Variety yield averages had to differ by 5 bushels in 2006 to be significantly different. In contrast, there were no significant yield differences among the varieties for the 2-year period. The 2006 protein, oil, and lodging score test averages were 36.3%, 19.9%, and 1, respectively (Table 3b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Central test zone, Group-0 (Tables 3a & 3b): The 2006 yield average was 48 bushels and the 2-year average was 57 bushels per acre (Table 3a). Varieties had to average 49 and 52 bushels or higher to be in the top yield group for 2006 and for 2 years, respectively. Variety yield averages had to differ by 4 bushels in 2006 to be significantly different, while for the 2-year period all the varieties had a similar yield average across both locations. In 2006 the protein, oil, and lodging score test averages were 36.8%, 19.4%, and 1, respectively, across both locations (Table 3b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries across both locations.

Brookings, Group-I (Tables 4a & 4b): The 2006 and 2-year test yield averages were 54 and 61 bushels per acre, respectively (Table 4a). Varieties had to average 55 and 62 bushels or higher to be in the top yield group for 2006 and for 2 years, respectively. Variety yield averages had to differ by 5 bushels in 2006 and 3 bushels for 2 years to be significantly different. The 2006 protein, oil, and lodging score test averages were 36.2%, 18.9%, and 1,

respectively (Table 4b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Bancroft, Group-I (Tables 4a & 4b): The yield average was 54 and 60 bushels per acre for 2006 and for 2 years, respectively (Table 4a). In both 2006 and for 2 years there were no significant yield differences among the varieties tested. This was likely affected greatly by the hail at this test site on July 13, 2006, resulting in a 40 to 50% loss of leaves. This would have affected the ability of the test to determine any difference in yield among the varieties entered in 2006 and in the 2-year period. In 2006, the protein, oil, and lodging score test averages were 35.9%, 19.9%, and 1, respectively (Table 4b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Central test zone, Group-I (Tables 4a & 4b): The yield average was 55 and 61 bushels per acre in 2006 and for 2 years, respectively (Table 4a). Varieties had to average 53 and 55 bushels or higher to be in the top yield group for 2006 and for 2 years, respectively. Variety yield averages had to differ by 7 bushels in 2006 to be significantly different; while there was no significant difference in yield average among the varieties for 2 years. The 2006 protein, oil, and lodging score test averages were 36.1%, 19.4%, and 1, respectively, across both locations (Table 4b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries across both locations.

Brookings, Group-II (Tables 5a & 5b): The 2006 and 2-year test yield averages were 56 and 63 bushels per acre, respectively (Table 5a). Varieties had to average 57 bushels or higher in 2006 and 61 bushels or higher for 2 years to be in the top yield group. In 2006, the protein, oil, and lodging score test averages were 36.4%, 18.9%, and 1, respectively (Table 5b). Lodging score averages had to be 2 or less to be in the top performance group. The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Bancroft, Group-II (Tables 5a & 5b): Yield average was 52 and 62 bushels per acre in 2006 and for 2 years, respectively (Table 5a). Varieties had to average 43 bushels or higher to be in the top yield group for 2006. In both years there were no significant yield differences among the varieties tested. This was likely caused by the hail at this test site on July 13, 2006. The 40 to 50% loss of leaves would have affected the ability of the test to determine any difference in yield among the varieties entered in 2006 and for the 2-year period. The 2006 protein, oil, and lodging score test averages were 36.1%, 19.5%, and 1, respectively (Table 5b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Central test zone, Group-II (Tables 5a & 5b): The 2006 yield average was 55 and 63 bushels per acre for 2006 and for 2 years, respectively (Table 5a). Yield differences among varieties were not significant for 2006 or for the 2-year period. This lack of yield difference across both locations was likely affected by the hail event at Bancroft in 2006. In 2006, the protein, oil, and lodging score test averages were 36.2%, 19.2%, and 1, respectively, across both locations (Table 5b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries across both locations.

SOUTHERN TEST ZONE

BERESFORD, South Dakota Agricultural Experiment Station Farm

GEDDES, No-till, Curtis Sybesma (cooperator)

Note: The test site at Delmont in 2005 was moved to Geddes in 2006.

Beresford, Group-I (Tables 6a & 6b): The 2006 and 2-year test yield averages were 61 and 56 bushels per acre, respectively (Table 6a). Varieties had to average 62 bushels or higher to be in the top yield group. There were no significant yield differences among varieties for 2 years so all varieties were in the top yield group. Variety yield averages had to differ by 5 bushels in 2006 to be significantly different from one another. The 2006 protein, oil, and lodging score test averages were 36.6%, 19.7%, and 2, respectively (Table 6b). Lodging was evident and entries with a lodging score of 2 or less were in the top performance group for resistance to lodging.

Geddes, Group-I (Tables 6a & 6b): The 2006 and 2-year test yield averages were 46 and 36 bushels per acre, respectively (Table 6a). Varieties had to average 48 bushels or higher in 2006 and 35 bushels or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 4 bushels in 2006 and 6 bushels for two years to be significantly different. The 2006 protein, oil, and lodging score test averages were 36.9%, 19.7%, and 1, respectively (Table 6b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Southern test zone, Group-I (Tables 6a & 6b): The 2006 and 2-year test yield averages in the Southern zone were 53 and 46 bushels per acre, respectively (Table 6a). Varieties had to average 57 bushels or higher in 2006 to be in the top yield group; while there were no significant yield differences among varieties for 2 years. Variety yield averages had to differ by 3 bushels in 2006 to be significantly different. In contrast, for the 2-year period a high CV indicated there was too much experimental error associated with the 2-year data across both locations to make a valid determination of yield differences among the entries. The 2006 protein, oil, and lodging score test averages were 36.8%, 19.7%, and 1, respectively, across both locations (Table 6b). The lodging

score average of 1 and Lsd value of 0.4 (less than 1) indicated that some lodging occurred and those entries with a score of 1 were in the top performance group for resistance to lodging.

Beresford, Group-II (Tables 7a & 7b): The 2006 and 2-year test yield averages were 63 and 59 bushels per acre, respectively (Table 7a). Varieties had to average 69 bushels or higher in 2006 and 60 bushels for 2 years to be in the top yield group. Variety yield averages had to differ by 7 bushels in 2006 and 6 bushels for 2 years to be significantly different. The 2006 protein, oil, and lodging score test averages were 36.4%, 19.3%, and 2, respectively (Table 7b). The lodging score top performance group value of 2 indicates varieties with a score of 2 or less were in the top group for lodging resistance.

Geddes, Group-II (Tables 7a & 7b): The 2006 and 2-year test yield averages were 45 and 36 bushels per acre, respectively (Table 7a). Varieties had to average 46 bushels or higher in 2006 and 36 bushels or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 4 bushels in both 2006 and for 2 years to be significantly different. The 2006 protein, oil, and lodging score test averages were 36.5%, 19.5%, and 1, respectively (Table 7b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Southern test zone, Group-II (Tables 7a & 7b): The 2006 and 2-year test yield averages in the Southern zone were 54 and 48 bushels per acre, respectively (Table 7a). Varieties had to average 58 bushels or higher in 2006 to be in the top yield group. Variety yield averages had to differ by 4 bushels in 2006 to be significantly different from one another. Valid yield differences for the 2-year period across both locations could not be determined. The high CV of 19% indicated there was too much experimental error associated with this trial to make valid determinations. Therefore, growers are encouraged to look at both the 2006 and the 2-year yield averages at each location separately to evaluate average yield trends at a given location. The 2006 protein, oil, and lodging score test averages were 36.4%, 19.4%, and 1, respectively across both locations (Table 7b). The lodging score average of 1 and Lsd value of 0.4 (less than 1) indicated that some lodging occurred and those entries with a score of 1 were in the top performance group for lodging resistance.

NON-ROUNDUP READY SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

SOUTH SHORE, Northeast Research Farm BERESFORD, South Dakota Agricultural Experiment Station Farm

Note: Yields are reported as 2006 averages or 2-yr averages (2005-06).

South Shore, Group-0 (Tables 8a & 8b): The 2006 and 2-year test yield averages were 24 and 33 bushels per acre, respectively (Table 8a). Varieties had to average 28 bushels or higher in 2006 and 33 bushels or higher for 2 years to be in the top yield group. Variety yield averages had to differ by 3 bushels in 2006 to be significantly different; while there were no significant differences in yield among the varieties tested 2 years. The 2006 protein, oil, and lodging score test averages were 37.3%, 18.9%, and 1, respectively (Table 8b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

South Shore, Group-I (Tables 8a & 8b): The 2006 and 2-year test yield averages were 23 and 34 bushels per acre, respectively (Table 8a). Varieties had to average 23 bushels or higher in 2006 and 33 bushels or higher for 2 years to be in the top performance group for yield. Variety yield averages had to differ by 3 bushels or more in 2006 to be significantly different. There was no difference in yield among the three varieties tested for 2 years. The 2006 protein, oil, and lodging score test averages were 36.3%, 19.0%, and 1, respectively (Table 8b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Brookings, Group-0 (Tables 9a & 9b): The 2006 test yield average was 37 bushels per acre (Table 9a). Varieties had to average 36 bushels or higher in 2006 to be in the top yield group. The 2006 protein, oil, and lodging score test averages were 37.3%, 19.0%, and 1, respectively (Table 9b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries at this location.

<u>Brookings, Group-I (Tables 9a & 9b):</u> The 2006 test yield average was 45 bushels per acre (Table 9a). Varieties had to

average 46 bushels or higher in 2006 to be in the top performance group for yield. Variety yield averages had to differ by 6 bushels or more in 2006 to be significantly different. The 2006 protein, oil, and lodging score test averages were 36.6%, 18.8%, and 1, respectively (Table 9b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Brookings, Group-II (Tables 9a & 9b): The 2006 and 2-year test yield averages were 48 bushels per acre (Table 9a). Varieties had to average 46 bushels or higher in 2006 to be in the top yield group. Variety yield averages had to differ by 6 bushels in 2006 to be significantly different. The 2006 protein, oil, and lodging score test averages were 36.4%, 18.5%, and 1, respectively (Table 9b). The lodging score average of 1 and Lsd value of 0 indicated lodging did not occur and did not differ among entries.

Beresford, Group-I (Tables 10a & 10b): The 2006 and 2-year test yield averages were 55 and 52 bushels per acre, respectively (Table 10a). Varieties had to average 55 bushels or higher in 2006 and 52 bushels or higher for 2 years to be in the top performance group for yield. Variety yield averages had to differ by 5 bushels in 2006 to be significantly different, while there were no significant yield differences among the entries for 2 years. The 2006 protein, oil, and lodging score test averages were 36.4%, 19.8%, and 3, respectively (Table 10b). The lodging score top performance group value of 2 indicates varieties with a score of 2 or less were in the top group for lodging resistance.

Beresford, Group-II (Tables 10a & 10b): The 2006 and 2-year test yield averages were 61 and 52 bushels per acre, respectively (Table 10a). Varieties had to average 62 bushels or higher in 2006 and 50 bushels or higher for 2 years to be in the top performance group for yield group. Variety yield averages had to differ by 6 bushels in 2006 to be significantly different. There was no difference in yield average between the varieties tested for 2 years. The 2006 protein, oil, and lodging score test averages were 36.6%, 19.3%, and 2, respectively (Table 10b). The lodging score top performance group value of 2 indicates varieties with a score of 2 or less were in the top group for lodging resistance.

Table A. Nearest weather station accumulated precipitation accumulation and average daily temperatures for 2006 and their departures from normal (DFN)

Source: South Dakota Office of Climate and Weather.

Castian	Varial	1_		Data is accu	mlated from <i>F</i>	April up to the day ending:				
Station	Variab	ie	Apr. 30	May 31	June 30	July 31	Aug. 31	Sept. 30		
	Precipin	06	2.41	2.16	3.21	0.71	2.47	2.67		
Aberdeen		DFN*	0.58	-0.53	-2.8	-2.21	0.07	0.86		
Airport	Avg.Temp	06	51	58	69	77	72	57		
		DFN*	5.6	0.1	2.2	4.8	1.5	-2.8		
	Precipin	06	2.53	1.99	0.95	0.83	1.93	5.66		
South Shore		DFN*	0.53	-0.73	-2.88	-0.244	0.53	3.77		
(NE Farm)	Avg.Temp	06	48	56	66	73	69	58		
		DFN*	5	0.2	1.3	3.3	1.2	-0.1		
	Precipin	06	1.73	0.98	1.3	0.6	5.68	4.61		
Iroquois**/		DFN*	0.51	-1.89	-2.06	2.53	3.6	2.59		
Huron***	Avg.Temp	06	53	59	70	80	74	58		
		DFN*	6.9	0.8	2.1	6.6	13	10.1		
	Precipin	06	2.65	2.02	2.35	0.23	5.65	4.09		
Brookings		DFN*	0.62	-0.93	-1.88	-2.88	2.71	1.61		
2NE	Avg.Temp	06	49	58	67	74	69	55		
		DFN*	4.8	1.3	0.9	3.3	0.4	-4.1		
	Precipin	06	3.44	1.51	3.72	0.39	3.23	7.81		
Centerville		DFN*	0.97	-2.14	-0.23	-2.96	0.4	5.55		
(SE Farm)	Avg.Temp	06	53	61	70	77	72	53		
		DFN*	5.8	0.5	0.6	3.3	9.7	8.3		
	Precipin	06	3.62	0.89	2.36	0.47	2.35	NA		
Platte**/		DFN*	1.01	2.91	1.05	-2.69	0.12	-		
Academy**	Avg.Temp	06	52	60	70	79	73	58		
		DFN*	6.5	2.4	2.6	5.5	1.6	-3.7		

^{*} DFN - how much a variable for year 2006 is greater or less (-) than the long-term average.

*** Precipition data.

*** Temperature data.

Table B. Description of trial locations- soil type, tillage methods, previous crop, pesticides used, and seeding dates.

Location	Soils & Manag	ement	Previous		Herb	icides		Nitragin Soybean Soil Implant	Date
(County)	Туре	Tillage	crop		p Ready		ndup Ready	Down seed tube	seeded
		Method		Pre	Post	Pre	Post	at label rate	
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	Yes	May 26
South Shore (Codington)	Kransburg silty clay loam, 3-6% slope	Conven- tional	S. Wheat	None	Roundup twice	None	Harmony/ Poast - split	Yes	May 23
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	No-till	Corn	None	Roundup once	-	-	Yes	May 30
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conven- tional	S. Wheat	None	Roundup twice	None	Harmony/ Poast/ Basagran split	Yes	May 22
Geddess (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	Yes	May 25
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conven- tional	Corn	Dual- Python tank mix	Roundup once	Dual- Python tank mix	None	Yes	May 17

Table C. 2006 Roundup ReadyTM soybean entries by brand/variety, maturity group, and gene for *Phytophthora* root rot resistance as reported by the entrants; and performance table number(s).

Brand / Variety	Mat. Grp.	Gene	Table No. (s)	Brand / Variety	Mat. Grp.	Gene	Table No. (s)
AGVENTURE/ AV11T1RR	1.0	Rps1k	2	FARM ADVANTAGE/ 7224	2.2	Rps1 (Rps1a)	7
AGVENTURE/ AV14D6	1.4	Not Reported	2	FARM ADVANTAGE/ 7253	2.5	Rps1c	7
AGVENTURE/ AV15D7	1.5	Not Reported	2	GOLD COUNTRY SEED/ 2509R	0.9	Not Reported	1
AGVENTURE/ AVEXP09D1	0.9	Not Reported	1	GOLD COUNTRY SEED/ 2713R	1.3	Rps1k	2,4
AGVENTURE/ AVEXP10G9	1.0	Not Reported	2	GOLD COUNTRY SEED/ 8716R	1.6	Rps1k	2,4
ASGROW/ AG0803	0.8	Rps1k	1	GOLD COUNTRY SEED/2717NR	1.7	Rps1c	6
ASGROW/ AG1002	1.0	rps1 - No resist.	2	GOLD COUNTRY SEED/6714NR	1.4	Not Reported	2
ASGROW/ AG1102	1.1	Rps1k	2,4	HEFTY/ 195RR	1.9	rps1 - No resist.	4,6
ASGROW/ AG1702	1.7	Rps1k	2,4,6	HEFTY/ 226RR	2.2	Rps1 (Rps1a)	5,7
ASGROW/ AG1903	1.9	Rps1k	4,6	HEFTY/ 266RR	2.6	Rps1c	7
ASGROW/ AG2002	2.0	Rps1c	5	HEFTY/ EXP067RR	0.6	rps1 - No resist.	1
ASGROW/ AG2107	2.1	Rps1k	5	HEFTY/ EXP117RR	1.0	rps1 - No resist.	2
ASGROW/ AG2403	2.4	Rps1k	7	HEFTY/ EXP137RR	1.3	Rps1k	2,4
ASGROW/ AG2605	2.6	Rps1k	7	KALTENBERG/ KB135RR	1.3	Rps1c	4
ASGROW/ AG2802	2.8	Rps1k	7	KALTENBERG/ KB155RR	1.5	Rps1k	4
COYOTE/ 4523RR	2.3	Rps1k	5,7	KALTENBERG/ KB256RR	2.5	Rps1k	7
COYOTE/ 4527RR	2.7	Rps1k	5,7	KALTENBERG/ KB258RR	2.5	rps1 - No resist.	7
COYOTE/ 4719RR	1.9	Rps1k	4,6	KALTENBERG/ KB266RR	2.5	rps1 - No resist.	7
COYOTE/ 9524RR	2.4	Rps1k	5,7	KALTENBERG/ KB276RR	2.7	Rps1k	7
COYOTE/ EXP 622RR	2.2	Rps1 (Rps1a)	5,7	KRUGER/ EXP057RR	0.5	Rps1 (Rps1a)	1,3
COYOTE/ EXP 625NRR	2.5	rps1 - No resist.	5,7	KRUGER/ EXP067RR	0.9	rps1 - No resist.	1,3
COYOTE/ EXP 626RR	2.6	Rps1k	5,7	KRUGER/ EXP086RR	0.8	Rps1k	1
CROW'S/ C0520R	0.5	rps1 - No resist.	1	KRUGER/ EXP186RR	1.8	rps1 - No resist.	4
CROW'S/ C1106R	1.1	Rps1k	2	KRUGER/ EXP226RR	2.2	Rps1 (Rps1a)	5
CROW'S/ C1706R	1.7	Rps1k	4	KRUGER/ K-042RR	0.4	Rps1 (Rps1a)	1
CROW'S/ C2618R	2.6	rps1 - No resist.	7	KRUGER/ K-056RR	0.6	Rps1 (Rps1a)	1,3
CROW'S/ C2917R	2.9	rps1 - No resist.	7	KRUGER/ K-072RR	0.7	rps1 - No resist.	1,3
DAIRYLAND/ DSR-0701/RR	0.7	Rps1k	1	KRUGER/ K-098RR	0.9	rps1 - No resist.	1,3
DAIRYLAND/ DSR-0903/RR	0.9	Not Reported	1,3	KRUGER/ K-100RR	1.0	Rps1k	2,4
DAIRYLAND/ DSR-1301/RR	1.3	Not Reported	2,4	KRUGER/ K-120RR	1.2	Rps1k	2,4
DAIRYLAND/ DSR-1520/RR	1.5	Not Reported	4	KRUGER/ K-140RR	1.5	Rps1k	2,4,6
DAIRYLAND/ DSR-199RRSTS	1.9	Rps1k	4	KRUGER/ K-156RR	1.4	Rps1k	2,4,6
DAIRYLAND/ DSR-2200/RR	2.2	Not Reported	7	KRUGER/ K-177RR	1.7	Rps1k	2,4,6
DAIRYLAND/ DSR-2300/RR	2.3	Not Reported	7	KRUGER/ K-188RR/SCN	1.7	Rps1k	2,4,6
DAIRYLAND/ DSR-234/RR	2.3	Rps1k	7	KRUGER/ K-194RR	1.8	Rps1k	2,4,6
DAIRYLAND/ DSR-2511/RR	2.5	Not Reported	7	KRUGER/ K-195+RR/SCN	2.0	Rps1k	4,6
DAIRYLAND/ DSR-2600/RR	2.6	Rps1k	7	KRUGER/ K-211+RR	2.2	Rps1k	5,7
DAIRYLAND/ DSR-2820/RR	2.8	Not Reported	7	KRUGER/ K-223+RR	2.2	Rps1k	5,7
DAIRYLAND/ DSR0902RRSTS	0.9	Rps1k	1	KRUGER/ K-233+RR	2.4	Rps1k	5,7
DAIRYLAND/ DSR1500RRSTS	1.5	Not Reported	2,4	KRUGER/ K-234RR	2.4	rps1 - No resist.	5,7
DAIRYLAND/ DSR1701RRSTS	1.7	Not Reported	4	KRUGER/ K-235RR/SCN	2.3	Rps1c	5,7
DAIRYLAND/ DSR2000RRSTS	2.0	Rps1k	7	KRUGER/ K-255RR	2.5	rps1 - No resist.	5,7
DAIRYLAND/ DSR2500RRSTS	2.5	Rps1k	7	KRUGER/ K-259RR	2.6	Rps1k	5,7
DAIRYLAND/ DSR2702RRSTS	2.7	Not Reported	7	KRUGER/ K-287RR/SCN	2.8	Rps1c	7
DAIRYLAND/ DST22-003/RR	2.7	Not Reported	7	KRUGER/ K-289+RR	2.8	Rps1k	7
DEKALB/ DKB18-51		Rps1k		LATHAM/ EXP-E1950R		Rps1k	
	1.8	·	2,4 5,7		1.9	The state of the s	2,4
DEKALB/ DKB22-52	2.2	rps1 - No resist.		LATHAM/ EXP-E2253R	2.2	Rps1 (Rps1a)	5
DEKALB/ DKB25-51	2.5	Rps1k	7	LATHAM/ EXP-E2810R	2.8	rps1 - No resist.	7
DEKALB/ DKB26-53	2.6	Rps1c	7	LATHAM/ EXP-E2976R	2.9	rps1 - No resist.	7
DEKALB/ DKB27-53	2.7	Rps1c	7	LATHAM/ L1553R	1.5	Rps1k	2

Table C. 2006 Roundup ReadyTM soybean entries by brand/variety, maturity group, and gene for *Phytophthora* root rot resistance as reported by the entrants; and performance table number(s) (continued).

Brand / Variety	Mat. Grp.	Gene	Table No. (s)	Brand / Variety	Mat. Grp.	Gene	Table No. (s)
LATHAM/ L2500R	2.5	rps1 - No resist.	7	NUTECH/ NT-2770RR/SCN	2.7	rps1 - No resist.	7
LATHAM/ L2635R	2.6	Rps1c	7	NUTECH/ NT-2777RR/SCN	2.7	Rps1k	7
LATHAM/ L2646R	2.6	Rps1k	7	NUTECH/ NT-2890+RR	2.8	Rps1k	7
LATHAM/ L2775R	2.7	Rps1k	7	NUTECH/ NT-2890RR	2.8	Rps1k	7
MIDWEST SEED/ GR0903	0.9	rps1 - No resist.	1	NUTECH/ NT-7205+RR	2.0	Rps1k	2,4
MIDWEST SEED/ GR1111	1.1	Rps1k	2	PRAIRIE BRAND/ PB-0725RR	0.7	rps1 - No resist.	1
MIDWEST SEED/ GR1633	1.4	Rps1k	4	PRAIRIE BRAND/ PB-0923RR	0.9	Rps1k	1,3
MIDWEST SEED/ GR2037	2.0	rps1 - No resist.	5,7	PRAIRIE BRAND/ PB-0936RR	0.9	rps1 - No resist.	1,3
MIDWEST SEED/ GR2231	2.2	Rps1k	5	PRAIRIE BRAND/ PB-0954RR	0.9	rps1 - No resist.	1,3
MIDWEST SEED/ GR2651	2.6	rps1 - No resist.	7	PRAIRIE BRAND/ PB-1256RR	1.2	Rps1k	2,4
MIDWEST SEED/ GR2731	2.7	Rps1k	7	PRAIRIE BRAND/ PB-1294RR	1.2	Rps1c	2,4
MUSTANG/ M-066RR	0.6	Rps1 (Rps1a)	1	PRAIRIE BRAND/ PB-1525RR	1.5	Rps1k	2,4
MUSTANG/ M-075RR	0.7	Rps1 (Rps1a)	1,3	PRAIRIE BRAND/ PB-1754RR	1.7	rps1 - No resist.	2,4
MUSTANG/ M-095RR	0.9	rps1 - No resist.	1,3	PRAIRIE BRAND/ PB-1885NR	1.8	Rps1k	4,6
MUSTANG/ M-096RR	0.9	rps1 - No resist.	1,3	PRAIRIE BRAND/ PB-1916RR	1.9	Rps1k	2,4,6
MUSTANG/ M-097RR	0.9	Rps1c	1,3	PRAIRIE BRAND/ PB-1954RR	1.9	rps1 - No resist.	2,4,6
MUSTANG/ M-115RR	1.1	Rps1c	2,4	PRAIRIE BRAND/ PB-1956RR	1.9	rps1 - No resist.	4,6
MUSTANG/ M-136RR	1.3	Rps1k	2,4	PRAIRIE BRAND/ PB-2141RR	2.1	Rps1k	5,7
MUSTANG/ M-156RR	1.5	Rps1k	2,4	PRAIRIE BRAND/ PB-2183NR	2.1	Rps1k	5
MUSTANG/ M-176RR	1.7	Rps1 (Rps1a)	2,4	PRAIRIE BRAND/ PB-2216RR	2.2	rps1 - No resist.	5,7
MUSTANG/ M-194NRR	1.9	Rps1k	6	PRAIRIE BRAND/ PB-2243RR	2.2	Rps1k	5,7
MUSTANG/ M-203RR	2.0	rps1 - No resist.	5,7	PRAIRIE BRAND/ PB-2421RR	2.4	Rps1k	5,7
MUSTANG/ M-207RR	2.0	Rps1k	5,7	PRAIRIE BRAND/ PB-2456RR	2.4	Rps1k	5,7
MUSTANG/ M-227RR	2.2	Rps1 (Rps1a)	7	PRAIRIE BRAND/ PB-2536RR	2.5	Rps1k	7
MUSTANG/ M-237RR	2.3	Rps1k	7	PRAIRIE BRAND/ PB-2565RR	2.5	Rps1c	7
MUSTANG/ M-246NRR	2.4	rps1 - No resist.	7	PRAIRIE BRAND/ PB-2636NR	2.6	Rps1k	7
MUSTANG/ M-247NRR	2.7	Rps1 (Rps1a)	7	PRAIRIE BRAND/ PB-2643RR	2.7	Rps1k	7
MUSTANG/ M-257RR	2.5	Rps1c	7	PRAIRIE BRAND/ PB-2645RR	2.7	Rps1k	7
MUSTANG/ M-264RR	2.6	Rps1k	7	PSI BRAND/ 96090RR	0.9	rps1 - No resist.	1
NORTHSTAR/ EXP 1401RR	1.4	rps1 - No resist.	4	PSI BRAND/ 96110RR	1.1	Rps1k	2,4
NORTHSTAR/ NS 0810RR	0.8	Rps1 (Rps1a)	1	PSI/ 96081RR	0.8	Rps1 (Rps1a)	1
NORTHSTAR/ NS 0911RR	0.9	Rps1k	1	RENK/ RS156RR	1.5	Rps1k	4
NORTHSTAR/ NS 1120RR	1.1	Rps1k	2,4	RENK/ RS165RR	1.6	Rps1k	4
NORTHSTAR/ NS 1521NRR	1.5	rps1 - No resist.	6	RENK/ RS246NRR	2.4	Not Reported	5,7
NORTHSTAR/ NS 1809RR	1.8	rps1 - No resist.	4,6	RENK/ RS265RR	2.6	Rps1c	7
NUTECH/ NT-0786RR	0.7	rps1 - No resist.	1	SANDS/ SOI 1874NRR	1.8	Rps1k	6
NUTECH/ NT-0886RR	0.8	rps1 - No resist.	1	SANDS/ SOI 2151NRR	2.1	Rps1k	5,7
NUTECH/ NT-0889RR	0.8	rps1 - No resist.	1	SANDS/ SOI 2448RR	2.4	Rps1k	7
NUTECH/ NT-0990RR	0.9	rps1 - No resist.	1	SANDS/ SOI 2511NRR	2.5	Not Reported	7
NUTECH/ NT-0999+RR	0.9	rps1 - No resist.	3	SANDS/ SOI 2609RR	2.6	Rps1k	7
NUTECH/ NT-1127RR	1.1	Rps1k	2,4	SANDS/ SOI 2673RR	2.6	Rps1k	7
NUTECH/ NT-1404RR	1.4	Rps1k	2	SANDS/ SOI 2675NRR	2.6	Not Reported	7
NUTECH/ NT-1909RR	1.9	rps1 - No resist.	6	SANDS/ SOI 2754RR	2.7	Rps1k	7
NUTECH/ NT-1991RR	1.9	Rps1k	2,4,6	SANDS/ SOI 2884RR	2.8	Rps1k	7
NUTECH/ NT-2202RR	2.2	Rps1k	4	SEEDS 2000/ 2090RR	0.9	Not Reported	1
NUTECH/ NT-2213RR	2.2	Rps1 (Rps1a)	5,7	SEEDS 2000/ 2130RR	1.3	Rps1k	2
NUTECH/ NT-2220RR	2.2	rps1 - No resist.	5,7	SODAK GENET./ SD1091RR	0.9	Rps1 (Rps1a)	1,3
NUTECH/ NT-2232RR	2.2	Rps1 (Rps1a)	5,7	SODAK GENET./ SD1092RR	0.9	Rps1k	1,3
NUTECH/ NT-2333RR	2.3	Rps1 (Rps1a)	5,7	SODAK GENET./ SD1032111	1.1	Rps1 (Rps1a)	2,4,6
NUTECH/ NT-2626RR	2.6	rps1 - No resist.	5	STINE/ 0708-4	0.7	rps1 - No resist.	1
		10 10000	-	1 , 0 . 00 1	J.,	PO. 110 10010t.	

t resistance as

Table No. (s)

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2,4,6 2,4 2,4

Brand / Variety	Mat. Grp.	Gene	Table No. (s)	Brand / Variety	Mat. Grp.	Gene
STINE/ 0943-4	1.0	Rps1k	1,3	Public Vari	eties & Exp	erimentals
STINE/ 1108-4	1.0	rps1 - No resist.	2,4	PUBLIC/ SD00-1018R	1	Rps1 (Rps1a)
STINE/ 1330-4	1.3	Rps1k	2,4	PUBLIC/ SD00-5555R	0	Rps1k
STINE/ 1918-4	1.9	rps1 - No resist.	2,4,6	PUBLIC/ SD01-1120R	1	Rps1 (Rps1a)
THOMPSON/ T-1330RR	1.3	Rps1k	2	PUBLIC/ SD01-3219R	1	Rps1k
THOMPSON/ T-1400RR	1.4	Rps1k	2	PUBLIC/ SD01-3477R	1	Rps1 (Rps1a)
THOMPSON/ T-1414RR	1.4	Rps1k	2	PUBLIC/ SD02R-48	2	Rps1k
THOMPSON/ T-1766RR	1.7	Not Reported	2	PUBLIC/ SD02R-5	2	Rps1k
THOMPSON/ T-1800RR	1.8	rps1 - No resist.	2	PUBLIC/ SD02R-50	2	Rps1k
THOMPSON/ T-2213ARR	2.0		5,7	PUBLIC/ SD02R-51	2	Rps1k
THOMPSON/ T-2220ARR	2.2	rps1 - No resist.	5,7	PUBLIC/ SD02R-8	1	Rps1k
THOMPSON/ T-2300RR	2.3	Rps1k	7	PUBLIC/ SD02R-93	1	Rps1k
THOMPSON/ T-2444RR/SCN	2.4	rps1 - No resist.	5,7	PUBLIC/ SD1091RR-4	0	Rps1k
THOMPSON/ T-2626RR	2.6	rps1 - No resist.	7	PUBLIC/ SDX00R-017-52	1	Rps1 (Rps1a)
THOMPSON/ T-2666RR	2.6	Not Reported	5,7	PUBLIC/ SDX00R-020-18	2	Rps1 (Rps1a)
THOMPSON/ T-2707RR	2.7	Rps1c	7	PUBLIC/ SDX00R-026-42N	1	Not Reported
ΓHOMPSON/ T-2999RR	2.9	Not Reported	7	PUBLIC/ SDX00R-029-3	1	Rps1k
THOMPSON/ T-7193RR/SCN	1.9	Rps1k	4	PUBLIC/ SDX00R-053-46	1	Rps1 (Rps1a)
ΓHOMPSON/ T-7205+RR	2.0	Rps1k	6	PUBLIC/ SDX01R-00403109	1	Rps1 (Rps1a)
THOMPSON/ T-7206RR	2.0	Rps1k	5	PUBLIC/ SDX01R-00403128	2	Rps1 (Rps1a)
THOMPSON/ T-7234RR	2.3	Rps1k	2,4	PUBLIC/ SDX01R-007039	2	Not Reported
ΓHUNDER/ 2511RR	1.1	Rps1k	2		' /	'
THUNDER/ 2512RR	1.2	rps1 - No resist.	2			
THUNDER/ 708RR	0.8	Rps1k	1			
THUNDER/ 709RR	0.9	Rps1c	1			
WECO/ EXP 6 0.7RR	0.7	Rps1k	1,3			
WECO/ EXP 6 1.0RR	1.0	Not Reported	2,4			
WECO/ EXP 6 1.5RR	1.5	Not Reported	2,4,6			
WECO/ EXP 6 2.0RR	2.0	Rps1k	5,7			
WECO/ EXP 6 2.5RR-STS	2.5	Rps1c	5,7			
WECO/ EXP 6 2.6RR-SCN	2.6	Rps1c	7			
WECO/ EXP 6 2.8RR-SCN	2.8	Not Reported	7			
WENSMAN/ W 2090RR	0.9	Not Reported	1			
WENSMAN/ W 2108RR	1.0	Not Reported	2			
WENSMAN/ W 2121RR	1.2	Rps1c	2			
WENSMAN/ W 2142RR	1.4	Rps1k	2,4			
WENSMAN/ W 2163RR	1.6	Not Reported	2,4,6			
WENSMAN/ W 2168NRR	1.6	Not Reported	4,6			
WENSMAN/ W 2172NRR	1.7	Rps1k	4,6			
WENSMAN/ W 2195NRR	1.9	Rps1k	4,6			
WENSMAN/ W 2200NRR	2.0	Rps1c	5,7			
WENSMAN/ W 2226RR	2.2	Rps1 (Rps1a)	5,7			
VVENOVANIA VV ZZZUNN	2.2	inhoi (iihoia)	J, /			

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7

2.5

1.2

1.5

1.8

2.2

Rps1c

Rps1k

Rps1k

Rps1k

Not Reported

WENSMAN/ W 2253RR

ZILLER/ BT 7124R

ZILLER/ BT 7156NR

ZILLER/ BT 7186NR

ZILLER/ BT 7227NR

Table 1a. Roundup Ready™ maturity group-0 soybean variety yield averages- northern South Dakota locations, 2005-2006.

		North	ern Locations	2005-2006 Yiel	d Averages		_
Brand/Variety	DTM*	South	Shore	Wa	rner	Northern Zo	ne Averages
(By 2-yr then 2006 zone yield)	DIW	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr
KRUGER/ K-098RR	116	32	41	38	46	35	44
NUTECH/ NT-0889RR	117	32	40	40	46	36	43
MUSTANG/ M-095RR	117	33	42	37	44	35	43
NUTECH/ NT-0886RR	117	30	42	37	44	34	43
PSI BRAND/ 96090RR	115	28	39	40	46	34	43
PRAIRIE BRAND/ PB-0725RR	115	32	43	30	42	31	43
MUSTANG/ M-096RR	118	35	42	36	42	36	42
SEEDS 2000/ 2090RR	117	32	41	35	42	34	42
WENSMAN/ W 2090RR	116	29	39	35	43	32	41
DAIRYLAND/ DSR-0701/RR	113	32	41	30	40	31	41
MUSTANG/ M-075RR	113	28	41	29	41	29	41
KRUGER/ K-056RR	112	32	40	30	40	31	40
PRAIRIE BRAND/ PB-0923RR	113	28	37	33	42	31	40
PRAIRIE BRAND/ PB-0954RR	116	29	37	35	41	32	39
SODAK GENET./ SD1092RR	116	30	38	32	40	31	39
MUSTANG/ M-066RR	112	26	37	31	40	29	39
SODAK GENET./ SD1091RR	117	29	36	32	39	31	38
THUNDER/ 709RR	117	31		38		35	
KRUGER/ K-072RR	116	34		35		35	
PRAIRIE BRAND/ PB-0936RR	116	33		36		35	
MUSTANG/ M-097RR	117	32		36		34	
NUTECH/ NT-0990RR	116	30		38		34	
KRUGER/ EXP057RR	113	35		31		33	
DAIRYLAND/ DSR-0903/RR	113	33		32		33	
MIDWEST SEED/ GR0903	117	30		35		33	
ASGROW/ AG0803	113	29		34	•	32	•
KRUGER/ K-042RR	113	33		31	•	32	
KRUGER/ EXP086RR	115	30		33		32	
PUBLIC/ SD00-5555R	118	25		38		32	
WECO/ EXP 6 0.7RR	116	30		32		31	
PUBLIC/ SD1091RR-4	118	27		35	•	31	
THUNDER/ 708RR	113	31		29	40	30	
HEFTY/ EXP067RR	111	30		30	•	30	
DAIRYLAND/ DSR0902RRSTS	114	25		33		29	
NORTHSTAR/ NS 0911RR	114	24		34		29	
NUTECH/ NT-0786RR	113	26		30		28	
PSI/ 96081RR	113	28		28		28	

Table 1a. Roundup Ready™ maturity group-0 soybean variety yield averages- northern South Dakota locations, 2005-2006 (continued).

		Northe	ern Locations	2005-2006 Yiel	d Averages	Northern Zo	ne Averages
Brand/Variety	DTM*	South	Shore	Wai	rner		
(By 2-yr then 2006 zone yield)	D1141	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr
KRUGER/ EXP067RR	111	27		29		28	
NORTHSTAR/ NS 0810RR	113	28		26		27	
CROW'S/ C0520R	112	25		26		26	
AGVENTURE/ AVEXP09D1	112			36			
GOLD COUNTRY SEED/ 2509R	111			39	44		
STINE/ 0943-4	110			34	43		
STINE/ 0708-4	121	30	41				
Test avg. :	115	30	40	33	42	32	41
High avg. :	121	35	43	40	46	36	44
Low avg.:	110	24	36	26	39	26	38
# Lsd (.05):		5	NS	4	NS	3	2
## TPG-avg.:		30	36	36	39	36	42
@ Coef. Var.:		9	7	8	6	9	6
No. Entries:		41	18	43	20	80	34

^{*} DTM= average days from seeding (South Shore- May 23, Warner- May 26, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 1b. Roundup Ready™ maturity group-O soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2006.

			Nort	thern Avera	ges by Loca	ation		N41	7 A	
Brand/Variety	DTM*		South Shore	е		Warner		Northe	rn Zone Av	erages
(By 2006 zone protein)	Divi	Protein (%)	Oil (%)	Lodging (1–5)*	Protein (%)	Oil (%)	Lodging (1–5)*	Protein (%)	Oil (%)	Lodging (1–5)*
SODAK GENET./ SD1091RR	117	38.2	18.7	1	37.3	19.3	1	37.8	19.0	1
WENSMAN/ W 2090RR	116	37.8	18.7	1	36.8	19.4	1	37.3	19.1	1
MUSTANG/ M-095RR	117	37.7	18.8	1	36.8	19.4	1	37.3	19.1	1
KRUGER/ K-098RR	116	37.3	18.9	1	37.0	19.3	1	37.2	19.1	1
NUTECH/ NT-0889RR	117	37.1	18.9	1	37.0	19.5	1	37.1	19.2	1
PRAIRIE BRAND/ PB-0954RR	116	36.9	18.9	1	37.1	19.3	1	37.0	19.1	1
PSI BRAND/ 96090RR	115	37.3	18.6	1	36.6	19.5	1	37.0	19.1	1
PRAIRIE BRAND/ PB-0923RR	113	37.5	19.0	1	36.4	19.7	1	37.0	19.4	1
PUBLIC/ SD00-5555R	118	37.4	18.7	1	36.5	19.6	1	37.0	19.2	1
MUSTANG/ M-066RR	112	37.7	18.9	1	36.1	19.7	1	36.9	19.3	1
PRAIRIE BRAND/ PB-0725RR	115	37.1	19.0	1	36.7	19.7	1	36.9	19.4	1
SODAK GENET./ SD1092RR	116	37.2	19.0	1	36.5	19.8	1	36.9	19.4	1
MIDWEST SEED/ GR0903	117	36.9	18.9	1	36.8	19.3	1	36.9	19.1	1
KRUGER/ K-056RR	112	37.3	19.0	1	36.3	19.5	1	36.8	19.3	1
NORTHSTAR/ NS 0911RR	114	37.6	18.7	1	36.0	19.7	1	36.8	19.2	1
SEEDS 2000/ 2090RR	117	37.1	18.7	1	36.5	19.5	1	36.8	19.1	1
NUTECH/ NT-0886RR	117	36.6	19.0	1	36.9	19.4	1	36.8	19.2	1
KRUGER/ K-072RR	116	36.8	19.0	1	36.7	19.6	1	36.8	19.3	1
DAIRYLAND/ DSR-0701/RR	113	37.4	18.8	1	36.1	19.8	1	36.8	19.3	1
PUBLIC/ SD1091RR-4	118	37.0	19.0	1	36.5	19.5	1	36.8	19.3	1
DAIRYLAND/ DSR-0903/RR	113	37.6	18.9	1	35.8	19.9	1	36.7	19.4	1
PRAIRIE BRAND/ PB-0936RR	116	37.2	18.9	1	36.2	19.7	1	36.7	19.3	1
NUTECH/ NT-0990RR	116	37.1	18.7	1	36.2	19.7	1	36.7	19.2	1
CROW'S/ C0520R	112	37.1	19.3	1	36.1	19.8	1	36.6	19.6	1
MUSTANG/ M-096RR	118	36.8	19.0	1	36.3	19.6	1	36.6	19.3	1
NUTECH/ NT-0786RR	113	37.2	19.0	1	35.8	20.0	1	36.5	19.5	1
THUNDER/ 708RR	113	37.1	18.7	1	35.6	19.6	1	36.4	19.2	1
PSI/ 96081RR	113	37.1	18.9	1	35.6	20.0	1	36.4	19.5	1
KRUGER/ EXP057RR	113	36.9	18.9	1	35.8	20.0	1	36.4	19.5	1
WECO/ EXP 6 0.7RR	116	36.8	19.0	1	35.8	19.9	1	36.3	19.5	1

Table 1b. Roundup Ready™ maturity group-O soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2006 (continued).

			Nort	hern Avera	ges by Loc	ation		Nantha	7 A	
Brand/Variety	DTM*		South Shore	е		Warner		Nortne	rn Zone Av	erages
(By 2006 zone protein)		Protein (%)	Oil (%)	Lodging (1–5)*	Protein (%)	Oil (%)	Lodging (1–5)*	Protein (%)	Oil (%)	Lodging (1–5)*
KRUGER/ K-042RR	113	37.4	19.1	1	35.2	20.5	1	36.3	19.8	1
KRUGER/ EXP067RR	111	37.2	18.9	1	35.4	19.7	1	36.3	19.3	1
NORTHSTAR/ NS 0810RR	113	37.2	18.9	1	35.4	20.2	1	36.3	19.6	1
HEFTY/ EXP067RR	111	36.9	18.9	1	35.5	19.6	1	36.2	19.3	1
MUSTANG/ M-075RR	113	36.8	19.0	1	35.5	20.0	1	36.2	19.5	1
MUSTANG/ M-097RR	117	36.9	19.0	1	35.4	19.9	1	36.2	19.5	1
KRUGER/ EXP086RR	115	36.3	18.7	1	35.8	19.5	1	36.1	19.1	1
THUNDER/ 709RR	117	36.6	19.4	1	35.2	19.9	1	35.9	19.7	1
ASGROW/ AG0803	113	36.2	19.2	1	35.5	19.6	1	35.9	19.4	1
DAIRYLAND/ DSR0902RRSTS	114	36.4	19.1	1	35.2	20.1	1	35.8	19.6	1
AGVENTURE/ AVEXP09D1	112				36.8	19.4	1			
GOLD COUNTRY SEED/ 2509R	111				36.6	19.4	1			
STINE/ 0943-4	110				36.6	19.7	1			
STINE/ 0708-4	121	36.8	18.7	1						
Test avg. :	115	37.1	18.9	1	36.2	19.7	1	36.6	19.3	1
High avg. :	121	38.2	19.4	_1	37.3	20.5	1	37.8	19.8	1
Low avg. :	110	36.2	18.6	1	35.2	19.3	1	35.8	19.0	1
# Lsd(.05):				0			0			0
## TPG-avg. :				1			1			1
@ Coef. Var. :				0			0			0
No. Entries :		41	41	41	43	43	43	80	80	80

^{*} DTM= average days from seeding (South Shore- May 23, Warner- May 26, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error.

Table 2a. Roundup Ready™ maturity group-I soybean variety yield averages- northern South Dakota locations, 2005-2006.

D 10/ 11			Northern Avera	Northern Zone Average				
Brand/Variety (By 2-yr then 2006 zone yield)	DTM*	South	Shore	Wa	rner	Northern Zone Averages		
(by 2-yr then 2000 Zone yielu)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	
PRAIRIE BRAND/ PB-1954RR	113	32	40	40	45	36	43	
STINE/ 1330-4	118	29	39	38	46	34	43	
WENSMAN/ W 2142RR	112	30	40	36	45	33	43	
ASGROW/ AG1702	119	28	39	37	45	33	42	
NUTECH/ NT-7205+RR	117	27	38	38	46	33	42	
SEEDS 2000/ 2130RR	118	29	38	34	44	32	41	
PRAIRIE BRAND/ PB-1525RR	118	29	39	32	43	31	41	
WENSMAN/ W 2121RR	115	25	37	34	45	30	41	
THOMPSON/ T-7234RR	115	27	39	32	42	30	41	
NUTECH/ NT-1404RR	117	25	38	30	43	28	41	
DEKALB/ DKB18-51	113	26	36	35	43	31	40	
DAIRYLAND/ DSR-1301/RR	118	26	35	35	44	31	40	
PRAIRIE BRAND/ PB-1294RR	116	27	37	32	43	30	40	
KRUGER/ K-100RR	117	28	40	28	40	28	40	
PRAIRIE BRAND/ PB-1754RR	118	29	38	34	40	32	39	
KRUGER/ K-177RR	119	24	34	37	43	31	39	
DAIRYLAND/ DSR1500RRSTS	113	28	35	32	41	30	38	
PUBLIC/ SDX00R-026-42N	118	27	36	30	40	29	38	
SODAK GENET./ SD1111RR	114	25	36	27	40	26	38	
KRUGER/ K-156RR	117	26	36	29	38	28	37	
PUBLIC/ SD01-3219R	118	25	34	30	39	28	37	
THUNDER/ 2512RR	115	21	34	24	36	23	35	
THOMPSON/ T-1766RR	114	32	34	39	30	36	33	
KRUGER/ K-194RR	117	31		39	\ \ \ /	35		
LATHAM/ EXP-E1950R	117	31		39		35	•	
NUTECH/ NT-1127RR	117	29		39		34		
WECO/ EXP 6 1.5RR	117	31		37	•	34	·	
LATHAM/ L1553R	118	29	·	36	•	33	•	
PRAIRIE BRAND/ PB-1916RR	116	29		36	•	33	•	
WENSMAN/ W 2163RR	117	29	•	36	•	33	•	
WENSMAN/ W 2108RR	117	25	•	41	•	33	•	
		l	•		•		•	
PUBLIC/ SDX00R-017-52	115	30	•	36	•	33	•	
PUBLIC/ SD02R-8	117	28	•	37	•	33		
MUSTANG/ M-156RR	117	26		38		32	•	
MUSTANG/ M-176RR	118	29		34		32		
NUTECH/ NT-1991RR	117	29		34	•	32	•	
GOLD COUNTRY SEED/ 8716R	119	28		35	•	32		
THOMPSON/ T-1330RR	118	30		34		32	•	
CROW'S/ C1106R	117	27		36		32	•	
MUSTANG/ M-115RR	117	26	•	36	•	31		
THUNDER/ 2511RR	117	26		36		31		
THOMPSON/ T-1800RR	114	29		33		31		
PUBLIC/ SDX00R-053-46	115	28		34		31		
PUBLIC/ SD01-1120R	117	28		34		31		
PUBLIC/ SD01-3477R	118	28		33		31		
ASGROW/ AG1102	116	27		33		30		
AGVENTURE/ AV14D6	118	27		32		30		

Table 2a. Roundup Ready™ maturity group-I soybean variety yield averages- northern South Dakota locations, 2005-2006 (continued).

Duand Manistra			Northern Avera	ges by Location		Northorn 7a	ne Averages
Brand/Variety (By 2-yr then 2006 zone yield)	DTM*	South	Shore	Wa	rner	Northern 20	ne Averages
(by 2 yr then 2000 zone yielu)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr
GOLD COUNTRY SEED/ 2713R	118	27		33		30	
THOMPSON/ T-1414RR	117	26		33		30	
THOMPSON/ T-1400RR	118	28		31		30	
PUBLIC/ SDX00R-029-3	115	27		33		30	
MUSTANG/ M-136RR	117	25		32		29	
HEFTY/ EXP117RR	116	25		33		29	
HEFTY/ EXP137RR	118	25		32		29	
WECO/ EXP 6 1.0RR	116	26		32		29	
PRAIRIE BRAND/ PB-1256RR	116	25		32		29	
MIDWEST SEED/ GR1111	116	26		32		29	
PUBLIC/ SD00-1018R	117	25		31		28	•
PUBLIC/ SD02R-93	117	24		32		28	•
KRUGER/ K-188RR/SCN	118	25		29		27	•
STINE/ 1108-4	116	25		28		27	•
KRUGER/ K-120RR	117	23		28		26	•
ASGROW/ AG1002	121	25					
AGVENTURE/ AV11T1RR	122	27	39				
AGVENTURE/ AVEXP10G9	111			27			
AGVENTURE/ AV15D7	112			31			•
PSI BRAND/ 96110RR	123	26	38				
GOLD COUNTRY SEED/6714NR	124	30					
STINE/ 1918-4		28	39				
ZILLER/ BT 7124R	121	27					
NORTHSTAR/ NS 1120RR	123	30	38				
Test avg. :	117	27	37	34	42	31	40
High avg. :	124	32	40	41	46	36	43
Low avg. :	111	21	34	24	36	23	35
# Lsd (.05):		4	NS	5	NS	3	
## TPG-avg. :		28	34	24	36	33	
@ Coef. Var. :		10	8	10	8	9	29+
No. Entries :		70	26	65	22	126	44

^{*} DTM= average days from seeding (South Shore- May 23, Warner- May 26, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

⁺ Lsd and TPG-average values are not reported because Coef. of Variation exceeds 15%.

Table 2b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2006.

iocations, 2000.			Nor	thern Avera	ges by Loca	tion				
Brand/Variety	DTM*		South Shore		,	Warner		North	ern Zone Av	erages
(By zone protein)	D I IVI	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*
LATHAM/ L1553R	118	38.1	18.8	1	36.8	19.4	1	37.5	19.1	1
AGVENTURE/ AV14D6	118	37.7	18.6	1	37.0	19.0	1	37.4	18.8	1
MUSTANG/ M-156RR	117	38.1	18.6	1	36.5	19.6	1	37.3	19.1	1
HEFTY/ EXP137RR	118	38.0	18.8	1	36.4	19.5	1	37.2	19.2	1
KRUGER/ K-177RR	119	38.1	18.9	1	36.3	19.6	1	37.2	19.3	1
GOLD COUNTRY SEED/ 8716R	119	38.1	19.0	1	36.2	19.6	1	37.2	19.3	1
NUTECH/ NT-1404RR	117	37.5	18.7	1	36.7	19.4	1	37.1	19.1	1
NUTECH/ NT-7205+RR	117	37.5	18.9	1	36.7	19.3	1	37.1	19.1	1
DAIRYLAND/ DSR-1301/RR	118	37.5	18.9	1	36.7	19.6	1	37.1	19.3	1
PRAIRIE BRAND/ PB-1754RR	118	37.1	18.5	1	37.1	19.1	1	37.1	18.8	1
MUSTANG/ M-176RR	118	37.4	18.6	1	36.8	19.2	1	37.1	18.9	1
THUNDER/ 2511RR	117	37.9	18.6	1	36.2	19.7	1	37.1	19.2	1
WENSMAN/ W 2163RR	117	37.0	18.6	1	37.0	19.2	1	37.0	18.9	1
DEKALB/ DKB18-51	113	37.6	18.8	1	36.3	19.5	1	37.0	19.2	1
STINE/ 1330-4	118	37.7	18.7	1	36.2	19.6	1	37.0	19.2	1
WECO/ EXP 6 1.5RR	113	37.2	19.0	1	36.6	19.3	1	36.9	19.2	1
KRUGER/ K-156RR	117	37.6	18.6	1	36.2	19.4	1	36.9	19.0	1
MIDWEST SEED/ GR1111	116	37.6	18.4	1	36.2	19.5	1	36.9	19.0	1
PUBLIC/ SD02R-93	117	37.4	18.8	1	36.4	19.7	1	36.9	19.3	1
MUSTANG/ M-136RR	117	37.7	18.5	1	35.9	19.5	1	36.8	19.0	1
KRUGER/ K-100RR	117	37.6	18.7	1	36.0	19.8	1	36.8	19.3	1
DAIRYLAND/ DSR1500RRSTS	113	37.1	18.7	1	36.5	19.2	1	36.8	19.0	1
CROW'S/ C1106R	117	37.4	18.7	1	36.2	19.8	1	36.8	19.3	1
ASGROW/ AG1702	119	37.1	18.8	1	36.4	19.4	1	36.8	19.1	1
WECO/ EXP 6 1.0RR	116	37.3	18.8	1	36.2	19.7	1	36.8	19.3	1
GOLD COUNTRY SEED/ 2713R	118	37.4	18.9	1	36.1	19.7	1	36.8	19.3	1
THOMPSON/ T-1330RR	118	37.1	18.9	1	36.3	19.6	1	36.7	19.3	1
THOMPSON/ T-7234RR	115	36.7	19.1	1	36.6	19.5	1	36.7	19.3	1
THUNDER/ 2512RR	115	37.4	18.6	1	35.9	19.4	1	36.7	19.0	1
STINE/ 1108-4	116	37.1	19.0	1	36.0	19.7	1	36.6	19.4	1
THOMPSON/ T-1414RR	117	36.9	19.0	1	36.2	19.5	1	36.6	19.3	1
KRUGER/ K-188RR/SCN	118	37.3	18.7	1	35.7	19.8	1	36.5	19.3	1
KRUGER/ K-194RR	117	36.8	18.8	1	36.2	19.4	1	36.5	19.1	1
PRAIRIE BRAND/ PB-1525RR	118	36.9	18.9	1	36.1	19.6	1	36.5	19.3	1
THOMPSON/ T-1766RR	114	36.5	18.4	1	36.5	19.2	1	36.5	18.8	1
PRAIRIE BRAND/ PB-1916RR	116	36.7	19.3	1	36.2	19.2	1	36.5	19.3	1
THOMPSON/ T-1400RR	118	36.6	18.9	1	36.3	19.4	1	36.5	19.2	1
WENSMAN/ W 2142RR	112	37.1	18.8	1	35.7	19.8	1	36.4	19.3	1
PRAIRIE BRAND/ PB-1954RR	113	36.3	18.7	1	36.5	19.2	1	36.4	19.0	1
PUBLIC/ SD01-1120R	117	36.5	19.0	1	36.2	19.5	1	36.4	19.3	1
PUBLIC/ SDX00R-026-42N	118	36.8	18.6	1	35.9	19.3	1	36.4	19.0	1
PUBLIC/ SD01-3477R	118	36.8	18.7	1	35.9	19.6	1	36.4	19.2	1
HEFTY/ EXP117RR	116	36.4	19.1	1	36.2	19.6	1	36.3	19.4	1
KRUGER/ K-140RR	118	37.2	18.6	1	35.4	19.4	1	36.3	19.0	1
LATHAM/ EXP-E1950R	117	36.5	18.9	1	36.0	19.3	1	36.3	19.1	1
SEEDS 2000/ 2130RR	118	36.4	18.6	1	36.1	19.5	1	36.3	19.1	1
WENSMAN/ W 2108RR	117	36.6	19.0	1	35.8	19.8	1	36.2	19.4	1
PUBLIC/ SD02R-8	117	36.4	19.0	1	36.0	19.5	1	36.2	19.3	1
ASGROW/ AG1102	116	36.5	18.7	1	35.8	19.2	1	36.2	19.0	1
KRUGER/ K-120RR	117	36.9	18.5	1	35.4	19.4	1	36.2	19.0	1

Table 2b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota

locations, 2006 (continued).

locations, 2006 (continued).			Nor	thern Avera	ges by Loca	tion				
Brand/Variety	DT8#		South Shore			Warner		Northe	ern Zone Av	erages
(By zone protein)	DTM*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*
THOMPSON/ T-1800RR	114	36.3	18.0	1	36.0	19.3	1	36.2	18.7	1
NUTECH/ NT-1127RR	117	36.7	18.8	1	35.4	19.4	1	36.1	19.1	1
NUTECH/ NT-1991RR	117	36.5	18.8	1	35.6	19.3	1	36.1	19.1	1
PRAIRIE BRAND/ PB-1294RR	116	36.6	19.0	1	35.4	19.6	1	36.0	19.3	1
PRAIRIE BRAND/ PB-1256RR	116	36.4	18.8	1	35.6	19.3	1	36.0	19.1	1
PUBLIC/ SD01-3219R	118	36.1	18.7	1	35.9	19.5	1	36.0	19.1	1
PUBLIC/ SDX00R-029-3	115	36.3	19.0	1	35.4	19.6	1	35.9	19.3	1
MUSTANG/ M-115RR	117	36.0	18.8	1	35.4	19.6	1	35.7	19.2	1
SODAK GENET./ SD1111RR	114	35.9	19.4	1	35.4	19.8	1	35.7	19.6	1
PUBLIC/ SDX00R-053-46	115	35.9	19.1	1	35.4	19.6	1	35.7	19.4	1
WENSMAN/ W 2121RR	115	35.8	19.0	1	35.1	19.7	1	35.5	19.4	1
PUBLIC/ SDX00R-017-52	115	35.9	19.0	1	35.0	19.7	1	35.5	19.4	1
PUBLIC/ SD00-1018R	117	35.9	19.2	1	34.7	20.0	1	35.3	19.6	1
ASGROW/ AG1002	121	36.7	19.0	1						
AGVENTURE/ AV11T1RR	122	37.6	18.8	1						
AGVENTURE/ AVEXP10G9	111				36.0	19.7	1			
AGVENTURE/ AV15D7	112				36.3	19.7	1			
PSI BRAND/ 96110RR	123	37.7	18.8	1						
GOLD COUNTRY SEED/6714NR	124	36.9	18.9	1						
STINE/ 1918-4		37.0	18.9	1						
ZILLER/ BT 7124R	121	36.5	18.7	1						
NORTHSTAR/ NS 1120RR	123	37.2	19.0	1						
Test avg. :	117	37.0	18.8	1	36.1	19.5	1	36.5	19.1	1
High avg. :	124	38.1	19.4	1	37.1	20.0	1	37.5	19.6	1
Low avg. :	111	35.8	18.0	1	34.7	19.0	1	35.3	18.7	1
# Lsd(.05):				0			0			0
## TPG-avg. :		-		1			1			1
@ Coef.Var. :				0			0			0
No. Entries :		70	70	70	65	65	65	126	126	126

^{*} DTM= average days from seeding (South Shore- May 23, Warner- May 26, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error.

Table 3a. Roundup Ready™ maturity group-O soybean variety yield averages- central South Dakota locations, 2005-2006.

			Central Averag	es by Location		Control 7or	. Averence
Brand/Variety (By 2-yr then 2006 zone yield)	DTM*	Broo	kings	Ban	croft	Centrai Zor	e Averages
(by 2 yr then 2000 zone yreit)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr
NUTECH/ NT-0999+RR	119	55	62	46	56	51	59
PRAIRIE BRAND/ PB-0923RR	119	54	61	44	56	49	59
MUSTANG/ M-095RR	120	56	61	48	55	52	58
KRUGER/ K-098RR	119	53	59	47	56	50	58
PRAIRIE BRAND/ PB-0954RR	119	54	59	46	54	50	57
MUSTANG/ M-096RR	120	49	58	46	56	48	57
SODAK GENET./ SD1092RR	120	46	53	43	53	45	53
SODAK GENET./ SD1091RR	120	44	53	38	51	41	52
KRUGER/ K-072RR	119	58		48		53	
PRAIRIE BRAND/ PB-0936RR	119	55		46		51	
DAIRYLAND/ DSR-0903/RR	118	53		46		50	
KRUGER/ EXP057RR	113	50		45		48	
KRUGER/ EXP067RR	113	49		47		48	
MUSTANG/ M-097RR	118	51		43		47	
PUBLIC/ SD00-5555R	120	52		41		47	
PUBLIC/ SD1091RR-4	121	50		43		47	
KRUGER/ K-056RR	114	46		46		46	
MUSTANG/ M-075RR	114	46		42		44	
WECO/ EXP 6 0.7RR	114		-	44			
STINE/ 0943-4	115			46	56		
Test avg.:	118	51	58	45	55	48	57
High avg. :	121	58	62	48	56	53	59
Low avg. :	113	44	53	38	51	41	52
# Lsd (.05):		5	5	5	NS	4	NS
## TPG-avg. :		53	57	43	51	49	52
@ Coef. Var.:		6	4	7	7	7	8
No. Entries:		18	8	20	9	36	16

^{*} DTM= average days from seeding (Brookings- May 22, Bancroft- May 30, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 3b. Roundup Ready™ maturity group-O soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2006.

			Се	ntral Averag	jes by Locat	ion		Comtre	Central Zone Averages			
Brand/Variety	DTM*		Brookings			Bancroft		Centr	ai Zoile Ave	erages		
(By 2006 zone protein)		Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*		
SODAK GENET./ SD1091RR	120	38.4	18.8	1	36.6	19.6	1	37.5	19.2	1		
PUBLIC/ SD1091RR-4	121	38.1	18.8	1	36.7	19.6	1	37.4	19.2	1		
SODAK GENET./ SD1092RR	120	38.0	18.7	1	36.6	20.0	1	37.3	19.4	1		
PUBLIC/ SD00-5555R	120	37.9	18.7	1	36.5	19.8	1	37.2	19.3	1		
MUSTANG/ M-075RR	114	37.4	19.1	1	36.5	20.1	1	37.0	19.6	1		
KRUGER/ K-056RR	114	37.5	19.0	1	36.4	20.0	1	37.0	19.5	1		
PRAIRIE BRAND/ PB-0954RR	119	37.4	18.9	1	36.4	19.8	1	36.9	19.4	1		
PRAIRIE BRAND/ PB-0923RR	119	37.3	18.8	1	36.4	19.9	1	36.9	19.4	1		
MUSTANG/ M-095RR	120	37.2	19.1	1	36.3	19.8	1	36.8	19.5	1		
KRUGER/ K-072RR	119	37.0	19.0	1	36.4	19.6	1	36.7	19.3	1		
MUSTANG/ M-096RR	120	36.9	19.3	1	36.4	19.9	1	36.7	19.6	1		
KRUGER/ K-098RR	119	37.0	19.0	1	36.3	19.8	1	36.7	19.4	1		
KRUGER/ EXP057RR	113	37.1	19.0	1	36.1	20.0	1	36.6	19.5	1		
PRAIRIE BRAND/ PB-0936RR	119	36.7	19.0	1	36.2	20.1	1	36.5	19.6	1		
DAIRYLAND/ DSR-0903/RR	118	37.1	19.1	1	35.7	20.3	1	36.4	19.7	1		
KRUGER/ EXP067RR	113	36.9	19.0	1	35.9	19.8	1	36.4	19.4	1		
NUTECH/ NT-0999+RR	119	36.5	18.9	1	36.2	20.0	1	36.4	19.5	1		
MUSTANG/ M-097RR	118	36.6	19.0	1	35.8	19.9	1	36.2	19.5	1		
WECO/ EXP 6 0.7RR	114				36.2	20.0	1					
STINE/ 0943-4	115				36.5	19.8	1					
Test avg. :	118	37.3	19.0	1	36.3	19.9	1	36.8	19.4	1		
High avg. :	121	38.4	19.3	1	36.7	20.3	1	37.5	19.7	1		
Low avg. :	113	36.5	18.7	1	35.7	19.6	1	36.2	19.2	1		
* Lsd(.05):				0			0			0		
## TPG-avg.:				1			1			1		
### Coef.Var. :				0			0			0		
No. Entries :		18	18	18	20	20	20	36	36	36		

^{*} DTM= average days from seeding (Brookings- May 22, Bancroft- May 30, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#] Lsd_i(.05)= amount values in a column must differ to be significantly different, if difference are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error.

Table 4a. Roundup Ready™ maturity group-I soybean variety yield averages- central South Dakota locations, 2005-2006.

STINE/ 1918-4 126 60 65 60 66 60 KRUGER/ K-195+RR/SCN 125 57 65 59 64 58 THOMPSON/ T-7234RR 127 58 62 59 65 59 NUTECH/ NT-7205+RR 128 59 65 54 63 57 PRAIRIE BRAND/ PB-1954RR 122 58 63 58 62 58 PRAIRIE BRAND/ PB-1954RR 121 55 63 59 63 57 WENSMAN/ W 2195NRR 124 57 64 55 61 56 PRAIRIE BRAND/ PB-1525RR 119 56 62 59 62 58 ASGROW/ AG1903 122 58 63 55 61 57 MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54	erages
Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2-Yr Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/Acre 2006 Bu/A	
KRUGER/ K-195+RR/SCN 125 57 65 59 64 58 THOMPSON/ T-7234RR 127 58 62 59 65 59 NUTECH/ NT-7205+RR 128 59 65 54 63 57 PRAIRIE BRAND/ PB-1954RR 122 58 63 58 62 58 PRAIRIE BRAND/ PB-1754RR 121 55 63 59 63 57 WENSMAN/ W 2195NRR 124 57 64 55 61 56 PRAIRIE BRAND/ PB-1525RR 119 56 62 59 62 58 ASGROW/ AG1903 122 58 63 55 61 57 MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 <	Acre 2-Yr
THOMPSON/ T-7234RR 127 58 62 59 65 59 NUTECH/ NT-7205+RR 128 59 65 54 63 57 PRAIRIE BRAND/ PB-1954RR 122 58 63 58 62 58 PRAIRIE BRAND/ PB-1754RR 121 55 63 59 63 57 WENSMAN/ W 2195NRR 124 57 64 55 61 56 PRAIRIE BRAND/ PB-1525RR 119 56 62 59 62 58 ASGROW/ AG1903 122 58 63 55 61 57 MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 <td>66</td>	66
NUTECH/ NT-7205+RR 128 59 65 54 63 57 PRAIRIE BRAND/ PB-1954RR 122 58 63 58 62 58 PRAIRIE BRAND/ PB-1754RR 121 55 63 59 63 57 WENSMAN/ W 2195NRR 124 57 64 55 61 56 PRAIRIE BRAND/ PB-1525RR 119 56 62 59 62 58 ASGROW/ AG1903 122 58 63 55 61 57 MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	65
PRAIRIE BRAND/ PB-1954RR 122 58 63 58 62 58 PRAIRIE BRAND/ PB-1754RR 121 55 63 59 63 57 WENSMAN/ W 2195NRR 124 57 64 55 61 56 PRAIRIE BRAND/ PB-1525RR 119 56 62 59 62 58 ASGROW/ AG1903 122 58 63 55 61 57 MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 <td>64</td>	64
PRAIRIE BRAND/ PB-1754RR 121 55 63 59 63 57 WENSMAN/ W 2195NRR 124 57 64 55 61 56 PRAIRIE BRAND/ PB-1525RR 119 56 62 59 62 58 ASGROW/ AG1903 122 58 63 55 61 57 MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 <td>64</td>	64
WENSMAN/ W 2195NRR 124 57 64 55 61 56 PRAIRIE BRAND/ PB-1525RR 119 56 62 59 62 58 ASGROW/ AG1903 122 58 63 55 61 57 MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	63
PRAIRIE BRAND/ PB-1525RR 119 56 62 59 62 58 ASGROW/ AG1903 122 58 63 55 61 57 MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	63
ASGROW/ AG1903 122 58 63 55 61 57 MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	63
MUSTANG/ M-156RR 121 54 61 59 62 57 NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	62
NUTECH/ NT-2202RR 128 57 63 51 61 54 NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	62
NORTHSTAR/ NS 1120RR 121 54 60 61 62 58 MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	62
MUSTANG/ M-176RR 121 51 60 57 62 54 HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	62
HEFTY/ 195RR 126 54 61 53 60 54 ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	61
ASGROW/ AG1702 124 55 62 51 59 53 THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	61
THOMPSON/ T-7193RR/SCN 120 53 62 52 60 53 DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	61
DAIRYLAND/ DSR-199RRSTS 123 55 60 56 59 56	61
	61
AMUCTANICAM 11FDD	60
MUSTANG/ M-115RR 119 53 59 56 60 55	60
KRUGER/ K-156RR 121 54 60 56 60 55	60
WENSMAN/ W 2163RR 117 54 59 56 61 55	60
WENSMAN/ W 2142RR 121 54 61 55 58 55	60
PSI BRAND/ 96110RR 122 55 61 53 58 54	60
KRUGER/ K-100RR 121 56 61 52 58 54	60
DEKALB/ DKB18-51 123 56 62 49 58 53	60
KRUGER/ K-177RR 123 54 61 49 59 52	60
PRAIRIE BRAND/ PB-1294RR 123 51 57 57 61 54	59
DAIRYLAND/ DSR-1301/RR 119 56 61 50 56 53	59
MUSTANG/ M-136RR 118 53 59 51 59 52	59
DAIRYLAND/ DSR1500RRSTS 122 54 59 54 57 54	58
PUBLIC/ SDX00R-026-42N 123 51 57 56 59 54	58
PUBLIC/ SD01-3219R 123 50 56 52 55 51	56
PUBLIC/ SD01-3477R 123 52 56 50 53 51	55
SODAK GENET./ SD1111RR 121 50 55 47 54 49	55
PRAIRIE BRAND/ PB-1956RR 126 58 . 62 . 60	
NUTECH/ NT-1991RR 123 59 . 59 . 59	
KRUGER/ K-194RR 126 58 . 59 . 59	
WECO/ EXP 6 1.5RR 123 55 . 61 . 58	
KRUGER/ EXP186RR 124 56 . 60 . 58	
GOLD COUNTRY SEED/ 2713R 121 55 . 61 . 58	
PRAIRIE BRAND/ PB-1916RR 120 57 . 58 . 58	
CROW'S/ C1706R 123 58 . 57 . 58	
HEFTY/ EXP137RR 122 54 . 60 . 57	
LATHAM/ EXP-E1950R 127 56 . 57 . 57	

Table 4a. Roundup Ready™ maturity group-I soybean variety yield averages- central South Dakota locations, 2005-2006 (continued).

Brand/Variety	DT			es by Location		Central Zon	e Averages
(By 2-yr then 2006 zone yield)	DTM*		kings		croft	D/A 0000	D-/A 0 V
VDUOED/ V 400DD/00N	100	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yı
KRUGER/ K-188RR/SCN	123	60		52		56	
DAIRYLAND/ DSR-1520/RR	123	55		56	•	56	
DAIRYLAND/ DSR1701RRSTS	124	53	•	59	•	56	•
PRAIRIE BRAND/ PB-1885NR	124	57		55		56	
PUBLIC/ SDX00R-017-52	124	54		57		56	
ASGROW/ AG1102	121	54		54		54	
KRUGER/ K-120RR	121	51		57		54	
KRUGER/ K-140RR	121	54		53		54	
PUBLIC/ SDX01R-00403109	120	52		56		54	
PUBLIC/ SD02R-8	124	55		53		54	
WECO/ EXP 6 1.0RR	120	54		52		53	
WENSMAN/ W 2168NRR	119	52		53		53	
PUBLIC/ SDX00R-053-46	126	52		54		53	
WENSMAN/ W 2172NRR	119	54		50		52	
NORTHSTAR/ EXP 1401RR	117	54		50		52	
PUBLIC/ SDX00R-029-3	124	51		53		52	
NUTECH/ NT-1127RR	122	53		49		51	
PUBLIC/ SD01-1120R	124	54		47		51	
PRAIRIE BRAND/ PB-1256RR	120	51		49		50	
MIDWEST SEED/ GR1633	120	50		48		49	
PUBLIC/ SD00-1018R	122	49		43		46	
COYOTE/ 4719RR		52	59				
GOLD COUNTRY SEED/ 8716R		54			. V		
KALTENBERG/ KB135RR	124	55	62				
KALTENBERG/ KB155RR		55	61				
STINE/ 1330-4	119			58	62		
STINE/ 1108-4	116			43			
ZILLER/ BT 7156NR		54					
ZILLER/ BT 7186NR		56					
NORTHSTAR/ NS 1809RR		56					
RENK/ RS165RR		53	61				
RENK/ RS156RR	124	54					
Test avg. :	122	54	61	54 +	60 +	55	61
High avg. :	128	60	65	62	66	60	66
Low avg. :	116	49	55	43	53	46	55
# Lsd (.05):		5	3	NS	NS	7	NS
## TPG-avg. :		55	62	43	53	53	55
### Coef.Var. :		5	5	14	10	11	13
No. Entries :		73	37	66	34	128	66

^{*} DTM= average days from seeding (Brookings- May 22, Bancroft- May 30, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

⁺ Location was hit by hail on July 13, 2006 and resulted in an estimated 40-50% stand defoliatation.

Table 4b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2006.

			Ce		Central Zone Averages					
Brand/Variety	DTM*		Brookings			Bancroft		Centi	ai Zuile Ave	ayes
(By 2006 zone protein)	51	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*
KRUGER/ K-156RR	121	37.3	18.3	1	36.9	19.5	1	37.1	18.9	1
MUSTANG/ M-136RR	118	37.0	18.5	1	36.8	19.6	1	36.9	19.1	1
PUBLIC/ SDX01R-00403109	120	37.4	18.7	1	36.4	19.8	1	36.9	19.3	1
DAIRYLAND/ DSR-1520/RR	123	37.1	18.6	1	36.5	19.5	1	36.8	19.1	1
MIDWEST SEED/ GR1633	120	37.0	18.2	1	36.6	19.6	1	36.8	18.9	1
MUSTANG/ M-176RR	121	37.0	18.5	1	36.3	19.6	1	36.7	19.1	1
PSI BRAND/ 96110RR	122	36.3	19.0	1	36.7	19.8	1	36.5	19.4	1
ASGROW/ AG1702	124	36.5	18.9	1	36.4	19.7	1	36.5	19.3	1
KRUGER/ K-100RR	121	36.7	19.1	1	36.2	20.0	1	36.5	19.6	1
DAIRYLAND/ DSR1500RRSTS	122	36.3	18.5	1	36.6	19.5	1	36.5	19.0	1
DAIRYLAND/ DSR-1301/RR	119	36.4	18.7	1	36.4	19.7	1	36.4	19.2	1
PRAIRIE BRAND/ PB-1754RR	121	36.4	18.7	1	36.4	19.5	1	36.4	19.1	1
NORTHSTAR/ NS 1120RR	121	36.4	18.9	1	36.4	20.0	1	36.4	19.5	1
DAIRYLAND/ DSR-199RRSTS	123	36.7	18.5	1	36.0	19.4	1	36.4	19.0	1
DAIRYLAND/ DSR1701RRSTS	124	36.2	18.8	1	36.5	19.5	1	36.4	19.2	1
ASGROW/ AG1102	121	36.6	18.6	1	36.0	19.7	1	36.3	19.2	1
NUTECH/ NT-1127RR	122	36.5	18.8	1	36.0	19.6	1	36.3	19.2	1
WENSMAN/ W 2168NRR	119	36.3	18.8	1	36.2	19.8	1	36.3	19.3	1
PUBLIC/ SDX00R-026-42N	123	36.5	18.6	1	36.0	19.7	1	36.3	19.2	1
HEFTY/ EXP137RR	123	36.5	19.1		35.9	19.8	1	36.2	19.5	1
PRAIRIE BRAND/ PB-1954RR	122	36.3	18.9	1	36.1	19.8	1	36.2	19.4	1
WECO/ EXP 6 1.0RR	122	36.2	18.8		36.1	20.0	1	36.2	19.4	1
GOLD COUNTRY SEED/ 2713R	120	36.1	19.0		36.2	19.8		36.2	19.4	1
PRAIRIE BRAND/ PB-1256RR		36.2				19.8	1	36.2		1
	120		18.5	1	36.1				19.1	
MUSTANG/ M-156RR	121	36.4	18.9	1	35.9	20.0	1	36.2	19.5	1
PUBLIC/ SD00-1018R	122	36.3	19.0	1	36.0	20.1	1	36.2	19.6	1
THOMPSON/ T-7234RR	127	36.1	19.0	1	36.1	19.7	1	36.1	19.4	1
NUTECH/ NT-7205+RR	128	36.3	19.0	1	35.9	19.8	1	36.1	19.4	1
KRUGER/ EXP186RR	124	36.3	19.0	1	35.9	19.8	1	36.1	19.4	1
NORTHSTAR/ EXP 1401RR	117	36.3	18.6	1	35.9	19.7	1	36.1	19.2	1
SODAK GENET./ SD1111RR	121	36.8	18.9	1	35.4	20.2	1	36.1	19.6	1
DEKALB/ DKB18-51	123	36.4	18.9	1	35.7	19.9	1	36.1	19.4	1
KRUGER/ K-120RR	121	36.2	19.0	1	35.9	19.6	1	36.1	19.3	1
KRUGER/ K-140RR	121	36.6	18.8	1	35.5	19.9	1	36.1	19.4	1
WENSMAN/ W 2163RR	117	36.5	18.6	1	35.6	19.4	1	36.1	19.0	1
PUBLIC/ SD01-3219R	123	36.6	18.7	1	35.5	20.0	1	36.1	19.4	1
PRAIRIE BRAND/ PB-1525RR	119	36.1	19.0	1	35.9	19.9	1	36.0	19.5	1
ASGROW/ AG1903	122	36.0	18.8	1	35.9	19.7	1	36.0	19.3	1
WECO/ EXP 6 1.5RR	123	35.9	19.1	1	36.0	19.9	1	36.0	19.5	1
KRUGER/ K-195+RR/SCN	125	36.1	19.3	1	35.8	20.0	1	36.0	19.7	1
KRUGER/ K-188RR/SCN	123	35.8	19.2	1	36.1	20.0	1	36.0	19.6	1
PRAIRIE BRAND/ PB-1885NR	124	35.8	19.2	1	36.1	20.0	1	36.0	19.6	1
WENSMAN/ W 2142RR	121	36.7	19.0	1	35.1	20.3	1	35.9	19.7	1
PUBLIC/ SD01-3477R	123	36.6	18.9	1	35.2	20.3	1	35.9	19.6	1
KRUGER/ K-177RR	123	36.3	19.0	1	35.5	20.1	1	35.9	19.6	1

Table 4b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2006.

			Ce	ntral Averag	jes by Locat	ion		C4	Central Zone Averages			
Brand/Variety	DTM*		Brookings			Bancroft		Centr	ai Zone Ave	rages		
(By 2006 zone protein)	DIW	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*		
WENSMAN/ W 2195NRR	124	35.4	19.2	1	36.4	19.8	1	35.9	19.5	1		
CROW'S/ C1706R	123	36.0	18.8	1	35.8	19.9	1	35.9	19.4	1		
STINE/ 1918-4	126	36.1	19.1	1	35.6	20.0	1	35.9	19.6	1		
PUBLIC/ SD01-1120R	124	36.2	19.0	1	35.5	20.2	1	35.9	19.6	1		
NUTECH/ NT-2202RR	128	36.0	19.1	1	35.5	20.1	1	35.8	19.6	1		
PUBLIC/ SDX00R-017-52	124	35.7	19.1	1	35.8	20.1	1	35.8	19.6	1		
PUBLIC/ SDX00R-053-46	126	35.8	19.0	1	35.7	19.6	1	35.8	19.3	1		
HEFTY/ 195RR	126	35.8	18.9	1	35.6	19.9	1	35.7	19.4	1		
KRUGER/ K-194RR	126	35.4	18.9	1	36.0	19.4	1	35.7	19.2	1		
PRAIRIE BRAND/ PB-1916RR	120	36.0	19.0	1	35.3	19.9	1	35.7	19.5	1		
PUBLIC/ SDX00R-029-3	124	35.6	19.1	1	35.6	20.0	1	35.6	19.6	1		
LATHAM/ EXP-E1950R	127	35.5	18.9	1	35.6	19.6	1	35.6	19.3	1		
WENSMAN/ W 2172NRR	119	35.8	18.6	1	35.3	20.2	1	35.6	19.4	1		
NUTECH/ NT-1991RR	123	35.6	18.8	1	35.4	19.9	1	35.5	19.4	1		
THOMPSON/ T-7193RR/SCN	120	35.9	19.4	1	35.1	20.4	1	35.5	19.9	1		
PUBLIC/ SD02R-8	124	35.5	18.9	1	35.3	20.0	1	35.4	19.5	1		
PRAIRIE BRAND/ PB-1956RR	126	35.7	19.3	1	34.9	20.2	1	35.3	19.8	1		
PRAIRIE BRAND/ PB-1294RR	123	35.4	19.1	1	34.8	20.1	1	35.1	19.6	1		
MUSTANG/ M-115RR	119	35.2	19.0	1	34.8	20.1	1	35.0	19.6	1		
COYOTE/ 4719RR		35.9	19.3	1								
GOLD COUNTRY SEED/ 8716R		36.0	18.9	1								
KALTENBERG/ KB135RR	124	36.8	18.5	1								
KALTENBERG/ KB155RR		36.6	18.5	1								
STINE/ 1330-4	119				36.3	19.9	1					
STINE/ 1108-4	116				36.1	20.0	1					
ZILLER/ BT 7156NR		36.6	18.8	1								
ZILLER/ BT 7186NR		36.2	18.7	1								
NORTHSTAR/ NS 1809RR		36.0	18.6	1								
RENK/ RS165RR		36.8	18.8	1								
RENK/ RS156RR	124	36.2	19.0	1								
Test avg. :	122	36.2	18.9	1	35.9	19.9	1	36.1	19.4	1		
High avg. :	128	37.4	19.4	1	36.9	20.4	1	37.1	19.9	1		
Low avg. :	116	35.2	18.2	1	34.8	19.4	1	35.0	18.9	1		
* Lsd(.05):				0			0			0		
## TPG-avg. :				1			1			1		
@ Coef. Var. :				0			0			0		
No. Entries :		73	73	73	66	66	66	128	128	128		

^{*} DTM= average days from seeding (Brookings - May 22, Bancroft- May 30, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error.

Table 5a. Roundup Ready™ maturity group-II soybean variety yield averages- central South Dakota locations, 2005-2006.

Table 5a. Koundup Keady ^{IM}	70 1	<u>, </u>	Central Avera			Central Zone Averages		
Brand/Variety	DTM*	Broo	kings	Ban	croft	Central Zon	e Averages	
(By 2-yr then 2006 zone yield)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	
PRAIRIE BRAND/ PB-2243RR	126	60	63	60	66	60	65	
PRAIRIE BRAND/ PB-2421RR	127	56	65	58	62	57	64	
KRUGER/ K-223+RR	125	55	63	55	64	55	64	
MUSTANG/ M-203RR	127	60	63	53	62	57	63	
DEKALB/ DKB22-52	124	59	63	53	62	56	63	
HEFTY/ 226RR	126	57	61	57	62	57	62	
KRUGER/ K-233+RR	129	59	62	55	61	57	62	
KRUGER/ K-211+RR	126	61	63	50	60	56	62	
NUTECH/ NT-2333RR	126	61	61	53	60	57	61	
PRAIRIE BRAND/ PB-2141RR	130	58	62	43	57	51	60	
MUSTANG/ M-207RR	124	61		56		59		
PRAIRIE BRAND/ PB-2456RR	129	56		61		59		
PUBLIC/ SDX00R-020-18	124	59	·	54		57		
KRUGER/ K-255RR	128	58		54	•	56		
KRUGER/ K-259RR	130	54		58		56	·	
MIDWEST SEED/ GR2037	127	60		52		56		
NUTECH/ NT-2626RR	128	56		54	·	55	·	
KRUGER/ EXP226RR	127	55	•	54	•	55	•	
KRUGER/ K-235RR/SCN	127	54	·	55	•	55		
MIDWEST SEED/ GR2231	126	55		55	•	55		
	124						•	
WENSMAN/ W 2200NRR		59 58		50 51	·	55 55	·	
THOMPSON/ T-2220ARR	124	56		54		55 55	•	
THOMPSON/T-2213ARR	127	58		54 52		55	•	
THOMPSON/ T-7206RR	124						•	
PUBLIC/ SD02R-5	125	56		54		55		
PUBLIC/ SD02R-51	121	57		53		55		
KRUGER/ K-234RR	128	57		51		54		
THOMPSON/ T-2666RR	129	56		52		54	•	
PUBLIC/ SDX01R-00403128	124	53		54	•	54		
PUBLIC/ SDX01R-007039	128	56		51		54		
NUTECH/ NT-2220RR	127	58		47		53		
NUTECH/ NT-2232RR	130	55		50		53		
PUBLIC/ SD02R-48	124	57		48		53		
ASGROW/ AG2002	121	59		44		52		
NUTECH/ NT-2213RR	127	56		48		52		
LATHAM/ EXP-E2253R	129	55		49		52		
PRAIRIE BRAND/ PB-2216RR	128	54		49		52		
WENSMAN/ W 2226RR	126	53		50		52		
PUBLIC/ SD02R-50	124	55		49		52		
PRAIRIE BRAND/ PB-2183NR	123	57		44		51		
THOMPSON/ T-2444RR/SCN	127	50		46		48		
ASGROW/ AG2107		58	63					
COYOTE/ 9524RR		56						
COYOTE/ 4523RR		56	61					
COYOTE/ 4527RR		50						

Table 5a. Roundup Ready™ maturity group-II soybean variety yield averages- central South Dakota locations, 2005-2006.

D 10/ : /			Central Averages by Location					
Brand/Variety (By 2-yr then 2006 zone yield)	DTM*	Broo	kings	Ban	croft	Central Zoi	e Averages	
(by 2-yr then 2000 Zone yielu)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	
COYOTE/ EXP 622RR		57						
COYOTE/ EXP 625NRR		51						
COYOTE/ EXP 626RR		54						
SANDS/ SOI 2151NRR		58						
WECO/ EXP 6 2.0RR		61						
WECO/ EXP 6 2.5RR-STS		55						
RENK/ RS246NRR		52						
Test avg. :	126	56	63	52+	62+	55	63	
High value :	130	61	65	61	66	60	65	
Low avg. :	121	50	61	43	57	48	60	
# Lsd (.05):		4	NS	NS	NS	NS	NS	
## TPG-avg. :		57	61	43	57	48	60	
@ Coef. Var. :		5	4	14	9	10	14	
No. Entries :		52	12	41	10	82	20	

^{*} DTM= average days from seeding (Brookings- May 22, Bancroft- May 30, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

⁺ Location was hit by hail on July 13, 2006 resulting in a 40-50% stand defoliation.



[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

[#]TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 5b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2006.

			Ce	ntral Averag	es by Locat	ion		Central Zone Averages			
Brand/Variety	DTM*		Brookings			Bancroft		Centi	ai Zuile Ave	rayes	
(By 2006 zone protein)		Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	
LATHAM/ EXP-E2253R	129	37.0	18.9	1	37.0	19.1	1	37.0	19.0	1	
KRUGER/ EXP226RR	127	37.1	18.6	1	36.8	19.3	1	37.0	19.0	1	
PUBLIC/ SDX01R-00403128	124	36.7	18.7	1	36.9	19.4	1	36.8	19.1	1	
PUBLIC/ SDX01R-007039	128	36.9	18.6	1	36.7	19.0	1	36.8	18.8	1	
PUBLIC/ SD02R-50	124	37.2	18.7	1	36.4	19.5	1	36.8	19.1	1	
NUTECH/ NT-2213RR	127	37.1	18.8	1	36.4	19.5	1	36.8	19.2	1	
PRAIRIE BRAND/ PB-2216RR	128	36.9	18.7	1	36.6	19.4	1	36.8	19.1	1	
PRAIRIE BRAND/ PB-2141RR	130	36.4	19.1	1	37.0	19.4	1	36.7	19.3	1	
THOMPSON/ T-2213ARR	127	36.6	18.9	1	36.8	19.5	1	36.7	19.2	1	
WENSMAN/ W 2226RR	126	36.9	18.9	1	36.4	19.5	1	36.7	19.2	1	
PUBLIC/ SD02R-5	125	36.8	18.8	1	36.5	19.8	1	36.7	19.3	1	
KRUGER/ K-234RR	128	36.5	18.8	1	36.5	18.8	1	36.5	18.8	1	
NUTECH/ NT-2626RR	128	36.4	18.8	1	36.5	19.1	1	36.5	19.0	1	
KRUGER/ K-223+RR	125	36.8	18.6	1	36.1	19.5	1	36.5	19.1	1	
KRUGER/ K-235RR/SCN	128	36.2	19.3	1	36.6	19.3	1	36.4	19.3	1	
MIDWEST SEED/ GR2231	124	36.8	18.9	1	36.0	19.6	1	36.4	19.3	1	
NUTECH/ NT-2232RR	130	36.2	19.1	1	36.5	19.9	1	36.4	19.5	1	
PRAIRIE BRAND/ PB-2456RR	129	36.3	18.9	1 _	36.4	19.4	1	36.4	19.2	1	
PRAIRIE BRAND/ PB-2243RR	126	36.6	19.1	1	36.0	19.8	1	36.3	19.5	1	
THOMPSON/ T-2444RR/SCN	127	36.3	18.7	1	36.3	19.1	1	36.3	18.9	1	
PRAIRIE BRAND/ PB-2421RR	127	36.1	18.6	1	36.4	19.4	1	36.3	19.0	1	
KRUGER/ K-255RR	128	36.5	18.9	1	35.9	19.3	1	36.2	19.1	1	
THOMPSON/ T-7206RR	124	36.7	19.2	1	35.7	19.7	1	36.2	19.5	1	
MIDWEST SEED/ GR2037	127	36.1	19.0	1	36.1	19.5	1	36.1	19.3	1	
MUSTANG/ M-203RR	127	36.3	19.2	1	35.9	19.7	1	36.1	19.5	1	
KRUGER/ K-233+RR	129	35.9	19.0	1	36.2	19.2	1	36.1	19.1	1	
PRAIRIE BRAND/ PB-2183NR	123	36.4	19.3	1	35.7	19.8	1	36.1	19.6	1	
THOMPSON/ T-2666RR	129	36.2	19.1	1	35.9	19.3	1	36.1	19.2	1	
PUBLIC/ SDX00R-020-18	124	36.1	18.8	1	36.0	19.6	1	36.1	19.2	1	
MUSTANG/ M-207RR	124	36.0	19.0	1	35.8	19.6	1	35.9	19.3	1	
NUTECH/ NT-2333RR	126	36.0	18.7	1	35.8	19.6	1	35.9	19.2	1	
NUTECH/ NT-2220RR	127	36.5	18.7	1	35.3	19.5	1	35.9	19.1	1	
HEFTY/ 226RR	126	36.0	18.9	1	35.8	19.5	1	35.9	19.2	1	
THOMPSON/ T-2220ARR	124	36.8	18.6	1	35.0	19.5	1	35.9	19.1	1	
PUBLIC/ SD02R-48	124	36.5	19.0	1	35.3	19.8	1	35.9	19.4	1	
KRUGER/ K-259RR	130	35.6	18.8	1	36.1	19.0	1	35.9	18.9	1	
PUBLIC/ SD02R-51	121	36.1	18.6	1	35.4	19.9	1	35.8	19.3	1	
ASGROW/ AG2002	121	36.2	19.1	1	35.2	19.9	1	35.7	19.5	1	
KRUGER/ K-211+RR	126	36.1	19.0	1	35.3	19.8	1	35.7	19.4	1	
DEKALB/ DKB22-52	124	35.9	19.1	1	35.3	19.8	1	35.6	19.5	1	

Table 5b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2006.

			Ce	ntral Averag	es by Locat	ion		Central Zone Averages			
Brand/Variety	DTM*		Brookings			Bancroft		Centr	ai Zone Ave	erages	
(By 2006 zone protein)	D1141	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	
WENSMAN/ W 2200NRR	124	36.3	19.3	1	33.6	19.1	1	35.0	19.2	1	
ASGROW/ AG2107		36.3	19.3	1							
COYOTE/ 9524RR		35.9	19.1	1							
COYOTE/ 4523RR		36.3	18.9	1							
COYOTE/ 4527RR		35.5	18.9	1							
COYOTE/ EXP 622RR		37.0	18.8	1							
COYOTE/ EXP 625NRR		36.8	18.7	1					•		
COYOTE/ EXP 626RR		36.5	18.9	1					•		
SANDS/ SOI 2151NRR		36.5	19.3	1					•		
WECO/ EXP 6 2.0RR		36.4	19.0	1							
WECO/ EXP 6 2.5RR-STS		36.3	18.5	1							
RENK/ RS246NRR		36.6	18.8	1							
Test avg. :	126.0	36.4	18.9	1	36.1	19.5	1	36.2	19.2	1	
High avg. :	130.0	37.2	19.3	1	37.0	19.9	1	37.0	19.6	1	
Low avg. :	121.0	35.5	18.5	1	33.6	18.8	1	35.0	18.8	1	
* Lsd(.05):				0			0		•	0	
## TPG-avg.:		7 . 4		1			1	7. [1	
### Coef.Var. :		7.8	. '	0			0			0	
No. Entries :		52	52	52	41	41	41	82	82	82	

^{*} DTM= average days from seeding (Brookings- May 25, Bancroft- May 27, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 6a. Roundup Ready™ maturity group-I soybean variety yield averages- southern South Dakota locations, 2005-2006.

			Southern Avera	ges by Location		0.41.7	_
Brand/Variety (By 2-yr then 2006 zone yield)	DTM*	Bere	sford	Ged	ldes	Southern Zo	ne Averages
(by 2-yr then 2000 zone yretu)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr
THOMPSON/ T-7205+RR	124	64	59	48	38	56	49
ASGROW/ AG1903	120	60	56	50	41	55	49
NORTHSTAR/ NS 1809RR	122	65	57	47	38	56	48
KRUGER/ K-195+RR/SCN	121	64	59	48	35	56	47
NUTECH/ NT-1909RR	123	57	57	48	37	53	47
KRUGER/ K-177RR	118	63	58	46	33	55	46
PRAIRIE BRAND/ PB-1954RR	122	59	56	48	36	54	46
PUBLIC/ SDX00R-026-42N	123	61	57	44	34	53	46
KRUGER/ K-156RR	117	57	56	39	32	48	44
PUBLIC/ SD01-3219R	123	56	51	44	33	50	42
SODAK GENET./ SD1111RR	113	47	49	38	30	43	40
PRAIRIE BRAND/ PB-1956RR	125	67		52		60	
ASGROW/ AG1702	118	61		50	39	56	
HEFTY/ 195RR	124	64		47		56	
KRUGER/ K-188RR/SCN	121	67		45		56	
PRAIRIE BRAND/ PB-1916RR	125	65		47		56	
WENSMAN/ W 2195NRR	124	61		50		56	
NUTECH/ NT-1991RR	123	61		49		55	
KRUGER/ K-194RR	123	61		49		55	
SANDS/ SOI 1874NRR	120	60		48		54	
PRAIRIE BRAND/ PB-1885NR	122	62		45		54	
WENSMAN/ W 2172NRR	121	62		46		54	
WENSMAN/ W 2163RR	119	61		45		53	
NORTHSTAR/ NS 1521NRR	116	60		43		52	
WENSMAN/ W 2168NRR	118	55		43		49	
KRUGER/ K-140RR	116	54		42		48	
COYOTE/ 4719RR	128			51	38		
MUSTANG/ M-194NRR	123	63					
WECO/ EXP 6 1.5RR	123			48			
GOLD COUNTRY SEED/2717NR	117	62					
STINE/ 1918-4	118	62	58				
Test avg. :	121	61	56	46	36	53	46
High avg. :	128	67	59	52	41	60	49
Low avg. :	113	47	49	38	30	43	40
# Lsd (.05):		5	NS	4	6	3	
## TPG-avg.:		62	49	48	35	57	
@ Coef. Var. :		5	6	6	8	5	20+
No. Entries :		29	12	28	13	52	22

^{*} DTM= average days from seeding (Beresford- May 17, Geddes- May 25, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

^{+ .}Lsd and TPG-avg. values are not reported because the Coef. of Variation exceeds 15%.

Table 6b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2006.

			Sou	thern Avera	ges by Loca	ntion		Southern Zone Averages			
Brand/Variety	DTM*		Beresford			Geddes					
(By 2006 zone protein)	DIW	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	
KRUGER/ K-156RR	117	36.9	19.6	1	38.3	19.2	1	37.6	19.4	1	
WENSMAN/ W 2168NRR	118	37.1	19.7	2	37.9	19.7	1	37.5	19.7	2	
WENSMAN/ W 2163RR	119	37.3	19.3	2	37.3	19.6	1	37.3	19.5	1	
NORTHSTAR/ NS 1521NRR	116	37.0	19.8	2	37.5	19.8	1	37.3	19.8	2	
PUBLIC/ SDX00R-026-42N	123	37.0	19.4	2	37.5	19.4	1	37.3	19.4	2	
KRUGER/ K-140RR	116	36.3	19.8	2	37.6	19.4	1	37.0	19.6	1	
SODAK GENET./ SD1111RR	113	36.4	20.0	3	37.5	19.7	1	37.0	19.9	2	
WENSMAN/ W 2195NRR	124	36.7	19.7	2	37.1	19.9	1	36.9	19.8	1	
ASGROW/ AG1903	120	36.8	19.3	1	37.0	19.5	1	36.9	19.4	1	
ASGROW/ AG1702	118	36.5	19.8	2	37.2	19.6	1	36.9	19.7	2	
KRUGER/ K-195+RR/SCN	121	36.6	19.8	2	37.1	20.0	1	36.9	19.9	2	
NUTECH/ NT-1909RR	123	36.8	19.6	2	36.9	19.7	1	36.9	19.7	1	
HEFTY/ 195RR	124	36.8	19.6	2	36.9	19.8	1	36.9	19.7	2	
PUBLIC/ SD01-3219R	123	36.5	19.5	2	37.0	19.5	1	36.8	19.5	2	
WENSMAN/ W 2172NRR	121	36.5	19.8	2	36.8	19.8	1	36.7	19.8	1	
SANDS/ SOI 1874NRR	120	36.5	20.0	2	36.7	19.9	1	36.6	20.0	1	
THOMPSON/ T-7205+RR	124	36.7	19.5	2	36.5	19.8	1	36.6	19.7	1	
KRUGER/ K-188RR/SCN	121	36.4	19.9	2	36.7	20.1	1	36.6	20.0	2	
PRAIRIE BRAND/ PB-1954RR	122	36.4	19.5	2	36.7	19.7	1	36.6	19.6	2	
KRUGER/ K-177RR	118	36.4	19.6	2	36.6	19.5	1	36.5	19.6	2	
KRUGER/ K-194RR	123	36.8	19.3	2	36.2	19.9	1	36.5	19.6	1	
PRAIRIE BRAND/ PB-1916RR	125	36.6	19.4	2	36.4	19.7	1	36.5	19.6	1	
PRAIRIE BRAND/ PB-1885NR	122	36.2	19.9	2	36.6	19.9	1	36.4	19.9	1	
NORTHSTAR/ NS 1809RR	122	36.6	19.4	2	36.2	19.6	1	36.4	19.5	2	
NUTECH/ NT-1991RR	123	36.5	19.5	2	36.2	19.7	1	36.4	19.6	1	
PRAIRIE BRAND/ PB-1956RR	125	35.9	19.7	3	35.7	19.9	1	35.8	19.8	2	
COYOTE/ 4719RR	128	•			36.5	19.7	1				
MUSTANG/ M-194NRR	123	36.5	19.8	2							
WECO/ EXP 6 1.5RR	123				36.8	20.0	1				
GOLD COUNTRY SEED/2717NR	117	36.4	20.0	2							
STINE/ 1918-4	118	36.8	19.7	2							
Test avg. :	121	36.6	19.7	2	36.9	19.7	1	36.8	19.7	1	
High avg. :	128	37.3	20.0	3	38.3	20.1	1	37.6	20.0	2	
Low avg. :	113	35.9	19.3	1	35.7	19.2	1	35.8	19.4	1	
* Lsd(.05):				1			0			0.4	
## TPG-avg. :				2			1			1	
@ Coef. Var. :				22			0			22	
No. Entries :		29	29	29	28	28	28	52	52	52	

^{*} DTM= average days from seeding (Beresford- May 17, Geddes- May 25, 2006) to maturity; a missing value indicates a site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not, significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 7a. Roundup Ready™ maturity group-II soybean variety yield averages- southern South Dakota locations, 2005-2006.

		<u> </u>	Southern Avera	Southern Zone Averages			
Brand/Variety (By 2-yr then 2006 zone yield)	DTM*	Bere	sford	Ged	ldes	Southern Zo	ne Averages
(by 2-yr then 2000 Zone yield)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr
DEKALB/ DKB25-51	127	76	66	48	40	62	53
SANDS/ SOI 2448RR	127	67	63	47	38	57	51
KRUGER/ K-233+RR	126	68	62	46	37	57	50
KRUGER/ K-289+RR	131	66	61	46	39	56	50
SANDS/ SOI 2754RR	131	64	58	49	39	57	49
PRAIRIE BRAND/ PB-2141RR	125	69	62	43	36	56	49
PRAIRIE BRAND/ PB-2421RR	126	68	61	44	36	56	49
PRAIRIE BRAND/ PB-2643RR	130	65	58	47	38	56	48
ASGROW/ AG2403	124	66	62	43	33	55	48
MUSTANG/ M-264RR	130	65	59	44	37	55	48
COYOTE/ 9524RR	127	61	59	45	36	53	48
LATHAM/ L2635R	129	65	57	47	37	56	47
DAIRYLAND/ DSR2500RRSTS	128	63	57	48	37	56	47
SANDS/ SOI 2673RR	126	66	60	42	34	54	47
SANDS/ SOI 2884RR	130	64	58	44	35	54	47
PRAIRIE BRAND/ PB-2243RR	125	64	59	44	34	54	47
NUTECH/ NT-2890RR	129	61	57	44	37	53	47
RENK/ RS265RR	129	60	59	44	34	52	47
DAIRYLAND/ DSR-234/RR	124	62	56	45	36	54	46
NUTECH/ NT-2770RR/SCN	129	57	55	48	37	53	46
DAIRYLAND/ DSR-2600/RR	129	63	56	42	35	53	46
PRAIRIE BRAND/ PB-2565RR	131	59	55	47	36	53	46
KRUGER/ K-255RR	127	64	54	45	35	55	45
KRUGER/ K-223+RR	124	61	56	41	32	51	44
DAIRYLAND/ DSR-2300/RR	126	68		49		59	
THOMPSON/ T-2220ARR	126	68		50		59	
ASGROW/ AG2605	127	70		46		58	
MUSTANG/ M-207RR	124	67		48		58	
KRUGER/ K-259RR	131	66		49		58	
LATHAM/ EXP-E2810R	131	66		49		58	
DAIRYLAND/ DSR-2200/RR	127	68		48		58	
LATHAM/ L2500R	126	68		46		57	
LATHAM/ L2646R	128	67		46		57	
PRAIRIE BRAND/ PB-2645RR	130	70		44		57	
CROW'S/ C2917R	133	66		47		57	
SANDS/ SOI 2609RR	131	66		45		56	
DAIRYLAND/ DSR-2511/RR	133	64		47		56	
MIDWEST SEED/ GR2731	131	65		46		56	
THOMPSON/ T-2213ARR	127	66		45		56	
THOMPSON/ T-2666RR	129	68		44		56	
FARM ADVANTAGE/ 7224	126	66		44		55	
NUTECH/ NT-2777RR/SCN	132	60		49		55	
NUTECH/ NT-2890+RR	130	64		45		55	
KRUGER/ K-234RR	126	64		45		55	
LATHAM/ L2775R	129	63		47		55	

Table 7a. Roundup Ready™ maturity group-II soybean variety yield averages- southern South Dakota locations, 2005-2006 (continued).

Brand/Variety	DT8#	n		ges by Location	Idaa	Southern Zone Averages		
(By 2-yr then 2006 zone yield)	DTM*	Bere Bu/Acre 2006	Stora Bu/Acre 2-Yr	Bu/Acre 2006	Ides Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yi	
DAIRYLAND/ DSR2000RRSTS	123	66	. Bu/Acic 2 11	44	. Du/Acic 2 II	55	. Bu/Acic 2 11	
DAIRYLAND/ DSR-2820/RR	125	67		43		55		
WENSMAN/ W 2253RR	129	62		47		55	•	
WENSMAN/ W 2200NRR	123	66		43	·	55		
WENSMAN/ W 2226RR	127	63	·	46	·	55	•	
THOMPSON/ T-2300RR	127	63		47		55	•	
CROW'S/ C2618R	128	62	·	47		55	•	
FARM ADVANTAGE/ 7253	129	60		47	•	54		
NUTECH/ NT-2333RR	123	64		43		54	•	
NUTECH/ NT-2220RR	125	62		45	·	54	•	
WECO/ EXP 6 2.0RR		67	•	40	•		•	
•	125		•	-	•	54	•	
WECO/ EXP 6 2.8RR-SCN	135	64		44		54	•	
DAIRYLAND/ DSR2702RRSTS	129	62		46		54		
PRAIRIE BRAND/ PB-2456RR	127	59		48		54	•	
PRAIRIE BRAND/ PB-2536RR	129	62		46		54		
THOMPSON/ T-2707RR	131	59		49		54		
THOMPSON/ T-2999RR	132	65		42		54		
PUBLIC/ SD02R-48	122	61		46		54		
MUSTANG/ M-227RR	126	65		41		53		
MUSTANG/ M-237RR	125	61		45		53		
DEKALB/ DKB27-53	131	59		47		53		
NUTECH/ NT-2213RR	126	60		45		53		
WECO/ EXP 6 2.5RR-STS	129	60		46		53		
PRAIRIE BRAND/ PB-2216RR	126	61		45		53		
MIDWEST SEED/ GR2037	124	63		43		53		
MIDWEST SEED/ GR2651	128	60		45		53		
THOMPSON/ T-2626RR	126	59		47		53		
ASGROW/ AG2802	132	57		47		52		
MUSTANG/ M-257RR	129	61		43		52		
NUTECH/ NT-2232RR	130	62		42		52		
HEFTY/ 226RR	123	60		44		52		
HEFTY/ 266RR	130	59		45		52		
KRUGER/ K-235RR/SCN	125	59		45		52		
PRAIRIE BRAND/ PB-2636NR	130	59		44		52		
RENK/ RS246NRR	124	57		46		52		
MUSTANG/ M-246NRR	125	59		42		51		
WECO/ EXP 6 2.6RR-SCN	128	57		45		51		
KRUGER/ K-211+RR	125	61	·	40		51	·	
PUBLIC/ SD02R-5	123	60		41		51		
PUBLIC/ SD02R-51	124	61		41		51		
SANDS/ SOI 2675NRR	126	60	•	40		50	•	
KRUGER/ K-287RR/SCN	131	56		43		50		
LATHAM/ EXP-E2976R	132	56		44		50	•	
DAIRYLAND/ DST22-003/RR	124	57		43		50		
MUSTANG/ M-247NRR	127	57		41		49		

Table 7a. Roundup Ready™ maturity group-II soybean variety yield averages- southern South Dakota locations, 2005-2006 (continued).

			Southern Avera	ges by Location		Southern Zone Averages		
Brand/Variety (By 2-yr then 2006 zone yield)	DTM*	Bere	sford	Ged	ldes	Southern 20	ne Averages	
(by 2-yr then 2000 20ne yreit)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	
SANDS/ SOI 2511NRR	128	56		42		49		
THOMPSON/ T-2444RR/SCN	126	56		40		48		
COYOTE/ 4523RR	127			43				
COYOTE/ 4527RR	132	64	59					
COYOTE/ EXP 622RR	127			46				
COYOTE/ EXP 625NRR	125	54						
COYOTE/ EXP 626RR	133	66						
MUSTANG/ M-203RR	122	66	61					
DEKALB/ DKB22-52	123	66	61					
DEKALB/ DKB26-53	126	64	59					
SANDS/ SOI 2151NRR	125			46	36			
KALTENBERG/ KB256RR	128	62	58					
KALTENBERG/ KB276RR	131	69	62					
KALTENBERG/ KB258RR	126	64						
KALTENBERG/ KB266RR	129	64						
ZILLER/ BT 7227NR	121	60						
Test avg. :	128	63	59	45	36	54	48	
High avg.:	135	76	66	50	40	62	53	
Low avg. :	121	54	54	40	32	48	44	
# Lsd (.05):		7	6	4	4	4		
## TPG-avg.:		69	60	46	36	58		
@ Coef. Var. :		7	6	6	7	7	19+	
No. Entries :		103	30	95	25	184	48	

^{*} DTM= average days from seeding (Beresford- May 17, Geddes- May 25, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

⁺ Lsd and TPG-avg. values are not reported because the Coef. of Variation exceeds 15%.

Table 7b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2006.

1000010113, 2000.			Sou	thern Avera	ges by Loca	tion		Southern Zone Averages			
Brand/Variety	DTM*		Beresford			Geddes		Southern Zone Averages			
(By 2006 zone protein)	DIM	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	
DAIRYLAND/ DSR2000RRSTS	123	37.6	19.3	2	37.1	19.5	1	37.4	19.4	1	
MUSTANG/ M-227RR	126	36.9	19.5	2	37.3	19.5	1	37.1	19.5	2	
NUTECH/ NT-2770RR/SCN	129	36.8	18.9	2	37.4	19.2	1	37.1	19.1	2	
THOMPSON/ T-2707RR	131	36.8	19.2	3	37.3	19.2	1	37.1	19.2	2	
LATHAM/ L2500R	126	37.0	19.3	2	37.0	19.5	1	37.0	19.4	2	
WENSMAN/ W 2226RR	127	37.1	19.4	2	36.9	19.5	1	37.0	19.5	2	
NUTECH/ NT-2213RR	126	36.8	19.4	2	37.1	19.4	1	37.0	19.4	2	
DAIRYLAND/ DSR-2200/RR	127	36.9	19.4	2	37.0	19.5	1	37.0	19.5	1	
PRAIRIE BRAND/ PB-2565RR	131	36.9	19.0	2	37.0	19.4	1	37.0	19.2	2	
THOMPSON/ T-2213ARR	127	36.8	19.5	2	37.1	19.7	1	37.0	19.6	2	
FARM ADVANTAGE/ 7224	126	36.9	19.4	2	36.9	19.7	1	36.9	19.6	2	
CROW'S/ C2618R	128	37.0	19.2	2	36.8	19.4	1	36.9	19.3	2	
MIDWEST SEED/ GR2651	128	36.7	19.2	2	37.0	19.4	1	36.9	19.3	1	
FARM ADVANTAGE/ 7253	129	36.8	19.1	2	36.9	19.4	1	36.9	19.3	2	
WECO/ EXP 6 2.5RR-STS	129	36.9	19.2	3	36.8	19.4	1	36.9	19.3	2	
KRUGER/ K-255RR	127	36.9	19.2	2	36.8	19.5	1	36.9	19.4	2	
PRAIRIE BRAND/ PB-2216RR	126	36.6	19.6	2	37.0	19.6	1	36.8	19.6	2	
WENSMAN/ W 2253RR	129	36.7	19.2	2	36.9	19.4	1	36.8	19.3	2	
WECO/ EXP 6 2.6RR-SCN	128	36.8	19.4	2	36.7	19.6	1	36.8	19.5	2	
LATHAM/ L2635R	129	36.6	19.4	2	36.9	19.4	1	36.8	19.4	2	
DAIRYLAND/ DSR2702RRSTS	129	36.7	19.3	2	36.8	19.3	1	36.8	19.3	1	
THOMPSON/ T-2444RR/SCN	129	36.8	18.8	3	36.7	19.4	1	36.8	19.3	2	
RENK/ RS265RR	129	36.7	19.1	2	36.8	19.4		36.8	19.1	2 2	
MUSTANG/ M-247NRR	129	36.7	19.1		36.7	19.5	1	36.7	19.3	2 2	
			19.0	3 2		19.4					
MUSTANG/ M-257RR	129	36.6	19.1	1	36.8		1	36.7	19.3	1	
KRUGER/ K-223+RR	124	36.7			36.7	19.4	1	36.7	19.3		
LATHAM/ EXP-E2976R	132	36.5	19.1	3	36.9	19.3	1	36.7	19.2	2	
DAIRYLAND/ DST22-003/RR	124	36.6	19.4	2	36.8	19.4	1	36.7	19.4	2	
THOMPSON/ T-2626RR	126	36.6	19.5	1	36.8	19.5	1	36.7	19.5	1	
SANDS/ SOI 2511NRR	128	36.6	18.9	3	36.7	19.2	1	36.7	19.1	2	
PRAIRIE BRAND/ PB-2141RR	125	36.6	19.6	1	36.7	19.6	1	36.7	19.6	1	
DAIRYLAND/ DSR-234/RR	124	36.5	19.4	1	36.8	19.4	1	36.7	19.4	1	
DAIRYLAND/ DSR2500RRSTS	128	36.6	19.2	2	36.6	19.5	1	36.6	19.4	2	
WENSMAN/ W 2200NRR	123	36.7	19.6	1	36.5	19.6	1	36.6	19.6	1	
KRUGER/ K-287RR/SCN	131	36.3	19.1	3	36.9	19.3	1	36.6	19.2	2	
MUSTANG/ M-246NRR	125	36.1	19.5	2	37.0	19.4	1	36.6	19.5	2	
HEFTY/ 266RR	130	36.6	19.2	1	36.5	19.3	1	36.6	19.3	1	
PRAIRIE BRAND/ PB-2243RR	125	36.6	19.5	1	36.5	19.6	1	36.6	19.6	1	
RENK/ RS246NRR	124	36.5	19.3	1	36.6	19.4	1	36.6	19.4	1	
CROW'S/ C2917R	133	36.5	19.2	3	36.6	19.6	1	36.6	19.4	2	
HEFTY/ 226RR	123	36.7	19.5	1	36.3	19.6	1	36.5	19.6	1	
KRUGER/ K-233+RR	126	36.5	19.5	1	36.5	19.6	1	36.5	19.6	1	
KRUGER/ K-235RR/SCN	125	36.5	19.4	1	36.5	19.7	1	36.5	19.6	1	
PRAIRIE BRAND/ PB-2456RR	127	36.5	19.5	2	36.5	19.3	1	36.5	19.4	2	
MIDWEST SEED/ GR2037	124	36.7	19.6	1	36.3	19.7	1	36.5	19.7	1	

Table 7b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2006 (continued).

· · · · · · · · · · · · · · · · · · ·			Sou	thern Avera	ges by Loca	ition		Southorn Zono Avoragos			
Brand/Variety	DTM*		Beresford			Geddes		Southern Zone Averages			
(By 2006 zone protein)	DIW!"	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	
THOMPSON/ T-2220ARR	126	36.3	19.1	2	36.7	19.4	1	36.5	19.3	1	
ASGROW/ AG2403	124	36.3	19.6	1	36.6	19.6	1	36.5	19.6	1	
ASGROW/ AG2605	127	36.4	19.4	2	36.5	19.4	1	36.5	19.4	2	
MUSTANG/ M-207RR	124	36.4	19.4	1	36.5	19.6	1	36.5	19.5	1	
MUSTANG/ M-237RR	125	36.5	19.4	2	36.4	19.4	1	36.5	19.4	1	
LATHAM/ EXP-E2810R	131	36.3	19.0	2	36.6	19.4	1	36.5	19.2	2	
PRAIRIE BRAND/ PB-2643RR	130	36.5	19.2	2	36.3	19.6	1	36.4	19.4	2	
PUBLIC/ SD02R-5	123	36.4	19.5	1	36.4	19.7	1	36.4	19.6	1	
KRUGER/ K-289+RR	131	36.6	19.2	2	36.1	19.7	1	36.4	19.5	2	
SANDS/ SOI 2754RR	131	36.3	19.2	2	36.4	19.4	1	36.4	19.3	1	
KRUGER/ K-211+RR	125	36.3	19.5	1	36.4	19.7	1	36.4	19.6	1	
LATHAM/ L2775R	129	36.4	19.3	1	36.3	19.6	1	36.4	19.5	1	
ASGROW/ AG2802	132	35.8	19.4	3	36.8	19.3	1	36.3	19.4	2	
SANDS/ SOI 2675NRR	126	36.2	19.7	2	36.4	19.6	1	36.3	19.7	1	
NUTECH/ NT-2220RR	125	36.2	19.2	1	36.4	19.3	1	36.3	19.3	1	
THOMPSON/ T-2300RR	127	36.3	19.4	2	36.3	19.6	1	36.3	19.5	2	
NUTECH/ NT-2333RR	123	36.3	19.4	2	36.2	19.6	1	36.3	19.5	2	
WECO/ EXP 6 2.0RR	125	36.6	19.3	1	35.9	19.8	1	36.3	19.6	1	
KRUGER/ K-234RR	126	36.3	19.4	2	36.2	19.6	1	36.3	19.5	1	
LATHAM/ L2646R	128	36.3	19.1	2	36.2	19.3	1	36.3	19.2	2	
DAIRYLAND/ DSR-2300/RR	126	36.2	19.4	2	36.3	19.6	1	36.3	19.5	1	
DAIRYLAND/ DSR-2820/RR	125	36.3	19.1	1	36.2	19.5	1	36.3	19.3	1	
DAIRYLAND/ DSR-2511/RR	133	36.1	19.3	2	36.4	19.6	1	36.3	19.5	2	
PRAIRIE BRAND/ PB-2421RR	126	36.2	19.4	1	36.3	19.4	1	36.3	19.4	1	
PRAIRIE BRAND/ PB-2536RR	129	36.4	19.2	2	36.1	19.4	1	36.3	19.3	1	
MUSTANG/ M-264RR	130	36.5	19.1	3	35.9	19.5	1	36.2	19.3	2	
KRUGER/ K-259RR	131	36.5	19.3	2	35.9	19.6	1	36.2	19.5	2	
SANDS/ SOI 2884RR	130	35.7	19.6	2	36.5	19.5	1	36.1	19.6	2	
MIDWEST SEED/ GR2731	131	36.1	19.4	3	36.1	19.6	1	36.1	19.5	2	
PUBLIC/ SD02R-48	122	36.2	19.5	1	36.0	19.7	1	36.1	19.6	1	
NUTECH/ NT-2777RR/SCN	132	35.9	19.5	2	36.3	19.5	1	36.1	19.5	2	
NUTECH/ NT-2890RR	129	36.2	19.1	2	35.9	19.6	1	36.1	19.4	1	
NUTECH/ NT-2890+RR	130	36.2	19.2	1	35.9	19.7	1	36.1	19.5	1	
PRAIRIE BRAND/ PB-2645RR	130	36.2	19.2	2	35.9	19.7	1	36.1	19.5	2	
SANDS/ SOI 2448RR	127	36.1	19.5	2	35.9	19.9	1	36.0	19.7	1	
WECO/ EXP 6 2.8RR-SCN	135	35.4	19.3	3	36.6	19.3	1	36.0	19.3	2	
PRAIRIE BRAND/ PB-2636NR	130	35.7	19.5	3	36.3	19.4	1	36.0	19.5	2	
DAIRYLAND/ DSR-2600/RR	129	36.2	19.0	2	35.7	19.4	1	36.0	19.2	2	
PUBLIC/ SD02R-51	124	36.0	19.5	1	35.8	19.7	1	35.9	19.6	1	
NUTECH/ NT-2232RR	130	36.0	19.5	2	35.7	19.9	1	35.9	19.7	2	
DEKALB/ DKB27-53	131	35.8	19.4	3	35.9	19.8	1	35.9	19.6	2	
SANDS/ SOI 2609RR	131	35.9	19.5	2	35.7	19.7	1	35.8	19.6	2	
DEKALB/ DKB25-51	127	35.8	19.7	2	35.6	19.9	1	35.7	19.8	2	
THOMPSON/ T-2666RR	129	35.6	19.8	1	35.7	19.8	1	35.7	19.8	1	
COYOTE/ 9524RR	127	35.4	19.6	1	35.6	19.9	1	35.5	19.8	1	

Table 7b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2006 (continued).

			Sou	thern Avera	ges by Loca	ition		Southern Zone Averages		
Brand/Variety	DTM*		Beresford			Geddes		Southe	ern Zone Av	erages
(By 2006 zone protein)	DIW	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*
THOMPSON/ T-2999RR	132	35.4	19.8	3	35.5	19.6	1	35.5	19.7	2
SANDS/ SOI 2673RR	126	35.6	19.5	2	34.8	19.2	1	35.2	19.4	1
COYOTE/ 4523RR	127				36.2	19.5	1			
COYOTE/ 4527RR	132	36.3	19.3	1						
COYOTE/ EXP 622RR	127				37.1	19.6	1			
COYOTE/ EXP 625NRR	125	36.9	19.0	2						
COYOTE/ EXP 626RR	133	36.5	19.0	2					•	
MUSTANG/ M-203RR	122	36.8	19.4	1						
DEKALB/ DKB22-52	123	36.8	19.6	1						
DEKALB/ DKB26-53	126	37.0	19.4	2						
SANDS/ SOI 2151NRR	125				36.1	20.1	1			
KALTENBERG/ KB256RR	128	36.4	19.3	1						
KALTENBERG/ KB276RR	131	36.1	19.3	2						
KALTENBERG/ KB258RR	126	36.7	19.4	2						
KALTENBERG/ KB266RR	129	36.8	19.0	3						
ZILLER/ BT 7227NR	121	37.0	19.4	1						
Test avg. :	128	36.4	19.3	2	36.5	19.5	1	36.4	19.4	1
High avg. :	135	37.6	19.8	3	37.4	20.1	1	37.4	19.8	2
Low avg.:	121	35.4	18.8	1	34.8	19.2	1	35.2	19.1	1
* Lsd(.05):		•	·	1			0	7		0.4
## TPG-avg.:		J		2			1			1
@ Coef. Var. :				28			0			26
No. Entries :		103	103	103	95	95	95	184	184	184

^{*} DTM= average days from seeding (Beresford- May 17, Geddes- May 25, 2006) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#]Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error.

Table D. 2006 Conventional soybean entries by brand/variety, maturity group, and gene for *Phytophthora* root rot resistance as reported by entrants; and performance table number(s).

Brand / Variety	Mat. Grp.	Gene Resistance	Table No.(s)
COYOTE/ 5525	2.5	Rps1k	9,10
DAIRYLAND/ DSR-22/STSUL	2.2	Not Reported	9,10
RICHLAND ORGANICS/ 9061	0.9	rps1 - No resist.	8
RICHLAND ORGANICS/ 9532	0.9	rps1 - No resist.	8
SANDS/ EXP2879N	2.8	Not Reported	10
SANDS/ SOI 239N	2.3	Not Reported	10

Public varieties	Public varieties & Experimental lines										
PUBLIC/ HAMLIN	0.9	Rps1k	8,9								
PUBLIC/ SURGE	0.7	Rps1 (Rps1a)	8,9								
PUBLIC/ SD00-1587	2	Not Reported	9,10								
PUBLIC/ SD00-167	1	Not Reported	8,9								
PUBLIC/ SD00-266	1	Not Reported	8,9,10								
PUBLIC/ SD00-632	1	Not Reported	8,9,10								
PUBLIC/ SD00-732	2	Not Reported	9,10								
PUBLIC/ SD00-833	0	Rps1k	8,9								
PUBLIC/ SD00-895	0	Rps1c	8								
PUBLIC/ SD02-1045	1	Rps1k, Rps6	8,9								
PUBLIC/ SD02-1138	1	Rps1c	8,9,10								
PUBLIC/ SD02-14	1	Rps1k	8,9								
PUBLIC/ SD02-195	2	Not Reported	9,10								
PUBLIC/ SD02-22	2	Not Reported	9,10								
PUBLIC/ SD02-26	2	Not Reported	9,10								
PUBLIC/ SD02-829	0	Rps1k	8,9								
PUBLIC/ SD02-906	1	Rps1k	8,9,10								
PUBLIC/ SD02-911	1	Rps1k	8,9								
PUBLIC/ SD02-923	1	Rps1k	8,9								
PUBLIC/ SD02-96	2	Not Reported	9,10								
PUBLIC/ SD03-1537	0	Rps1k	8,9								
PUBLIC/ SD03-1607	1	Rps1k	8,9,10								
PUBLIC/ SD03-1899	1	Rps1k	8,9,10								
PUBLIC/ SD03-2154	0	Rps1k	8,9								
PUBLIC/ SD03-2327	0	Rps1k	8,9								

Strain or race resistance by gene type is reported in table B.

Table 8a. Non-Roundup Ready™ maturity group-0 and -I soybean variety yield averages- South Shore, South Dakota, 2005-2006.

Brand/Variety			Averages by N	Naturity Group	
(By maturity group & 2006	DTM*	M	G-0	M	G-I
yield)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr
PUBLIC/ SD03-1537	125	31			
PUBLIC/ SD00-833	123	29			
PUBLIC/ SD03-2327	121	27			
PUBLIC/ HAMLIN	120	24	33		
PUBLIC/ SURGE	120	23	33		
PUBLIC/ SD02-829	124	22	33		
RICHLAND ORGANICS/ 9532	113	21			
PUBLIC/ SD00-895	124	21			
PUBLIC/ SD03-2154	119	21			
RICHLAND ORGANICS/ 9061	116	20			
PUBLIC/ SD00-632				26	35
PUBLIC/ SD02-14				25	35
PUBLIC/ SD03-1899				25	
PUBLIC/ SD02-1045				24	
PUBLIC/ SD00-266	124			23	
PUBLIC/ SD02-1138	123			23	
PUBLIC/ SD03-1607	124			23	
PUBLIC/ SD02-911	·			22	
PUBLIC/ SD02-923				22	
PUBLIC/ SD00-167	124			21	
PUBLIC/ SD02-906				21	33
Test avg.:	121	24	33	23	34
High avg.:	125	31	33	26	35
Low avg. :	113	20	33	21	33
# Lsd (.05):		3	NS	3	NS
## TPG-value:		28	33	23	33
@ Coef. Var.:		7	8	7	7
No. Entries:		10	3	11	3

^{*} DTM= average days from seeding on May 23, 2006 to maturity; a missing value indicates the site received a hard frost before the variety reached maturity

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 8b. Non-Roundup Ready™ maturity group-0 and -I soybean variety protein, oil,and lodging score averages- South Shore, South Dakota, 2006.

		2006 Averages by Maturity Group								
Brand/Variety (By maturity group & protein)	DTM*		MG-0		MG-I					
(b) matarity group & protom/		Protein %	Oil %	Lodging* (1-5)	Protein %	Oil %	Lodging* (1-5)			
RICHLAND ORGANICS/ 9061	116	39.3	17.1	1						
PUBLIC/ HAMLIN	120	37.9	19.0	1						
PUBLIC/ SURGE	120	37.7	19.0	1						
PUBLIC/ SD00-895	124	37.3	18.8	1	•					
PUBLIC/ SD00-833	123	37.0	18.9	1						
PUBLIC/ SD02-829	124	37.0	19.0	1						
PUBLIC/ SD03-1537	125	36.9	18.8	1						
PUBLIC/ SD03-2327	121	36.8	19.0	1						
PUBLIC/ SD03-2154	119	36.6	19.4	1						
RICHLAND ORGANICS/ 9532	113	36.3	19.5	1						
PUBLIC/ SD00-632					37.3	18.6	1			
PUBLIC/ SD00-167	124				37.0	19.0	1			
PUBLIC/ SD02-14					36.6	19.0	1			
PUBLIC/ SD00-266	124				36.4	19.0	1			
PUBLIC/ SD03-1607	124				36.4	19.1	1			
PUBLIC/ SD02-906					36.3	19.3	1			
PUBLIC/ SD02-911					36.3	19.1	1			
PUBLIC/ SD02-1045					36.3	19.0	1			
PUBLIC/ SD02-923					36.1	19.0	1			
PUBLIC/ SD03-1899					35.8	19.0	1			
PUBLIC/ SD02-1138	123				35.3	19.4	1			
Test avg. :	121	37.3	18.9	1	36.3	19.0	1			
High avg. :	125	39.3	19.5	1	37.3	19.4	1			
Low avg. :	113	36.3	17.1	1	35.3	18.6	1			
* Lsd(.05):				0			0			
## TPG-avg. :				1			1			
@ Coef. Var. :				0			0			
No. Entries :		10	10	10	11	11	11			

^{*} DTM= average days from seeding on May 25, 2006 to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated. ## TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error.

Table 9a. Non-Roundup Ready™ maturity group-0, -I & -II soybean variety yield averages- Brookings, South Dakota, 2005-2006.

Brand/Variety		Averages by Maturity Group								
(By maturity group	DTM*	М	G-0	M	G-I	М	G-II			
& 2006 yield)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr			
PUBLIC/ SD00-833		40								
PUBLIC/ SD03-1537		40								
PUBLIC/ SD02-829	124	39								
PUBLIC/ SD03-2154	123	38								
PUBLIC/ SD03-2327	124	35								
PUBLIC/ HAMLIN	123	34								
PUBLIC/ SURGE	123	33								
PUBLIC/ SD02-906				52						
PUBLIC/ SD02-911				49						
PUBLIC/ SD00-632				47						
PUBLIC/ SD02-1138	123			45						
PUBLIC/ SD03-1607				45						
PUBLIC/ SD03-1899				44						
PUBLIC/ SD02-923				43						
PUBLIC/ SD02-1045				43			•			
PUBLIC/ SD00-167				42						
PUBLIC/ SD02-14				41						
PUBLIC/ SD00-266				39						
PUBLIC/ SD02-22						52				
DAIRYLAND/ DSR-22/STSUL						50				
PUBLIC/ SD00-732						50				
PUBLIC/ SD02-96						50				
PUBLIC/ SD02-195		·				50				
PUBLIC/ SD02-26						49				
PUBLIC/ SD00-1587						48				
COYOTE/ 5525						34				
Test avg. :	123	37		45		48				
High avg.:	124	40		52		52				
Low avg. :	123	33		39		34				
# Lsd (.05):		4		6		6				
## TPG-avg. :		36		46		46				
@ Coef. Var. :		7		7		7				
No. Entries :		7		11		8				

^{*} DTM= days from seeding on May 22, 2006 to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 9b. Non-Roundup Ready™ maturity group-0, -I & -II soybean variety protein, oil, and lodging score averages- Brookings, South Dakota, 2006.

Brand/Variety (By maturity group & protein)	DTM*	2006 Averages by Maturity Group								
		MG-0			MG-I			MG-II		
		Protein (%)	Oil (%)	Lodging* (1-5)	Protein (%)	Oil (%)	Lodging* (1-5)	Protein (%)	Oil (%)	Lodging* (1-5)
PUBLIC/ HAMLIN	123	38.5	18.6	1						
PUBLIC/ SURGE	123	37.6	18.9	1						
PUBLIC/ SD02-829	124	37.2	18.9	1						
PUBLIC/ SD03-1537		37.2	19.2	1						
PUBLIC/ SD00-833		37.1	19.3	1						
PUBLIC/ SD03-2154	123	37.0	19.2	1						
PUBLIC/ SD03-2327	124	36.8	19.1	1						
PUBLIC/ SD02-1045					37.5	18.7	1			
PUBLIC/ SD02-911					37.0	18.5	1			
PUBLIC/ SD00-632					36.9	18.3	1	•		
PUBLIC/ SD00-167					36.9	19.0	1			
PUBLIC/ SD00-266					36.8	18.9	1			
PUBLIC/ SD02-14					36.5	18.7	1			
PUBLIC/ SD02-906					36.5	18.9	1			
PUBLIC/ SD03-1607					36.4	18.8	1			
PUBLIC/ SD02-1138	123				36.3	19.2	1			
PUBLIC/ SD03-1899					36.2	18.8	1	7. F		
PUBLIC/ SD02-923		<i>)</i>			35.7	18.5	1			
PUBLIC/ SD00-732								37.4	18.5	1
PUBLIC/ SD00-1587				7.				37.4	18.6	1
COYOTE/ 5525								36.7	18.3	1
PUBLIC/ SD02-195								36.5	18.8	1
DAIRYLAND/ DSR-22/STSUL								36.1	18.3	1
PUBLIC/ SD02-22								35.9	18.4	1
PUBLIC/ SD02-96								35.9	19.0	1
PUBLIC/ SD02-26								35.2	18.3	1
Test avg. :	123	37.3	19.0	1	36.6	18.8	1	36.4	18.5	1
High avg. :	124	38.5	19.3	1	37.5	19.2	1	37.4	19.0	1
Low avg. :	123	36.8	18.6	1	35.7	18.3	1	35.2	18.3	1
* Lsd(.05):				0			0			0
## TPG-avg. :				1			1			1
@ Coef. Var. :				0			0		0	0
No. Entries :		7	7	7	11	11	11	8	1	8

^{*} DTM= days from seeding on May 22, 2006 to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

[#] TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error.

Table 10a. Non-Roundup Ready™ maturity group-I & -II soybean variety yield averages- Beresford, South Dakota, 2005-2006.

Brand/Variety		Averages by Maturity Group							
(By maturity group	DTM*	М	G-I	MG-II					
& 2006 yield)		Bu/Acre 2006	Bu/Acre 2-Yr	Bu/Acre 2006	Bu/Acre 2-Yr				
PUBLIC/ SD03-1607	117	60							
PUBLIC/ SD00-632	120	57	52						
PUBLIC/ SD02-906	117	57	52						
PUBLIC/ SD03-1899	114	53							
PUBLIC/ SD00-266	112	52							
PUBLIC/ SD02-1138	112	51							
SANDS/ EXP2879N	132			68					
SANDS/ SOI 239N	123			66					
PUBLIC/ SD02-22	122			64	56				
COYOTE/ 5525	132			63	53				
DAIRYLAND/ DSR-22/STSUL	122			62					
PUBLIC/ SD00-732	122			61	50				
PUBLIC/ SD02-195	122			60					
PUBLIC/ SD02-26	125			57	50				
PUBLIC/ SD02-96	123			57					
PUBLIC/ SD00-1587	115			51					
Test avg. :	120	55	52	61	52				
High avg. :	132	60	52	68	56				
Low avg. :	112	51	52	51	50				
# Lsd (.05) :		5	NS	6	NS				
## TPG-avg. :		55	52	62	50				
@ Coef. Var. :		5	5	5	6				
No. Entries :		6	2	10	4				

^{*} DTM= average days from seeding on May 17, 2006 to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

[#] Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best.

Table 10b. Non-Roundup Ready™ maturity group-I & -II soybean variety protein, oil, and lodging score averages- Beresford, South Dakota, 2006.

Brand/Variety				2006 Averages by Maturity Group						
(By maturity group &	DTM*		MG-I			MG-II				
protein)		Protein %	Oil %	Lodging* (1-5)	Protein %	Oil %	Lodging* (1-5)			
PUBLIC/ SD00-632	120	37.0	19.4	3						
PUBLIC/ SD02-906	117	36.8	19.7	2						
PUBLIC/ SD03-1607	117	36.5	19.7	2						
PUBLIC/ SD00-266	112	36.4	20.1	2						
PUBLIC/ SD03-1899	114	36.4	19.7	3						
PUBLIC/ SD02-1138	112	35.5	20.3	4						
PUBLIC/ SD02-96	123				37.1	19.4	1			
PUBLIC/ SD00-1587	115				37.1	19.4	1			
SANDS/ SOI 239N	123				37.0	19.0	2			
PUBLIC/ SD00-732	122				36.6	19.3	1			
PUBLIC/ SD02-195	122				36.6	19.7	1			
DAIRYLAND/ DSR-22/STSUL	122				36.5	19.2	2			
PUBLIC/ SD02-22	122				36.5	19.1	2			
PUBLIC/ SD02-26	125				36.5	19.0	2			
SANDS/ EXP2879N	132				36.2	19.3	5			
COYOTE/ 5525	132				35.6	19.2	4			
Test avg. :	120	36.4	19.8	3	36.6	19.3	2			
High avg. :	132	37.0	20.3	4	37.1	19.7	5			
Low avg. :	112	35.5	19.4	2	35.6	19.0	1			
* Lsd(.05):			. .	1			1			
## TPG-avg. :			7 .	2	.V		2			
@ Coef. Var. :				18			30			
No. Entries :		6	6	6	10	10	10			

^{*} DTM= average days from seeding on May 17, 2006 to maturity; a missing value indicates the site received a hard frost before the variety reached maturity.

^{**} Lodging, 1= all plants erect, 5= all plant flat.

[#]Lsd,(.05)= amount values in a column must differ to be significantly different, if differences are not significant (NS), NS is indicated.

^{##} TPG-avg. = minimum value to qualify for top performance group.

[@] Coef. Var.= a measure of trial experimental error.

Entrant name (brand name)	Mailing address
Scherr's Seed LLC (AgVenture- Warner trial)	13464 335th Ave., Roscoe, SD 57471
Coyote Seed Mills (Coyote), Inc.	PO Box 16, Bridgewater, SD 57319-0016
Crow's Hybrid Corn Co. (Crow's)	14575 University Ave., Waukee, IA 50263
Dairyland Seed Co.,Inc. (Dairyland)	3570 Hwy H, West Bend, WI 53095
Farm Advantage (Farm Advantage)	1275 Hwy 69, Belmont, IA 50421
Gold Country Seed Inc. (Gold Country Seed)	6506 Hwy 15 N., Hutchinson, MN 55350
Hefty Seed Co. (Hefty)	47504 252nd St., Baltic, SD 57003
Integra Seed LTD (PSI Brand)	PO Box 40, Bozeman, MT 59771
Kaltenberg Seeds (Kaltenberg)	5506 State Rd 19, Box 278, Waunakee, WI 5359
Keltgen Inc. (Agventure- So. Shore trial)	44449 US Hwy 212, Watertown, SD 57201
Kruger Seed Co. (Kruger)	33938 160th Ave.,PO Box A, Dike, IA 50624
Latham Seed Co. (Latham)	131 180th St, Alexander, IA 50420-8028
Midwest Seed Genetics (Midwest Seed)	14575 University Ave., Waukee, IA 50263
Monsanto (Asgrow & Dekalb)	102 West Carol Ave., Courtland, IL 60112
Mustang Seeds (Mustang)	PO Box 466, Madison, SD 57042
Northstar Genetics (Northstar)	14602 50th St. SE, Leonard, ND 58052
Nutech Seed, LLC (Nutech)	6131 North Fork Rd., Ames, IA 50010
Prairie Brand Seed Co. (Praire Brand)	15 X Ave., Story City, IA 50248
Renk Seed Co. (Renk)	6809 Wilburn Rd., Sun Prairie, WI 53590
Richland Organics, Inc. (Richland Organics)	100 North 10th St., Breckenridge, MN 56520
Sand Seed Service, Inc. (Sands SOI)	Box 648, Marcus, IA 51035
SDSU Soybean Breeding Program (Experimentals)	Plant Science Dept, Brookings, SD 57007
Seeds 2000 (Seeds 2000)	PO Box 200, Breckenridge, MN 56520
Sodak Genetics (Sodak)	1200 Campus Dr., Brookings, SD 57007
Stine Seed Co.(Stine)	2225 Laredo Trail, Adel, IA 50003
Thompson Seeds (Thompson)	40321 130th Ave., Leland, IA 50453
Thunder Seed Inc. (Thunder)	3008 210th St. W., Hawley, MN 56549
Wensman Seed Co.(Wensman)	PO Box 190, Wadena, MN 56482
Wilbur Ellis Seed (WECO)	3320 Pine Ave., Brookings, SD 57006
Ziller Seed Co.Inc.(Ziller)	76374 380th St., Bird Island, MN 55310

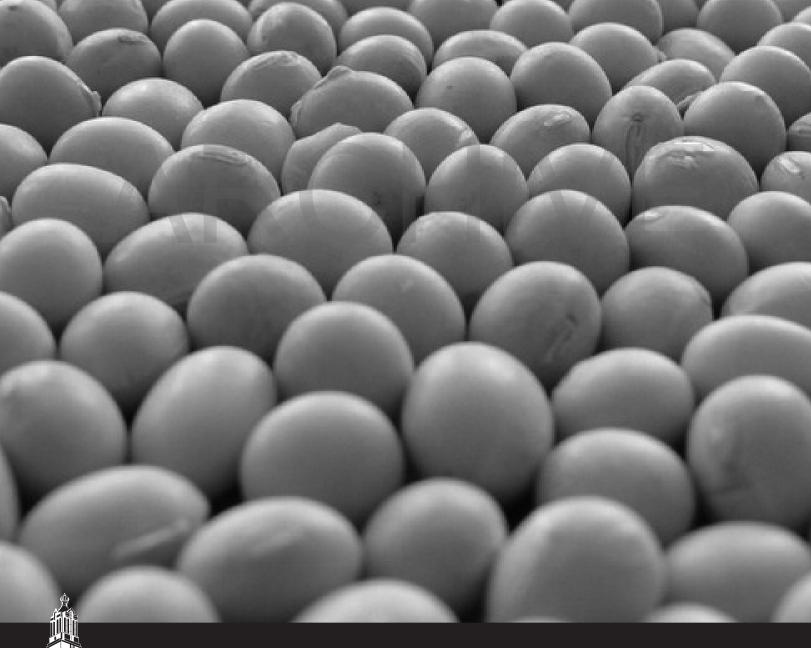
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SOYBEAN

Variety Performance Trials—2007 Results



South Dakota State University ullet Cooperative Extension Service ullet U.S. Department of Agriculture

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EC 775—Precision Planted Soybeans 2007 Crop Performance Results is available electronically on the internet

http://agbiopubs.sdstate.edu/articles/EC775-07.pdf



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SOYBEAN Variety Performance Trials—2007 Results

Robert G. Hall, Extension agronomist - crops/manager - crop testing Kevin K. Kirby, Agricultural research manager - crop testing Jesse Hall, Agricultural research manager - crop testing

Successful soybean production is greatly affected by variety selection. This publication reports the agronomic performance of entries in the 2007 South Dakota performance trials for conventional non-Roundup Ready and Roundup Ready soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

General

Soybean varieties are classified according to maturity groups, which are then adapted to maturity zones. Maturity zones are based on day length and are therefore greatly affected by latitude. Consequently, maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. Groups III through VIII are suited to Iowa, Nebraska, and southward into Texas.

These soybean trial results are reported according to the prevalent maturity zones in South Dakota (see map below). The Roundup-Ready™ soybean variety trials were conducted in the following test zones and locations:

Northern test zone: Maturity groups-0 and -I at South Shore and Warner

Central test zone: Maturity groups-0, -I, and -II at Brookings and Bancroft

Southern test zone: Maturity groups-I and -II at Beresford and Geddes

The conventional soybean variety trials are conducted at the following SDSU affiliated research farms:

Northeast Research Farm, South Shore: Maturity groups-0 and -I

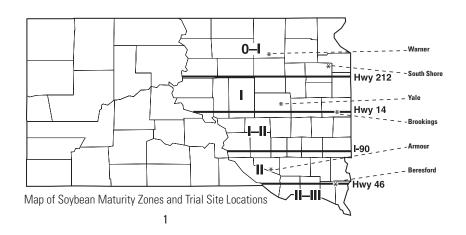
SDSU Plant Science Farm, Brookings: Maturity groups-0, -I, and –II $\,$

Southeast SD Agricultural Experiment Station, Beresford: Maturity groups-I and –II

There are transition areas where varieties of two maturity groups may perform similarly. In such cases, mitigating factors like rainfall and/or elevation may moderate the effect of latitude on maturity. In most cases, an earlier maturity group may be seeded in a zone suited to a later maturity group; this is only practical a) if seeding is delayed, or b) if reseeding following hail, or c) if double cropping.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, then the use of varieties with a wide range of rot resistance is strongly suggested (see discussion of Phytophthora under "General Test Procedures").

An alternative method of control is the use of "tolerant varieties." Tolerant varieties are not resistant to PRR in the seedling



stage. Thus, a PRR fungicide must be applied to protect them. Currently, we do not evaluate the field tolerance of varieties. Thus, field tolerance ratings are not available.

Certified seed is the best source of seed and the only way to be assured of the genetic purity of the variety seeded. In addition, inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean soils there is no guarantee that beneficial bacteria will be present to naturally inoculate planted seed. Therefore, inoculation of seed at planting is an inexpensive means of increasing the percentage of plants that will fix nitrogen in the current crop year.

Yield

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested. In addition, two-year averages are included where varieties have been tested for two years. Yield test averages and least significant difference (LSD) values are rounded to the nearest bushel and printed at the bottom of each yield column.

The LSD value can be used to determine if varieties differ in yield per acre. For example, assume variety-A averages 30 bushels, -B averages 25 bushels, and the calculated LSD value is 4 bushels. The average difference between varieties A and B is 5 bushels. Since the average difference of 5 bushels is greater than the test LSD value of 4 bushels, the average of variety-A (30 bushels) is significantly higher than for -B (25 bushels). In contrast, if variety-A averages 28 bushels and -B averages 25 bushels, the average difference would be 3 bushels. In this case, both varieties would have a similar yield average because their difference of 3 bushels was less than the test LSD value of 4 bushels.

The LSD value can be used to identify the best-yielding variety or group of varieties. The LSD value (bottom of each yield column) is used to calculate a **minimum top yield value**. For example, assume the highest yield is 50 bushels and the LSD value is 5 bushels. The minimum top yield value is 45 bushels (50–5 = 45). All yield values higher than 45 are included in the top-yield group. However, because the yield and LSD values are rounded to the nearest whole bushel, we also include yield values of 45 bushels in our definition of minimum top yield value. Therefore, in this case, varieties with averages of 45 bushels or higher are included in the top yield group. Entries in all tables are sorted from high to low values by the variable listed with the brand/variety heading of each table. Note: Entries tested for two years may also have a top yield group value in the 2007 yield column.

Each seed company selects the appropriate maturity group trial (maturity group-0, -I, or -II) and locations for their entries. Companies generally have one or more maturity group checks for their varieties. There are, however, no standard regional or national check varieties for maturity. A late group-I variety from one company may be similar in maturity to an early group-I or an early group-II variety from another company because they use different check varieties for maturity. Therefore, this testing program does not guarantee that entries are placed in the appropriate maturity group trial. Borderline entries with maturity ratings at or near the arbitrary breaks between the late group-0s and early group-Is and between the late group-Is and early group-IIs may cross over in some test trials. It is suggested that you note the reported maturity rating of every entry you are considering. Because all entries at a location are seeded the same day, one

can compare the relative difference in days to maturity among varieties tested at that location. Use caution when comparing the maturity rating of a variety over many locations. Variations in soil moisture and temperature may differ between locations, resulting in some maturity variations over locations.

The efforts of D. Doyle, SDSU Agronomy Farm; A. Heuer, NE Research Farm, South Shore; and R. Berg and staff, SE Research Farm, Beresford, in obtaining the data are gratefully acknowledged. Also, the assistance and cooperation of our farmer co-operators Allen and Inel Ryckman, Warner; Curtis Sybesma, Geddes; and Erland Weerts, Bancroft, is gratefully acknowledged.

Protein and Oil Content

The 2007 protein and oil values (adjusted to a 13% moisture basis) were determined using a calibrated FOSS TECATOR Model Infratec 1229 Grain Analyzer. Three replicates of every variety in each trial were tested. Samples of known protein and oil were tested by the SDSU Agricultural Experiment Station Biochemistry Laboratory and were used to calibrate the analyzer.

Weather and Seasonal Precipitation

Seasonal rainfall and its distribution and average temperatures at weather reporting stations nearest each test trial are reported in Table A for the period April 1 to September 30. Seasonal precipitation totals were above normal for Aberdeen (+7.77"), NE Farm (+0.98"), and Platte (+3.60"), but below normal for DeSmet (-0.56"), Brookings (-0.39"), and SE Farm (-2.91"). The greatest midseason moisture (June, July, and August) deficits were apparent at Brookings and the Beresford research farm. At these two locations, moisture deficits were greater at Beresford (-3.02") compared to Brookings (-0.7"). At these reporting stations, average temperatures varied from about -1.0 to +4.0 degrees from normal in May to about ±2.0 from normal in August.

General Test Procedures

These procedures apply to both conventional non-Roundup Ready™ and Roundup Ready™ soybean entries, except for the chemical weed control listed in Table B. Trial locations, soil types, tillage methods, previous crops, pesticide usage, and seeding dates are indicated in Table B.

Test Procedures: A row spacing of 30 inches was used at all locations. The seeding rate was 165,000 seeds per acre for all varieties and locations. Test plots consist of 4-row plots, 20-feet long, with three replications at all locations. Soybean inoculation was accomplished by applying Nitragin brand Soybean Soil Implant down the seed tube, according to label instructions and rates, during seeding. Seeding at all locations was accomplished using a Monosem precision row crop planter; the use of this planter this year resulted in very uniform seed spacing within the seed row. The center two rows of each plot were harvested for yield.

Yield: Plots were harvested at 15% seed moisture or less. Yields were calculated on a 13% moisture content basis and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine.

Reporting variety maturity: Variety maturity is reported as "days to maturity" (DTM). Entries are mature when 95% of the pods have turned brown. Each maturity value is obtained by 1) determining the average number of days from seeding to maturity for two replicates and 2) expressing as DTM at each location. Table DTM values are an average of four replicates (two for each

location). If data is missing at a location, it is noted in a table footnote; if data is missing at both locations (most often from early frost), the data is missing in the DTM column.

Lodging Score: Scores at maturity are based on average erectness of the main stem of plants within each variety: 1 = all plants erect, 2 = slight lodging, 3 = lodging at a 45 degree angle, 4 = severe lodging, and 5 = all plants flat.

Phytophthora **Root Rot** (**PRR**): The gene resistance of each variety to PRR is supplied by each seed company (proprietary

entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). A key for each type of PRR gene and the race resistance it imparts to a variety is given in Table C. Specific race resistance to PRR (reported by seed company)for a variety can be determined by noting the PRR gene in the variety index tables D (Roundup Ready™) and E (Non-Roundup Ready™) and referencing the gene back to table C to find the range of race resistance. Currently, races -1, -3, and -4 are the most common races in South Dakota.

ROUNDUP READY™ SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

Note: Yields are reported as 2007 averages or 2-yr averages (2006-07)

NORTHERN TEST ZONE

SOUTH SHORE- Northeast Research Farm WARNER- Minimum-tillage, Allen & Inel Ryckman Farm (cooperators)

South Shore, Group-0 (Tables 1a & 1b): The 2007 and twoyear test yield averages were 52 and 42 bushels per acre, respectively (Table 1a). Varieties had to average 55 bushels or higher to be in the top yield group for 2007. Likewise, varieties had to average 38 bushels or higher to be in the top yield group for two years. Variety yield averages had to differ by 3 bushels in 2007 to be significantly different, while yield differences for two years were non-significant (NS). The 2007 protein, oil, and lodging score test averages were 35.9%, 19.3%, and 2, respectively (Table 1b). Variety protein and oil values had to average 37.1% and 19.9% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.9% and 0.5%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Warner, Group-0 (Tables 1a & 1b): The 2007 and two-year test yield averages were 49 and 42 bushels per acre, respectively (Table 1a). Varieties had to average 51 bushels or higher to be in the top yield group for 2007. Likewise, varieties had to average 37 bushels or higher to be in the top yield group for two years. Variety yield averages had to differ by 4 bushels in 2007 to be significantly different, while yield differences for two years were non-significant (NS). The 2007 protein, oil, and lodging score test averages were 32.5%, 20.5%, and 1, respectively (Table 1b). Variety protein and oil values had to average 33.0% and 21.2% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 1.2% and 0.5%, respectively, to be significantly different. Variety lodging score values did not differ among varieties; therefore, they were not significantly different

Northern test zone, Group-0 (Tables 1a & 1b): The 2007 and two-year test yield averages in the Northern zone were 51 and 42 bushels per acre, respectively (Table 1a). The effect of variety on yield differed significantly between the two locations for both 2007 and for two years. Growers are encouraged to evaluate varieties by looking at the 2007 and 2-Yr columns at each location

and disregard the yield averages in the Northern zone columns. The 2007 protein, oil, and lodging score test averages were 34.2%, 19.9%, and 1, respectively, across both locations (Table 1b). Like the yield values, the protein, oil, and lodging score values also differed significantly between locations in 2007; therefore, evaluate variety performance by looking at the data columns at each location and not at the Northern zone columns.

South Shore, Group-I (Tables 2a & 2b): The 2007 and two-year test yield averages were 50 and 39 bushels per acre, respectively (Table 2a). Varieties had to average 54 bushels and 35 bushels or higher to be in the top yield group for 2007 and for two years, respectively. Variety yield averages had to differ by 3 bushels in 2007 to be in the top performance group for yield, while the two-year average differences were non-significant (NS). The 2007 protein, oil, and lodging score test averages were 35.3%, 19.3%, and 1, respectively (Table 2b). Variety protein and oil values had to average 36.5% and 20.3% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 1.0% and 0.5%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Warner, Group-I (Tables 2a & 2b): The 2007 and two-year test yield averages were 55 and 44 bushels per acre, respectively (Table 2a). Varieties had to average 58 bushels and 43 bushels or higher to be in the top yield group for 2007 and for two years, respectively. Variety yield averages had to differ by 5 bushels in 2007 and 6 bushels for two years to be significantly different. The 2007 protein, oil, and lodging score test averages were 31.9%, 20.3%, and 1, respectively (Table 2b). Variety protein and oil values had to average 33.3% and 22.6% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 1.3% and 1.0%, respectively, to be significantly different. Variety lodging score values did not differ among varieties; therefore, they were not significantly different.

Northern test zone, Group-I (Tables 2a & 2b): The 2007 and two-year yield test averages were 53 and 42 bushels per acre, respectively (Table 2a). The effect of variety on yield differed significantly between the two locations for both 2007 and for two years. Growers are encouraged to evaluate varieties by looking at the 2007 and 2-yr columns at each location and disregard the yield averages in the Northern zone columns. The 2007 protein, oil, and lodging score test averages were 33.6%, 19.8%, and 1, respectively, across both locations (Table 2b). Like the yield values, the protein, oil, and lodging score values also differed significantly

between locations in 2007; therefore, evaluate variety performance by looking at the data columns at each location and not at the Northern zone columns.

CENTRAL TEST ZONE

BROOKINGS, SDSU Plant Science Research Farm, conventional tillage

Bancroft, No-till, Erland Weerts (cooperator)

Brookings, Group-0 (Tables 3a & 3b): The 2007 and two-year test yield averages were 58 and 55 bushels per acre, respectively (Table 3a). Varieties had to average 58 bushels or higher in 2007 and 55 bushels or higher for two years to be in the top yield group. Variety yield averages had to differ by 5 bushels in 2007 and 4 bushels for two years to be significantly different. The 2007 protein, oil, and lodging score test averages were 36.8%, 19.6%, and 1, respectively (Table 3b). Variety protein and oil values had to average 39.1% and 20.7% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.6% and 0.3%, respectively, to be significantly different. Variety lodging score values did not differ among varieties; therefore, they were not significantly different.

Bancroft, Group-0 (Tables 3a & 3b): The 2007 yield average was 60 and 54 bushels per acre for 2007 and for two years, respectively (Table 3a). Varieties had to average 62 and 50 bushels or higher to be in the top yield group for 2007 and for two years, respectively. Variety yield averages had to differ by 4 bushels in 2007 to be significantly different. In contrast, the yield differences among varieties were non-significant for the two-year period. The 2007 protein, oil, and lodging score test averages were 35.3%, 19.5%, and 1, respectively (Table 3b). Variety protein and oil values had to average 36.1% and 20.4% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.9% and 0.5%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Central test zone, Group-0 (Tables 3a & 3b): The 2007 yield average was 59 bushels and the two-year average was 55 bushels per acre (Table 3a). The effect of variety on yield differed significantly between the two locations for 2007, but was non-significant (NS) for two years. Growers are encouraged to evaluate varieties by looking at the 2007 and 2-yr columns at each location and disregard the yield averages in the Central zone columns. The 2007 protein, oil, and lodging score test averages were 36.0%, 19.5%, and 1, respectively, across both locations (Table 3b). Like the yield values, the protein values also differed significantly between locations in 2007; therefore, evaluate variety protein performance by looking at the protein columns at each location and not at the Central zone columns. Variety oil and lodging score values had to equal 20.5 or higher and 1 to be in the top performance group for oil and lodging resistance, respectively. Variety oil and lodging values had to differ by 0.3% and 1, respectively, to be significantly different.

Brookings, Group-I (Tables 4a & 4b): The 2007 and two-year test yield averages were 60 and 57 bushels per acre, respectively (Table 4a). Varieties had to average 63 and 56 bushels or higher to be in the top yield group for 2007 and for two years, respectively. Variety yield averages had to differ by 5 bushels in both 2007 and

for two years to be significantly different. The 2007 protein, oil, and lodging score test averages were 36.8%, 20.5%, and 1, respectively (Table 4b). Variety protein and oil values had to average 38.0% and 21.1% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 1.0% and 0.5%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Bancroft, Group-I (Tables 4a & 4b): The yield average was 58 and 56 bushels per acre for 2007 and for two years, respectively (Table 4a). In 2007, varieties had to average 60 bushels or higher to be in the top yield group, while the effect of variety on yield differences was non-significant (NS) for two years. The 2007 protein, oil, and lodging score test averages were 34.2%, 19.5%, and 1, respectively (Table 4b). Variety protein and oil values had to average 35.6% and 20.1% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.9% and 0.4%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Central test zone, Group-I (Tables 4a & 4b): Yields averaged 59 and 56 bushels per acre, respectfully, for 2007 and for the two-year period (Table 4a). Varieties had to average 63 and 57 bushels or higher to be in the top yield group for 2007 and for two years, respectively. Variety yield averages had to differ by 3 bushels in 2007 and 4 bushels for two years to be significantly different. The 2007 protein, oil, and lodging score test averages were 35.5%, 20.0%, and 1, respectively, across both locations (Table 4b). Like the yield values, the protein, oil, and lodging score values also differed significantly between locations in 2007; therefore, evaluate variety protein and oil performance by looking at the data columns at each location and not at the Central zone columns. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Brookings, Group-II (Tables 5a & 5b): The 2007 and two-year test yield averages were 59 and 58 bushels per acre, respectively (Table 5a). Varieties had to average 59 bushels or higher in 2007 and 56 bushels or higher for two years to be in the top yield group. Variety yield averages had to differ by 5 bushels in 2007 to be significantly different, while differences among varieties were non-significant for two years. The 2007 protein, oil, and lodging score test averages were 36.3%, 19.8%, and 1, respectively (Table 5b). Variety protein and oil values had to average 37.4% and 20.4% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.8% and 0.5%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Bancroft, Group-II (Tables 5a & 5b): The 2007 yield average was 57 and 56 bushels per acre in 2007 and for two years, respectively (Table 5a). Varieties had to average 58 bushels or higher in 2007 and 53 bushels or higher to be in the top yield group for two years. Variety yield averages had to differ by 4 bushels in 2007, while differences among varieties were non-significant (NS) for two years. The 2007 protein, oil, and lodging score test averages

were 34.3%, 19.6%, and 1, respectively (Table 5b). Variety protein and oil values had to average 35.8% and 20.1% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 1.0% and 0.5%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Central test zone, Group-II (Tables 5a & 5b): The 2007 yield average was 58 and 57 bushels per acre for 2007 and for two years, respectively (Table 5a). Varieties had to average 59 bushels or higher in 2007 and 55 bushel or higher to be in the top yield group for two years. Variety yield averages had to differ by 3 bushels in 2007, while differences among varieties were non-significant (NS) for two years. The 2007 protein, oil, and lodging score test averages were 35.2%, 19.7%, and 1, respectively, across both locations (Table 5b). Like the yield values, the protein, oil, and lodging score values also differed significantly between locations in 2007; therefore, evaluate variety protein and oil performance by looking at the data columns at each location and not at the Central zone columns. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

SOUTHERN TEST ZONE

BERESFORD, Conventional tillage, Southeast SD Agricultural Experiment Station

GEDDES, No-till, Curtis Sybesma (cooperator)

Beresford, Group-I (Tables 6a & 6b): The 2007 and two-year test yield averages were 55 and 57 bushels per acre, respectively (Table 6a). Varieties had to average 55 bushels or higher in 2007 and 54 bushels or higher for two years to be in the top yield group. Variety yield averages had to differ by 4 bushels in 2007 and 7 bushel for two years to be significantly different. The 2007 protein, oil, and lodging score test averages were 35.4%, 21.1%, and 1, respectively (Table 6b). Variety protein and oil values had to average 36.5% and 21.8% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.8% and 0.4%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group.

Geddes, Group-I (Tables 6a & 6b): The test yield averages for 2007 and for two years were 55 and 51 bushels per acre, respectively (Table 6a). Varieties had to average 54 bushels or higher in 2007 and 50 bushels or higher for two years to be in the top yield group. Variety yield averages had to differ by 6 bushels both in 2007 and for two years to be significantly different. The 2007 protein, oil, and lodging score test averages were 32.5%, 20.8%, and 1, respectively (Table 6b). Variety protein and oil values had to average 33.3% and 21.3% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 1.2% and 0.4%, respectively, to be significantly different. Variety lodging score values did not differ among varieties; therefore, they were not significantly different.

Southern test zone, Group-I (Tables 6a & 6b): The 2007 and two-year test yield averages in the Southern zone were 55 and 54 bushels per acre, respectively (Table 6a). Varieties had to average 55 bushels or higher in 2007 and 54 bushels or higher for

two years to be in the top yield group. Variety yield averages had to differ by 4 bushels in 2007 and 5 bushels for two years to be significantly different. The 2007 protein, oil, and lodging score test averages were 34.0%, 20.9%, and 1, respectively, across both locations (Table 6b). Like the yield values, the protein, oil, and lodging score values also differed significantly between locations in 2007; therefore, evaluate variety protein and oil performance by looking at the protein and oil columns at each location and not at the Southern zone columns. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Beresford, Group-II (Tables 7a & 7b): The 2007 and two-year test yield averages were 54 and 60 bushels per acre, respectively (Table 7a). Varieties had to average 55 bushels or higher in 2007 and 59 bushels for two years to be in the top yield group. Variety yield averages had to differ by 5 bushels in 2007 and 7 bushels for two years to be significantly different. The 2007 protein, oil, and lodging score test averages were 35.4%, 20.2%, and 1, respectively (Table 7b). Variety protein and oil values had to average 37.0% and 20.9% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.8% and 0.5%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Geddes, Group-II (Tables 7a & 7b): The 2007 and two-year test yield averages were 56 and 51 bushels per acre, respectively (Table 7a). Varieties had to average 58 bushels or higher in 2007 and 47 bushels or higher for two years to be in the top yield group. Variety yield averages had to differ by 7 bushels in 2007 to be significantly different, while the yield average differences were non-significant (NS) for two years. The 2007 protein, oil, and lodging score test averages were 33.3%, 19.7%, and 1, respectively (Table 7b). Variety protein and oil values had to average 34.6% and 20.4% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 1.5% and 0.8%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Southern test zone, Group-II (Tables 7a & 7b): The 2007 and two-year test yield averages in the Southern zone were 55 and 56 bushels per acre, respectively (Table 7a). The effect of variety on yield differed significantly between the two locations for both 2007 and for two years. Growers are encouraged to evaluate varieties by looking at the 2007 and 2-Yr columns at each location and disregard the yield averages in the Southern zone columns. The 2007 protein, oil, and lodging score test averages were 34.3%, 20.0%, and 1, respectively, across both locations (Table 7b). Like the yield values, the protein, oil, and lodging score values also differed significantly between locations in 2007; therefore, evaluate variety protein and oil performance by looking at the protein and oil columns at each location and not at the Southern zone columns. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

NON-ROUNDUP READY SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

SOUTH SHORE, Conventional tillage, Northeast Research Farm

BERESFORD, Conventional tillage, Southeast SD Agricultural Experiment Stn.

Note: Yields are reported as 2007 averages or 2-yr averages (2006-07)

South Shore, Group-0 (Tables 8a & 8b): The 2007 and two-year test yield averages were 47 and 35 bushels per acre, respectively (Table 8a). Varieties had to average 42 bushels or higher in 2007 and 34 bushels or higher for two years to be in the top yield group. There were no significant differences in yield average among the varieties tested in 2007 and for two years. The 2007 protein, oil, and lodging score test averages were 35.5%, 19.1%, and 1, respectively (Table 8b). Variety protein and oil values had to average 35.5% and 19.5% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 1.0% and 0.4%, respectively, to be significantly different. Variety lodging score values did not differ among varieties; therefore, they were not significantly different.

South Shore, Group-I (Tables 8a & 8b): The 2007 and two-year test yield averages were 47 and 34 bushels per acre, respectively (Table 8a). Varieties had to average 47 bushels or higher in 2007 to be in the top performance group for yield, while there were no significant differences in yield average among the varieties tested for two years. Variety yield averages had to differ by 3 bushels or more in 2007 to be significantly different. The 2007 protein, oil, and lodging score test averages were 36.3%, 18.1%, and 2, respectively (Table 8b). Variety protein and oil values had to average 37.0% and 18.1% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.9% and 0.7%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Brookings, Group-0 (Tables 9a & 9b): The 2007 and two-year test yield averages were 56 bushels and 46 bushels per acre, respectively (Table 9a). All varieties tested in 2007 and for two years were in the top yield group because the yield average differences among them were non-significant (NS). The 2007 protein, oil, and lodging score test averages were 37.0%, 19.5%, and 1, respectively (Table 9b). Variety protein and oil values had to average 37.7% and 20.0% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.9% and 0.3%, respectively, to be significantly different. Variety lodging score values did not differ among varieties; therefore, they were not significantly different.

<u>Brookings, Group-I (Tables 9a & 9b):</u> The 2007 and twoyear test yield averages were 53 bushels and 50 bushels per acre, respectively (Table 9a). Varieties had to average 53 bushels or higher in 2007 and 48 bushels or higher for two years to be in the top performance group for yield. Variety yield averages had to differ by 3 bushels or more in 2007 to be significantly different, while the average differences among the varieties for two years were non-significant (NS). The 2007 protein, oil, and lodging score test averages were 37.4%, 19.8%, and 1, respectively (Table 9b). Variety protein values had to average 38.6% to be in the top performance group for protein in 2007. Variety protein averages had to differ by 1.1% to be significantly different. Variety oil and lodging score values did not differ among varieties; therefore, they were not significantly different.

Brookings, Group-II (Tables 9a & 9b): The 2007 and two-year test yield averages were 47 bushels and 50 bushels per acre, respectively (Table 9a). Varieties had to average 49 bushels or higher in 2007 and 46 bushels or higher for two years to be in the top yield group. Variety yield averages had to differ by 5 bushels in 2007 to be significantly different, while the average differences among the varieties for two years were non-significant. The 2007 protein, oil, and lodging score test averages were 37.4%, 19.1%, and 1, respectively (Table 9b). Variety protein and oil values had to average 38.0% and 18.9% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.8% and 0.7%, respectively, to be significantly different. Variety lodging score values did not differ among varieties; therefore, they were not significantly different.

Beresford, Group-I (Tables 10a & 10b): The 2007 and two-year test yield averages were 41 and 51 bushels per acre, respectively (Table 10a). All varieties tested in 2007 and for two years were in the top yield group because the yield average differences among them were non-significant (NS). The 2007 protein, oil, and lodging score test averages were 35.0%, 20.4%, and 1, respectively (Table 10b). Variety protein and oil values had to average 36.2% and 20.7% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.9% and 0.3%, respectively, to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Beresford, Group-II (Tables 10a & 10b): The 2007 and two-year test yield averages were 44 and 54 bushels per acre, respectively (Table 10a). All varieties tested in 2007 and for two years were in the top yield group because the yield average differences among them were non-significant (NS). The 2007 protein, oil, and lodging score test averages were 35.4%, 19.9%, and 1, respectively (Table 10b). Variety protein and oil values had to average 36.5% and 20.2% or higher, respectively, to be in the top groups for protein and oil in 2007. Variety protein and oil averages had to differ by 0.9% and 0.5%, respectively, to be significantly different. Variety lodging score values did not differ among varieties; therefore, they were not significantly different.

Table A. Monthly nearest weather station totals for precipitation and average temperatures; and their departures from normal (DFN) for the 2007 growing season

Source: South Dakota Office of Climate and Weather. 2007. D. Todey and C. Shukla.

Station (Tast sits)	Variable		Monthly data beginning April 1 and ending September 30								
Station (Test site)	variable	April	May	June	July	Aug.	Sept.	Totals			
Aberdeen Airport	Precip inches	'07 DFN*	3.42 1.83	12.23 9.54	2.43 -1.06	0.79 -2.13	2.20 -0.22	1.61 -0.19	22.68 7.77		
(Warner)	Avg.Temp°F	ʻ07 DFN	41 -4.1	60 2.5	69 2.1	74 1.6	68 -2.1	60 0.5			
South Shore Shore	Precip inches	ʻ07 DFN	2.53 0.53	1.99 -0.73	0.95 -2.88	0.83 -0.24	1.93 0.53	5.66 3.77	13.89 0.98		
(NE Farm)	Avg.Temp°F	ʻ07 DFN	40 -3.4	58 2.6	66 1.2	71 0.7	68 0.2	61 3.0			
DeSmet/	Precip inches	ʻ07 DFN	3.42 1.21	4.25 1.17	2.27 -1.65	1.05 -2.50	4.27 1.41	2.16 -0.20	17.42 -0.56		
(Bancroft)	Avg.Temp°F	ʻ07 DFN	44 -1.8	62 4.0	69 1.6	74 2.2	70 -0.1	62 2.0			
Brookings	Precip inches	ʻ07 DFN	3.62 1.59	1.86 -1.09	2.99 -1.24	0.14 -2.97	6.45 3.51	1.00 -1.28	16.06 -0.39		
2NE	Avg.Temp°F	ʻ07 DFN	41 -3.3	61 4.0	68 2.1	72 0.8	68 -0.2	61 1.6			
Centerville	Precip inches	ʻ07 DFN	3.04 0.57	3.49 -0.16	2.16 -1.79	0.00 -3.35	4.95 2.12	1.96 -0.30	15.60 -2.91		
"(SE Farm," Beresford)	Avg.Temp°F	ʻ07 DFN	46 -1.6	64 4.5	70 0.5	75 1.6	73 0.8	64 1.4			
Platte**/ Academy*** (Geddes)	Precip inches	ʻ07 DFN	1.76 -0.85	5.68 1.88	6.24 2.83	1.47 -1.69	4.78 2.31	1.51 -0.88	21.44 3.60		
	Avg.Temp°F	ʻ07 DFN	44 -1.3	62 4.2	69 1.5	76 2.3	72 0.7	65 3.5			

^{*} DFN - how much a variable for one year is greater or less (-) than the long-term average ** Precipitation data

^{***} Temperature data

Table B. Description of soybean trial locations- soil type, tillage methods, previous crop, herbicides, seed inoculants used, a dated seeded.

	0.11.0.14				Herbi	Nitragin	Date		
Location	Soils & Manage	Soils & Management			Applied at	Soybean Soil Implant			
(County)	Type	Tillage	crop	Roundup Ready Non-Ro			ndup Ready	In-furrow	seeded
	Туре	Method		Pre	Post	Pre	Post	at label rate	
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	Yes	May 24
South Shore (Codington)	Kransburg silty clay loam, 3-6% slope	Conven- tional	S. Wheat	None	Roundup twice	None	Harmony/ Poast split	Yes	May 31
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	No-till	Corn	None	Roundup once	-	-	Yes	June 6
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conven- tional	S. Wheat	None	Roundup twice	None	Harmony/ Poast/ Basagran split	Yes	May 21
Geddess (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	Yes	May 26
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conven- tional	Corn	None	Roundup/ Assure II/ Kicker plus	None	Raptor/ Assure II/ Kicker plus	Yes	June 9

Table C. Gene race resistance to Phytophthora root rot

Gene	Race Resistance
0	None- No strain resistance
1A	1-2,10-11,13,15-18,24
1B	1,3-9,13-15,18,21-22
1C	1-3,6-11,13,15,17,21,23-24
1K	1-11,13-15,17-18,21-22,24
2	1-5,9-20
3	1-5,8-9,11,13-14,16,18,23,25
4	1-4,10,12-16,18-21,25
5	1-5,8-9,11-14,18,20,25
6	1-4,10,12,14-16,18-21,25
7	16,18,19
K6	1-22,24-25
C3	1-10,13-18,22-25
В3	1-9,13-16,18,21-23,25
MIX	Resistant & Susceptible Plants
NR	Not reported

Table D. 2007 Roundup Ready™ soybean entries by brand/variety, maturity group, and gene for *Phytophthora* root rot resistance as reported by entrants; and performance table number(s)

Brand / Variety	Mat. Grp.	Gene Resistance	Table No.(s)	Brand / Variety	Mat. Grp.	Gene Resistance	Table No.(s)
ASGROW/ AG0701 ASGROW/ AG0803 ASGROW/ AG1102 ASGROW/ AG1403 ASGROW/ AG1702	0.7 0.8 1.1 1.4 1.7	Not Reported Rps1k Rps1k Rps1k Rps1k	1 1 2,4 2,4 2,4,6	HEFTY/ EXP168R HEFTY/ EXP198R HEFTY/ EXP218RN HEFTY/ EXP248R HEFTY/ EXP298RN	1.6 1.9 2.1 2.4 2.9	rps1 - None rps1 - None Rps1c Rps3 Rps1c	2,4 4 5,7 7
ASGROW/ AG2002 ASGROW/ AG2108 ASGROW/ AG2406 ASGROW/ AG2603 ASGROW/ AG2606 ASGROW/ AG2906	1.9 2.1 2.4 2.6 2.6 2.9	Rps1c Rps1k Rps1c Rps1c Rps1c Not Reported	2,4 5 5,7 7 7	KALTENBERG/ KB196RR KALTENBERG/ KB203RR KALTENBERG/ KB247RR KALTENBERG/ KB268RR KRUGER/ EXP19A07 KRUGER/ K-042RR	1.9 2 2.4 2.7 1.6 0.4	Rps1k Not Reported Rps1 (Rps1a) Not Reported Rps1k Rps1 (Rps1a)	4,6 5 7 7 2,4,6 1,3
ASGROW/ DKB22-52	2.2	rps1 - None	5	KRUGER/ K-056RR	0.6	Rps1 (Rps1a)	1,3
ASGROW/ DKB25-51	2.5	Rps1k	7	KRUGER/ K-072+RR	0.8	Rps1 (Rps1a)	1,3
ASGROW/ DKB27-52	2.7	Rps1c	7	KRUGER/ K-072RR	0.7	Rps1 (Rps1a)	1,3
COYOTE/ 4523RR	2.3	Rps1k	5,7	KRUGER/ K-091RR	0.9	rps1 - None	1,3
COYOTE/ 4527RR	2.7	Rps1k	5,7	KRUGER/ K-098RR	0.9	rps1 - None	1,3
COYOTE/ 4719RR	1.9	Rps1k	2,4	KRUGER/ K-100RR	1	Rps1k	2,4
COYOTE/ 9524RR	2.4	Rps1k	5	KRUGER/ K-120RR	1.2	Rps1k	2,4,6
COYOTE/ EXP722NRR	2.2	Rps1k	5,7	KRUGER/ K-140RR	1.5	Rps1k	2,4,6
COYOTE/ EXP725NRR	2.5	Rps1k	5,7	KRUGER/ K-142RR	1.4	Rps1k	2,4,6
COYOTE/ EXP728NRR	2.7	Rps1k	5,7	KRUGER/ K-170RR/SCN	1.7	Not Reported	2,4,6
DAIRYLAND/ DSR-0701/RR DAIRYLAND/ DSR-0903/RR DAIRYLAND/ DSR-1301/RR DAIRYLAND/ DSR-1601/RR DAIRYLAND/ DSR-2200/RR	0.7	Rps1k	1	KRUGER/ K-194RR	1.9	Rps1k	2,4,6
	0.9	Not Reported	1,3	KRUGER/ K-195+RR/SCN	1.9	Rps1k	2,4,6
	1.3	Not Reported	2,4	KRUGER/ K-201RR/SCN	2	Rps1c	5,7
	1.6	Rps1k	4	KRUGER/ K-234RR	2.4	Not Reported	5,7
	2.2	Not Reported	7	KRUGER/ K-239RR	2.3	rps1 - None	5,7
DAIRYLAND/ DSR-2300/RR DAIRYLAND/ DSR-2600/RR DAIRYLAND/ DSR-2770/RR DAIRYLAND/ DSR1500RRSTS DAIRYLAND/ DSR1701RRSTS	2.3	Not Reported	7	KRUGER/ K-248RR/SCN	2.5	rps1 - None	5,7
	2.6	Rps1k	7	KRUGER/ K-256RR	2.5	Not Reported	5,7
	2.7	Rps1k	7	KRUGER/ K-259RR	2.6	Rps1k	5,7
	1.5	Not Reported	2,4	KRUGER/ K-271RR	2.7	rps1 - None	7
	1.7	Not Reported	4	KRUGER/ K-275RR/SCN	2.8	Rps1c	7
DAIRYLAND/ DSR1850RRSTS	1.8	Not Reported	4	LATHAM/ EXP-E1700R	1.7	rps1 - None	4
FARM/ ADVANTAGE 7194N	1.9	Rps1c	4	LATHAM/ EXP-E2250R	2.2	Rps1c	7
FARM/ ADVANTAGE 7223N	2.2	Rps1k	5,7	LATHAM/ EXP-E2458RV	2.4	Rps1c	7
FARM/ ADVANTAGE 7233N	2.3	Rps1k	7	LATHAM/ L1950R	1.9	Rps1k	4
FARM/ ADVANTAGE 7254N	2.5	Rps1k	7	LATHAM/ L2085R	2	Rps1c	7
GOLD/ COUNTRY 2509RR GOLD/ COUNTRY 2713RR GOLD/ COUNTRY 2815RR GOLD/ COUNTRY 3817RR GOLD/ COUNTRY 3825NRR	0.9 1.3 1.5 1.7 2.5	Not Reported Not Reported Not Reported Not Reported Not Reported	1 2 2,4 2,4 7	LATHAM/ L2158R LATHAM/ L2337R LATHAM/ L2500R LATHAM/ L2780RV LATHAM/ L2810R	2 2.3 2.5 2.7 2.8	Rps1k rps1 - None rps1 - None rps1 - None rps1 - None	7 7 7 7
GOLD/ COUNTRY 8716RR	1.6	Not Reported	2	MUSTANG/ M-066RR	0.6	Rps1 (Rps1a)	1
GOLD/ COUNTRY 9822RR	2.2	Not Reported	7	MUSTANG/ M-075RR	0.7	Rps1 (Rps1a)	1
HEFTY/ 067R	0.6	rps1 - None	1	MUSTANG/ M-095RR	0.9	rps1 - None	1,3
HEFTY/ 117R	1.1	rps1 - None	2	MUSTANG/ M-096RR	0.9	rps1 - None	1,3
HEFTY/ 137R	1.3	Rps1k	2,4	MUSTANG/ M-097RR	0.9	Rps1c	1,3
HEFTY/ 226R	2.2	Rps1 (Rps1a)	7	MUSTANG/ M-115RR	1.1	Rps1c	2,4
HEFTY/ 257RN	2.5	rps1 - None	7	MUSTANG/ M-168RR	1.6	rps1 - None	2,4
HEFTY/ 266R	2.6	Rps1c	7	MUSTANG/ M-207RR	2	Rps1 (Rps1a)	5
HEFTY/ 277RN	2.7	Rps1k	7	MUSTANG/ M-228NRR	2.2	Rps1k	7

Table D. 2007 Roundup Ready™ soybean entries by brand/variety, maturity group, and gene for *Phytophthora* root rot resistance as reported by entrants; and performance table number(s)

Mat. Gene Table						Table	
Brand / Variety	Mat. Grp.	Resistance	No.(s)	Brand / Variety	Mat. Grp.	Gene Resistance	Table No.(s)
MUSTANG/ M-237RR MUSTANG/ M-238NRR MUSTANG/ M-246NRR MUSTANG/ M-264RR MUSTANG/ M-277NRR	2.3 2.3 2.4 2.6 2.7	Rps1k Rps1k rps1 - None Rps1k Rps1c	7 7 7 7	PRAIRIE/ BR. PB-1954RR PRAIRIE/ BR. PB-1956RR PRAIRIE/ BR. PB-2117NRR PRAIRIE/ BR. PB-2147RR PRAIRIE/ BR. PB-2207NRR	1.9 1.9 2.1 2.1 2.2	rps1 - None Rps1c Rps1k rps1 - None Rps1k	2,4,6 2,4,6 5 5 5
MUSTANG/ M-318RR MUSTANG/ T-138RR NORTHSTAR/ NS 1012RR NORTHSTAR/ NS 1123RR NORTHSTAR/ NS 1311RR	2 1.3 1 1.1 1.3	Rps1c Rps1 (Rps1a) Not Reported Not Reported Not Reported	7 2 2 2,4 2,4	PRAIRIE/ BR. PB-2216RR PRAIRIE/ BR. PB-2243RR PRAIRIE/ BR. PB-2337NRR PRAIRIE/ BR. PB-2396RR PRAIRIE/ BR. PB-2421RR	2.2 2.2 2.3 2.3 2.4	Rps1 (Rps1a) Rps1k Rps1k rps1 - None Rps1k	5 5,7 5 5 5,7
NORTHSTAR/ NS 1312RR NUTECH/ NT-0886RR NUTECH/ NT-0889RR NUTECH/ NT-0990RR NUTECH/ NT-1212RR	1.3 0.8 0.8 0.9 1.2	Not Reported Not Reported Not Reported Not Reported Not Reported	2,4 1 1 1,3 2	PRAIRIE/ BR. PB-2447RR PRAIRIE/ BR. PB-2456RR PRAIRIE/ BR. PB-2515RR PRAIRIE/ BR. PB-2565RR PRAIRIE/ BR. PB-2636NRR	2.4 2.4 2.5 2.5 2.6	rps1 - None Rps1k Rps1k Rps1c Rps1k	7 5 5,7 7 7
NUTECH/ NT-1766RR NUTECH/ NT-1808RR/SCN NUTECH/ NT-1991RR NUTECH/ NT-2220RR NUTECH/ NT-6105	1.7 1.8 1.9 2.2 0.9	Not Reported Rps1c Rps1k Not Reported Rps1k	2,4 6 2,4,6 5,7 1,3	PRAIRIE/ BR. PB-2667NRR PRAIRIE/ BR. PB-2697NRR PRAIRIE/ BR. PB-2707RR PRAIRIE/ BR. PB-EX117NRR PRAIRIE/ BR. PB-EX147RR	2.6 2.6 2.7 1.8 1.8	Rps1c Rps1c Rps1k Rps1k rps1 - None	7 7 7 6 6
NUTECH/ NT-6133 NUTECH/ NT-6145 NUTECH/ NT-6156 NUTECH/ NT-6166 NUTECH/ NT-6175	1.3 1.4 1.5 1.6 1.7	Not Reported Not Reported Not Reported Rps1k Not Reported	2,4 2 4 2,4 4	PRAIRIE/ BR. PB-EX207RR PRAIRIE/ BR. PB-EX228RR PRAIRIE/ BR. PB-EX271RR RENK/ RS124NRR RENK/ RS147RR	1.9 1.9 2.7 1.2 1.4	Rps1k rps1 - None Rps1c Rps1c Not Reported	4,6 6 7 4
NUTECH/ NT-6211 NUTECH/ NT-6219 NUTECH/ NT-6242 NUTECH/ NT-6255 NUTECH/ NT-6281	2.1 2.1 2.4 2.5 2.8	Not Reported Not Reported Not Reported Rps3 Rps1k	5,7 7 5,7 7 7	RENK/ RS187NRR RENK/ RS204NRR RENK/ RS247NRR RENK/ RS253RR RENK/ RS277NRR	1.8 2 2.4 2.5 2.7	Rps1k Rps1k Rps1c Not Reported Not Reported	4 5 7 7
NUTECH/ NT-7193RR/SCN NUTECH/ NT-7205+RR NUTECH/ NT-7206 NUTECH/ NT-7222 NUTECH/ NT-7227	1.9 1.9 2.6 2.2 2.2	Rps1k Rps1k Rps1k Rps1k Rps1k	4,6 2,4,6 7 7 5	RG/ 607RR SD/ 1092RR SD/ 1111RR SD/ 1161RR/SCN SEEDS 2000/ 2090RR	0.7 0.9 1.1 1.6 0.9	Rps1k Rps1 (Rps1a) Rps1 (Rps1a) Not Reported	1,3 1,3 2,4,6 2,4,6 1
NUTECH/ NT-7234RR NUTECH/ NT-7282 NUTECH/ NT-7293 PRAIRIE/ BR. PB-0636RR PRAIRIE/ BR. PB-0923RR	2.3 2.8 2.9 0.6 0.9	Rps1k Rps1c Rps1k Rps1k Rps1k	5 7 7 1 1,3	SEEDS 2000/ 2120RR STINE/ 1008-4 STINE/ 1108-4 STINE/ 1432-4 STINE/ 1468-4	1.2 1 1.1 1.4 1.4	Rps1k rps1 - None rps1 - None Rps1k rps1 - None	2 2,4 2 2,4 2,4
PRAIRIE/ BR. PB-0936RR PRAIRIE/ BR. PB-0954RR PRAIRIE/ BR. PB-1007RR PRAIRIE/ BR. PB-1337RR PRAIRIE/ BR. PB-1557NRR	0.9 0.9 0.9 1.3 1.5	rps1 - None rps1 - None Rps1k rps1 - None Rps1k	1,3 1,3 1,3 2,4 2,4	STINE/ 1916-4 STINE/ 1918-4 STINE/ 2523-4 STINE/ 2862-4 THUNDER/ 2511RR	1.9 1.9 2.5 2.8 1.1	rps1 - None rps1 - None Rps1k Rps1k Rps1k	2,4 2,4 7 7 4
PRAIRIE/ BR. PB-1597RR PRAIRIE/ BR. PB-1607RR PRAIRIE/ BR. PB-1737NRR PRAIRIE/ BR. PB-1754RR PRAIRIE/ BR. PB-1914RR	1.5 1.6 1.7 1.7 1.9	rps1 - None Rps1k rps1 - None Rps1 (Rps1a) rps1 - None	2,4 2,4 2,4,6 2,4,6 6	THUNDER/ 2608NRR THUNDER/ 2709RR THUNDER/ 2811RR THUNDER/ 709RR WENSMAN/ W 2090RR	0.8 0 1.1 0.9 0.9	Rps1k Rps1k Rps1k Rps1c Not Reported	1 1 4 1

Table D. 2007 Roundup Ready™ soybean entries by brand/variety, maturity group, and gene for *Phytophthora* root rot resistance as reported by entrants; and performance table number(s)

Brand / Variety	Mat. Grp.	Gene Resistance	Table No.(s)	Brand / Variety	Mat. Grp.	Gene Resistance	Table No.(s)
WENSMAN/ W 2108RR	1	Not Reported	2	PUBLIC/ SD02R-48	1	Not Reported	2,4
WENSMAN/ W 2124RR	1.2	Not Reported	2,4	PUBLIC/ SD02R-5	2	Not Reported	5,7
WENSMAN/ W 2147NRR	1.4	Not Reported	2,4	PUBLIC/ SD02R-51	1	Not Reported	2,4
WENSMAN/ W 2166RR	1.6	Not Reported	2,4,6	PUBLIC/ SD02R-8	1	Not Reported	2,4
WENSMAN/ W 2172NRR	1.7	Not Reported	2,4,6	PUBLIC/ SD03-1774R	0	Not Reported	1,3
WENSMAN/ W 2195NRR	1.9	Not Reported	4,6	PUBLIC/ SD03-2006R	2	Not Reported	5,7
WENSMAN/ W 2200NRR	2	Not Reported	5,7	PUBLIC/ SD03-2222R	2	Not Reported	5,7
WENSMAN/ W 2222NRR	2.2	Not Reported	5,7	PUBLIC/ SD03-2271R	0	Not Reported	1,3
WENSMAN/ W 2253RR	2.5	Not Reported	7	PUBLIC/ SD03-2768R	0	Not Reported	1,3
WENSMAN/ W 2300RR	2.3	Not Reported	7	PUBLIC/ SD03-3493R	0	Not Reported	1,3
ZILLER/ BT 7083NR ZILLER/ BT 7156NR ZILLER/ BT 7186NR ZILLER/ BT 7208NR ZILLER/ BT 7217NR	0.8	Rps1k	1	PUBLIC/ SD03-3580R	0	Not Reported	1,3
	1.5	rps1 - None	2,4	PUBLIC/ SD03-3920R	0	Not Reported	1,3
	1.8	Rps1k	6	PUBLIC/ SDX00R-017-52	1	Not Reported	2,4
	2	Rps1c	5	PUBLIC/ SDX00R-020-18	2	Not Reported	5,7
	2.1	Rps1k	7	PUBLIC/ SDX00R-035-56	2	Not Reported	5,7
PUBLIC/ SD(LD)05-16118 PUBLIC/ SD(LD)05-16121 PUBLIC/ SD(LD)05-16137 PUBLIC/ SD00-1018R PUBLIC/ SD01-1120R	2 1 2 1 1	Not Reported Not Reported Not Reported Not Reported Not Reported	5,7 2,4 5,7 2,4 2,4	PUBLIC/ SDX00R-053-46 PUBLIC/ SDX01R-00403109 PUBLIC/ SDX01R-007039 PUBLIC/ SDX04R-68-1-9	1 1 2 1	Not Reported Not Reported Not Reported Not Reported	2,4 2,4 5,7 2,4



Table 1a. Roundup Ready™ maturity group-0 soybean variety yield averages- northern South Dakota locations, 2006-2007

Brand/Variety	Average	No	rthern Aver	ages by Locati	on	Northe	rn Zone
(By 2-yr then 2007 zone yield)	DTM*	South		Warn		Avei	ages
		Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr
NUTECH/ NT-0886RR KRUGER/ K-072RR PRAIRIE/ BR. PB-0936RR MUSTANG/ M-096RR NUTECH/ NT-0990RR	117 116 117 117 117	57 58 55 54 54	43 46 44 45 42	55 50 53 52 52	46 43 45 44 45	56 54 54 53 53	45 45 45 45 44
HEFTY/ 067R DAIRYLAND/ DSR-0903/RR SEEDS 2000/ 2090RR MUSTANG/ M-095RR NUTECH/ NT-0889RR	114 115 116 116 116	56 53 54 51 52	43 43 43 42 42	54 54 51 51 49	42 43 43 44 44	55 54 53 51 51	43 43 43 43 43
KRUGER/ K-098RR PRAIRIE/ BR. PB-0923RR WENSMAN/ W 2090RR THUNDER/ 709RR ASGROW/ AG0803	116 116 117 118 117	52 54 53 50 52	42 41 41 41 41	49 51 50 48 49	43 42 42 43 41	51 53 52 49 51	43 42 42 42 41
DAIRYLAND/ DSR-0701/RR KRUGER/ K-056RR KRUGER/ K-042RR MUSTANG/ M-097RR MUSTANG/ M-066RR	112 115 113 116 115	52 53 51 51 55	42 43 42 42 40	50 47 48 44 47	40 39 39 40 39	51 50 50 48 51	41 41 41 41 40
PRAIRIE/ BR. PB-0954RR MUSTANG/ M-075RR SD/ 1092RR GOLD/ COUNTRY 2509RR NUTECH/ NT-6105	117 111 116 116 119	52 53 46 52	40 41 38	45 45 48 46 55	40 37 40 42	49 49 47 54	40 39 39
KRUGER/ K-072+RR KRUGER/ K-091RR PRAIRIE/ BR. PB-1007RR ASGROW/ AG0701 PRAIRIE/ BR. PB-0636RR	117 117 119 114 114	54 53 54 54 52		54 55 54 52 53	:	54 54 54 53 53	
PUBLIC/ SD03-2768R PUBLIC/ SD03-3493R THUNDER/ 2608NRR PUBLIC/ SD03-1774R THUNDER/ 2709RR	120 117 111 115 116	49 53 52 52 48		51 46 43 44 45	: : : :	50 50 48 48 47	: : : :
PUBLIC/ SD03-2271R PUBLIC/ SD03-3580R RG/ 607RR PUBLIC/ SD03-3920R ZILLER/ BT 7083NR	115 116 110 116	49 47 46 45 52		44 44 43 45		47 46 45 45	: : :
Test avg. : High avg. : Low avg. : # Lsd (.05): ## TPG-avg. : @ Coef. Var.: No. Entries:	116 120 110	52 58 45 3 55 3	42 46 38 NS 38 6	49 55 43 4 51 5	42 46 37 NS 37 6	51 56 45 ** 4 4	42 45 39 ** 6 23

^{*} DTM= days to maturity at Warner when seeded May 24, 2007; South Shore is missing due to an early frost

[#] LSD,(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

^{**} The effect of variety differed significantly between locations for both 2007 and for two years. Therefore, evaluate varieties by looking at the 2007 and 2-yr columns at each location, not by looking at the Northern zone columns

Table 1b. Roundup Ready™ maturity group-0 soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2007

			Northern Averages by Location							
Brand/Variety	Average	,	South Sho	re		Warner		Northe	rn Zone A	verages
(By 2007 zone protein)	DTM*	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**
SD/ 1092RR SEEDS 2000/ 2090RR PRAIRIE/ BR. PB-0954RR KRUGER/ K-098RR RG/ 607RR		37.9 37.2 36.6 36.5 36.6	19.2 18.3 19.5 19.5 19.6	3 1 2 2 2	33.5 34.1 33.8 33.7 33.6	20.5 19.7 20.2 20.3 21.3	1 1 1 1	35.7 35.7 35.2 35.1 35.1	19.8 19.0 19.9 19.9 20.4	2 1 2 1 2
THUNDER/ 2608NRR NUTECH/ NT-0889RR NUTECH/ NT-0886RR KRUGER/ K-072RR THUNDER/ 2709RR		36.0 36.1 36.3 35.7 35.5	19.2 19.0 18.9 19.0 19.2	3 2 1 1 2	33.9 33.3 33.1 33.6 33.7	20.0 20.4 20.3 20.1 19.9	1 1 1 1	35.0 34.7 34.7 34.6 34.6	19.6 19.7 19.6 19.6 19.5	2 2 1 1 2
WENSMAN/ W 2090RR MUSTANG/ M-096RR KRUGER/ K-072+RR PUBLIC/ SD03-2271R MUSTANG/ M-095RR		36.3 36.3 35.8 36.0 35.9	19.4 19.8 19.0 19.2 19.2	2 1 1 2 3	32.8 32.8 33.0 32.8 32.8	20.4 20.5 20.2 20.6 20.6	1 1 1 1	34.6 34.5 34.4 34.4 34.4	19.9 20.2 19.6 19.9 19.9	2 1 1 1 2
PUBLIC/ SD03-3580R PRAIRIE/ BR. PB-0923RR DAIRYLAND/ DSR-0701/RR DAIRYLAND/ DSR-0903/RR KRUGER/ K-091RR		36.4 36.2 36.2 36.1 35.9	19.3 19.1 19.2 19.5 19.5	2 1 1 1 1	32.2 32.4 32.4 32.3 32.4	21.2 20.4 20.4 20.8 20.7	1 1 1 1	34.3 34.3 34.3 34.2 34.2	20.3 19.8 19.8 20.1 20.1	1 1 1 1 1
MUSTANG/ M-066RR KRUGER/ K-056RR MUSTANG/ M-075RR NUTECH/ NT-0990RR KRUGER/ K-042RR		35.3 36.0 35.6 35.8 36.0	20.3 20.2 19.0 19.1 20.3	2 2 1 1 2	32.9 32.3 32.6 32.3 31.7	20.3 20.4 20.4 20.3 21.6	1 1 1 1	34.1 34.1 34.1 34.1 33.9	20.3 20.3 19.7 19.7 20.9	1 1 1 1 1
NUTECH/ NT-6105 PRAIRIE/ BR. PB-0936RR MUSTANG/ M-097RR THUNDER/ 709RR PRAIRIE/ BR. PB-1007RR		35.8 35.9 35.4 35.8 35.2	19.0 19.1 19.1 19.0 18.7	1 1 1 1 1	31.8 31.4 31.9 31.4 32.0	20.2 20.8 20.5 20.7 20.1	1 1 1 1	33.8 33.7 33.6 33.6 33.6	19.6 20.0 19.8 19.8 19.4	1 1 1 1 1
PUBLIC/ SD03-1774R PUBLIC/ SD03-3920R PUBLIC/ SD03-3493R PRAIRIE/ BR. PB-0636RR ASGROW/ AG0803		35.4 35.6 35.3 34.9 34.5	20.0 18.8 19.7 19.5 19.9	2 2 2 2 3	31.7 31.3 31.5 32.0 32.3	21.3 20.7 21.1 20.2 20.5	1 1 1 1	33.5 33.5 33.4 33.4 33.4	20.6 19.7 20.4 19.8 20.2	1 1 1 2 2
ASGROW/ AG0701 HEFTY/ 067R PUBLIC/ SD03-2768R GOLD/ COUNTRY 2509RR ZILLER/ BT 7083NR		34.7 34.6 35.2 36.0	19.7 19.4 19.6	1 2 2	31.4 31.4 29.8 34.0	20.2 20.3 21.0 20.1	1 1 1 1	33.1 33.0 32.5	20.0 19.9 20.3	1 2 2
Test avg.: High avg.: Low avg.: # LSD(.05): ## TPG-avg.: @ Coef. Var.:		35.9 37.9 34.5 0.9 37.1 2	19.3 20.3 18.3 0.5 19.9 2	2 3 1 1 1 41	32.5 34.1 29.8 1.2 33.0 2	20.5 21.6 19.7 0.5 21.2	1 1 1 NS 1	34.2 35.7 32.5 ***	19.9 20.9 19.0 ***	1 2 1 ***
No. Entries :		39	39	39	39	39	39	38	38	38

^{*} DTM= average days from seeding (South Shore- May 31, Warner- May 24, 2007) to maturity, a missing value indicates the site received a hard frost before the variety reached maturity

^{**} Lodging, 1= all plants erect, 5= all plant flat

^{***} The effect of variety differed significantly between locations for 2007. Therefore, evaluate varieties by looking at the 2007 columns at each location, not by looking at the Northern zone 2007 column.

[#] LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 2a. Roundup Ready™ maturity group-I soybean variety yield averages- northern South Dakota locations, 2006-2007

		No	rthern Avera	ges by Location	on	Northern Zone		
Brand/Variety	Average	South	Shore	Wai	rner	Aver	ages	
(By 2-yr then 2007 zone yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	
NUTECH/ NT-7205+RR WENSMAN/ W 2108RR ASGROW/ AG1702 PRAIRIE/ BR. PB-1954RR ASGROW/ AG1102	123 117 121 123 118	53 55 53 50 54	40 40 40 41 40	60 58 56 53 59	49 49 47 46 46	57 57 55 52 57	45 45 44 44 43	
HEFTY/ 117R NUTECH/ NT-1991RR KRUGER/ K-194RR NUTECH/ NT-1766RR KRUGER/ K-140RR	118 124 123 121 118	54 47 48 46 54	39 38 39 39 40	60 61 56 56 55	46 47 47 47 43	57 54 52 51 55	43 43 43 43 42	
GOLD/ COUNTRY 2713RR PRAIRIE/ BR. PB-1754RR PUBLIC/ SDX00R-017-52 HEFTY/ 137R DAIRYLAND/ DSR-1301/RR	119 122 120 118 119	52 50 47 51 50	40 40 39 38 38	53 55 53 54 53	43 44 44 43 44	53 53 50 53 52	42 42 42 41 41	
MUSTANG/ M-115RR PUBLIC/ SD02R-8 KRUGER/ K-100RR DAIRYLAND/ DSR1500RRSTS SD/ 1161RR/SCN	117 123 116 119 123	49 45 52 47 49	37 36 40 37 38	52 54 52 55 53	44 45 40 43 41	51 50 52 51 51	41 41 40 40 40	
SD/ 1111RR PUBLIC/ SD00-1018R PUBLIC/ SD01-1120R KRUGER/ K-120RR PUBLIC/ SDX00R-053-46	118 118 123 115 121	51 46 45 50 42	38 36 36 37 35	50 51 48 48 49	39 41 41 38 41	51 49 47 49 46	39 39 39 38 38	
WENSMAN/ W 2166RR MUSTANG/ M-168RR HEFTY/ EXP168R STINE/ 1468-4 NUTECH/ NT-6133	120 121 120 121 118	57 56 55 56 53		62 62 63 62 60		60 59 59 59 57		
GOLD/ COUNTRY 2815RR STINE/ 1008-4 WENSMAN/ W 2124RR PRAIRIE/ BR. PB-1337RR PRAIRIE/ BR. PB-1597RR	120 116 119 119 119	52 56 53 52 55		61 58 61 60 56		57 57 57 56 56		
NUTECH/ NT-6166 KRUGER/ EXP19A07 STINE/ 1432-4 PRAIRIE/ BR. PB-1607RR NORTHSTAR/ NS 1012RR	122 123 121 121 119	52 47 52 52 54		58 62 57 57 56		55 55 55 55 55		
ASGROW/ AG1403 MUSTANG/ T-138RR KRUGER/ K-195+RR/SCN WENSMAN/ W 2147NRR NORTHSTAR/ NS 1311RR	119 118 122 121 117	48 53 53 52 54		59 55 54 55 54		54 54 54 54 54		

Table 2a. Roundup Ready™ maturity group-I soybean variety yield averages- northern locations (continued)

Table 2a. Noulluly heady	, ,		orthern Averag				ern Zone
Brand/Variety	Average	South	Shore	Warr	ner	Ave	erages
(By 2-yr then 2007 zone yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr
PRAIRIE/ BR. PB-1557NRR WENSMAN/ W 2172NRR PUBLIC/ SD(LD)05-16121 NUTECH/ NT-6145 KRUGER/ K-142RR	122 121 123 118 119	50 51 49 53 50		55 54 57 50 54		53 53 53 52 52	
PRAIRIE/ BR. PB-1956RR SEEDS 2000/ 2120RR PUBLIC/ SDX01R-00403109 PUBLIC/ SD02R-48 PRAIRIE/ BR. PB-1737NRR	124 116 114 121 121	43 50 49 47 49		61 53 53 54 51		52 52 51 51 50	
ASGROW/ AG2002 KRUGER/ K-170RR/SCN PUBLIC/ SD02R-51 NUTECH/ NT-1212RR PUBLIC/ SDX04R-68-1-9	123 122 123 121 121	46 48 46 49 36		52 50 52 47 42		49 49 49 48 39	
COYOTE/ 4719RR GOLD/ COUNTRY 8716RR GOLD/ COUNTRY 3817RR STINE/ 1918-4 STINE/ 1108-4	116	50 52 51 51	40 39	54			
STINE/ 1916-4 ZILLER/ BT 7156NR NORTHSTAR/ NS 1312RR NORTHSTAR/ NS 1123RR		49 49 45 52			\.	7	
Test avg. : High avg. : Low avg. : # Lsd (.05) : ## TPG-avg. : @ Coef. Var. : No. Entries :	120 124 114	50 57 36 3 54 4 68	39 41 35 NS 35 6	55 63 42 5 58 6	44 49 38 6 43 7 26	53 60 39 ** 5 60	42 45 38 *** 30 25

^{*} DTM= days to maturity at Warner when seeded May 24, 2007; South Shore is missing due to an early frost

[#] LSD,(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

^{**} The effect of variety differed significantly between locations for 2007. Therefore, evaluate varieties by looking at the 2007 columns at each location, not by looking at the Northern zone 2007 column.

^{***} A coefficient of variation value of 30% indicates there was too much experimental error associated with the 2-yr means to make a valid comparison between varieties using means in this column.

Table 2b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2007

South Dakota loc	110113, 200		Nort	hern Avera	aes by Lo	cation				
Brand/Variety	Average	So	uth Sho		<u> </u>	Warne	 r	Norther	n Zone	Averages
(By zone protein)	DTM*	Protein (%)	0il (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**
PUBLIC/ SDX04R-68-1-9 KRUGER/ K-170RR/SCN PRAIRIE/ BR. PB-1737NRR PUBLIC/ SDX01R-00403109 PRAIRIE/ BR. PB-1754RR		37.3 36.1 36.5 37.3 37.4	18.2 18.7 18.9 19.3 18.3	3 2 2 1	33.6 34.5 34.1 33.3 32.4	18.9 19.1 19.2 20.3 19.8	2 1 1 1 1	35.5 35.3 35.3 35.3 34.9	18.6 18.9 19.1 19.8 19.0	3 2 1 1
DAIRYLAND/ DSR-1301/RR DAIRYLAND/ DSR1500RRSTS NUTECH/ NT-7205+RR STINE/ 1008-4 KRUGER/ K-100RR		37.0 37.1 35.7 35.6 36.2	18.5 18.5 19.0 19.3 19.3	1 1 1 1 1	32.7 32.2 33.4 33.2 32.5	20.4 20.0 19.9 20.2 20.8	1 1 1 1 1	34.8 34.7 34.6 34.4 34.4	19.4 19.3 19.5 19.8 20.1	1 1 1 1 1
NUTECH/ NT-1766RR ASGROW/ AG1702 PRAIRIE/ BR. PB-1956RR SD/ 1161RR/SCN NUTECH/ NT-6133		35.9 35.4 37.1 35.4 35.5	18.1 19.5 20.7 19.2 19.2	1 1 2 1 1	32.8 33.1 31.4 32.8 32.5	19.5 19.8 20.4 19.9 19.8	1 1 1 1	34.3 34.3 34.2 34.1 34.0	18.8 19.7 20.6 19.6 19.5	1 1 2 1
PRAIRIE/ BR. PB-1954RR WENSMAN/ W 2108RR ASGROW/ AG2002 KRUGER/ K-194RR SEEDS 2000/ 2120RR		36.1 35.3 36.6 35.0 35.8	19.1 19.4 19.0 18.8 19.0	2 1 2 1 1	31.9 32.7 31.3 32.9 32.0	19.9 20.3 20.2 19.2 19.9	1 1 1 1	34.0 34.0 34.0 34.0 33.9	19.5 19.9 19.6 19.0 19.4	2 1 1 1 1
KRUGER/ K-140RR PRAIRIE/ BR. PB-1337RR PUBLIC/ SD01-1120R HEFTY/ 117R NUTECH/ NT-6166		34.9 35.8 35.9 35.3 34.8	19.6 18.9 19.4 19.5 19.3	1 1 2 1	32.7 31.7 31.7 32.2 32.7	20.6 20.0 20.5 20.3 19.7	1 1 1 1	33.8 33.8 33.8 33.8 33.8	20.1 19.5 20.0 19.9 19.5	1 1 2 1
KRUGER/ K-120RR NORTHSTAR/ NS 1012RR ASGROW/ AG1403 KRUGER/ EXP19A07 NORTHSTAR/ NS 1311RR	· · · · · · · · · · · · · · · · · · ·	35.5 35.4 35.2 35.2 35.3	18.8 19.4 19.3 19.0 19.7	1 1 1 1	32.0 32.0 32.2 32.0 31.9	19.6 20.4 19.7 20.7 20.6	1 1 1 1	33.8 33.7 33.7 33.6 33.6	19.2 19.9 19.5 19.8 20.2	1 1 1 1
NUTECH/ NT-1991RR WENSMAN/ W 2124RR KRUGER/ K-142RR NUTECH/ NT-6145 HEFTY/ 137R		34.8 35.8 35.0 34.8 34.8	19.2 19.1 19.9 19.8 19.4	1 2 1 1	32.3 31.2 32.0 32.0 32.0	19.4 20.2 20.7 20.4 23.5	1 1 1 1	33.6 33.5 33.5 33.4 33.4	19.3 19.6 20.3 20.1 21.5	1 1 1 1
PRAIRIE/ BR. PB-1607RR MUSTANG/ T-138RR PUBLIC/ SD00-1018R GOLD/ COUNTRY 2713RR PUBLIC/ SD02R-48		35.1 35.1 35.4 34.9 34.6	19.1 19.2 19.6 19.8 19.5	1 1 2 1 1	31.6 31.6 31.2 31.5 31.7	20.0 20.1 21.0 20.9 20.1	1 1 1 1	33.4 33.3 33.3 33.2 33.1	19.6 19.7 20.3 20.4 19.8	1 1 2 1 1
SD/ 1111RR KRUGER/ K-195+RR/SCN STINE/ 1432-4 PUBLIC/ SD02R-51 ASGROW/ AG1102		34.2 34.6 34.5 34.4 33.9	20.2 20.1 19.7 19.4 19.1	2 1 1 1 1	31.9 31.4 31.6 31.4 31.9	20.9 20.7 20.8 19.8 20.1	1 1 1 1	33.1 33.0 33.0 32.9 32.9	20.6 20.4 20.3 19.6 19.6	2 1 1 1 1
PUBLIC/ SD02R-8 PUBLIC/ SDX00R-017-52 PRAIRIE/ BR. PB-1557NRR WENSMAN/ W 2172NRR PUBLIC/ SDX00R-053-46		34.3 35.1 34.4 34.0 34.7	19.4 19.9 19.8 19.9 19.4	1 2 1 1 3	31.3 30.5 31.1 31.5 30.7	20.3 21.1 20.8 20.5 20.4	1 1 1 1	32.8 32.8 32.8 32.8 32.7	19.8 20.5 20.3 20.2 19.9	1 1 1 1 2

Table 2b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- northern South Dakota locations, 2007 (continued)

			Nort	hern Avera	ges by Lo	cation		Northern Zone Averages			
Brand/Variety	Average	So	uth Sho	ore		Warne	r	Norther	n Zone i	Averages	
(By zone protein)	DTM*	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**	
STINE/ 1468-4 PRAIRIE/ BR. PB-1597RR WENSMAN/ W 2166RR GOLD/ COUNTRY 2815RR WENSMAN/ W 2147NRR		34.5 34.8 34.5 34.4 34.2	19.8 19.7 19.7 19.7 19.8	1 1 1 1	30.8 30.4 30.7 30.7 30.7	20.9 21.0 20.8 20.8 20.8	1 1 1 1	32.6 32.6 32.6 32.5 32.5	20.3 20.4 20.3 20.3 20.3	1 1 1 1	
NUTECH/ NT-1212RR PUBLIC/ SD(LD)05-16121 MUSTANG/ M-115RR MUSTANG/ M-168RR HEFTY/ EXP168R		34.4 33.4 34.1 34.4 34.1	19.7 19.6 19.6 19.9 19.4	1 1 1 1	30.1 31.1 30.2 29.9 29.9	20.4 19.9 20.7 21.1 21.1	1 1 1 1	32.3 32.3 32.2 32.2 32.0	20.0 19.8 20.2 20.5 20.3	1 1 1 1	
COYOTE/ 4719RR GOLD/ COUNTRY 8716RR GOLD/ COUNTRY 3817RR STINE/ 1918-4 STINE/ 1108-4		35.2 35.1 33.3 35.0	19.3 19.2 20.0 19.3	1 1 2 1	32.4	20.3					
STINE/ 1916-4 ZILLER/ BT 7156NR NORTHSTAR/ NS 1312RR NORTHSTAR/ NS 1123RR	· · ·	36.2 36.2 35.9 35.5	19.0 19.3 18.9 19.0	1 1 1 1							
Test avg.: High avg.: Low avg.: # Lsd(.05): ## TPG-avg.: @ Coef.Var.: No. Entries:	2	35.3 37.4 33.3 1.0 36.5 2 68	19.3 20.7 18.1 0.5 20.3 2 68	1 3 1 1 1 34 68	31.9 34.5 29.9 1.3 33.3 3 61	20.3 23.5 18.9 1.0 22.6 3 61	1 2 1 NS 1 0 61	33.6 35.5 32.0 *** 2 60	19.8 21.5 18.6 *** 3 60	1 3 1 *** 26 60	

^{*} DTM= days from seeding (South Shore- May 31, Warner- May 24, 2007) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity

^{**} Lodging, 1= all plants erect, 5= all plant flat

^{***} The effect of variety differed significantly between locations for 2007. Therefore, evaluate varieties by looking at the 2007 columns at each location, not by looking at the Northern zone 2007 column.

[#] LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 3a. Roundup Ready™ maturity group-0 soybean variety yield averages- central South Dakota locations, 2006-2007.

2000-2007.		Ce	entral Average	es by Location				
Brand/Variety	Average	Brook		Band		Central Zon	ne Averages	
(By 2-yr then 2007 zone yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	
KRUGER/ K-072RR MUSTANG/ M-095RR PRAIRIE/ BR. PB-0954RR DAIRYLAND/ DSR-0903/RR PRAIRIE/ BR. PB-0923RR	113 114 115 111 114	61 62 61 62 58	59 59 57 57 56	66 60 61 60 63	57 54 54 53 54	64 61 61 61 61	58 57 56 55 55	
KRUGER/ K-098RR PRAIRIE/ BR. PB-0936RR MUSTANG/ M-096RR MUSTANG/ M-097RR KRUGER/ K-056RR	114 115 115 114 111	60 59 59 57 50	57 57 54 54 48	59 60 63 62 63	53 53 54 52 55	60 60 61 60 57	55 55 54 53 52	
SD/ 1092RR KRUGER/ K-072+RR NUTECH/ NT-6105 PRAIRIE/ BR. PB-1007RR NUTECH/ NT-0990RR	113 115 118 119 114	51 63 61 62 62	49	57 65 64 62 59	50	54 64 63 62 61	50	
KRUGER/ K-091RR KRUGER/ K-042RR PUBLIC/ SD03-1774R PUBLIC/ SD03-3493R PUBLIC/ SD03-2271R	115 110 112 116 112	60 57 57 57 55		61 63 61 59 56		61 60 59 58 56		
PUBLIC/ SD03-2768R PUBLIC/ SD03-3580R PUBLIC/ SD03-3920R RG/ 607RR	114 113 114 110	56 56 54 48		55 55 54 58		56 56 54 53	:	
Test avg.: High avg.: Low avg.: # Lsd (.05): ## TPG-avg.: @ Coef. Var.: No. Entries:	114 119 110	58 63 48 5 58 5	55 59 48 4 55 5	60 66 54 4 62 4 24	54 57 50 NS 50 6	59 64 53 ** 5 29	55 58 50 NS 50 13	

^{*} DTM= days to maturity at Brookings and Bancroft when seeded May 21 and June 6, 2007, respectfully

[#] LSD,(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

^{**} The effect of variety differed significantly between locations for 2007. Therefore, evaluate varieties by looking at the 2007 columns at each location, not by looking at the Northern zone 2007 column.

Table 3b. Roundup Ready™ maturity group-0 soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2007

South Bakota local			Cent	ral Average	es by Loca	tion					
Brand/Variety	Average	E	Brookings			Bancrof	t	Central	Zone A	verages	
(By 2007 zone protein)	DTM*	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	0il (%)	Lodging (1-5)**	
SD/ 1092RR RG/ 607RR KRUGER/ K-098RR PUBLIC/ SD03-3580R PRAIRIE/ BR. PB-0954RR		39.6 38.2 37.9 37.4 37.7	18.8 19.5 19.2 19.7 19.3	1 1 1 1	36.9 36.1 35.5 36.1 35.6	18.8 20.2 19.2 19.5 19.5	2 2 3 2 2	38.3 37.2 36.7 36.7 36.7	18.8 19.9 19.2 19.6 19.4	1 2 2 1 2	
KRUGER/ K-072+RR PUBLIC/ SD03-3493R MUSTANG/ M-095RR PUBLIC/ SD03-2271R DAIRYLAND/ DSR-0903/RR		37.0 37.1 37.7 37.2 36.8	19.5 19.8 19.3 19.6 20.2	1 1 2 1 1	35.8 35.6 35.0 35.4 35.6	19.3 19.6 19.5 19.5 20.1	1 2 2 2 2 2	36.4 36.4 36.3 36.3 36.2	19.4 19.7 19.4 19.6 20.1	1 1 2 2 1	
KRUGER/ K-072RR PRAIRIE/ BR. PB-0923RR NUTECH/ NT-6105 MUSTANG/ M-096RR PRAIRIE/ BR. PB-1007RR		37.0 36.4 36.3 36.7 36.3	19.5 19.3 19.6 19.7 19.3	1 1 1 1	35.4 35.7 35.8 35.1 35.4	19.3 19.1 18.9 19.7 18.6	1 1 1 1	36.2 36.1 36.0 35.9 35.9	19.4 19.2 19.2 19.7 18.9	1 1 1 1	
PUBLIC/ SD03-3920R KRUGER/ K-091RR KRUGER/ K-056RR PRAIRIE/ BR. PB-0936RR NUTECH/ NT-0990RR		36.1 36.2 36.9 36.0 36.1	19.5 19.6 19.5 19.6 19.6	1 1 1 1	35.5 35.2 34.2 35.0 34.7	18.9 19.0 20.2 19.2 19.1	1 1 1 1	35.8 35.7 35.6 35.5 35.4	19.2 19.3 19.9 19.4 19.4	1 1 1 1 1	
MUSTANG/ M-097RR PUBLIC/ SD03-2768R PUBLIC/ SD03-1774R KRUGER/ K-042RR		35.6 36.1 35.6 35.6	19.8 19.8 20.6 20.9	1 2 1	35.0 33.7 34.1 33.8	19.4 19.3 20.6 20.8	2 2 1 1	35.3 34.9 34.8 34.7	19.6 19.6 20.6 20.8	1 2 1	
Test avg.: High avg.: High avg.: * LSD(.05): ## TPG-avg.: ### Coef.Var.: No. Entries:		36.8 39.6 35.6 0.6 39.1 1 24	19.6 20.9 18.8 0.3 20.7 1 24	1 2 1 NS 2 0 24	35.3 36.9 33.7 0.9 36.1 2 24	19.5 20.8 18.6 0.5 20.4 2 24	1 3 1 1 1 33 24	36.0 38.3 34.7 *** 1 48	19.5 20.8 18.8 0.3 20.5 1 48	1 2 1 1 1 28 48	

^{*} DTM= average days from seeding (Brookings- May 21, Bancroft- June 6, 2007) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity

^{**} Lodging, 1= all plants erect, 5= all plant flat

^{***} The effect of variety differed significantly between locations for 2007. Therefore, evaluate varieties by looking at the 2007 columns at each location, not by looking at the Central zone 2007 column.

[#] LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 4a. Roundup Ready™ maturity group-I soybean variety yield averages- central South Dakota locations, 2006-2007

		Cer	itral Average	s by Locati	on	01.7	
Brand/Variety	Average	Brook	cings	Ban	croft	Central Zon	ie Averages
(By 2-yr then 2007 zone yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr
STINE/ 1918-4	119	62	61	59	60	61	61
KRUGER/ K-195+RR/SCN	117	63	60	60	60	62	60
WENSMAN/ W 2195NRR	120	64	60	59	57	62	59
NUTECH/ NT-7205+RR	120	58	59	63	58	61	59
KRUGER/ K-194RR	119	62	60	57	58	60	59
PRAIRIE/ BR. PB-1754RR	116	62	58	58	59	60	59
NUTECH/ NT-1991RR	119	61	60	54	57	58	59
PRAIRIE/ BR. PB-1956RR	121	60	59	56	59	58	59
KRUGER/ K-100RR	113	62	59	62	57	62	58
KRUGER/ K-120RR	115	61	56	60	59	61	58
PRAIRIE/ BR. PB-1954RR	119	57	57	58	58	58	58
ASGROW/ AG1702	118	64	60	56	54	60	57
LATHAM/ L1950R	119	60	58	56	56	58	57
WENSMAN/ W 2172NRR	116	63	58	59	54	61	56
ASGROW/ AG1102	113	55	54	62	58	59	56
DAIRYLAND/ DSR-1301/RR	115	61	58	57	53	59	56
KRUGER/ K-140RR	116	56	55	59	56	58	56
DAIRYLAND/ DSR1500RRSTS	114	60	57	56	55	58	56
SD/ 1161RR/SCN	118	58	54	57	57	58	56
MUSTANG/ M-115RR	115	58	56	55	55	58	56
DAIRYLAND/ DSR1701RRSTS	119	59	56	53	56	56	56
HEFTY/ 137R	115	49	52	60	60	55	56
ASGROW/ AG2002	120	62	60	55	49	59	55
PUBLIC/ SDX01R-00403109	113	55	54	54	55	55	55
PUBLIC/ SDX00R-017-52	118	56	55	51	54	54	55
PUBLIC/ SD02R-8 PUBLIC/ SD01-1120R PUBLIC/ SDX00R-053-46 SD/ 1111RR PUBLIC/ SD00-1018R	119	54	55	51	52	53	54
	118	55	55	55	51	55	53
	117	51	51	53	53	52	52
	114	53	51	54	50	54	51
	113	47	48	54	48	51	48
HEFTY/ EXP168R PRAIRIE/ BR. PB-1597RR MUSTANG/ M-168RR NUTECH/ NT-6156 NUTECH/ NT-6133	117 116 113 116 117	68 67 65 65 63		63 64 62 63 63		66 66 64 64 63	
NUTECH/ NT-6166 HEFTY/ EXP198R PRAIRIE/ BR. PB-1337RR WENSMAN/ W 2147NRR WENSMAN/ W 2166RR	121 121 116 116 115	64 66 62 67 66		62 60 63 59 59		63 63 63 63 63	
THUNDER/ 2811RR KRUGER/ K-170RR/SCN WENSMAN/ W 2124RR STINE/ 1916-4 PRAIRIE/ BR. PB-1557NRR	112 119 116 121 114	61 64 62 64 64		62 59 61 58 57		62 62 62 61 61	

Table 4a. Roundup Ready™ maturity group-I soybean variety yield averages- central locations (continued)

		Cei	ntral Averag	es by Locati	on	Central Zone Averages		
Brand/Variety	Average	Brool	kings	Ban	croft	Central Zoi	ne Averages	
(By 2-yr then 2007 zone yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	
ASGROW/ AG1403 NUTECH/ NT-6175	118 117	59 64		61 56		60 60		
NUTECH/ NT-7193RR/SCN DAIRYLAND/ DSR-1601/RR DAIRYLAND/ DSR1850RRSTS	118 119 121	63 60 60		57 59 59		60 60 60		
PRAIRIE/ BR. PB-1607RR THUNDER/ 2511RR LATHAM/ EXP-E1700R PRAIRIE/ BR. PB-1737NRR PRAIRIE/ BR. PB-EX207RR	119 115 117 117 120	61 60 59 60 63		59 58 59 57 55		60 59 59 59 59		
NUTECH/ NT-1766RR KRUGER/ EXP19A07 GOLD/ COUNTRY 3817RR NORTHSTAR/ NS 1312RR KRUGER/ K-142RR	115 118 116 114 117	58 58 58 58 54		57 58 58 55 55		58 58 58 57 56		
PUBLIC/ SD(LD)05-16121 PUBLIC/ SD02R-51 PUBLIC/ SD02R-48 PUBLIC/ SDX04R-68-1-9 COYOTE/ 4719RR	119 114 114 115	56 58 57 38 63	58	51 50 48 40		54 54 53 39		
FARM/ ADVANTAGE 7194N GOLD/ COUNTRY 2815RR KALTENBERG/ KB196RR STINE/ 1008-4 STINE/ 1432-4	112 115	65 65 62		63 59				
STINE/ 1468-4 ZILLER/ BT 7156NR NORTHSTAR/ NS 1311RR NORTHSTAR/ NS 1123RR RENK/ RS124NRR	114 120 111 120	62 61 57	58	63 62				
RENK/ RS147RR RENK/ RS187NRR	119	58 62						
Test avg. : High avg. : Low avg. : # Lsd (.05) : ## TPG-avg. : ### Coef.Var. :	117 121 111	60 68 38 5 63 5	57 61 48 5 56 6	58 64 40 4 60 5	56 60 48 **	59 66 39 3 63 5	56 61 48 4 57	
No. Entries :	70	73	32	68	30	64	30	

^{*} DTM= days to maturity at Bancroft when seeded June 6, 2007; Brookings is missing due to an early frost

[#] LSD,(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

^{**} Variety averages did not differ significantly for the 2-yr period at Bancroft. There was, however, a significant difference in averages between the years 2006 and 2007. Therefore, evaluate varieties by looking at the 2-yr column under the Northern zone averages.

Table 4b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2007

				ral Averag	es by Loca	ntion		Central Zone Averages		
Brand/Variety	Average	1	Brooking	s		Bancro	ft	Gentral Zone Averages		
(By 2007 zone protein)	DTM*	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**
DAIRYLAND/ DSR1701RRSTS DAIRYLAND/ DSR1500RRSTS KRUGER/ K-170RR/SCN DAIRYLAND/ DSR1850RRSTS		38.3 38.2 38.1 37.6	19.8 20.1 19.9 20.3	1 1 2 1	36.4 36.1 36.0 36.4	18.7 18.8 18.8 18.9	2 2 2 1	37.4 37.1 37.0 37.0	19.3 19.5 19.4 19.6	1 1 2 1
PRAIRIE/ BR. PB-1737NRR PUBLIC/ SDX01R-00403109 PRAIRIE/ BR. PB-1337RR WENSMAN/ W 2124RR SD/ 1161RR/SCN		38.4 38.8 37.7 38.1 38.2	20.1 20.3 19.9 19.8	2 2 1 1 1	35.5 34.9 35.9 35.4 35.2	20.2 18.5 18.8 18.6	1 1 1 1 1	37.0 36.8 36.8 36.8 36.7	19.4 20.2 19.4 19.4 19.2	2 2 1 1 1
NUTECH/ NT-6133 DAIRYLAND/ DSR-1301/RR PRAIRIE/ BR. PB-1754RR HEFTY/ EXP198R THUNDER/ 2511RR KRUGER/ EXP19A07		38.0 37.6 37.5 37.6 37.9 37.1	20.0 20.3 19.8 20.1 20.2 20.3	1 1 2 1 1	35.4 35.7 35.8 35.3 34.8 35.4	18.5 19.0 18.7 19.1 19.8 19.4	1 1 1 1 1 1	36.7 36.7 36.5 36.4 36.3	19.3 19.7 19.2 19.6 20.0 19.8	1 1 1 1 1
NORTHSTAR/ NS 1312RR PUBLIC/ SDX04R-68-1-9 STINE/ 1916-4 ASGROW/ AG1702 NUTECH/ NT-1766RR		37.4 38.3 37.2 36.9 37.1	20.2 19.4 20.2 20.5 19.6	2 3 1 1	35.0 33.8 34.9 35.2 34.9	19.2 19.3 18.7 19.3 18.7	1 3 1 1	36.2 36.1 36.1 36.0 36.0	19.7 19.4 19.5 19.9 19.2	2 3 1 1
KRUGER/ K-100RR PUBLIC/ SDX00R-053-46 DAIRYLAND/ DSR-1601/RR KRUGER/ K-120RR NUTECH/ NT-6175	2	37.4 37.8 37.6 37.3 36.7	20.4 20.0 20.1 19.6 20.6	1 2 1 1	34.5 34.0 34.2 34.5 35.1	19.9 19.4 19.5 19.1 19.4	1 3 1 1	36.0 35.9 35.9 35.9 35.9	20.2 19.7 19.8 19.4 20.0	1 3 1 1 1
THUNDER/ 2811RR PRAIRIE/ BR. PB-1954RR ASGROW/ AG1403 KRUGER/ K-140RR HEFTY/ 137R		37.0 37.0 36.9 37.1 37.5	20.0 20.1 20.3 20.7 20.3	1 2 1 1	34.5 34.5 34.5 34.1 33.7	19.2 19.0 18.6 19.9 19.7	1 2 1 1 1	35.8 35.8 35.7 35.6 35.6	19.6 19.6 19.5 20.3 20.0	1 2 1 1 1
NUTECH/ NT-6166 STINE/ 1918-4 PUBLIC/ SD01-1120R NUTECH/ NT-7205+RR LATHAM/ L1950R		36.3 36.3 37.0 36.0 36.7	20.3 20.5 20.7 20.5 20.1	1 1 2 1	34.8 34.7 34.0 34.8 34.1	19.0 19.7 19.9 19.4 19.0	1 1 4 1	35.5 35.5 35.5 35.4 35.4	19.7 20.1 20.3 20.0 19.6	1 1 3 1
PRAIRIE/ BR. PB-1607RR NUTECH/ NT-1991RR KRUGER/ K-195+RR/SCN PUBLIC/ SD02R-51 PUBLIC/ SDX00R-017-52		36.5 37.0 36.3 37.5 36.2	20.4 20.4 21.1 20.2 21.5	1 1 1 1	34.3 33.7 34.3 33.1 34.3	18.9 18.6 20.3 19.6 20.1	1 1 1 1	35.4 35.4 35.3 35.3 35.3	19.7 19.5 20.7 19.9 20.8	1 1 1 1
KRUGER/ K-142RR PUBLIC/ SD00-1018R ASGROW/ AG2002 PUBLIC/ SD02R-8 WENSMAN/ W 2195NRR		36.5 37.0 35.7 37.7 36.1	21.1 21.2 20.4 20.3 21.0	1 2 1 1	34.0 33.5 34.7 32.6 34.1	20.0 20.3 19.3 20.0 20.3	1 2 1 1	35.3 35.3 35.2 35.2 35.1	20.6 20.8 19.8 20.2 20.7	1 2 1 1

Table 4b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2007 (continued)

		Central Averages by Location							. 1.7	
Brand/Variety	Average	ı	 Brookinç	js		Bancrof	t	Centra	al Zone A	/erages
(By 2007 zone protein)	DTM*	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**
SD/ 1111RR PUBLIC/ SD02R-48		37.7 37.1	20.6	3	32.4 32.9	20.4 19.4 19.4	3 1 1	35.1 35.0	20.5 19.9	3 1 2
ASGROW/ AG1102 KRUGER/ K-194RR NUTECH/ NT-7193RR/SCN	· ·	36.9 36.1 35.7	20.0 20.4 21.1	3 1 1	32.8 33.6 33.8	19.4 19.3 20.1	1 1	34.9 34.8 34.8	19.7 19.8 20.6	1 1
PRAIRIE/ BR. PB-EX207RR MUSTANG/ M-168RR WENSMAN/ W 2147NRR NUTECH/ NT-6156 WENSMAN/ W 2172NRR		35.5 35.1 35.7 34.9 35.6	21.0 21.5 21.2 21.5 21.4	1 1 1 1	33.5 33.8 33.2 33.9 33.1	20.0 19.7 20.3 19.9 20.1	1 1 1 1	34.5 34.5 34.5 34.4 34.4	20.5 20.6 20.8 20.7 20.7	1 1 1 1
PRAIRIE/ BR. PB-1557NRR HEFTY/ EXP168R WENSMAN/ W 2166RR PUBLIC/ SD(LD)05-16121 PRAIRIE/ BR. PB-1956RR		35.4 34.9 34.9 35.8 35.7	21.2 21.5 21.5 20.5 20.6	1 1 1 1	33.3 33.4 33.3 32.5 32.5	20.3 19.9 19.6 19.7 20.0	1 1 1 1 1 3	34.3 34.2 34.1 34.1 34.1	20.8 20.7 20.6 20.1 20.3	1 1 1 1 2
PRAIRIE/ BR. PB-1597RR MUSTANG/ M-115RR GOLD/ COUNTRY 3817RR LATHAM/ EXP-E1700R COYOTE/ 4719RR		35.2 35.8 35.9 35.4 36.0	21.4 20.5 20.5 21.0 20.5	1 3 3 3 1	33.0 31.9 31.6 31.6	19.6 19.8 20.1 20.4	1 2 3 3	34.1 33.8 33.8 33.5	20.5 20.2 20.3 20.7	1 2 3 3
FARM/ ADVANTAGE 7194N GOLD/ COUNTRY 2815RR KALTENBERG/ KB196RR STINE/ 1008-4 STINE/ 1432-4		35.5 35.2 37.0	21.1 21.3 20.7	1 1 1	35.1 34.0	19.4 20.3	1 1		: : :	
STINE/ 1468-4 ZILLER/ BT 7156NR NORTHSTAR/ NS 1311RR NORTHSTAR/ NS 1123RR RENK/ RS124NRR		37.7 37.9 36.2	20.4 20.4 20.4	2 1	33.7 35.7	20.2 18.8	1 1		- - - - -	
RENK/ RS147RR RENK/ RS187NRR		38.9 35.5	19.5 21.4	1 1						
Test avg. : High avg. : Low avg. : # LSD(.05) : ## TPG-avg. : @ Coef. Var. : No. Entries :		36.8 38.9 34.9 1.0 38.0 2 73	20.5 21.5 19.4 0.5 21.1 1	1 3 1 1 1 34 73	34.2 36.4 31.6 0.9 35.6 2 68	19.5 20.4 18.5 0.4 20.1 2 68	1 4 1 1 1 27 68	35.5 37.4 33.5 *** 1 64	20.0 20.8 19.2 ***	1 3 1 1 1 32 64

^{*} DTM= average days from seeding (Brookings - May 21, Bancroft- June 6, 2007) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity

^{**} Lodging, 1= all plants erect, 5= all plant flat

^{***} The effect of variety differed significantly between locations for 2007. Therefore, evaluate varieties by looking at the 2007 columns at each location, not by looking at the Central zone 2007 column.

[#] LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 5a. Roundup Ready™ maturity group-II soybean variety yield averages- central South Dakota locations, 2006-2007

Tocations, 2000-20		Се	ntral Averaç	jes by Locatio	on	Central Zone Averages		
Brand/Variety	Average	Brook	ings	Band	roft	Central Zoi	ie Averages	
(By 2-yr then 2007 zone yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	
ASGROW/ DKB22-52 MUSTANG/ M-207RR PRAIRIE/ BR. PB-2243RR PRAIRIE/ BR. PB-2456RR KRUGER/ K-234RR	121 119 118 120 119	62 58 57 59 60	60 60 58 57 59	61 59 61 59 58	57 58 60 60 55	62 59 59 59 59	59 59 59 59 57	
WENSMAN/ W 2200NRR KRUGER/ K-259RR PUBLIC/ SDX00R-020-18 PRAIRIE/ BR. PB-2421RR NUTECH/ NT-2220RR	118 124 114 120 120	61 58 55 57 57	60 56 57 57 57	57 56 59 55 60	54 57 56 56 55	59 57 57 56 59	57 57 57 57 56	
PRAIRIE/ BR. PB-2216RR PUBLIC/ SDX01R-007039 PUBLIC/ SD02R-5 KRUGER/ K-201RR/SCN PRAIRIE/ BR. PB-2207NRR	120 120 115 117 119	58 56 58 63 64	56 56 57	57 57 51 60 59	53 54 53	58 57 55 62 62	55 55 55	
NUTECH/ NT-6211 HEFTY/ EXP218RN WENSMAN/ W 2222NRR NUTECH/ NT-7234RR PRAIRIE/ BR. PB-2117NRR	119 118 119 121 120	62 62 63 57 64		60 60 59 62 56		61 61 61 60 60		
PRAIRIE/ BR. PB-2147RR PRAIRIE/ BR. PB-2337NRR NUTECH/ NT-7227 NUTECH/ NT-6242 KRUGER/ K-239RR	119 120 120 122 122	61 64 63 58 59		58 56 55 59 58		60 60 59 59 59		
PRAIRIE/ BR. PB-2515RR PRAIRIE/ BR. PB-2396RR COYOTE/ 9524RR PUBLIC/ SD(LD)05-16118 KRUGER/ K-256RR	122 121 121 120 119	59 57 57 59 56	56	59 58 56 55 55		59 58 57 57 56		
KRUGER/ K-248RR/SCN PUBLIC/ SDX00R-035-56 PUBLIC/ SD(LD)05-16137 PUBLIC/ SD03-2006R PUBLIC/ SD03-2222R	121 120 115 115 121	59 55 57 60 51		51 54 50 45 45		55 55 54 53 48		
ASGROW/ AG2108 ASGROW/ AG2406 COYOTE/ 4523RR COYOTE/ 4527RR COYOTE/ EXP722NRR	119 118 124	62		59 57 54				

Table 5a. Roundup Ready™ maturity group-II soybean variety yield averages- central locations (continued)

		Се	ntral Averaç	Centra	al Zone			
Brand/Variety	Average	Brook	ings	Band	croft	Averages		
(By 2-yr then 2007 zone yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	
COYOTE/ EXP725NRR		62						
COYOTE/ EXP728NRR		58						
FARM/ ADVANTAGE 7223N	120			57				
KALTENBERG/ KB203RR		52						
ZILLER/ BT 7208NR		63						
RENK/ RS204NRR		64						
Test avg. :	119	59	58	57	56	58	57	
High value :	124	64	60	62	60	62	59	
Low avg. :	114	51	56	45	53	48	55	
# Lsd (.05):		5	NS	4	NS	3	NS	
## TPG-avg. :		59	56	58	53	59	55	
@ Coef. Var. :		5	5	5	9	5	8	
No. Entries :	34	42	14	39	13	35	13	

^{*} DTM= days to maturity at Bancroft when seeded June 6, 2007; Brookings is missing due to an early frost

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best



[#] LSD,(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

Table 5b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- central South Dakota locations, 2007

South Dakota locat	10115, 2007	Central Averages by Location									
Brand/Variety	Average	Brookings				Bancrof	t	Central Zone Averages			
(By 2007 zone protein)	DTM*	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	Oil (%)	Lodging (1-5)**	Protein (%)	0il (%)	Lodging (1-5)**	
PUBLIC/ SDX01R-007039 PRAIRIE/ BR. PB-2216RR NUTECH/ NT-7227 PRAIRIE/ BR. PB-2337NRR KRUGER/ K-239RR		37.8 37.7 37.7 37.4 36.9	19.0 19.5 19.4 19.4 19.8	2 2 1 1 1	36.7 36.2 36.1 36.3 35.3	18.5 19.1 19.5 19.7 19.5	2 2 1 1 1	37.3 37.0 36.9 36.9 36.1	18.8 19.3 19.5 19.6 19.7	2 2 1 1 1	
NUTECH/ NT-6211 PRAIRIE/ BR. PB-2147RR PRAIRIE/ BR. PB-2396RR PRAIRIE/ BR. PB-2421RR PUBLIC/ SDX00R-020-18		37.4 37.0 37.2 36.5 37.2	19.8 19.6 19.4 19.7 19.9	1 1 1 1 2	34.6 34.8 34.6 35.2 34.5	19.2 19.6 19.8 19.1 19.6	1 1 1 2 1	36.0 35.9 35.9 35.8 35.8	19.5 19.6 19.6 19.4 19.8	1 1 1 1 2	
KRUGER/ K-234RR NUTECH/ NT-2220RR KRUGER/ K-256RR KRUGER/ K-248RR/SCN PRAIRIE/ BR. PB-2456RR		37.2 36.3 37.2 35.9 36.5	19.0 19.4 19.0 20.1 19.1	2 1 1 2 1	34.1 34.9 33.9 35.2 34.5	19.8 19.0 19.2 19.5 19.3	2 2 1 1 2	35.6 35.6 35.5 35.5 35.5	19.4 19.2 19.1 19.8 19.2	2 1 1 1 2	
NUTECH/ NT-6242 KRUGER/ K-201RR/SCN WENSMAN/ W 2200NRR KRUGER/ K-259RR PRAIRIE/ BR. PB-2117NRR		35.6 36.0 36.1 35.8 36.1	19.6 20.4 20.2 19.7 20.1	1 2 1 1 1	35.1 34.8 34.5 34.2 33.7	20.1 19.6 19.8 19.4 20.2	1 1 1 1 1	35.4 35.4 35.3 35.0 34.9	19.9 20.0 20.0 19.6 20.2	1 1 1 1	
PUBLIC/ SD02R-5 PUBLIC/ SD03-2222R ASGROW/ DKB22-52 COYOTE/ 9524RR MUSTANG/ M-207RR		36.9 35.9 36.0 35.5 36.1	19.6 20.1 20.1 20.1 20.1	1 1 1 1 1	32.8 33.8 33.6 33.9 33.3	19.5 19.7 19.7 19.8 19.1	1 1 1 1 1	34.9 34.9 34.8 34.7 34.7	19.6 19.9 19.9 20.0 19.6	1 1 1 1	
PUBLIC/ SDX00R-035-56 NUTECH/ NT-7234RR PRAIRIE/ BR. PB-2243RR PRAIRIE/ BR. PB-2515RR WENSMAN/ W 2222NRR		36.2 35.7 36.1 34.2 35.4	19.6 20.0 20.1 20.2 20.3	2 1 1 1 1	33.2 33.7 33.2 34.7 33.2	19.2 20.0 20.3 19.6 20.3	1 1 1 1	34.7 34.7 34.7 34.5 34.3	19.4 20.0 20.2 19.9 20.3	2 1 1 1 1	
HEFTY/ EXP218RN PRAIRIE/ BR. PB-2207NRR PUBLIC/ SD(LD)05-16118 PUBLIC/ SD(LD)05-16137 PUBLIC/ SD03-2006R		34.9 34.8 35.3 35.5 35.8	20.8 20.3 19.7 19.8 20.8	1 1 1 2 2	33.5 33.1 32.3 31.6 31.0	20.1 20.2 19.7 20.1 20.5	1 1 1 1 1	34.2 34.0 33.8 33.5 33.4	20.5 20.3 19.7 20.0 20.7	1 1 1 1	
ASGROW/ AG2108 ASGROW/ AG2406 COYOTE/ 4523RR COYOTE/ 4527RR COYOTE/ EXP722NRR		35.3	20.0 19.6	1 1	34.9 35.8 34.6	19.9 18.3 19.9	1 1 1 1				
COYOTE/ EXP725NRR COYOTE/ EXP728NRR FARM/ ADVANTAGE 7223N KALTENBERG/ KB203RR ZILLER/ BT 7208NR RENK/ RS204NRR		36.4 36.9 35.9 35.4 35.8	18.9 19.1 19.7 20.8 20.8	1 1 1 1	35.5	18.8	1				
Test avg. : High avg. : Low avg. : # LSD(.05) : ## TPG-avg. : ### Coef.Var. : No. Entries :		36.3 38.1 34.2 0.8 37.4 1 42	19.8 20.8 18.9 0.5 20.4 1 42	1 2 1 1 1 36 42	34.3 36.7 31.0 1.0 35.8 2 39	19.6 20.5 18.3 0.5 20.1 2 39	1 2 1 1 1 25 39	35.2 37.3 33.4 *** 2 70	19.7 20.7 18.8 *** 2 70	1 2 1 1 1 32 70	

^{*} DTM= average days from seeding (Brookings- May 21, Bancroft- June 6, 2007) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity

** Lodging, 1= all plants erect, 5= all plant flat

^{***} The effect of variety differed significantly between locations for 2007. Therefore, evaluate varieties by looking at the 2007 columns at each location, not by looking at the Central zone 2007 column.

LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 6a. Roundup Ready™ maturity group-I soybean variety yield averages- southern South Dakota locations, 2006-2007

iocations, 2000-2		Sou	ıthern Avera	Southern Zone				
Brand/Variety (By 2-yr then	Average	Beres	sford	Geo	ldes	Averages		
2007 zone yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	
PRAIRIE/ BR. PB-1956RR ASGROW/ AG1702 NUTECH/ NT-1991RR KRUGER/ K-194RR PRAIRIE/ BR. PB-1954RR	115 109 114 113 112	56 57 55 54 59	61 59 58 57 59	60 56 58 57 53	56 53 53 53 50	58 57 57 56 56	59 56 56 55 55	
WENSMAN/ W 2172NRR KRUGER/ K-195+RR/SCN WENSMAN/ W 2195NRR KRUGER/ K-140RR SD/ 1161RR/SCN	110 112 110 108 110	55 54 54 53 52	59 59 57 54 56	56 55 53 59 53	51 51 51 50 48	56 55 54 56 53	55 55 54 52 52	
SD/ 1111RR NUTECH/ NT-7205+RR KRUGER/ EXP19A07 WENSMAN/ W 2166RR PRAIRIE/ BR. PB-EX228RR	109 116 110 110 116	47 59 56 56 56	47	48 58 59 60 58	43	48 59 58 58 57	45	
NUTECH/ NT-7193RR/SCN PRAIRIE/ BR. PB-1914RR PRAIRIE/ BR. PB-EX147RR KRUGER/ K-142RR KRUGER/ K-170RR/SCN	111 114 113 109 110	54 54 56 51 56		58 56 54 57 51		56 55 55 54 54		
PRAIRIE/ BR. PB-1754RR KRUGER/ K-120RR PRAIRIE/ BR. PB-1737NRR PRAIRIE/ BR. PB-EX117NRR PRAIRIE/ BR. PB-EX207RR	110 105 110 113 113	57 52 54 55 55		51 53 52 51 51		54 53 53 53 53	:	
NUTECH/ NT-1808RR/SCN KALTENBERG/ KB196RR ZILLER/ BT 7186NR	112 109 108	55 57 58		49		52	:	
Test avg. : High avg. : Low avg. : # Lsd (.05) : ## TPG-avg. : @ Coef. Var. : No. Entries :	111 116 105	55 59 47 4 55 4	57 61 47 7 54 5	55 60 48 6 54 6	51 56 43 6 50 7	55 59 48 4 55 5	54 59 45 5 54 10	

^{*} DTM= days to maturity at Beresford and Geddes when seeded June 9 and May 26, 2007, respectfully

[#] LSD,(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 6b. Roundup Ready™ maturity group-I soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2007

South Dakota locat			Southern Averages by Location								
Brand/Variety	Average DTM*	Beresford			Geddes			Southern Zone Averages			
(By 2007 zone protein)		Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*	
KRUGER/ K-170RR/SCN PRAIRIE/ BR. PB-1754RR PRAIRIE/ BR. PB-1737NRR SD/ 1161RR/SCN KRUGER/ EXP19A07		36.7 37.2 36.6 36.2 35.6	20.3 20.2 20.7 20.6 21.1	1 1 1 1 1	34.4 33.3 33.7 33.3 33.6	20.2 20.1 20.2 20.3 20.9	1 1 1 1	35.6 35.3 35.2 34.8 34.6	20.3 20.2 20.5 20.4 21.0	1 1 1 1	
PRAIRIE/ BR. PB-EX147RR ASGROW/ AG1702 PRAIRIE/ BR. PB-1914RR NUTECH/ NT-7205+RR NUTECH/ NT-1808RR/SCN		35.6 35.3 35.8 36.0 35.2	20.8 21.1 20.8 20.9 21.2	1 1 1 1	33.2 33.5 33.0 32.7 33.2	20.5 20.4 20.6 20.7 20.5	1 1 1 1	34.4 34.4 34.4 34.2	20.7 20.7 20.7 20.8 20.9	1 1 1 1	
NUTECH/ NT-1991RR SD/ 1111RR PRAIRIE/ BR. PB-EX117NRR WENSMAN/ W 2195NRR KRUGER/ K-140RR		35.3 35.8 35.8 35.4 35.3	20.7 22.0 21.1 21.4 21.5	1 2 1 1	32.6 32.1 32.0 32.3 32.4	20.2 21.6 21.2 21.4 21.0	1 1 1 1	34.0 34.0 33.9 33.9 33.8	20.5 21.8 21.1 21.4 21.3	1 2 1 1	
NUTECH/ NT-7193RR/SCN KRUGER/ K-142RR KRUGER/ K-195+RR/SCN WENSMAN/ W 2172NRR PRAIRIE/ BR. PB-1954RR		35.2 34.8 34.9 35.1 35.1	21.4 21.9 21.7 21.8 20.9	1 1 1 1	32.5 32.5 32.4 32.1 32.0	21.3 21.0 21.4 21.5 20.7	1 1 1 1	33.8 33.7 33.7 33.6 33.6	21.4 21.5 21.6 21.7 20.8	1 1 1 1	
KRUGER/ K-194RR KRUGER/ K-120RR PRAIRIE/ BR. PB-EX228RR PRAIRIE/ BR. PB-1956RR PRAIRIE/ BR. PB-EX207RR		34.9 34.8 35.1 34.4 34.2	20.9 20.7 20.5 21.2 21.2	1 1 1 1	32.0 32.1 31.5 31.8 30.7	20.2 20.0 20.4 20.8 21.3	1 1 1 1 1	33.5 33.4 33.3 33.1 32.5	20.6 20.3 20.4 21.0 21.3	1 1 1 1	
WENSMAN/ W 2166RR KALTENBERG/ KB196RR ZILLER/ BT 7186NR		33.5 35.8 36.3	22.1 21.3 20.6	1 1 1	31.3	21.5	1	32.4	21.8		
Test avg. : High avg. : Low avg. : # LSD(.05) : ## TPG-avg. : @ Coef. Var. : No. Entries :		35.4 37.2 33.5 0.8 36.5 1 28	21.1 22.1 20.2 0.4 21.8 1 28	1 2 1 1 1 0	32.5 34.4 30.7 1.2 33.3 2 26	20.8 21.6 20.0 0.4 21.3 1 26	1 1 1 NS 1 0	34.0 35.6 32.4 *** 2 26	20.9 21.8 20.2 *** 1 26	1 2 1 1 1 0 26	

^{*} DTM= average days from seeding (Beresford- June 9, Geddes- May 26, 2007) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity

^{**} Lodging, 1= all plants erect, 5= all plant flat

^{***} The effect of variety differed significantly between locations for 2007. Therefore, evaluate varieties by looking at the 2007 columns at each location, not by looking at the Southern zone 2007 column.

[#] LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 7a. Roundup Ready™ maturity group-II soybean variety yield averages- southern South Dakota locations, 2006-2007									
D 10/ : /			Southern Avera	Souther					
Brand/Variety (By 2-yr then 2007 zone yield)	Average DTM*		esford		ldes	Averages			
(by 2-yr then 2007 Zone yreit)	DIW	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr		
ASGROW/ DKB25-51	115	56	66	62	55	59	61		
PRAIRIE/ BR. PB-2243RR	115	59	61	64	54	62	58		
_ATHAM/ L2810R	118	57	62	59	54	58	58		
NUTECH/ NT-2220RR	115	53	61	58	54	56	58		
PRAIRIE/ BR. PB-2421RR	115	55	62	59	52	57	57		
DAIRYLAND/ DSR-2200/RR	113	52	60	58	53	55	57		
MUSTANG/ M-264RR	119	56	61	57	51	57	56		
(RUGER/ K-234RR	114	57	61	57	51	57	56		
KRUGER/ K-259RR	118	54	60	56	52	55	56		
MUSTANG/ M-237RR	114	57	59	57	51	57	55		
DAIRYLAND/ DSR-2600/RR	115	57	60	56	49	57	55		
DAIRYLAND/ DSR-2300/RR	113	52	60	51	50	52	55		
PRAIRIE/ BR. PB-2636NRR	117	52	55	59	50 52	52 56	54		
VENSMAN/ W 2200NRR	111	52 55	60	52	48	56 54	54 54		
WENSMAN/ W 2253RR	1118	51	57	52	50	54 52	54 54		
_ATHAM/ L2500R	113	54	61	48	47	51 	54		
MUSTANG/ M-246NRR	113	53	56	56	49	55	53		
PUBLIC/ SD02R-5	112	53	57	57	49	55	53		
PRAIRIE/ BR. PB-2565RR	117	53	56	53	50	53	53		
NUTECH/ NT-6211	113	58		65		62			
_ATHAM/ EXP-E2250R	115	58		62		60			
ASGROW/ DKB27-52	117	56		62		59			
NUTECH/ NT-7206	115	56		61		59			
NUTECH/ NT-6255	116	57		60		59			
MUSTANG/ M-238NRR	113	56		60		58			
_ATHAM/ L2337R	113	56	 .	59		58			
PRAIRIE/ BR. PB-2515RR	116	52		64		58			
WENSMAN/ W 2222NRR	114	55		61		58			
ASGROW/ AG2603	116	55		59		57			
NUTECH/ NT-6219	115	55		58		57			
NUTECH/ NT-7222	113	57		56		57			
KRUGER/ K-239RR	115	54		60		57			
LATHAM/ L2158R	114	57		57		57			
GOLD/ COUNTRY 9822RR	114	53		60		57			
PRAIRIE/ BR. PB-2447RR	115	55		59		57			
PRAIRIE/ BR. PB-2667NRR	116	55		58		57			
PUBLIC/ SDX00R-035-56	116	54	l .	57		56			
KRUGER/ K-256RR	115	56	l .	53		55			
_ATHAM/ EXP-E2458RV	115	54	l .	56		55	l :		
_ATHAM/ L2780RV	117	53] .	56		55			
DAIRYLAND/ DSR-2770/RR	118	53		56		55			
PRAIRIE/ BR. PB-2707RR	118	54	·	55		55 55			
PRAIRIE/ BR. PB-EX271RR	116	52	·	57	·	55 55			
PUBLIC/ SD(LD)05-16137	111	54	·	56	·	55 55			
PUBLIC/ SD03-2006R	1112	52		58	•	55 55			
ASGROW/ AG2406	113	55 53	· ·	53	•	54			
NUTECH/ NT-6242	117	52	· ·	55 50		54			
NUTECH/ NT-6281	118	52 53		56 56		54			
KRUGER/ K-275RR/SCN	116	52	· ·	56		54			
_ATHAM/ L2085R	112	52		56		54			

Table 7a. Roundup Ready™ maturity group-II soybean variety yield averages- southern South Dakota locations (continued)

		-	Southern Avera	Southe	rn Zone		
Brand/Variety	Average	Bere	sford	Ged	ldes	Aver	
(By 2-yr then 2007 zone yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr
PUBLIC/ SDX00R-020-18 PUBLIC/ SD(LD)05-16118 ASGROW/ AG2906 MUSTANG/ M-228NRR KRUGER/ K-201RR/SCN	111 114 118 113 111	52 53 50 53 54		55 54 55 53 51		54 54 53 53 53	: : :
KRUGER/ K-271RR PUBLIC/ SDX01R-007039 MUSTANG/ M-318RR NUTECH/ NT-7282 GOLD/ COUNTRY 3825NRR	118 115 120 119 116	52 51 49 54 52		54 54 54 54 49 52		53 53 52 52 52 52	: : : :
PRAIRIE/ BR. PB-2697NRR WENSMAN/ W 2300RR ASGROW/ AG2606 MUSTANG/ M-277NRR NUTECH/ NT-7293	116 119 116 117 117	52 49 50 51 51		51 54 52 51 50		52 52 51 51 51	:
HEFTY/ 277RN KRUGER/ K-248RR/SCN PUBLIC/ SD03-2222R COYOTE/ 4523RR COYOTE/ 4527RR	117 115 118 109 122	52 52 50 50		49 50 50 61		51 51 50	
COYOTE/ EXP722NRR COYOTE/ EXP725NRR COYOTE/ EXP728NRR FARM/ ADVANTAGE 7254N FARM/ ADVANTAGE 7223N	118 110 117 111 116	56 53 56		56		/ E	
FARM/ ADVANTAGE 7233N HEFTY/ 226R HEFTY/ 266R HEFTY/ EXP218RN HEFTY/ 257RN	119 115 119 106 109		/	59 57 53	51 49		
HEFTY/ EXP298RN HEFTY/ EXP248R KALTENBERG/ KB247RR KALTENBERG/ KB268RR STINE/ 2523-4	117 119 112 114 108	55 51 51 53		55			
STINE/ 2862-4 ZILLER/ BT 7217NR RENK/ RS253RR RENK/ RS277NRR RENK/ RS247NRR	112 112 112 115 106	47 55 54 58 52					
Test avg. : High avg. : Low avg. : # Lsd (.06) : ## TPG-avg. : @ Coef. Var. :	115 122 106	54 59 47 4 55 5	60 66 55 7 59 7	56 65 48 7 58	51 55 47 NS 47 7	55 62 50 **	56 61 53 **
No. Entries :	90	83	19	75	21	68	19

^{*} DTM= days to maturity at Beresford and Geddes when seeded June 9 and May 26, 2007, respectfully

[#] LSD,(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

^{**} The effect of variety differed significantly between locations for both 2007 and two years. Therefore, evaluate varieties by looking at the 2007 and 2-yr columns at each location, not by looking at the Northern zone columns.

Table 7b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2007

South Dakota location			Sout	hern Avera	ges by Lo	cation			_	_
Brand/Variety	Average	Е	eresfo	rd		Gedde	s	Souther	n Zone	Averages
(By 2007 zone protein)	DTM*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*
ASGROW/ AG2606 PUBLIC/ SDX01R-007039 MUSTANG/ M-238NRR DAIRYLAND/ DSR-2770/RR MUSTANG/ M-277NRR	:	37.7 37.3 36.8 36.6 36.5	18.9 19.3 20.3 20.1 19.1	1 2 1 1	36.0 36.0 35.2 35.4 35.1	18.8 18.9 19.8 18.9 18.7	1 1 1 1	36.9 36.6 36.0 36.0 35.8	18.9 19.1 20.0 19.5 18.9	1 2 1 1
NUTECH/ NT-6281 LATHAM/ L2780RV PRAIRIE/ BR. PB-2707RR GOLD/ COUNTRY 9822RR MUSTANG/ M-318RR		36.9 37.0 36.9 36.4 36.6	19.7 19.4 19.7 20.4 19.6	1 1 2 1	34.6 34.5 34.4 34.9 34.5	19.4 19.4 19.2 19.4 19.0	1 1 1 1 1	35.7 35.7 35.7 35.6 35.6	19.6 19.4 19.4 19.9 19.3	1 1 2 1
KRUGER/ K-271RR KRUGER/ K-239RR WENSMAN/ W 2253RR ASGROW/ AG2906 DAIRYLAND/ DSR-2200/RR		36.4 36.0 35.9 36.6 36.3	20.0 20.7 20.0 19.3 20.4	1 1 1 1	34.6 34.7 34.8 33.9 34.1	19.2 19.4 18.8 19.0 19.7	1 1 1 1 1	35.5 35.4 35.4 35.3 35.2	19.6 20.1 19.4 19.2 20.1	1 1 1 1 1
PRAIRIE/ BR. PB-2565RR LATHAM/ L2500R ASGROW/ AG2603 LATHAM/ L2158R MUSTANG/ M-246NRR		36.0 36.3 35.8 35.8 35.9	19.7 19.9 19.8 20.7 20.2	1 1 1 1	34.2 34.0 34.4 34.2 33.8	19.2 19.6 18.9 19.9 19.6	1 1 1 1 1	35.1 35.1 35.1 35.0 34.8	19.5 19.7 19.4 20.3 19.9	1 1 1 1
MUSTANG/ M-228NRR NUTECH/ NT-7293 GOLD/ COUNTRY 3825NRR LATHAM/ EXP-E2458RV KRUGER/ K-256RR	2	36.0 35.8 35.4 35.2 36.1	19.9 18.8 20.4 20.3 19.4	1 1 1 1	33.4 33.4 33.8 34.0 33.0	19.5 18.4 19.7 19.5 19.5	1 1 1 1	34.7 34.6 34.6 34.6 34.6	19.7 18.6 20.1 19.9 19.5	1 1 1 1
WENSMAN/ W 2300RR NUTECH/ NT-7282 LATHAM/ L2085R NUTECH/ NT-2220RR KRUGER/ K-201RR/SCN		36.1 36.2 35.7 35.2 35.1	19.9 19.8 20.6 20.1 20.7	1 2 1 1 1	33.0 32.8 33.4 33.8 33.5	19.4 19.6 20.1 19.1 20.0	1 1 1 1 1	34.6 34.5 34.5 34.5 34.3	19.7 19.7 20.3 19.6 20.4	1 2 1 1 1
PUBLIC/ SDX00R-020-18 ASGROW/ AG2406 NUTECH/ NT-6242 NUTECH/ NT-6211 PRAIRIE/ BR. PB-2421RR		35.0 35.4 35.6 34.9 35.1	20.7 20.9 20.3 20.8 20.2	1 1 1 1	33.6 33.1 32.9 33.5 33.3	19.8 20.7 19.9 20.1 19.6	1 1 1 1 1	34.3 34.3 34.3 34.2 34.2	20.3 20.8 20.1 20.4 19.9	1 1 1 1
MUSTANG/ M-264RR NUTECH/ NT-7206 KRUGER/ K-234RR PRAIRIE/ BR. PB-2243RR NUTECH/ NT-6255		34.7 35.4 34.8 35.2 34.8	20.5 20.5 20.3 20.3 19.8	1 1 1 1	33.6 32.8 33.4 33.0 33.4	19.4 20.4 19.7 20.1 19.4	1 1 1 1 1	34.1 34.1 34.1 34.1 34.1	20.0 20.5 20.0 20.2 19.6	1 1 1 1
HEFTY/ 277RN PRAIRIE/ BR. PB-EX271RR WENSMAN/ W 2200NRR KRUGER/ K-248RR/SCN LATHAM/ L2337R		35.2 35.4 35.0 35.4 35.0	20.0 20.8 20.7 20.3 20.6	1 1 1 1	32.8 32.5 33.0 32.4 32.7	19.5 20.5 20.1 20.3 20.0	1 1 1 1	34.0 34.0 34.0 33.9 33.9	19.8 20.6 20.4 20.3 20.3	1 1 1 1
PRAIRIE/ BR. PB-2667NRR MUSTANG/ M-237RR LATHAM/ L2810R KRUGER/ K-259RR PRAIRIE/ BR. PB-2697NRR		34.8 34.7 34.7 35.0 34.7	20.1 20.3 20.4 20.5 20.4	1 1 1 1	32.9 32.7 32.7 32.3 32.5	19.3 19.8 19.6 19.8 19.9	1 1 1 1 1	33.9 33.7 33.7 33.7 33.6	19.7 20.1 20.0 20.2 20.2	1 1 1 1

Table 7b. Roundup Ready™ maturity group-II soybean variety protein, oil, and lodging score averages- southern South Dakota locations, 2007 (continued)

South Dakota locatio	110, 2007 (0			ern Avera	ges by Loc	cation				_
Brand/Variety	Average	Е	Beresfor			Geddes		Souther	n Zone <i>i</i>	Averages
(By 2007 zone protein)	DTM*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	0il (%)	Lodging (1-5)*	Protein (%)	Oil (%)	Lodging (1-5)*
DAIRYLAND/ DSR-2300/RR WENSMAN/ W 2222NRR ASGROW/ DKB27-52 DAIRYLAND/ DSR-2600/RR PRAIRIE/ BR. PB-2447RR		35.5 34.7 34.8 35.1 34.7	20.3 20.6 20.3 20.1 20.7	1 1 1 1	31.7 32.3 32.1 31.8 32.1	20.2 20.4 19.7 19.6 19.9	1 1 1 1	33.6 33.5 33.5 33.5 33.4	20.2 20.5 20.0 19.9 20.3	1 1 1 1
PUBLIC/ SD02R-5 PUBLIC/ SD03-2222R PRAIRIE/ BR. PB-2636NRR PUBLIC/ SD(LD)05-16118 KRUGER/ K-275RR/SCN		34.5 34.4 33.8 33.9 34.2	21.1 20.9 20.9 20.6 20.9	1 1 2 1 1	32.2 32.3 32.7 32.5 32.3	20.7 20.2 20.1 19.7 20.1	1 1 2 1 1	33.3 33.3 33.2 33.2 33.2	20.9 20.6 20.5 20.2 20.5	1 1 2 1 1
NUTECH/ NT-7222 PUBLIC/ SD03-2006R PUBLIC/ SD(LD)05-16137 PUBLIC/ SDX00R-035-56 NUTECH/ NT-6219		34.2 33.6 33.1 34.3 33.7	20.9 21.3 20.9 20.0 20.9	1 1 1 2 1	32.0 32.1 32.0 30.7 31.1	20.6 21.1 20.2 20.4 20.7	1 1 1 1	33.1 32.9 32.6 32.5 32.4	20.8 21.2 20.6 20.2 20.8	1 1 1 2 1
LATHAM/ EXP-E2250R ASGROW/ DKB25-51 PRAIRIE/ BR. PB-2515RR COYOTE/ 4523RR COYOTE/ 4527RR		33.5 33.4 33.5 35.4	21.0 21.0 20.9 19.7	1 1 1 1	31.1 31.2 30.7 33.6	20.4 20.8 20.4 19.6	1 1 1	32.3 32.3 32.1	20.7 20.9 20.7	1 1 1
COYOTE/ EXP722NRR COYOTE/ EXP725NRR COYOTE/ EXP728NRR FARM/ ADVANTAGE 7254N FARM/ ADVANTAGE 7223N		35.9 36.3 35.7	20.0 19.9 19.7	1 2 1	34.8	19.9	1			
FARM/ ADVANTAGE 7233N HEFTY/ 226R HEFTY/ 266R HEFTY/ EXP218RN HEFTY/ 257RN	· · ·	34.5 35.7	21.3 20.2		35.3 33.1 34.2	19.6 19.4 19.3	1 1 1			:
HEFTY/ EXP298RN HEFTY/ EXP248R KALTENBERG/ KB247RR KALTENBERG/ KB268RR STINE/ 2523-4		35.7 35.7 36.5 36.0	19.9 20.7 20.1 19.6	1 1 1	32.2	19.3	1			
STINE/ 2862-4 ZILLER/ BT 7217NR RENK/ RS253RR RENK/ RS277NRR RENK/ RS247NRR		36.1 35.7 37.0 34.8 35.1	18.9 20.9 19.6 20.0 20.7	1 1 1 1						
Test avg. : High avg. : Low avg. : # LSD(.05) : ## TPG-avg. : @ Coef. Var. : No. Entries :		35.4 37.7 33.1 0.8 37.0 1	20.2 21.3 18.8 0.5 20.9 1 83	1 2 1 1 1 8 83	33.3 36.0 30.7 1.5 34.6 3	19.7 21.1 18.4 0.8 20.4 2 75	1 2 1 1 1 7 75	34.3 36.9 32.1 *** 2 68	20.0 21.2 18.6 *** 2 68	1 2 1 1 1 8 68

^{*} DTM= average days from seeding (Beresford- June 9, Geddes- May 26, 2007) to maturity; a missing value indicates the site received a hard frost before the variety reached maturity

^{**} Lodging, 1= all plants erect, 5= all plant flat

^{***} The effect of variety differed significantly between locations for 2007. Therefore, evaluate varieties by looking at the 2007 columns at each location, not by looking at the Southern zone 2007 column.

[#] LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table E. 2007 Conventional soybean entries by brand/variety, maturity group, and gene for Phtophthora root rot resistance as reported by entrants; and performance table number(s)

Brand / Variety	Mat. Grp.	Gene Resistance	Table No. (s)	Brand / Variety	Mat. Grp.	Gene Resistance	Table No. (s)
DAIRYLAND/ DSR-22/STSUL	2.2	Not reported	9,10	PUBLIC/ SD03-2154	0	Rps1k	8,9
RICHLAND/ ORGANICS EX16	1	Not reported	8	PUBLIC/ SD03-2327	0	Rps1k	8,9
PUBLIC/ SHEYENNE	0	Rps3	8,9	PUBLIC/ SD03-483	2	rps1 - None	9,10
PUBLIC/ SURGE	0.7	Rps1 (Rps1a)	8,9	PUBLIC/ SD04CV-254	1	rps1 - None	8,9,10
PUBLIC/ HAMLIN	0.9	Rps1k	8,9	PUBLIC/ SD04CV-263	2	rps1 - None	9,10
PUBLIC/ SD00-732	2	Not reported	9,10	PUBLIC/ SD04CV-277	1	rps1 - None	8,9,10
PUBLIC/ SD02-1138	0	Rps1c	8,9	PUBLIC/ SD04CV-405	0	rps1 - None	8,9
PUBLIC/ SD02-22	2	Not reported	9,10	PUBLIC/ SD04CV-460	2	rps1 - None	9,10
PUBLIC/ SD02-833	1	Rps1k	8,9,10	PUBLIC/ SD04CV-519	0	rps1 - None	8,9
PUBLIC/ SD02-906	1	Rps1k	8,9,10	PUBLIC/ SD04CV-534	0	rps1 - None	8,9
PUBLIC/ SD02-911	1	Rps1k	8,9,10	PUBLIC/ SD04CV-620	1	rps1 - None	8,9,10
PUBLIC/ SD02-96	2	Not reported	9,10	PUBLIC/ SD04CV-907	2	rps1 - None	9,10
PUBLIC/ SD03-1537	1	Rps1k	8,9,10	PUBLIC/ SD04CV-941	2	rps1 - None	9,10
PUBLIC/ SD03-1607	1	Rps1k	8,9,10				

Strain or race resistance by gene type is reported in table B



Table 8a. Non-Roundup Ready™ maturity group-0 and -I soybean variety yield averages-South Shore, South Dakota, 2006-2007

·			Averages by	Maturity Group	
Brand/Variety	Average	М	G-0	М	
(By maturity group & 2007 yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr
PUBLIC/ SHEYENNE PUBLIC/ SD04CV-534 PUBLIC/ SD02-1138 PUBLIC/ SD03-2154 PUBLIC/ SURGE		52 49 48 48 48	34 35		
PUBLIC/ HAMLIN PUBLIC/ SD03-2327 PUBLIC/ SD04CV-405 PUBLIC/ SD04CV-519 PUBLIC/ SD04CV-620		47 47 45 42	35 37	50	: : : :
PUBLIC/ SD03-1537 PUBLIC/ SD04CV-277 PUBLIC/ SD02-906 PUBLIC/ SD03-1607 PUBLIC/ SD04CV-254				50 48 48 47 46	34 35
PUBLIC/ SD02-911 PUBLIC/ SD02-833 RICHLAND/ ORGANICS EX16				45 44 43	33
Test avg.: High avg.: Low avg.: # LSD (.05): ## TPG-value: @ Coef. Var.: No. Entries:	18	47 52 42 NS 42 6	35 37 34 NS 34 5	47 50 43 3 47 3	34 35 33 NS 33 5

^{*} DTM= days to maturity when seeded May 31, 2007; data is missing due to an early frost

[#]LSD (.05)= amount values in a column must differ to be significantly different or if the were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 8b. Non-Roundup Ready™ maturity group-0 and -I soybean variety protein, oil, and lodging score averages- South Shore, South Dakota, 2007

Score averages- South	1 011010, 000	Tur Bakota						
			2007	Averages b	y Maturity	Group		
Brand/Variety	Average		MG-0		MG-I			
(By maturity group & protein)	DTM*	Protein %	Oil %	Lodging* (1-5)	Protein %	Oil %	Lodging* (1-5)	
PUBLIC/ SD04CV-405		36.4	18.2	2				
PUBLIC/ HAMLIN		36.3	19.2	1				
PUBLIC/ SURGE		36.3	19.0	1				
PUBLIC/ SD03-2327		36.2	18.8	1				
PUBLIC/ SD04CV-519		35.9	18.6	1				
PUBLIC/ SD04CV-534		35.6	19.8	1				
PUBLIC/ SD03-2154		34.9	19.4	2				
PUBLIC/ SD02-1138		34.4	19.5	2				
PUBLIC/ SHEYENNE		33.7	19.8	1				
RICHLAND/ ORGANICS EX16					37.8	16.4	3	
PUBLIC/ SD04CV-620					37.6	18.2	1	
PUBLIC/ SD02-911					36.4	18.5	2	
PUBLIC/ SD03-1537					36.1	18.0	3	
PUBLIC/ SD03-1607					36.1	18.0	1	
PUBLIC/ SD02-906					35.9	18.7	2	
PUBLIC/ SD04CV-254					35.8	18.1	1	
PUBLIC/ SD04CV-277					35.8	18.5	1	
PUBLIC/ SD02-833					35.6	18.3	2	
Test avg. :		35.5	19.1	1	36.3	18.1	2	
High avg. :	l .	36.4	19.8	2	37.8	18.7	3	
Low avg. :		33.7	18.2	1	35.6	16.4	1	
# LSD(.05):		1.0	0.4	NS	0.9	0.7	1	
## TPG-avg. :		35.5	19.5	2	37.0	18.1	1	
@ Coef. Var. :		2	2	35	2	2	32	
No. Entries :		9	9	9	9	9	9	

^{*} DTM= days to maturity when seeded May 31, 2007; a missing value indicates the site received a hard frost before the variety reached maturity

^{**} Lodging, 1= all plants erect, 5= all plant flat

[#] LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 9a. Non-Roundup Ready™ maturity group-0, -I & -II soybean variety yield averages- Brookings, South Dakota, 2006-2007

South Dakota, 200				Averages by M	aturity Group		
Brand/Variety (By maturity group & 2007	Average	М	3-0	M	G-I	М	i-II
yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr
PUBLIC/ SD02-1138		59					
PUBLIC/ HAMLIN		58	46				
PUBLIC/ SD03-2327		58	47				
PUBLIC/ SD04CV-405 PUBLIC/ SD04CV-519	•	57 56					
PUBLIC/ SD03-2154	•	56	47		•	•	
PUBLIC/ SD03-2154 PUBLIC/ SD04CV-534		55	4/				
PUBLIC/ SHEYENNE		55				•	
PUBLIC/ SURGE		54	43				
PUBLIC/ SD02-833				56			
PUBLIC/ SD04CV-254				55	· ·	· ·	
PUBLIC/ SD04CV-277				55			
PUBLIC/ SD03-1537				54			
PUBLIC/ SD04CV-620				53			
PUBLIC/ SD02-911				51	50		
PUBLIC/ SD03-1607				51	48		
PUBLIC/ SD02-906	·	·		49	51		
PUBLIC/ SD02-22						54	53
DAIRYLAND/ DSR-22/STSUL						51 51	50
PUBLIC/ SD00-732 PUBLIC/ SD03-483		·	i i	_ · _		51 49	51
PUBLIC/ SD04CV-460						46	
PUBLIC/ SD04CV-263						45	
PUBLIC/ SD02-96						43	46
PUBLIC/ SD04CV-941						43	
PUBLIC/ SD04CV-907						42	
Test avg. :		56	46	53	50	47	50
High avg. :		59	47	56	51	54	53
Low avg. :		54	43	49	48	42	46
# LSD (.05):		NS	NS 40	3	NS	5	NS 46
## TPG-avg. : @ Coef. Var. :		54	43 4	53	48	49 6	46 7
@ Coef. var. : No. Entries :	26	3 9	4	3	6 3	6 9	7 4
*DTM	20		<u> </u>				<u> </u>

^{*} DTM= days to maturity when seeded May 21, 2007; data is missing due to an early frost

[#] LSD (.05)= amount values in a column must differ to be significantly different or if differences are non-significant

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 9b. Non-Roundup Ready™ maturity group-0, -I & -II soybean variety protein, oil, and lodging score averages-Brookings, South Dakota, 2007

Brookings, South t				2	007 Averag	jes by M	aturity Grou	p		
Brand/Variety	Average		MG-0			MG-I			MG-II	
(By maturity group & protein)	DTM*	Protein (%)	Oil (%)	Lodging* (1-5)	Protein (%)	Oil (%)	Lodging* (1-5)	Protein (%)	Oil (%)	Lodging* (1-5)
PUBLIC/ SURGE PUBLIC/ HAMLIN PUBLIC/ SD04CV-405 PUBLIC/ SD04CV-534 PUBLIC/ SD04CV-519		38.5 38.0 37.7 37.4 37.2	19.3 19.2 19.0 19.8 19.0	1 1 1 1 1						
PUBLIC/ SD03-2327 PUBLIC/ SD03-2154 PUBLIC/ SHEYENNE PUBLIC/ SD02-1138		36.6 36.5 36.1 35.1	20.1 19.8 19.3 20.2	1 1 1 1						
PUBLIC/ SD04CV-620 PUBLIC/ SD03-1537 PUBLIC/ SD02-906 PUBLIC/ SD02-833 PUBLIC/ SD03-1607					39.6 38.0 37.8 37.2 37.0	19.7 19.9 19.7 19.7 20.1	1 1 1 1			
PUBLIC/ SD02-911 PUBLIC/ SD04CV-254 PUBLIC/ SD04CV-277					36.9 36.6 36.5	19.8 19.8 20.0	1 1 1			
PUBLIC/ SD03-483 PUBLIC/ SD04CV-907 PUBLIC/ SD00-732 PUBLIC/ SD04CV-460 PUBLIC/ SD02-96								38.7 38.4 38.3 37.8 37.4	19.0 18.5 19.4 19.4 19.5	1 1 1 1 1
DAIRYLAND/ DSR-22/STSUL PUBLIC/ SD04CV-941 PUBLIC/ SD02-22 PUBLIC/ SD04CV-263					:			36.8 36.5 36.5 35.9	19.5 17.7 19.1 19.3	1 1 1
Test avg. : High avg. : Low avg. : # LSD (.05) : ## TPG-avg. : @ Coef. Var. : No. Entries :		37.0 38.5 35.1 0.9 37.7 1	19.5 20.2 19.0 0.3 20.0 1	1 1 1 NS 1 0	37.4 39.6 36.5 1.1 38.6 2	19.8 20.1 19.7 NS 19.7 1	1 1 1 NS 1 0 8	37.4 38.7 35.9 0.8 38.0 1	19.1 19.5 17.7 0.7 18.9 2	1 1 1 NS 1 0

^{*} DTM= days to maturity when seeded May 21, 2007; a missing value indicates the site received a hard frost before the variety reached maturity

^{**} Lodging, 1= all plants erect, 5= all plant flat

[#] LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 10a. Non-Roundup Ready™ maturity group-I & -II soybean variety yield averges-Beresford, South Dakota, 2006-2007

Deresion, South D			erages by Ma	aturity Grou	 D
Brand/Variety	Average	MG	i-l	M	G-II
(By maturity group & 2007 yield)	DTM*	Bu/Acre 2007	Bu/Acre 2-Yr	Bu/Acre 2007	Bu/Acre 2-Yr
PUBLIC/ SD03-1607 PUBLIC/ SD04CV-254 PUBLIC/ SD02-906 PUBLIC/ SD02-911 PUBLIC/ SD03-1537	107 108 108 108 108	43 42 42 42 42 42	51 50		
PUBLIC/ SD04CV-620 PUBLIC/ SD02-833 PUBLIC/ SD04CV-277	109 106 110	41 40 37			
PUBLIC/ SD00-732 DAIRYLAND/ DSR-22/STSUL PUBLIC/ SD02-22 PUBLIC/ SD02-96 PUBLIC/ SD04CV-263	108 111 111 111 111			49 47 45 45 44	55 54 54 51
PUBLIC/ SD03-483 PUBLIC/ SD04CV-907 PUBLIC/ SD04CV-460 PUBLIC/ SD04CV-941	111 113 115 112			44 43 42 41	· · ·
Test avg. : High avg. : Low avg. : # LSD (.05) : ## TPG-avg. : @ Coef. Var. : No. Entries :	109 115 105	41 43 37 NS 37 11	51 51 50 NS 50 10	44 49 41 NS 41 6	54 55 51 NS 51 6

^{*} DTM= average days from seeding on June 9, 2007 to maturity

[#] LSD (.05)= amount values in a column must differ to be significantly different or if differences are non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table 10b. Non-Roundup Ready™ maturity group-I & -II soybean variety protein, oil, and lodging score averages- Beresford, South Dakota, 2007

Toughing Score ave				7 Averages	hu Maturit	Croup		
B 484 1 4	_			Averages	by Maturity	<u> </u>		
Brand/Variety	Average		MG-I	ĭ	MG-II			
(By maturity group & protein)	DTM*	Protein %	Oil %	Lodging* (1-5)	Protein %	Oil %	Lodging* (1-5)	
PUBLIC/ SD04CV-620		37.0	20.3	2				
PUBLIC/ SD02-833		35.3	20.2	2				
PUBLIC/ SD03-1607		35.0	20.5	1				
PUBLIC/ SD02-911		34.9	20.4	1				
PUBLIC/ SD03-1537		34.8	20.2	2				
PUBLIC/ SD02-906		34.7	20.9	1				
PUBLIC/ SD04CV-254		34.3	20.0	1				
PUBLIC/ SD04CV-277		33.6	20.9	1				
PUBLIC/ SD03-483					37.3	19.9	1	
PUBLIC/ SD04CV-907					36.9	19.8	1	
PUBLIC/ SD02-96					36.0	20.6	1	
PUBLIC/ SD00-732					35.9	20.4	1	
PUBLIC/ SD04CV-460					35.5	19.7	1	
PUBLIC/ SD02-22					35.2	19.6	1	
DAIRYLAND/ DSR-22/STSUL					34.2	19.8	1	
PUBLIC/ SD04CV-941					34.2	18.5	2	
PUBLIC/ SD04CV-263					33.4	20.4	1	
Test avg. :		35.0	20.4	1	35.4	19.9	1	
High avg. :		37.0	20.9	2	37.3	20.6	2	
Low avg. :		33.6	20.0	1	33.4	18.5	1	
# LSD (.05):		0.9	0.3	1	0.9	0.5	NS	
## TPG-avg. :		36.2	20.7	1	36.5	20.2	2	
@ Coef. Var. :		1	11	28	1	1	24	
No. Entries :		8	8	8	9	9	9	

^{*} DTM= days to maturity when seeded June 9, 2007; a missing value indicates the site received a hard frost before the variety reached maturity

^{**} Lodging, 1= all plants erect, 5= all plant flat

[#] LSD(.05)= amount values in a column must differ to be significantly different or if they were non-significant (NS)

^{##} TPG-avg. = minimum value to qualify for top performance group

[@] Coef. Var.= a measure of trial experimental error, 15% or less is best

Table F. Mailing addresses of entrants in the 2007 soybean trials.

Entrant name (brand name), mailing address

Coyote Seed Mills (Coyote), Inc., PO Box 16, Bridgewater, SD 57319-0016
Dairyland Seed Co., Inc. (Dairyland), PO Box 958, West Bend, WI 53095
Farm Advantage (Farm Advantage), 1275 Hwy 69, Belmont, IA 50421
Gold Country Seed Inc. (Gold Country Seed), 16506 Hwy 15 N., Hutchinson, MN 55350
Hefty Seed Co. (Hefty), 47504 252nd St., Baltic, SD 57003

Kaltenberg Seeds (Kaltenberg), 5506 State Rd 19, Box 278, Waunakee, WI 53597-0278 Kruger Seed Co. (Kruger), 33938 160th Ave., PO Box A, Dike, IA 50624 Latham Seed Co. (Latham), 131 180th St, Alexander, IA 50420-8028 Monsanto (Asgrow), 102 West Carol Ave., Courtland, IL 60112 Mustang Seeds (Mustang), PO Box 466, Madison, SD 57042

Northstar Genetics (Northstar), 14602 50th St. SE, Leonard, ND 58052 Nutech Seed, LLC (Nutech), 40321 130th Ave., Leland, IA 50453 Prairie Brand Seed Co. (Praire Brand), 15 X Ave., Story City, IA 50248 Renk Seed Co. (Renk), 6809 Wilburn Rd., Sun Prairie, WI 53590 Roughrider Genetics (RG), 1735 NDSU Research Park Drive, Fargo, ND 58105

SDSU Soybean Breeding Program (Experimentals), Plant Science Dept, Brookings, SD 57007 Seeds 2000 (Seeds 2000), PO Box 200, Breckenridge, MN 56520 Sodak Genetics (Sodak), 1200 North Campus Dr., Brookings, SD 57007 Stine Seed Co.(Stine), 22555 Laredo Trail, Adel, IA 50003 Thunder Seed Inc. (Thunder), 3008 210th St. W., Hawley, MN 56549

Wensman Seed Co.(Wensman), PO Box 190, Wadena, MN 56482 Ziller Seed Co.Inc.(Ziller), 76374 380th St., Bird Island, MN 55310

Variety Performance Trials—2008 Results



South Dakota State University • Cooperative Extension Service • U.S. Department of Agriculture

Tables for the 2008 Soybean Performance Trials

A	Monthly nearest weather station precipitation totals and average temperature;
	and their departures from average for 2008
В	Description of trial locations, soil types, tillage methods, prior crop, herbicide usage, and dates seeded
C	Gene race resistance to Phytophthora root rot
D	Glyphosate-resistant entries with yield table numbers
E	Entrants (brand name) mailing addresses (after yield tables)
F	Explanation of yield and lodging score table footnotes
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	northern South Dakota locations, 2007-2008
1b	Glyphosate-resistant maturity group-0 soybean variety protein and oil averages-
	northern South Dakota locations, 2008. Entries are sorted by 2008 zone protein
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2b	Glyphosate-resistant maturity group-I soybean variety protein and oil averages-
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3b	Glyphosate-resistant maturity group-0 soybean variety protein and oil averages-
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4a	Glyphosate-resistant maturity group-I soybean variety yeild and lodging averages-
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4b	
10	Glyphosate-resistant maturity group-I soybean variety protein and oil averages- central South Dakota locations, 2008. Entries are sorted by 2008 zone protein
5a	Glyphosate-resistant maturity group-II soybean variety yeild and lodging averages-
Ja	Glyphosate-resistant maturity group-II soybean variety yeild and lodging averages-central South Dakota locations, 2007-2008
5b	Clyphocata registent maturity group II covboon variety protein and oil averages
30	Glyphosate-resistant maturity group-II soybean variety protein and oil averages-central South Dakota locations, 2008. Entries are sorted by 2008 zone protein
6.	Glyphosate-resistant maturity group-I soybean variety yeild and lodging averages-
6a	southern South Dakota locations, 2007-2008
(1.	
6b	Glyphosate-resistant maturity group-I soybean variety protein and oil averages-southern South Dakota locations, 2008. Entries are sorted by 2008 zone protein
_	
7a	Glyphosate-resistant maturity group-II soybean variety yeild and lodging averages-
-1	southern South Dakota locations, 2007-2008
7b	Glyphosate-resistant maturity group-II soybean variety protein and oil averages-
	southern South Dakota locations, 2008. Entries are sorted by 2008 zone protein
Nor	ı-Glyphosate-Resistant Soybean Trial Results
8a	Non-glyphosate-resistant maturity group-0 and -I soybean variety yield and lodging averages-
	South Shore, 2007-2008
8b	Non-glyphosate-resistant maturity group-0 and -I soybean variety protein and oil averages-
	South Shore, 2008.

EC 775—Precision Planted Soybeans 2008 Crop Performance Results is available electronically on the internet

http://agbiopubs.sdstate.edu/articles/EC775-08.pdf



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SOYBEAN Variety Performance Trials-2008 Results

Robert G. Hall, Extension agronomist - crops/manager - crop testing Kevin K. Kirby, Agricultural research manager – crop testing Jesse Hall, Agricultural research manager – crop testing

Soybean production is greatly affected by variety selection. This circular reports the agronomic performance of entries in the 2008 South Dakota performance trials for glyphosate-resistant and conventional or non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

General

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and therefore affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to Iowa, Nebraska, and south to Texas.

These soybean trial results are reported according to the prevalent maturity zones in South Dakota (see map). The glyphosate-resistant soybean variety trials were conducted by the following test zones and locations: Northern test zone: Maturity groups-0 and -I at South Shore and Warner; Central test zone: Maturity groups-0, -I, and –II at Brookings and Bancroft; Southern test zone: Maturity groups-I and -II at Beresford and Geddes.

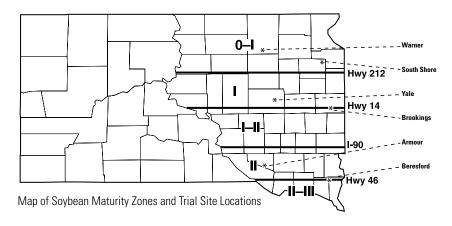
The conventional non-glyphosate-resistant soybean variety trials are conducted at the following SDSU affiliated research farms: Northeast Research Farm, South Shore- Maturity groups-0 and -I; SDSU Plant Science Farm, Brookings- Maturity groups-0, -I, and -II; and the Southeast SD Agricultural Experiment Station, Beresford- Maturity groups-I and -II. There are transi-

tion areas where varieties of two maturity groups may perform similarly. In such cases rainfall and or elevation may moderate the affect of latitude on maturity. In most cases, an earlier maturity group may be seeded in a zone suited to a later maturity group. This is only practical if seeding is delayed, or if reseeding following hail, or if double cropping.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to *Phytophthora* root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem then use of varieties with a wide range of rot resistance is strongly suggested (see discussion of *Phytophthora* under General Test procedures).

An alternative method of control is the use of "tolerant varieties." Tolerant varieties are not resistant to PRR in the seedling stage. Thus, a PRR fungicide must be applied to protect them. Currently, we do not evaluate variety field tolerance; therefore, field tolerance ratings are not available.

Certified seed is the best source of seed and the only way to be assured of the genetic purity of the variety seeded. In addition, inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean soils there is no guarantee that beneficial bacteria will be present to naturally inoculate planted seed. Therefore, inoculation of seed at



planting is an inexpensive means of increasing the percentage of plants that will fix nitrogen in the current crop year.

Yield

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested along with 2-year averages where varieties have been tested for two years. Yield test averages and least significant difference (LSD) values are rounded-off to the nearest bushel and printed at the bottom of each yield column.

The LSD value can be used to determine if varieties differ in yield per acre. For example, assume variety A averages 30 bu., B averages 25 bu., and the calculated LSD value is 4 bu. The average difference between varieties A and B is 5 bu (30-25=5). Since the average difference of 5 bu. is greater than the test LSD value of 4 bu., variety A (30 bu.) is significantly higher in yield than for B (25 bu.). In contrast, if variety A averages 28 bu. and B averages 25 bu., the average difference would be 3 bu (28-25=3). In this case, both varieties would have a similar yield average because their difference of 3 bu. is less than the test LSD value of 4 bu.

Use LSD values to identify the best-yielding varieties. The LSD value at the bottom of each yield column is used to calculate a minimum top yield value. For example, if the highest column yield value is 50 bu., subtract the LSD value of 5 bu. to obtain an intermediate value of 45 bu. (50-5=45). The minimum top yield value has to be greater than this intermediate value of 45 bu. and since the yield values are rounded to the nearest bushel it must be at least 46 bu. Thus, varieties with an average of 46 bu. or higher are included in the top-yield group. Note: Entries tested for two years may also have a top yield group value in the 2008 yield column.

NOTE: Each company selects the appropriate maturity group trial (maturity group-0, -I, or -II trial) and locations for their entries. Companies generally have one or more maturity group checks for their varieties. There are, however, no standard regional or national check varieties for maturity. A late group-I variety from one company may be similar in maturity to an early group-I, or an early group-II variety from another company because they use different check varieties for maturity. Therefore, this testing program does not guarantee that entries are placed in the appropriate maturity group trial. Borderline entries with maturity ratings at or near the arbitrary breaks between the late group-0's and early group-I's and between the late group-I's and early-group-II's may crossover in some test trials. It is suggested you note the reported maturity rating of every entry you are considering. Since all entries at a location are seeded the same day, one can compare the relative difference in days to maturity among varieties tested at that location. Use caution when comparing the maturity rating of a variety over many locations. Variations in soil moisture and temperature often differ between locations resulting in some maturity variations over locations.

The efforts of D. Doyle, SDSU Agronomy Farm; A. Heuer, NE Research Farm, South Shore; and R. Berg and staff, SE Research Farm, Beresford in obtaining the data are gratefully acknowledged. Also, the assistance and cooperation of our farmer co-operators: Allen and Inel Ryckman, Warner, SD; Curtis Syb-

esma, Geddes, SD; and Erland Weerts, Bancroft, SD is gratefully acknowledged.

Protein and Oil Content

The 2008 protein and oil values (adjusted to a 13% moisture) were determined using a calibrated FOSS TECATOR Model Infratec 1229 Grain Analyzer. Three replicates of every variety in each trial were tested. Samples of known protein and oil were tested by the SDSU Agricultural Experiment Station Biochemistry Laboratory and were used to calibrate the analyzer.

Weather and Seasonal Precipitation

Seasonal rainfall and its distribution and average temperatures at weather reporting stations nearest each test trial are reported in Table A for the period April 1 to September 30. Seasonal precipitation totals were above average at Aberdeen (2.22") and Mitchell (1.61"); near average at South Shore (-0.62"), Huron (0.47"), and Centerville (Beresford-SE Farm 0.50"); and below average at Brookings (-4.81"). The greatest moisture deficit of -3.78" from June through August was at Brookings. Station temperatures varied from about 0 to -90 below average in April, May, and June; and from 0-20 F in July and August. Effects of the cool spring in May that delayed planting or inhibited early seedling growth at some of the locations can be seen in table A.

General Test Procedures

These procedures apply to both the glyphosate-resistant and conventional non-glyphosate-resistant soybean trials except for the chemical weed control imposed. Trial locations, soil types, tillage methods, previous crops, pesticide usage, and seeding dates are indicated in table B.

Test Procedures: A row spacing of 30 inches was used at all locations. The seeding rate was 165,000 seeds per acre for all varieties and locations. Test plots consist of 4-row plots, 20 feet long, with three replications at all locations. Soybean inoculation was accomplished by applying Nitragin brand Soybean Soil Implant down the seed tube, according to label instructions and rates, during seeding. Seeding at all locations was accomplished using a Monosem precision row crop planter. The center two rows of each plot were harvested for yield.

<u>Yield:</u> Plots were harvested at 15% seed moisture or less. Yields were calculated on a 13% moisture content basis and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine.

Reporting variety maturity: Variety maturity is reported as "Days to maturity" or DTM. Entries are mature when 95% of the pods have turned brown. Each maturity value is obtained by determining the average number of days from seeding to maturity for two replicates and expressing as DTM at each location. Table DTM values are an average of four replicates (two for each location) unless data is at a location; and in such cases the DTM average is based on two replications.

<u>Lodging Score</u>: Scores at maturity are based on the erectness of the main stem of plants within each variety. 1= all plants erect, 2= slight lodging, 3= some lodging at a 450-angle, 4= severe lodging, and 5= all plants flat.

Phytophthora Root Rot (PRR): The gene resistance of each variety to PRR is supplied by each seed company (proprietary entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). A key for each type of PRR gene and the race resistance it imparts to a variety is given in Table C. Spe-

cific race resistance to PRR as reported by seed company, can be determined by noting the PRR gene in the variety index table D (glyphosate-resistant) and and referencing the gene back to table C to find the range of race resistance. Currently, races -1, -3, and -4 are the most common races in South Dakota.

GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Note: Yield averages are reported 2-yr (2007-08) or 2008.

NORTHERN TEST ZONE

SOUTH SHORE- Conventional tillage, Northeast Research Farm WARNER- Minimum-tillage, Allen & Inel Ryckman Farm (farm cooperators)

South Shore, Group-0 (Tables 1a & 1b): The two-year and 2008 test-yield averages were 49 and 43 bushels per acre, respectively (Table 1a). Varieties had to average 46 and 49 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield differences among the two-year averages were not significant (NS); while the 2008 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 39.5% and 18.8%, respectively (Table 1b). Variety protein and oil values had to average 41.5% and 19.6% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 0.7% and 0.5%, respectively, to be significantly different.

Warner, Group-0 (Tables 1a & 1b): The two-year and 2008 test-yield averages were 47 and 41 bushels per acre, respectively (Table 1a). Varieties had to average 43 and 46 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield differences among the two-year averages were not significant (NS); while the 2008 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values did not differ among varieties therefore they were not significantly different.

The 2008 protein and oil test averages were 38.7% and 18.2%, respectively (Table 1b). Variety protein and oil values had to average 40.1% and 18.5% or higher, respectively, to be in the top groups for protein and oil in 2008. Variety protein and oil averages had to differ by 1.7% and 0.9%, respectively, to be significantly different.

Northern test zone, Group-0 (Tables 1a & 1b): The two-year and 2008 test-yield averages were 48 and 42 bushels per acre, respectively, and the lodging score average was 2.(Table 1a). The effect of variety on yield and lodging score differed significantly between the two locations for both the two-year and 2008 periods. Growers are encouraged to evaluate varieties by looking at both yield columns and the lodging score column at each location and disregard the Northern zone columns.

The 2008 northern zone protein and oil test averages were 39.2% and 18.5%, respectively (Table 1b). Variety protein and oil

values had to average 41.1% and 19.1% or higher, respectively, to be in the top groups for protein and oil. Variety protein and oil averages had to differ by 0.9% and 0.5%, respectively, to be significantly different.

South Shore, Group-I (Tables 2a & 2b): The two-year and 2008 test-yield averages were 48 and 45 bushels per acre, respectively (Table 2a). Varieties had to average 49 bushels and 48 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield averages had to differ by 5 bushels for two years and 3 bushels for 2008 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 39.0% and 18.9%, respectively (Table 2b). Variety protein and oil values had to average 39.9% and 20.7% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 0.9% and 0.5%, respectively, to be significantly different.

Warner, Group-I (Tables 2a & 2b): The two-year and 2008 test-yield averages were 48 and 38 bushels per acre, respectively (Table 2a). Varieties had to average 43 and 39 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield differences among the two-year averages were not significant (NS); while the 2008 variety yield differences had to differ by 6 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 38.5% and 18.0%, respectively (Table 2b). Variety protein and oil values had to average 39.1% and 18.9% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 1.7% and 1.1%, respectively, to be significantly different.

Northern test zone, Group-I (Tables 2a & 2b): The two-year and 2008 test-yield averages were 48 and 41 bushels per acre, respectively (Table 2a). Variety yield differences among the two-year averages were not significant (NS). In contrast, the effect of variety on the 2008 yield and lodging score average differed significantly between the two locations in 2008. Growers are encouraged to evaluate the yield and lodging resistance potential of varieties by looking at the 2008 yield and lodging score columns at each location and disregard the averages of these variables in the Northern zone columns.

The 2008 protein and oil test averages were 38.8% and 18.5%, respectively, (Table 2b). Variety protein and oil values had to average 39.2% and 20.0% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 1.0% and 0.6%, respectively, to be significantly different.

CENTRAL TEST ZONE

BROOKINGS— Conventional tillage, SDSU Plant Science Research Farm

BANCROFT- No-till, Erland Weerts (farm cooperator)

Brookings, Group-0 (Tables 3a & 3b): The two-year and 2008 test-yield averages were 52 and 42 bushels per acre, respectively (Table 3a). Varieties had to average 51 bushels and 44 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield averages had to differ by 4 bushels for both the two-year and 2008 periods to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2008.

The 2008 protein and oil test averages were 39.4% and 19.0%, respectively (Table 3b). Variety protein and oil values had to average 37.9% and 19.2% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 4.0% and 1.2%, respectively, to be significantly different.

Bancroft, Group-0 (Tables 3a & 3b): The two-year and 2008 test-yield averages were 57 and 50 bushels per acre, respectively (Table 3a). Varieties had to average 57 and 54 bushels or higher to be in the top yield group for 2008 and for two years, respectively. Variety yield averages had to differ by 5 bushels for both two years and in 2008 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 41.1% and 20.2%, respectively (Table 3b). Variety protein and oil values had to average 42.4% and 20.9% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 1.2% and 0.7%, respectively, to be significantly different.

Central test zone, Group-0 (Tables 3a & 3b): The two-year and 2008 test-yield averages were 54 and 47 bushels per acre, respectively (Table 2a). Varieties had to average 57 bushels and 50 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield averages had to differ by 2 bushels for two years and 3 bushels for 2008 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 40.3% and 19.6%, respectively, (Table 3b). Variety protein and oil values had to average 40.8% and 20.1% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 2.0% and 0.7%, respectively, to be significantly different.

Brookings, Group-I (Tables 4a & 4b): The two-year and 2008 test-yield averages were 53 and 44 bushels per acre, respectively (Table 4a). Varieties had to average 54 and 46 bushels or higher to be in the top yield group for 2008 and for two years, respectively. Variety yield averages had to differ by 5 bushels for two years and 4 bushel for 2008 to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2008.

The 2008 protein and oil test averages were 38.5% and 19.3%, respectively (Table 4b). Variety protein and oil values had to average 39.9% and 20.0% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages both had to differ by 0.7% to be significantly different.

Bancroft, Group-I (Tables 4a & 4b): The two-year and 2008 test-yield averages were 55 and 51 bushels per acre, respectively (Table 4a). Varieties had to average 48 and 41 bushels or higher to be in the top yield group for 2008 and for two years, respectively. Variety yield averages had to differ by 5 bushels for both the two-year and 2008 periods to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 40.3% and 20.2%, respectively (Table 4b). Variety protein and oil values had to average 41.5% and 20.9% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 1.3% and 0.6%, respectively, to be significantly different.

Central test zone, Group-I (Tables 4a & 4b): The two-year and 2008 test-yield averages were 54 and 48 bushels per acre, respectively, and the lodging score average was 1 (Table 4a). The effect of variety on yield and lodging score differed significantly between the two locations for both the two-year and 2008 periods. Growers are encouraged to evaluate varieties by looking at both yield columns and the lodging score column at each location and disregard the Central zone columns.

The 2008 protein and oil test averages were 39.4% and 19.7%, respectively (Table 4b). Variety protein and oil values had to average 40.9% and 20.9% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 0.7% and 0.4%, respectively, to be significantly different.

Brookings, Group-II (Tables 5a & 5b): The two-year and 2008 test-yield averages were 53 and 47 bushels per acre, respectively (Table 2a). Varieties had to average 50 and 48 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield differences among the two-year averages were not significant (NS); while the 2008 variety yield differences had to differ by 6 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2008.

The 2008 protein and oil test averages were 36.9% and 18.8%, respectively (Table 5b). Variety protein and oil values had to

average 39.3% and 19.0% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 0.9% and 0.6%, respectively, to be significantly different.

Bancroft, Group-II (Tables 5a & 5b): The two-year and 2008 test-yield average was 54 and 50 bushels per acre in 2008 and for two years, respectively (Table 5a). Likewise, varieties had to average 54 bushels or higher in 2008 and 53 bushel or higher to be in the top yield group for two years. Variety yield averages had to differ by 6 bushels for two years and for 2008 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 40.1% and 19.8%, respectively (Table 5b). Variety protein and oil values had to average 40.4% and 20.0% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 2.2% and 0.8%, respectively, to be significantly different.

Central test zone, Group-II (Tables 5a & 5b): The two-year and 2008 test-yield averages were 54 and 49 bushels per acre, respectively (Table 2a). Varieties had to average 55 bushels and 50 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield averages had to differ by 3 bushels for two years and 4 bushels for 2008 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 38.6% and 19.3%, respectively, (Table 5b). Variety protein and oil values had to average 39.6% and 19.6% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 1.2% and 0.5%, respectively, to be significantly different.

SOUTHERN TEST ZONE

BERESFORD— Conventional tillage, Southeast SD Agricultural Experiment Stn.

GEDDES- No-till, Curtis Sybesma (farm cooperator)

Beresford, Group-I (Tables 6a & 6b): The two-year and 2008 test-yield averages were 48 and 42 bushels per acre, respectively (Table 2a). Varieties had to average 49 bushels and 45 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield averages had to differ by 5 bushels for two years and 4 bushels for 2008 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 36.9% and 19.3%, respectively (Table 6b). Variety protein and oil values had to average 38.3% and 19.7% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 0.7% and 0.4%, respectively, to be significantly different.

Geddes, Group-I (Tables 6a & 6b): The two-year and 2008 test-yield averages were 52 and 48 bushels per acre, respectively (Table 1a). Varieties had to average 47 and 48 bushels or higher to be in the top yield group for two years and for 2008, respectively. Variety yield differences among the two-year averages were not significant (NS); while the 2008 variety yield differences had to differ by 6 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2008.

The 2008 protein and oil test averages were 36.7% and 19.9%, respectively (Table 6b). Variety protein and oil values had to average 37.3% and 19.9% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 2.0% and 1.1%, respectively, to be significantly different.

Southern test zone, Group-I (Tables 6a & 6b): The two-year and 2008 test-yield averages were 50 and 45 bushels per acre, respectively, and the lodging score average was 2 (Table 1a). The effect of variety on yield and lodging score differed significantly between the two locations for both the two-year and 2008 periods. Growers are encouraged to evaluate varieties by looking at both yield columns and the lodging score column at each location and disregard the Southern zone columns.

The 2008 protein and oil test averages were 36.8% and 19.6%, respectively, (Table 6b). Variety protein and oil values had to average 38.2% and 19.8% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 1.0% and 0.6%, respectively, to be significantly different.

Beresford, Group-II (Tables 7a & 7b): The two-year and 2008 test-yield averages were 49 and 44 bushels per acre, respectively (Table 4a). Varieties had to average 49 and 51 bushels or higher to be in the top yield group for 2008 and for two years, respectively. Variety yield averages had to differ by 6 bushels for two years and 5 bushel for 2008 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging and lodging values had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 36.6% and 19.0%, respectively (Table 7b). Variety protein and oil values had to average 38.0% and 19.4% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 1.1% and 0.5%, respectively, to be significantly different.

Geddes, Group-II (Tables 7a & 7b): The two-year and 2008 test-yield averages were 55 and 53 bushels per acre, respectively (Table 4a). Varieties had to average 55 and 53 bushels or higher to be in the top yield group for 2008 and for two years, respectively. Variety yield averages had to differ by 6 bushels for both two years and for 2008 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging and lodging values had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 37.0% and 19.5%, respectively (Table 7b). Variety protein and oil values had to average 38.5% and 19.9% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 2.1% and 1.1%, respectively, to be significantly different.

<u>Southern test zone, Group-II (Tables 7a & 7b):</u> The two-year and 2008 test-yield averages were 52 and 48 bushels per acre, respectively, and the lodging score average was 1 (Table 1a). The effect of variety on yield and lodging score differed significantly

between the two locations for both the two-year and 2008 periods. Growers are encouraged to evaluate varieties by looking at both yield columns and the lodging score column at each location and disregard the Southern zone columns.

The 2008 protein and oil test averages were 36.8% and 19.3%, respectively, (Table 7b). Variety protein and oil values had to average 37.6% and 19.7% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein and oil averages had to differ by 1.1% and 0.6%, respectively, to be significantly different.

NON-GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Note: Yield averages are reported 2-yr (2007-08) or 2008.

SOUTH SHORE— Conventional tillage, Northeast Research Farm South Shore, Group-0 (Tables 8a & 8b): The two-year and 2008 test-yield averages were 43 and 35 bushels per acre, respectively (Table 8a). Varieties had to average 43 bushels or higher for two years and 36 bushels or higher for 2008 to be in the top yield group. There were no significant differences in yield average among the varieties tested for two years; while in 2008 averages had to differ by 5 bushel to be significantly different. Variety lodging score values had to equal 2 or lower to be in the top performance group for lodging and lodging values had to differ by 1 to be significantly different.

The 2008 protein and oil test averages were 40.0% and 18.3%, respectively (Table 8b). Variety protein and oil values had to average 40.0% and 17.9% or higher, respectively, to be in the top groups for protein and oil 2008. Variety protein averages had to differ by 1.4% to be significantly different. Variety oil average differences were non-significant(NS; therefore the varieties did not differ in oil content.

<u>South Shore, Group-I (Tables 8a & 8b):</u> There was only one entry in this trial so there were no differences in yield, lodging score, protein, and oil content to compare.

Table A. Nearest weather station precipitation accumulation and average daily tempeatures for each growing season month in 2008 and their departures from average (DFA). Source: South Dakota Office of Climate and Weather.

Station (Test site)	Veriebl		M	onthly da	ata - Apri	1 to Se	ptember	30	Total
Station (Test site)	Variabl	е	April	May	June	July	Aug	Sept	Total
	Precip inches 1971-2000 avg.	'08	0.86 1.83	2.19 2.69	3.21 3.49	6.26 2.92	1.24 2.42	3.62 1.81	17.38 15.16
Aberdeen Airport		DFA*	-0.97	-0.50	-0.28	3.34	-1.18	1.81	2.22
(Warner)	Avg.Temp°F 1971-2000 avg.	'08	43 45	49 58	65 67	73 72	71 71	62 60	
	<u> </u>	DFA	-2	-9	-2	1	0	2	
	Precip inches 1971-2000 avg.	'08	0.57 1.96	2.67 2.61	4.48 4.01	4.04 2.91	1.74 2.85	2.25 2.03	15.75 16.37
South Shore		DFA	-1.39	0.06	0.47	1.13	-1.11	0.22	-0.62
(NE Farm)	Avg.Temp°F 1971-2000 avg.	'08	39 43	53 56	62 65	70 70	68 68	59 58	
		DFA	-4	-3	-3	0	0	1	
	Precip inches 1971-2000 avg.	'08	0.19 2.29	4.33 3.00	4.51 3.28	2.47 2.86	2.79 2.07	1.48 1.80	15.77 15.30
Huron		DFA	-2.10	1.33	1.23	-0.39	0.72	-0.32	0.47
(Bancroft)	Avg.Temp°F 1971-2000 avg.	'08	41 46	50 58	66 68	74 73	73 72	62 61	
		DFA	-5	-8	-2	1	1	1	
Λ	Precip inches 1971-2000 avg.	,08	0.84 2.03	2.76 2.95	5.60 4.23	1.60 3.11	0.67 2.94	1.46 2.48	12.93 17.74
Brookings		DFA	-1.19	-0.19	1.37	-1.51	-2.27	-1.02	-4.81
(Agronomy Farm)	Avg.Temp°F 1971-2000 avg.	'08	41 44	48 57	64 66	71 71	69 69	62 59	
		DFA	-3	-9	-2	0	0	3	
	Precip inches 1971-2000 avg.	'08	1.84 2.47	5.76 3.65	4.68 3.95	2.63 3.35	1.70 2.83	2.40 2.26	19.01 18.51
Centerville, 6 SE		DFA	-0.63	2.11	0.73	-0.72	-1.13	0.14	0.50
(Beresford-SE Farm)	Avg.Temp°F 1971-2000 avg.	'08	44 47	57 60	69 69	75 74	71 72	62 62	
		DFA	-3	-3	0	1	-1	0	
	Precip inches 1971-2000 avg.	'08	3.31 2.71	5.9 3.33	4.9 3.52	2.46 2.64	0.76 2.32	1.07 2.27	18.40 16.79
Mitchell		DFA	0.60	2.57	1.38	-0.18	-1.56	-1.20	1.61
(Geddes)	Avg.Temp°F 1971-2000 avg.	'08	44 47	51 59	68 69	76 74	73 72	66 62	
		DFA	-3	-8	-1	2	1	4	

^{*} DFA - departure from normal, difference current year is greater or less (-) than the long-term average.

Table B. Description of trial locations- soil t	ne, tillage methods	. previous crop	, herbicides and inoculants used, and se	eding dates.

Location	Soils & Man	agement				icides label rates		Nitragin Soybean Soil Implant	Date
(County)		Tillage	Previous	Glypoho	sate Trials	Non- glyp	hosate Trials	Down seed tube	seeded
	Туре	Method	crop	Pre	Post	Pre	Post	at label rate	
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	Yes	May 27
South Shore (Codington)	Kranzburg silty clay loam, 3-6% slope	Conven- tional	S. Wheat	2 pt, Dual II Magnum	Roundup once	2 pt, Dual II Magnum	Pursuit	Yes	May 31
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	No-till	Corn	None	Roundup once	-	-	Yes	May 28
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conven- tional	S. Wheat	None	Roundup twice	None	Harmony/ Poast/ Basagran split	Yes	May 23
Geddes (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	Yes	June 12
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conven- tional	Corn	None	Roundup once/ 6oz. Assure	Tri		ned following an errode application	or

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Table C. Phytophthora root rot race resistance by gene.

Gene	Gene Code	Race Resistance
rps1	0	None
Rps1, Rps1a	1A	1-2,10-11,13,15-18,24
Rps1b	1B	1,3-9,13-15,18,21-22
Rps1c	1C	1-3,6-11,13,15,17,21,23-24
Rps1k	1K	1-11,13-15,17-18,21-22,24
Rps2	2	1-5,9-20
Rps3	3	1-5,8-9,11,13-14,16,18,23,25
Rps4	4	1-4,10,12-16,18-21,25
Rps5	5	1-5,8-9,11-14,18,20,25
Rps6	6	1-4,10,12,14-16,18-21,25
Rsp7	7	16,18,19
Rps1k, Rps6	K6	1-22,24-25
Rps1c, Rps3	C3	1-10,13-18,22-25
Rps1b	В3	1-9,13-16,18,21-23,25
MIX	MIX	Resistant & Susceptible Plants
NR	NR	Not Reported

Table D. Index to 2008 Glyphosate-resistant soybean entries by brand/variety, maturity group, gene code for Phytophthora root rot(PRR) resistance as reported by entrants, and performance table number(s). Use table C to determine entry PRR resistance.

Brand / Variety	Mat. Grp.	Gene Code	Table No.(s)	Brand / Variety	Mat. Grp.	Gene Code	Table No.(s)
ASGROW/ AG0808 ASGROW/ AG1102 ASGROW/ AG1403 ASGROW/ AG1406 ASGROW/ AG1702	0.8 1.1 1.4 1.4 1.7	1K 1K 0 0	1 2,4 2,4 2,4 2,4	HEFTY/ EXP089R HEFTY/ EXP139R HEFTY/ EXP159RN HEFTY/ EXP179RN HEFTY/ EXP199R	0.8 1.3 1.5 1.7 1.9	1K 0 1K 0	1 2 2,4 4 4
ASGROW/ AG1802 ASGROW/ AG2002 ASGROW/ AG2108 ASGROW/ AG2403 ASGROW/ AG2406	1.8 1.9 2.1 2.4 2.4	1K 1C 0 1K 1C	2,4 4 5 7	HEFTY/ EXP229RN HEFTY/ EXP259RN HEFTY/ EXP279RN JGL/ EXP 601 JGL/ EXP 602	2.2 2.5 2.7 1.8 0.9	0 1K 1C 0	5,7 7 7 4,6 1,3
ASGROW/ AG2909 ASGROW/ DKB22-52 ASGROW/ DKB25-51 ASGROW/ DKB27-52 DAIRYLAND/ DSR-0903/RR	2.9 2.2 2.5 2.7 0.9	1C 0 1K 1C NR	7 5 7 7 1	JGL/ EXP 603 KALTENBERG/ KB1809RR KALTENBERG/ KB196RR KALTENBERG/ KB249RR KALTENBERG/ KB2609RR	0.9 1.8 1.9 2.4 2.6	1C 0 1K 0	1,3 4 4 7 7
DAIRYLAND/ DSR-1055/RR DAIRYLAND/ DSR-1601/RR DAIRYLAND/ DSR-2200/RR DAIRYLAND/ DSR-2600/RR DAIRYLAND/ DSR-2770/RR	1 1.6 2.2 2.6 2.7	NR 1K NR 1K 1K	2 4 7 7 7	KALTENBERG/ KB278RR KRUGER/ EXPKX1987R KRUGER/ K-042RR KRUGER/ K-058RR KRUGER/ K-072+RR	2.7 1.9 0.4 0.5 0.8	0 NR 1A 1K 1A	7 2,4,6 1,3 1,3 1,3
DAIRYLAND/ DSR1302RRSTS DAIRYLAND/ DSR1850RRSTS DAIRYLAND/ DST10-000/RR DAIRYLAND/ DST14-002/RR DAIRYLAND/ DST24-004/RR	1.3 1.8 1 1.4 2.4	1K NR NR NR NR	2 4 2 2 7	KRUGER/ K-079RR KRUGER/ K-091RR KRUGER/ K-100RR KRUGER/ K-129RR KRUGER/ K-142RR	0.7 0.9 1 1.2 1.4	1K 0 1K 0 1K	1,3 1,3 2,4 2,4 2,4,6
DAIRYLAND/ DST25-002/RR G-2 GENETICS/ 6099 G-2 GENETICS/ 7095 G-2 GENETICS/ 7151 G-2 GENETICS/ 7186	2.5 0.9 0.9 1.5 1.8	NR 1C 1K K6 1K	7 1,3 1 2,4 4,6	KRUGER/ K-147RR/SCN KRUGER/ K-163RR KRUGER/ K-167RR/SCN KRUGER/ K-170RR/SCN KRUGER/ K-189RR/SCN	1.2 1.6 1.6 0.7 1.8	1K 1K 1K 0	2 2,4,6 2,4,6 2,4,6 2,4,6
G-2 GENETICS/ 7226 G-2 GENETICS/ 7241 G-2 GENETICS/ 7255 GOLD COUNTRY/ 1913RR GOLD COUNTRY/ 1915NRR	2.2 2.4 2.5 1.3	1K 1K 1K 0	5,7 7 7 2 2,4	KRUGER/ K-194RR KRUGER/ K-195+RR/SCN KRUGER/ K-201RR/SCN KRUGER/ K-204RR/SCN KRUGER/ K-228RR/SCN	1.9 1.9 2 2 2.2	1K 1K 1C 1K 1K	2,4,6 4,6 5,7 5,7 5,7
GOLD COUNTRY/ 1918RR GOLD COUNTRY/ 2509RR GOLD COUNTRY/ 2713RR GOLD COUNTRY/ 2815RR GOLD COUNTRY/ 8820NRR	1.8 0.9 1.3 1.5 2	1K 0 1K 0	4,6 1 2 2,4 7	KRUGER/ K-239RR KRUGER/ K-248RR/SCN KRUGER/ K-249RR/SCN KRUGER/ K-251RR/SCN KRUGER/ K-256RR	2.3 2.4 2.4 2.5 2.5	0 0 0 1K 1K	5,7 5,7 5 5,7 5,7
GOLD COUNTRY/ 9822RR HEFTY/ 117R HEFTY/ 168R HEFTY/ 218RN HEFTY/ 248R	2.2 1.1 1.6 2.1 2.4	1K 0 0 1C 3	7 2 2,4 5,7 7	KRUGER/ K-271RR KRUGER/ K-274RR/SCN KRUGER/ K-275RR/SCN LATHAM/ EXP-E2680R LATHAM/ EXP-E2935R	2.7 2.7 2.7 2.6 2.9	1K 0 1K 0 1K	7 7 7 7
LATHAM/ L1738R LATHAM/ L1983R LATHAM/ L2158R LATHAM/ L2285R LATHAM/ L2303R	1.7 1.9 2.1 2.2 2.3	0 1C 1K 1K 0	4 4 7 7 7	NUTECH/ NT-0886 NUTECH/ NT-0990 NUTECH/ NT-1808/SCN RR NUTECH/ NT-2324+RR/SCN NUTECH/ NT-6205+RR	0.8 0.9 1.8 2.3 1.9	NR NR 1C NR 1K	1 1,3 4 7 2,4,6
LATHAM/ L2348R LATHAM/ L2658R LATHAM/ L2740R MUSTANG/ M-089RR MUSTANG/ M-095RR	2.3 2.6 2.7 0.8 0.9	1K 1C 0 1K 0	7 7 7 1 1,3	NUTECH/ NT-6234RR NUTECH/ NT-7193+RR/SCN NUTECH/ NT-7206 PIONEER/ 91Y90 PIONEER/ 92M61	2.3 1.9 2 1.9 2.6	1K 1K 1K 0	5 4,6 7 2,4 7

Table D. Index to 2008 Glyphos	ate-resi		ī —	tries (Continued).			
Brand / Variety	Mat. Grp.	Gene Code	Table No.(s)	Brand / Variety	Mat. Grp.	Gene Code	Table No.(s)
MUSTANG/ M-096RR MUSTANG/ M-139RR MUSTANG/ M-159NRR MUSTANG/ M-168RR MUSTANG/ M-177NRR	0.9 1.3 1.5 1.6 1.7	0 NR 1K 0 1K	1,3 2 4 2,4 4	PIONEER/ 92Y30 PIONEER/ 93M11 PRAIRIE BR./ EXP PB-0186 PRAIRIE BR./ EXP PB-1170 PRAIRIE BR./ EXP PB-1182	2.3 2.9 0.6 1.9	1K 1K 0 0	5,7 7 1 4,6 2,4
MUSTANG/ M-190NRR MUSTANG/ M-199RR MUSTANG/ M-207RR MUSTANG/ M-209NRR MUSTANG/ M-217NRR	1.9 1.9 2 2 2	1C 0 0 0 1K	4 4,6 5 5,7 5	PRAIRIE BR./ EXP PB-1189 PRAIRIE BR./ EXP PB-1470 PRAIRIE BR./ EXP PB-2024 PRAIRIE BR./ EXP PB-2082 PRAIRIE BR./ EXP PB-2083	1.8 1.9 2.4 1.9	0 0 0 0	6 6 5 2,4,6 6
MUSTANG/ M-219RR MUSTANG/ M-237RR MUSTANG/ M-246NRR MUSTANG/ M-264RR MUSTANG/ M-277NRR	2.1 2.3 2.4 2.6 2.7	0 1K 0 1K 0	5,7 7 7 7 7	PRAIRIE BR./ EXP PB-2086 PRAIRIE BR./ EXP PB-2182 PRAIRIE BR./ EXP PB-2282 PRAIRIE BR./ PB-0738RR PRAIRIE BR./ PB-0923RR	2.6 2.2 1.9 0.7 0.9	0 1K 1K 1K 1K	7 5 6 1
MUSTANG/ M-318RR MUSTANG/M-115RR NORTHSTAR/ NS 1012RR NORTHSTAR/ NS 1212RR NORTHSTAR/ NS 1311RR	3.1 1.1 1 1.2 1.3	1C 1C NR NR NR	7 2,4 2 2 2	PRAIRIE BR./ PB-0936RR PRAIRIE BR./ PB-0954RR PRAIRIE BR./ PB-1337RR PRAIRIE BR./ PB-1358RR PRAIRIE BR./ PB-1578NRR	0.9 0.9 1.3 1.2 1.5	0 0 0 0 1K	1 1 2,4 2 2,4
NORTHSTAR/ NS 1423RR NUTECH/ 6105 NUTECH/ 6133 NUTECH/ 6134 NUTECH/ 6156	1.4 0.9 1.3 1.3	NR 1K NR NR NR	2 1,3 2,4 2 2,4	PRAIRIE BR./ PB-1597RR PRAIRIE BR./ PB-1607RR PRAIRIE BR./ PB-1754RR PRAIRIE BR./ PB-1918RR PRAIRIE BR./ PB-1954RR	1.5 1.6 1.7 1.8 1.9	0 1K 0 0	2,4 2 2,4 2,4,6 2,4,6
NUTECH/ 6193 NUTECH/ 6211 NUTECH/ 6212 NUTECH/ 6224 NUTECH/ 6242	1.9 2.1 2.1 2.3 2.4	NR NR NR NR	4,6 5,7 5 7 5	PRAIRIE BR./ PB-1956RR PRAIRIE BR./ PB-2058NRR PRAIRIE BR./ PB-2117NRR PRAIRIE BR./ PB-2147RR PRAIRIE BR./ PB-2207NRR	1.9 1.9 2.1 2.1 2.2	1C 1K 0 0 1K	2,4,6 4,6 5 5 5,7
NUTECH/ 6242 NUTECH/ 7154 NUTECH/ 7176 NUTECH/ 7251 NUTECH/ 7274	2.5 1.5 1.8 2.5 2.7	NR NR NR NR	7 2 6 7 7	PRAIRIE BR./ PB-2243RR PRAIRIE BR./ PB-2337NRR PRAIRIE BR./ PB-2421RR PRAIRIE BR./ PB-2515RR PRAIRIE BR./ PB-2558NRR	2.2 2.3 2.4 2.5 2.5	1K 1K 1K 1K 1K	5,7 5 5,7 5,7 5,7
PRAIRIE BR./ PB-2565RR PRAIRIE BR./ PB-2698NRR PRAIRIE BR./ PB-2897NRR PRAIRIE BR./ PB-3058NRR	2.5 2.6 2.8 2.9	1C 1K 1C 1C	7 7 7 7	SODAK GEN./ 1161RR/SCN STINE/ 1008-4 STINE/ 1108-4 STINE/ 1568-4	1.6 1 1.1 1.5	1A 0 0 0	2,4,6 2 2,4 2,4
PROSEED/ 61-00 PROSEED/ 80-90 PROSEED/ 81-30 PROSEED/ 81-50	1 0.9 1.3 1.5	0 0 0 1K	2 1 2,4 4	STINE/ 2432-94 STINE/ 2532-94 THUNDER/ 2908RR THUNDER/ 2910RR	2.4 2.5 0.8 1	1C 1C 1K NR	7 7 1 2
PROSEED/ 81-90 PROSEED/ 82-00 RENK/ RS129NRR RENK/ RS179NRR	1.9 2 1.2 1.7	C3 1K 1C NR	6 7 4 4	THUNDER/ 2911RR WENSMAN/ W 2090RR WENSMAN/ W 2108RR WENSMAN/ W 2126RR	1.1 0.9 1 1.2	1C 0 0 0	4 1 2 2
RENK/ RS187NRR RENK/ RS204NRR RENK/ RS239RR RENK/ RS259NRR RENK/ RS277NRR	1.8 2 2.3 2.5 2.7	1C 1C 1K NR NR	4 5 7 7 7	WENSMAN/ W 2152NRR WENSMAN/ W 2166RR WENSMAN/ W 2195NRR WENSMAN/ W 2196RR WENSMAN/ W 2222NRR	1.5 1.6 1.9 1.9 2.2	1K 0 1K 0 1K	4 2,4 4 4,6 7
SEEDS 2000/ 2090RR SEEDS 2000/ 2120RR SODAK GEN./ 1071RR SODAK GEN./ 1093RR SODAK GEN./ 1111RR	0.9 1.2 0.7 0.9 1.1	NR 1K NR NR 1A	1 2 1,3 1,3 2,4,6	ZILLER/ BT 7156NR ZILLER/ BT 7208NR ZILLER/ BT 7217NR ZILLER/ EXP 37411NR	1.5 2 2.1 1.2	0 1C 1K 1C	2,4 5,7 7 2

Table E. Mailing addresses of entrants in the 2008 soybean trials.

Entrant name (brand name), mailing address

Dairyland Seed Co., Inc. (Dairyland), PO Box 958, West Bend, WI 53095

Gold Country Seed Inc. (Gold Country Seed), 16506 Hwy 15 N., PO Box 604, Hutchinson, MN 55350

G2 Genetics (G2), 36131 Hwy 69, Forest City, IA 50436

Hefty Seed Co. (Hefty), 47504 252nd St., Baltic, SD 57003

JGL, Inc. (JGL), 1550 Pidco Dr., Plymouth, IN 46563

Kaltenberg Seeds (Kaltenberg), 5506 State Rd 19, PO Box 278, Waunakee, WI 53597-0278

Kruger Seed Co. (Kruger), 33938 160th Ave., PO Box A, Dike, IA 50624

Latham Seed Co. (Latham), 131 180th St, Alexander, IA 50420-8028

Monsanto (Asgrow), 102 West Carol Ave., Cortland, IL 60112

Mustang Seeds (Mustang), PO Box 466, Madison, SD 57042

Northstar Genetics (Northstar), 14602 50th St. SE, Leonard, ND 58052

Nutech Seed, LLC (Nutech), 36131 Hwy 69, Forest City, IA 50436

Pioneer Hi-Bred Intl. (Pioneer), 151 St. Andrews Ct., Mankato, MN 56001

Prairie Brand Seed Co. (Praire Brand), 15 X Ave., Story City, IA 50248

Proseed (Proseed), 705 East Brewster St., Harvey, ND 58341

Renk Seed Co. (Renk), 6809 Wilburn Rd., Sun Prairie, WI 53590

Richland Organics, Inc. (Richland Organics), 100 North Tenth St, Breckenridge, MN 56520

SDSU Soybean Breeding Program (Experimentals), Plant Science Dept, Brookings, SD 57007

Seeds 2000 (Seeds 2000), PO Box 200, Breckenridge, MN 56520

Sodak Genetics (Sodak), 1200 North Campus Dr., Brookings, SD 57007

Stine Seed Co.(Stine), 22555 Laredo Trail, Adel, IA 50003

Thunder Seed Inc. (Thunder), 3008 210th St. W., Hawley, MN 56549

Wensman Seed Co.(Wensman), 67784 330th St., Watkins, MN 55389

Ziller Seed Co.Inc.(Ziller), 76374 380th St., Bird Island, MN 55310

Table	F. Explanation of yield and lodging score table footnotes.
No.	Explanation of footnotes
[1]	Days to maturity (DTM) – the number of days from seeding to 95% brown pod. If data is missing, the site was likely exposed to an early frost that prevented the collection of valid maturity data.
[2]	Lodging scores: 0= all plants erect, 3= 50% of plants lodged at 45°-angle, 5= all plants flat.
[3]	Least Significant Difference (LSD 0.05) – the difference two averages within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value the difference between the averages is not significant (NS).
[4]	TPG-avg. – the minimum value within a column that entry yield averages must equal or exceed to qualify for the TPG.
[5]	TPG-avg. – the maximum value within a column that lodging score averages must equal or be less than to qualify for the TPG.
[6]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% tend to be less common while values of 6 to 15% are more common. Occasionally, values exceed 15%; this means the trial contained too much experimental error to be a valid test; thus, no data for that table column is not reported.

Table 1a. Glyphosate-resistant maturity group-O soybean variety yield and lodging averages- northern South Dakota locations, 2007-2008. Entries are sorted by 2-Yr then by 2008 zone yield.

		-	Noi	thern Avera	ges by Loc	ation				
			South Sho	re		Warner		North	ern Zone A	verages
Brand/Variety	DTM [1]	Yield	-bu/a	2008	Yield	-bu/a	2008	Yield	-bu/a	2008
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]
NUTECH/ NT-0886RR KRUGER/ K-072+RR NUTECH/ NT-6105 KRUGER/ K-091RR NUTECH/ NT-0990RR	116 116 116 115 114	54 53 49 50 52	52 51 46 46 50	1 1 1 2 2	52 51 51 49 46	49 49 46 42 40	2 2 2 2 2	53 52 50 50 49	51 50 46 44 45	1 2 1 2 2
PRAIRIE/ BR. PB-0923RR PRAIRIE/ BR. PB-0936RR SEEDS 2000/ 2090RR MUSTANG/ M-096RR MUSTANG/ M-095RR	115 114 116 115 114	51 50 50 46 47	48 46 46 39 43	1 2 1 2 3	46 47 46 49 47	41 42 41 45 44	1 2 2 3 3	49 49 48 48 47	45 44 44 42 44	1 2 1 2 3
WENSMAN/ W 2090RR PRAIRIE/ BR. PB-0954RR DAIRYLAND/ DSR-0903/RR KRUGER/ K-042RR ASGROW/ AG0808	113 114 112 111 113	49 47 47 46	44 43 40 40 42	3 3 1 1 2	45 44 45 43	41 43 37 38 44	3 3 2 3 3	47 46 46 45	43 43 39 39 43	3 3 2 2 2 3
PRAIRIE BR./ PB-0738RR THUNDER/ 2908RR HEFTY/ EXP089R KRUGER/ K-058RR KRUGER/ K-079RR	115 114 114 112 111		43 44 43 44 42	3 2 2 2 1		40 38 38 37 39	3 3 3 3		42 41 41 41 41	3 3 2 2 2
JGL/ EXP 603 JGL/ EXP 602 PROSEED/ 80-90 G-2 GENETICS/ 7095 SODAK GEN./ 1071RR	116 111 112 112 111		42 39 42 39 38	3 1 2 1 2		40 41 37 39 39	4 2 2 2 2 3		41 40 40 39 39	4 1 2 1 3
G-2 GENETICS/ 6099 SODAK GEN./ 1093RR PRAIRIE BR./ EXP PB-01860 MUSTANG/ M-089RR GOLD COUNTRY/ 2509RR	112 111 113 117 114		38 40 38 42 42	2 2 2 2 2 3		38 36 36	3 2 4		38 38 37	3 2 3
Test avg. : High avg. : Low avg. : [3] Test LSD (.05): [4] Min.TPG-avg. : [5] Max.TPG-avg. : [6] Test Coef. Var.: No. Entries:	114 117 111	49 54 46 NS 46 4	43 52 38 4 49 6	2 3 1 1 1 6 31	47 52 43 NS 43 6	41 49 36 4 46 6	2 4 1 1 1 22 29	48 53 45 *	42 51 37 *	2 4 1 *

^[1] DTM= days to maturity from seeding dates of May 31 at South Shore and May 27 at Warner. Note that additional table footnotes are explained in Table F.

^{*} There was a significant variety by location interaction for the yield and lodging variables. Therefore, evaluate these variables by using the 2-yr and 2008 yield and 2008 lodging columns for each location.

Table 1b. Glyphosate-resistant maturity group-0 soybean variety protein and oil averages- northern South Dakota locations, 2008. Entries are sorted by 2008 zone protein.

		North	ern Avera	ges by Locat	ion	North 7.	
Brand/Variety	DTM*	South S	hore	Warı	ner	Northern Zo	ne Averages
		Protein %	Oil %	Protein %	0il %	Protein %	Oil %
KRUGER/ K-079RR	111	42.1	18.5	41.7	17.7	41.9	18.1
KRUGER/ K-058RR	112	41.8	18.4	40.2	17.9	41.0	18.2
JGL/ EXP 602	111	41.3	18.4	39.8	17.9	40.6	18.2
SEEDS 2000/ 2090RR	116	40.8	17.9	40.3	17.4	40.6	17.6
SODAK GEN./ 1093RR	111	40.4	18.8	40.3	18.1	40.4	18.4
NUTECH/ NT-0990RR	114	40.2	18.3	40.2	17.8	40.2	18.0
PRAIRIE/ BR. PB-0936RR	114	40.2	18.4	40.0	17.9	40.1	18.2
KRUGER/ K-091RR	115	40.1	18.4	39.5	18.0	39.8	18.2
PRAIRIE/ BR. PB-0923RR	115	40.0	18.8	39.1	18.2	39.5	18.5
PROSEED/ 80-90	112	39.9	19.4	39.1	18.5	39.5	19.0
DAIRYLAND/ DSR-0903/RR	112	40.0	19.0	39.0	18.2	39.5	18.6
WENSMAN/ W 2090RR	113	39.8	19.0	39.1	18.1	39.5	18.6
MUSTANG/ M-095RR	114	40.2	19.3	38.6	18.4	39.4	18.9
KRUGER/ K-042RR	111	39.4	19.4	39.4	18.4	39.4	18.9
SODAK GEN./ 1071RR	111	40.1	18.9	38.2	17.4	39.1	18.2
KRUGER/ K-072+RR	116	39.5	19.1	38.7	18.6	39.1	18.8
JGL/ EXP 603	116	39.8	17.8	38.2	17.4	39.0	17.6
G-2 GENETICS/ 6099	112	39.2	18.2	38.8	17.8	39.0	18.0
PRAIRIE/ BR. PB-0954RR	114	39.7	19.3	38.1	18.8	38.9	19.0
G-2 GENETICS/ 7095	112	39.4	19.2	38.3	18.3	38.9	18.8
NUTECH/ NT-0886RR	116	39.7	18.9	37.1	18.1	38.4	18.5
MUSTANG/ M-096RR	115	38.9	18.9	37.7	19.3	38.3	19.1
NUTECH/ NT-6105	116	39.1	18.9	37.0	18.9	38.1	18.9
PRAIRIE BR./ PB-0738RR	115	38.2	19.0	37.4	18.0	37.8	18.5
HEFTY/ EXP089R	114	37.7	18.8	37.4	18.3	37.5	18.6
ASGROW/ AG0808	113	38.0	19.5	37.0	19.0	37.5	19.3
THUNDER/ 2908RR	114	37.9	18.9	36.8	18.0	37.4	18.5
PRAIRIE BR./ EXP PB-0186	113	36.6	20.0	36.1	19.1	36.4	19.5
MUSTANG/ M-089RR	117	37.5	18.7				-
GOLD COUNTRY/ 2509RR	114	39.6	18.9				
Test avg. :	114	39.6	18.8	38.7	18.2	39.2	18.5
High avg. :	117	42.1	20.0	41.7	19.3	41.9	19.5
Low avg. :	111	36.6	17.8	36.1	17.4	36.4	17.6
[3] LSD(.05):		0.7	0.5	1.7	0.9	0.9	0.5
[4] Min.TPG-avg. :		41.5	19.6	40.1	18.5	41.1	19.1
[6] Coef. Var. :		1	2	3	3	2	2
No. Entries :	60	31	31	29	29	58	58

^[1] DTM= days to maturity from seeding dates of May 31 at South Shore and May 27 at Warner. Note that additional table footnotes are explained in Table F.

Table 2a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- northern South Dakota locations, 2007-2008. Entries are sorted by 2-Yr then by 2008 zone yield.

tions, 2007-2006. Entitles are se	1			hern Averaç	jes by Lo	cation				
			South Sho	re		Warner		North	ern Zone A	verages
Brand/Variety	DTM [1]	Yield	-bu/a	2008	Yiel	d-bu/a	2008	Yield	l-bu/a	2008
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]
HEFTY/ EXP168R	114	52	49	1	51	40	2	52	45	2
WENSMAN/ W 2166RR	114	53	50	1	51	39	2	52	45	2
MUSTANG/ M-168RR	114	52	48	1	51	39	2	52	44	2
STINE/ 1008-4 HEFTY/ 117R	115 114	52 50	49 46	1 1	50 52	42 43	1 3	51 51	46 45	1 2
PRAIRIE/ BR. PB-1597RR	115	52	48	1	48	40	2	50	44	2
NUTECH/ NT-7205+RR	119	50	47	1	49	37	2	50	42	2
WENSMAN/ W 2108RR	114	51	46	1	48	38	3	50	42	2
PRAIRIE BR./ PB-1954RR	118	49	47	3	48	42	3	49	45	3
NORTHSTAR/ NS 1012RR	115	49	45	1	49	43	2	49	44	2
ASGROW/ AG1102	115	49	43	2	49	39	3	49	41	3
NUTECH/ NT-6133	114	50	46	1	48	36	3	49	41	2
PRAIRIE BR./ PB-1337RR	115 118	49	46 47	1	48 47	36 39	2	49 48	41 43	2 2
PRAIRIE BR/. PB-1754RR ASGROW/ AG1702	117	49 50	47	1 1	47	36	2 2	46 48	43	2
ASGROW/ AG1403	115	48	47	1	47	35	2	48	41	2
KRUGER/ K-100RR	115	47	42	İ	46	41	2	47	42	2
SEEDS 2000/ 2120RR	115	48	45	1	46	38	2	47	42	2
PRAIRIE/ BR. PB-1607RR	117	48	43	1	46	36	2	47	40	2
KRUGER/ K-170RR/SCN	119	46	45	2	46	42	2	46	44	2
KRUGER/ K-194RR	117	45	43	1	45	34	2	45	39	2
SODAK GEN./ 1161RR/SCN	115	46	43	3	44	34	3	45	39	3
KRUGER/ K-142RR PRAIRIE/ BR. PB-1956RR	115 121	47 42	43 42	2 2	43 47	33 32	2 3	45 45	38 37	2 2
SODAK GEN./ 1111RR	114	42	33	3	44	37	4	43	35	3
NUTECH/ 6156	116		48	1		44	2		46	1
PROSEED/ 81-30	114		47	1		42	3		45	2
THUNDER/ 2910RR	114		47	1		41	3		44	2
STINE/ 1108-4	114		45	1	48	43	3		44	2
PIONEER/ 91Y90	118		48	1		37	3		43	2
KRUGER/ K-163RR PRAIRIE BR./ EXP PB-2082	118 122		48 47	1 2	•	37 39	2 2		43 43	2 2
PRAIRIE BR./ PB-1578NRR	117		47	1	•	39	2	•	43	1
PROSEED/ 61-00	115		45	İ		41	3	:	43	2
ASGROW/ AG1802	118		45	1		38	2		42	1
MUSTANG/ M-139RR	114		46	2		38	3		42	3
KRUGER/ K-167RR/SCN	118		47	1		37	2		42	2
KRUGER/ EXP KX1987R	118		45	3		39	2		42	2
PRAIRIE BR./ PB-1358RR NUTECH/ 6134	115 114		45 46	2		38 36	3		42 41	2 2
					•					
NUTECH / 7154 HEFTY/ EXP139R	117 115		45 46	1 2	•	37 36	2 3	•	41 41	2 2
KRUGER/ K-129RR	114		47	2		35	3	•	41	2
KRUGER/ K-147RR/SCN	116		42	2		39	2		41	2
PRAIRIE BR./ PB-1918RR	118		46	2		36	2		41	2
HEFTY/ EXP159RN	117		44	1		35	2		40	1
G-2 GENETICS/ 7151	114		44	2		35	3		40	3
NORTHSTAR/ NS 1212RR	115		43	1		36	2		40	2
DAIRYLAND/ DST14-002/RR	116		43	1		35	2		39	2

Table 2a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- northern South Dakota locations, 2007-2008 (continued).

			Nortl	nern Averaç	es by Lo	cation		Nandh	7 A	
			South Sho	re		Warner		North	ern Zone A	verages
Brand/Variety	DTM [1]	Yield	-bu/a	2008	Yiel	d-bu/a	2008	Yield	l-bu/a	2008
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]
PRAIRIE BR/. EXP PB-1182	116		41	3		36	4		39	3
WENSMAN/ W 2126RR	114		41	2		36	3		39	3
NORTHSTAR/ NS 1423RR	116		42	2		35	2		39	2
KRUGER/ K-189RR/SCN	118		41	1		34	1		38	1
ASGROW/ AG1406	116		43	1		31	3		37	2
DAIRYLAND/ DSR-1055/RR	112		38	2		32	3		35	2
MUSTANG/ M-115RR	114				47	42	4			
GOLD COUNTRY/ 2713RR	118	49	46	1						
GOLD COUNTRY/ 2815RR	116	50	48	1						
GOLD COUNTRY/ 1913RR	114		48	1						
GOLD COUNTRY/ 1915NRR	119		43	1						
DAIRYLAND/ DST10-000/RR	117		42	3						
DAIRYLAND/ DSR1302RRSTS	114					35	3			
STINE/ 1568-4	116					37	2			
ZILLER/ BT 7156NR	117	46	43	2						
ZILLER/ EXP 37411NR	117		41	3						
NORTHSTAR/ NS 1311RR	115	49	43	1						
Test avg. :	116	48	45	1	48	38	2	48	41	2
High avg. :	122	53	50	3	52	44	4	52	46	3
Low avg. :	112	42	33	1	43	31	1	43	34	1
[3] Test LSD (.05):		5	3	1	NS	6	1	NS	*	*
[4] Min.TPG-avg. :		49	48		43	39		43		
[5] Max.TPG-avg. :				1			1	7.		
[6] Test Coef. Var.:		4	4	31	7	9	19	6		
No. Entries:	125	30	65	65	28	60	60	52		

^[1] DTM= days to maturity from seeding dates of May 31 at South Shore and May 27 at Warner.

Note that additional table footnotes are explained in Table F.

^{*} There was a significant variety by location interaction for yield and lodging in 2008. Therefore, evaluate these variables by using the 2008 yield and lodging columns for each location.

Table 2b. Glyphosate-resistant maturity group-I soybean variety protein and oil averages- northern South Dakota locations, 2008. Entries are sorted by 2008 zone protein.

		North	Northern Zone				
Brand/Variety	DTM*	South S	Shore	Warn	er	Avera	ges
		Protein %	Oil %	Protein %	Oil %	Protein %	Oil %
WENSMAN/ W 2108RR	114	39.5	18.2	40.7	17.1	40.1	17.7
PRAIRIE/ BR. PB-1754RR	118	40.3	18.5	39.7	17.6	40.0	18.0
SEEDS 2000/ 2120RR	115	39.9	18.1	39.8	16.5	39.8	17.3
NUTECH/ 6134	114	39.8	19.0	39.8	17.9	39.8	18.5
NORTHSTAR/ NS 1212RR	115	39.4	17.9	39.9	16.1	39.7	17.0
PROSEED/ 61-00	115	39.6	18.5	39.7	17.5	39.7	18.0
MUSTANG/ M-139RR	114	39.7	18.6	39.4	18.4	39.6	18.5
NUTECH/ NT-6133	114	38.9	18.4	40.2	16.8	39.5	17.6
HEFTY/ EXP139R	115	39.6	18.6	39.4	18.1	39.5	18.3
KRUGER/ K-129RR	114	40.1	18.7	39.0	17.5	39.5	18.1
PRAIRIE/ BR. PB-1337RR	115	39.1	18.1	39.9	16.6	39.5	17.4
NORTHSTAR/ NS 1012RR	115	39.6	18.6	39.4	18.1	39.5	18.3
PRAIRIE BR./ PB-1358RR	115	39.6	18.8	39.2	18.2	39.4	18.5
STINE/ 1108-4	114	39.4	18.4	39.3	18.1	39.4	18.2
DAIRYLAND/ DST14-002/RR	116	39.5	18.7	39.3	17.9	39.4	18.3
G-2 GENETICS/ 7151	114	39.2	18.3	39.5	16.9	39.3	17.6
THUNDER/ 2910RR	114	39.5	18.7	39.1	17.8	39.3	18.3
STINE/ 1008-4	115	38.8	18.8	39.8	17.6	39.3	18.2
PRAIRIE BR./ EXP PB-2082	122	40.4	20.9	38.1	18.5	39.3	19.7
PROSEED/ 81-30	114	39.8	18.6	38.7	18.3	39.2	18.5
PRAIRIE/ BR. PB-1956RR	121	40.7	21.1	37.7	19.9	39.2	20.5
ASGROW/ AG1406	116	39.4	19.0	39.0	18.0	39.2	18.5
KRUGER/ K-189RR/SCN	118	40.1	18.5	38.2	18.1	39.2	18.3
PRAIRIE/ BR. PB-1607RR	117	39.3	19.1	38.9	17.2	39.1	18.1
WENSMAN/ W 2126RR	114	38.7	18.6	39.5	17.7	39.1	18.2
PIONEER/ 91Y90	118	39.2	19.3	39.0	17.5	39.1	18.4
KRUGER/ K-142RR	115	38.7	19.1	39.5	17.5	39.1	18.3
HEFTY/ 117R	114	39.0	18.3	39.1	17.9	39.1	18.1
PRAIRIE BR./ EXP PB-1182	116	39.3	17.1	38.8	17.1	39.1	17.1
KRUGER/ K-170RR/SCN	119	40.4	19.7	37.6	18.8	39.0	19.2
ASGROW/ AG1702	117	38.7	18.7	39.1	17.7	38.9	18.2
SODAK GEN./ 1161RR/SCN	115	39.3	18.8	38.3	17.9	38.8	18.3
ASGROW/ AG1403	115	38.4	18.5	39.2	16.8	38.8	17.7
KRUGER/ EXPKX1987R	118	39.7	19.1	37.8	18.7	38.8	18.9
HEFTY/ EXP168R	114	38.1	19.1	39.1	17.6	38.6	18.4
KRUGER/ K-163RR	118	38.7	19.3	38.4	18.1	38.6	18.7
PRAIRIE BR./ PB-1918RR	118	38.8	19.1	38.2	18.6	38.5	18.9
KRUGER/ K-147RR/SCN	116	38.9	19.2	38.1	18.4	38.5	18.8
MUSTANG/ M-168RR	114	38.2	19.3	38.8	17.9	38.5	18.6
NORTHSTAR/ NS 1423RR	116	38.6	19.2	38.3	17.9	38.5	18.6
PRAIRIE/ BR. PB-1954RR	118	38.9	19.2	37.7	18.3	38.3	18.8
PRAIRIE/ BR. PB-1597RR	115	38.1	19.2	38.4	18.1	38.3	18.7
WENSMAN/ W 2166RR	114	37.8	19.2	38.4	18.1	38.1	18.6
HEFTY/ EXP159RN	117	37.2	19.5	38.7	17.9	38.0	18.7

Table 2b. Glyphosate-resistant maturity group-I soybean variety protein and oil averages- northern South Dakota locations, 2008 (continued).

		North	ern Averaç	Northern Zone			
Brand/Variety	DTM*	South S	Shore	Warn	er	Avera	ges
		Protein %	Oil %	Protein %	Oil %	Protein %	0il %
ASGROW/ AG1802	118	38.3	19.7	37.5	18.7	37.9	19.2
KRUGER/ K-100RR	115	38.4	18.8	37.3	18.9	37.9	18.9
DAIRYLAND/ DSR-1055/RR	112	37.5	18.9	38.2	18.0	37.9	18.4
NUTECH/ 7154	117	38.2	19.4	37.4	18.6	37.8	19.0
KRUGER/ K-194RR	117	38.1	18.6	37.4	17.9	37.8	18.3
PRAIRIE BR./ PB-1578NRR	117	38.2	19.6	36.8	18.6	37.5	19.1
NUTECH/ 6156	116	37.9	19.3	37.1	18.9	37.5	19.1
KRUGER/ K-167RR/SCN	118	38.2	20.1	36.7	19.1	37.5	19.6
ASGROW/ AG1102	115	37.6	18.5	37.2	18.3	37.4	18.4
NUTECH/ NT-7205+RR	119	37.9	19.6	36.6	19.0	37.3	19.3
SODAK GEN./ 1111RR	114	37.5	18.9	35.9	19.2	36.7	19.1
MUSTANG/M-115RR	114			36.5	19.1		
GOLD/ COUNTRY 2713RR	118	38.6	18.9				
GOLD/ COUNTRY 2815RR	116	37.6	19.3				
GOLD COUNTRY/ 1913RR	114	39.6	18.6				
GOLD COUNTRY/ 1915NRR	119	38.2	19.8				
DAIRYLAND/ DST10-000/RR	117	39.4	18.6				
DAIRYLAND/ DSR1302RRSTS	114			38.4	17.4		
STINE/ 1568-4	116			38.3	17.8		
ZILLER/ BT 7156NR	117	40.5	18.4				
ZILLER/ EXP 37411NR	117	39.5	17.8				
NORTHSTAR/ NS 1311RR	115	38.9	19.3				
Test avg. :	116	39.0	18.9	38.5	18.0	38.8	18.5
High avg. :	122	40.7	21.1	40.7	19.9	40.1	20.5
Low avg. :	112	37.2	17.1	35.9	16.1	36.7	17.0
[3] LSD(.05):		0.9	0.5	1.7	1.1	1.0	0.6
[4] Min.TPG-avg. :		39.9	20.7	39.1	18.9	39.2	20.0
[6] Coef. Var. :		1	2	3	4	2	3
No. Entries :	125	65	65	60	60	114	114

^[1] DTM= days to maturity from seeding dates of May 31 at South Shore and May 27 at Warner. Note that additional table footnotes are explained in Table F.

Table 3a. Glyphosate-resistant maturity group-0 soybean variety yield and lodging averages- central South Dakota locations, 2007-2008. Entries are sorted by 2-Yr then by 2008 zone yield.

			Cent	C4	Control Zono Averages						
		Brookings				Bancroft		Central Zone Averages			
Brand/Variety	DTM [1]	Yield	l-bu/a	2008	Yield	-bu/a	2008	Yield	-bu/a	2008	
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	
KRUGER/ K-072+RR NUTECH/ 6105	115 116	54 54	45 47	1 1	61 60	58 56	1 1	58 57	52 52	1 1	
KRUGER/ K-091RR MUSTANG/ M-096RR NUTECH/ NT-0990	113 114 113	53 53 54	46 47 46	1 1	58 58 56	55 52 53	1 2 1	56 56 55	51 50 50	1 2	
MUSTANG/ M-095RR KRUGER/ K-042RR KRUGER/ K-058RR KRUGER/ K-079RR JGL/ EXP 602	113 110 112 111 109	53 49	43 42 44 44 43	1 1 1 1 1	56 56	52 50 52 52 52 50	2 1 2 1 1	55 55 53	48 46 48 48 48	2 1 2 1 1	
SODAK GEN./ 1071RR JGL/ EXP 603 G-2 GENETICS/ 6099 SODAK GEN./ 1093RR	111 117 111 112		40 40 41 38	1 1 1 1		49 47 45 48	2 3 2 2		45 44 43 43	2 2 2 1	
Test avg. : High avg. : Low avg. : [3] Test LSD (.05): [4] Min.TPG-avg. :	113 117 109	52 54 49 4 51	42 47 38 4 44	1 1 1 0	57 61 56 5 5	50 58 45 5	2 3 1 1	54 58 53 2 57	47 52 43 3 50	1 2 1 1	
[5] Max.TPG-avg. : [6] Test Coef. Var.:		5	6	1 0	4	5	1 33	4	6	1 30	

^[1] DTM= days to maturity from seeding dates of May 23 at Brookings and May 28 at Bancroft. Note that additional table footnotes are explained in Table F.

Table 3b. Glyphosate-resistant maturity group-0 soybean variety protein and oil averagescentral South Dakota locations, 2008. Entries are sorted by 2008 zone protein.

		Centi	al Average	s by Locatio	n	Northern Zone Averages		
Brand/Variety	DTM*	Brook	ings	Bancr	oft			
		Protein %	Oil %	Protein %	0il %	Protein %	0il %	
KRUGER/ K-079RR	111	41.8	18.6	43.5	19.9	42.7	19.3	
JGL/ EXP 602	109	40.7	18.5	42.7	19.3	41.7	18.9	
KRUGER/ K-058RR	112	40.6	19.1	42.4	20.4	41.5	19.8	
SODAK GEN./ 1093RR	112	40.2	19.2	42.0	19.7	41.1	19.5	
SODAK GEN./ 1071RR	111	39.6	19.2	42.4	20.3	41.0	19.8	
KRUGER/ K-042RR	110	40.6	19.4	40.7	20.9	40.6	20.1	
MUSTANG/ M-095RR	113	40.4	18.8	40.5	20.3	40.5	19.6	
JGL/ EXP 603	117	39.8	17.5	41.0	19.5	40.4	18.5	
G-2 GENETICS/ 6099	111	39.6	18.2	41.1	19.5	40.3	18.8	
NUTECH/ NT-0990	113	39.4	19.5	41.0	19.5	40.2	19.5	
KRUGER/ K-091RR	113	39.0	19.6	41.1	20.0	40.1	19.8	
MUSTANG/ M-096RR	114	39.1	19.6	40.6	20.4	39.9	20.0	
NUTECH/ 6105	116	38.8	19.2	39.8	20.3	39.3	19.8	
KRUGER/ K-072+RR	115	33.8	19.0	41.2	20.3	37.5	19.6	
Test avg. :	113	39.4	19.0	41.1	20.2	40.3	19.6	
High avg. :	117	41.8	20.3	43.5	21.5	42.7	20.7	
Low avg. :	109	33.8	17.5	39.1	19.3	37.5	18.5	
[3] LSD(.05):		4.0	1.2	1.2	0.7	2.0	0.7	
[4] Min.TPG-avg.:		37.9	19.2	42.4	20.9	40.8	20.1	
[6] Coef. Var. :		6	4	2	2	5	3	
No. Entries :	38	19	19	19	19	38	38	

[1] DTM= days to maturity from seeding dates of May 23 at Brookings and May 28 at Bancroft. Note that additional table footnotes are explained in Table F.

Table 4a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- central South Dakota locations, 2007-2008. Entries are sorted by 2-Yr then by 2008 zone yield.

			-	ntral Avera	ges by Lo	cation		Central Zone Averages			
			Brookinç	js		Bancrof	t	Central Zone Averages			
Brand/Variety	DTM [1]	Yield-	-bu/a	2008	Yield	-bu/a	2008	Yield	-bu/a	2008	
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	
HEFTY/ 168R MUSTANG/ M-168RR WENSMAN/ W 2166RR KRUGER/ K-100RR PRAIRIE BR./ PB-1337RR	115 115 117 116 117	58 56 56 54 54	47 47 47 45 46	1 1 1 1	59 59 57 59 59	56 55 56 56 56	1 1 1 1 2	59 58 57 57 57	52 51 52 51 51	1 1 1 1 2	
NUTECH/ 6156 PRAIRIE BR./ PB-1597RR ASGROW/ AG1403 KRUGER/ K-195+RR/SCN WENSMAN/ W 2195NRR	116 116 118 119 119	55 55 53 56 55	46 43 47 49 46	1 1 1 1	58 59 59 56 57	54 54 56 52 55	2 2 2 1 1	57 57 56 56 56	50 49 52 51 51	1 1 1 1	
NUTECH/ 6133 ASGROW/ AG1102 NUTECH/ NT-6205+RR NUTECH/ NT-7193+RR/SCN KRUGER/ K-170RR/SCN	117 117 121 121 120	53 50 52 54 54	43 45 47 45 45	1 1 1 1	59 59 56 54 53	55 57 49 51 47	2 2 1 1 2	56 55 54 54 54	49 51 48 48 46	2 2 1 1 2	
ASGROW/ AG1702 PRAIRIE BR./ PB-1754RR PRAIRIE BR./ PB-1954RR PRAIRIE BR./ PB-1956RR SODAK GEN./ 1161RR/SCN	117 118 119 121 116	54 52 49 51 50	44 43 42 42 43	1 1 1 1	52 53 54 53 53	48 47 51 49 48	1 2 3 3 3	53 53 52 52 52	46 45 47 46 46	1 2 2 2 2	
KRUGER/ K-194RR DAIRYLAND/ DSR-1601/RR DAIRYLAND/ DSR1850RRSTS KRUGER/ K-142RR ASGROW/ AG2002	119 118 120 116 120	52 50 50 48 52	42 40 40 41 42	1 1 1 1	52 54 54 54 48	47 49 50 49 41	2 2 2 2 2 2	52 52 52 51 50	45 45 45 45 42	1 2 2 1 2	
SODAK GEN./ 1111RR ASGROW/ AG1802 STINE/ 1108-4 PRAIRIE BR./ EXP PB-2082 PRAIRIE BR./ PB-1578NRR	114 117 115 122 119	47	41 46 43 44 47	1 1 1 1	51	49 55 57 56 53	3 1 2 1 2	49	45 51 50 50 50	2 1 2 1 1	
PROSEED/ 81-50 MUSTANG/ M-159NRR THUNDER/ 2911RR NUTECH/ 6193 HEFTY/ EXP159RN	117 118 118 122 119		47 46 43 42 46	1 1 1 1		53 52 54 56 51	1 1 4 2 1		50 49 49 49 49	1 1 3 2 1	
KRUGER/ K-163RR KRUGER/ K-167RR/SCN LATHAM/ L1983R STINE/ 1568-4 PRAIRIE BR./ PB-2058NRR	118 118 118 119 119		45 45 45 45 48	1 1 1 1		53 53 52 53 50	1 2 1 1		49 49 49 49 49	1 1 1 1	
WENSMAN/ W 2152NRR MUSTANG/ M-177NRR KRUGER/ K-129RR KRUGER/ EXPKX1987R	117 117 114 120		44 43 43 45	1 1 1 1		54 53 53 51	1 1 2 2		49 48 48 48	1 1 1 2	

Table 4a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- central South Dakota locations, 2007-2008 (continued).

		Central Averages by Location								
		I	Brooking	js		Bancrof	it	Centra	al Zone Av	erages
Brand/Variety	DTM [1]	Yield-	bu/a	2008	Yield	-bu/a	2008	Yield-	-bu/a	2008
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]
PRAIRIE BR./ EXP PB-1170 PRAIRIE BR./ PB-1918RR ASGROW/ AG1406 MUSTANG/ M-199RR	120 121 116 121		45 44 42 44	1 1 1 1		50 52 51 49	1 2 2 3		48 48 47 47	1 1 2 2
PIONEER/ 91Y90 HEFTY/ EXP179RN KRUGER/ K-189RR/SCN LATHAM/ L1738R	117 119 120 118		41 43 43 45	1 1 1 1		52 51 50 49	3 2 1 2		47 47 47 47	2 2 1 2
JGL/ EXP 601 PRAIRIE BR./ EXP PB-1182 PROSEED/ 81-30 HEFTY/ EXP199R	119 117 115 119		44 43 42 43	1 1 1 1		49 51 51 49	3 4 2 2		47 47 47 46	2 2 1 2
WENSMAN/ W 2196RR MUSTANG/ M-190NRR G-2 GENETICS/ 7186 NUTECH/ NT-1808/SCN RR	120 121 115 120		43 43 43 43	1 1 1 1		48 46 46 44	2 2 3 1		46 45 45 44	2 2 2 1
G-2 GENETICS/ 7151 MUSTANG/M-115RR GOLD COUNTRY/ 2815RR GOLD COUNTRY/ 1915NRR	115 116 120 119	57	43 49 44	1 1	53	44 52	3 3		44	2
GOLD COUNTRY/ 1918RR KALTENBERG/ KB196RR KALTENBERG/ KB1809RR ZILLER/ BT 7156NR	122 123 124 120	52 52	44 43 43 42	1 1 1						
RENK/ RS187NRR RENK/ RS179NRR RENK/ RS129NRR	120 121 118	54 ·	45 44 43	1 1 1						
Test avg. : High avg. : Low avg. : [3] Test LSD (.05): [4] Min.TPG-avg. : [5] Max.TPG-avg. : [6] Test Coef. Var.:	118 124 112	53 58 47 5 54	44 49 40 4 46	1 1 1 0 1	55 59 48 5 55	51 57 41 5 53	2 4 1 1 1	54 59 49 *	48 52 41 *	1 3 1 *

^[1] DTM= days to maturity from seeding dates of May 23 at Brookings and May 28 at Bancroft.

Note that additional table footnotes are explained in Table F.

^{*} There was a significant variety by location interaction for the yield and lodging variables. Therefore, evaluate these variables by using the 2-yr and 2008 yield and 2008 lodging columns for each location.

Table 4b. Glyphosate-resistant maturity group-I soybean variety protein and oil averages- central South Dakota locations, 2008. Entries are sorted by 2008 zone protein.

		Cent	tral Averaç	0				
Brand/Variety	DTM*	Brooki	ings	Bancro	oft	Central Zone Averges		
		Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)	
PRAIRIE BR./ PB-1754RR	118	40.5	18.3	42.5	19.1	41.5	18.7	
ASGROW/ AG2002	120	39.2	19.0	42.7	18.9	41.0	19.0	
G-2 GENETICS/ 7151	115	39.7	18.2	41.4	19.7	40.6	18.9	
DAIRYLAND/ DSR1850RRSTS	120	39.6	18.7	41.5	19.8	40.6	19.2	
LATHAM/ L1738R	118	39.1	19.3	41.8	19.8	40.5	19.5	
KRUGER/ EXPKX1987R	120	39.4	19.2	41.1	19.8	40.3	19.5	
KRUGER/ K-170RR/SCN	120	39.2	19.4	41.3	20.1	40.3	19.8	
PRAIRIE BR./ EXP PB-1182	117	39.7	17.3	40.7	19.6	40.2	18.5	
PROSEED/ 81-30	115	39.3	19.2	41.1	20.1	40.2	19.7	
KRUGER/ K-129RR	114	39.3	19.2	41.1	20.0	40.2	19.6	
HEFTY/ EXP199R	119	39.3	19.4	41.0	19.9	40.1	19.6	
MUSTANG/ M-199RR	121	39.5	19.3	40.7	19.7	40.1	19.5	
STINE/ 1108-4	115	39.3	19.4	40.9	19.9	40.1	19.7	
NUTECH/ 6193	122	39.2	19.0	40.8	20.1	40.0	19.5	
HEFTY/ EXP179RN	119	39.0	19.1	41.0	20.0	40.0	19.6	
THUNDER/ 2911RR	118	39.6	17.5	40.2	19.8	39.9	18.6	
HEFTY/ 168R	115	38.6	19.7	41.1	20.2	39.9	20.0	
PRAIRIE BR./ EXP PB-1170	120	38.9	19.9	40.8	20.5	39.8	20.2	
G-2 GENETICS/ 7186	115	38.5	18.9	41.1	19.8	39.8	19.3	
PRAIRIE BR./ PB-1337RR	117	39.2	18.6	40.4	19.7	39.8	19.2	
KRUGER/ K-189RR/SCN	120	38.2	19.3	41.4	20.0	39.8	19.7	
MUSTANG/ M-190NRR	121	39.1	20.2	40.4	20.0	39.8	20.1	
PRAIRIE BR./ PB-1918RR	121	39.1	19.1	40.5	19.8	39.8	19.5	
NUTECH/ 6133	117	39.5	18.5	40.0	19.8	39.7	19.1	
ASGROW/ AG1406	116	39.2	19.3	40.1	20.5	39.7	19.9	
WENSMAN/ W 2196RR	120	38.7	18.9	40.7	19.9	39.7	19.4	
JGL/ EXP 601	119	38.8	18.7	40.5	19.1	39.7	18.9	
ASGROW/ AG1702	117	38.4	19.1	40.9	19.5	39.6	19.3	
KRUGER/ K-142RR	116	38.6	19.4	40.5	20.2	39.6	19.8	
MUSTANG/ M-168RR	115	38.0	19.8	41.0	20.1	39.5	19.9	
NUTECH/ NT-1808/SCN RR	120	38.0	19.3	41.0	19.6	39.5	19.5	
DAIRYLAND/ DSR-1601/RR	118	38.9	18.9	40.0	20.4	39.5	19.7	
SODAK GEN./ 1161RR/SCN	116	38.8	19.2	40.1	20.2	39.5	19.7	
PRAIRIE BR./ PB-2058NRR	119	38.6	20.2	40.3	20.2	39.4	20.2	
PIONEER/ 91Y90	117	38.3	18.7	40.4	19.7	39.4	19.2	
NUTECH/ 6156	116	38.3	19.5	40.4	20.3	39.4	19.9	
KRUGER/ K-100RR	116	39.1	18.9	39.6	20.4	39.4	19.6	
PRAIRIE BR./ PB-1954RR	119	38.5	19.2	39.9	20.0	39.2	19.6	
KRUGER/ K-195+RR/SCN	119	37.8	19.8	40.2	20.5	39.0	20.2	
ASGROW/ AG1403	118	38.2	19.0	39.9	20.2	39.0	19.6	
KRUGER/ K-194RR	119	38.4	18.7	39.6	19.9	39.0	19.3	
NUTECH/ NT-7193+RR/SCN	121	37.6	20.2	40.4	20.8	39.0	20.5	
PRAIRIE BR./ PB-1597RR	116	37.9	19.8	40.1	20.0	39.0	19.9	
KRUGER/ K-163RR	118	37.8	19.5	40.0	19.9	38.9	19.7	
STINE/ 1568-4	119	37.9	19.2	39.9	20.2	38.9	19.7	

Table 4b. Glyphosate-resistant maturity group-I soybean variety protein and oil averages- central South Dakota locations, 2008 (continued).

		Cent	tral Averag	jes by Location	1	Control 7on	- A.v.	
Brand/Variety	DTM*	Brooki	ings	Bancre	oft	Central Zone Averges		
		Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)	
ASGROW/ AG1802	117	37.5	19.7	40.2	20.8	38.9	20.3	
PRAIRIE BR./ EXP PB-2082	122	37.3	19.6	40.2	20.0	38.7	19.8	
NUTECH/ NT-6205+RR	121	37.4	19.8	40.0	20.5	38.7	20.2	
WENSMAN/ W 2166RR	117	38.3	20.0	39.1	20.7	38.7	20.3	
PRAIRIE BR./ PB-1956RR	121	38.0	20.6	39.2	20.6	38.6	20.6	
WENSMAN/ W 2152NRR	117	37.4	20.0	39.9	20.6	38.6	20.3	
PRAIRIE BR./ PB-1578NRR	119	37.6	19.9	39.5	20.9	38.6	20.4	
WENSMAN/ W 2195NRR	119	37.6	20.0	39.5	20.8	38.6	20.4	
LATHAM/ L1983R	118	37.3	20.0	39.7	20.4	38.5	20.2	
KRUGER/ K-167RR/SCN	118	37.3	19.9	39.6	20.9	38.5	20.4	
MUSTANG/ M-159NRR	118	37.5	20.0	39.3	20.8	38.4	20.4	
HEFTY/ EXP159RN	119	37.3	19.9	39.6	20.4	38.4	20.2	
PROSEED/ 81-50	117	37.1	19.9	39.7	20.8	38.4	20.4	
MUSTANG/ M-177NRR	117	37.4	20.1	39.3	20.5	38.4	20.3	
SODAK GEN./ 1111RR	114	37.5	20.5	38.4	21.4	38.0	20.9	
ASGROW/ AG1102	117	37.4	18.4	38.3	20.3	37.9	19.4	
MUSTANG/M-115RR	116			38.4	21.2		21.2	
GOLD COUNTRY/ 2815RR	120	37.7	19.6				19.6	
GOLD COUNTRY/ 1915NRR	119	37.2	20.0				20.0	
GOLD COUNTRY/ 1918RR	122	38.7	19.4				19.4	
KALTENBERG/ KB196RR	123	38.3	19.5				19.5	
KALTENBERG/ KB1809RR	124	39.1	19.4				19.4	
ZILLER/ BT 7156NR	120	39.0	19.3				19.3	
RENK/ RS187NRR	120	37.0	20.2				20.2	
RENK/ RS179NRR	121	38.7	19.0			-	19.0	
RENK/ RS129NRR	118	40.1	17.1				17.1	
Test avg. :	118	38.5	19.3	40.3	20.2	39.4	19.7	
High avg. :	124	40.5	20.6	42.7	21.4	41.5	21.2	
Low avg. :	112	37.0	17.1	38.1	18.9	37.9	17.1	
[3] LSD(.05):		0.7	0.7	1.3	0.6	0.7	0.4	
[4] Min.TPG-avg.:		39.9	20.0	41.5	20.9	40.9	20.9	
[6] Coef. Var. :	4.5	1 1	1	2	2	2	2	
No. Entries :	146	77	77	69	69	136	146	

^[1] DTM= days to maturity from seeding dates of May 23 at Brookings and May 28 at Bancroft. Note that additional table footnotes are explained in Table F.

Table 5a. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- central South Dakota locations, 2007-2008. Entries are sorted by 2-Yr then by 2008 zone yield.

			Cen	tral Averaç	jes by Lo	cation		Centr	al Zone A	verages
Brand/Variety	DTM [1]	ı	Brooking:	s		Bancrof	ft			J
Diana, variety		Yield-	-bu/a	2008	Yield	l-bu/a	2008	Yield	-bu/a	2008
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]
ASGROW/ DKB22-52 PRAIRIE BR./ PB-2243RR	122 120	56 54	50 52	1	58 57	55 54	1	57 56	53 53	1
NUTECH/ NT-6234RR	120	53	48	1	57 59	55	1	56	52	1
PRAIRIE BR./ PB-2117NRR	120	56	48	1	55	55	1	56	52	1
PRAIRIE BR./ PB-2147RR	122	54	46	1	58	57	1	56	52	1
NUTECH/ 6211	121	55	49	1	56	52	1	56	51	1
HEFTY/ 218RN	121	55	49	1	54	48	1	55	49	1
PRAIRIE BR./ PB-2207NRR	121	55 54	46	1	54 54	50	2	55 54	48	1
NUTECH/ 6242 PRAIRIE BR./ PB-2337NRR	127 122	54 55	50 46	1	54 53	49 50	2 1	54 54	50 48	1 1
PRAIRIE BR./ PB-2515RR	124	52	45	1	55	51	2	54	48	2
KRUGER/ K-256RR	123	53	50	i	52	49	2	53	50	2
PRAIRIE BR./ PB-2421RR	123	51	44	1	54	52	2	53	48	2
MUSTANG/ M-207RR	121	52	45	1	54	49	1	53	47	1
KRUGER/ K-239RR	125	53	46	1	53	48	2	53	47	2
KRUGER/ K-201RR/SCN	121	54	44	1	52	45	1	53	45	1
KRUGER/ K-248RR/SCN	124	53	47	1	50	49	1	52	48	1
MUSTANG/ M-219RR MUSTANG/ M-209NRR	122 121		48 48	1		58 55	1		53 52	1
KRUGER/ K-204RR/SCN	120		49	1		55	i		52	1
KRUGER/ K-249RR/SCN	123		50	1		53	1		52	1
ASGROW/ AG2108	119	56	49	1		52	1		51	1
PRAIRIE BR./ EXP PB-2024	124		47	, 1		54	2		51	1
PRAIRIE BR./ PB-2558NRR G-2 GENETICS/ 7226	123 122	•	50 51	1	•	52 48	2		51 50	1
					•			•		
KRUGER/ K-228RR/SCN KRUGER/ K-251RR/SCN	121 122		46 45	1	•	51 51	1 1		49 48	1 1
PRAIRIE BR./ EXP PB-2182	122		49	l'i		47	2	•	48	2
NUTECH/ 6212	121		42	1		48	1		45	1
MUSTANG/ M-217NRR	124		39	1						
PIONEER/ 92Y30	125		53	1						
HEFTY/ EXP229RN	123		49	1						
ZILLER/ BT 7208NR RENK/ RS204NRR	124 120	57 54	51 44	1						•
				1				54	49	1
Test avg. : High avg. :	122 127	53 57	47 53	1 1	54 59	50 58	2 4	5 4 57	53	1 2
Low avg. :	119	50	39	1 1	50	45	1	52	45	1
[3] Test LSD (.05):		NS	6	0	6	6	1	3	4	1
[4] Min.TPG-avg.:		50	48		54	53		55	50	
[5] Max.TPG-avg.:		<u>.</u>		1		<u>.</u>	1			1
[6] Test Coef. Var.:		7	8	0	6	7	25	6	8	22

^[1] DTM= days to maturity from seeding dates of May 23 at Brookings and May 28 at Bancroft. Note that additional table footnotes are explained in Table F.

Table 5b. Glyphosate-resistant maturity group-II soybean variety protein and oil averages- central South Dakota locations, 2008. Entries are sorted by 2008 zone protein.

Oddin Dakota iocations, 20			•	es by Locatio	n	Central 2	Zone
Brand/Variety	DTM*	Brooki	ngs	Bancre	oft	Averag	jes
		Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)
KRUGER/ K-249RR/SCN PRAIRIE BR./ PB-2558NRR KRUGER/ K-201RR/SCN NUTECH/ 6211 PRAIRIE BR./ PB-2337NRR	123 123 121 121 122	38.7 38.6 38.7 38.4 38.6	17.9 17.8 18.6 18.5 18.8	42.5 42.4 42.1 41.4 40.8	18.6 19.0 18.9 19.7 19.9	40.6 40.5 40.4 39.9 39.7	18.3 18.4 18.7 19.1 19.4
KRUGER/ K-256RR KRUGER/ K-239RR PRAIRIE BR./ PB-2147RR PRAIRIE BR./ PB-2421RR KRUGER/ K-251RR/SCN	123 125 122 123 122	38.3 38.2 38.0 37.6 37.9	18.2 18.4 18.6 18.2 17.9	41.0 40.9 41.0 40.7 39.9	19.3 19.6 20.0 19.8 19.4	39.7 39.6 39.5 39.2 38.9	18.8 19.0 19.3 19.0 18.7
MUSTANG/ M-219RR G-2 GENETICS/ 7226 NUTECH/ 6242 HEFTY/ 218RN PRAIRIE BR./ EXP PB-2182	122 122 127 121 122	37.3 36.9 36.9 36.3 36.4	18.6 19.0 19.3 19.3 18.8	40.1 40.3 40.2 40.5 40.2	19.6 19.7 19.7 20.2 19.8	38.7 38.6 38.6 38.4 38.3	19.1 19.4 19.5 19.8 19.3
PRAIRIE BR./ PB-2117NRR KRUGER/ K-248RR/SCN ASGROW/ DKB22-52 ASGROW/ AG2108 MUSTANG/ M-209NRR	120 124 122 119 121	36.6 36.1 36.7 36.0 36.7	19.1 19.5 19.0 18.9 18.7	39.9 40.3 39.5 40.1 39.3	20.3 19.9 20.2 19.8 20.6	38.3 38.2 38.1 38.0 38.0	19.7 19.7 19.6 19.3 19.6
NUTECH/ 6212 KRUGER/ K-204RR/SCN MUSTANG/ M-207RR PRAIRIE BR./ PB-2515RR PRAIRIE BR./ EXP PB-2024	121 120 121 124 124	36.4 35.8 36.4 35.8 36.0	18.4 19.4 17.8 18.8 18.8	39.7 40.2 39.4 39.9 39.6	19.7 20.2 19.3 20.2 20.0	38.0 38.0 37.9 37.9 37.8	19.1 19.8 18.6 19.5 19.4
KRUGER/ K-228RR/SCN PRAIRIE BR./ PB-2207NRR NUTECH/ NT-6234RR PRAIRIE BR./ PB-2243RR MUSTANG/ M-217NRR	121 121 122 120 124	36.1 36.0 35.8 36.5 35.8	19.2 19.3 19.2 19.4 19.2	39.3 38.9 38.6 35.3	20.3 20.3 20.7 20.5	37.7 37.5 37.2 35.9	19.8 19.8 20.0 20.0
PIONEER/ 92Y30 HEFTY/ EXP229RN ZILLER/ BT 7208NR RENK/ RS204NRR	125 123 124 120	35.8 36.6 35.7 35.8	19.4 19.2 19.5 19.1				
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min.TPG-avg. : [6] Coef. Var. : No. Entries :	122 127 119 73	36.9 40.1 35.5 0.9 39.3 2 39	18.8 19.5 17.8 0.6 19.0 2 39	40.1 42.5 35.3 2.2 40.4 3	19.8 20.7 18.6 0.8 20.0 3 34	38.6 40.7 35.9 1.2 39.6 3	19.3 20.0 18.3 0.5 19.6 2 68

^[1] DTM= days to maturity from seeding dates of May 23 at Brookings and May 28 at Bancroft. Note that additional table footnotes are explained in Table F.

Table 6a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- southern South Dakota locations, 2007-2008. Entries are sorted by 2-Yr then by 2008 zone yield.

		Southern Averages by Location						Southern Zone Averages		
Brand/Variety	DTM [1]	1	Beresford			Geddes	,			
,		Yield-	bu/a	2008	Yield	-bu/a	2008	Yield	-bu/a	2008
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]
PRAIRIE/ BR. PB-EX228RR	107	52	47	1	55	53	1	54	50	1
PRAIRIE/ BR. PB-1956RR	106	51	47	1	54	48	1	53	48	1
NUTECH/ NT-7205+RR KRUGER/ K-195+RR/SCN	104 103	51 48	44 43	1	54 54	50 53	1 1	53 51	47 48	1 1
PRAIRIE/ BR. PB-1954RR	103	53	48	2	48	44	1	51	46	1
PRAIRIE/ BR. PB-EX147RR	102	49	42	1	52	50	1	51	46	1
KRUGER/ K-170RR/SCN	102	50	44	1	50	50	1	50	47	1
PRAIRIE/ BR. PB-EX117NRR	102	51	47	1	49	46	1	50	47	1
NUTECH/ NT-7193RR/SCN KRUGER/ K-194RR	101 102	48 44	42 35	1	51 53	45 49	1 1	50 49	44 42	1 1
SODAK GEN./ 1161RR/SCN	101	45	39	1	50	47	1	48	43	1
KRUGER/ K-142RR	100	43	35	1	52	47		48	41	1
SODAK GEN./ 1111RR	98	40	33	3	47	47	1 1	44	40	2
PRAIRIE BR./ PB-2058NRR	103		48	1		53	1		51	1
PRAIRIE BR./ EXP PB-2282	104		47	1		53	1		50	1
PROSEED/ 81-90	104		44	1		53	1	-	49	1
MUSTANG/ M-199RR	102		45	1		49	1		47	1
NUTECH/ 6193	103 104		45 45	1		49	1		47 47	1
PRAIRIE BR./ EXP PB-1189 WENSMAN/ W 2196RR	104		42	1		49 52	1	<i>7</i> .	47	1
KRUGER/ EXPKX1987R	102		43	1		48	1		46	1
PRAIRIE BR./ EXP PB-2083	105		45	1		47	1		46	1
KRUGER/ K-163RR	101		41	1		49	1		45	1
KRUGER/ K-167RR/SCN	99	·	42	1		48	1		45	1
G-2 GENETICS/ 7186	101	•	41	1		49	1		45	1
PRAIRIE BR./ PB-1918RR JGL/ EXP 601	104 100		42 36	1 1		46 45	1 1	•	44 41	1 1
NUTECH/ 7176	99		33			45 45			39	
KRUGER/ K-189RR/SCN	100		32	1		46	l i		39	1 1
GOLD COUNTRY/ 1918RR	100		36	1						
Test avg. :	102	48	42	1	52	48	1	50	45	1
High avg. :	107	53	48	3	55	53	1	54	51	2
Low avg. :	98	40	32	1	47 N.C	44	1	44 *	39 *	1 *
[3] Test LSD (.05): [4] Min.TPG-avg. :		5 49	4 45	1	NS 47	6 48	0	^	^	*
[4] Min. TPG-avg. :		43	40	1	4/	40	1			
[6] Test Coef. Var.:		5	5	27	7	8	Ö			

^[1] DTM= days to maturity from seeding dates of June 13 at Beresford and June 12 at Geddes.

Note that additional table footnotes are explained in Table F.

^{*} There was a significant variety by location interaction for the yield and lodging variables. Therefore, evaluate these variables by using the 2-yr and 2008 yield and 2008 lodging columns for each location.

Table 6b. Glyphosate-resistant maturity group-I soybean variety protein and oil averages- southern South Dakota locations, 2008. Entries are sorted by 2008 zone protein.

		Sout	hern Averag	es by Location	n	Southe	rn Zone
Brand/Variety	DTM [1]	Beres	ford	Gedd	es	Aver	ages
		Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)
NUTECH/ 7176	99	38.9	18.0	39.2	20.9	39.1	19.4
KRUGER/ K-170RR/SCN	102	37.9	19.1	38.4	19.7	38.2	19.4
SODAK GEN./ 1161RR/SCN	101	37.4	18.6	38.3	20.4	37.8	19.5
PRAIRIE/ BR. PB-EX147RR	102	37.5	19.2	37.9	20.1	37.7	19.7
KRUGER/ EXPKX1987R	102	36.7	19.3	38.4	19.8	37.6	19.5
JGL/ EXP 601	100	37.7	18.5	37.3	19.0	37.5	18.8
KRUGER/ K-189RR/SCN	100	37.7	18.6	36.9	19.6	37.3	19.1
PRAIRIE BR./ PB-2058NRR	103	37.2	19.7	37.3	19.9	37.3	19.8
PROSEED/ 81-90	104	37.5	19.6	37.0	20.0	37.2	19.8
MUSTANG/ M-199RR	102	37.2	19.3	37.1	19.6	37.2	19.5
WENSMAN/ W 2196RR	103	36.9	19.7	37.2	19.5	37.1	19.6
NUTECH/ NT-7193RR/SCN	101	36.3	19.5	37.7	19.9	37.0	19.7
KRUGER/ K-142RR	100	37.3	18.7	36.5	20.8	36.9	19.7
PRAIRIE/ BR. PB-EX117NRR	102	36.6	19.6	37.0	20.1	36.8	19.9
KRUGER/ K-195+RR/SCN	103	37.1	19.9	36.5	20.6	36.8	20.2
PRAIRIE BR./ PB-1918RR	104	37.4	19.4	36.1	18.8	36.8	19.1
KRUGER/ K-194RR	102	36.6	18.7	36.9	20.2	36.7	19.5
PRAIRIE/ BR. PB-1954RR	102	37.1	19.2	36.3	19.7	36.7	19.4
KRUGER/ K-167RR/SCN	99	36.8	19.6	36.3	20.0	36.5	19.8
G-2 GENETICS/ 7186	101	36.7	19.3	36.4	19.9	36.5	19.6
SODAK GEN./ 1111RR	98	36.6	19.3	36.1	20.2	36.3	19.7
NUTECH/ 6193	103	36.6	19.2	36.0	19.0	36.3	19.1
PRAIRIE/ BR. PB-EX228RR	107	36.0	19.3	36.5	19.9	36.3	19.6
NUTECH/ NT-7205+RR	104	36.8	19.5	35.7	20.2	36.2	19.8
PRAIRIE BR./ EXP PB-2282	104	35.8	19.8	35.7	20.1	35.8	20.0
PRAIRIE BR./ EXP PB-1189	104	35.6	20.0	35.9	19.9	35.7	19.9
PRAIRIE BR./ EXP PB-2083	105	35.2	20.0	36.2	20.6	35.7	20.3
KRUGER/ K-163RR	101	36.3	18.8	34.6	19.3	35.5	19.1
PRAIRIE/ BR. PB-1956RR	106	34.9	19.9	35.0	20.0	35.0	20.0
GOLD COUNTRY/ 1918RR	100	38.2	18.3				
Test avg. :	102	36.9	19.3	36.7	19.9	36.8	19.6
High avg. :	107	38.9	20.0	39.2	20.9	39.1	20.3
Low avg. :	98	34.9 0.7	18.0	34.6	18.8	35.0	18.8
[3] LSD(.05):	[3] LSD(.05):		0.4	2.0	1.1	1.0	0.6
[4] Min.TPG-avg. :	[4] Min.TPG-avg. :		19.7	37.3	19.9	38.2	19.8
[6] Coef. Var. :		2	1	3	3	2	2
No. Entries :	63	32	32	31	31	62	62

^[1] DTM= days to maturity from seeding dates of June at Beresford and June 12 at Geddes. Note that additional table footnotes are explained in Table F.

Table 7a. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- southern South Dakota locations, 2007-2008. Entries are sorted by 2-Yr then by 2008 zone yield.

			Southern Averages by Location						-	
			Beresford	d		Gedde	s	South	ern Zone <i>l</i>	Averages
Brand/Variety	DTM [1]	Yield	-bu/a	2008	Yield-	-bu/a	2008	Yield	l-bu/a	2008
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]
ASGROW/ DKB27-52 WENSMAN/ W 2222NRR PRAIRIE/ BR. PB-2243RR ASGROW/ AG2406 MUSTANG/ M-264RR	110 104 93 107 111	52 51 50 54 53	49 46 40 52 49	1 1 1 1 1	58 58 60 53 55	54 55 57 54 53	1 1 1 1 1	55 55 55 54 54	52 51 49 53 51	1 1 1 1 1
NUTECH/ NT-7206 NUTECH/ NT-6211 KRUGER/ K-275RR/SCN KRUGER/ K-256RR KRUGER/ K-239RR ASGROW/ DKB25-51	105 104 109 107 107 106	49 48 51 51 48 48	42 38 49 47 42 41	1 1 2 1 1	59 59 55 54 57	57 54 54 54 54 54 51	1 1 1 1 1	54 54 53 53 53 53	50 46 52 51 48 46	1 1 2 1 1
DAIRYLAND/ DSR-2770/RR DAIRYLAND/ DSR-2600/RR MUSTANG/ M-237RR LATHAM/ L2158R PRAIRIE BR./ PB-2515RR	110 109 106 104 108	49 50 49 48 46	45 43 41 40 41	1 1 1 1	54 54 54 55 58	52 52 52 54 52	1 1 1 1 1	52 52 52 52 52 52	49 48 47 47 47	1 1 1 1
KRUGER/ K-271RR MUSTANG/ M-246NRR DAIRYLAND/ DSR-2200/RR PRAIRIE BR./ PB-2421RR MUSTANG/ M-277NRR PRAIRIE BR./ PB-2565RR	111 106 107 105 111 107	48 48 45 48 47 48	43 43 39 40 42 43	1 1 1 1 1 2	53 53 56 53 53 51	52 50 53 47 54 50	1 1 1 1 1	51 51 51 51 50 50	48 47 46 44 48 47	1 1 1 1
NUTECH/ NT-6242 KRUGER/ K-248RR/SCN KRUGER/ K-201RR/SCN MUSTANG/ M-318RR PIONEER/ 93M11	109 108 104 113 112	48 46 46 43	43 40 37 37 53	1 1 1 1	52 52 51 51	49 54 51 47 56	1 1 1 1 1	50 49 49 47	46 47 44 42 55	1 1 1 1
LATHAM/ L2658R LATHAM/ L2740R ASGROW/ AG2909 PIONEER/ 92Y30 NUTECH/ NT-2324+RR/SCN	108 112 112 105 106		54 49 50 48 47	1 1 1 1		56 57 54 56 57	1 1 1 1 1		55 53 52 52 52	1 1 1 1
KRUGER/ K-228RR/SCN LATHAM/ L2285R PRAIRIE BR./ PB-2207NRR PRAIRIE BR./ PB-2558NRR HEFTY/ EXP229RN KRUGER/ K-204RR/SCN	105 105 105 106 105 104		45 44 47 44 45 45	1 1 1 1 1		56 57 55 58 55 55	1 1 1 1 1		51 51 51 51 50 50	1 1 1 1 1
KALTENBERG/ KB249RR ASGROW/ AG2403 PIONEER/ 92M61 NUTECH/ 6224 NUTECH/ 7251	106 105 107 107 106		42 41 47 46 40	1 1 1 1		57 56 50 52 58	1 1 1 1		50 49 49 49 49	1 1 1 1 1

Table 7a. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- southern South Dakota locations, 2007-2008 (continued).

			Southern Averages by Location					Caudh	7 /	
			Beresford	d		Gedde	S	South	ern Zone <i>l</i>	Averages
Brand/Variety	DTM [1]	Yield	-bu/a	2008	Yield-	-bu/a	2008	Yield	-bu/a	2008
		2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]	2-Yr	2008	Lodg. (1-5) [2]
KRUGER/ K-251RR/SCN DAIRYLAND/ DST24-004/RR PROSEED/ 82-00 HEFTY/ EXP248R HEFTY/ EXP259RN	105 107 103 108 106		44 44 45 45 42	1 2 1 1	53	53 53 53 51 53	1 1 1 1		49 49 49 48 48	1 1 1 1
PRAIRIE BR/. PB-2897NRR PRAIRIE BR./ PB-3058NRR NUTECH / 7274 KRUGER/ K-274RR/SCN LATHAM/ EXP-E2680R	112 111 108 108 108		43 49 40 43 41	1 1 1 1 1		53 47 53 50 52	1 1 1 1		48 48 47 47 47	1 1 1 1
LATHAM/ EXP-E2935R DAIRYLAND/ DST25-002/RR KALTENBERG/ KB2609RR G-2 GENETICS/ 7255 PRAIRIE BR./ PB-2698NRR	110 105 107 110 107		45 48 41 42 42	1 2 1 1		48 45 50 50 50	1 1 1 1		47 47 46 46 46	1 1 1 1
PRAIRIE BR./ EXP PB-2086 KALTENBERG/ KB278RR G-2 GENETICS/ 7226 G-2 GENETICS/ 7241 LATHAM/ L2303R	108 111 104 102 106	·	42 42 37 41 36	1 1 1 1		49 48 52 48 51	1 1 1 1		46 45 45 45 44	1 1 1 1
LATHAM/ L2348R MUSTANG/ M-209NRR MUSTANG/ M-219RR HEFTY/ EXP218RN HEFTY/ EXP279RN	104 103 103 103 109		35 43 38 42 47	1 1 1 1		52	1			1
GOLD COUNTRY/ 9822RR GOLD COUNTRY/ 8820NRR STINE/ 2432-94 STINE/ 2532-94 ZILLER/ BT 7208NR	106 103 107 110 103	48	43 44 51 43 41	1 1 1 2 1						
ZILLER/ BT 7217NR RENK/ RS277NRR RENK/ RS259NRR RENK/ RS239RR	102 112 105 106	48 53	41 48 46 46	1 1 1						
Test avg. : High avg. : Low avg. : [3] Test LSD (.05): [4] Min.TPG-avg. : [5] Max.TPG-avg. : [6] Test Coef. Var.:	107 113 93	49 54 43 6 49	44 55 35 5 51	1 2 1 1 1 21	55 60 51 6 55	53 58 45 6 53	1 2 1 1 1	52 55 47 *	48 55 42 *	1 2 1 *

^[1] DTM= days to maturity from seeding dates of June 13 at Beresford and June 12 at Geddes. Note that additional table footnotes are explained in Table F.

^{*} There was a significant variety by location interaction for the yield and lodging variables. Therefore, evaluate these variables by using the 2-yr and 2008 yield and 2008 lodging columns for each location.

Table 7b. Glyphosate-resistant maturity group-II soybean variety protein and oil averages- southern South Dakota locations, 2008. Entries are sorted by 2008 zone protein.

		South	on	Southern	Zone		
Brand/Variety	DTM [1]	Beresfo	ord	Geddo	es	Avergo	es
		Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)
DAIRYLAND/ DSR-2770/RR	110	38.0	18.9	39.1	18.5	38.6	18.7
MUSTANG/ M-318RR	113	36.4	19.1	40.5	18.4	38.5	18.8
PRAIRIE BR./ PB-3058NRR	111	37.5	18.2	39.1	18.7	38.3	18.5
NUTECH/ 7251	106	38.1	18.2	38.5	18.9	38.3	18.6
KRUGER/ K-271RR	111	38.3	18.5	38.3	19.2	38.3	18.9
KALTENBERG/ KB249RR	106	37.3	18.9	39.1	18.8	38.2	18.9
KRUGER/ K-274RR/SCN	108	37.4	18.8	39.0	19.4	38.2	19.1
ASGROW/ AG2909	112	37.3	18.2	39.1	18.5	38.2	18.4
MUSTANG/ M-277NRR	111	38.2	18.2	37.8	18.1	38.0	18.1
DAIRYLAND/ DST24-004/RR	107	37.9	18.7	37.6	18.6	37.8	18.6
PRAIRIE BR./ PB-2558NRR	106	37.7	18.6	37.8	19.3	37.8	19.0
PRAIRIE/ BR. PB-2565RR	107	37.4	19.0	38.1	18.9	37.7	19.0
DAIRYLAND/ DSR-2200/RR	107	37.3	18.9	37.8	19.9	37.6	19.4
KRUGER/ K-251RR/SCN	105	37.1	18.5	37.8	19.0	37.4	18.8
G-2 GENETICS/ 7241	102	37.3	18.2	37.4	19.0	37.4	18.6
KRUGER/ K-256RR	107	37.0	18.3	37.7	19.3	37.4	18.8
DAIRYLAND/ DSR-2600/RR	109	37.8	19.0	36.7	19.7	37.3	19.3
PRAIRIE BR./ PB-2698NRR	107	36.6	19.0	37.8	19.0	37.2	19.0
KRUGER/ K-201RR/SCN	104	37.0	18.7	37.4	19.7	37.2	19.2
DAIRYLAND/ DST25-002/RR	105	37.6	19.1	36.7	19.7	37.2	19.4
PRAIRIE BR./ EXP PB-2086	108	36.4	18.8	37.6	19.3	37.0	19.1
NUTECH/ NT-6211	104	37.0	18.8	36.9	20.3	37.0	19.6
MUSTANG/ M-246NRR	106	37.2	18.8	36.6	19.0	36.9	18.9
NUTECH/ NT-6242	109	36.5	19.3	37.3	19.5	36.9	19.4
HEFTY/ EXP259RN	106	36.6	18.7	37.2	19.7	36.9	19.2
ASGROW/ AG2406	107	36.8	19.7	36.9	20.2	36.9	19.9
NUTECH/ 6224	107	37.4	18.9	36.3	19.4	36.8	19.1
KRUGER/ K-239RR	107	37.0	19.0	36.6	18.7	36.8	18.9
LATHAM/ L2740R	112	35.8	18.6	37.8	19.0	36.8	18.8
PIONEER/ 93M11	112	36.8	19.4	36.8	20.2	36.8	19.8
LATHAM/ L2348R	104	37.0	18.5	36.6	18.8	36.8	18.6
KALTENBERG/ KB2609RR	107	36.3	19.0	37.2	18.8	36.8	18.9
G-2 GENETICS/ 7255	110	37.2	18.8	36.2	19.4	36.7	19.1
HEFTY/ EXP248R	108	36.3	18.5	37.0	18.8	36.7	18.7
LATHAM/ L2303R	106	36.6	19.2	36.6	20.0	36.6	19.6
NUTECH/ NT-2324+RR/SCN	106	36.1	19.5	37.1	20.4	36.6	20.0
LATHAM/ EXP-E2680R	108	36.1	19.0	37.0	19.0	36.6	19.0
PRAIRIE/ BR. PB-2421RR	105	36.7	18.8	36.4	19.3	36.5	19.1
PRAIRIE BR./ PB-2897NRR	112	36.0	18.9	37.1	19.9	36.5	19.4
G-2 GENETICS/ 7226	104	36.0	18.8	37.1	18.5	36.5	18.7
HEFTY/ EXP229RN	105	36.1	19.3	36.9	20.4	36.5	19.9
MUSTANG/ M-264RR	111	36.2	18.9	36.8	19.8	36.5	19.4
LATHAM/ L2158R	104	36.5	19.1	36.4	20.4	36.5	19.8
ASGROW/ AG2403	105	36.3	19.3	36.5	20.5	36.4	19.9
NUTECH/ NT-7206	105	36.5	19.5	36.3	20.0	36.4	19.8
KRUGER/ K-248RR/SCN	108	36.1	19.3	36.6	20.6	36.4	20.0
NUTECH/ 7274	108	36.4	18.9	36.2	18.9	36.3	18.9

Table 7b. Glyphosate-resistant maturity group-II soybean variety protein and oil averages- southern South Dakota locations, 2008 (continued).

		South	ern Avera	ges by Locati	on	Southern	Zone
Brand/Variety	DTM [1]	Beresfe	ord	Geddo	es	Avergo	es
	ניז	Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)
KALTENBERG/ KB278RR	111	36.7	18.7	35.9	19.2	36.3	19.0
PROSEED/ 82-00	103	36.3	19.3	36.2	19.9	36.3	19.6
MUSTANG/ M-237RR	106	36.6	18.7	35.8	18.8	36.2	18.8
PIONEER/ 92Y30	105	35.8	19.8	36.6	20.2	36.2	20.0
KRUGER/ K-228RR/SCN	105	35.4	19.7	37.0	20.6	36.2	20.1
PIONEER/ 92M61	107	35.5	19.4	36.9	20.9	36.2	20.1
PRAIRIE/ BR. PB-2515RR	108	35.6	19.4	36.6	19.7	36.1	19.6
PRAIRIE/ BR. PB-2243RR	93	35.7	19.3	36.5	19.8	36.1	19.5
LATHAM/ EXP-E2935R	110	36.4	19.5	35.5	20.1	36.0	19.8
LATHAM/ L2658R	108	35.7	18.9	35.8	20.5	35.8	19.7
ASGROW/ DKB25-51	106	35.9	19.3	35.1	19.4	35.5	19.4
KRUGER/ K-204RR/SCN	104	35.8	19.6	35.2	20.3	35.5	20.0
LATHAM/ L2285R	105	35.2	19.7	35.7	20.7	35.4	20.2
KRUGER/ K-275RR/SCN	109	35.2	19.5	35.5	20.6	35.3	20.0
ASGROW/ DKB27-52	110	34.9	19.2	35.4	19.8	35.2	19.5
PRAIRIE BR./ PB-2207NRR	105	35.4	19.5	34.9	20.5	35.2	20.0
WENSMAN/ W 2222NRR	104	35.0	19.7	35.1	20.3	35.1	20.0
MUSTANG/ M-209NRR	103	36.0	19.2				
MUSTANG/ M-219RR	103	36.7	18.7				
HEFTY/ EXP218RN	103	36.2	19.7		-		
HEFTY/ EXP279RN	109	39.0	17.4				
GOLD/ COUNTRY 9822RR	106	36.6	19.0				
GOLD COUNTRY/ 8820NRR	103	35.7	19.6				
STINE/ 2432-94	107	37.7	18.2				
STINE/ 2532-94	110	37.6	18.5				
ZILLER/ BT 7208NR	103	36.2	19.4				
ZILLER/ BT 7217NR	102	36.5	19.2				
RENK/ RS277NRR	112	35.5	19.1				
RENK/ RS259NRR	105	37.8	17.6				
RENK/ RS239RR	106	36.2	19.4			·	
Test avg. :	107	36.6	19.0	37.0	19.5	36.8	19.3
High avg. :	113	39.0	19.8	40.5	20.9	38.6	20.2
Low avg. :	93	34.3	17.4	34.9	18.1	35.0	18.1
[3] LSD(.05):		1.1	0.5	2.1	1.1	1.1	0.6
[4] Min.TPG-avg. :		38.0	19.4	38.5	19.9	37.6	19.7
[6] Coef. Var. :		2	2	3	3	3	3
No. Entries :	149	81	81	68	68	136	136

^[1] DTM= days to maturity from seeding dates of June at Beresford and June 12 at Geddes. Note that additional table footnotes are explained in Table F.

Table 8a. Non-glyphosate-resistant maturity group-0 and -I soybean variety yield and lodging averages-South Shore, 2007-08.

			Yield ave	rage (bu/a) b	y maturity	group		
			MG-0		MG-I			
BRAND/VARIETY	DTM [1]	Yield-	·bu/a	2008	Yield-bu/a		2008	
		2008	2-yr	Lodg. (1-5) [2]	2008	2-yr	Lodg. (1-5) [2]	
PUBLIC/ HAMLIN	119	40	43	2				
PUBLIC/ SURGE	117	39	43	3				
PUBLIC/ MN0701	117	36		2				
RICHLAND ORGAN./ EXP0508	114	32		3				
RICHLAND ORGAN./ MK9532	112	29		3				
RICHLAND ORGAN./ MK0649	112	29		3				
RICHLAND ORGAN./ MK1016	121				32	37	3	
Test avg.:	119	35	43	3	32	37	3	
High avg.:	125	40	43	3	32	37	3	
Low avg. :	112	29	43	2	32	37	3	
[3] LSD (.05):		5	0	1	0	0	0	
[4] Min. TPG avg.:		36	43		32	37		
[5] Max. TPG avg.:	•			2			3	
[6] Coef. Var.:		9	7	17	0	0	0	

^[1] DTM= days to maturity from seeding dates of May 31 at South Shore.

Note that additional table footnotes are explained in Table F.

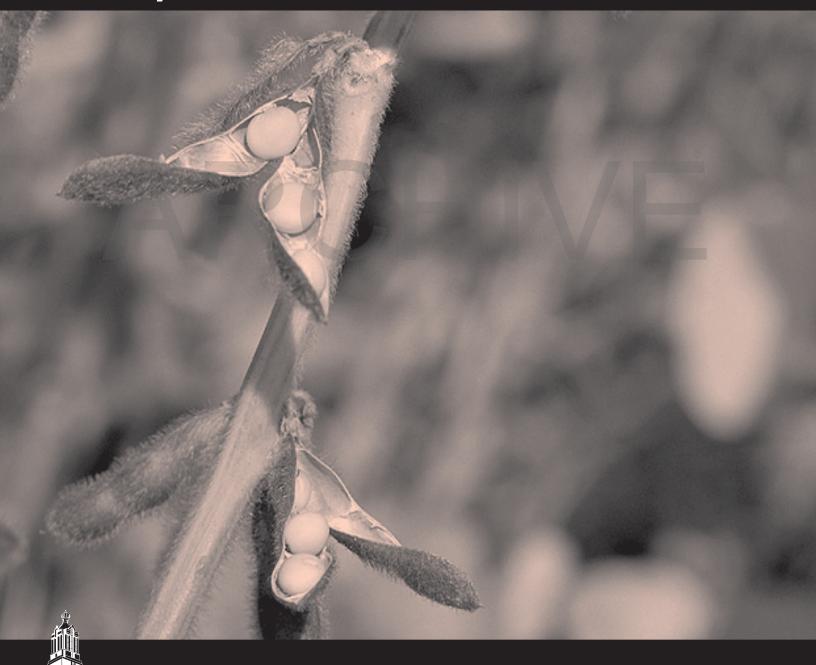
Table 8b. Non-glyphosate-resistant maturity group-O and -I soybean variety protein and oil averages- South Shore, 2008.

		Northern prot	ein and oil avera	ages by maturity	group in 2008
BRAND/VARIETY by maturity group & protein average	DTM*	M	G-0	M	G-I
group & protein average		Protein %	Oil %	Protein %	Oil %
PUBLIC/ SURGE	117	41.3	17.9		
PUBLIC/ MN0701	117	40.9	17.9		
PUBLIC/ HAMLIN	119	40.7	18.3		
RICHLAND ORGAN./ MK0649	112	40.6	18.4		
RICHLAND ORGAN./ EXP0508	114	39.2	18		
RICHLAND ORGAN./ MK9532	112	37.4	19.1		
RICHLAND ORGAN./ MK1016	121			40.5	18.5
Test avg. :	119	40.0	18.3	40.5	18.5
High avg. :	125	41.3	19.1	40.5	18.5
Low avg. :		37.4	17.9	40.5	18.5
[3] LSD(.05):		1.4	NS		
[4] Min. TPG avg.:		40	17.9	40.5	18.5
[6] Coef. Var. :	4	2	3	2	4

^[1] DTM= days to maturity from seeding dates of May 31 at South Shore and May 27 at Warner. Note that additional table footnotes are explained in Table F.

SOYBEAN

Variety Performance Trials–2009 Results



South Dakota State University • Cooperative Extension Service • U.S. Department of Agriculture

Tables for the 2009 Soybean Performance Trials

A	Monthly nearest weather station precipitation totals and average temperature;
	and their departures from average for 2009
В	Description of trial locations, soil types, tillage methods, prior crop, herbicide usage, and dates seeded
C	Gene race resistance to <i>Phytophthora</i> root rot
D	Glyphosate-resistant entries with yield table numbers
E	Non-glyphosate-resistant entries with yield table numbers
F	Explanation of yield and lodging score table footnotes
G	Entrants (brand name) mailing addresses (after yield tables)
Glvr	phosate-Resistant Soybean Trial Results
la	Glyphosate-resistant maturity group-O soybean variety yield and lodging averages-
	northern South Dakota locations, 2008-2009
1b	Glyphosate-resistant maturity group-O soybean variety protein and oil averages-
	northern South Dakota locations, 2009
2a	Glyphosate-resistant maturity group-I soybean variety yield and lodging averages-
	northern South Dakota locations, 2008-2009
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	central South Dakota locations, 2009
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	central South Dakota locations, 2008-2009
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	central South Dakota locations, 2008-2009
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	southern South Dakota locations, 2008-2009
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	southern South Dakota locations, 2008-2009
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Non	ı-Glyphosate-Resistant Soybean Trial Results
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	Derestora Zuum 18

EC 775—Precision Planted Soybeans 2009 Crop Performance Results is available electronically on the internet

http://agbiopubs.sdstate.edu/articles/EC775-09.pdf



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SOYBEAN Variety Performance Trials—2009 Results

Robert G. Hall, Extension agronomist - crops/manager - crop testing Kevin K. Kirby, Agricultural research manager – crop testing Jesse Hall, Agricultural research manager – crop testing

Soybean production is greatly affected by variety selection. This circular reports the agronomic performance of entries in the 2009 South Dakota performance trials for glyphosate-resistant and conventional or non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

General

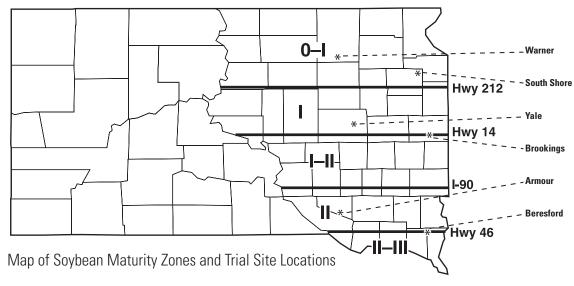
Soybean varieties are classified according to maturity groups that, in turn, are adapted to maturity zones. Maturity zones are based on day length and are therefore affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to Iowa, Nebraska, and south to Texas.

These soybean trial results are reported according to the prevalent maturity zones in South Dakota (see map). The glyphosate-resistant soybean variety trials were conducted in the following test zones and locations: Northern test zone: maturity groups-0 and -I at South Shore and Warner; Central test zone: maturity groups-0, -I, and –II at Brookings and Bancroft; and Southern test zone: maturity groups-I and -II at Beresford and Geddes.

The conventional non-glyphosate-resistant soybean variety trials are conducted at the following SDSU-affiliated research farms: Northeast Research Farm, South Shore - Maturity groups -0 and -I; SDSU Plant Science Farm, Brookings - Maturity groups -0, -I, and -II; and the Southeast SD Agricultural Experiment Station, Beresford - Maturity groups -I and -II. There are transition areas where varieties of two maturity groups may perform similarly. In such cases, rainfall and or elevation may moderate the effect of latitude on maturity. In most cases, an earlier maturity group may be seeded in a zone suited to a later maturity group; this is only practical if seeding is delayed, or if reseeding following hail, or if double-cropping.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, then the use of varieties with a wide range of rot resistance is strongly suggested (see discussion of Phytophthora under "General Test Procedures").

An alternative method of control is the use of "tolerant varieties." Tolerant varieties are not resistant to PRR in the seedling stage. Thus, a PRR fungicide must be applied to protect them.



Currently, we do not evaluate variety field tolerance; therefore, field tolerance ratings are not available.

Certified seed is the best source of seed and the only way to be assured of the genetic purity of the variety seeded. In addition, inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean soils, there is no guarantee that beneficial bacteria will be present to naturally inoculate planted seed. Therefore, inoculation of seed at planting is an inexpensive means of increasing the percentage of plants that will fix nitrogen in the current crop year.

Yield

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested, along with 2-year averages where varieties have been tested for two years. Yield test averages and least significant difference (LSD) values are rounded-off to the nearest bushel and printed at the bottom of each yield column.

The LSD value can be used to determine if varieties differ in yield per acre. For example, assume variety A averages 30 bu., variety B averages 25 bu., and the calculated LSD value is 4 bu. The average difference between varieties A and B is 5 bu (30-25=5). Since the average difference of 5 bu. is greater than the test LSD value of 4 bu., variety A (30 bu.) is significantly higher in yield than for B (25 bu.). In contrast, if variety A averages 28 bu. and B averages 25 bu., the average difference would be 3 bu (28-25=3). In this case, both varieties would have a similar yield average, because their difference of 3 bu. is less than the test LSD value of 4 bu.

Use LSD values to identify the best-yielding varieties. The LSD value at the bottom of each yield column is used to calculate a minimum top-yield value. For example, if the highest column yield value is 50 bu., subtract the LSD value of 5 bu. to obtain an intermediate value of 45 bu. (50-5=45). The minimum top yield value has to be greater than this intermediate value of 45 bu., and because the yield values are rounded to the nearest bushel, it must be at least 46 bu. Thus, varieties with an average of 46 bu. or higher are included in the top-yield group. Note: Entries tested for two years may also have a top-yield group value in the 2009-yield column.

NOTE: Each company selects the appropriate maturity group trial (maturity group-0, -I, or -II trial) and locations for their entries. Companies generally have one or more maturitygroup checks for their varieties. There are, however, no standard regional or national check varieties for maturity. A late group-I variety from one company may be similar in maturity to an early group-I or early group-II variety from another company, because companies use different check varieties for maturity. Therefore, this testing program does not guarantee that entries are placed in the appropriate maturity-group trial. Borderline entries with maturity ratings at or near the arbitrary breaks between the late group-0's and early group-I's and between the late group-I's and early-group-II's may crossover in some test trials. It is suggested that you note the reported maturity rating of every entry you are considering. Since all entries at a location are seeded the same day, one can compare the relative difference in days to maturity among varieties tested at that location. Use caution when

comparing the maturity rating of a variety over many locations. Variations in soil moisture and temperature often differ between locations, resulting in some maturity variations over locations.

The efforts of D. Doyle, SDSU Agronomy Farm; A. Heuer, NE Research Farm, South Shore; and R. Berg and staff, SE Research Farm, Beresford, in obtaining the data are gratefully acknowledged. Also, the assistance and cooperation of our farmer cooperators, Allen and Inel Ryckman, Warner, S.D.; Curtis Sybesma, Geddes, S.D.; and E. Weerts Inc., Bancroft, S.D., is gratefully acknowledged.

Protein and Oil Content

The 2009 protein and oil values (adjusted to a 13% moisture) were determined using a calibrated FOSS TECATOR Model Infratec 1229 Grain Analyzer. Three replicates of every variety in each trial were tested. Samples of known protein and oil were tested by the SDSU Agricultural Experiment Station Biochemistry Laboratory and were used to calibrate the analyzer.

Weather and Seasonal Precipitation

Seasonal rainfall and its distribution and average temperatures at weather reporting stations nearest each test trial are reported in table A for the period April 1 to October 31.

Seasonal precipitation sums were above average at Aberdeen (3.15"), South Shore (2.95"), and Huron (2.25"); near average at Centerville (0.65"); and below average at Brookings (-1.38") and White Lake (-1.37"). The greatest moisture deficits tended to occur at most locations in April and May. In some cases this early season moisture deficits resulted in the delayed emergence of some crops seeded at their normal seeding dates.

Seasonal average temperatures from April to October were at or near normal at Brookings and Centerville. Seasonal temperatures were below average at Aberdeen (-2.37°F), South Shore (-3.07°F), Huron (-2.00°F), and White Lake (-3.13°F). The monthly departures from average temperatures in June, July, and August varied from near normal at Brookings and Centerville to nearly 7°F below average at South Shore and White Lake in July.

In summary, the growing-season precipitation totals for soybeans varied from -1.3" below normal to over 3" above normal across the six locations tested, with the greatest precipitation generally occurring in October.

In addition, the greatest monthly departures from average temperature occurred in June, July, August, and October. The monthly temperatures in June, July, and August varied from near normal at Brookings and Centerville to nearly -7°F at South Shore and White Lake in July.

General Test Procedures

These procedures apply to both the glyphosate-resistant and the conventional non-glyphosate-resistant soybean trials, except for the chemical weed control imposed. Trial locations, soil types, tillage methods, previous crops, pesticide usage, and seeding dates are indicated in table B.

<u>Test Procedures:</u> A row spacing of 30 inches was used at all locations. The seeding rate was 165,000 pure-live-seeds per acre for all varieties and locations. Test plots consist of 4-row plots, 20-feet long, with 3 replications at all locations. Soybean inoculation was accomplished by applying Nitragin-brand Soybean Soil

Implant down the seed tube, according to label instructions and rates, during seeding. Seeding at all locations was accomplished using a Monosem precision row-crop planter. The center 2 rows of each plot were harvested for yield.

<u>Yield:</u> Plots were harvested and yields were adjusted to a 13% moisture content basis and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small-plot combine.

Reporting variety maturity: Variety maturity is reported as "days to maturity," or DTM. Entries are mature when 95% of the pods have turned brown. Each maturity value is obtained by determining the average number of days from seeding to maturity for two replicates and expressing as DTM at each location. Table DTM values are an average of four replicates (two for each location), unless data is at a location (in such cases, the DTM average is based on 2 replications).

<u>Lodging Score</u>: Scores at maturity are based on the erectness of the main stem of plants within each variety: 1 = all plants erect, 2 = slight lodging, 3 = some lodging at a 450-angle, 4 = severe lodging, and 5 = all plants flat.

Phytophthora Root Rot (PRR): The gene resistance of each variety to PRR is supplied by each seed company (proprietary entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). A key for each type of PRR gene and the race resistance it imparts to a variety is given in table C. Specific race resistance to PRR, as reported by seed company, can be determined by noting the PRR gene in the variety index table D (glyphosate-resistant) and table E (non-glyphosate resistant) and referencing the gene back to table C to find the range of race resistance. Currently, races -1, -3, and -4 are the most-common races in South Dakota.

GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Note: Yield averages are reported for 2-yr (2008-09) and for 2009.

In addition, in each yield table, entries are sorted by the zone 2-year and then by the zone 2009 yield values.

NORTHERN TEST ZONE

SOUTH SHORE- Conventional tillage, Northeast Research Farm WARNER- Minimum-tillage, Allen & Inel Ryckman Farm (farm cooperators)

South Shore, Group-0 (Tables 1a & 1b): The 2-year and 2009 test-yield averages were 49 and 53 bushels per acre, respectively, and the lodging score average was 1 (table 1a). Varieties had to average 44 and 52 bushels or higher to be in the top-yield group for 2 years and for 2009, respectively. Variety yield differences among the 2-year averages were not significant (NS), while the 2009 variety yield differences had to differ by 7 bushels to be significantly different. Variety lodging score value differences were not significant, so all entries were in the top performance group for lodging resistance. The 2009 protein and oil test averages were 38.1% and 18.4%, respectively (table 1b). Variety protein and oil values had to average 40.3% and 19.2% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 1.0% and 0.6%, respectively, to be significantly different.

Warner, Group-0 (Tables 1a & 1b): The 2-year and 2009 test-yield averages were 52 and 61 bushels per acre, respectively, and the lodging score average was 1 (table 1a). Varieties had to average 54 and 65 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield averages had to differ by 5 bushels for 2 years and 4 bushels for 2009 to be significantly different. Variety lodging score value differences were not significant, so all entries were in the top performance group for lodging resistance. The 2009 protein and oil test averages were 37.9 and 21.1%, respectively (table 1b). Variety protein values had to average 38.4% or higher to be in the top groups for protein in 2009. Differences in oil percentage among the varieties tested in 2009 were non-significant (NS). Variety protein averages had to differ by 1.0% to be significantly different.

Northern test zone, Group-0 (Tables 1a & 1b): The 2-year and 2009 test-yield averages were 50 and 57 bushels per acre, respectively, and the lodging score average was 1 (table 1a). In

2009, the protein and oil averages were **37.9** and **19.7%**, respectively (table 1b). However, there were significant year-by-location interactions for the 2-year yield and the 2009 yield averages; this means variety performance differed by location and year for the 2-year yield and differed by location for the 2009 yield in the Northern zone. In addition, there were significant variety by location interactions for the zone protein and oil averages. Therefore, soybean producers are encouraged to evaluate variety performance differences for yield, protein, and oil percentage by using the yield, protein, and oil columns listed under each location and not use the column averages listed for the Northern zone.

South Shore, Group-I (Tables 2a & 2b): The 2-year and 2009 test-yield averages were 51 and 56 bushels per acre, respectively, and the lodging score average was 1 (table 2a). Varieties had to average 52 bushels and 57 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield differences among the 2-year averages were not significant (NS), while the 2009 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score value differences were not significant, so all entries were in the top performance group for lodging resistance. The 2009 protein and oil test averages were 35.6 and 17.6%, respectively (Table 2b). Variety protein and oil values had to average 37.5 and 18.2% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 0.9 and 0.7%, respectively, to be significantly different.

Warner, Group-I (Tables 2a & 2b): The 2-year and 2009 test-yield averages were 51 and 64 bushels per acre, respectively, and the lodging score average was 1 (Table 2a). Varieties had to average 51 and 66 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield averages had to differ by 5 bushels for 2 years and 4 bushels for 2009 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different. The 2009 protein and oil test averages were 36.4 and 20.6%, respectively (table 2b). Variety

protein and oil values had to average **37.0** and **21.0**% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by **2.0** and **1.2**%, respectively, to be significantly different.

Northern test zone, Group-I (Tables 2a & 2b): The 2-year and 2009 test-yield averages were 51 and 60 bushels per acre, respectively, and the lodging score average was 1 (table 2a). In 2009, the protein and oil averages were 35.9 and 19.1%, respectively (table 2b). However, there were significant year-by-location interactions for the 2-year yield and the 2009 yield averages; this means variety performance differed by location and year for the 2-year yield and differed by location for the 2009 yield in the Northern zone. In addition, there were significant variety by location interactions for the zone protein and oil averages. Therefore, soybean producers are encouraged to evaluate variety performance differences for yield, protein, and oil percentage by using the yield, protein, and oil columns listed under each location and not use the column averages listed for the Northern zone.

CENTRAL TEST ZONE

BROOKINGS- Conventional tillage, SDSU Plant Science Research Farm

BANCROFT- No-till, E. Weerts, Inc. (farm cooperator)

Brookings, Group-0 (Tables 3a & 3b): The 2-year and 2009 test-yield averages were 50 and 58 bushels per acre, respectively, and the lodging score average was 1 (table 3a). Varieties had to average 47 bushels and 59 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield differences among the 2-year averages were not significant (NS), while the 2009 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 38.7 and 17.4%, respectively, (table 3b). Differences in protein percentage among the varieties tested in 2009 were non-significant (NS). Variety oil values had to average 18.1% or higher to be in the top groups for oil content in 2009. Variety oil averages had to differ by 0.7% to be significantly different.

Bancroft, Group-0 (Tables 3a & 3b): The 2-year and 2009 test-yield averages were 48 and 41 bushels per acre, respectively, and the lodging score average was 1 (table 3a). Varieties had to average 44 and 50 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield differences among the 2-year averages were not significant, while the 2009 variety yield differences had to differ by 8 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 35.8 and 19.3%, respectively (table 3b). Variety protein and oil values had to average 36.7 and 20.2% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 1.4 and 0.7%, respectively, to be significantly different.

<u>Central test zone, Group-0 (Tables 3a & 3b):</u> The 2-year and 2009 test-yield averages were **47** and **50** bushels per acre, respectively, and the lodging score average was **1** (table 3a). In 2009, the protein and oil averages were **37.3** and **18.3%**, respectively (table 3b). However, there were significant year-by-location interactions for the 2-year yield and the 2009 yield averages; this means vari-

ety performance differed by location and year for the 2-year yield and differed by location for the 2009 yield in the Central zone. In addition, there were significant variety by location interactions for the zone protein and oil averages. Therefore, **soybean producers are encouraged to evaluate variety performance differences for yield, protein, and oil percentage by using the yield, protein, and oil columns listed under each location and not use the column averages listed for the Central zone.**

Brookings, Group-I (Tables 4a & 4b): The 2-year and 2009 test-yield averages were 52 and 61 bushels per acre, respectively, and the lodging score average was 1 (table 4a). Varieties had to average 51 and 64 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield averages had to differ by 4 bushels for both the 2-year and 2009 yield columns to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 36.0 and 17.8%, respectively (table 4b). Variety protein and oil values had to average 37.6 and 18.5% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 1.3 and 0.7%, respectively, to be significantly different.

Bancroft, Group-I (Tables 4a & 4b): The 2-year and 2009 test-yield averages were 48 and 46 bushels per acre, respectively, and the lodging score average was 1 (table 4a). Varieties had to average 46 and 52 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield averages had to differ by 12 bushels for 2 years and by 8 bushels for 2009 to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 34.9 and 19.6%, respectively (table 4b). Variety protein and oil values had to average 37.1 and 20.1% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 1.5 and 0.8%, respectively, to be significantly different.

Central test zone, Group-I (Tables 4a & 4b): The 2-year and 2009 test-yield averages were 50 and 54 bushels per acre, respectively, and the lodging score average was 1 (table 4a). In 2009, the protein and oil averages were 35.5 and 18.6%, respectively (table 4b). However, there were significant year-by-location interactions for the 2-year yield and the 2009 yield averages; this means variety performance differed by location and year for the 2-year yield and differed by location for the 2009 yield in the Central zone. In addition, there were significant variety by location interactions for the zone protein and oil averages. Therefore, soybean producers are encouraged to evaluate variety performance differences for yield, protein, and oil percentage by using the yield, protein and oil columns listed under each location and not use the column averages listed for the Central zone.

Brookings, Group-II (Tables 5a & 5b): The 2-year and 2009 test-yield averages were 54 and 59 bushels per acre, respectively, and the lodging score average was 1 (table 5a). Varieties had to average 50 and 60 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield differences among the 2-year averages were not significant (NS), while the 2009 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in

2009. The 2009 protein and oil test averages were **37.1** and **17.9%**, respectively (table 5b). Variety protein and oil values had to average **39.2** and **18.8%** or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by **1.0** and **0.8%**, respectively, to be significantly different.

Bancroft, Group-II (Tables 5a & 5b): The 2-year and 2009 test-yield average were 47 and 44 bushels per acre, respectively, and the lodging score average was 1 (table 5a). Varieties had to average 45 and 54 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield averages had to differ by 6 bushels in both the 2-year and 2009 yield columns to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 35.5 and 19.6%, respectively (table 5b). Variety protein and oil values had to average 36.2 and 19.9% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 1.7 and 0.8%, respectively, to be significantly different.

Central test zone, Group-II (Tables 5a & 5b): The 2-year and 2009 test-yield averages were 51 and 52 bushels per acre, respectively, and the lodging score average was 1 (table 5a). In 2009, the protein and oil averages were 36.3 and 18.8%, respectively (table 5b). However, there were significant year-by-location interactions for the 2-year yield and the 2009 yield averages; this means variety performance differed by location and year for the 2-year yield and differed by location for the 2009 yield in the Central zone. In addition, there were significant variety by location interactions for the zone protein and oil averages. Therefore, soybean producers are encouraged to evaluate variety performance differences for yield, protein, and oil percentage by using the yield, protein, and oil columns listed under each location and not use the column averages listed for the Central zone.

SOUTHERN TEST ZONE

BERESFORD— Conventional tillage, Southeast SD Agricultural Experiment Station.

GEDDES- No-till, Curtis Sybesma (farm cooperator)

Beresford, Group-I (Tables 6a & 6b): The 2-year and 2009 test-yield averages were 53 and 65 bushels per acre, respectively, and the lodging score average was 1 (table 6a). Varieties had to average 51 bushels and 68 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield averages had to differ by 7 bushels for 2 years and by 3 bushels for 2009 to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 37.4 and 20.7%, respectively (table 6b). Variety protein and oil values had to average 38.0 and 21.2% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 1.4 and 0.9%, respectively, to be significantly different.

Geddes, Group-I (Tables 6a & 6b): The 2-year and 2009 test-yield averages were 50 and 51 bushels per acre, respectively, and the lodging score average was 1 (table 6a). Varieties had to average 48 and 53 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield averages had to differ by 6 bushels for 2 years and by 5 bushels for 2009 to be

significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were **36.2** and **20.9%**, respectively (table 6b). Variety protein values had to average **36.0%** or higher to be in the top groups for oil content in 2009. Differences in oil percentage among the varieties tested in 2009 were non-significant (NS). Variety protein averages had to differ by **2.9%** to be significantly different.

Southern test zone, Group-I (Tables 6a & 6b): The 2-year and 2009 test-yield averages were 52 and 58 bushels per acre, respectively, and the lodging score average was 1 (table 6a). In 2009, the protein and oil averages were 36.8 and 20.8%, respectively (table 6b). However, there were significant year-by-location interactions for the 2-year yield and the 2009 yield averages; this means variety performance differed by location and year for the 2-year yield and differed by location for the 2009 yield in the Southern zone. In addition, there were significant variety by location interactions for the zone protein and oil averages. Therefore, soybean producers are encouraged to evaluate variety performance differences for yield, protein, and oil percentage by using the yield, protein, and oil columns listed under each location and not use the column averages listed for the Southern zone.

Beresford, Group-II (Tables 7a & 7b): The 2-year and 2009 test-yield averages were 53 and 63 bushels per acre, respectively, and the lodging score average was 1 (table 7a). Varieties had to average 54 and 66 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield averages had to differ by 6 bushels for 2 years and by 5 bushels for 2009 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different. The 2009 protein and oil test averages were 35.8 and 19.0%, respectively (table 7b). Variety protein and oil values had to average 38.6 and 20.1% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 1.0 and 0.7%, respectively, to be significantly different.

Geddes, Group-II (Tables 7a & 7b): The 2-year and 2009 test-yield averages were 56 and 60 bushels per acre, respectively, and the lodging score average was 1 (table 7a). Varieties had to average 56 and 66 bushels or higher to be in the top yield group for 2 years and for 2009, respectively. Variety yield averages had to differ by 6 bushels for 2 years and by 5 bushels for 2009 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different. The 2009 protein and oil test averages were 36.2 and 18.8%, respectively (table 7b). Variety protein and oil values had to average 38.0 and 20.0% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 2.0 and 1.1%, respectively, to be significantly different.

Southern test zone, Group-II (Tables 7a & 7b): The 2-year and 2009 test-yield averages were 55 and 62 bushels per acre, respectively, and the lodging score average was 1 (table 7a). In 2009, the protein and oil averages were 35.9 and 18.9%, respectively (table 7b). However, there were significant year-by-location interactions for the 2-year yield and the 2009 yield averages; this means variety performance differed by location and year for the 2-year yield and differed by location for the 2009 yield in the

Southern zone. In addition, there were significant variety by location interactions for the zone protein and oil averages. Therefore, soybean producers are encouraged to evaluate variety performance differences for yield, protein, and oil percentage by using the yield, protein, and oil columns listed under each location and not use the column averages listed for the Southern zone.

NON-GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Note: Yield averages are reported 2-yr (2008-09) or for 2009.

SOUTH SHORE— Conventional tillage, Northeast Research Farm

South Shore, Group-0 (Tables 8a & 8b): The 2-year and 2009
test-yield averages were 40 and 46 bushels per acre, respectively,
and the lodging score average was 1 (table 8a). Varieties had to
average 37 bushels or higher for 2 years and 49 bushels or higher
for 2009 to be in the top yield group. Variety yield averages had
to differ by 6 bushels for 2 years and by 4 bushels for 2009 to be
significantly different. Variety lodging score values indicated there
was no difference in lodging resistance in the varieties tested in
2009. The 2009 protein and oil test averages were 37.0 and 16.5%,
respectively (table 8b). Variety protein and oil values had to average 40.7 and 16.8% or higher, respectively, to be in the top groups
for protein and oil in 2009. Variety protein and oil averages had to
differ by 1.1 and 0.8%, respectively, to be significantly different.

South Shore, Group-I (Tables 8a & 8b): The 2-year and 2009 test-yield averages were 41 and 43 bushels per acre, respectively, and the lodging score average was 1 (table 8a). Varieties had to average 35 bushels or higher for 2 years and 43 bushels or higher for 2009 to be in the top yield group. Variety yield averages had to differ by 10 bushels for 2 years and by 4 bushels for 2009 to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 37.0 and 16.5%, respectively (table 8b). Variety protein and oil values had to average 38.4 and 17.1% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 0.7 and 0.6%, respectively, to be significantly different.

BROOKINGS— Conventional tillage, SDSU Agronomy Farm

Brookings, Group-0 (Tables 9a & 9b): The 2009 test-yield average was 48 bushels per acre, and the lodging score average was 1 (table 9a). Varieties had to average 54 bushels or higher for 2009 to be in the top yield group. Variety yield averages had to differ by 5 bushels for 2009 to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 39.1 and 17.6%, respectively (table 9b). Variety protein and oil values had to average 42.1 and 18.1% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 0.8 and 0.3%, respectively, to be significantly different.

Brookings, Group-I (Tables 9a & 9b): The 2009 test-yield average was 58 bushels per acre, and the lodging score average was 1 (table 9a). Varieties had to average 60 bushels or higher for 2009 to be in the top yield group. Variety yield averages had to differ by 4 bushels for 2009 to be significantly different. Variety lodging score values indicated there was no difference in lodging

resistance in the varieties tested in 2009. The 2009 protein and oil test averages were **37.4** and **17.8%**, respectively (table 9b). Variety protein and oil values had to average **39.1** and **18.3%** or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by **0.8** and **0.7%**, respectively, to be significantly different.

Brookings, Group-II (Tables 9a & 9b): The 2009 test-yield average was 50 bushels per acre, and the lodging score average was 1 (table 9a). Varieties had to average 52 bushels or higher for 2009 to be in the top yield group. Variety yield averages had to differ by 4 bushels for 2009 to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 37.4 and 18.4%, respectively (table 9b). Variety protein and oil values had to average 37.4 and 18.3% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 0.9 and 1.0%, respectively, to be significantly different.

BERESFORD— Conventional tillage, Southeast Agricultural Experiment Station

Beresford, Group-I (Tables 10a & 10b): The 2009 test-yield average was 50 bushels per acre, and the lodging score average was 2 (table 10a). Varieties had to average 48 bushels or higher for 2009 to be in the top yield group. Variety yield averages had to differ by 6 bushels for 2009 to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2009. The 2009 protein and oil test averages were 37.3 and 18.3%, respectively (table 10b). Variety protein and oil values had to average 38.7 and 18.7% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 1.4 and 0.4%, respectively, to be significantly different.

Beresford, Group-II (Tables 10a & 10b): The 2009 test-yield average was 55 bushels per acre, and the lodging score average was 2 (table 10a). Varieties had to average 55 bushels or higher for 2009 to be in the top yield group. Variety yield averages had to differ by 5 bushels for 2009 to be significantly different. Variety lodging scores had to differ by 1 to be significantly different in lodging resistance. The 2009 protein and oil test averages were 36.2 and 18.8%, respectively (table 10b). Variety protein and oil values had to average 36.6 and 19.3% or higher, respectively, to be in the top groups for protein and oil in 2009. Variety protein and oil averages had to differ by 0.8 and 0.6%, respectively, to be significantly different.

Table A. Nearest weather station precipitation accumulation and average daily tempeatures for each growing season month in 2009 and departures from average (DFA), SD Office of Climate and Weather.

O: (T:.)	.,			Мо	nthly data	- April 1 t	o Octobe	r 31		Sum or
Station (Test site)	Variable		April	May	June	July	Aug	Sept	Oct	Average
	Precip inches 1971-2000 avg.	'09	1.90 1.83	0.47 2.69	3.87 3.49	2.46 2.92	2.83 2.42	4.41 1.81	4.00 1.63	19.94 16.79
Aberdeen Airport (Warner)		DFA*	0.07	-2.22	0.38	-0.46	0.41	2.60	2.37	3.15
(vvaillei)	Avg.Temp°F 1971-2000 avg.	'09	43.0 45.4	56.4 57.9	64.0 66.8	68.0 72.2	66.5 70.5	63.5 59.8	41.4 46.8	57.54 59.91
		DFA	-2.4	-1.5	-2.8	-4.2	-4.0	3.7	-5.4	-2.37
	Precip inches 1971-2000 avg.	'09	1.09 1.96	1.73 2.61	2.70 4.01	3.97 2.91	3.60 2.85	1.62 2.03	6.53 1.92	21.24 18.29
South Shore, Northeast		DFA	-0.87	-0.88	-1.31	1.06	0.75	-0.41	4.61	2.95
Research Farm	Avg.Temp°F 1971-2000 avg.	'09	40.7 43.2	54.3 56.0	61.9 65.3	64.0 70.4	63.9 67.8	61.1 57.8	38.1 45.0	54.86 57.93
		DFA	-2.5	-1.7	-3.4	-6.4	-3.9	3.3	-6.9	-3.07
	Precip inches 1971-2000 avg.	'09	1.68 2.29	2.08 3.00	4.45 3.28	2.95 2.86	1.57 2.07	2.54 1.80	3.87 1.59	19.14 16.89
Huron (Bancroft)		DFA	-0.61	-0.92	1.17	0.09	-0.50	0.74	2.28	2.25
	Avg.Temp°F 1971-2000 avg.	'09	44.5 46.1	58.5 58.2	65.0 67.9	69.0 73.4	68.5 71.5	64.5 61.0	42.0 47.9	58.86 60.86
		DFA	-1.6	0.3	-2.9	-4.4	-3.0	3.5	-5.9	-2.00
	Precip inches 1971-2000 avg.	'09	0.86 2.03	2.23 2.95	3.32 4.23	3.78 3.11	1.37 2.94	1.25 2.48	5.33 1.78	18.14 19.52
Brookings, SDSU Plant Science		DFA	-1.17	-0.72	-0.91	0.67	-1.57	-1.23	3.55	-1.38
Farm	Avg.Temp°F 1971-2000 avg.	'09	44.4 44.2	56.9 56.7	66.2 66.1	70.7 70.7	68.5 68.6	58.9 59.1	46.0 46.3	58.80 58.81
		DFA	0.2	0.2	0.1	0.0	-0.1	-0.2	-0.3	-0.01
Centerville, 6 SE.	Precip inches 1971-2000 avg.	'09	1.60 2.47	0.94 3.65	4.64 3.95	4.82 3.35	2.08 2.83	2.16 2.26	4.72 1.80	20.96 20.31
Southeast		DFA	-0.87	-2.71	0.69	1.47	-0.75	-0.10	2.92	0.65
Experiment Station	Avg.Temp°F 1971-2000 avg.	'09	47.4 47.2	59.7 59.5	69.5 69.4	73.7 73.7	71.4 71.5	62.6 62.3	49.4 49.7	61.96 61.90
		DFA	0.2	0.2	0.1	0.0	-0.1	0.3	-0.3	0.06
	Precip inches 1971-2000 avg.	'09	0.96 2.49	1.18 3.6	3.11 3.19	3.4 2.88	2.63 2.21	1.72 2.09	3.68 1.59	16.68 18.05
White Lake (Geddes)		DFA	-1.53	-2.42	-0.08	0.52	0.42	-0.37	2.09	-1.37
(00000)	Avg.Temp°F 1971-2000 avg.	'09	43.7 47.9	58.0 59.7	65.1 69.0	68.0 74.5	67.5 72.7	62.7 62.8	49.5 49.8	59.21 62.34
		DFA	-4.2	-1.7	-3.9	-6.5	-5.2	-0.1	-0.3	-3.13

^{*} DFA - departure from normal, difference current year is greater or less (-) than the long-term average.

Table B. Description of trial locations- soil type, tillage, prior crop, herbicides and inoculants, and seeding dates.

	Soils & Manag	jement		Herb	icides App	lied at labe	l rates	Insecticides	
Location (County)	Туре	Tillage	Prior crop	Glypohos	ohosate Trials No		yphosate ials	Applied at	Date seeded
		Method		Pre	Post	Pre	Post	label rates	
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	Asana (ground)	May 21
South Shore (Codington)	Kranzburg silty clay loam, 3-6% slope	Conventional	Spring wheat	2 pt, Dual II Magnum	Roundup once	2 pt, Dual II Magnum	Harmony	Warrior (aerial)	May 22
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	No-till	Corn	None	Roundup once	-	-	Asana (ground)	May 20
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conventional	Spring wheat	None	Roundup twice	None	Harmony/ Poast	Asana (ground)	May 19
Geddes (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	None	June 1
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conventional	Corn	None	Roundup once/ Select		Harmony/ Classic	None	26-May

^{*} Nitragin Soybean Soil Implant was applied down the seed tube at label rates at planting.

Table C.	Phytophthora	root ro	t race	resistan	ice by	gene.

Gene	Gene Code	Race Resistance
rps1	0	None
Rps1, Rps1a	1A	1-2,10-11,13,15-18,24
Rps1b	1B	1,3-9,13-15,18,21-22
Rps1c	1C	1-3,6-11,13,15,17,21,23-24
Rps1k	1K	1-11,13-15,17-18,21-22,24
Rps2	2	1-5,9-20
Rps3	3	1-5,8-9,11,13-14,16,18,23,25
Rps4	4	1-4,10,12-16,18-21,25
Rps5	5	1-5,8-9,11-14,18,20,25
Rps6	6	1-4,10,12,14-16,18-21,25
Rsp7	7	16,18,19
Rps1k, Rps6	K6	1-22,24-25
Rps1c, Rps3	C3	1-10,13-18,22-25
Rps1b	В3	1-9,13-16,18,21-23,25
MIX	MIX	Resistant & Susceptible Plants
NR	NR	Not Reported

Table D. Index to 2009 Glyphosate-resistant soybean entries by brand/variety, maturity group, seed trt., gene code for *Phytophthora* root rot(PRR) resistance as reported by entrants, and performance table no.(s). Use table C to determine entry PRR strain resistance.

Brand / Variety	Mat. Grp.	Seed Trt.	Gene Code*	Table No.(s)	Brand / Variety	Mat. Grp.	Seed Trt.	Gene Code*	Table No.(s)
ASGROW/ AG0803	0.8	Cruiser Maxx	1K	1	GOLD COUNTRY/ EXP 1940	1.9	Acceleron	NR	4
ASGROW/ AG0808	0.8	Cruiser Maxx	1K	1	HEFTY/ 089R	0.8	Not reported	1K	1
ASGROW/ AG1102	1.1	Cruiser Maxx	1K	2	HEFTY/ 108	1	Not reported	1K	2
ASGROW/ AG1403	1.4	Cruiser Maxx	0	2,4	HEFTY/ 117R	1.1	Not reported	0	2
ASGROW/ AG1506	1.5	Cruiser Maxx	1K	2,4	HEFTY/ 139R	1.3	Not reported	0	2
ASGROW/ AG1702	1.7	Cruiser Maxx	1K	2,4	HEFTY/ 159R	1.5	Not reported	1K	2,4
ASGROW/ AG1703	1.7	Cruiser Maxx	1K	2,4	HEFTY/ 168R	1.6	Not reported	0	2,4
ASGROW/ AG2108	2.1	Cruiser Maxx	0	5	HEFTY/ 179R	1.7	Not reported	0	4
ASGROW/ AG2839	2.8	Acceleron+Insecticide	1C	7	HEFTY/ 199R	1.9	Not reported	0	4
ASGROW/ AG2939	2.9	Acceleron+Insecticide	1K	7	HEFTY/ 218RN	2.1	Not reported	1C	5,7
ASGROW/ DKB22-52	2.2	Cruiser Maxx	0	5	HEFTY/ 229R	2.2	Not reported	0	5,7
ASGROW/ DKB27-52	2.7	Cruiser Maxx	1C	7	HEFTY/ 248R	2.4	Not reported	3	7
ASGROW/ RY0809	0.8	Acceleron+Insecticide	1C	1	HEFTY/ 259R	2.5	Not reported	1K	7
ASGROW/ RY0819	0.8	Acceleron+Insecticide	1C	1	HEFTY/ 279R	2.7	Not reported	1C	7
ASGROW/ RY1709	1.7	Acceleron+Insecticide	1K	2,4	HEFTY/ EXP070R	0.7	Not reported	0	1
ASGROW/ RY1719	1.7	Acceleron+Insecticide	0	2,4	HEFTY/ EXP200R	2	Not reported	1K	5,7
ASGROW/ RY2119	2.1	Acceleron+Insecticide	MX	5	KALTENBERG/ EXP 2010	2	Trilex 2000+CelGard	1K	5
ASGROW/ RY2409	2.4	Acceleron+Insecticide	1C	7	KALTENBERG/ EXP 2510	2.5	Trilex 2000+CelGard	NR	7
ASGROW/ RY2419	2.4	Acceleron+Insecticide	1K	7	KALTENBERG/ EXP 2710	2.7	Trilex 2000+CelGard	NR	7
ASGROW/ RY2809	2.8	Acceleron+Insecticide	1C	7	KALTENBERG/ KB1809RR	1.8	Trilex 2000+CelGard	0	4
ASGROW/ RY2929	2.9	Acceleron+Insecticide	MX	7	KALTENBERG/ KB249RR	2.4	Trilex 2000+CelGard	0	7
CHANNEL BRAMD/ 2551R2	2.5	Apron Max	1K	7	KALTENBERG/ KB2609RR	2.6	Trilex 2000+CelGard	0	7
CHANNEL BRAND/ 1651R	1.6	Apron Max	1K	2,4	KRUGER/ EXPK2X05A9	0.5	Acceleron	1K	1,3
CHANNEL BRAND/ 2151R	2.1	Apron Max	1K	5	KRUGER/ EXPK2X06A9	0.6	Acceleron	NR	1,3
CHANNEL BRAND/ 2200R2	2.2	Acceleron	1C	5,7	KRUGER/ EXPK2X09A9	0.9	Acceleron	1C	1,3
									-
CHANNEL BRAND/ 2400R2	2.4	Acceleron	1C	7	KRUGER/ EXPK2X10A9	1	Acceleron	1C	2,4
DAIRYLAND/ DSR-0747/R2Y	0.9	Not reported	1C	1	KRUGER/ EXPK2X11B9	1.1	Acceleron	NR 10	2,4
DAIRYLAND/ DSR-1100/RR	1.1	Not reported	NR	2	KRUGER/ EXPK2X14A9	1.4	Acceleron	1C C	2,4,6
DAIRYLAND/ DSR-1200/R2Y DAIRYLAND/ DSR-1807/R2Y	1.2 1.8	Not reported Not reported	1K 1C	2	KRUGER/ EXPK2X15B9 KRUGER/ EXPK2X16A9	1.5 1.6	Acceleron Acceleron	1K	2,4,6 6
DAIRYLAND/ DSR-2132/R2Y	2.1	Not reported	1C	7	KRUGER/ EXPK2X19B9	1.9	Acceleron	1C	2,4,6
DAIRYLAND/ DSR-2200/RR	2.2	Not reported	NR	7	KRUGER/ EXPK2X21A9	2.1	Acceleron	NR	5,7
DAIRYLAND/ DSR-2440/R2Y	2.4	Not reported	1C	7	KRUGER/ K-042RR	0.4	Cruiser Maxx	1A	1,3
DAIRYLAND/ DSR-2525RRAP	2.5	Not reported	NR	7	KRUGER/ K-058RR	0.5	Cruiser Maxx	1K	1,3
DAIRYLAND/ DSR-2560/RR	2.5	Not reported	NR	7	KRUGER/ K-072+RR	0.8	Cruiser Maxx	1A	1,3
DAIRYLAND/ DSR-2770/RR	2.7	Not reported	1K	7	KRUGER/ K-091RR	0.9	Cruiser Maxx	0	1,3
DAIRYLAND/ DSR1423RRSTS	1.4	Not reported	NR	2,4	KRUGER/ K-129RR	1.2	Cruiser Maxx	0	2,4
DAIRYLAND/ DST11-001R2Y	1.1	Not reported	NR	2	KRUGER/ K-163RR	1.6	Cruiser Maxx	MX	4
AIRYLAND/ DST14-003R2Y	1.4	Not reported	NR	2,4	KRUGER/ K-167RR/SCN	1.6	Cruiser Maxx	1K	2,4,6
AIRYLAND/ DST20-002/RR	2	Not reported	NR	7	KRUGER/ K-189RR/SCN	1.8	Cruiser Maxx	1K	2,4,6
AIRYLAND/ DST22-006R2Y	2.2	Not reported	1K	7	KRUGER/ K-204RR/SCN	2	Cruiser Maxx	1K	5,7
AIRYLAND/ DST25-003R2Y	2.5	Not reported	NR	7	KRUGER/ K-228RR/SCN	2.2	Cruiser Maxx	1K	7
i-2 GENETICS/ 6088	0.8	Cruiser Maxx	NR	1,3	KRUGER/ K-239RR	2.3	Cruiser Maxx	0	7
G-2 GENETICS/ 6098	0.9	Cruiser Maxx	1K	1,3	KRUGER/ K-249RR/SCN	2.4	Cruiser Maxx	0	5,7
I-2 GENETICS/ 6159	1.5	Cruiser Maxx	1K	2,4,6	KRUGER/ K-271RR	2.7	Cruiser Maxx	1K	7
G-2 GENETICS/ 6247	2.4	Cruiser Maxx	1K	5	KRUGER/ K-274RR/SCN	2.7	Cruiser Maxx	0	7
				7	KRUGER/ K2-1901	1.9	Acceleron	1K	2,4,6
	2.7	Cruiser Maxx	1K	,		1.0	Acceleron		
G-2 GENETICS/ 6279 G-2 GENETICS/ 7129		Cruiser Maxx Cruiser Maxx	1K 1K	2,4	KRUGER/ K2-2701	2.7	Acceleron	0	5,7
G-2 GENETICS/ 6279 G-2 GENETICS/ 7129	2.7								5,7 7
G-2 GENETICS/ 6279 G-2 GENETICS/ 7129 G-2 GENETICS/ 7186	2.7 1.2	Cruiser Maxx	1K	2,4	KRUGER/ K2-2701	2.7	Acceleron	0	
1-2 GENETICS/ 6279 1-2 GENETICS/ 7129 1-2 GENETICS/ 7186 1-2 GENETICS/ 7208	2.7 1.2 1.7 2	Cruiser Maxx Cruiser Maxx Cruiser Maxx	1K 1K 1C	2,4 4,6 5,7	KRUGER/ K2-2701 KRUGER/ K2-2801 MUSTANG/ M-09330	2.7 2.8 0.9	Acceleron Acceleron Trilex 6000	0 1C 1C	7 1,3
1-2 GENETICS/ 6279 1-2 GENETICS/ 7129 1-2 GENETICS/ 7186 1-2 GENETICS/ 7208	2.7 1.2 1.7 2	Cruiser Maxx Cruiser Maxx	1K 1K 1C	2,4 4,6 5,7	KRUGER/ K2-2701 KRUGER/ K2-2801 MUSTANG/ M-09330 MUSTANG/ M-09920	2.7 2.8 0.9	Acceleron Acceleron	0 1C 1C	7 1,3
-2 GENETICS/ 6279 -2 GENETICS/ 7129 -2 GENETICS/ 7186 -2 GENETICS/ 7208 -2 GENETICS/ 7212 -2 GENETICS/ 7226	2.7 1.2 1.7 2	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx	1K 1K 1C 1K 1K	2,4 4,6 5,7 5,7	KRUGER/ K2-2701 KRUGER/ K2-2801 MUSTANG/ M-09330 MUSTANG/ M-09920 MUSTANG/ M-13320	2.7 2.8 0.9 0.9 1.3	Acceleron Acceleron Trilex 6000 Trilex 6000	0 1C 1C	7 1,3 1,3 2,4
3-2 GENETICS/ 6279 3-2 GENETICS/ 7129 3-2 GENETICS/ 7186 3-2 GENETICS/ 7208 3-2 GENETICS/ 7212 3-2 GENETICS/ 7226 3-2 GENETICS/ 7255	2.7 1.2 1.7 2 2.1 2.2	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx	1K 1K 1C	2,4 4,6 5,7	KRUGER/ K2-2701 KRUGER/ K2-2801 MUSTANG/ M-09330 MUSTANG/ M-09920	2.7 2.8 0.9	Acceleron Acceleron Trilex 6000 Trilex 6000 Trilex 6000	0 1C 1C	7 1,3 1,3 2,4 2,4
8-2 GENETICS/ 6279 8-2 GENETICS/ 7129 8-2 GENETICS/ 7186 8-2 GENETICS/ 7208 8-2 GENETICS/ 7212 8-2 GENETICS/ 7226 8-2 GENETICS/ 7255 8-2 GENETICS/ 7288	2.7 1.2 1.7 2 2.1 2.2 2.5	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx	1K 1K 1C 1K 1K 1K	2,4 4,6 5,7 5,7 5,7 5	KRUGER/ K2-2701 KRUGER/ K2-2801 MUSTANG/ M-09330 MUSTANG/ M-09920 MUSTANG/ M-13320 MUSTANG/ M-159NRR	2.7 2.8 0.9 0.9 1.3 1.5	Acceleron Acceleron Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000	0 1C 1C 1C 1C 1K	7 1,3 1,3 2,4
3-2 GENETICS/ 6279 3-2 GENETICS/ 7129 3-2 GENETICS/ 7186 3-2 GENETICS/ 7208 3-2 GENETICS/ 7212 3-2 GENETICS/ 7226 3-2 GENETICS/ 7255 3-2 GENETICS/ 7288 3-10 COUNTRY/ 1915NRR	2.7 1.2 1.7 2 2.1 2.2 2.5 2.8 1.5	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Not reported	1K 1K 1C 1K 1K 1K 1K	2,4 4,6 5,7 5,7 5,7 5 7 2,4	KRUGER/ K2-2701 KRUGER/ K2-2801 MUSTANG/ M-09330 MUSTANG/ M-09920 MUSTANG/ M-13320 MUSTANG/ M-159NRR MUSTANG/ M-168RR MUSTANG/ M-177NRR	2.7 2.8 0.9 0.9 1.3 1.5 1.6 1.7	Acceleron Acceleron Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000	0 1C 1C 1C 1C 1K 0	7 1,3 1,3 2,4 2,4 2,4 4
3-2 GENETICS/ 6279 3-2 GENETICS/ 7129 3-2 GENETICS/ 7186 3-2 GENETICS/ 7208 3-2 GENETICS/ 7212 3-2 GENETICS/ 7226 3-2 GENETICS/ 7255 3-2 GENETICS/ 7288 GOLD COUNTRY/ 1915NRR	2.7 1.2 1.7 2 2.1 2.2 2.5 2.8 1.5	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Not reported	1K 1K 1C 1K 1K 1K 1K 1K	2,4 4,6 5,7 5,7 5,7 5 7 2,4	KRUGER/ K2-2701 KRUGER/ K2-2801 MUSTANG/ M-09330 MUSTANG/ M-09920 MUSTANG/ M-13320 MUSTANG/ M-159NRR MUSTANG/ M-168RR MUSTANG/ M-177NRR	2.7 2.8 0.9 0.9 1.3 1.5 1.6 1.7	Acceleron Acceleron Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000	0 1C 1C 1C 1C 1K 0 1K	7 1,3 1,3 2,4 2,4 2,4 4
G-2 GENETICS/ 6279	2.7 1.2 1.7 2 2.1 2.2 2.5 2.8 1.5	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Not reported	1K 1K 1C 1K 1K 1K 1K	2,4 4,6 5,7 5,7 5,7 5 7 2,4	KRUGER/ K2-2701 KRUGER/ K2-2801 MUSTANG/ M-09330 MUSTANG/ M-09920 MUSTANG/ M-13320 MUSTANG/ M-159NRR MUSTANG/ M-168RR MUSTANG/ M-177NRR	2.7 2.8 0.9 0.9 1.3 1.5 1.6 1.7	Acceleron Acceleron Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000 Trilex 6000	0 1C 1C 1C 1C 1K 0	7 1,3 1,3 2,4 2,4 2,4 4

Table D. Index to 2009 Glyphosate-resistant soybean entries (Continued).

Brand / Variety	Mat. Grp.	Seed Trt.	Gene Code*	Table No.(s)	Brand / Variety	Mat. Grp.	Seed Trt.	Gene Code*	Table No.(s)
MUSTANG/ M-21320	2.1	Trilex 6000	1C	5	PRAIRIE BR./ PB-1999NRR2	1.9	Acceleron	1K	6
MUSTANG/ M-219RR	2.1	Trilex 6000	0	5	PRAIRIE BR./ PB-2058NRR	1.9	Trilex 6000	1K	4,6
MUSTANG/ M-23530	2.3	Trilex 6000	0	5,7	PRAIRIE BR./ PB-2099NRR2	2	Acceleron	1C	5,7
MUSTANG/ M-24620	2.4	Trilex 6000	1C	5,7	PRAIRIE BR./ PB-2117NRR	2.1	Trilex 6000	0	5
MUSTANG/ M-259NRR	2.4	Trilex 6000	1K	7	PRAIRIE BR./ PB-2147RR	2.1	Trilex 6000	0	5
MUSTANG/ M-270NRR	2.7	Trilex 6000	1C	7	PRAIRIE BR./ PB-2207NRR	2.2	Trilex 6000	1K	5,7
MUSTANG/ M-28929	2.8	Trilex 6000	1C	7 7	PRAIRIE BR./ PB-2243RR PRAIRIE BR./ PB-2278RR	2.2	Trilex 6000	1K	5
MUSTANG/ M-318RR NUTECH/ 0886RR	2.9 0.8	Trilex 6000 Cruiser Maxx	1C NR	1,3	PRAIRIE BR./ PB-2419RR2	1.9 2.4	Trilex 6000 Acceleron	0	4,6 5,7
NUTECH/ 0889RR	0.8	Cruiser Maxx	NR	1,3	PRAIRIE BR./ PB-2439NRR2	2.4	Acceleron	1C	5,7
NUTECH/ 0990RR	0.9	Cruiser Maxx	NR	1,3	PRAIRIE BR./ PB-2515RR	2.5	Trilex 6000	1K	7
NUTECH/ 1808RN	1.8	Cruiser Maxx	1C	4,6	PRAIRIE BR./ PB-2558NRR	2.4	Trilex 6000	0	5,7
NUTECH/ 2324+RN	2.3	Cruiser Maxx	NR	7	PRAIRIE BR./ PB-2667NRR	2.6	Trilex 6000	1C	7
NUTECH/ 2660RN	2.6	Cruiser Maxx	1C	7	PRAIRIE BR./ PB-2828NRR2	2.8	Acceleron	1C	7
NUTECH/ 2707RR	2.7	Cruiser Maxx	NR	7	PROSEED/ 61-00	1	Cruiser Maxx	0	2
NUTECH/ 6122	0.9	Cruiser Maxx	1K	1,3	PROSEED/ 80-90	0.9	Cruiser Maxx	0	1
NUTECH/ 6145	1.4	Cruiser Maxx	NR	2,4	PROSEED/ 81-30	1.3	Cruiser Maxx	0	2,4
NUTECH/ 6156	1.5	Cruiser Maxx	NR	2,4	PROSEED/ 81-50	1.3	Cruiser Maxx	1K	2,4
NUTECH/ 6166	1.6	Cruiser Maxx	1K	2	PROSEED/81-90	1.9	Cruiser Maxx	1C	6
NUTECH/ 6191	1.9	Cruiser Maxx	NR	4	PROSEED/ 82-00N	2	Cruiser Maxx	1K	7
NUTECH/ 6193	1.9	Cruiser Maxx	NR	2,4,6	REA/ EXP-1054	1.4	Not reported	1C	2,4
NUTECH/ 6205+RR	1.9	Cruiser Maxx	1K	2,4,6	REA/ EXP-1056	1.6	Not reported	1K	2,4
NUTECH/ 6211 NUTECH/ 6234RR	2.1	Cruiser Maxx Cruiser Maxx	NR 1K	5,7 5	REA/ EXP-1059 REA/ EXP-1062	1.9 2.2	Not reported Not reported	1C 1C	2,4 5
NUTECH/ 6244	2.4	Cruiser Maxx	NR	5,7	REA/ EXP-1064	2.4	Not reported	1C	5
NUTECH/ 7199	1.9	Cruiser Maxx	1C	4	REA/ EXP-1068	2.8	Not reported	1C	5
NUTECH/ 7203	2	Cruiser Maxx	1K	5	RENK/ RS110R2	1.1	Acceleron	1C	4
NUTECH/ 7222	2.2	Cruiser Maxx	1K	5,7	RENK/ RS140NR2	1.4	Acceleron	1C	4
NUTECH/ 7269	2.6	Cruiser Maxx	1C	7	RENK/ RS160NR2	1.6	Acceleron	1K	4
NUTECH/ 7274	2.7	Cruiser Maxx	1K	7	RENK/ RS179NRR	1.7	Not reported	NR	4
PIONEER/ 90Y50	0.5	Cruiser Maxx	1K	1	RENK/ RS180R2	1.8	Acceleron	1C	4
PIONEER/ 90Y80	0.8	Cruiser Maxx	0	1	RENK/ RS200NR2	2	Acceleron	1K	5
PIONEER/ 91Y90	1.9	Cruiser Maxx	0	2,4	RENK/ RS210NR2	2	Acceleron	1C	5
PIONEER/ 92Y10 PIONEER/ 92Y30	2.1	Cruiser Maxx Cruiser Maxx	1K 1K	5 5,7	RENK/ RS259NRR RENK/ RS270NR2	2.5 2.7	Not reported Acceleron	NR 1C	7 7
PIONEER/ 92Y80	2.8	Cruiser Maxx	1K	7	RENK/ RS277NRR	2.7			7
PIONEER/ 93M11	3.1	Cruiser Maxx	1K	7	SEEDS 2000/ 2081RR	0.8	Not reported Not reported	NR 1K	1
PRAIRIE BR / PB-3039NRR2	2.9	Acceleron	1C	7	SEEDS 2000/ 2120RR	1.2	Not reported	1K	2
PRAIRIE BR./ EXP 109	0.9	Acceleron	1C	1,3	SODAK GEN./ SD1093RR	0.9	Not reported	0	1,3
PRAIRIE BR./ EXP 119	0.9	Acceleron	1C	1,3	SODAK GEN./ SD1161RR/SCN	1.6	Not reported	1A	2,4,6
PRAIRIE BR./ EXP 129	0.9	Acceleron	1C	1	SODAK GEN./ SD2081RR	0.8	Not reported	0	1,3
PRAIRIE BR./ EXP 141	1.4	Acceleron	1C	2,4	SODAK GEN./ SD2121RR	1.2	Not reported	1K	2,4,6
PRAIRIE BR./ EXP 158	1.5	Acceleron	0	2,4	STINE/ 1008-4	1	Trilex 6000	0	2
PRAIRIE BR./ EXP 179	1.6	Acceleron	1K	2,4	STINE/ 1108-4	1.1	Trilex 6000	0	2
PRAIRIE BR./ EXP 195	-	Acceleron	1K	5	STINE/ 1423-4	1.4	Trilex 6000	1K	4
PRAIRIE BR./ EXP 199	1.9	Acceleron	1C	2,4,6	STINE/ 1568-4	1.5	Trilex 6000	1K	4
PRAIRIE BR./ EXP 201 PRAIRIE BR./ EXP 207	1.9	Acceleron Acceleron	1C 0	4,6 5,7	STINE/ 2062-4 STINE/ 2420-4	2 2.4	Trilex 6000 Trilex 6000	1K 0	5 7
PRAIRIE BR./ EXP 215	1.9	Acceleron	0	4,6	STINE/ 2538-4	2.5	Trilex 6000	1K	7
PRAIRIE BR./ EXP 217	1.9	Trilex 6000	0	6	STINE/ 3132-4	2.9	Trilex 6000	1C	7
PRAIRIE BR./ EXP 220	1.9	Trilex 6000	1K	6	STINE/ EXP 2482-4	2.4	Trilex 6000	1K	7
PRAIRIE BR./ PB-0779RR	0.7	Trilex 6000	0	1	WENSMAN/ W 2079RR	0.7	Cruiser Maxx	0	1
PRAIRIE BR./ PB-0954RR	0.9	Trilex 6000	0	1	WENSMAN/ W 2112RR	1.1	Cruiser Maxx	NR	2,4
PRAIRIE BR./ PB-0999RR	0.9	Trilex 6000	0	1	WENSMAN/ W 2166RR	1.6	Cruiser Maxx	0	2,4
PRAIRIE BR./ PB-1337RR	1.3	Trilex 6000	0	2	WENSMAN/ W 2222NRR	2.2	Cruiser Maxx	1K	5,7
PRAIRIE BR./ PB-1597RR	1.5	Trilex 6000	0	2,4	WENSMAN/W 3186R2	1.8	Cruiser Maxx	1C	4,6
PRAIRIE BR./ PB-1918RR PRAIRIE BR./ PB-1956RR	1.9 1.9	Trilex 6000 Trilex 6000	0 1C	2,4,6 6	WENSMAN/ W 3192NR2 WENSMAN/ W 3280NR2	1.9 2.8	Cruiser Maxx Cruiser Maxx	1C 1C	4,6 7
THAIRIE DIL/ I D-1930IIII	1.0	111167 0000	10		VVEIVOIVIAIN, VV 3200IVIIZ	2.0	OTUISET IVIAAA	10	,

NR indicates gene code was not reported by seed entrant.

Table E. Index of 2009 Conventional soybean entries by brand/variety, maturity group, seed trt., and gene code for *Phytophthora* root rot resistance as reported by entrants; and performance table no.(s) Strain or race resistance by gene type is reported in table C.

Octain of fuor resistance by gene type is reported in table o.									
Brand / Variety	Mat. Grp.	Seed Trt.	Gene Code*	Table No.(s)					
MUSTANG/ ML-0979 MUSTANG/ ML-1520 MUSTANG/ ML-1889 MUSTANG/ ML-2269 MUSTANG/ ML-2670	0.9 1.5 1.8 2.2 2.6	Not reported Not reported Not reported Not reported Not reported	Rps1k Rps1k Rps1c rps1 - None Rps1k	8,9 8,9 9 9,10 10					
PROSEED/ LL81-60 PROSEED/ LL91-12 PUBLIC/DAVISON PUBLIC/DEUEL PUBLIC/HAMLIN	1.6 1.1 2.2 1.1 0.9	Cruiser Maxx Cruiser Maxx Not reported Not reported Not reported	Rps1k Rps1k Rps1 (Rps1a) Rps1k Rps1k	9 9 9,10 8,9,10 8,9					
PUBLIC/MN0806CN PUBLIC/MN0908CN PUBLIC/MN1410 PUBLIC/MN1505SP PUBLIC/MN1701CN	0.8 0.9 1.4 1.5	Not reported Not reported Not reported Not reported Not reported	NR NR NR NR NR	8,9 8,9 8,9,10 8,9,10 10-Aug					
PUBLIC/SD00-1501 PUBLIC/SD05-240 PUBLIC/SD05-248 PUBLIC/SD05-273 PUBLIC/SD05-274	0 1 2 2 2	Not reported Not reported Not reported Not reported Not reported	NR NR NR NR NR	8,9 8,9 9,10 9,10 9,10					
PUBLIC/SD05-767 PUBLIC/SURGE RICHLAND ORG./ MK0508 RICHLAND ORG./ MK0649 RICHLAND ORG./ MK1016	0 0.7 0.5 0.6 1	Not reported Not reported Not reported Not reported Not reported	NR NR rps1 - None rps1 - None rps1 - None	8,9 8,9 8 8					

^{*} NR indicates gene code was not reported by seed entrant.

Table F. Explanation of performance table footnotes.

IUDIC	1. Explanation of performance table footnotes.
No.	Explanation of footnotes
[1]	Days to maturity (DTM) – the number of days to maturity from seeding to 95% brown pod.
[2]	Lodging scores: 0 = all plants erect, 3 = 50% of plants lodged at 45°-angle, 5 = all plants flat.
[3]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value, the difference between the values is nonsignificant (NS).
[4]	TPG-avg. – the minimum value within a column that entry yield values must equal or exceed to qualify for the top-performance group (TPG).
[5]	TPG-avg. – the maximum value within a column that lodging score values must equal or be less than to qualify for the TPG.
[6]	Coefficient of variation (C.V.) – the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% tend to be less common, while values of 6 to 15% are more common. Occasionally, values exceed 15%; this means the trial contained too much experimental error to be a valid test; thus, no data for that table column is reported.

Table G. Mailing addresses of entrants in the 2009 soybean trials.

Entrant name (brand name) & Mailing address

Dairyland Seed Co., Inc. (Dairyland), PO Box 958, West Bend, WI 53095 Gold Country Seed Inc. (Gold Country Seed), 16506 Hwy 15 N., PO Box 604, Hutchinson, MN 55350 G2 Genetics (G2), 36131 Hwy 69N, Forest City, IA 50436 Hefty Seed Co. (Hefty), 47504 252nd St., Baltic, SD 57003 Kaltenberg Seeds (Kaltenberg), 5506 State Rd 19, PO Box 278, Waunakee, WI 53597-0278

Kruger Seed Co. (Kruger), 33938 160th Ave., PO Box A, Dike, IA 50624 Channel Bio. Corp. (Channel), 1551 Hwy 210, Huxley, IA 50124 Monsanto (Asgrow), 102 West Carol Ave., Cortland, IL 60112 Mustang Seeds (Mustang), PO Box 466, Madison, SD 57042 Nutech Seed, LLC (Nutech), 36131 Hwy 69N, Forest City, IA 50436

Pioneer Hi-Bred Intl. (Pioneer), 151 St. Andrews Ct., Mankato, MN 56001 Prairie Brand Seed Co. (Praire Brand), 15 X Ave., Story City, IA 50248 Proseed (Proseed), 705 East Brewster St., Harvey, ND 58341 REA Hybrids, (REA), 537 Ave. S, Moorhead, MN 56560 Renk Seed Co. (Renk), 6809 Wilburn Rd., Sun Prairie, WI 53590

Richland Organics, Inc. (Richland Organics), 100 Tenth St. North, Breckenridge, MN 56520 Seeds 2000 (Seeds 2000), PO Box 200, Breckenridge, MN 56520 Sodak Genetics (Sodak), 1200 North Campus Dr., Brookings, SD 57007 Stine Seed Co.(Stine), 14605 University Ave., Waukee, IA 50263 Wensman Seed Co.(Wensman), 67784 330th St., Watkins, MN 55389



Table 1a. Glyphosate-resistant maturity group-0 soybean variety yield and lodging averagesnorthern South Dakota locations, 2008-2009. Entries are sorted by 2-Yr then by 2009 zone yield.

northern country				orthern Avera				Northern Zone Averages		
D 10/2	DT84 [4]	,	South S	Shore		War	ner	Norti	iern Zoi	ne Averages
Brand/Variety	DTM [1]	Yield-bu/a 200		2009 Lodg.	Yield	-bu/a	2009 Lodg.	Yield-bu/a		2009 Lodg.
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]
NUTECH/ NT-0886 NUTECH/ NT-0990 PRAIRIE BR./ PB-0954RR ASGROW/ AG0808 HEFTY/ EXP089R SODAK GEN./ SD1093RR	126 127 124 124 124 124	51 52 47 46 48 44	50 53 52 49 53 49	1 1 1 1 1	59 51 52 53 49 48	69 63 60 61 60 60	1 1 1 1 1	55 52 50 50 49 46	60 58 56 55 57 55	1 1 1 1 1
MUSTANG/ M-09330 PRAIRIE BR./ EXP 109 SEEDS 2000/ 2081RR DAIRYLAND/ DSR-0747/R2Y PRAIRIE BR./ PB-0999RR PIONEER/ 90Y80	129 126 126 123 126 120		57 56 57 55 53 53	1 1 1 1		65 65 62 62 64 63	1 1 1 1 1		61 61 60 59 59 58	1 1 1 1 1
NUTECH/ 0889RR NUTECH/ 6122 ASGROW/ RY0809 KRUGER/ EXPK2X09A9 G-2 GENETICS/ 6098 PRAIRIE BR./ PB-0779RR	124 130 124 129 124 122		55 50 54 52 52 52 54	1 1 1 1		61 65 59 61 61 59	1 1 1 1 1		58 58 57 57 57 57	1 1 1 1 1
PRAIRIE BR./ EXP 119 ASGROW/ RY0819 KRUGER/ EXPK2X05A9 PRAIRIE BR./ EXP 129 WENSMAN/ W 2079RR SODAK GEN./ SD2081RR	124 125 124 123 120 123		52 50 52 51 53 49	1 1 1 1		62 61 59 60 59 60	1 1 1 1 1		57 56 56 56 56 55	1 1 1 1
ASGROW/ AG0803 KRUGER/ EXPK2X06A9 HEFTY/ EXP070R MUSTANG/ M-09920 PIONEER/ 90Y50 KRUGER/ K-042RR	125 125 120 133 128 119		50 50 45 59 52	1 1 1 1	49	58 55 58	1 1 1		54 53 52	1 1 1
KRUGER/ K-072+RR KRUGER/ K-091RR KRUGER/ K-058RR GOLD COUNTRY/ 2509RR G-2 GENETICS/ 6088 PROSEED/ 80-90	124 133 118 131 125 129	53 48 50	59 51 58 52	1 1	58	67 66	1 1			
Test avg. : High avg. : Low avg. : [3] Test LSD (.05): [4] Min.TPG-avg. : [5] Max.TPG-avg. : [6] Test Coef. Var.: No. Entries:	125 133 118	49 53 44 NS** 44 7	53 59 45 7 52 8 33	1 1 NS 1 0 33	52 59 48 5 54 4	61 69 55 4 65 4 30	1 1 NS 1 0 30	50 55 46 ***	57 61 52 ***	1 1 1

^[1] DTM= days to maturity from seeding dates of May 22 at South Shore and May 21 at Warner.

Note that additional table footnotes are explained in Table F.

* Values in **bold type** within a column are included in the top performance group.

** Indicates differences between values within a column were non-significant (NS).

*** There was a significant variety by location interaction for yield. Therefore, evaluate yield by using the yield columns for each location.

for each location.

Table 1b. Glyphosate-resistant maturity group-O soybean variety protein and oil averagesnorthern South Dakota locations, 2009. Entries are sorted by 2009 zone protein.

nortnern South Dakota locations		1		ges by Loc		Norther	n Zone
Drand Mariatu	DTM [4]	South	Shore	Wai	ner	Avera	
Brand/Variety	DTM [1]	Protein %	Oil %	Protein %	Oil %	Protein %	Oil %
PRAIRIE BR./ EXP 109 PRAIRIE BR./ EXP 119 MUSTANG/ M-09330 PRAIRIE BR./ EXP 129 KRUGER/ EXPK2X06A9 WENSMAN/ W 2079RR	126 124 129 123 125 120	40.0 39.1 39.3 39.0 39.6 38.7	18.2 17.9 17.7 17.5 17.6 18.2	39.1 39.3 38.7 38.8 37.7 38.4	21.1 21.1 20.9 20.6 20.4 21.2	39.6 39.2 39.0 38.9 38.7 38.5	19.6 19.5 19.3 19.0 19.0 19.7
NUTECH/ 0889RR PRAIRIE BR./ PB-0999RR ASGROW/ RY0809 SODAK GEN./ SD1093RR DAIRYLAND/ DSR-0747/R2Y HEFTY/ EXP070R	124 126 124 124 123 120	38.9 38.6 38.7 38.4 38.7 38.5	19.5 18.0 17.3 18.6 18.2 18.5	38.1 38.3 38.1 38.3 38.0 38.0	21.3 21.1 21.0 21.2 20.7 21.2	38.5 38.5 38.4 38.4 38.3 38.3	20.4 19.6 19.1 19.9 19.4 19.8
KRUGER/ EXPK2X05A9 NUTECH/ 6122 PRAIRIE BR./ PB-0779RR NUTECH/ NT-0990 PRAIRIE BR./ PB-0954RR KRUGER/ EXPK2X09A9	124 130 122 127 124 129	38.4 38.4 37.9 38.0 38.0 38.0	18.6 17.7 18.6 18.4 19.3 19.1	38.1 37.9 38.3 37.9 38.0 37.7	21.4 20.6 21.4 21.3 21.1 20.9	38.3 38.2 38.1 38.0 38.0 37.9	20.0 19.1 20.0 19.8 20.2 20.0
NUTECH/ NT-0886 SODAK GEN./ SD2081RR ASGROW/ RY0819 G-2 GENETICS/ 6098 ASGROW/ AG0803 PIONEER/ 90Y80	126 123 125 124 125 120	38.2 37.6 36.9 36.8 36.4 35.5	17.7 17.5 18.2 18.5 19.4 19.7	37.2 37.0 37.5 37.6 37.7 37.2	20.2 20.7 21.0 21.4 21.4 21.8	37.7 37.3 37.2 37.2 37.0 36.4	19.0 19.1 19.6 20.0 20.4 20.8
HEFTY/ EXP089R ASGROW/ AG0808 SEEDS 2000/ 2081RR MUSTANG/ M-09920 PIONEER/ 90Y50 KRUGER/ K-042RR	124 124 126 133 128 119	35.9 35.7 35.2 37.4 37.5	19.0 18.8 19.0 19.1 18.3	36.7 36.9 37.3 37.5	20.8 21.1 21.4 21.4	36.3 36.3 36.3	19.9 20.0 20.2
KRUGER/ K-072+RR KRUGER/ K-091RR KRUGER/ K-058RR GOLD COUNTRY/ 2509RR G-2 GENETICS/ 6088 PROSEED/ 80-90	124 133 118 131 125 129	38.6 41.2 38.8	18.4 17.3 19.3 19.1	38.2	21.2		
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min.TPG-avg. : [6] Coef. Var. : No. Entries :	125 133	38.1 41.2 35.2 1.0 40.3 2 33	18.4 19.7 17.3 0.6 19.2 2 33	37.9 39.3 36.7 1.0 38.4 2 30	21.1 21.8 20.2 NS** 20.2 3 30	37.9 ***	19.7 ***

^[1] DTM= days to maturity from seeding dates of May 22 at South Shore and May 21 at Warner.

Note that additional table footnotes are explained in Table F.

* Values in bold type within a column are included in the top-performance group.

** Indicates differences between values within a column were non-significant (NS).

*** There were significant variety by location interactions for protein and oil. Therefore, evaluate yield by using the protein and oil columns for each location.

Table 2a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- northern South Dakota locations, 2008-2009. Entries are sorted by 2-Yr then by 2009 zone yield.

South Dakota loca	10113, 2000	-2003.		rthern Avera			-	Ė		
			South S	Shore	<u> </u>	War	ner	North	ern Zoı	ne Averages
Brand/Variety	DTM [1]	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]
WENSMAN/ W 2166RR HEFTY/ 168R STINE/ 1108-4 NUTECH/ 6156 MUSTANG/ M-168RR	128 128 126 127 128	55 53 53 52 52	61 57 61 55 59	1 1 1 1	53 54 54 56 53	67 68 65 68 67	1 1 1 1	54 54 54 54 54 53	64 63 63 62 63	1 1 1 1
PRAIRIE BR./ PB-1597RR HEFTY/ 117R STINE/ 1008-4 PRAIRIE BR./ PB-1337RR NUTECH/ NT-6205+RR	129 127 128 128 133	53 51 50 52 52	59 56 52 58 56	1 1 1 1	53 55 56 51 52	67 67 70 65 66	1 1 1 1	53 53 53 52 52	63 62 61 62 61	1 1 1 1
ASGROW/ AG1403 SEEDS 2000/ 2120RR HEFTY/ EXP159RN ASGROW/ AG1102 ASGROW/ AG1702	130 128 131 127 127	50 49 49 49 51	53 52 55 56 55	1 1 1 1	51 52 50 51 49	66 65 66 63 63	1 1 1 1	51 51 50 50 50	60 59 61 60 59	1 1 1 1
PRAIRIE BR./ PB-1918RR PROSEED/ 81-30 HEFTY/ EXP139R KRUGER/ K-129RR SODAK GEN./ SD1161RR/SCN	132 129 126 126 131	50 49 50 49 47	54 50 53 51 52	1 1 1 1	49 51 48 48 48	61 59 61 62 61	1 1 1 1	50 50 49 49 48	58 55 57 57 57	1 1 1 1
KRUGER/ K-189RR/SCN ASGROW/ RY1719 PRAIRIE BR./ EXP 141 KRUGER/ EXPK2X11B9 KRUGER/ EXPK2X14A9	133 133 130 126 129	45	48 61 60 60 59	1 1 1 1	46	59 68 69 65 67	1 1 1 2	46	54 65 65 63 63	1 1 2 1
PRAIRIE BR./ EXP 179 MUSTANG/ M-159NRR NUTECH/ 6145 KRUGER/ EXPK2X10A9 DAIRYLAND/ DST11-001R2Y	133 133 132 126 129		58 60 59 59 57	1 1 1 1 1		67 63 64 64 66	1 1 1 1 1	: : :	63 62 62 62 62	1 1 1 1
PRAIRIE BR./ EXP 158 ASGROW/ AG1506 ASGROW/ AG1703 ASGROW/ RY1709 NUTECH/ 6166	132 132 134 132 131		59 58 57 56 55	1 1 1 1		65 64 64 66 66	2 1 1 1		62 61 61 61 61	1 1 1 1
DAIRYLAND/ DSR-1100/RR PRAIRIE BR./ EXP 199 CHANNEL BRAND/ 1651R PROSEED/ 81-50 HEFTY/ 108	126 129 133 132 127		57 58 57 56 56	1 1 1 1		65 64 64 65 64	1 1 1 1		61 61 61 61 60	1 1 1 1
KRUGER/ EXPK2X15B9 KRUGER/ K2-1901 KRUGER/ EXPK2X19B9 WENSMAN/ W 2112RR SODAK GEN./ SD2121RR	130 131 133 123 126		58 57 57 57 56	1 1 1 1		61 62 62 62 62	1 1 1 1		60 60 60 60 59	1 1 1 1
DAIRYLAND/ DSR-1200/R2Y G-2 GENETICS/ 6159 NUTECH/ 6193 G-2 GENETICS/ 7129 MUSTANG/ M-13320	127 128 132 126 137		54 54 53 49 60	1 1 1 1 1		62 62 60 55	1 1 1 1		58 58 57 52	1 1 1 1

Table 2a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- northern South Dakota locations, 2008-2009 (continued).

South Dakota loca		-2003 (CUIIIIII	ueu <i>j</i> .							
		Northern Averages by Location							orn 7o	no Avorogoo	
Dua mal (Marria tra	DT84 [4]		South Shore			War	ner	Northern Zone Averages			
Brand/Variety	DTM [1]	Yield-bu/a		2009 Lodg.	Yield-bu/a		2009 Lodg.	Yield-bu/a		2009 Lodg.	
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	
PIONEER/ 91Y90	130				51	66	2				
KRUGER/ K-167RR/SCN	135	51	55	1							
GOLD COUNTRY/ 2713RR	133	50	53	1							
GOLD COUNTRY/ 2815RR	132 135	54 52	59 61	1							
GOLD COUNTRY/ 1915NRR	133	52	61				·	·	·		
DAIRYLAND/ DSR1423RRSTS	130					57	2				
DAIRYLAND/ DST14-003R2Y	135					67	2		.		
REA/ EXP-1054	126					67	1 1	·	·		
REA/ EXP-1056 REA/ EXP-1059	127 126		· ·			65 64		· ·	l ·		
PROSEED/ 61-00	121		· ·		53	65	li	١.	١.		
·			-				-		-		
Test avg.:	129 137	51 55	56 61	1	51 56	64 70	1	51 54	60 65	1	
High avg. : Low avg. :	121	45	48	1	46	55	2	1 46	52	2	
[3] Test LSD (.05):	121	NS**	4	NS	5	4	l i	***	***	'	
[4] Min.TPG-avg. :		52	57		51	66	:				
[5] Max.TPG-avg. :				1			1				
[6] Test Coef. Var.:		4	4	0	6	4	10				
No. Entries:		25	54	54	23	56	56		l		

^[1] DTM= days to maturity from seeding dates of May 22 at South Shore and May 21 at Warner.

Note that additional table footnotes are explained in Table F.

* Values in **bold type** within a column are included in the top performance group.

** Indicates differences between values within a column were non-significant (NS).

*** There was a significant variety by location interaction for yield. Therefore, evaluate yield by using the yield columns for each location.

Table 2b. Glyphosate-resistant maturity group-I soybean variety protein and oil averages-northern South Dakota locations, 2009. Entries are sorted by 2009 zone protein.

HOTHIETH SOUTH DAKOTA TOCATIO	Northern Averages by Location*						
D 10/ 14	DTM	South		War		Aver	rn Zone ages
Brand/Variety	[1]	Protein %	Oil %	Protein %	Oil %	Protein %	Oil %
KRUGER/ EXPK2X15B9	130	38.3	17.9	38.9	19.6	38.6	18.8
KRUGER/ EXPK2X10A9	126	37.3	17.0	38.7	19.7	38.0	18.4
KRUGER/ K-189RR/SCN	133	37.8	18.5	37.0	21.2	37.4	19.8
HEFTY/ 108	127	37.3	16.3	37.3	20.2	37.3	18.3
KRUGER/ EXPK2X19B9	133	36.9	17.9	37.6	21.0	37.3	19.5
HEFTY/ EXP139R	126	36.5	17.1	37.8	20.8	37.2	19.0
STINE/ 1008-4	128	37.5	17.1	36.5	20.2	37.0	18.7
WENSMAN/ W 2112RR	123	36.5	16.5	37.4	19.7	36.9	18.1
KRUGER/ K-129RR	126	36.8	17.1	36.8	20.5	36.8	18.8
SODAK GEN./ SD1161RR/SCN	131	36.1	16.9	37.5	19.1	36.8	18.0
DAIRYLAND/ DSR-1100/RR	126	36.3	17.7	37.2	20.1	36.8	18.9
SEEDS 2000/ 2120RR	128	36.6	16.3	36.8	19.6	36.7	17.9
PRAIRIE BR./ EXP 179	133	36.2	18.5	37.1	21.0	36.7	19.7
ASGROW/ RY1719	133	36.2	16.6	37.0	20.6	36.6	18.6
NUTECH/ 6145	132	36.5	17.3	36.7	20.6	36.6	18.9
NUTECH/ 6166	131	35.9	17.5	37.3	20.7	36.6	19.1
ASGROW/ RY1709	132	36.5	18.3	36.5	21.4	36.5	19.9
KRUGER/ EXPK2X14A9	129	36.0	17.4	37.0	20.8	36.5	19.1
DAIRYLAND/ DST11-001R2Y	129	35.8	17.2	37.2	20.1	36.5	18.7
PRAIRIE BR./ EXP 141	130	35.7	17.5	37.2	20.7	36.5	19.1
STINE/ 1108-4	126	36.4	17.0	36.5	19.7	36.5	18.4
ASGROW/ AG1702	127	35.8	18.3	36.9	20.2	36.4	19.2
PROSEED/ 81-30	129	36.4	17.1	36.4	20.5	36.4	18.8
DAIRYLAND/ DSR-1200/R2Y	127	35.8	17.5	36.9	19.6	36.4	18.6
NUTECH/ 6193	132	35.6	16.8	37.1	21.1	36.4	18.9
HEFTY/ 117R	127	36.0	17.3	36.7	19.6	36.4	18.5
SODAK GEN./ SD2121RR	126	35.9	17.4	36.3	19.4	36.1	18.4
PRAIRIE BR./ EXP 199	129	35.9	16.8	36.1	19.3	36.0	18.1
KRUGER/ EXPK2X11B9	126	34.7	17.1	36.9	20.1	35.8	18.6
ASGROW/ AG1403	130	34.8	17.1	36.6	20.7	35.7	18.9
PRAIRIE BR./ PB-1918RR	132	36.6	17.9	34.8	19.8	35.7	18.8
PRAIRIE BR./ PB-1337RR	128	35.3	16.7	36.1	19.7	35.7	18.2
NUTECH/ NT-6205+RR	133	34.4	17.4	36.5	21.7	35.5	19.5
ASGROW/ AG1506	132	34.8	18.3	36.1	22.1	35.4	20.2
CHANNEL BRAND/ 1651R	133	34.9	18.0	35.3	21.8	35.1	19.9
G-2 GENETICS/ 6159	128	35.5	18.0	34.7	21.3	35.1	19.7
PROSEED/ 81-50	132	34.2	18.2	36.0	22.1	35.1	20.2
KRUGER/ K2-1901	131	35.1	17.5	34.9	20.6	35.0	19.1
PRAIRIE BR./ PB-1597RR	129	34.5	17.8	35.5	21.6	35.0	19.7
PRAIRIE BR./ EXP 158	132	34.7	16.6	35.2	21.1	35.0	18.8
NUTECH/ 6156	127	35.0	17.8	34.7	21.3	34.8	19.6
HEFTY/ EXP159RN	131	34.5	18.5	34.4	21.5	34.5	20.0
HEFTY/ 168R	128	34.7	17.8	33.8	20.8	34.3	19.3
ASGROW/ AG1703	134	33.0	18.5	35.5	21.8	34.3	20.2
MUSTANG/ M-168RR	128	34.9	18.0	33.6	20.3	34.2	19.2
MUSTANG/ M-159NRR G-2 GENETICS/ 7129 WENSMAN/ W 2166RR ASGROW/ AG1102 MUSTANG/ M-13320	133 126 128 127 137	33.7 33.8 34.1 32.9 35.9	18.2 18.8 18.3 16.9 17.8	34.8 34.5 33.6 33.8	22.0 21.0 20.7 19.6	34.2 34.1 33.9 33.4	20.1 19.9 19.5 18.3

Table 2b. Glyphosate-resistant maturity group-I soybean variety protein and oil averagesnorthern South Dakota locations, 2009 (continued).

		Northe	rn Averag	Northern Zone			
Brand/Variety	DTM	South	Shore	Shore Warı		Averages	
Brana, varioty	[1]	Protein %	Oil %	Protein %	Oil %	Protein %	0il %
PIONEER/ 91Y90 KRUGER/ K-167RR/SCN GOLD COUNTRY/ 2713RR GOLD COUNTRY/ 2815RR GOLD COUNTRY/ 1915NRR	130 135 133 132 135	35.0 36.1 34.4 34.0	18.5 17.6 18.4 18.2	37.4	20.5		
DAIRYLAND/ DSR1423RRSTS DAIRYLAND/ DST14-003R2Y REA/ EXP-1054 REA/ EXP-1056 REA/ EXP-1059 PROSEED/ 61-00	130 135 126 127 126 121			36.6 37.8 37.0 37.5 38.3 36.8	20.5 22.1 20.9 21.4 20.4 20.1		
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min.TPG-avg. : [6] Coef. Var. : No. Entries :	129 137 121	35.6 38.3 32.9 0.9 37.5 2.0 54.0	17.6 18.8 16.3 0.7 18.2 2.0 54.0	36.4 38.9 33.6 2.0 37.0 3.0 56.0	20.6 22.1 19.1 1.2 21.0 4.0 56.0	35.9 **	19.1 **

^[1] DTM= days to maturity from seeding dates of May 22 at South Shore and May 21 at Warner.

Note that additional table footnotes are explained in Table F.

* Values in bold type within a column are included in the top-performance group.

** There were significant variety by location interactions for protein and oil. Therefore, evaluate yield by using the protein and oil columns for each location.

Table 3a. Glyphosate-resistant maturity group-0 soybean variety yield and lodging averages- central South Dakota locations, 2008-2009. Entries are sorted by 2-Yr then by 2009 zone yield.

			Central Averages by Location							Central Zone Averages			
Drand Mariatu	DTM [1]		Brook	ings		Banc	roft	Central Zone Averages					
Brand/Variety	ן וואונטן 	Yield	l-bu/a	2009 Lodg.	Yield-bu/a		2009 Lodg.	Yield-bu/a		2009 Lodg.			
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]			
NUTECH/ 0990RR SODAK GEN./ SD1093RR G-2 GENETICS/ 6088 NUTECH/ 0886RR MUSTANG/ M-09920 KRUGER/ EXPK2X09A9	131 126 126 127 126 130	51* 47	55 57 63 63 59 58	1 1 1 1 1	44 45	35 42 56 54 56 58	1 1 1 1 1	48 46	45 50 60 59 58 58	1 1 1 1 1			
PRAIRIE BR./ EXP 119 MUSTANG/ M-09330 PRAIRIE BR./ EXP 109 NUTECH/ 6122 KRUGER/ EXPK2X06A9 SODAK GEN./ SD2081RR	126 127 126 127 119 125		61 61 61 58 56 55	1 1 1 1 1		49 46 42 33 32 25	1 1 1 1 1		55 54 52 46 44 40	1 1 1 1 1 1			
KRUGER/ EXPK2X05A9 G-2 GENETICS/ 6098 KRUGER/ K-042RR KRUGER/ K-072+RR KRUGER/ K-091RR KRUGER/ K-058RR	122 125 126 132 123 115	53 50	56 57 59 55	1 1 1	48 54	19 16 47 49	1 1 1 1		38 37	1 1			
Test avg.: High avg.: Low avg.: [3] Test LSD (.05): [4] Min.TPG-avg.: [5] Max.TPG-avg.: [6] Test Coef. Var.: No. Entries:	126 132 115	50 53 47 NS** 47 5 4	58 63 55 4 59 4 16	1 1 0 1 0	48 54 44 NS** 44 7	41 58 16 8 50 11	1 1 1 0	47 48 46 ***	50 60 37 ***	1 1 1			

^[1] DTM= days to maturity from seeding dates of May 19 at Brookings and May 20 at Bancroft.

* Values in **bold type** within a column are included in the top-performance group.

Note that additional table footnotes are explained in Table F.

^{**} Indicates differences between values within a column were non-significant (NS).

*** There was a significant variety by location interaction for yield. Therefore, evaluate yield by using the yield columns for each location.

Table 3b. Glyphosate-resistant maturity group-0 soybean variety protein and oil averagescentral South Dakota locations, 2009. Entries are sorted by 2009 zone protein.

		Cent	ral Avera	ges by Locatio	n*	Northern	Zone	
Brand/Variety	DTM [1]	Brooki	ngs	Bancro	oft	Averages		
	'''	Protein %	0il %	Protein %	0il %	Protein %	0il %	
MUSTANG/ M-09330 PRAIRIE BR./ EXP 109 PRAIRIE BR./ EXP 119 NUTECH/ 0886RR G-2 GENETICS/ 6088 KRUGER/ EXPK2X06A9	127 126 126 127 126 119	40.0 39.6 39.8 38.9 38.7 38.5	17.1 17.7 17.4 17.6 17.8 16.4	38.0 37.4 37.0 36.4 36.5 36.4	18.9 18.5 18.7 20.0 19.6 18.4	39.0 38.5 38.4 37.7 37.6 37.5	18.0 18.1 18.1 18.8 18.7 17.4	
SODAK GEN./ SD1093RR KRUGER/ EXPK2X05A9 KRUGER/ EXPK2X09A9 NUTECH/ 0990RR MUSTANG/ M-09920 NUTECH/ 6122	126 122 130 131 126 127	38.3 38.7 38.4 38.2 37.8 38.7	18.0 17.6 17.6 17.2 18.7 16.4	36.3 35.6 35.8 35.6 35.4 34.2	19.9 19.3 19.2 18.9 19.1 18.5	37.3 37.2 37.1 36.9 36.6 36.5	19.0 18.5 18.4 18.1 18.9 17.4	
G-2 GENETICS/ 6098 SODAK GEN./ SD2081RR KRUGER/ K-042RR KRUGER/ K-072+RR KRUGER/ K-091RR KRUGER/ K-058RR	125 125 126 132 123 115	37.3 37.7 38.8 39.1	17.3 16.8 17.3 17.0	35.2 33.0 33.9 35.9	19.3 19.9 20.8 19.7	36.3 35.3	18.3 18.4	
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min.TPG-avg. : [6] Coef. Var. : No. Entries :	126 132 115	38.7 40.0 37.3 NS** 37.3 3	17.4 18.7 16.4 0.7 18.1 2	35.8 38.0 33.0 1.4 36.7 2	19.3 20.8 18.4 0.7 20.2 2	37.3 ***	18.3	

^[1] DTM= days to maturity from seeding dates of May 19 at Brookings and May 20 at Bancroft. Note that additional table footnotes are explained in Table F.

* Values in bold type within a column are included in the top-performance group.

** Indicates differences between values within a column were non-significant (NS).

^{***} There were significant variety by location interactions for protein and oil. Therefore, evaluate yield by using the protein and oil columns for each location.

Table 4a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- central South Dakota locations, 2008-2009. Entries are sorted by 2-Yr then by 2009 zone yield.

South Dakota local	10113, 2	200 200		ntral Average	<u> </u>					
	DTM		Brook			Band		Cent	ral Zon	e Averages
Brand/Variety	[1]	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.	Yield-bu/a		2009 Lodg.
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]
PRAIRIE BR./ PB-2278RR NUTECH/ 6156 ASGROW/ AG1403 HEFTY/ 168R WENSMAN/ W 2166RR	141 131 128 134 134	53* 54 53 53 54	63 61 59 60 61	1 1 1 1	58 53 53 52 51	60 52 50 49 47	1 1 1 1	56 54 53 53 53	62 57 55 55 54	1 1 1 1
PIONEER/ 91Y90 HEFTY/ 179R NUTECH/ 6193 PRAIRIE BR./ PB-1597RR MUSTANG/ M-168RR	137 140 139 133 133	51 51 51 52 52	60 59 60 61 57	1 1 1 1	53 53 52 51 52	54 55 48 47 49	1 1 1 1	52 52 52 52 52 52	57 57 54 54 53	1 1 1 1
PRAIRIE BR./ PB-1918RR PRAIRIE BR./ PB-2058NRR MUSTANG/ M-177NRR NUTECH/ 6205+RR MUSTANG/ M-159NRR	140 141 138 139 136	51 55 53 55 55	59 63 63 63 64	1 1 1 1	50 47 47 45 44	49 43 41 41 36	1 1 1 1	51 51 50 50 50	54 53 52 52 50	1 1 1 1
MUSTANG/ M-190NRR ASGROW/ AG1702 HEFTY/ 199R HEFTY/ 159R NUTECH/ 1808RN	140 130 140 136 142	51 51 51 54 50	60 59 59 62 58	1 1 1 1	47 46 47 43 46	49 45 45 35 49	1 1 1 1	49 49 49 49 48	55 52 52 49 54	1 1 1 1
KRUGER/ K-189RR/SCN PROSEED/ 81-50 SODAK GEN./ SD1161RR/SCN PROSEED/ 81-30 REA/ EXP-1056	140 138 133 132 130	52 55 49 47	61 64 55 53 65	1 1 1 1	43 39 38 40	36 25 28 29	1 1 1 1 .	48 47 44 44	49 45 42 41 65	1 1 1 1
RENK/ RS160NR2 STINE/ 1423-4 GOLD COUNTRY/ 1915NRR REA/ EXP-1054 REA/ EXP-1059	128 131 131 129 128	54	65 64 63 63 63	1 1 1 1 1			:		65 64 63 63 63	
KRUGER/ K-167RR/SCN RENK/ RS179NRR RENK/ RS140NR2 RENK/ RS180R2 GOLD COUNTRY/ 2815RR	124 135 134 130 126	54 53 54	62 62 62 61 60	1 1 1 1					62 62 62 61 60	
MUSTANG/ M-19990 PRAIRIE BR./ EXP 141 KRUGER/ EXPK2X14A9 KRUGER/ K2-1901 GOLD COUNTRY/ EXP 1940	131 137 134 134 132		63 63 63 61 63	1 1 1 1		54 55 52 54 52	1 1 1 1		59 59 58 58 58	1 1 1 1
DAIRYLAND/ DST14-003R2Y PRAIRIE BR./ EXP 158 PRAIRIE BR./ EXP 199 CHANNEL BRAND/ 1651R KRUGER/ EXPK2X11B9	139 134 131 131 132		61 61 63 63 65	1 1 1 1		54 55 53 52 49	1 1 1 1		58 58 58 58 58 57	1 1 1 1
KALTENBERG/ KB1809RR STINE/ 1568-4 PRAIRIE BR./ EXP 179 WENSMAN/ W 3192NR2 ASGROW/ RY1719	133 127 133 137 134	50 51	57 57 68 63 61	1 1 1 1 1		46 51 50	1 1 1 1		57 57 57 57 56	1 1 1

Table 4a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- central South Dakota locations, 2008-2009 (continued).

South Dakota locat	, 2	200-200									
				ntral Average	es by Lo			Central Zone Averages			
Brand/Variety	DTM		Brooki	ings		Band	roft				
2.4, 24,	[1]	Yield	-bu/a	2009 Lodg.	Yield-bu/a		2009 Lodg.	Yield-bu/a		2009 Lodg.	
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	
MUSTANG/ M-13320 KRUGER/ EXPK2X15B9 WENSMAN/ W 3186R2 ASGROW/ RY1709 NUTECH/ 7199	133 130 131 136 141		59 59 61 61 59	1 1 1 1		52 52 50 49 51	1 1 1 1		56 56 56 55 55	1 1 1 1	
KRUGER/ EXPK2X10A9 KRUGER/ EXPK2X19B9 PRAIRIE BR./ EXP 201 RENK/ RS110R2 GOLD COUNTRY/ 2713RR	128 136 140 127 134		62 59 64 55 54	1 1 1 1		48 50 45	1 1 1		55 55 55 55 54	1 1 1	
DAIRYLAND/ DSR1423RRSTS DAIRYLAND/ DSR-1807/R2Y PRAIRIE BR./ EXP 215 SODAK GEN./ SD2121RR WENSMAN/ W 2112RR	133 136 141 129 123		57 59 62 60 60	1 1 1 1		51 48 45 48 43	1 1 1 1		54 54 54 54 52	1 1 1 1	
ASGROW/ AG1703 NUTECH/ 6191 ASGROW/ AG1506 NUTECH/ 6145 G-2 GENETICS/ 7186	138 139 135 137 137		62 63 57 61 58	1 1 1 1		39 39 43 39 42	1 1 1 1		51 51 50 50 50	1 1 1 1	
G-2 GENETICS/ 6159 G-2 GENETICS/ 7129 KRUGER/ K-129RR KRUGER/ K-163RR	131 129 135 144		58 55	1	49 45	40 36 45 38	1 1 1		49 46 45 38	1 1	
Test avg.: High avg.: Low avg.: [3] Test LSD (.05): [4] Min.TPG-avg.: [5] Max.TPG-avg.: [6] Test Coef. Var.: No. Entries:	135 144 123	52 55 47 4 51 5 30	61 68 53 4 64 4 72	1 1 0 1 0 72	48 58 38 12 46 9	46 60 25 8 52 11	1 1 0 1 0 59	50 56 44 **	54 65 38 **	1 1 1	

^[1] DTM= days to maturity from seeding dates of May 19 at Brookings and May 20 at Bancroft.

Note that additional table footnotes are explained in Table F.

* Values in **bold type** within a column are included in the top-performance group.

** There was a significant variety by location interaction for yield. Therefore, evaluate yield by using the yield columns for each location.

Table 4b. Glyphosate-resistant maturity group-I soybean variety protein and oil averages- central South Dakota locations, 2009. Entries are sorted by 2009 zone protein.

Juni Bukota iocations, 2005. L		· · · ·		es by Location	 1*	Central Zone		
Brand/Variety	DTM	Brookin	igs	Bancro	oft	Averaç		
Drailu/variety	[1]	Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)	
PRAIRIE BR./ EXP 215	141	38.8	17.0	38.5	19.0	38.6	18.0	
KRUGER/ EXPK2X10A9	128	38.6	17.1	37.5	18.7	38.1	17.9	
HEFTY/ 179R	140	38.2	17.2	36.9	18.8	37.5	18.0	
KRUGER/ EXPK2X15B9	130	37.8	17.4	37.2	18.3	37.5	17.9	
KRUGER/ EXPK2X19B9	136	37.3	17.9	37.1	19.9	37.2	18.9	
DAIRYLAND/ DSR-1807/R2Y	136	37.2	16.8	36.3	19.5	36.8	18.2	
PRAIRIE BR./ EXP 201	140	36.7	17.5	36.9	18.8	36.8	18.2	
WENSMAN/ W 3192NR2	137	36.9	17.8	36.5	19.3	36.7	18.6	
NUTECH/ 7199	141	37.0	18.0	36.4	19.7	36.7	18.9	
MUSTANG/ M-19990	131	37.1	16.7	36.1	18.9	36.6	17.8	
MUSTANG/ M-190NRR	140	37.6	18.3	35.5	19.9	36.6	19.1	
WENSMAN/ W 2112RR	123	38.2	16.4	34.9	19.1	36.5	17.8	
SODAK GEN./ SD2121RR	129	36.4	17.4	36.6	19.2	36.5	18.3	
KRUGER/ K-189RR/SCN	140	36.8	17.8	36.0	19.7	36.4	18.8	
PROSEED/ 81-30	132	37.5	17.5	35.3	19.6	36.4	18.5	
WENSMAN/ W 3186R2	131	36.7	16.9	36.0	18.1	36.3	17.5	
PRAIRIE BR./ PB-1918RR	140	36.4	17.1	36.0	19.7	36.2	18.4	
ASGROW/ AG1702	130	37.3	17.3	35.1	19.4	36.2	18.4	
HEFTY/ 199R	140	35.8	17.1	36.5	19.9	36.2	18.5	
PIONEER/ 91Y90	137	36.5	17.3	35.6	19.2	36.1	18.3	
PRAIRIE BR./ EXP 199	131	36.9	16.7	35.0	18.5	36.0	17.6	
GOLD COUNTRY/ EXP 1940	132	37.1	17.0	34.7	18.7	35.9	17.9	
ASGROW/ RY1719	134	36.2	17.1	35.6	19.8	35.9	18.4	
SODAK GEN./ SD1161RR/SCN	133	36.2	17.6	35.4	18.6	35.8	18.1	
PRAIRIE BR./ PB-2058NRR	141	36.2	18.2	35.3	20.2	35.7	19.2	
NUTECH/ 1808RN	142	36.0	17.9	35.4	19.5	35.7	18.7	
NUTECH/ 6193	139	36.1	17.2	35.2	19.6	35.6	18.4	
ASGROW/ RY1709	136	36.0	17.9	34.9	19.8	35.5	18.8	
G-2 GENETICS/ 7129	129	35.0	18.9	35.6	20.6	35.3	19.8	
PRAIRIE BR./ EXP 179	133	36.2	18.0	34.0	19.4	35.1	18.7	
PRAIRIE BR./ EXP 141	137	35.3	18.1	34.8	19.2	35.1	18.6	
NUTECH/ 6191	139	35.3	18.7	34.7	20.3	35.0	19.5	
DAIRYLAND/ DSR1423RRSTS	133	35.4	17.2	34.6	19.7	35.0	18.5	
ASGROW/ AG1403	128	35.8	16.9	34.1	19.1	35.0	18.0	
KRUGER/ EXPK2X11B9	132	35.9	17.2	34.1	18.1	35.0	17.6	
NUTECH/ 6145	137	36.2	18.2	33.6	19.8	34.9	19.0	
PROSEED/ 81-50	138	35.1	18.7	34.7	20.4	34.9	19.6	
MUSTANG/ M-159NRR	136	34.3	18.6	35.4	20.8	34.9	19.7	
PRAIRIE BR./ PB-2278RR	141	35.2	17.5	34.3	18.8	34.8	18.1	
G-2 GENETICS/ 7186	137	36.2	18.0	33.1	20.7	34.6	19.3	
ASGROW/ AG1506	135	35.8	18.4	33.3	20.2	34.5	19.3	
MUSTANG/ M-13320	133	34.8	17.8	34.2	19.4	34.5	18.6	
KRUGER/ EXPK2X14A9	134	35.5	18.0	33.6	18.7	34.5	18.3	
DAIRYLAND/ DST14-003R2Y	139	34.7	17.9	34.3	19.2	34.5	18.6	
PRAIRIE BR./ EXP 158	134	35.0	17.6	34.0	19.5	34.5	18.5	
G-2 GENETICS/ 6159	131	35.8	18.2	33.0	20.7	34.4	19.5	
WENSMAN/ W 2166RR	134	34.5	17.9	34.2	20.5	34.3	19.2	
NUTECH/ 6205+RR	139	34.1	18.1	34.4	19.8	34.2	19.0	
HEFTY/ 168R	134	34.6	18.1	33.7	20.0	34.2	19.1	
KRUGER/ K2-1901	134	34.0	18.0	34.2	19.4	34.1	18.7	

Table 4b. Glyphosate-resistant maturity group-I soybean variety protein and oil averages- central South Dakota locations, 2009 (continued).

		Centra	I Averag	Central Zone				
Brand/Variety	DTM	Brookin	ıgs	Bancro	oft	Averages		
Diana, variety	[1]	Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)	
MUSTANG/ M-168RR PRAIRIE BR./ PB-1597RR MUSTANG/ M-177NRR NUTECH/ 6156 HEFTY/ 159R	133 133 138 131 136	34.8 35.4 34.2 35.3 34.3	18.3 18.0 19.1 18.3 18.6	33.2 32.6 33.6 32.4 33.4	20.8 20.2 20.8 19.7 20.4	34.0 34.0 33.9 33.9 33.9	19.6 19.1 20.0 19.0 19.5	
ASGROW/ AG1703 CHANNEL BRAND/ 1651R KRUGER/ K-129RR KRUGER/ K-163RR KRUGER/ K-167RR/SCN	138 131 135 144 124	34.6 34.6 36.2	18.8 18.4 18.1	32.9 32.9 35.5 34.7	20.0 20.1 19.8 19.9	33.8 33.7	19.4 19.3	
GOLD COUNTRY/ 2713RR GOLD COUNTRY/ 2815RR GOLD COUNTRY/ 1915NRR KALTENBERG/ KB1809RR STINE/ 1568-4	134 126 131 133 127	36.0 36.1 34.3 35.3 35.8	17.8 18.0 18.4 17.9 17.9					
STINE/ 1423-4 REA/ EXP-1054 REA/ EXP-1056 REA/ EXP-1059 RENK/ RS179NRR	131 129 130 128 135	33.9 35.0 36.2 37.0 38.0	18.5 18.0 17.4 16.9 17.4					
RENK/ RS110R2 RENK/ RS140NR2 RENK/ RS160NR2 RENK/ RS180R2	127 134 128 130	36.5 35.0 36.9 36.6	16.8 18.1 18.1 17.2			·		
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min.TPG-avg. : [6] Coef. Var. : No. Entries :	135 144 123	36.0 38.8 33.9 1.3 37.6 2 72	17.8 19.1 16.4 0.7 18.5 2 72	34.9 38.5 32.4 1.5 37.1 3 59	19.6 20.8 18.1 0.8 20.1 3 59	35.5 **	18.6	

^[1] DTM= days to maturity from seeding dates of May 19 at Brookings and May 20 at Bancroft.

Note that additional table footnotes are explained in Table F.

* Values in bold type within a column are included in the top-performance group.

** There were significant variety by location interactions for protein and oil. Therefore, evaluate yield by using the protein and oil columns for each location.

Table 5a. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- central South Dakota locations, 2008-2009. Entries are sorted by 2-Yr then by 2009 zone yield.

South Dakota Io	vaciviis, 2	_000-20		entral Average						
B 107 1 .	D=141		Brook			Band		Cent	ral Zon	e Averages
Brand/Variety	DTM [1]	Yield-	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]
ASGROW/ AG2108 KRUGER/ K-204RR/SCN NUTECH/ 6234RR ASGROW/ DKB22-52 PRAIRIE BR./ PB-2117NRR	137 134 139 131 139	54* 55 53 55 55	58 60 59 60 56	1 1 1 1	51 50 51 48 50	50 45 47 42 45	1 1 1 1	53 53 52 52 52 51	54 53 53 51 51	1 1 1 1
MUSTANG/ M-219RR KRUGER/ K-249RR/SCN PRAIRIE BR./ PB-2243RR PRAIRIE BR./ PB-2207NRR NUTECH/ 6211	133 138 133 134 139	52 56 55 54 54	56 61 58 62 59	1 1 1 1	50 45 46 45 46	43 37 37 41 40	1 1 1 1	51 51 51 50 50	50 49 48 52 50	1 1 1 1
PRAIRIE BR./ PB-2558NRR MUSTANG/ M-209NRR HEFTY/ 218RN PRAIRIE BR./ PB-2147RR G-2 GENETICS/ 7226	136 138 134 138 137	53 52 54 50 56	57 55 58 54 61	1 1 1 1	47 47 43 48 40	42 39 38 40 32	1 1 1 1	50 50 49 49 48	50 47 48 47 47	1 1 1 1
PRAIRIE BR./ PB-2419RR2 ASGROW/ RY2119 MUSTANG/ M-21320 KRUGER/ EXPK2X21A9 PRAIRIE BR./ EXP 195	137 135 134 134 131		62 64 60 58 57	1 1 1 1		60 50 54 55 55	1 1 1 1		61 57 57 57 56	1 1 1 1
MUSTANG/ M-20420 G-2 GENETICS/ 6247 NUTECH/ 7203 G-2 GENETICS/ 7208 G-2 GENETICS/ 7212	138 137 133 134 141	: : :	59 58 62 61 64	1 1 1 1		51 52 45 47 44	1 1 1 1		55 55 54 54 54	1 1 1 1
PRAIRIE BR./ EXP 207 PIONEER/ 92Y10 KRUGER/ K2-2701 NUTECH/ 7222 NUTECH/ 6244	132 132 138 133 137	i	61 57 59 64 58	1 1 1 1		44 46 45 38 43	1 1 1 1	:	53 52 52 51 51	1 1 1 1
PRAIRIE BR./ PB-2099NRR2 WENSMAN/ W 2222NRR PRAIRIE BR./ PB-2439NRR2 CHANNEL BRAND/ 2200R2 HEFTY/ EXP200R	134 133 134 135 133		61 63 61 57 60	1 1 1 1		41 38 39 42 37	1 1 1 1	V	51 51 50 50 49	1 1 1 1 1
CHANNEL BRAND/ 2151R G-2 GENETICS/ 7255 MUSTANG/ M-24620 MUSTANG/ M-23530 PIONEER/ 92Y30	135 134 135 141 134	55	59 48 61 61 56	1 1 1 1		33 40	1 1		46 44	1 1
HEFTY/ 229R GOLD COUNTRY/ 8820NRR KALTENBERG/ EXP 2010 STINE/ 2062-4 REA/ EXP-1062	132 135 135 133 134	53	58 60 57 61 61	1 1 1 1						
REA/ EXP-1064 REA/ EXP-1068 RENK/ RS210NR2 RENK/ RS200NR2	135 138 138 133		62 60 58 55	1 1 1 1						: : :
Test avg. : High avg. : Low avg. : [3] Test LSD (.05): [4] Min.TPG-avg. : [5] Max.TPG-avg. : [6] Test Coef. Var.: No. Entries:	135 141 131	54 56 50 NS** 50 6	59 64 48 4 60 5	1 1 0 1 0 49	47 51 40 6 45 8	44 60 32 6 54 9	1 1 1 0 1 0 37	51 53 48 ***	52 61 44 ***	1 1 1

^[1] DTM= days to maturity from seeding dates of May 19 at Brookings and May 20 at Bancroft.

* Values in **bold type** within a column are included in the top-performance group.

Note that additional table footnotes are explained in Table F.

^{**} Indicates differences between values within a column were non-significant (NS).

^{***} There was a significant variety by location interaction for yield. Therefore, evaluate yield by using the yield columns for each location.

Table 5b. Glyphosate-resistant maturity group-II soybean variety protein and oil averages- central South Dakota locations, 2009. Entries are sorted by 2009 zone protein.

tral South Dakota locations, 2009. Entries are sorted by 2009 zone protein.										
	Centr	al Averag	es by Locatio	n	•					
DTM [1]	Brookin	igs	Bancr	oft	Averag	es				
	Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)				
138 136 138 134 137	40.1 39.6 39.0 39.2 38.3	16.4 16.7 16.8 19.5 17.5	37.8 37.6 37.8 36.7 37.0	19.4 19.2 18.0 19.3 18.8	38.9 38.6 38.4 37.9 37.6	17.9 18.0 17.4 19.4 18.2				
133 132 135 139 137	39.4 37.7 38.4 38.6 37.6	17.3 17.7 16.3 16.7 17.9	35.7 37.3 36.5 36.1 36.7	18.6 19.0 19.5 19.4 20.6	37.6 37.5 37.5 37.4 37.2	18.0 18.4 17.9 18.0 19.2				
137 138 134 132 134	38.2 38.5 37.6 37.8 38.2	18.1 17.1 17.7 17.4 18.1	36.0 35.5 36.4 35.7 35.0	19.0 19.0 19.5 19.2 18.8	37.1 37.0 37.0 36.8 36.6	18.5 18.1 18.6 18.3 18.5				
134 137 137 134 133	38.2 36.1 36.8 36.8 37.1	18.2 17.6 17.4 18.8 18.0	34.8 36.6 35.9 35.9 35.3	19.8 19.4 19.7 20.2 19.5	36.5 36.4 36.4 36.4 36.2	19.0 18.5 18.6 19.5 18.8				
133 135 139 134 133	37.0 35.8 37.2 36.9 35.9	17.7 18.3 17.6 18.6 18.5	35.2 36.2 34.5 34.7 35.2	19.4 19.9 20.5 19.7 19.3	36.1 36.0 35.9 35.8 35.6	18.5 19.1 19.0 19.1 18.9				
131 138 134 135 133	35.3 36.0 37.2 35.9 35.7	17.9 18.0 18.4 18.6 18.4	35.6 34.9 33.6 34.7 34.8	19.5 20.3 20.2 20.1 20.2	35.5 35.4 35.4 35.3 35.3	18.7 19.1 19.3 19.4 19.3				
141 131 139 134 133	35.5 35.5 35.5 36.1 35.3	18.6 18.5 19.0 18.2 18.7	34.7 34.4 34.3 33.5 33.9	20.5 19.6 19.8 20.3 19.9	35.1 35.0 34.9 34.8 34.6	19.6 19.0 19.4 19.3 19.3				
134 138 135 141 134	35.8 34.5 37.1 38.2 37.8	18.4 18.2 17.8 17.8 17.6	32.8 33.5	20.5 19.7	34.3 34.0	19.5 18.9				
132 135 135 133 134	36.8 35.7 39.1 36.0 36.2	18.1 18.6 17.5 18.5 18.1								
135 138 138 133	37.3 37.7 35.7 35.2	17.7 18.0 18.2 18.4								
135 141 131	37.1 40.1 34.5 1.0 39.2 2 49	17.9 19.5 16.3 0.8 18.8 3 49	35.5 37.8 32.8 1.7 36.2 3	19.6 20.6 18.0 0.8 19.9 2 37	36.3 **	18.8 **				
	138 136 138 134 137 133 132 135 139 137 138 134 132 134 133 131 138 134 133 135 139 134 133 131 138 134 135 139 134 131 138 134 135 131 139 134 131 139 134 131 139 134 131 139 134 131 139 134 131 139 134 131 139 134 131 139 134 133 135 141 131 139 134 135 131 138 134 135 131 138 135 141 131 139 134 133 135 141 131 139 134 133 135 141 131 139 134 133 135 141 131 139 134 138 135 141 131 135 135 136 137 137 138 138 138 138 138 138 138 138 138 138	DTM [1] Brookin 138 40.1 136 39.6 138 39.0 134 39.2 137 38.3 132 37.7 135 38.4 139 38.6 137 38.2 138 38.5 134 37.6 137 36.1 137 36.8 134 38.2 137 36.8 134 36.8 133 37.1 133 37.2 134 36.8 133 37.2 134 36.9 133 35.9 131 35.3 138 36.0 134 37.2 135 35.9 131 35.5 139 35.5 134 36.1 135 35.9 133 35.5 134 36.1	Central Average Protein (%) Oil (%) 138 40.1 16.4 138 39.6 16.7 138 39.0 16.8 134 39.2 19.5 137 38.3 17.5 133 39.4 17.3 132 37.7 17.7 135 38.4 16.3 139 38.6 16.7 137 37.6 17.9 137 38.2 18.1 138 38.5 17.1 134 37.6 17.9 137 38.2 18.1 134 37.6 17.7 134 38.2 18.1 134 38.2 18.1 137 36.8 17.4 134 38.2 18.1 137 36.8 17.4 134 36.8 18.8 133 37.1 18.0 133 37.2	Central Averages by Location Brookings Bance Protein (%) Oil (%) Protein (%) 138 40.1 16.4 37.8 138 39.0 16.8 37.6 138 39.0 16.8 37.0 137 38.3 17.5 36.7 137 38.3 17.5 37.0 133 39.4 17.3 35.7 135 38.4 16.3 36.5 139 38.6 16.7 36.1 137 37.6 17.9 36.7 137 38.2 18.1 36.0 138 38.5 17.1 35.5 134 37.6 17.7 36.4 137 36.1 17.6 36.6 137 36.8 17.4 35.9 134 38.2 18.1 35.0 134 36.8 18.8 35.9 133 37.1 18.0	DTM [1]	DTM [1] Brooking Bancom Central Z Average Protein (%) Oil (%) Protein (%) Oil (%) Protein (%) Oil (%) Protein (%) Oil (%) Protein (%) Noil (%) Protein (%) 138				

^[1] DTM= days to maturity from seeding dates of May 19 at Brookings and May 20 at Bancroft. Note that additional table footnotes are explained in Table F.

 $^{^{\}star}$ Values in bold type within a column are included in the top-performance group.

^{**} There were significant variety by location interactions for protein and oil. Therefore, evaluate yield by using the protein and oil columns for each location.

Table 6a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- southern South Dakota locations, 2008-2009. Entries are sorted by 2-Yr then by 2009 zone yield.

Journ Dakota locati				uthern Avera					7	
Brand/Variety	DTM [1]		Beres	ford		Gedo	les	South	iern Zon	e Averages
branu/variety	ן וואווט <u> </u>	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.	Yield	l-bu/a	2009 Lodg.
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]
PRAIRIE BR./ PB-2278RR PRAIRIE BR./ EXP PB-2282 PRAIRIE BR./ PB-2058NRR NUTECH/ NT-6205+RR	125 123 121 121	58* 57 57 54	68 67 66 65	1 1 1 1	54 54 52 51	55 54 52 53	1 1 1 1	56 56 55 53	62 61 59 59	1 1 1 1
PRAIRIE BR./ EXP PB-1170 PRAIRIE BR./ PB-1956RR NUTECH/ 6193 PROSEED/ 81-90	121 124 119 126	56 54 54 50	66 61 62 56	1 1 1 1	48 50 49 49	50 52 50 44	1 1 1 1	52 52 52 50	58 57 56 50	1 1 1
PRAIRIE BR./ PB-1918RR SODAK GEN./ SD1161RR/SCN KRUGER/ K-189RR/SCN PRAIRIE BR./ EXP 215	121 120 120 122	51 49 46	60 59 60 70	1 1 1 1	47 45 46	48 42 47 57	1 1 1 1	49 47 46	54 51 54 64	1 1 1
KRUGER/ EXPK2X14A9 KRUGER/ EXPK2X15B9 KRUGER/ EXPK2X19B9 PRAIRIE BR./ EXP 201	118 117 121 122		70 67 71 70	1 1 1 1		55 56 52 53	1 1 1		63 62 62 62	1 1 1
PRAIRIE BR./ PB-1999NRR2 KRUGER/ EXPK2X16A9 WENSMAN/ W 3192NR2 PRAIRIE BR./ EXP 199	121 121 121 117		64 68 68 66	1 1 1 1		58 52 52 51	1 1 1		61 60 60 59	1 1 1
G-2 GENETICS/ 6159 WENSMAN/ W 3186R2 KRUGER/ K2-1901 G-2 GENETICS/ 7186	115 117 121 118		63 67 63 62	1 1 1 1		52 49 51 49	1 1 1 1	.7	58 58 57 56	1 1 1
NUTECH/ 1808RN SODAK GEN./ SD2121RR KRUGER/ K-167RR/SCN	123 113 118	:	61 61	1 1 .	50	48 47 53	1 1 1	· ·	55 54	1 1
Test avg.: High avg.: Low avg.: [3] Test LSD (.05): [4] Min.TPG-avg.: [5] Max.TPG-avg.: [6] Test Coef. Var.: No. Entries:	120 126 113	53 58 46 7 51	65 71 56 3 68 3 26	1 1 0 1 0 26	50 54 45 6 48 7	51 58 42 5 53 6 27	1 1 0 1 0 27	52 56 46 **	58 64 50 **	1 1 1

^[1] DTM= days to maturity from seeding dateS of May 22 at Beresford and June 1 at Geddes.

Note that additional table footnotes are explained in Table F.

* Values in **bold type** within a column are included in the top-performance group.

*** There was a significant variety by location interaction for yield. Therefore, evaluate yield by using the yield and lodging columns for each location.

Table 6b. Glyphosate-resistant maturity group-I soybean variety protein and oil averages- southern South Dakota locations, 2009. Entries are sorted by 2009 zone protein.

South Dakota locations, 2009.				es by Locatio	nn*	Ca 4l	7
D 10/	DT84 [4]	Beresto		Gedd		Southern Averaç	
Brand/Variety	DTM [1]	Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)
KRUGER/ EXPK2X15B9	117	39.3	20.6	38.8	20.5	39.0	20.6
PRAIRIE BR./ EXP 215	122	38.7	19.7	38.7	21.3	38.7	20.5
KRUGER/ EXPK2X16A9	121	38.0	20.7	37.9	21.1	38.0	20.9
KRUGER/ EXPK2X19B9	121	38.2	20.5	37.5	20.8	37.9	20.7
PRAIRIE BR./ EXP 201	122	38.4	20.4	37.3	20.7	37.9	20.6
PRAIRIE BR./ EXP 199	117	37.4	19.3	38.0	21.4	37.7	20.4
PRAIRIE BR./ PB-1999NRR2	121	37.7	20.7	37.7	21.5	37.7	21.1
WENSMAN/ W 3192NR2	121	38.0	20.7	37.2	20.6	37.6	20.7
WENSMAN/ W 3186R2	117	38.4	20.6	36.4	20.4	37.4	20.5
KRUGER/ K-189RR/SCN	120	38.1	20.6	36.5	21.3	37.3	21.0
G-2 GENETICS/ 7186	118	37.2	22.0	37.5	21.8	37.3	21.9
SODAK GEN./ SD1161RR/SCN	120	37.7	19.6	36.9	20.8	37.3	20.2
PRAIRIE BR./ PB-2278RR	125	36.7	20.3	37.3	21.7	37.0	21.0
PRAIRIE BR./ PB-2058NRR	121	37.2	21.3	36.5	21.6	36.9	21.5
PRAIRIE BR./ EXP PB-1170	121	37.2	21.6	35.9	22.0	36.5	21.8
PROSEED/ 81-90	126	37.1	20.5	35.9	19.2	36.5	19.8
KRUGER/ K2-1901	121	36.9	20.4	35.1	20.2	36.0	20.3
NUTECH/ 6193	119	37.2	20.1	34.7	20.5	36.0	20.3
PRAIRIE BR./ PB-1918RR	121	36.8	20.6	34.9	20.4	35.9	20.5
KRUGER/ EXPK2X14A9	118	36.5	20.5	35.2	20.2	35.9	20.3
SODAK GEN./ SD2121RR	113	37.6	20.1	33.9	19.3	35.8	19.7
NUTECH/ 1808RN	123	37.0	20.8	34.3	20.6	35.7	20.7
G-2 GENETICS/ 6159	115	37.2	21.1	33.8	20.9	35.5	21.0
PRAIRIE BR./ EXP PB-2282	123	36.0	21.9	34.9	21.6	35.4	21.7
NUTECH/ NT-6205+RR	121	36.4	21.1	33.4	20.6	34.9	20.9
PRAIRIE BR./ PB-1956RR KRUGER/ K-167RR/SCN	124 118	34.9	21.7	34.8 35.6	21.0 21.9	34.8	21.4
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min.TPG-avg. : [6] Coef. Var. : No. Entries :	120 126 113	37.4 39.3 34.9 1.4 38.0 2 26	20.7 22.0 19.3 0.9 21.2 3 26	36.2 38.8 33.4 2.9 36.0 5	20.9 22.0 19.2 NS** 19.2 5 27	36.8 ***	20.8

^[1] DTM= days to maturity from a seeding dates of May 22 at Beresford and June 1 at Geddes. Note that additional table footnotes are explained in Table F.

^{*} Values in bold type within a column are included in the top-performance group.
** Indicates differences between values within a column were non-significant (NS).

^{***} There were significant variety by location interactions for protein and oil. Therefore, evaluate yield by using the protein and oil columns for each location.

Table 7a. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- southern South Dakota locations, 2008-2009. Entries are sorted by 2-Yr then by 2009 zone yield.

Brand/Variety	DTM			outhern Aver				Sout	hern Zoı	ne Averages
-	[1]		Beres	ford		Gedo	des			
		Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]
ASGROW/ DKB27-52 PIONEER/ 92Y30 PIONEER/ 93M11 PRAIRIE BR./ PB-2558NRR NUTECH/ 7274	127 122 131 126 127	60 56 59 54 53	71 64 66 64 67	1 1 1 1	59 60 57 59 58	65 64 58 60 64	1 2 1 1	60 58 58 57 56	68 64 62 62 66	1 1 1 1
HEFTY/ EXP229RN KALTENBERG/ KB249RR PRAIRIE BR./ PB-2207NRR WENSMAN/ W 2222NRR NUTECH/ NT-2324+RR/SCN	121 126 124 123 124	53 52 56 55	61 61 64 64 63	1 1 1 1	58 60 56 56 56	62 62 57 58 55	1 2 1 1 1	56 56 56 56 56	62 62 61 61 59	1 2 1 1
PRAIRIE BR./ PB-2515RR PROSEED/ 82-00N HEFTY/ 248R HEFTY/ EXP259RN DAIRYLAND/ DST25-002/RR	126 124 129 125 126	51 53 54 52 56	62 62 62 62 65	1 1 1 1	58 57 55 57 52	64 61 60 60 60	2 1 1 1 1	55 55 55 55 54	63 62 61 61 63	2 1 1 1 1
DAIRYLAND/ DSR-2770/RR G-2 GENETICS/ 7226 NUTECH/ 6211 DAIRYLAND/ DSR-2200/RR MUSTANG/ M-318RR	129 124 122 127 132	53 50 48 51 50	60 62 58 62 63	2 1 1 1	54 55 56 53 50	56 58 57 54 52	2 1 1 1 3	54 53 52 52 50	58 60 58 58 58	2 1 1 1 2
NUTECH/ 2660RN PRAIRIE BR./ PB-2099NRR2 PIONEER/ 92Y80 ASGROW/ RY2409 CHANNEL BRAND/ 2400R2	126 125 126 123 126		67 66 66 67 64	1 1 1 1 1		71 71 67 65 67	1 1 2 1	· · ·	69 69 67 66 66	1 1 2 1 1
GOLD COUNTRY/ 8820NRR CHANNEL BRAND/ 2200R2 ASGROW/ AG2939 MUSTANG/ M-259NRR G-2 GENETICS/ 7212	122 123 130 125 123	53	63 65 69 63 63	1 1 1 1		66 64 58 65 64	1 1 1 1	; : :	65 65 64 64 64	1 1 1 1
PRAIRIE BR./ EXP 207 PRAIRIE BR./ PB-2439NRR2 HEFTY/ EXP200R DAIRYLAND/ DSR-2525RRAP PRAIRIE BR./ PB-2419RR2	125 125 122 124 126		63 65 62 62 66	1 1 1 1		65 63 64 64 59	1 2 1 2 1		64 64 63 63 63	1 1 1 2 1
NUTECH/ 7222 KRUGER/ K2-2701 PRAIRIE BR / PB-3039NRR2 ASGROW/ RY2419 ASGROW/ AG2839	123 128 134 126 130		63 65 66 65 66	1 1 2 2 1		61 59 57 57 55	1 3 3 2 2		62 62 62 61 61	1 2 3 2 2
ASGROW/ RY2809 NUTECH/ 6244 DAIRYLAND/ DSR-2132/R2Y PRAIRIE BR./ PB-2667NRR CHANNEL BRAMD/ 2551R2	131 127 124 126 124		66 63 64 64 62	2 1 1 1		56 59 58 57 60	2 1 1 1		61 61 61 61 61	2 1 1 1 1
ASGROW/ RY2929 MUSTANG/ M-28929 KRUGER/ EXPK2X21A9 G-2 GENETICS/ 6279 PRAIRIE BR./ PB-2828NRR2	131 130 122 127 129		66 63 60 64 63	2 2 1 1 2		53 57 60 56 57	1 1 1 1 2		60 60 60 60 60	1 2 1 1 2
WENSMAN/ W 3280NR2 MUSTANG/ M-270NRR NUTECH/ 2707RR G-2 GENETICS/ 7208 KRUGER/ K2-2801	128 128 130 122 130		63 59 62 59 58	1 1 2 1		56 59 55 59 58	1 2 3 1 2		60 59 59 59 58	1 1 3 1 2

Table 7a. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- southern South Dakota locations, 2008-2009 (continued).

			S	outhern Aver	ages by	Location	1	Court	horn 7or	2009 Lodg. (1-5) [2] 2 2 2
Brand/Variety	DTM		Beres	ford		Gedo	les	South	ilerii Zui	e Averages
Drailu/ variety	[1]	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	
		2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]	2-Yr	2009	(1-5) [2]
G-2 GENETICS/ 7288 NUTECH/ 7269	128 129		59 60	2 2		56 53	2 1		58 57	
MUSTANG/ M-24620	129	i i	62	1					. 37	
MUSTANG/ M-23530 HEFTY/ 218RN	128 122	51	68 60	1						
HEFTY/ EXP279RN	129	53	59	1	<u>:</u>	<u>:</u>	:			
KRUGER/ K-239RR KRUGER/ K-271RR	126 127				55 53	57 53	1 1	·	: :	
KRUGER/ K-204RR/SCN KRUGER/ K-228RR/SCN	123 121	53	60	1 .	62	68	i			
KRUGER/ K-249RR/SCN KRUGER/ K-274RR/SCN	127 128	53	64 63	1						
DAIRYLAND/ DST20-002/RR	126		65	1						
DAIRYLAND/ DST22-006R2Y DAIRYLAND/ DSR-2440/R2Y	125 128		56 65	1 1						
DAIRYLAND/ DST25-003R2Y KALTENBERG/ KB2609RR	128 128		59	1	53	55	i			
KALTENBERG/ EXP 2510	130		64	1						·
KALTENBERG/ EXP 2710 STINE/ 2420-4	130 126		62 59	1 1						
STINE/ EXP 2482-4	129 126		63 61	1						
STINE/ 2538-4 STINE/ 3132-4	137		65	3			7.	1./		i i
RENK/ RS277NRR RENK/ RS259NRR	131 128	56 52	64 58	2				<i>:</i>		
RENK/ RS270NR2	127		64	1						
Test avg. : High avg. :	126 137	53 60	63 71	1 3	56 62	60 71	1 3	55 60	62 69	1 3
Low avg. : [3] Test LSD (.05):	121	48 6	56 5	1	50 6	52 5	1	50 **	57 **	1
[4] Min.TPG-avg. :		54	66		56	66				
[5] Max.TPG-avg. : [6] Test Coef. Var.:		6	5	1 25	5	5	1 27			
No. Entries:		27	77	77	24	61	61			

^[1] DTM= days to maturity from a seeding dated of May 22 at Beresford and June 1 at Geddes.

Note that additional table footnotes are explained in Table F.

* Values in **bold type** within a column are included in the top-performance group.

** There was a significant variety by location interaction for yield and lodging. Therefore, evaluate these variables by using the yield and lodging columns for each location.

Table 7b. Glyphosate-resistant maturity group-II soybean variety protein and oil averages- southern South Dakota locations, 2009. Entries are sorted by 2009 zone protein.

		South	ern Avera	on*	Southern Zone Aver-		
Brand/Variety	DTM [1]	Beresfo	ord	Geddo	es	ages	;
		Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)
PRAIRIE BR./ PB-2558NRR	126	38.8	18.6	39.3	17.3	39.0	18.0
KRUGER/ K2-2701	128	38.1	17.7	39.9	16.8	39.0	17.3
PIONEER/ 92Y80	126	38.2	19.3	39.7	18.3	39.0	18.8
DAIRYLAND/ DSR-2770/RR	129	37.9	18.5	39.6	17.7	38.7	18.1
KALTENBERG/ KB249RR	126	37.6	18.2	39.3	17.5	38.5	17.8
PRAIRIE BR / PB-3039NRR2	134	37.1	16.9	39.7	16.3	38.4	16.6
MUSTANG/ M-318RR	132	37.2	18.7	38.8	17.6	38.0	18.2
NUTECH/ 2707RR	130	36.6	18.8	39.2	18.1	37.9	18.4
G-2 GENETICS/ 6279	127	37.4	19.0	37.6	18.3	37.5	18.7
ASGROW/ RY2929	131	37.6	19.1	37.4	17.8	37.5	18.4
ASGROW/ AG2939	130	36.6	18.3	38.3	17.7	37.4	18.0
DAIRYLAND/ DST25-002/RR	126	36.7	18.8	38.1	18.3	37.4	18.6
ASGROW/ RY2419	126	36.9	17.4	37.8	16.4	37.3	16.9
HEFTY/ 248R	129	36.7	18.5	38.0	17.3	37.3	17.9
ASGROW/ AG2839	130	36.3	18.8	37.8	17.4	37.0	18.1
G-2 GENETICS/ 7288	128	35.6	19.1	38.1	19.6	36.9	19.4
KRUGER/ EXPK2X21A9	122	36.6	19.7	37.0	18.8	36.8	19.3
PRAIRIE BR./ EXP 207	125	36.0	18.9	37.6	18.4	36.8	18.7
DAIRYLAND/ DSR-2200/RR	127	36.8	19.4	36.6	18.6	36.7	19.0
PIONEER/ 92Y30	122	36.1	20.7	37.1	19.8	36.6	20.3
DAIRYLAND/ DSR-2132/R2Y	124	37.0	18.9	36.2	17.7	36.6	18.3
PRAIRIE BR./ PB-2419RR2	126	36.1	19.2	36.6	19.0	36.4	19.1
PIONEER/ 93M11	131	36.0	19.3	36.3	18.8	36.2	19.1
CHANNEL BRAND/ 2400R2	126	36.1	19.0	36.2	18.4	36.2	18.7
G-2 GENETICS/ 7208	122	35.8	19.8	36.3	19.5	36.1	19.6
NUTECH/ 6211	122	36.3	19.1	35.8	19.2	36.1	19.2
NUTECH/ NT-2324+RR/SCN	124	35.9	19.5	36.0	20.2	36.0	19.8
PRAIRIE BR./ PB-2439NRR2	125	35.7	18.7	36.1	18.6	35.9	18.6
HEFTY/ EXP200R	122	35.1	19.7	36.2	20.2	35.6	19.9
ASGROW/ RY2809	131	34.9	18.6	35.8	17.9	35.4	18.2
NUTECH/ 6244	127	35.3	18.8	35.4	19.3	35.4	19.1
NUTECH/ 7274	127	34.9	19.2	35.8	18.2	35.3	18.7
WENSMAN/ W 3280NR2	128	35.3	18.7	35.2	18.4	35.3	18.5
MUSTANG/ M-270NRR	128	34.4	19.3	36.1	18.5	35.2	18.9
NUTECH/ 7269	129	36.0	20.0	34.4	19.5	35.2	19.8
MUSTANG/ M-28929	130	34.9	18.7	35.4	19.1	35.2	18.9
HEFTY/ EXP229RN	121	35.3	19.8	35.0	19.9	35.1	19.8
ASGROW/ RY2409	123	35.4	19.0	34.7	18.4	35.0	18.7
DAIRYLAND/ DSR-2525RRAP	124	34.0	19.1	36.0	18.3	35.0	18.7
PROSEED/ 82-00N	124	35.0	19.4	34.9	19.8	35.0	19.6
G-2 GENETICS/ 7226	124	34.8	19.9	35.1	19.8	34.9	19.9
KRUGER/ K2-2801	130	34.5	18.4	35.2	18.1	34.9	18.2
MUSTANG/ M-259NRR	125	35.0	19.0	34.6	19.2	34.8	19.1
CHANNEL BRAMD/ 2551R2	124	35.3	19.2	34.3	19.1	34.8	19.2
PRAIRIE BR./ PB-2515RR	126	33.3	19.4	36.0	19.7	34.7	19.6
NUTECH/ 2660RN	126	34.5	19.5	34.8	19.0	34.7	19.2
PRAIRIE BR./ PB-2099NRR2	125	33.6	19.3	35.6	19.6	34.6	19.4
PRAIRIE BR./ PB-2828NRR2	129	34.9	18.2	34.1	19.1	34.5	18.6
HEFTY/ EXP259RN	125	34.4	18.9	34.2	19.6	34.3	19.2
CHANNEL BRAND/ 2200R2	123	34.5	20.0	34.0	19.8	34.2	19.9

Table 7b. Glyphosate-resistant maturity group-II soybean variety protein and oil averages- southern South Dakota locations, 2009 (continued).

Brand/Variety	DTM [1]	Southe	ern Avera	ges by Locatio	on*	Southern Zo	ne Aver-
		Beresfo	ord	Gedd	es	ages	;
		Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)
G-2 GENETICS/ 7212 ASGROW/ DKB27-52 NUTECH/ 7222 GOLD COUNTRY/ 8820NRR PRAIRIE BR./ PB-2667NRR	123 127 123 122 126	34.6 33.8 34.0 33.7 33.4	20.2 18.9 20.2 20.2 18.9	33.5 34.2 33.4 33.4 32.6	19.6 18.8 21.0 20.4 19.5	34.1 34.0 33.7 33.6 33.0	19.9 18.9 20.6 20.3 19.2
WENSMAN/ W 2222NRR PRAIRIE BR./ PB-2207NRR MUSTANG/ M-24620 MUSTANG/ M-23530 HEFTY/ 218RN	123 124 129 128 122	33.4 33.3 36.5 36.3 34.1	20.2 20.0 19.2 19.3 19.7	32.0 31.9	20.9 20.6	32.7 32.6	20.6 20.3
HEFTY/ EXP279RN KRUGER/ K-239RR KRUGER/ K-271RR KRUGER/ K-204RR/SCN KRUGER/ K-228RR/SCN	129 126 127 123 121	39.5	17.2 · · 20.2 ·	38.1 37.7 33.7	18.2 18.1 19.4		
KRUGER/ K-249RR/SCN KRUGER/ K-274RR/SCN DAIRYLAND/ DST20-002/RR DAIRYLAND/ DST22-006R2Y DAIRYLAND/ DSR-2440/R2Y	127 128 126 125 128	37.3 36.5 36.0 37.2 35.8	18.0 19.1 19.3 18.0 18.7				
DAIRYLAND/ DST25-003R2Y KALTENBERG/ KB2609RR KALTENBERG/ EXP 2510 KALTENBERG/ EXP 2710 STINE/ 2420-4	128 128 130 130 126	34.8 37.1 35.1 37.6	17.6 18.8 19.3 18.3	36.7	18.0		
STINE/ EXP 2482-4 STINE/ 2538-4 STINE/ 3132-4 RENK/ RS277NRR RENK/ RS259NRR RENK/ RS270NR2	129 126 137 131 128 127	35.0 34.9 37.4 35.3 37.3 37.4	19.0 19.1 17.8 18.4 17.6 17.8				
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min.TPG-avg. : [6] Coef. Var. : No. Entries :	126 137 121	35.8 39.5 33.3 1.0 38.6 2 77	19.0 20.7 16.9 0.7 20.1 2	36.2 39.9 31.9 2.0 38.0 3 61	18.8 21.0 16.3 1.1 20.0 4 61	35.9 **	18.9

^[1] DTM= days to maturity from a seeding dates of May 22 at Beresford and June 1 at Geddes.

Note that additional table footnotes are explained in Table F.

* Values in bold type within a column are included in the top-performance group.

** There were significant variety by location interactions for protein and oil. Therefore, evaluate yield by using the protein and oil columns for each location.

Table 8a. Non-glyphosate-resistant maturity group-0 and -I soybean variety yield and lodging averages- South Shore, 2008-09.

			Yield	average (bu/a	a) by matı	urity grou	р
DDAND WADIETY	DT84 [4]		MG-0)		MG-I	
BRAND/VARIETY	DTM [1]	Yield	l-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.
		2-yr	2009	(1-5) [2]	2-yr	2009	(1-5) [2]
MUSTANG/ ML-0979 PUBLIC/MN0908CN PUBLIC/HAMLIN PUBLIC/SURGE RICHLAND ORG./ MK0508	128 133 131 130 130	43 43 38	53* 48 47 47 44	1 1 1 1			
PUBLIC/MN0806CN PUBLIC/SD05-767 PUBLIC/SD00-1501 RICHLAND ORG./ MK0649 MUSTANG/ ML-1520	128 133 129 123 131	35	44 44 42 41	1 1 1 1			
PUBLIC/MN1701CN PUBLIC/DEUEL PUBLIC/MN1410 PUBLIC/MN1505SP RICHLAND ORG./ MK1016	133 129 130 131 126				45 41 45	46 44 42 41 37	1 1 1 1
Test avg.: High avg.: Low avg.: [3] LSD (.05): [4] Min. TPG avg.: [5] Max. TPG avg.: [6] Coef. Var.:	130 133 123	40 43 35 6 37	46 53 41 4 49	1 1 1 0	41 45 34 10 35	43 47 37 4 43	1 1 1 0

^[1] DTM= days to maturity from seeding dates of May 22 at South Shore.

* Values in **bold type** within a column are included in the top-performance group.

Note that additional table footnotes are explained in Table F.

Table 8b. Non-glyphosate resistant maturity group-O and -I soybean variety protein and oil averages- South Shore, 2009. Sorted by maturity group and protein average.

		1		percentages roup in 2009 [†]	
BRAND/VARIETY	DTM [1]	MG-	0	MG-	ı
		Protein %	0il %	Protein %	0il %
PUBLIC/SD00-1501 PUBLIC/SD05-767 PUBLIC/HAMLIN PUBLIC/SURGE MUSTANG/ ML-0979	129 133 131 130 128	41.7 38.3 37.2 37.2 36.3	14.9 16.6 16.9 16.8 17.5		
PUBLIC/MN0908CN RICHLAND ORG./ MK0508 PUBLIC/MN0806CN RICHLAND ORG./ MK0649 PUBLIC/MN1505SP	133 130 128 123 131	36.1 36.0 35.4 34.6	16.6 15.8 17.4 15.8	39.0	16.0
RICHLAND ORG./ MK1016 PUBLIC/MN1410 PUBLIC/MN1701CN PUBLIC/DEUEL MUSTANG/ ML-1520	126 130 133 129 131			38.8 36.9 36.4 36.1 35.0	14.5 17.3 17.6 16.7 16.7
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min. TPG avg.: [6] Coef. Var. :	130 133 123	37.0 41.7 34.6 1.1 40.7 2	16.5 17.5 14.9 0.8 16.8 3	37.0 39.0 35.0 0.7 38.4 1	16.5 17.6 14.5 0.6 17.1 2

^[1] DTM= days to maturity from seeding dates of May 22 at South Shore.

Note that additional table footnotes are explained in Table F.

* Values in bold type within a column are included in the top-performance group.

Table 9a. Non-glyphosate-resistant maturity group-0, -I, and -II soybean variety yield and lodging averages-Brookings, 2008-09.

				Yiel	d average	e (bu/a) b	y maturity gr	oup		
DD AND A/A DIETY	DT84 [4]		MG-0)		MG-I			MG-I	I
BRAND/VARIETY	DTM [1]	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.	Yield	-bu/a	2009 Lodg.
		2-yr	2009	(1-5) [2]	2-yr	2009	(1-5) [2]	2-yr	2009	(1-5) [2]
MUSTANG/ ML-0979 PUBLIC/SURGE PUBLIC/HAMLIN PUBLIC/SD00-1501	125 129 133 128		59* 51 48 48	1 1 1						· ·
PUBLIC/SD05-767 PUBLIC/MN0806CN PUBLIC/MN0908CN PUBLIC/SD05-240	136 129 131 136		47 42 42	1 1 1		64	1			
MUSTANG/ ML-1520 PROSEED/ LL91-12 PROSEED/ LL81-60 MUSTANG/ ML-1889	137 129 138 146					63 61 61 57	1 1 1			: : :
PUBLIC/MN1701CN PUBLIC/MN1410 PUBLIC/MN1505SP PUBLIC/DEUEL	136 136 135 136					56 54 53 49	1 1 1			
MUSTANG/ ML-2269 PUBLIC/DAVISON PUBLIC/SD05-274 PUBLIC/SD05-273 PUBLIC/SD05-248	146 139 146 148 149								56 54 48 46 44	1 1 1 1
Test avg.: High avg.: Low avg.: [3] LSD (.05): [4] Min. TPG avg.: [5] Max. TPG avg.: [6] Coef. Var.:	136 149 125		48 59 42 5 54	1 1 0		58 64 49 4 60	1 1 0 1		50 56 44 4 52	1 1 1 0 1

^[1] DTM= days to maturity from seeding dates of May 19 at Brookings.

* Values in **bold type** within a column are included in the top-performance group.

Note that additional table footnotes are explained in Table F.

Table 9b. Non-glyphosate resistant maturity group-0, group-I, and group-II soybean variety protein and oil averages- Brookings, 2009. Sorted by maturity group and protein average.

		Prote	in & oil	averages by	maturity	group in 200)9*
BRAND/VARIETY	DTM [1]	MG-	0	MG-	I	MG-	·II
	1.7	Protein %	0il %	Protein %	0il %	Protein %	Oil %
PUBLIC/SD00-1501 PUBLIC/SD05-767 MUSTANG/ ML-0979 PUBLIC/HAMLIN PUBLIC/SURGE	128 136 125 133 129	42.8 39.4 39.2 39.1 38.6	15.9 17.8 17.6 18.0 18.1				
PUBLIC/MN0806CN PUBLIC/MN0908CN PUBLIC/MN1505SP PR0SEED/ LL91-12 MUSTANG/ ML-1889	129 131 135 129 146	37.5 37.3	18.3 17.3	39.8 39.1 38.3	16.8 17.6 18.9		
PUBLIC/MN1701CN PUBLIC/DEUEL PUBLIC/SD05-240 PR0SEED/ LL81-60 PUBLIC/MN1410	136 136 136 138 136			37.2 36.8 36.6 36.5 36.4	18.1 17.6 18.2 17.6 18.3		
MUSTANG/ ML-1520 PUBLIC/SD05-248 MUSTANG/ ML-2269 PUBLIC/SD05-274 PUBLIC/SD05-273 PUBLIC/DAVISON	137 149 146 146 148 139			36.3	16.9	38.2 37.6 37.2 37.1 36.7	19.0 18.9 18.0 19.2 16.9
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min. TPG avg.: [6] Coef. Var. :	136 149 125	39.1 42.8 37.3 0.8 42.1 1	17.6 18.3 15.9 0.3 18.1	37.4 39.8 36.3 0.8 39.1	17.8 18.9 16.8 0.7 18.3 2	37.4 38.2 36.7 0.9 37.4	18.4 19.2 16.9 1.0 18.3

^[1] DTM= days to maturity from seeding dates of May 19 at Brookings.

Note that additional table footnotes are explained in Table F.

* Values in bold type within a column are included in the top-performance group.

Table 10a. Non-glyphosate-resistant maturity group-I and -II soybean variety yield and lodging averages- Beresford, 2008-09.

			Yield	average (bu/a) by mat	urity grou	ıp
DDAND WADIETY	DTM [1]		MG-I			MG-	·II
BRAND/VARIETY	ן וואונט _ו	Yield-	·bu/a	2009 Lodg.	Yield	l-bu/a	2009 Lodg.
		2-yr	2009	(1-5) [2]	2-yr	2009	(1-5) [2]
PUBLIC/MN1410	126		54*	2			
PUBLIC/MN1701CN	127		50	2			
PUBLIC/MN1505SP PUBLIC/DEUEL	125 124		49 46	2 3			
MUSTANG/ ML-2670	138					60	2
MUSTANG/ ML-2269	131					58	2
PUBLIC/DAVISON	124					58	1
PUBLIC/SD05-248	131					57	2 3
PUBLIC/SD05-274 PUBLIC/SD05-273	131 131					53 45	ე ე
,		•				<u> </u>	
Test avg.: High avg.:	129 138		50 54	2 3		55 60	2 3
Low avg. :	124	•	46	2		45	1 1
[3] LSD (.05):			6	NS**	:	5	1
[4] Min. TPG avg.:			48	:		55	:
[5] Max. TPG avg.:				3		;	1
[6] Coef. Var.:			6	21		5	30

^[1] DTM= days to maturity from seeding dates of May 26 at Beresford.

* Values in **bold type** within a column are included in the top-performance group.

** Indicates differences between values within a column were non-significant (NS).



Table 10b. Non-glyphosate resistant maturity group-I and -II soybean variety protein and oil averages- Beresford, 2009. Sorted by maturity group and protein average.

BRAND/VARIETY	DTM [1]	Protein & oil percentages by maturity group in 2009*				
		MG-		MG-I		
		Protein %	Oil %	Protein %	Oil %	
PUBLIC/MN1505SP PUBLIC/MN1701CN PUBLIC/MN1410 PUBLIC/DEUEL PUBLIC/SD05-248	125 127 126 124 131	40.0 36.6 36.5 36.2	17.7 17.9 19.0 18.7	37.3	18.6	
PUBLIC/DAVISON MUSTANG/ ML-2269 PUBLIC/SD05-274 MUSTANG/ ML-2670 PUBLIC/SD05-273	124 131 131 138 131			36.9 36.8 35.8 35.6 34.8	18.0 18.3 19.2 18.5 19.8	
Test avg. : High avg. : Low avg. : [3] LSD(.05) : [4] Min. TPG avg.: [6] Coef. Var. :	129 138 124	37.3 40.0 36.2 1.4 38.7 2	18.3 19.0 17.7 0.4 18.7	36.2 37.3 34.8 0.8 36.6	18.8 19.8 18.0 0.6 19.3 2	

^[1] DTM= days to maturity from seeding dates of May 26 at Beresford. Note that additional table footnotes are explained in Table F.

ARCHIVE

^{*} Values in bold type within a column are included in the top-performance group.

Variety Performance Trials—2010 Results

South Dakota State University ullet Cooperative Extension Service ullet U.S. Department of Agriculture

Tables for the 2010 Soybean Performance Trials

A	Monthly nearest weather station precipitation totals and average temperature; and their departures from average for 2010
В	Description of trial locations, soil types, tillage methods, prior crop, herbicide usage, and dates seeded
С	Gene race resistance to <i>Phytophthora</i> root rot
D	Glyphosate-resistant entries with yield table numbers
E	Entrants (brand name) mailing addresses (after yield tables)
F	Explanation of yield and lodging score table footnotes
G	Entrants (brand name) mailing addresses (after yield tables)
Gly 1	phosate-Resistant Soybean Trial Results Glyphosate-resistant maturity group-O soybean variety yield and lodging averages- northern South Dakota locations, 2009-2010
2	Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- northern South Dakota locations, 2009-2010
3	Glyphosate-resistant maturity group-O soybean variety yield and lodging averages- central South Dakota locations, 2009-2010
4	Glyphosate-resistant maturity group-I soybean variety yield and lodging averages-central South Dakota locations, 2009-2010
5	Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- central South Dakota locations, 2009-2010
6	Glyphosate-resistant maturity group-I soybean variety yield and lodging averages-southern South Dakota locations, 2009-2010
7	Glyphosate-resistant maturity group-II soybean variety yield and lodging averages-southern South Dakota locations, 2009-2010
Nor	ı-Glyphosate-Resistant Soybean Trial Results
8	Non-glyphosate-resistant maturity group-O and -I soybean variety yield and lodging averages-South Shore, 2009-2010
9	Non-glyphosate-resistant maturity group-O, -I and -II soybean variety yield and lodging averages- Brookings, 2009-2010
10	Non-glyphosate-resistant maturity group-I and -II soybean variety yield and lodging averages-

EC 775—Precision Planted Soybeans 2010 Crop Performance Results is available electronically on the internet

http://www.sdstate.edu/ps/extension/crop-mgmt/variety-trials-results.cfm



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SOYBEAN Variety Performance Trials—2010 Results

Robert G. Hall, Extension agronomist - crops/Manager - crop testing Kevin K. Kirby, Agricultural research manager – crop testing Shawn Hawks, Agricultural research manager – crop testing

Soybean production is greatly affected by variety selection. This circular reports the agronomic performance of entries in the 2010 South Dakota performance trials for glyphosate-resistant and conventional or non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

General

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and therefore are affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to Iowa, Nebraska, and south to Texas.

These soybean trial results are reported according to the prevalent maturity zones in South Dakota (see map). The glyphosate-resistant soybean variety trials were conducted by the following test zones and locations: Northern test zone: Maturity groups-0 and -I at South Shore and Warner; Central test zone: Maturity groups-0, -I, and –II at Brookings and Bancroft; Southern test zone: Maturity groups-I and -II at Beresford and Geddes.

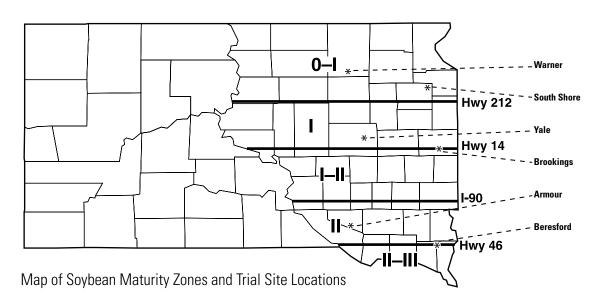
The conventional non-glyphosate-resistant soybean variety trials are conducted at the following SDSU affiliated research farms: Northeast Research Farm, South Shore- Maturity groups-0

and -I; SDSU Plant Science Farm, Brookings- Maturity groups-0, -I, and -II; and the Southeast SD Agricultural Experiment Station, Beresford- Maturity groups-I and -II. There are transition areas where varieties of two maturity groups may perform similarly. In such cases, rainfall and or elevation may moderate the effect of latitude on maturity. In most cases, an earlier maturity group may be seeded in a zone suited to a later maturity group. This is only practical if seeding is delayed, or if reseeding following hail, or if double cropping.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, using varieties with a wide range of rot resistance is strongly suggested (see discussion of Phytophthora under "General Test Procedures").

An alternative method of control is the use of "tolerant varieties." Tolerant varieties are not resistant to PRR in the seedling stage. Thus, a PRR fungicide must be applied to protect them. Currently, we do not evaluate variety field tolerance; therefore, field tolerance ratings are not available.

Certified seed is the best source of seed and the only way to be assured of the genetic purity of the variety seeded. In addition, inoculation of seed with the appropriate nitrogen-fixing



bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean soils, there is no guarantee that beneficial bacteria will be present to naturally inoculate planted seed. Therefore, inoculation of seed at planting is an inexpensive means of increasing the percentage of plants that will fix nitrogen in the current crop year.

Yield

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested, along with two-year averages where varieties have been tested for two years. Yield test averages and least significant difference (LSD) values are rounded to the nearest bushel and printed at the bottom of each yield column.

The LSD value can be used to determine if varieties differ in yield per acre. For example, assume variety A averages 30 bu., B averages 25 bu., and the calculated LSD value is 4 bu. The average difference between varieties A and B is 5 bu (30-25=5). Since the average difference of 5 bu. is greater than the test LSD value of 4 bu., variety A (30 bu.) is significantly higher in yield than for B (25 bu.). In contrast, if variety A averages 28 bu. and B averages 25 bu., the average difference would be 3 bu (28-25=3). In this case, both varieties would have a similar yield average because their difference of 3 bu. is less than the test LSD value of 4 bu.

Use LSD values to identify the best-yielding varieties. The LSD value at the bottom of each yield column is used to calculate a minimum top performance group (TPG) value for yield. For example, if the highest column yield value is 50 bu., subtract the LSD value of 5 bu. to obtain an intermediate value of 45 bu. (50-5=45). Generally, entries in that column yielding 46 bu/a or higher are in the TPG. However, we can also say a yield of 45 bu/a also qualifies as a TPG-value because the yield averages are rounded to the nearest bushel. This inclusion of 45 bu/a acre in the TPG also makes the results indicated in the table (rounded values) agree with the results of the statistical analysis, which determines variety differences to the nearest tenth of bushel.

Note: Use care when evaluating the yield performance of entries in each table. Entries tested for two years may also have a top yield group value in the 2010 yield column. **Note:** Each company selects the appropriate maturity group trial (maturity group-0, -I, or -II trial) and locations for their entries. Companies generally have one or more maturity group checks for their varieties. There are, however, no standard regional or national check varieties for maturity. A late group-I variety from one company may be similar in maturity to an early group-I, or an early group-II variety from another company because they use different check varieties for maturity. Therefore, this testing program does not guarantee that entries are placed in the appropriate maturity group trial. Borderline entries with maturity ratings at or near the arbitrary breaks between the late-group-0's and early group-I's and between the late-group-I's and early group-II's may crossover in some test trials. It is suggested you note the reported maturity rating of every entry you are considering. Since all entries at a location are seeded the same day, one can compare the relative difference in days to maturity among varieties tested at that location. Use caution when comparing the maturity rating of a variety over many locations. Variations in soil moisture and temperature often differ between locations, resulting in some maturity variations over locations.

The efforts of D. Doyle, SDSU Agronomy Farm; A. Heuer, NE Research Farm, South Shore; and R. Berg and staff, SE Research

Farm, Beresford, in obtaining the data are gratefully acknowledged. Also, the assistance and cooperation of our farmer cooperators, Allen and Inel Ryckman, Warner, S.D.; Curtis Sybesma, Geddes, S.D.; and E. Weerts Farm Inc., Bancroft, S.D., is gratefully acknowledged.

Protein and Oil Content

The 2010 protein and oil values (adjusted to a 13% moisture) were determined using a calibrated FOSS TECATOR Model Infratec 1229 Grain Analyzer. Three replicates of every variety in each trial were tested. Samples of known protein and oil were tested by the SDSU Agricultural Experiment Station Biochemistry Laboratory and used to calibrate the analyzer.

The protein and oil content of the 2010 soybean entries are not included in this report because they were not available when this report went to print. The data, however, will be available on the Internet version of this report when the protein and oil determinations are complete. The internet version of this report is available at http://www.sdstate.edu/ps/extension/crop-mgmt/variety-trials-results.cfm.

Weather and Seasonal Precipitation

Seasonal rainfall and its distribution and average temperatures at weather reporting stations nearest each test trial are reported in table A for the period April 1 to October 31. Seasonal precipitation totals were 5" above average at Aberdeen (22.37"), 6" above average at White Lake (24.12"), 8" above average at Beresford (28.49"), 9" above average at Huron (25.98"), 10" above average at Brookings (29.72"), and 4" below average at South Shore (13.99"). The moisture distribution across locations was fairly uniforms at Huron, Brookings, Beresford, and White Lake. Two locations encountered moisture deficits. Aberdeen only received 1" of moisture at the airport; however, 10 miles south, at the plots, there was no moisture during August. This lack of rainfall likely reduced the potential yield at the Warner trial. At Northeast Research Farm at South Shore, the early season moisture in April was well above average and was near average through July. Thereafter, there was little if any rainfall through harvest. Again, this lack of moisture may have reduced the potential yield at the Northeast Research Farm. April temperatures were well above average for Huron, Brookings, Beresford, and White Lake, while Aberdeen was one degree above average and South Shore was one degree below average. May through July temperatures tended to be near average across all locations. However, in August, temperatures were 3 to 5 degrees higher than average at Aberdeen, South Shore, Bancroft, and Brookings, while other locations were near average.

General Test Procedures

These procedures apply to both the glyphosate-resistant and conventional non-glyphosate-resistant soybean trials, except for the chemical weed control imposed. Trial locations, soil types, tillage methods, previous crops, pesticide usage, and seeding dates are indicated in table B.

<u>Test Procedures:</u> A row spacing of 30 inches was used at all locations. The seeding rate was 165,000 seeds per acre for all varieties and locations. Test plots consist of 4-row plots, 20-feet long, with three replications at all locations. Soybean inoculation was accomplished by applying Nitragin-brand Soybean Soil Implant down the seed tube, according to label instructions and rates, during seeding. Seeding at all locations was accomplished using

a Monosem precision row crop planter. The center two rows of each plot were harvested for yield.

<u>Yield:</u> Plots were harvested and yields were adjusted to a 13% moisture content basis and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine.

Reporting variety maturity: Variety maturity is reported as "days to maturity" or DTM. Entries are mature when 95% of the pods have turned brown. Each maturity value is obtained by determining the average number of days from seeding to maturity for two replicates and expressing as DTM at each location. Table DTM values are an average of four replicates (two for each location) unless data is at a location; in such cases, the DTM average is based on two replications.

<u>Lodging Score</u>: Scores at maturity are based on the erectness of the main stem of plants within each variety. 1 = all plants erect, 2 = slight lodging, $3 = \text{some lodging at a } 45^{\circ}$ -angle, 4 = severe lodging, and 5 = all plants flat.

Phytophthora Root Rot (PRR): The gene resistance of each variety to PRR is supplied by each seed company (proprietary entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). A key for each type of PRR gene and the race resistance it imparts to a variety is given in table C. Specific race resistance to PRR, as reported by seed company, can be determined by noting the PRR gene in the variety index table D (glyphosate-resistant) and referencing the gene back to table C to find the range of race resistance. Currently, races -1, -3, and -4 are the most common races in South Dakota.

GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Note: Yield averages are reported for 2-yr (2009-10) and for 2010. In addition, in each yield table, entries are sorted by the zone two-year then by the zone 2010 yield values.

NORTHERN TEST ZONE

SOUTH SHORE- Conventional tillage, Northeast Research Farm WARNER- Minimum-tillage, Allen & Inel Ryckman Farm (farm cooperators)

Note: The test trial coefficients of variation or the amount of experimental error associated with the test trial was lower than average at South Shore and a little higher than average at Warner. The higher amount of experimental error at Warner was likely the result of a lack a rainfall in August along with variations in soil type; together these factors resulted in variable soil moisture levels that in turn caused higher levels of experimental error in 2010.

South Shore, Group-0 (Tables 1): The two-year and 2010 test-yield averages were both 53 bushels per acre, respectively, and the lodging score average was 2 (Table 1). Varieties had to average 51 and 52 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 5 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

Warner, Group-0 (Tables 1): The two-year and 2010 test-yield averages were 52 and 41 bushels per acre, respectively, and the lodging score average was 1 (table 1). Varieties had to average 49 and 40 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 9 bushels to be significantly different. Variety lodging score value differences were not significant, so all entries were in the top performance group for lodging resistance.

Northern test zone, Group-0 (Tables 1): The two-year and 2010 test-yield averages were 53 and 48 bushels per acre, respectively, and the lodging score average was 2 (table 1). In 2010, however, there were significant year-by-location interactions for both the two-year and 2010 yield averages at both locations. This means variety performance differed by location and year for the two-year yield and differed by location for the 2010 yield in the

Northern zone. Therefore, soybean producers are encouraged to evaluate variety performance differences by using the yield columns listed under each location and not use the yield columns listed for the Northern zone.

South Shore, Group-I (Tables 2): The two-year and 2010 test-yield averages were 54 and 50 bushels per acre, respectively, and the lodging score average was 2. Varieties had to average 50 bushels and 54 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

Warner, Group-I (Tables 2): The two-year and 2010 test-yield averages were 54 and 45 bushels per acre, respectively, and the lodging score average was 1. Varieties had to average 51 and 46 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 7 bushels to be significantly different. Variety lodging score value differences were not significant so all entries were in the top performance group for lodging resistance.

Northern test zone, Group-I (Tables 2): The two-year and 2010 test-yield averages were 54 and 48 bushels per acre, respectively, and the lodging score average was 2. Because there were significant year-by-location interactions for the two-year yield and the 2010 yield at both locations, soybean growers are encouraged to evaluate variety performance differences by using the yield columns listed under each location and not use the yield columns listed for the Northern zone.

CENTRAL TEST ZONE

BROOKINGS- Conventional tillage, SDSU Plant Science Research Farm

BANCROFT- No-till, E. Weerts Farm Inc. (farm cooperator)

Note: The test trial coefficients of variation or the amount of experimental error associated with the test trials was lower than

average (3-5%) at Brookings and Bancroft in 2010. These lower amounts of experimental error at Brookings and Bancroft were likely the result of good moisture distribution during the growth season.

Brookings, Group-0 (Tables 3): The two-year and 2010 test-yield averages were 57 and 53 bushels per acre, respectively, and the lodging score average was 1. Varieties had to average 52 bushels and 55 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2010.

<u>Bancroft, Group-0 (Tables 3):</u> The two-year and 2010 test-yield averages were 46 and 51 bushels per acre, respectively, and the lodging score average was 1. Varieties had to average 31 and 52 bushels or higher to be in the top yield group for 2010 and for two years, respectively. Variety yield differences among the two-year averages were not significant, while the 2010 variety yield differences had to differ by 3 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2010.

Central test zone, Group-0 (Tables 3): The two-year and 2010 test-yield averages were 52 and 52 bushels per acre, respectively, and the lodging score average was 1. Because there were significant year-by-location interactions for the two-year yield and the 2010 yield at both locations, soybean growers are encouraged to evaluate variety performance differences by using the yield columns listed under each location and not use the yield columns listed for the Central zone.

Brookings, Group-I (Tables 4): The two-year and 2010 test-yield averages were 60 and 58 bushels per acre, respectively, and the lodging score average was 1. Varieties had to average 58 and 61 bushels or higher to be in the top yield group for 2010 and for two years, respectively. Variety yield averages had to differ by 5 bushels for two years and 3 bushels in 2010 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

Bancroft, Group-I (Tables 4): The two-year and 2010 test-yield averages were 51 and 55 bushels per acre, respectively, and the lodging score average was 1. Varieties had to average 48 and 57 bushels or higher to be in the top yield group for 2010 and for two years, respectively. Variety yield averages had to differ by 12 bushels for two years and 4 bushels for 2010 to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2010.

Central test zone, Group-I (Tables 4): The two-year and 2010 test-yield averages were 56 and 57 bushels per acre, respectively, and the lodging score average was 1. Because there were significant year-by-location interactions for the two-year yield and the 2010 yield at both locations, soybean growers are encouraged to evaluate variety performance differences by using the yield columns listed under each location and not use the yield columns listed for the Central zone.

Brookings, Group-II (Tables 5): The two-year and 2010 test-yield averages were each 61 bushels per acre, and the lodging score average was 1. Varieties had to average 59 and 65 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences

had to differ by 3 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

Bancroft, Group-II (Tables 5): The two-year and 2010 test-yield average was 50 and 55 bushels per acre in 2010 and for two years, respectively, and the lodging score average was 1. Varieties had to average 50 and 57 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield averages had to differ by 10 bushels for two years and 4 bushels in 2010 to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in 2010.

Central test zone, Group-II (Tables 5): The two-year and 2010 test-yield averages were 56 and 58 bushels per acre, respectively, and the lodging score average was 1. Because there were significant year-by-location interactions for the two-year yield and the 2010 yield at both locations, soybean growers are encouraged to evaluate variety performance differences by using the yield columns listed under each location and not use the yield columns listed for the Central zone. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2010.

SOUTHERN TEST ZONE

BERESFORD— Conventional tillage, Southeast SD Agricultural Experiment Station.

GEDDES- No-till, Curtis Sybesma (farm cooperator)

Note: The test trial coefficients of variation or the amount of experimental error associated with the test trial was lower than average at Beresford and about average at Geddes. The lower amount of experimental error at Beresford compared to Geddes was likely the result of more rainfall and better distribution of the rainfall at Beresford in 2010.

Beresford, Group-I (Tables 6): The two-year and 2010 test-yield averages were 68 and 72 bushels per acre, respectively, and the lodging score average was 1. Varieties had to average 67 bushels and 75 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield averages had to differ by 5 bushels for two years and 2 bushels for 2010 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

Geddes, Group-I (Tables 6): The two-year and 2010 test-yield averages were 53 and 55 bushels per acre, respectively, and the lodging score average was 1. Varieties had to average 52 and 55 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield averages had to differ by 6 bushels for both two years and for 2010 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.

Southern test zone, Group-I (Tables 6): The two-year and 2010 test-yield averages were 61 and 64 bushels per acre, respectively, and the lodging score average was 1. Because there was a significant year-by-location interaction for the 2010 yield at both locations, soybean growers are encouraged to evaluate 2010 variety performance differences by using the yield columns listed under each location and not use the 2010 yield column listed for the Southern zone. The two-year yield averages, however, did not exhibit any year-by-location interaction but did exhibit a significant variety effect. Therefore, varieties in the Southern test zone

with a two-year yield of **63** bushels per acre or higher were in the top performance group. Likewise, varieties with a lodging score of **1** were in the top performance group for lodging resistance.

Beresford, Group-II (Tables 7): The two-year and 2010 test-yield averages were 68 and 71 bushels per acre, respectively, and the lodging score average was 2. Varieties had to average 64 and 72 bushels or higher to be in the top yield group for 2010 and for two years, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

<u>Geddes, Group-II (Tables 7):</u> The two-year and 2010 test-yield averages were 57 and 52 bushels per acre, respectively, and the lodging score average was 1. Varieties had to average 54 and 51

bushels or higher to be in the top yield group for 2010 and for two years, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 7 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Southern test zone, Group-II (Tables 7): The two-year and 2010 test-yield averages were 63 and 62 bushels per acre, respectively, and the lodging score average was 1. Because there were significant year by location interactions for the two-year yield and the 2010 yield at both locations, soybean growers are encouraged to evaluate variety performance differences by using the yield columns listed under each location and not use the yield columns listed for the Southern zone.

NON-GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Note: Yield averages are reported 2-yr (2009-10) or for 2010.

SOUTH SHORE— Conventional tillage, Northeast Research Farm South Shore, Group-0 (Tables 8): The 2010 and two-year test-yield averages were 46 and 50 bushels per acre, respectively, and the lodging score average was 2. Varieties had to average 42 bushels or higher for two years and 50 bushels or higher for 2010 to be in the top yield group. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 5 bushels to be significantly

different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

South Shore, Group-I (Tables 8): The two-year and 2010 and test-yield averages were 45 and 47 bushels per acre, respectively, and the lodging score average was 1. Varieties had to average 40 bushels or higher for two years and 49 bushels or higher for 2010 to be in the top yield group. Variety yield averages had to differ by 9 bushels for two years and 5 bushels for 2010 to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

BROOKINGS— Conventional tillage, SDSU Agronomy Farm

Brookings, Group-0 (Tables 9): The two-year and 2010 test-yield averages were both 48 bushels per acre, and the lodging score average was 2. Varieties had to average 45 and 53 bushels or higher to be in the top yield group for 2010 and for two years, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2010.

Brookings, Group-I (Tables 9): The two-year and 2010 test-yield averages were 58 and 53 bushels per acre, respectively, and the lodging score average was 2. Varieties had to average 54 and 62 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 4 bushels to be significantly

different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Brookings, Group-II (Tables 9): The two-year and 2010 test-yield averages were both 58 bushels per acre, and the lodging score average was 2. There was only one variety tested for the two-year period, so there were no variety differences. Varieties had to average 63 bushels or higher to be in the top yield for 2010. In 2010, variety yield differences had to differ by 3 bushels per acre to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

BERESFORD— Conventional tillage, Southeast Agricultural Experiment Station

Beresford, Group-I (Tables 10): The two-year and 2010 test-yield averages were 58 and 60 bushels per acre, respectively, and the lodging score average was 3. Varieties had to average 56 and 68 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2010 variety yield differences had to differ by 3 bushels to be significantly different. Variety lodging score values had to equal 2 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Beresford, Group-II (Tables 10): The two-year and 2010 test-yield averages were 65 and 68 bushels per acre, respectively, and the lodging score average was 3. There was only one variety tested for the two-year period, so there were no variety differences. Varieties had to average 70 bushels or higher to be in the top yield for 2010. In 2010, variety yield differences had to differ by 3 bushels per acre to be significantly different. Variety lodging score values had to equal 2 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different.

Table A. Nearest weather station monthly rainfall totals and average daily temperatures and their departures from average during the 2010 growing season. South Dakota Office of Climate and Weather, South Dakota State University, Brookings, SD.

Station			Monthly data - April 1 to October 31					Sum or		
(Test site)	Variable		April	May	June	July	Aug	Sept	0ct	Average
	Rain totals - inch	'10	3.15	4.46	5.40	3.24	1.01	4.08	1.03	22.37
	1971-2000 avg.		1.83	2.69	3.49	2.92	2.42	1.81	1.63	16.79
Aberdeen Airport		DFA*	1.32	1.77	1.91	0.32	-1.41	2.27	-0.60	5.58
(Warner)	Temp.AvgoF	'10	51.0	56.2	67.2	72.6	73.4	57.9	49.3	61.09
	1971-2000 avg.		45.4	57.9	66.8	72.2	70.5	59.8	46.7	59.90
		DFA	5.6	-1.7	0.4	0.4	2.9	-1.9	2.6	1.19
	Rain totals - inch	'10	0.94	2.76	6.53	3.51	0.25	0.00	0.00	13.99
	1971-2000 avg.		1.96	2.61	4.01	2.91	2.85	2.03	1.92	18.29
South Shore		DFA	-1.02	0.15	2.52	0.60	-2.60	-2.03	-1.92	-4.30
(NE Research Farm)	Temp.AvgoF	'10	51.1	56.4	65.9	71.7	72.5	57.2	50.1	60.70
	1971-2000 avg.		43.2	56.0	65.3	70.4	67.8	57.8	45.0	57.93
		DFA	7.9	0.4	0.6	1.3	4.7	-0.6	5.1	2.77
	Rain totals - inch	'10	2.40	3.67	7.52	6.43	1.60	3.50	0.86	25.98
	1971-2000 avg.		2.29	3.00	3.28	2.86	2.07	1.80	1.59	16.89
Huron		DFA	0.11	0.67	4.24	3.57	-0.47	1.70	-0.73	9.09
(Bancroft)	Temp.AvgoF	'10	52.6	57.3	68.4	74.6	75.4	60.2	51.6	62.87
	1971-2000 avg.		46.1	58.2	67.9	73.4	71.5	61.0	47.9	60.86
		DFA	6.5	-0.9	0.5	1.2	3.9	-0.8	3.7	2.01
	Rain totals - inch	'10	1.24	2.22	7.95	5.29	4.75	7.39	0.88	29.72
	1971-2000 avg.		2.03	2.95	4.23	3.11	2.94	2.48	1.78	19.52
Brookings		DFA	-0.79	-0.73	3.72	2.18	1.81	4.91	-0.90	10.20
(Plant Science Res. Farm)	Temp.AvgoF	'10	51.5	56.7	66.4	72.1	72.7	57.9	49.1	60.91
	1971-2000 avg.		44.2	56.7	66.1	70.7	68.6	59.1	46.3	58.81
		DFA	7.3	0.0	0.3	1.4	4.1	-1.2	2.8	2.10
	Rain totals - inch	'10	1.91	2.19	6.69	6.99	3.47	6.03	1.21	28.49
	1971-2000 avg.		2.47	3.65	3.95	3.35	2.83	2.26	1.80	20.31
Centerville, 6 SE		DFA	-0.56	-1.46	2.74	3.64	0.64	3.77	-0.59	8.18
(Berestord, SE Experiment Station)	Temp.AvgoF	'10	53.4	58.8	69.8	74.1	73.9	60.6	51.2	63.11
·	1971-2000 avg.		47.2	59.5	69.4	73.7	71.5	62.3	49.7	61.90
		DFA	6.2	-0.7	0.4	0.4	2.4	-1.7	1.5	1.21
	Rain totals - inch	'10	2.86	2.93	6.45	6.4	2.35	2.48	0.65	24.12
	1971-2000 avg.		2.49	3.6	3.19	2.88	2.21	2.09	1.59	18.05
White Lake		DFA	0.37	-0.67	3.26	3.52	0.14	0.39	-0.94	6.07
(Geddes)	Temp.AvgoF	'10	51.3	56.8	68.5	74.3	74.0	58.8	50.7	62.06
	1971-2000 avg.		47.9	59.7	69.0	74.5	72.7	62.8	49.8	62.34
		DFA	3.4	-2.9	-0.5	-0.2	1.3	-4.0	0.9	-0.29

^{*} DFA - departure from normal, difference current year is greater or less (-) than the long-term average.

Table B. Description of 2010 trial locations- soil type, tillage, prior crop, herbicides and inoculants, and seeding dates.

Location	Soils & Management		Prior	Herbicides Applied at label rates				Insecticides	
(County)	_	Tillage	crop	Glypohosate Plots		Non- glyphosate Plots		Applied	Date
	Туре	Method		Pre	Post	Pre	Post	at label rates	seeded
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	No-till	Corn	None	Roundup/ Fusilade once	-	-	None	May 28
South Shore (Codington)	Kranzburg silty clay loam, 3-6% slope	Conven- tional	Spring wheat	2 pt, Dual II Magnum	Roundup once	2 pt, Dual II Magnum	Harmony/ Basagran	Warrior (aerial)	May 21
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	No-till	Corn	None	Roundup twice	-	-	None	June 3
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conven- tional	Spring wheat	None	Roundup twice	None	Harmony/ Poast	Asana (ground)	May 17
Geddes (Char. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	None	June 7
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conven- tional	Corn	None	Roundup once		Basagran/ Classic/ Assure	None	May 24

^{*} Nitragin Soybean Soil Implant was applied down the seed tube at label rates at planting.



Table C. Phytophthora root rot race resistance by gene.

Gene	Gene Code	Race Resistance
rps1	0	None
Rps1, Rps1a	1A	1-2,10-11,13,15-18,24
Rps1b	1B	1,3-9,13-15,18,21-22
Rps1c	1C	1-3,6-11,13,15,17,21,23-24
Rps1k	1K	1-11,13-15,17-18,21-22,24
Rps2	2	1-5,9-20
Rps3	3	1-5,8-9,11,13-14,16,18,23,25
Rps4	4	1-4,10,12-16,18-21,25
Rps5	5	1-5,8-9,11-14,18,20,25
Rps6	6	1-4,10,12,14-16,18-21,25
Rsp7	7	16,18,19
Rps1k, Rps6	K6	1-22,24-25
Rps1c, Rps3	C3	1-10,13-18,22-25
Rps1b	B3	1-9,13-16,18,21-23,25
MIX	MIX	Resistant & Susceptible Plants
NR	NR	Not Reported

Table D. Index to 2010 Glyphosate-resistant soybean entries by brand/variety, maturity group, seed trt., gene code for Phytophthora root rot(PRR) resistance as reported by entrants, glyphosate gene event, and performance table no.(s). Use table C to determine entry PRR strain resistance.

Brand / Variety	Mat.	Seed	PRR Gene	Glyphosate	Table
	Grp.	Trt.	Code*	Gene Event*	No.(s)
ASGROW/ AG0730 ASGROW/ AG1031 ASGROW/ AG1230 ASGROW/ AG1431 ASGROW/ AG1530	0.7 1 1.2 1.4 1.5	Acceleron Acceleron Acceleron Acceleron Acceleron Acceleron	1K 3 1C 1C 1C	RR2Y RR2Y RR2Y RR2Y RR2Y RR2Y	1 2 2 2,4 2,4
ASGROW/ AG1631	1.6	Acceleron	1C	RR2Y	2,4
ASGROW/ AG1831	1.8	Acceleron	1K	RR2Y	4
ASGROW/ AG1931	1.9	Acceleron	1C	RR2Y	4
ASGROW/ AG2031	2	Acceleron	1C	RR2Y	5,7
ASGROW/ AG2430	2.4	Acceleron	1C	RR2Y	7
ASGROW/ AG2530	2.5	Acceleron	1K	RR2Y	7
ASGROW/ AG2631	2.6	Acceleron	0	RR2Y	7
ASGROW/ AG2831	2.8	Acceleron	1C	RR2Y	7
ASGROW/ AG2931	2.9	Acceleron	1C	RR2Y	7
CHANNEL/ 1201R2	1.2	Acceleron	1C	RR2Y	2,4
CHANNEL/ 1400R2	1.4	Acceleron	1K	RR2Y	2,4
CHANNEL/ 1502R2	1.5	Acceleron	1C	RR2Y	2,4
CHANNEL/ 1700R2	1.7	Acceleron	1C	RR2Y	5
CHANNEL/ 2000R2	2	Acceleron	1C	RR2Y	5
CHANNEL/ 2402R2	2.4	Acceleron	1C	RR2Y	5
DAIRYLAND/ DSR-0747/R2Y DAIRYLAND/ DSR-1100/RR DAIRYLAND/ DSR-1370/R2Y DAIRYLAND/ DSR-1710/R2Y DAIRYLAND/ DSR-1807/R2Y	0.7 1.1 1.3 1.7 1.8	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx	1C 1C 1C 1C	RR2Y RR1 RR2Y RR2Y RR2Y	7 7 7 2 7
DAIRYLAND/ DSR-2011/RR	2	Cruiser Maxx	NR	RR1	7
DAIRYLAND/ DSR-2132/R2Y	2.1	Cruiser Maxx	1C	RR2Y	7
DAIRYLAND/ DSR-2375/R2Y	2.3	Cruiser Maxx	1C	RR2Y	7
DAIRYLAND/ DSR-2560/RR	2.5	Cruiser Maxx	NR	RR1	7
DAIRYLAND/ DSR-2770/RR	2.7	Cruiser Maxx	1K	RR1	7
DAIRYLAND/ DSR1215/RY2	1.2	Cruiser Maxx	1C	RR2Y	1
DAIRYLAND/ DST18-003/R2	1.8	Cruiser Maxx	1C	RR2Y	2
DAIRYLAND/ DST19-003/R2	1.9	Cruiser Maxx	1C	RR2Y	4
DAIRYLAND/ DST22-007/R2	2.2	Cruiser Maxx	NR	RR2Y	7
G-2/ GENETICS 6088	0.8	Cruiser Maxx	NR	RR1	7
G-2/ GENETICS 6090	0.9	Cruiser Maxx	1C	RR1	1,3
G-2/ GENETICS 6098	0.9	Cruiser Maxx	1K	RR1	7
G-2/ GENETICS 6159	1.5	Cruiser Maxx	1K	RR1	7
G-2/ GENETICS 6160	1.5	Cruiser Maxx	1K	RR1	1,3
G-2/ GENETICS 7180	1.8	Cruiser Maxx	NR	RR1	2,4,6
G-2/ GENETICS 7186	1.8	Cruiser Maxx	1K	RR1	7
G-2/ GENETICS 7208	2	Cruiser Maxx	1C	RR1	5
G-2/ GENETICS 7212	2.1	Cruiser Maxx	1K	RR1	2
G-2/ GENETICS 7230	2.3	Cruiser Maxx	1C	RR1	2
G-2/ GENETICS 7249	2.4	Cruiser Maxx	1K	RR1	5,7
G-2/ GENETICS 7250	2.5	Cruiser Maxx	1K	RR1	5,7
G-2/ GENETICS 7260	2.6	Cruiser Maxx	1K	RR1	1,3
G-2/ GENETICS 7290	2.8	Cruiser Maxx	1K	RR1	2,4,6
HEFTY/ 09Y11	0.9	Acceleron	3	RR2Y	1
HEFTY/ H09Y10	0.9	Acceleron	1C	RR2Y	1

^{*}NR - Not reported by seed entrant.

Table D. Index to 2010 Glyphosate-resistant soybean entries (Continued).

Brand / Variety	Mat.	Seed	PRR Gene	Glyphosate	Table	
——————————————————————————————————————	Grp.	Trt.	Code*	Gene Event*	No.(s)	
HEFTY/ H117	1.1	NR	0	RR1	2,	
HEFTY/ H11Y10	1.1	Acceleron	1C	RR2Y	1	
HEFTY/ H12Y11	1.2	Acceleron	1C	RR2Y	2	
HEFTY/ H139	1.3	NR	0	RR1	2	
HEFTY/ H13Y11	1.3	Acceleron	1C	RR2Y	2	
HEFTY/ H168	1.6	NR	0	RR1	4	
HEFTY/ H16Y11	1.6	Acceleron	0	RR2Y	4	
HEFTY/ H187	1.8	Acceleron	1C	RR2Y	5	
HEFTY/ H18Y11	1.8	Acceleron	0	RR2Y	2,4	
HEFTY/ H19Y11	1.9	Acceleron	1C	RR2Y	4	
HEFTY/ H200	2	NR	1K	RR1	4	
HEFTY/ H20Y11	2	Acceleron	0	RR2Y	4	
HEFTY/ H23Y10	2.3	Acceleron	0	RR2Y	5	
HEFTY/ H23Y11	2.3	Acceleron	1C	RR2Y	5	
HEFTY/ H24Y11	2.4	Acceleron	1C	RR2Y	5,7	
HEFTY/ H250	2.5	NR	1K	RR1	7	
HEFTY/ H259	2.5	NR	1K	RR1	7	
HEFTY/ H25Y11	2.5	Acceleron	1C	RR2Y	7	
MUSTANG/ 06441	0.6	Acceleron	0	RR2Y	1	
MUSTANG/ 08331	0.8	Acceleron	3	RR2Y	1	
MUSTANG/ 09920	0.9	Acceleron	1C	RR2Y	1	
MUSTANG/ 11030	1.1	Acceleron	1C	RR2Y	2	
MUSTANG/ 13320	1.3	Acceleron	1C	RR2Y	2	
MUSTANG/ 14441	1.4	Acceleron	1C	RR2Y	2,4	
MUSTANG/ 16221	1.6	Acceleron	0	RR2Y	4	
MUSTANG/ 18821	1.8	Acceleron	1K	RR2Y	4	
MUSTANG/ 19990	1.9	Acceleron	1C	RR2Y	4	
MUSTANG/ 20221	2	Acceleron	1C	RR2Y	5	
MUSTANG/ 21181	2.1	Acceleron	1C	RR2Y	5	
MUSTANG/ 21320	2.1	Acceleron	1C	RR2Y	5	
MUSTANG/ 21421	2.1	Acceleron	1C	RR2Y	5	
MUSTANG/ 23321	2.3	Acceleron	1C	RR2Y	5,7	
MUSTANG/ 23530	2.3	Acceleron	1C	RR2Y	5,7	
MUSTANG/ 25521	2.5	Acceleron	1C	RR2Y	7	
MUSTANG/ 27721	2.7	Acceleron	0	RR2Y	7	
NORTHSTAR/ NS1726NR2	1.7	NR	NR	RR2Y	7	
NORTHSTAR/ NS2026NR2	2	NR	NR	RR2Y	7	
NORTHSTAR/ NS2116NR2	2.1	NR	NR	RR2Y	1,3	
NORTHSTAR/ NS2226NR2	2.2	NR	NR	RR2Y	2,4,6	
NUTECH/ 0886RR	0.8	Cruiser Maxx	NR	RR1	1,3	
NUTECH/ 0889RR	0.8	Cruiser Maxx	NR	RR1	1,3	
NUTECH/ 0990RR	0.9	Cruiser Maxx	NR	RR1	1,3	
NUTECH/ 1808RN	1.8	Cruiser Maxx	1C	RR1	4,6	
NUTECH/ 2660RN	2.6	Cruiser Maxx	1C	RR1	5,7	
NUTECH/ 6082	0.8	Cruiser Maxx	NR	RR1	1,1	
NUTECH/ 6145	1.4	Cruiser Maxx	NR	RR1	2,4	
NUTECH/ 6195	1.9	Cruiser Maxx	NR	RR1	2,4	
NUTECH/ 6198	1.9	Cruiser Maxx	NR	RR1	6	
NUTECH/ 6205+RR	1.9	Cruiser Maxx	1K	RR1	2,4,6	
NUTECH/ 6217	2.1	Cruiser Maxx	NR	RR1	7	

^{*}NR - Not reported by seed entrant.

Table D. Index to 2010 Glyphosate-resistant soybean entries (Continued).

Brand / Variety	Mat.	Seed	PRR Gene Code*	Glyphosate Gene Event*	Table
NUTECH/ 6234RR NUTECH/ 7199 NUTECH/ 7222 NUTECH/ 7274 PIONEER/ 90Y80	2.3 1.9 2.2 2.7 0.8	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx	1K 1C 1K 1K 0	RR1 RR1 RR1 RR1 RR1 RR1	No.(s) 5 2,4,6 5,7 5,7 1
PIONEER/ 91Y22	1.2	Cruiser Maxx	0	RR1	2
PIONEER/ 91Y60	1.6	Cruiser Maxx	1C	RR1	2,4
PIONEER/ 91Y71	1.7	Cruiser Maxx	0	RR1	4
PIONEER/ 91Y90	1.9	Cruiser Maxx	0	RR1	4
PIONEER/ 92Y30	2.3	Cruiser Maxx	1K	RR1	5,7
PIONEER/ 92Y51	2.5	Cruiser Maxx	1K	RR1	7
PIONEER/ 92Y70	2.7	Cruiser Maxx	0	RR1	7
PIONEER/ 92Y82	2.8	Cruiser Maxx	1K	RR1	7
PIONEER/ 93Y13	3.1	Cruiser Maxx	1C	RR1	7
PRAIRIE BR./ EXP 0801	0.8	Cruiser Maxx	1C	RR2Y	1
PRAIRIE BR./ EXP 1001	0.9	Cruiser Maxx	1C	RR2Y	2,4
PRAIRIE BR./ EXP 1301	1.3	Cruiser Maxx	1C	RR2Y	6
PRAIRIE BR./ EXP 1701	1.7	Cruiser Maxx	1C	RR2Y	1
PRAIRIE BR./ EXP 1802	1.8	Cruiser Maxx	1C	RR2Y	4,6
PRAIRIE BR./ EXP 2102	2.1	Cruiser Maxx	1K	NR	2,4,6
PRAIRIE BR./ EXP 2302	2.3	Cruiser Maxx	1C	RR1	4,6
PRAIRIE BR./ EXP 2801	2.8	Cruiser Maxx	1C	RR2Y	5
PRAIRIE BR./ PB-0954RR	0.9	Cruiser Maxx	0	RR1	2,4
PRAIRIE BR./ PB-0999RR	0.9	Cruiser Maxx	0	RR1	2
PRAIRIE BR./ PB-1120R2	0.9	Cruiser Maxx	1C	RR2Y	4
PRAIRIE BR./ PB-1337RR PRAIRIE BR./ PB-1410R2 PRAIRIE BR./ PB-1552R2 PRAIRIE BR./ PB-1597RR PRAIRIE BR./ PB-1722R2	1.3 1.4 1.5 1.5 1.7	Cruiser Maxx Cruiser Maxx Cruiser Maxx Trilex 6000 Cruiser Maxx	0 1C 1C 0 1K	RR1 RR1 RR2Y RR1 RR2Y	2 5,7 1 4
PRAIRIE BR./ PB-1920R2 PRAIRIE BR./ PB-1942R2 PRAIRIE BR./ PB-1956RR PRAIRIE BR./ PB-202 PRAIRIE BR./ PB-2020R2	1.9 1.8 1.9 1.9	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx	1C 1C 1C 0	RR2Y RR2Y RR1 RR2Y RR2Y	2 1 2 2 5,7
PRAIRIE BR./ PB-2042R2	1.9	Cruiser Maxx	1C	RR2Y	2
PRAIRIE BR./ PB-2058NRR	1.9	Cruiser Maxx	1K	RR1	1
PRAIRIE BR./ PB-2110R2	1.9	Cruiser Maxx	1C	RR2Y	2
PRAIRIE BR./ PB-2142R2	2.1	Cruiser Maxx	1K	RR2Y	6
PRAIRIE BR./ PB-2207NRR	2.2	Trilex 6000	1K	RR1	7
PRAIRIE BR./ PB-2278RR PRAIRIE BR./ PB-2419RR2 PRAIRIE BR./ PB-242 PRAIRIE BR./ PB-2442R2 PRAIRIE BR./ PB-2450R	1.9 2.4 2.4 2.4 2.4	Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx Cruiser Maxx	1K 1C 1C 1C	RR1 RR2Y RR2Y RR2Y RR1	5,7 4,6 4,6 6 4,6
PRAIRIE BR./ PB-2558NRR	2.4	Trilex 6000	0	RR1	6
PRAIRIE BR./ PB-2632R2	2.6	Cruiser Maxx	1C	RR2Y	5,7
PRAIRIE BR./ PB-2742R2	2.8	Cruiser Maxx	0	RR2Y	5
PRAIRIE BR./ PB0879NRR2	0.8	Cruiser Maxx	1C	RR2Y	5,7
PRAIRIE BR./ PB1499NRR2	1.4	Cruiser Maxx	1C	RR2Y	2,4

^{*}NR - Not reported by seed entrant.

Table D. Index to 2010 Glyphosate-resistant soybean entries (Continued).

Table D. Illuex to 2010 dispi	- Iosate resistar	it soybean enti	ico (continucu	<i>'</i>	
Brand / Variety	Mat.	Seed	PRR Gene	Glyphosate	Table
	Grp.	Trt.	Code*	Gene Event*	No.(s)
PRAIRIE BR./ PB2099NRR2	1.9	Cruiser Maxx	1C	RR2Y	2,4
REA/ 71G20	1.1	NR	0	RR2Y	7
REA/ 75G10	1.5	NR	1C	RR2Y	2,4,6
REA/ 76G10	1.6	NR	1K	RR2Y	5,7
REA/ 84G15	2.4	NR	1C	RR2Y	5,7
REA/ 8705NRR REA/ EXP 72G21 REA/ EXP 75G91 REA/ EXP 76G11 REA/ EXP 80G11	2 1.2 1.5 1.6 2	NR NR NR NR NR	1K 1C 1C 0 1K	RR1 RR2Y RR2Y RR2Y RR2Y	2,4 7 7 7 2,4 5
REA/ EXP 84G20 RENK/ RS140NR2 RENK/ RS141R2 RENK/ RS161NR2 RENK/ RS181NR2	2.4 1.4 1.4 1.6 1.8	NR Acceleron Acceleron Acceleron Acceleron	1C 1C 1C NR 1K	RR2Y RR2Y RR2Y RR2Y RR2Y	2,4 7 2 1
RENK/ RS210NR2	2	Acceleron	1C	RR2Y	7
RENK/ RS211NR2	2.1	Acceleron	1C	RR2Y	7
RENK/ RS241R2	2.4	Acceleron	1C	RR2Y	4
RENK/ RS259NRR	2.5	NR	NR	RR1	5,7
RENK/ RS271NR2	2.7	Acceleron	1K	RR2Y	5
SEEDS 2000/ 2120RR	1.2	NR	1K	RR1	5,7
SEEDS 2000/ EXP2061RR2Y	0.6	NR	1K	RR2Y	5,7
SEEDS 2000/ EXP2091RR2Y	0.9	NR	1K	RR2Y	5,7
STINE/ 06RA00	0.6	Cruiser Maxx	1C	RR2Y	4
STINE/ 10RA60	1	Cruiser Maxx	0	RR2Y	2
STINE/ 13R08	1.3	Cruiser Maxx	1K	RR2Y	2,4
STINE/ 14RA02	1.4	Cruiser Maxx	1K	RR2Y	4
STINE/ 16RA02	1.6	Cruiser Maxx	1K	RR2Y	7
STINE/ 18RA02	1.8	Cruiser Maxx	1K	RR2Y	4
STINE/ 21RB62	2.1	Cruiser Maxx	1C	RR2Y	4
STINE/ 23RA22	2.3	Cruiser Maxx	1K	RR2Y	7
STINE/ 24RB02	2.4	Cruiser Maxx	1K	RR2Y	2
STINE/ 27RA02	2.7	Cruiser Maxx	1C	RR2Y	2,4
STINE/ 29RB22	2.9	Cruiser Maxx	0	RR2Y	1
SD/ 1093RR	0.9	Trilex 6000	NR	RR1	4
SD/ 1161RR/SCN	1.6	Trilex 6000	1A	RR1	4
SD/ 2171RR	1.7	NR	1C	RR2Y	4
SD/(LD)05-16137	2	NR	NR	NR	7

NR - Not reported by seed entrant.

Table E. Conventional 2010 soybean entries by brand/variety, maturity group, seed trt., and gene code for Phytophthora root rot resistance as reported by entrants; and performance table no.(s). Strain or race resistance by gene type is reported in table C.

performance table no.(s). Strair	i oi race res	istance by gene	type is reporte	u III labie G.
Brand or Public / Variety	Mat. Grp.	Seed Treatment	Gene Code*	Table No.(s)
DAIRYLAND/ DSR-1680/STS	1.6	Cruiser Maxx	NR	9
RICHLAND ORG./ MK0508	0.5	None	rps1 - None	8
RICHLAND ORG./ MK1016	1	None	rps1 - None	8, 9,10
RICHLAND ORG./ MK1401T	1.4	None	rps1 - None	8, 9,10
RICHLAND ORG./ MK9101	1.1	None	rps1 - None	8, 9,10
RICHLAND ORG./ MK9120 SEEDS 2000/ EXP 2082L SEEDS 2000/ EXP 2083L SEEDS 2000/ EXP 2092L SEEDS 2000/ EXP 2102LN	1.2 0.8 0.8 0.9 1	None None None None None	rps1 - None Rps1k Rps1k Rps1k Rps1 (Rps1a)	8, 9,10 8,9 8 8 8 8,9
SK FOOD INTL/ EXP 9813	1.5	None	NR	9,10
SK FOOD INTL/ SK927	0.3	None	NR	9
SK FOOD INTL/ SK9801	1	None	Rps1k	8
PUBLIC/ DAVISON	2.2	None	Rps1 (Rps1a)	9,10
PUBLIC/ DEUEL	1.1	None	Rps1k	8, 9,10
PUBLIC/ EXP MN0907	0	None	Rps1k, Rps6	8,9
PUBLIC/ EXP MN0908CN	0	None	rps1 - None	8,9
PUBLIC/ MN0606CN	0	None	NR	8,9
PUBLIC/ MN1410	1	None	rps1 - None	8, 9,10
PUBLIC/ MN1413CN	1	None	rps1 - None	8, 9,10
PUBLIC/ MN1701CN PUBLIC/ SHEYENNE PUBLIC/ SURGE PUBLIC/ SD00-1501 PUBLIC/ SD03-2154	1 0.8 0.7 0	None None None None None	rps1 - None NR Rps1 (Rps1a) NR NR	8, 9,10 8,9 8,9 8,9 8,9
PUBLIC/ SD04CV-611	0	None	NR	8,9
PUBLIC/ SD04CV-613	0	None	NR	8,9
PUBLIC/ SD05-240	1	None	NR	8, 9,10
PUBLIC/ SD05-767	0	None	NR	8,9
PUBLIC/ SD06-322	0	None	NR	8,9
PUBLIC/ SD06-428	0	None	NR	8,9
PUBLIC/ SD06-430	0	None	NR	8,9
PUBLIC/ SD06-487	0	None	NR	8,9
PUBLIC/ SD06-525	0	None	NR	8,9
PUBLIC/ SD07CV-367	2	None	NR	9,10
PUBLIC/ SD07CV-523	1	None	NR	9
PUBLIC/ SD07CV-528	0	None	NR	8,9
PUBLIC/ SD07CV-539	0	None	NR	8,9
PUBLIC/ SD07CV-576	1	None	NR	9
PUBLIC/ SD07CV-603	2	None	NR	9,10
PUBLIC/ SD07CV-619	1	None	NR	9
PUBLIC/ SD07CV-631	2	None	NR	9,10
PUBLIC/ SD07CV-673	1	None	NR	9
PUBLIC/ SD07CV-770	2	None	NR	9,10
PUBLIC/ SD07CV-800	2	None	NR	9,10
PUBLIC/ SD07CV-874 PUBLIC/ SD07CV-875 PUBLIC/ SD07CV-878 PUBLIC/ SD07CV-885 PUBLIC/ SD07CV-886	2	None	NR	9,10
	1	None	NR	9
	2	None	NR	9,10
	1	None	NR	9
	2	None	NR	9,10
PUBLIC/ SD07CV-935	0	None	NR	8,9
PUBLIC/ SD07CV-997	1	None	NR	9

^{*} NR indicates gene code was not reported by seed entrant.

Table F. Explanation of performance table footnotes.

No.	Explanation of footnotes
[1]	Days to maturity (DTM) – the number of days to maturity from seeding to 95% brown pod.
[2]	Lodging scores: 0= all plants erect, 3= 50% of plants lodged at 45°-angle, 5= all plants flat.
[3]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value the difference between the values is nonsignificant (NS).
[4]	TPG-avg. – the minimum value within a column that entry yield values must equal or exceed to qualify for the top-performance group (TPG).
[5]	TPG-avg. – the maximum value within a column that lodging score values must equal or be less than to qualify for the TPG.
[6]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% tend to be less common while values of 6 to 15% are more common. Occasionally, values exceed 15%; this means the trial contained too much experimental error to be a valid test; thus, no data analysis for that table column is reported.

Table G. Mailing addresses of entrants in the 2010 soybean trials.

Entrant name (brand name) & Mailing address
Channel Bio. Corp. (Channel), 1551 Hwy 210, Huxley, IA 50124
Dairyland Seed Co., Inc. (Dairyland), PO Box 958, West Bend, WI 53095
G2 Genetics (G2), 36131 Hwy 69N, Forest City, IA 50436
Hefty Seed Co. (Hefty), 47504 252nd St., Baltic, SD 57003
Minnesota Crop Improvement Assoc., 1900 Hendon Ave, St. Paul, MN 55108

Monsanto (Asgrow), 102 West Carol Ave., Cortland, IL 60112 Mustang Seeds (Mustang), PO Box 466, Madison, SD 57042 North Star Genetics, MN Nutech Seed, LLC (Nutech), 36131 Hwy 69N, Forest City, IA 50436 REA Hybrids, (REA), 537 Ave. S, Moorhead, MN 56560

Renk Seed Co. (Renk), 6809 Wilburn Rd., Sun Prairie, WI 53590
Pioneer Hi-Bred Intl. (Pioneer), 151 St. Andrews Ct., Mankato, MN 56001
Prairie Brand Seed Co. (Praire Brand), 15 X Ave., Story City, IA 50248
Richland Organics, Inc. (Richland Organics), 100 Tenth St. North, Breckenridge, MN 56520
Seeds 2000 (Seeds 2000), PO Box 200, Breckenridge, MN 56520

SK Food International, 4666 Amber Valley Parkway, Fargo, ND 58104
Sodak Genetics (Sodak), 1200 North Campus Dr., Brookings, SD 57007
Stine Seed Co.(Stine), 14605 University Ave., Waukee, IA 50263
South Dakota State University, Plant Science Department, Box 2207A, Brookings, SD

Table 1. Glyphosate-resistant maturity group-0 soybean variety yield and lodging averages- northern South Dakota locations, 2009-2010. Entries are sorted by 2-Yr then by 2010 zone yield.

			No	orthern Avera		Northern Zone Averages				
D 10/ 1	DTM		South S	hore		Warne	er	Norti	iern Zon	e Averages
Brand/Variety	[1]	Yield-bu/a		2010 Lodg.	Yield	d-bu/a	2010 Lodg.	Yield	d-bu/a	2010 Lodg.
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]
DAIRYLAND/ DSR-0747/R2Y	112	55	55	2	54	45	1	55	50	2
NUTECH/ 0886RR	111	53	55	1	55	41	1	54	48	1
SODAK GEN./SD 1093RR	111	53	56	3	53	45	1	53	51	2
PRAIRIE BR./ PB-0999RR	113	53	53	2	53	42	1	53	48	2
PRAIRIE BR./ PB-0954RR	114	53	54	3	50	41	1	52	48	2
PIONEER/ 90Y80	108	54	55	2	50	37	1	52	46	2
NUTECH/ 0990RR	113	52	50	2	52	41	1	52	46	2
NUTECH/ 0889RR	114	54	54	3	49	37	1	52	46	2
G-2/ GENETICS 6098	110	51	49	2	49	37	1	50	43	2
G-2/ GENETICS 6088	112		57	2	55	44	1		51	1
PRAIRIE BR./ EXP 0801	112		52	1		47	1		50	1
SEEDS 2000/ EXP2091RR2Y	112		51	2		48	1		50	2
ASGROW/ AG0730	109		54	2		43	1		49	1
HEFTY/ 09Y11	110		54	2		44	1		49	2
PRAIRIE BR./ PB0879NRR2	115		54	3		43	1		49	2
PRAIRIE BR./ EXP 1001	112		53	2		41	1		47	2
NUTECH/ 6082	115		52	4		40	1		46	2
G-2/ GENETICS 6090	109		50	1		41	1		46	1
HEFTY/ H09Y10	111		51	2		37	1		44	2
PRAIRIE BR./ PB-1120R2	116		50	3		36	1		43	2
SEEDS 2000/ EXP2061RR2Y	112		47	3		37	1		42	2
MUSTANG/ 06441	114		57	2						
MUSTANG/ 08331	113		51	2						
MUSTANG/ 09920	116	55	50	2						
STINE/ 06RA00	114		50	3						
Test avg. :	112	53	53	2	52	41	1	53	48	2
High avg. :	116	55	57	4	55	48	1	55	57	3
Low avg. :	108	51	47	1	49	36	1	50 ***	42 ***	1 ***
[3] Test LSD (.05): [4] Min.TPG-avg. :		NS** 51	5 52	1	NS 49	9 40	0	***	***	***
[4] Min. 1PG-avg. :		וט) JZ	1 · 1	43 	4 0	1			
[6] Test Coef. Var.:		7	5	18	10	13				
No. Entries:	46	10	25	25	10	21	21	21	46	46

^[1] DTM= days to maturity from seeding dates of May 21 at South Shore and May 28 at Warner.

Note that additional table footnotes are explained in Table F.

* Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more

^{***} Indicates differences between values within a column are non-significant (NS).

*** There were significant variety by location interactions for yield zone averages.

Therefore, evaluate yield by using the yield columns for each location.

Table 2. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- northern South Dakota locations, 2009-2010. Entries are sorted by 2-Yr then by 2010 zone yield.

Kuta lucations, 2005-2010.				rthern Averag							
	DTM		South S		<u>, , , , , , , , , , , , , , , , , , , </u>	War		Northern Zone Averages			
Brand/Variety	[1]	Yield	-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	
DAIRYLAND/ DSR-1370/R2Y	117	55	52	2	59	51	1	57	52	2	
PRAIRIE BR./ PB-1597RR	114	57	55	2	56	45	1	57	50	1	
PRAIRIE BR./ PB1499NRR2	116	54	47	2	58	46	1	56	47	2	
NUTECH/ 6145	117	55	51	1	55	45	1	55	48	1	
DAIRYLAND/ DSR-1100/RR	114	55	53	3	54	43	1	55	48	2	
HEFTY/ H117	111	55	53	2	54	40	1	55	47	2	
G-2/ GENETICS 6159	114	53	51	2	52	42	1	53	47	1	
NUTECH/ 6205+RR	121	53	50	2	52	39	1	53	45	2	
PRAIRIE BR./ PB-1337RR	114	54	50	2	51	37	1	53	44	2	
SODAK GEN./SD 1161RR/ SCN	119	51	50	3	52	43	1	52	47	2	
HEFTY/ H139	115	50	48	1	51	40	1	51	44	1	
SEEDS 2000/ 2120RR	114	50	48	1	52	40	1	51	44	1	
ASGROW/ AG1631	117		51	3		53	1		52	2	
DAIRYLAND/ DSR-1710/R2Y	122		52	3		52	1		52	2	
PRAIRIE BR./ PB-1722R2	124		51	2		52	_ 1_		52	2	
MUSTANG/ 13320	117		51	2		51	1		51	1	
MUSTANG/ 14441	116		52	3		49	1		51	2	
ASGROW/ AG1230	114		50	1		49	1		50	1	
ASGROW/ AG1431	115		54	2		45	1		50	2	
DAIRYLAND/ DSR1215/RY2	115		54	2		45	1		50	2	
PRAIRIE BR./ PB-1920R2	127		49	3		51	1		50	2	
SODAK GEN./SD 2171RR	122		52	3		47	1		50	2	
ASGROW/ AG1031	113		53	2		44	1	-	49	1	
MUSTANG/ 11030	116		49	2		48	1		49	2	
REA/ 76G10	118		55	2	54	42	1		49	2	
REA/ 71G20	112		58	3		40	1		49	2	
REA/ EXP 72G21	120		53	3		44	1		49	2	
REA/ EXP 76G11	120		51	3		47	1		49	2	
PRAIRIE BR./ PB-1410R2	118		49	3		49	1		49	2	
HEFTY/ H11Y10	113		49	2		46	1		48	2	
HEFTY/ H16Y11	121		51	3		45	1		48	2	
G-2/ GENETICS 6160	115		54	3		42	1		48	2	
G-2/ GENETICS 7180	121		46	3		49	1		48	2	
REA/ 75G10	115		51	2	56	45	1		48	2	
PRAIRIE BR./ PB-1552R2	114		51	2		44	1		48	2	
PRAIRIE BR./ EXP 1701	121		48	2		48	1		48	2	
PRAIRIE BR./ EXP 1301	112		48	2		43	1		46	2	
ASGROW/ AG1530	116		47	2		43	1		45	2	
NUTECH/ 7199	125		46	3		44	1		45	2	
NUTECH/ 6195	127		43	3		47	1		45	2	

Table 2. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- northern South Dakota locations, 2009-2010 (continued).

			No	rthern Averaç	Northern Zone					
Duand Maniata	DTM		South S	hore		War	ner		Averag	es
Brand/Variety	[1]	Yield	-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]
REA/ EXP 75G91	117		45	2		44	1		45	2
PIONEER/ 91Y22	113		48	2		40	1		44	2
HEFTY/ H12Y11	112		47	2		41	1		44	2
G-2/ GENETICS 7186	115		49	2		39	1		44	2
PIONEER/ 91Y60	113					40	1			
STINE/ 10RA60	117		49	2						
STINE/ 13R08	114					48	1			
STINE/ 14RA02	113					41	1			
CHANNEL/ 1201R2	113					48	1			
CHANNEL/ 1400R2	111					40	1			
CHANNEL/ 1502R2	111					47	1			
NORTHSTAR/ NS1726NR2	122		46	3						
Test avg. :	117	54	50	2	54	45	1	54	48	2
High avg. :	127	57	58	3	59	53	1	57	52	2
Low avg. :	111	50	43	1	51	37	1	51	44	1
[3] Test LSD (.05):		NS**	4	1	NS	7	00	***	***	***
[4] Min.TPG-avg.:		50	54		51	46				
[5] Max.TPG-avg. :				1			1			
[6] Test Coef. Var.:		5	5	21	7	10				
No. Entries:	96	12	46	46	14	50	50	24	88	88

^[1] DTM= days to maturity from seeding dates of May 21 at South Shore and May 28 at Warner.

Note that additional table footnotes are explained in Table F.

* Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more the better.

^{**} Indicates differences between values within a column are non-significant (NS).

^{***} There were significant variety by location interactions for yield zone averages.

Therefore, evaluate yield by using the yield columns for each location.

Table 3. Glyphosate-resistant maturity group-0 soybean variety yield and lodging averages- central South Dakota locations, 2009-2010. Entries are sorted by 2-Yr then by 2010 zone yield.

			C	entral Averag	es by Lo	cation*		Central Zone Averages			
Drond Moriote	DTM		Brook	ings		Bancı	roft				
Brand/Variety	[1]	Yield-bu/a		2010 Lodg.	Yield	l-bu/a	2010 Lodg.	Yield-bu/a		2010 Lodg.	
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	
NUTECH/ 0886RR	115	61	59	1	54	55	1	58	57	1	
G-2/ GENETICS 6088	115	60	57	1	54	53	1	57	55	1	
SODAK GEN./SD 1093RR	110	56	55	1	47	53	1	52	54	1	
NUTECH/ 0990RR	115	56	56	1	43	51	1	50	54	1	
G-2/ GENETICS 6098	111	52	47	1	31	45	1	42	46	1	
G-2/ GENETICS 6090	109		49	1		52	1		51	1	
NUTECH/ 0889RR	113		50	1		47	2		49	2	
Test avg. :	113	57	53	1	46	51	1	52	52	1	
High avg. :	115	61	59	1	54	55	2	58	57	2	
Low avg. :	109	52	47	1	31	45	1	42	46	1	
[3] Test LSD (.05):		NS**	4	NS	NS	3	NS	***	***	***	
[4] Min.TPG-avg.:		52	55		31	52					
[5] Max.TPG-avg.:				1			1				
[6] Test Coef. Var.:		4	4	0	6	3					
No. Entries:	14	5	7	7	5	7	7	10	14	14	

^[1] DTM= days to maturity from seeding dates of May 17 at Brookings and June 3 at Bancroft.

Note that additional table footnotes are explained in Table F.

* Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more the better.

** Indicates differences between values within a column are non-significant (NS).

*** There were significant variety by location interactions for yield zone averages.

Table 4. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- central South Dakota locations, 2009-2010. Entries are sorted by 2-Yr then by 2010 zone yield.

locations, 2009-2010. Entries	1.000			entral Averag			•			_
	DTM		Brook	ings		Banc	roft	Central Zone Averages		
Brand/Variety	[1]	Yield	I-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]
PRAIRIE BR./ PB-2278RR	129	63	63	1	60	60	1	62	62	1
HEFTY/ H168	119	62	64	1	55	61	1	59	63	1
MUSTANG/ 19990	121	62	60	1	56	58	1	59	59	1
PRAIRIE BR./ PB-1597RR	121	62	64	1	54	61	1	58	63	1
PIONEER/ 91Y90	125	60	60	1	55	55	1	58	58	1
PRAIRIE BR./ EXP 1802	123	62	62	1	54	52	1	58	57	1
NUTECH/ 6205+RR	126	61	59	1	49	57	1	55	58	1
DAIRYLAND/ DSR-1807/R2Y	126	57	56	1	53	57	1	55	57	1
PRAIRIE BR./ PB-2058NRR	125	62	61	1	48	52	1	55	57	1
NUTECH/ 1808RN	126	56	55	1	53	57	1	55	56	1
NUTECH/ 7199	125	57	55	2	53	55	1	55	55	1
PRAIRIE BR./ PB1499NRR2	120	60	57	1	49	43	1	55	50	1
NUTECH/ 6145	121	60	58	1	48	57	1	54	58	1
G-2/ GENETICS 6159	117	55	53	1	47	54	1	51	54	1
SODAK GEN./SD 1161RR/SCN	124	52	50	2	38	49	1	45	50	2
MUSTANG/ 14441	121		63	2		57	1		60	2
PRAIRIE BR./ PB-202	128		62	1		58	1		60	1
ASGROW/ AG1631	120		59	1		58	1		59	1
HEFTY/ H13Y11	123		61	2		57	2		59	2
HEFTY/ H19Y11	124		59	2		58	2		59	2
ASGROW/ AG1431	118		57	1		59	1		58	1
MUSTANG/ 16221	123		60	2		55	1		58	2
STINE/ 18RA02	127		63	2		53	1		58	2
REA /76G10	122	63	60	1		55	1		58	1
REA/ 71G20	117		57	3		58	1		58	2
MUSTANG/ 18821	127		62	1		52	2		57	1
HEFTY/ H16Y11	126		60	2		53	2		57	2
G-2/ GENETICS 6160	120		56	1		58	1		57	1
REA/ EXP 72G21	123		60	2		54	1		57	2
REA/ EXP 76G11	125		60	2		53	2		57	2
PRAIRIE BR./ PB-1722R2	125		61	1		53	1		57	1
PRAIRIE BR./ PB-1920R2	128	.	58	2		56	2		57	2
ASGROW/ AG1931	122		58	1		54	1		56	1
PIONEER/ 91Y60	120		56	1		55	2		56	1
NUTECH/ 6195	128		58	1		53	1		56	1
DAIRYLAND/ DSR-1710/R2Y	125		59	1		53	1		56	1
G-2/ GENETICS 7180	124		57	1		55	1		56	1
PRAIRIE BR./ PB-2042R2	124		57	1		55	1		56	1
PRAIRIE BR./ PB-2110R2	127		59	3		53	2		56	2
SODAK GEN./SD 2171RR	124		59	1		53	1		56	1

Table 4. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- central South Dakota locations, 2009-2010 (continued).

			С	entral Averag	Central Zone Averages					
Dura well (Marris atro)	DTM		Brook	ings		Banc	roft	Cem	rai Zone	Averages
Brand/Variety	[1]	Yield	l-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	Yield-bu/a		2010 Lodg.
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]
ASGROW/ AG1530	119		52	2		55	1		54	2
ASGROW/ AG1831	123		54	2		53	1		54	1
REA/ 75G10	119	60	57	1		50	1		54	1
HEFTY/ H18Y11	120		51	2		48	2		50	2
REA/ EXP 75G91	119		47	2		49	1		48	2
CHANNEL/ 1700R2	129		64	1						
RENK/ RS141R2	126		63	2						
STINE/ 16RA02	127		62	2						
DAIRYLAND/ DST19-003/R2Y	129		61	3						
RENK/ RS181NR2	129		60	1						
DAIRYLAND/ DST18-003/R2Y	127		59	1						
PIONEER/ 91Y71	123		58	1						
CHANNEL/ 1201R2	124		58	2						
RENK/ RS161NR2	125		57	2						
RENK/ RS140NR2	121	59	55	1						
STINE/ 13R08	117					58	1	. /	, .	
Test avg. :	123	60	58	1	51	55	1	56	57	1
High avg. :	129	63	64	3	60	61	2	62	63	2
Low avg. :	117	52	47	1	38	43	1	45	48	1
[3] Test LSD (.05):		5	3	1	12	4	NS**	***	***	***
[4] Min.TPG-avg.:		58	61		48	57				
[5] Max.TPG-avg. :				1			2			
[6] Test Coef. Var.:		4	3	24	8	5	33			
No. Entries:	101	18	55	55	15	46	46	30	90	90

^[1] DTM= days to maturity from seeding dates of May 17 at Brookings and June 3 at Bancroft. Note that additional table footnotes are explained in Table F.

^{*} Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more the better.

^{**} Indicates differences between values within a column are non-significant (NS).

^{***} There were significant variety by location interactions for yield zone averages. Therefore, evaluate yield by using the yield columns for each location.

Table 5. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- central South Dakota locations, 2009-2010. Entries are sorted by 2-Yr then by 2010 zone yield.

			Ce	ntral Averag	es by Lo	cation*		Central Zone Averages			
B 104 1 .	DTM		Brooki	ngs		Banc	roft	Cent	ral Zone	Averages	
Brand/Variety	[1]	Yield-bu/a		2010 Lodg.	Yield	l-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	
PRAIRIE BR./ PB-2419RR2	130	65	68	2	60	60	1	63	64	2	
G-2/ GENETICS 7208	127	59	57	1	53	58	1	56	58	1	
PRAIRIE BR./ PB-2207NRR	127	61	60	1	48	55	1	55	58	1	
G-2/ GENETICS 7212	127	62	59	1	47	50	1	55	55	1	
PRAIRIE BR./ PB-2558NRR	130	59	61	2	49	57	1	54	59	1	
NUTECH/ 7222	128	62	60	1	46	54	1	54	57	1	
NUTECH/ 6234RR	127	59	60	1	49	52	1	54	56	1	
REA/ EXP 84G20	129		68	2	.	61	1		65	2	
REA/ EXP 80G11	127		61	1		61	1		61	1	
PRAIRIE BR./ PB-242	130		63	2		59	1		61	1	
NUTECH/ 2660RN	132		63	1		56	1		60	1	
G-2/ GENETICS 7249	128		61	1		58	1		60	1	
REA/ 84G15	130	62	63	2		57	1		60	2	
HEFTY/ H20Y11	129		63	1		55	1		59	1	
PRAIRIE BR./ EXP 2102	127		59	1		58	1		59	1	
HEFTY/ H187	123		61	1		54	1		58	1	
G-2/ GENETICS 7230	127		60	1		55	1	. /	58	1	
PRAIRIE BR./ EXP 2302	131		64	3		51	1		58	2	
NUTECH/ 7274	132		58	2		55	1		57	2	
HEFTY/ H200	127		61	1		53	1	W 7	57	1	
REA/ 8705NRR	126		59	1		52	1	<u> </u>	56	1	
PRAIRIE BR./ PB-2450R	131		56	2		56	1		56	2	
ASGROW/ AG2031	126		55	1		54	1		55	1	
PRAIRIE BR./ PB-2442R2	129		55	1		54	1		55	1	
PRAIRIE BR./ PB-2142R2	130		60	1		47	1		54	1	
PRAIRIE BR./ PB-2632R2	134		57	3		50	1		54	2	
PUBLIC/SD(LD)05-16137	125		55	1		45	1		50	1	
MUSTANG/ 21320	132	61	62	1							
MUSTANG/ 23530	132	64	68	2							
MUSTANG/ 20221	128		58	2							
MUSTANG/ 21421	133		60	1							
MUSTANG/ 21181	133		59	3							
MUSTANG/ 23321	134		62	2							
PIONEER/ 92Y30	127					58	1				
STINE/ 21RB62	133		61	1							

Table 5. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- central South Dakota locations, 2009-2010 (continued).

			Ce	ntral Averag	Central Zone					
Duand Maniata	DTM	Brookings				Banc	roft	Averages		
Brand/Variety	[1]	Yield	-bu/a	2010 Lodg.	Yield-bu/a		2010 Lodg.	Yield-bu/a		2010 Lodg.
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]
CHANNEL/ 2000R2	128		60	1						
NORTHSTAR/ NS2026NR2	129		60	2						
NORTHSTAR/ NS2116NR2	133		60	1						
NORTHSTAR/ NS2226NR2	134		62	1						
RENK/ RS210NR2	130	59	61	1						
Test avg. :	129	61	61	1	50	55	1	56	58	1
High avg. :	134	65	68	3	60	61	1	63	65	2
Low avg.:	123	59	55	1	46	45	1	54	50	1
[3] Test LSD (.05):		NS**	3	1	10	4	NS	***	***	***
[4] Min.TPG-avg.:		59	65		50	57				
[5] Max.TPG-avg.:				1			1			
[6] Test Coef. Var.:		4	3	21	5	4	18			
No. Entries:	67	11	39	39	7	28	28	14	54	54

^[1] DTM= days to maturity from seeding dates of May 17 at Brookings and June 3 at Bancroft. Note that additional table footnotes are explained in Table F.

Therefore, evaluate yield by using the yield columns for each location.

^{*} Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more the better.

^{***} Indicates differences between values within a column are non-significant (NS).

*** There were significant variety by location interactions for yield zone averages.

Table 6. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- southern South Dakota locations, 2009-2010. Entries are sorted by 2-Yr then by 2010 zone yield.

			Sou	thern Averag	es by L	ocation	*		7	
Brand/Variety	DTM		Beres	ford		Gedo	les	Souti	nern Zoi	ne Averages
brand/variety	[1]	Yield	l-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	Yield	l-bu/a	2010 Lodg.
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]
PRAIRIE BR./ PB-2278RR	125	72	77	2	58	61	1	65	69	2
PRAIRIE BR./ PB-2020R2	121	72	73	1	57	57	1	65	65	1
NUTECH/ 6205+RR	121	70	74	1	54	56	1	62	65	1
PRAIRIE BR./ PB-2058NRR	121	69	73	1	54	55	2	62	64	1
PRAIRIE BR./ PB-1956RR	123	65	70	2	55	57	2	60	64	2
G-2/ GENETICS 6159	110	65	66	1	52	51	1	59	59	1
NUTECH/ 1808RN	118	64	67	1	50	51	1	57	59	1
SODAK GEN./SD 1161RR/SCN	118	65	71	1	47	52	2	56	62	2
PRAIRIE BR./ PB2099NRR2	121		76	1		60	1		68	1
PRAIRIE BR./ PB-202	121		75	1		59	1		67	1
PRAIRIE BR./ PB-1920R2	121		73	2		58	2		66	2
PRAIRIE BR./ PB-1942R2	120		76	1		54	1		65	1
PRAIRIE BR./ PB-2042R2	118		74	1		56	1		65	1
SODAK GEN./SD 2171RR	116		75	1		55	1		65	1
PRAIRIE BR./ PB-2110R2	122		72	2		53	1		63	2
NUTECH/ 7199	119		69	1	. 1	55	1		62	1
G-2/ GENETICS 6160	112		71	2	.	50	2	. /	61	2
NUTECH/ 6198	118		67	1		50	1		59	1
G-2/ GENETICS 7180	118		67	2		50	1		59	2
Test avg. :	119	68	72	1	53	55	1	61	64	1
High avg. :	125	72	77	2	58	61	2	65	69	2
Low avg. :	110	64	66	1	47	50	1	56	59	1
[3] Test LSD (.05):		5	2	1	6	6	1	2	***	1
[4] Min.TPG-avg.:		67	75		52	55		63		
[5] Max.TPG-avg.:				1			1			1
[6] Test Coef. Var.:		2	2	18	7	7	29	5		24
No. Entries:	38	8	19	19	8	19	19	16	38	38

^[1] DTM= days to maturity from seeding dates of May 24 at Beresford and June 7 at Geddes.

Note that additional table footnotes are explained in Table F.

* Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more the better.

^{**} Indicates differences between values within a column are non-significant (NS).

*** There were significant variety by location interactions for yield zone averages.

Therefore, evaluate yield by using the yield columns for each location.

Table 7. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- southern South Dakota locations, 2009-2010. Entries are sorted by 2-Yr then by 2010 zone yield.

		Southern Averages by Location*		Southern Zone						
D 10/ 1	DTM		Beresfo	rd		Gedde	 S	•	Averag	
Brand/Variety	[1]	Yield	-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]
NUTECH/ 2660RN	125	70	73	2	62	53	1	66	63	2
PRAIRIE/ BR. PB-2419RR2	123	71	76	1	59	58	1	65	67	1
ASGROW/ AG2430	120	70	73	1	59	52	1	65	63	1
DAIRYLAND/ DSR-2560/RR	121	69	73	2	56	51	1	63	62	2
G-2/ GENETICS 7212	120	66	70	1	59	54	1	63	62	1
PRAIRIE BR./ PB-2207NRR	120	69	73	1	55	53	1	62	63	1
PRAIRIE BR./ PB-2558NRR	121	67	71	1	56	52	1	62	62	1
NUTECH / 7222	119	67	71	1	56	50	1	62	61	1
HEFTY/ H259	123	67	71	1	56	51	1	62	61	1
NUTECH/ 7274	122	68	70	1	55	46	1	62	58	1
DAIRYLAND/ DSR-2132/R2Y	117	66	68	1	56	53	1	61	61	1
G-2/ GENETICS 7208	117	64	70	1	55	52	1	60	61	1
ASGROW/ AG2530	121	65	66	2	54	51	1	60	59	2
HEFTY/ H23Y10	122		76	1		58	1		67	1
PRAIRIE BR./ PB-242	123		76	1		55	1		66	1
ASGROW/ AG2631	124		69	2		58	2		64	2
PIONEER/ 92Y70	124		73	1	.	54	1		64	1
HEFTY/ H23Y11	120		74	2		54	1	<i>.</i>	64	2
DAIRYLAND/ DSR-2011/RR	119	68	71	2		56	1	7.	64	1
G-2/ GENETICS 7250	120		74	1		54	1		64	1
G-2/ GENETICS 7290	126		72	1	. "	56	1		64	1
ASGROW/ AG2031	115		75	1		50	1		63	1
ASGROW/ AG2931	127		70	3		56	1		63	2
DAIRYLAND/ DSR-2375/R2Y	122		70	3		55	1		63	2
PRAIRIE BR./ PB-2142R2	122		70	1		55	1		63	1
PRAIRIE BR./ PB-2632R2	125		71	2		54	1		63	2
PRAIRIE BR./ PB-2450R	123		71	3		53	2		62	3
HEFTY/ H24Y11	122		70	1		52	1		61	1
G-2/ GENETICS 7230	120		74	1		47	1		61	1
G-2/ GENETICS 7249	122		73	2		49	1		61	2
ASGROW/ AG2831	122		72	3		47	2		60	2
NUTECH/ 6217	118		67	1		52	2		60	1
HEFTY/ H250	122		70	1		50	1		60	1
PRAIRIE BR/. EXP 2801	125		68	2		51	1		60	2
PRAIRIE BR./ PB-2442R2	119		69	1		48	1		59	1
PRAIRIE BR./ PB-2742R2	126		69	3		49	1		59	2
HEFTY/ H25Y11	122		69	2		47	1		58	2
G-2/ GENETICS 7260	119		67	1		45	1		56	1
PUBLIC/SD(LD)05-16137	115		64	2		45	1		55	1
MUSTANG/ 23530	127	72	75	1				<u> </u>	<u> </u>	

Table 7. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- southern South Dakota locations, 2009-2010 (continued).

			Sou	ıthern Averaç	jes by Lo	cation*		S	outhern	Zone
Brand/Variety	DTM		Beresfo	rd		Gedde	s		Averag	es
Brand/variety	[1]	Yield	-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.
		2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]	2-Yr	2010	(1-5) [2]
CHANNEL/ 2402R2	128		74	1						
PIONEER/ 92Y51	131		73	1						
PIONEER/ 93Y13	133		73	2						
RENK/ RS241R2	127		73	1						
CHANNEL/ 2000R2	122		72	1						
RENK/ RS211NR2	127		72	1						
DAIRYLAND/ DSR-2770/RR	131	66	71	2						
RENK/ RS259NRR	128	64	71	1						
MUSTANG/ 23321	128		70	1						
MUSTANG/ 25521	131		70	3						
STINE/ 29RB22	133		70	3						
STINE/ 27RA02	131		69	1						
STINE/ 23RA22	130		68	2						
STINE/ 24RB02	133		68	2						
DAIRYLAND/ DST22-007/R2Y	128		67	3						
MUSTANG/ 27721	133		67	3						
RENK/ RS271NR2	132	. 7	63	2	.					
PIONEER/ 92Y82	120					52	1			
PIONEER/ 92Y30	109				56	48	1			
Test avg. :	123	68	71	2	57	52	1	63	62	1
High avg. :	133	72	76	3	62	58	2	66	67	3
Low avg. :	109	64	63	1	54	45	1	60	55	1
[3] Test LSD (.05):		NS**	4	1	NS	7	1	***	***	***
[4] Min.TPG-avg.:		64	72		54	51				
[5] Max.TPG-avg. :				1			1			
[6] Test Coef. Var.:		4	3	26	6	8	8			
No. Entries:	98	17	57	57	14	41	41	26	78	78

^[1] DTM= days to maturity from a seeding dated of May 24 at Beresford and June 7 at Geddes.

Note that additional table footnotes are explained in Table F.

* Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more the better.

** Indicates differences between values within a column are non-significant (NS).

*** There were significant variety by location interactions for yield zone averages.

Table 8. Non-glyphosate-resistant maturity group-0 and -I soybean variety yield and lodging averages-South Shore, 2010-2010.

		Yi	eld & loc	lging score av	erages by mat	urity grou	ıp
Brand/Variety	DTM		MG-0			MG-I	
Brand, variety	[1]	Yield-bu/a 2-yr	2010	2010 Lodg. (1-5) [2]	Yield-bu/a 2-yr	2010	2010 Lodg. (1-5) [2]
PUBLIC/SD03-2154	118		55	3			
PUBLIC/SD07CV-539	120		54	2			
PUBLIC/SHEYENNE	117		54	2			
PUBLIC/SURGE	118	50	53	2			
SEEDS 2000/ EXP 2083L	123		52	2			
PUBLIC/EXP MN0907	119		52	3			
PUBLIC/SD04CV-613	120		52	1			
RICHLAND ORG./ MK0508	120	48	51	4			
SEEDS 2000/ EXP 2082L	118		51	1			
SEEDS 2000/ EXP 2092L	118		51	1			
PUBLIC/SD04CV-611	120		51	2			
PUBLIC/MN0606CN	121		51	3			
PUBLIC/SD07CV-528	119		50	2			
PUBLIC/SD06-430	117		50	2			
PUBLIC/SD06-487	119		50	3			
PUBLIC/SD07CV-935	124		48	3			
PUBLIC/EXP MN0908CN	119	48	48	2			
PUBLIC/SD06-525	125		48	3			
PUBLIC/SD06-322	118		47	2			
PUBLIC/SD06-428	119		47	3			
PUBLIC/SD05-767	123	44	44	3			
PUBLIC/SD00-1501	118	42	42	2			
PUBLIC/MN1410	123				48	54	3
PUBLIC/MN1701CN	130				49	53	3
PUBLIC/SD05-240	128					52	3
SEEDS 2000/ EXP 2102LN	124					50	1
PUBLIC/MN1413CN	125					49	2
SK FOOD INTL/ SK9801	119					48	2
PUBLIC/DEUEL	121				46	47	3
RICHLAND ORG./ MK9101	120					46	3
RICHLAND ORG./ MK1401T	121					45	2
RICHLAND ORG./ MK1016	119				38	39	3
RICHLAND ORG./ MK9120	124					32	3
Test avg.: High avg.: Low avg. : [3] LSD (.05): [4] Min. TPG avg.: [5] Max. TPG avg.: [6] Coef. Var.:		46 50 42 NS** 42	50 55 42 5 50	2 4 1 1 1	45 49 38 9 40	47 54 32 5 49	3 3 1 1 1

^[1] DTM= days to maturity from seeding dates of May 24 at South Shore.

Note that additional table footnotes are explained in Table F.

* Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more the better.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 9. Non-glyphosate resistant maturity group-0, -I, and -II soybean variety yield and lodging averages-Brookings, 2009-2010.

					ing sc		ages by mat	 			
Brand/Variety	DTM		MG	-0		MG	i-l		MG	i-II	
Diana, Farioty	[1]	Yield	-bu/a	2010 Lodg.	Yield	l-bu/a	2010 Lodg.	Yield	-bu/a	2010 Lodg.	
		2-yr	2010	(1-5) [2]	2-yr	2010	(1-5) [2]	2-yr	2010	(1-5) [2]	
PUBLIC/SD06-525	120		57	1							
SEEDS 2000/ EXP 2082L	119		55	1							
PUBLIC/SD07CV-539	121		55	1							
PUBLIC/SURGE	116	53	54	1				.			
PUBLIC/SD07CV-528	116		53	2							
PUBLIC/EXP MN0907	118		52	2							
PUBLIC/SD04CV-613	125		51	2							
PUBLIC/SD07CV-935	121		51	1							
PUBLIC/SD03-2154	117		51	1	١.			١.			
PUBLIC/SD05-767	124	48	49	1	١.			١.			
PUBLIC/SD04CV-611	119		48	2							
PUBLIC/EXP MN0908CN	120	45	48	1							
PUBLIC/SD06-428	119		45	2							
PUBLIC/MN0606CN	118		44	2							
PUBLIC/SD00-1501	118	46	44	2							
PUBLIC/SHEYENNE	109		44	1				. /	7.		
PUBLIC/SD06-487	117		43	2							
PUBLIC/SD06-430	112		42	2							
SK FOOD INTL/ SK927	112		40	1							
PUBLIC/SD06-322	119		39	2				7.			
PUBLIC/SD05-240	128				65	66	1				
DAIRYLAND/ DSR-1680/STS	127					64	2				
PUBLIC/DEUEL	124				54	60	2	١.	١.		
PUBLIC/SD07CV-576	130					58	3				
PUBLIC/SD07CV-673	130					58	1				
PUBLIC/MN1701CN	127				57	58	2				
PUBLIC/MN1410	123				55	57	2				
PUBLIC/SD07CV-885	130					57	2				
PUBLIC/SD07CV-997	124					55	2				
SEEDS 2000/ EXP 2102LN	120					54	1				
PUBLIC/SD07CV-523	122	<u>. </u>	<u>. </u>			53	1	<u>.</u>	<u>. </u>		
PUBLIC/MN1413CN	119					52	2	١.			
PUBLIC/SD07CV-619	118					50	1				
PUBLIC/SD07CV-875	124					50	1				
RICHLAND ORG./ MK9101	116					49	2	١.			
RICHLAND ORG./ MK1401T	121		<u> </u>			48	1	<u> </u>	<u> </u>		
RICHLAND ORG./ MK9120	120					40	2	 .			
RICHLAND ORG./ MK1016	118	.	.			37	3	.	.		
SK FOOD INTL/ EXP 9813	127			·		36	3	'			

Table 9. Non-glyphosate resistant maturity group-0, -I, and -II soybean variety yield and lodging averages-Brookings, 2009-2010 (continued).

		Yield & Lodging score averages by maturity group									
Duand Mariata	DTM		MG	-0		MG-I			MG-II		
Brand/Variety	[1]	Yield-bu/a		2010 Lodg.	Yield	l-bu/a	2010 Lodg.	Yield-bu/a		2010 Lodg.	
		2-yr	2010	(1-5) [2]	2-yr	2010	(1-5) [2]	2-yr	2010	(1-5) [2]	
PUBLIC/SD07CV-603	135								66	3	
PUBLIC/DAVISON	127							58	61	1	
PUBLIC/SD07CV-631	137								59	2	
PUBLIC/SD07CV-367	132								58	2	
PUBLIC/SD07CV-886	135								58	2	
PUBLIC/SD07CV-770	132								55	1	
PUBLIC/SD07CV-800	130								54	2	
PUBLIC/SD07CV-874	134								54	2	
PUBLIC/SD07CV-878	129								54	2	
Test avg.:	123	48	48	2	58	53	2	58	58	2	
High avg.:	137	53	57	2	65	66	3	58	66	3	
Low avg. :	109	45	39	1	54	36	1	58	54	1	
[3] LSD (.05):		NS**	4	NS	NS	4	1		3	1	
[4] Min. TPG avg.:		45	53		54	62			63		
[5] Max. TPG avg.:				2			1			1	
[6] Coef. Var.:		6	5	35	4	4	25	. /	3	30	

^[1] DTM= days to maturity from seeding dates of May 17 at Brookings.

Note that additional table footnotes are explained in Table F.

* Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more the better.

** Indicates differences between values within a column are non-significant (NS).

Table 10. Non-glyphosate resistant maturity group-I and -II soybean variety yield and lodging averages-Beresford, 2009-2010.

		Yield	d & lod	ging score a	verages	by matu	rity group
D 10/	DT84 [4]		MG	-I		MG-	·II
Brand/Variety	DTM [1]	Yield-	-bu/a	2010 Lodg.	Yield	l-bu/a	2010 Lodg
		2-yr	2010	(1-5) [2]	2-yr	2010	(1-5) [2]
PUBLIC/SD05-240	123		71	3			
PUBLIC/MN1410	117	61	68	3			
PUBLIC/DEUEL	115	56	66	4			
RICHLAND ORG./ MK1401T	114		65	2			
PUBLIC/MN1413CN	115		65	3			
PUBLIC/MN1701CN	120	57	64	4			
RICHLAND ORG./ MK9101	111		60	2			
RICHLAND ORG./ MK9120	113		50	2			
RICHLAND ORG./ MK1016	109		49	3			
SK FOOD INTL/ EXP 9813	116		44	3	l		l
PUBLIC/DAVISON	124		[65	73	3
PUBLIC/SD07CV-603	131					73	4
PUBLIC/SD07CV-631	132					72	3
PUBLIC/SD07CV-367	127					67	2
PUBLIC/SD07CV-770	126					66	2
PUBLIC/SD07CV-800	125					66	2
PUBLIC/SD07CV-878	125	A .				66	3
PUBLIC/SD07CV-886	131					66	2
PUBLIC/SD07CV-874	130	·				65	3
Test avg.:	121	58	60	3	65	68	3
High avg.:	132	61	71	4	65	73	4
Low avg. :	109	56	44	2	65	65	2
[3] LSD (.05):		NS**	3	1		3	1
[4] Min. TPG avg.:		56	68			70	
[5] Max. TPG avg.:				2			2
[6] Coef. Var.:		6	3	15		2	18

^[1] DTM= days to maturity from seeding dates of May 24 at Beresford.

Note that additional table footnotes are explained in Table F.

* Shaded values within a column are included in the top-performance group. Look for hybrids with more shaded values, the more the better.

^{**} Indicates differences between values within a column are non-significant (NS).

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DECEMBER 2011

SDSU EXTENSION

Soybean production is greatly affected by variety selection.

This circular reports the agronomic performance of entries in the 2011 South Dakota performance trials for glyphosate-resistant and non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Major factors in variety selection include:

- Yield
- Maturity
- Lodging resistance
- Phytophthora root rot resistance

Soybean Variety Performance Trials – 2011 Results

Robert G. Hall | SDSU Extension Agronomist Kevin K. Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager



General

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and therefore are affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to lowa, Nebraska, and south to Texas.

These soybean trial results are reported according to the prevalent maturity zones in South Dakota (see map below). These variety trials were conducted at the following locations: Maturity groups -0 and -I at South Shore and Warner; Maturity groups -0, -I, and -II at Brookings and Bancroft; and Maturity groups -I and -II at Beresford and Geddes.

There are transition areas where varieties of two maturity groups may perform similarly. In such cases, rainfall and or elevation may moderate the effect of latitude on maturity. In most cases, an earlier maturity group may be seeded if seeding is delayed, or if reseeding following hail, or if double cropping.

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Phytophthora root rot (PRR) is an important sovbean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, using varieties with a wide range of rot resistance is strongly suggested (see discussion of Phytophthora under "General Test Procedures").

Inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean ground, there is no guarantee that beneficial bacteria will be present to naturally inoculate the seed, thus, inoculation is cheap insurance that plants will fix nitrogen.

Yield

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested, along with two-year averages if varieties were tested two years. Yield averages and least significant difference (LSD) values are rounded to the nearest bushel and printed at the bottom of each yield column.

The LSD value can be used to determine if varieties differ in yield per acre. For example,

assume variety A averages 30 bu., B averages 25 bu., and the calculated LSD value is 4 bu. The average difference between varieties A and B is 5 bu. (30-25=5). Since the average difference of 5 bu. is greater than the test LSD value of 4 bu., variety A (30 bu.) is significantly higher in yield than for B (25 bu.). In contrast, if variety A averages 28 bu. and B averages 25 bu., the average difference would be 3 bu. (28-25=3). In this case, both varieties would have a similar yield average because their difference of 3 bu. is less than the test LSD value of 4 bu.

Use LSD values to identify the best-yielding varieties. The LSD value at the bottom of each yield column is used to calculate a minimum top performance group (TPG) value for yield. For example, if the highest column yield value is 50 bu., subtract the LSD value of 5 bu. to obtain an intermediate value of 45 bu. (50 -5 = 45). Entries in that column yielding 46 bushels per acre or higher are in the TPG. However, we can also say a yield of 45 bushels per acre also qualifies as a TPG-value because the yield averages are rounded to the nearest bushel. This inclusion of 45 bushels per acre in the TPG also makes the results indicated in the table (rounded values) agree with the results of the statistical analysis, which determines variety differences to the nearest tenth of bushel.

Note: Use care when evaluating the yield performance of entries in each table. Entries tested for

two years may also have a top yield group value in the 2011 yield column. Note: Each company selects the appropriate maturity group trial (maturity group-0, -1, or -II trial) and locations for their entries. Companies generally have one or more maturity group checks for their varieties. There are, however, no standard regional or national check varieties for maturity. A late group-I variety from one company may be similar in maturity to an early group-l or early group-II variety from another company because they use different check varieties for maturity. Therefore, this testing program does not guarantee that entries are placed in the appropriate maturity group trial. Borderline entries with maturity ratings at or near the arbitrary breaks between the late-group-0s and early group-Is and between the late-group-Is and early group-Ils may crossover in some test trials. It is suggested you note the reported maturity rating of every entry you are considering. Since all entries at a location are seeded the same day, one can compare the relative difference in days to maturity among varieties tested at that location. Use caution when comparing the maturity rating of a variety over many locations. Variations in soil moisture and temperature often differ between locations, resulting in some maturity variations over locations.

The efforts of D. Doyle, SDSU Agronomy Farm; A. Heuer, NE Research Farm, South Shore; and R. Berg and staff, SE Research Farm, Beresford, in obtaining the data are gratefully acknowledged.
Also, the assistance and
cooperation of our farmer
co-operators, Allen and Inel
Ryckman, Warner, S.D.; Curtis
Sybesma, Geddes, S.D.; and
Weerts Farms Inc., Bancroft, S.D.,
is gratefully acknowledged.

Protein and Oil Content

Protein and oil values (adjusted to 13% moisture) were determined using a calibrated FOSS TECATOR Model Infratec 1229 Grain Analyzer. Three replicates of every variety in each trial were tested.

Weather and Seasonal Precipitation

The efforts of Dennis Todey and his staff at the South Dakota Office of Climate and Weather at South Dakota State University are gratefully acknowledged in obtaining the weather data reported in table A. Seasonal rainfall and its distribution at weather reporting stations nearest each test trial are reported for the period April 1 to September 30. Seasonal precipitation totals were about 2.5 " above average at Aberdeen (Wagner), 1.5" above average at the Northeast Research Farm (South Shore), 1" below average at Huron Airport (Bancroft), near average at Brookings (Volga Research Farm) and White Lake (Geddes), and 1.5" below average at the Southeast Research Station (Beresford). Generally, across all the test trial locations, precipitation was generally highest in June and July and lower in August and September.

Temperatures for the 2011

growing season were cooler than average. The accumulation of growing degree days (GDDs) in April through June were generally below average for all locations. In July, the GDDs were near or above average across all locations; and in August the GDDs accumulation across locations varied from about 129 to 179 GDDs below average. The seasonal GDDs accumulations were below average at all locations including Aberdeen (-791), Northeast Research Farm (-1057), Huron ((-786), Brookings (-807), White Lake (-1059), and the Southeast Research Station (-841 GDDs). The coefficients of variation for yield were 8% or less across locations and well within acceptable limits: this means the test trials for yield were valid. Although the rainfall distribution and heat unit distribution did vary significantly this year compared to the average; the variability did not have a significant effect on the ability of the test trials to identify soybean variety differences.

General Test Procedures

These procedures apply to both the glyphosate-resistant and conventional non-glyphosate-resistant soybean trials, except for the chemical weed control imposed. Trial locations, soil types, tillage methods, previous crops, pesticide usage, and seeding dates are indicated in table B.

Test Procedures: A row spacing of 30 inches was used at all locations. The seeding rate was 165,000 seeds per acre for all varieties and locations. Test plots

consist of 4-row plots, 20-feet long, with three replications at all locations. Soybean inoculation was accomplished by applying Nitragin-brand Soybean Soil Implant down the seed tube, according to label instructions and rates, during seeding. Seeding at all locations was accomplished using a Monosem precision row crop planter. The center two rows of each plot were harvested for vield.

Yield: Plots were harvested and yields were adjusted to a 13% moisture content basis and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine.

Reporting variety maturity:

Variety maturity is reported as "days to maturity" or DTM.
Entries are mature when 95% of the pods have turned brown.
Each maturity value is obtained by determining the average number of days from seeding to maturity for two replicates and expressing it as DTM at each location. If DTM data is missing (.) then plots at that location were exposed to a killing frost before the 95% brown pod stage was attained.

Lodging Score: Scores at maturity are based on the erectness of the main stem of plants within each variety. 1 = all plants erect, 2 = slight lodging, 3 = some lodging at a 45° angle, 4 = severe lodging, and 5 = all plants flat.

Phytophthora Root Rot (PRR):

The gene resistance of each

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variety to PRR is supplied by each seed company (proprietary entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). A key for each type of PRR gene and the race resistance it imparts to a variety is given in table C. Specific race resistance to PRR, as reported by seed company, can be determined by noting the PRR gene in the variety index table D (glyphosateresistant) and referencing the gene back to table C to find the range of race resistance. Currently, races -1, -3, and -4 are the most common races in South Dakota.

Glyphosate-Resistant Soybean Variety Trial

Northern Test Trials

Warner - Minimum-tillage, Allen & Inel Ryckman Farm (farm cooperators)

South Shore – Conventional tillage, Northeast Research Farm

Warner Group-0 (Table 1a)

The two-year and 2011 yield averages were 55 and 67 bushels per acre, respectively, the lodging score average was 1, and the seed protein and oil content averages were 35.4 and 19.6%, respectively (table 1a). Varieties had to average 55 and 68 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the twoyear averages had to differ by 5 bu., while the 2011 variety yield differences had to differ by 4 bu. to be significantly different.

Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different. Variety protein and oil values had to be 36.0 and 20.7% or higher to be in the top performance group for 2011, respectively.

Warner, Group-I (Table 1b):

The two-year and 2011 testyield averages were 54 and 61 bushels per acre, respectively, the lodging score average was 1, and the seed protein and oil content averages were 35.1 and 19.2%, respectively (table 1b). Varieties had to average 51 and 63 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages had to differ by 8 bu., while the 2011 variety yield differences had to differ by 5 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different. Variety protein and oil values had to be 35.6 and 19.9% or higher to be in the top performance group for 2011, respectively.

South Shore, Group-0 (Table

2a): The two-year and 2011 test-yield averages were 51 and 49 bushels per acre, respectively, the lodging score average was 1, and the seed protein and oil content averages were 36.4 and 18.2%, respectively (table 2a). Varieties had to average 48 bushels and 51 bushels or higher to be in the top yield group for two years and for

2011, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score value differences were not significant, so all entries were in the top performance group. Variety protein and oil values had to be 38.5 and 19.3% or higher to be in the top performance group for 2011, respectively.

South Shore, Group-I (Table

2b): The two-year and 2011 testyield averages were 48 and 46 bushels per acre, respectively, the lodging score average was 1, and the seed protein and oil content averages were 36.4 and 17.3%, respectively (table 2b). Varieties had to average 44 and 49 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the twoyear averages were not significant (NS), while the 2011 variety vield differences had to differ by 3 bushels to be significantly different. Variety lodging score value differences were not significant, so all entries were in the top performance group. Variety protein and oil values had to be 38.1 and 17.9% or higher to be in the top performance group for 2011, respectively.

Central Test Trials

Bancroft – No-till, E. Weerts Farm Inc. (farm cooperator)

Brookings – Conventional tillage, Volga Research Farm

Bancroft, Group-0 (Table 3a):

The two-year and 2011 test-yield averages were both 51 bushels per acre, respectively, the lodging score average was 1, and the seed protein and oil content averages were 33.3 and 20.0%, respectively (table 3a). There was only one variety that was tested for two years. Varieties had to average 51 bushels or higher to be in the top yield group for 2011. Among the varieties tested for 2011, variety yield differences had to differ by 1 bu. to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2011. Variety protein and oil values had to be 33.0 and 18.9% or higher to be in the top performance group for 2011, respectively.

Bancroft, Group-I (Table 3b):

The two-year and 2011 testyield averages were both 56 bushels per acre, the lodging score average was 1, and the seed protein and oil content averages were 34.9 and 18.9%, respectively (table 3b). Varieties had to average 53 and 57 bushels or higher to be in the top yield group for two years and 2011, respectively. Variety yield differences among the two-year averages were not significant, while the 2011 variety yield differences had to differ by 6 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different. Variety protein and oil values had

to be 37.6 and 20.2% or higher to be in the top performance group for 2011, respectively.

Bancroft, Group-II (Tables

3c): The two-year and 2011 test-yield averages were both 57 bushels per acre, the lodging score average was 2, and the seed protein and oil content averages were 36.5 and 18.3%, respectively (table 3c). Varieties had to average 56 and 58 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield averages had to differ by 6 bushels for two years and 4 bushels in 2011 to be significantly different. Variety lodging score values had to equal 2 to be in the top performance group for lodging resistance because there was no significant differences in lodging scores among the varieties. Variety protein and oil values had to be 38.1 and 19.1% or higher to be in the top performance group for 2011, respectively.

Brookings, Group-0 (Table

4a): The two-year and 2011 testyield averages were 62 and 71 bushels per acre, respectively, the lodging score average was 2, and the seed protein and oil content averages were 35.5 and 19.5%, respectively (table 4a). Varieties had to average 62 and 70 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield averages did not differ among varieties for either the two-year period (only one variety tested) or for 2011. Variety lodging score values had to equal 1 to be in the top performance group for lodging

resistance and had to differ by 1 to be significantly different. Variety protein and oil values had to be 34.8 and 20.2% or higher to be in the top performance group for 2011, respectively.

Brookings, Group-I (Table

4b): The two-year and 2011 test-yield averages were both 61 bushels per acre, the lodging score average was 2, and the seed protein and oil content averages were 34.6 and 18.8%, respectively (table 4b). Varieties had to average 57 and 65 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 5 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different. Variety protein and oil values had to be 36.3 and 19.5% or higher to be in the top performance group for 2011, respectively.

Brookings, Group-II (Table 4c):

The two-year and 2011 test-yield average was 59 and 54 for two years and for 2011, respectively, the lodging score average was 2, and the seed protein and oil content averages were 34.1 and 18.4%, respectively (table 4c). Varieties had to average 52 and 60 bushels or higher to be in the top yield group for two years and for 2010, respectively. Variety yield differences among the two-year averages were not significant

(NS), while the 2011 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different. Variety protein and oil values had to be 34.3 and 19.0% or higher to be in the top performance group for 2011, respectively.

Southern Test Trials

Geddes – No-till, Curtis Sybesma (farm cooperator)

Beresford – Conventional tillage, Southeast SD Agricultural Experiment Station.

Geddes, Group-I (Table 5a):

The two-year and 2011 testyield averages were 52 and 49 bushels per acre, respectively, the lodging score average was 1, and the seed protein and oil content averages were 33.4 and 19.9%, respectively (table 5a). Varieties had to average 50 bushels and 47 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 6 bushels to be significantly different. Variety lodging score values indicated lodging resistance did not differ among the varieties tested in 2011. Variety protein and oil values had to be 35.4 and 21.0% or higher to be in the top performance group for 2011, respectively.

Geddes, Group-II (Table 5b):

The two-year and 2011 testyield averages were 52 and 51 bushels per acre, respectively, the lodging score average was 1, and the seed protein and oil content averages were 32.9 and 19.3%, respectively (table 5b). Varieties had to average 46 and 53 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 6 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2011. Variety protein and oil values had to be 35.4 and 20.1% or higher to be in the top performance group for 2011, respectively.

Beresford, Group-I (Table 6a):

The two-year and 2011 testyield averages were 63 and 52 bushels per acre, respectively, the lodging score average was 1, and the seed protein and oil content averages were 37.6 and 20.0%, respectively (table 6a). Varieties had to average 62 and 54 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 5 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be

significantly different. Variety protein and oil values had to be 38.7 and 21.2% or higher to be in the top performance group for 2011, respectively.

Beresford, Group-II (Table 6b):

The two-year and 2011 testyield averages were 61 and 51 bushels per acre, respectively, the lodging score average was 1, and the seed protein and oil content averages were 38.0 and 19.3%, respectively (table 6b). Varieties had to average 57 and 53 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety vield differences had to differ by 4 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2011. Variety protein and oil values had to be 40.5 and 19.7% or higher to be in the top performance group for 2011, respectively.

Non-Glyphosate-Resistant Soybean Variety Trial Results

South Shore – Conventional tillage, Northeast Research Farm

South Shore, Group-0 (Tables 7a and 7b): The two-year and 2011 yield averages were 46 and 42 bushels per acre, respectively, and the lodging score average was 1 (table 7a). Varieties had to average 41 bushels or higher for two years and 45 bushels or higher for 2011 to be in the

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top yield group. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 5 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2011.

The seed protein and oil content averages were 38.1 and 18.4%, respectively (table 7b). Variety protein and oil values had to be 41.0 and 19.7% or higher to be in the top performance group for 2011, respectively.

South Shore, Group-I (Table 7a and 7b): The two-year and 2011 and test-yield averages were 45 and 44 bushels per acre, respectively, and the lodging score average was 1 (table 7a). Varieties had to average 40 bushels or higher for two years and 44 bushels or higher for 2011 to be in the top yield group. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 3 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2011. The seed protein and oil content averages were 37.4 and 18.2%, respectively (table 7b). Variety protein and oil values had to be 37.5 and 18.9% or higher to be in the top performance group for 2011, respectively.

Brookings – Conventional tillage, Volga Research Farm

Brookings, Group-0 (Table 8a and 8b): The two-year and 2011 test-yield averages were 55 and 60 bushels per acre, respectively, and the lodging score average was 2 (table 8a). Varieties had to average 48 and 65 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different. The seed protein and oil content averages were 35.7 and 21.1%, respectively (table 8b). Variety protein and oil values had to be 37.0 and 20.2% or higher to be in the top performance group for 2011, respectively.

Brookings, Group-I (Table 8a and 8b): The two-year and 2011 yield averages were 50 and 53 bushels per acre, respectively, and the lodging score average was 2 (table 8a). Varieties had to average 45 and 56 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 5 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by

1 to be significantly different. The seed protein and oil content averages were 35.0 and 19.9%, respectively (table 8b). Variety protein and oil values had to be 36.2 and 22.1% or higher to be in the top performance group for 2011, respectively.

Brookings, Group-II (Table 8a and 8b): The two-year and 2011 yield averages were 50 and 40 bushels per acre, respectively, and the lodging score average was 2 (table 8a). Varieties had to average 46 and 52 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different. The seed protein and oil content averages were 35.4 and 18.2%, respectively (table 8b). Variety protein and oil values had to be 36.5 and 19.4% or higher to be in the top performance group for 2011, respectively.

Beresford – Conventional tillage, Southeast Agricultural Experiment Station

Beresford, Group-I (Table 9a):

The two-year and 2011 yield averages were 51 and 46 bushels per acre, respectively, and the lodging score average was 1 (table 9a). Varieties had to average

45 and 42 bushels or higher to be in the top yield group for two years and for 2011, respectively. Variety yield differences among the two-year averages and for 2011 were not significant (NS). Variety lodging score values had to equal 1 to be in the top performance group for resisting lodging, and lodging values had to differ by 1 to be significantly different. The seed protein and oil content averages were 35.2 and 21.1%, respectively (table 9b). Variety protein and oil values had to be 36.9 and 21.4% or higher to be in the top performance group for 2011, respectively.

Beresford, Group-II (Table

9a): The two-year and 2011 yield averages were 57 and 44 bushels per acre, respectively, and the lodging score average was 1 (table 9a). Varieties had to average 53 and 49 bushels or higher to be in the top yield group for two years and for 2011. Variety yield differences among the two-year averages were not significant (NS), while the 2011 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging score value differences were not significant (NS). The seed protein and oil content averages were 37.4 and 19.4%, respectively (table 9b). Variety protein and oil values had to be 37.6 and 19.6% or higher to be in the top performance group for 2011, respectively.

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Table A. Nearest weather station monthly rainfall and growing degree day totals and their departures from average during the 2011 growing season. Data is courtesy of the South Dakota Office of Climate and Weather, South Dakota State University, Brookings, SD.

Station	Variable	Monthly data - April 1 to October 31						
(Test site)	variable	April	May	June	July	Aug	Sept	Sum
	Rain totals - inch '11	2.98	2.93	4.69	6.63	0.87	0.64	18.74
	30 year avg.	1.85	3.11	3.70	3.02	2.43	2.19	16.30
A b a r d a a a	DFA*	1.13	-0.18	0.99	3.61	-1.56	-1.55	2.44
Aberdeen	GDDs Totals '11	86	265	498	786	641	376	2,652
	30 year avg.	278	480	678	751	770	486	3,443
	DFA*	-192	-215	-180	35	-129	-110	-791
	Rain totals - inch '11	1.38	4.72	3.28	8.13	1.20	0.58	19.29
	30 year avg.	2.18	2.74	3.77	3.34	2.93	2.78	17.74
Northeast	DFA	-0.80	1.98	-0.49	4.79	-1.73	-2.20	1.55
Research Farm	GDDs Totals '11	65	217	426	717	554	310	2,289
	30 year avg.	270	466	669	723	733	485	3,346
	DFA*	-205	-249	-243	-6	-179	-175	-1,057
	Rain totals - inch '11	2.59	3.34	3.95	3.49	2.35	0.45	16.17
	30 year avg.	2.31	3.11	3.93	2.92	2.43	2.46	17.16
Huron Airport	DFA	0.28	0.23	0.02	0.57	-0.08	-2.01	-0.99
(Bancroft)	GDDs Totals '11	98	300	524	842	670	383	2,817
	30 year avg.	304	473	686	801	794	545	3,603
	DFA*	-206	-173	-162	41	-124	-162	-786
	Rain totals - inch '11	2.64	6.18	3.98	4.88	1,52	0.14	19.34
Brookings	30 year avg.	2.13	2.97	4.30	3.25	3.07	3.19	18.91
(Volga Res.	DFA	0.51	3.21	-0.32	1.63	-1.55	-3.05	0.43
Farm)	GDDs Totals '11	62	257	457	772	586	347	2,481
	30 year avg.	238	445	643	745	740	477	3,288
	DFA*	-176	-188	-186	27	-154	-130	-807
	Rain totals - inch '11	2.74	4.12	6.61	1.63	2.35	0.35	17.80
	30 year avg.	2.72	3.54	3.64	2.63	2.53	2.23	17.29
White Lake	DFA	0.02	0.58	2.97	-1.00	-0.18	-1.88	0.51
(Geddes)	GDDs Totals '11	97	254	478	784	652	383	2,648
	30 year avg.	314	517	712	800	796	568	3,707
	DFA*	-217	-263	-234	-16	-144	-185	-1,059
	Rain totals - inch '11	3.52	5.16	4.38	1.06	3.43	0.74	18.29
Centerville,	30 year avg.	2.73	3.64	4.36	3.28	2.95	2.93	19.89
Experiment	DFA	0.79	1.52	0.02	-2.22	0.48	-2.19	-1.60
Station (Test	GDDs Totals '11	98	312	532	830	668	368	2,808
site)	30 year avg.	286	532	722	780	770	559	3,649
	DFA*	-188	-220	-190	50	-102	-191	-841
* DFA - departure	e from average, difference c	urrent year is	s greater or le	ess (-) than th	e 30 year ave	rage.		

Table B. Description of 2011 trial locations- soil type, tillage, prior crop, herbicides and inoculants, and seeding dates.

	Soils 8	k Management		Нє	erbicides Applied	d at label rate	es	Insecticides	
Location (County)	T	Tillage	D	Glypoh	Glypohosate Plots		sate Plots	Applied at	Date seeded
(County)	Туре	Method	Prior crop	Pre	Post	Pre	Post	label rates	seeded
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	No-till	Corn	None	Roundup/ Fusilade once	-	-	Assana (aerial)	May 26
South Shore (Codington)	Kranzburg silty clay loam, 3-6% slope	Conventional	Spring wheat	2 pt, Dual II Magnum	Roundup once	2 pt, Dual II Magnum	Harmony/ Basagran	Warrior (aerial)	June 6
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	No-till	Corn	Extreme/ Sharpen	Roundup twice	-	-	Warrior (ground)	June 2
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conventional	Springwheat	None	Roundup twice	None	Harmony/ Poast	Asana (ground)	May 25
Geddes (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Corn	None	Roundup once	-	-	None	May 26
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conventional	Corn	Sonalan	Roundup once		Raptor Cadet	Assana (ground)	June 8

* Nitragin Soybean Soil Implant was applied down the seed tube at label rates at planting.

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lable (:	Phyton	hthora r	oot rot	strain	resistance	accordi	na to	gene
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Gene	Gene Code	Race Resistance
rps1	0	None
Rps1, Rps1a	1A	1-2,10-11,13,15-18,24
Rps1b	1B	1,3-9,13-15,18,21-22
Rps1c	1 C	1-3,6-11,13,15,17,21,23-24
Rps1k	1 K	1-11,13-15,17-18,21-22,24
Rps2	2	1-5,9-20
Rps3	3	1-5,8-9,11,13-14,16,18,23,25
Rps4	4	1-4,10,12-16,18-21,25
Rps5	5	1-5,8-9,11-14,18,20,25
Rps6	6	1-4,10,12,14-16,18-21,25
Rsp7	7	16,18,19
Rps1k, Rps6	K6	1-22,24-25
Rps1c, Rps3	C3	1-10,13-18,22-25
Rps1b	В3	1-9,13-16,18,21-23,25
MIX	MX	Resistant & Susceptible Plants
NR*	NR	Not Reported

Table D. Index to 2011 Glyphosate-resistant soybean entries by brand/variety, maturity group, seed trt., gene code for Phytophthora root rot(PRR) resistance as reported by entrants, and performance table no.(s). Use table C to determine entry PRR strain resistance.

Brand / Variety	Mat. Grp.	Seed Treatment	Gene Code*	Table No.(s)
ASGROW/ AG0730	0.7	Acceleron	1 K	1a, 2a
ASGROW/ AG0832	0.8	Acceleron	3	1a, 2a
ASGROW/ AG1031	1.0	Acceleron	3	1b, 2b
ASGROW/ AG1132	1.1	Acceleron	1 K	1b, 2b
ASGROW/ AG1230	1.2	Acceleron	1 C	1b, 2b
ASGROW/ AG1431	1.4	Acceleron	1 C	1b, 2b, 3b, 4b
ASGROW/ AG1631	1.6	Acceleron	1 C	1b, 2b, 3b, 4b
ASGROW/ AG1832	1.8	Acceleron	1 K	3b, 4b
ASGROW/ AG2031	2.0	Acceleron	1 C	3c, 4c, 5b, 6b
ASGROW/ AG2232	2.2	Acceleron	1C	3c, 4c, 5b, 6b
ASGROW/ AG2431	2.4	Acceleron	1C	3c, 4c, 5b, 6b
ASGROW/ AG2732	2.4	Acceleron	NR	5b, 6b
ASGROW/ AG2931	2.9	Acceleron	1 C	5b, 6b
CHANNEL/ 0905R2	0.9	Acceleron	1 K	1a, 2a
CHANNEL/ 1101R2	1.1	Acceleron	1 K	1b, 2b
CHANNEL/ 1105R2	1.1	Acceleron	3	1b, 2b
CHANNEL/ 1405R2	1.4	Acceleron	1 C	1b, 2b, 3b, 4b
CHANNEL/ 1700R2	1.7	Acceleron	1C	3b, 4b
CHANNEL/ 1805R2	1.8	Acceleron	1 C	3b, 4b
CHANNEL/ 1901R2	1.9	Acceleron	1C	3b, 4b
CHANNEL/ 2000R2	2.0	Acceleron	1C	3c, 4c, 5b, 6b
CHANNEL/ 2105R2	2.1	Acceleron	1C	5b, 6b
CHANNEL/ 2200R2	2.2	Acceleron	1 K	5b, 6b
CHANNEL/ 2400R2	2.2	Acceleron	1 K	5b, 6b
CHANNEL/ 2402R2	2.2	Acceleron	1 K	5b, 6b
DAIRYLAND/ DSR-0747/R2Y	0.7	Cruiser Maxx	1 C	1a, 2a
DAIRYLAND/ DSR-1215/RY2	1.2	Cruiser Maxx	1 C	3b, 4b
DAIRYLAND/ DSR-1370/R2Y	1.3	Cruiser Maxx	1 C	1b, 2b
DAIRYLAND/ DSR-1808/R2Y	1.8	Cruiser Maxx	1 C	1b, 2b, 3b, 4b
DAIRYLAND/ DSR-2011/RR	2.0	Cruiser Maxx	1 K	3c, 4c, 5b, 6b
DAIRYLAND/ DSR-2105/R2Y	2.1	Cruiser Maxx	1 K	3c, 4c, 5b, 6b
DAIRYLAND/ DSR-2240/R2Y	2.2	Cruiser Maxx	1 C	5b, 6b
DAIRYLAND/ DST16-001/ RY2	1.6	Cruiser Maxx	1 C	1b, 2b
G-2 GENETICS/ 6088	0.8	Trilex 6000	0	1a, 2a
G-2 GENETICS/ 6092	0.9	Trilex 6000	1 K	1a, 2a
G-2 GENETICS/ 6098	0.9	Trilex 6000	1 K	1a, 2a
G-2 GENETICS/ 6142	1.4	Trilex 6000	0	1b, 2b, 3b, 4b
G-2 GENETICS/ 6155	1.5	Trilex 6000	1 K	1b, 2b, 3b, 4b
G-2 GENETICS/ 6162	1.6	Trilex 6000	1C	1b, 2b, 3b, 4b, 5a, 6a
G-2 GENETICS/ 7110	1.1	Trilex 6000	1 C	1b, 2b
G-2 GENETICS/ 7170	1.7	Trilex 6000	K6	1b, 2b, 3b, 4b, 5a, 6a
G-2 GENETICS/ 7192	1.9	Trilex 6000	1 C	3b, 4b, 5a, 6a
G-2 GENETICS/ 7208	2.0	Trilex 6000	1 C	5b, 6b
G-2 GENETICS/ 7226	2.2	Trilex 6000	1 K	5b, 6b
G-2 GENETICS/ 7249	2.4	Trilex 6000	1 K	5b, 6b
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Table D. Index to 2011 Glyp	phosate-resistant s	oybean entries (Continu	ed).	
Brand / Variety	Mat. Grp.	Seed Treatment	Gene Code*	Table No.(s)
G-2 GENETICS/ 7250	2.5	Trilex 6000	1 K	5b, 6b
G-2 GENETICS/ 7262	2.6	Trilex 6000	1 C	5b, 6b
G-2 GENETICS/ 7272	2.7	Trilex 6000	1 K	5b, 6b
G-2 GENETICS/ 7290	2.9	Trilex 6000	1 K	5b, 6b
HEFTY/ H05Y12	0.5	NR	0	1a
HEFTY/ H06Y12	0.6	NR	0	1a, 2a
HEFTY/ H07Y12	0.7	NR	3	2a
HEFTY/ H08Y11	0.8	NR	1 C	2a
HEFTY/ H08Y12	0.8	NR	0	2a
HEFTY/ H09Y10	0.9	NR	1 C	1a, 2a
HEFTY/ H09Y11	0.9	NR	3	1a, 2a
HEFTY/ H10Y12	1.0	NR	1 K	1b
HEFTY/ H11Y12	1.1	NR	3	1 b
HEFTY/ H12Y12	1.2	NR	1 C	1b, 2b
HEFTY/ H13Y11	1.3	NR	1 C	2b
HEFTY/ H13Y12	1.3	NR	1 C	1b, 2b, 3b
HEFTY/ H15Y12	1.5	NR	3	2b
HEFTY/ H16Y11	1.6	NR	0	2b, 3b
HEFTY/ H16Y12	1.6	NR	1 K	2b, 3b, 4b
HEFTY/ H17Y12	1.7	NR	1 K	3b, 4b
HEFTY/ H18Y12	1.8	NR	0	3b, 4b
HEFTY/ H19Y11	1.9	NR	1 C	3b, 4b
HEFTY/ H20Y11	2.0	NR	0	3c, 6b
HEFTY/ H20Y12	2.0	NR	1 C	3c, 5b
HEFTY/ H21Y11	2.1	NR	1 C	4c
HEFTY/ H21Y12	2.1	NR	1 K	3c, 6b
HEFTY/ H22Y11	2.2	NR	1 C	3c, 4c, 6b
HEFTY/ H22Y12	2.2	NR	1 C	4c, 5b
HEFTY/ H23Y10	2.3	NR	0	
				4c, 5b
HEFTY/ H23Y12	2.3	NR NR	1 K	4c, 5b
HEFTY/ H24Y12	2.4	NR	1C	4c, 6b
HEFTY/ H25Y12	2.5	NR	3	6b
HEFTY/ H26Y11	2.6	NR	1 C	6b
MUSTANG/ 06942	0.6	Acceleron	0	2a
MUSTANG/ 09822	0.9	Acceleron	1 K	1a, 2a, 3a, 4a
MUSTANG/ 11302	1.1	Acceleron	3	1b, 2b, 3b, 4b
MUSTANG/ 13552	1.3	Acceleron	1 C	1b, 2b, 3b, 4b
MUSTANG/ 14441	1.4	Acceleron	1 C	1b, 4b
MUSTANG/ 15522	1.5	Acceleron	1 C	1b, 2b, 3b, 4b
MUSTANG/ 17722	1.7	Acceleron	1 K	1b, 3b, 4b
MUSTANG/ 18821	1.8	Acceleron	1 K	4b
MUSTANG/ 18922	1.8	Acceleron	1 K	3b, 4b
MUSTANG/ 19922	1.9	Trilex 6000	NR	3b, 4b
MUSTANG/ 20622	2.0	Acceleron	1 C	3c, 4c
MUSTANG/ 23530	2.3	Acceleron	0	4c, 5b, 6b
MUSTANG/ 24322	2.4	Acceleron	3	4c, 5b, 6b
MUSTANG/ 25521	2.5	Acceleron	1 K	6b
MUSTANG/ 27721	2.7	Acceleron	0	5b, 6b
NUTECH/ 6078	0.9	Trilex 6000	NR	1a, 2a
NUTECH/ 6099	0.9	Trilex 6000	1 C	1a, 2a

Table D. Index to 2011 Glyphosate-resistant soybean entries (Continued).						
Brand / Variety	Mat. Grp.	Seed Treatment	Gene Code*	Table No.(s)		
NUTECH/ 6118	1.1	Trilex 6000	1 C	1b, 2b, 3b, 4b		
NUTECH/ 6145	1.4	Trilex 6000	NR	1b, 2b, 3b, 4b		
IUTECH/ 6156	1.8	Trilex 6000	NR	1b, 2b, 3b, 4b		
IUTECH/ 6195	1.9	NR	0	5a, 6a		
IUTECH/ 6228	2.2	Trilex 6000	NR	3c, 4c, 5b, 6b		
IUTECH/ 6244	2.4	Trilex 6000	NR	3c, 4c		
UTECH/ 6245	2.4	Trilex 6000	NR	3c, 4c, 5b, 6b		
UTECH/ 6265	2.6	Trilex 6000	NR	5b, 6b		
UTECH/ 6281	2.8	Trilex 6000	1 K	5b, 6b		
ETERSON FARMS/ 11R08	0.8	NR	3	1a, 2a		
ETERSON FARMS/ 11R10	1.0	NR	1 C	1b, 2b		
IONEER BR./ 90Y80	0.8	Gaucho+Apron+Trilex	NR	1a, 2a		
IONEER BR./ 90Y90	0.9	Gaucho+Apron+Trilex	1 C	1a, 2a		
IONEER BR./ 91Y22	1.2	Gaucho+Apron+Trilex	NR	1b, 2b, 3b		
IONEER BR./ 91Y41	1.4	Gaucho+Apron+Trilex	1 C	1b, 2b, 3b		
IONEER BR./ 91Y60	1.6	Gaucho+Apron+Trilex	1 C	1b, 2b, 3b, 4b		
IONEER BR./ 91Y61	1.6	Gaucho+Apron+Trilex	NR	1b, 2b, 3b, 4b		
IONEER BR./ 91Y90	1.9	Gaucho+Apron+Trilex	NR	1b, 3b, 4b		
IONEER BR./ 92Y30	2.3	Gaucho+Apron+Trilex	1 K	3c, 4c, 5b		
IONEER BR./ 92Y51	2.5	Gaucho+Apron+Trilex	1 K	4c, 5b, 6b		
IONEER BR./ 92Y70	2.7	Gaucho+Apron+Trilex	NR	5b, 6b		
IONEER BR./ 92Y73	2.7	Gaucho+Apron+Trilex	1 C	5b, 6b		
ONEER BR./ 93M11	2.9	Gaucho+Apron+Trilex	1 K	5b, 6b		
IONEER BR./ 93Y13	2.9	Gaucho+Apron+Trilex	1C	5b, 6b		
RAIRIE BR./ EXP 0811	0.8	NR	1 K	1a, 2a		
RAIRIE BR./ EXP 0912	0.9	NR	1K	1a, 2a		
RAIRIE BR./ EXP 0913	0.9	NR	1A	1a, 2a		
RAIRIE BR./ EXP 1511	1.5	NR		,		
			3A	1b, 2b, 3b, 4b		
RAIRIE BR./ EXP 1812	1.8	NR	0	3b, 4b, 5a, 6a		
RAIRIE BR./ EXP 2012	2.0	NR	1C	3c, 4c		
RAIRIE BR./ EXP 231	2.3	NR	1 C	3c, 4c		
RAIRIE BR./ PB-0721R2	0.7	NR	3	1a, 2a		
RAIRIE BR./ PB-0880R2	0.8	NR	0	1a, 2a		
RAIRIE BR./ PB-0920R2	0.9	NR	1 K	1a, 2a		
RAIRIE BR./ PB-1080R2	0.9	NR	1 C	1a, 2a		
RAIRIE BR./ PB-1120R2	0.9	NR	1 C	1a, 2a		
RAIRIE BR./ PB-1320R2	1.3	NR	1 C	1b, 2b		
RAIRIE BR./ PB-1410R2	1.4	NR	1 C	1b, 2b		
RAIRIE BR./ PB-1483R2	1.4	NR	1 C	1b, 2b		
RAIRIE BR./ PB-1523R2	1.5	NR	1 C	1b, 2b		
RAIRIE BR./ PB-1591R2	1.5	NR	0	1b, 2b, 3b, 4b, 5a, 6		
RAIRIE BR./ PB-1722R2	1.7	NR	1 K	1b, 2b, 3b, 4b, 5a, 6		
RAIRIE BR./ PB-1743R2	1.7	NR	1 C	1b, 2b, 3b, 4b		
RAIRIE BR./ PB-1823R2	1.8	NR	1 C	1b, 2b, 3b, 4b, 5a, 6		
RAIRIE BR./ PB-1920R2	1.9	NR	1 C	1b, 2b, 3b, 4b, 5a, 6		
RAIRIE BR./ PB-1942R2	1.9	NR	1 K	3b, 4b, 5a, 6a		
RAIRIE BR./ PB-2042R2	1.9	NR	1 C	5a, 6a		
RAIRIE BR./ PB-2099NRR2	1.9	NR	1 C	3b, 4b, 5a, 6a		
RAIRIE BR./ PB-2121R2	2.0	NR	0	3c, 4c, 5b, 6b		
RAIRIE BR./ PB-2123R2	1.9	NR	1 K	5a, 6a		

		oybean entries (Continue	Gene Code*	Table No. (a)
Brand / Variety	Mat. Grp.	Seed Treatment		Table No.(s)
PRAIRIE BR./ PB-2221R2	2.1	NR	1 C	3c, 4c, 5b, 6b
PRAIRIE BR./ PB-2242R2	2.2	NR	1A	3c, 4c, 5b, 6b
PRAIRIE BR./ PB-2278RR	1.9	NR	1 K	3b, 4b, 5a, 6a
PRAIRIE BR./ PB-2343R2	2.3	NR	1 K	3c, 4c
PRAIRIE BR./ PB-2391R2	2.3	NR	1 C	3c, 4c, 5b, 6b
PRAIRIE BR./ PB-2419RR2	2.3	NR	1 C	3c, 4c, 5b, 6b
PRAIRIE BR./ PB-2544R2	2.5	NR	3A	3c, 4c, 5b, 6b
PRAIRIE BR./ PB-2558NRR	2.4	NR	0	3c, 4c, 5b, 6b
PRAIRIE BR./ PB-2743R2	2.7	NR	1 C	5b, 6b
PRAIRIE BR./ PB-2882R2	2.7	NR	0	5b, 6b
PRAIRIE BR./ PB-2903R2	2.9	NR	1 K	5b, 6b
PRAIRIE BR./ PB0879NRR2	0.9	NR	1 C	1a, 2a
PUBLIC/ SD(LD)05-16121	2.0	NR	0	3c, 4c, 5b, 6b
PUBLIC/ SD(LD)05-16137	2.0	NR	0	3c, 4c, 5b, 6b
REA/ 6764RR	0.6	NR	3	1a, 2a
REA/ 67G61	0.7	NR	3	1a, 2a
REA/ 69G22	0.9	NR	1 K	1a, 2a
REA/ 71G20	1.1	NR	0	1b, 2b, 3b, 4b
REA/ 72G21	1.3	NR	1 C	1b, 2b, 3b, 4b
REA/ 75G10	1.4	NR	1 C	1b, 2b, 3b, 4b
REA/ 75G12	1.4	NR	1C	1b, 2b, 3b, 4b
REA/ 76G10	1.6	NR	1 K	1b, 2b, 3b, 4b
REA/ 78G12	1.8	NR	1 C	3b, 4b
REA/ 80G11	2.0	NR	1 K	3c, 4c
REA/ 84G20	2.4	NR	1C	3c, 4c
REA/ EXP22R211	2.2	NR	1C	3c, 4c
REA/ EXP25R211	2.5	NR	1 C	3c, 4c
RENK/ RS122R2	1.2	NR	1 C	4b
RENK/ RS140NR2	1.4	NR	1 C	4b
RENK/ RS141NR2	1.4	NR	1 C	4b
RENK/ RS172NR2	1.7	NR	1 K	4b
RENK/ RS181NR2	1.8	NR	1 K	4b
RENK/ RS202NR2	2.0	NR	1 C	4c
RENK/ RS210NR2	2.1	NR	1 C	4c
RENK/ RS222R2	2.2	NR	1 C	4c, 6b
RENK/ RS241R2	2.4	NR	1 C	6b
RENK/ RS282R2	2.8	NR	1 C	6b
SEEDS 2000/ 2082 RR2Y	0.8	NR	3	1a, 2a
EEDS 2000/ 2082 RR2YN	0.8	NR	1 K	1a, 2a 1a, 2a
SEEDS 2000/ 2091 RR21N	1.2	NR	3	1b, 2b
·		NR	0	<u> </u>
SODAK GEN./ SD1093RR	0.9			1a, 2a, 3a, 4a
SODAK GEN./ SD2091RR	0.7	NR	1C	1a, 2a, 3a, 4a
SODAK GEN./ SD2151RR	1.2	NR	1C	1b, 2b, 3b, 4b, 5a, 6
SODAK GEN./ SD2171RR	1.7	NR	1 C	1b, 2b, 3b, 4b, 5a, 6
STINE/ 08RC68	0.8	Cruiser Maxx	0	2a
STINE/ 09RC83	0.9	Cruiser Maxx	1 K	1a, 2a
STINE/ 11RC08	1.1	Cruiser Maxx	3	1b, 2b
STINE/ 11RC68	1.1	Cruiser Maxx	3	1 b
STINE/ 13RA08	1.3	Cruiser Maxx	1 K	1b, 3b
STINE/ 16RA02	1.6	Cruiser Maxx	1 K	1b, 3b, 4b

Table D. Index to 2011 Glyphosate-resistant soybean entries (Continued).							
Brand / Variety	Mat. Grp.	Seed Treatment	Gene Code*	Table No.(s)			
STINE/ 19RA02	1.9	Cruiser Maxx	1 C	1b, 4b			
STINE/ 20RC32	2.0	Cruiser Maxx	1 C	4c			
STINE/ 22RC62	2.2	Cruiser Maxx	1 K	4c, 6b			
STINE/ 2420-4	2.4	Cruiser Maxx	1 A	6b			
STINE/ 24RB00	2.4	Cruiser Maxx	1 C	4c, 6b			
STINE/ 29RB22	2.9	Cruiser Maxx	0	6b			
WENSMAN/ W 3099R2	0.9	Acceleron	1 K	1a, 2a			
WENSMAN/ W 3108R2	1.0	Acceleron	3A	1b, 2b			
WENSMAN/ W 3114R2	1.1	Acceleron	1 C	1b, 2b, 3b, 4b			
WENSMAN/ W 3120R2	1.2	Acceleron	1 C	1b, 2b, 3b, 4b			
WENSMAN/ W 3131R2	1.3	Acceleron	1 C	1b, 2b, 3b, 4b			
WENSMAN/ W 3140R2	1.4	Acceleron	0	1b, 2b, 3b, 4b			
WENSMAN/ W 3174NR2	1.7	Acceleron	1 K	1b, 2b, 3b, 4b			
WENSMAN/ W 3180NR2	1.8	Acceleron	1 K	1b, 2b, 3b, 4b			
WENSMAN/ W 3200NR2	2.0	Acceleron	1 C	3c, 4c, 5b, 6b			
WENSMAN/ W 3212NR2	2.1	Acceleron	1 C	3c, 4c, 5b, 6b			
WENSMAN/ W 3230R2	2.3	Acceleron	1 C	3c, 4c, 5b, 6b			
WENSMAN/ W 3256NR2	2.5	Acceleron	3A	5b, 6b			
WENSMAN/ W 3284NR2	2.8	Acceleron	1 C	5b, 6b			

Table E. Mailing addr	esses of entrants in the 2011 soybean trials.
Entrant name (bra	and name) & Mailing address
Channel	Channel Bio. Corp., Box 277, Laurel, NE 68745
Dairyland	Dairyland Seed Co., Inc., PO Box 958, West Bend, WI 53095
G2	G2 Genetics, 36131 Hwy 69N, Forest City, IA 50436
Hefty	Hefty Seed Co.), 47504 252nd St., Baltic, SD 57003
Asgrow	Monsanto, 46040 SD HWY 44,Chancellor, SD 57015
Mustang	Mustang Seeds, PO Box 466, Madison, SD 57042
Nutech	Nutech Seed, LLC, 36131 Hwy 69N, Forest City, IA 50436
Peterson	Peterson Farms, 3104 164th Ave SE, Harwood, ND 58042
Pioneer	Pioneer Hi-Bred Intl., 151 St. Andrews Ct. Suite 910, Mankato, MN 56001
Praire Brand	Prairie Brand Seed Co., 11261 US HWY 69, Story City, IA 50248
REA	REA Hybrids, 5 37th Ave S, Moorhead, MN 56560
Renk	Renk Seed Co., 6809 Wilburn Rd., Sun Prairie, WI 53590
Richland Organics	Richland Organics, Inc., 100 N 10th St., Breckenridge, MN 56520
Seeds 2000	Seeds 2000, 115 N 3rd St, Breckenridge, MN 56520
SK	SK Food International, 4666 Amber Valley Parkway, Fargo, ND 58104
SoDak	Sodak Genetics, 1200 North Campus Dr., Brookings, SD 57007
Public	South Dakota State University, Plant Science Department, Brookings, SD 57007
Stine	Stine Seed Co., 11920 Hargrove Dr., Des Peres, MO 63131
Wensman	Wensman Seed, PO Box 190, Wadena, MN 56482

Table F. E	Table F. Explanation of performance table footnotes.							
NO.	EXPLANATION OF TABLE FOOTNOTES							
[1]	Days to maturity (DTM) – the number of days to maturity from seeding to 95% brown pod. If data is missing (.) the plots were exposed to a killing frost before they attained the 95% brown pod stage.							
[2]	Lodging scores: 0= all plants erect, 3= 50% of plants lodged at 45°-angle, 5= all plants flat.							
[3]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value the difference between the values is nonsignificant (NS).							
[4]	TPG-avg. – the minimum value within a column that entry yield values must equal or exceed to qualify for the top-performance group (TPG).							
[5]	TPG-avg. – the maximum value within a column that lodging score values must equal or be less than to qualify for the TPG.							
[6]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% tend to be less common while values of 6 to 15% are more common. Occasionally, values exceed 15%; this means the trial contained too much experimental error to be a valid test; thus, no data analysis for that table column is reported.							

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Table 1a. Glyphosate-resistant maturity group-0 soybean variety yield, lodging score, and seed protein, and oil averages at Warner, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

		Yield Averages* bu/a		Other 2011 Averages			
Brand/Variety	DTM [1]	(13%	Vist.#)	Lodg. Score	Prot. % (13%	Oil %	
		2-Yr	2011	(1-5)	Mst.#)	(13% Mst.#)	
SEEDS 2000/ 2091 RR2YN	117	59	70	2	35.2	19.5	
DAIRYLAND/ DSR-0747/R2Y		58	71	2	36.0	18.7	
PRAIRIE BR./ PB0879NRR2	117	56	70	1	35.1	19.6	
ASGROW/ AG0730	110	56	69	1	36.4	19.0	
G-2 GENETICS/ 6088	114	56	68	1	35.8	19.7	
SODAK GEN./ SD1093RR	112	55	65	1	35.9	19.8	
PIONEER BR./ 90Y80	111	52	67	1	34.4	21.0	
G-2 GENETICS/ 6098	115	52	66	2	35.2	19.8	
PRAIRIE BR./ PB-1120R2		49	61	2	36.3	18.9	
NUTECH/ 6078	116		71	1	35.4	19.6	
MUSTANG/ 09822	113		69	2	35.1	20.2	
PRAIRIE BR./ EXP 0912	114		69	2	35.6	20.0	
HEFTY/ H09Y10	115		68	1	35.3	19.6	
PRAIRIE BR./ EXP 0811	115		68	1	36.0	19.7	
PRAIRIE BR./ EXP 0913	112		68	3	34.3	20.0	
NUTECH/ 6099	117		67	3	34.8	19.7	
HEFTY/ H06Y12	110		67	2	35.7	19.6	
G-2 GENETICS/ 6092	114		67	2	36.0	19.4	
REA/ 67G61	113		67	1	35.3	19.3	
WENSMAN/W 3099R2	114	·	67	1	36.5	19.5	
ASGROW/ AG0832	114		66	1	36.6	20.0	
PIONEER BR./ 90Y90	111		66	1	36.1	19.3	
HEFTY/ H09Y11	113	. 📠	66	1	35.4	19.4	
STINE/ 09RC83	115		66	1	37.0	19.3	
PRAIRIE BR./ PB-0721R2	111		66	1	35.1	19.3	
PRAIRIE BR./ PB-0880R2	113		66	1	34.5	18.8	
SODAK GEN./ SD2091RR			66	1	35.3	18.7	
REA/ 6764RR	110		65	1	33.3	19.7	
PETERSON FARMS/ 11R08	115		65	1	35.0	19.4	
PRAIRIE BR./ PB-0920R2	114		65	1	37.1	19.1	
SEEDS 2000/ 2082 RR2Y	115		64	1	35.4	19.6	
REA/ 69G22	116		63	3	34.1	20.3	
CHANNEL/ 0905R2			63	2	34.0	20.0	
PRAIRIE BR./ PB-1080R2			63	2	34.0	20.2	
Test avg. :	113	55	67	1	35.4	19.6	
High avg. :	117	59	71	3	37.1	21.0	
Low avg. :	110	49	61	1	33.3	18.7	
[3] Test LSD (.05):		5	4	<1	1.1	0.4	
[4] Min.TPG-avg. :		55	68		36.0	20.7	
[5] Max.TPG-avg.:				1			
[6] Test Coef. Var.:		7	3	30	2	1	
No. Entries:	29	9	34	34	34	34	

^[1] DTM= days to maturity from a seeding date of May 26, 2011 at Warner.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 1b. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at Warner, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

		Yield Avera (13% l		Other 2011 Averages			
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% MST.#)	Oil % (13% Mst.#)	
PRAIRIE BR./ PB-1743R2		58	67	1	35.7	18.2	
ASGROW/ AG1631		58	63	2	36.2	19.5	
PRAIRIE BR./ PB-1722R2		57	62	1	35.8	19.4	
SODAK GEN./ SD2171RR		56	65	1	33.0	19.6	
DAIRYLAND/ DSR-1370/R2Y		56	60	1	34.8	18.7	
REA/ 75G10	115	55	65	1	35.8	18.6	
ASGROW/ AG1230	115	55	61	1	34.7	19.8	
PRAIRIE BR./ PB-1410R2		55	61	1	35.7	18.3	
ASGROW/ AG1431	115	54	64	1	35.3	20.3	
ASGROW/ AG1031	115	53	62	1	36.9	19.0	
STINE/ 13RA08		53	59	1	35.7	18.6	
MUSTANG/ 14441	119	53	58	1	35.2	18.9	
REA/ 71G20	116	52	65	2	34.8	19.4	
REA/ 72G21		52	60	2	35.7	18.9	
NUTECH/ 6145		52	58	1	33.8	19.8	
PRAIRIE BR./ PB-1920R2		52	54	1	36.9	18.4	
PIONEER BR./ 91Y22	115	51	62	_1	36.2	19.6	
REA/ 76G10		51	59	1	34.4	19.7	
PIONEER BR./ 91Y60		48	57	1	35.7	19.3	
CHANNEL/ 1405R2			68	1	35.6	19.8	
MUSTANG/ 17722			66	1	35.1	19.4	
DAIRYLAND/ DST16-001/RY2			66	1	33.1	19.5	
WENSMAN/ W 3174NR2			66	1	34.5	19.4	
REA/ 75G12			64	1	36.1	19.2	
CHANNEL/ 1105R2	117		64	1	36.4	18.5	
PRAIRIE BR./ PB-1591R2			64	1	33.3	19.1	
WENSMAN/ W 3108R2	115		64	1	36.4	19.0	
MUSTANG/ 15522			63	1	32.8	19.2	
NUTECH/ 6118	116		63	3	35.0	19.6	
STINE/ 16RA02			63	1	35.6	19.3	
STINE/ 19RA02			63	1	34.0	19.1	
G-2 GENETICS/ 6155		,	63	1	35.1	20.4	
G-2 GENETICS/ 6162	117	,	63	1	33.4	20.2	
CHANNEL/ 1101R2			63	1	35.6	18.7	
MUSTANG/ 11302			62	1	36.6	18.6	
DAIRYLAND/ DSR-1808/R2Y	•		62	1	33.9	18.8	
WENSMAN/ W 3114R2	•		62	2	35.9	19.0	
WENSMAN/ W 3140R2			62	1	33.7	19.0	
SEEDS 2000/ 2121 RR2Y	113		62	1	36.8	18.8	
ASGROW/ AG1132			61	1	34.6	19.5	
STINE/ 11 RC08	112		61	1	36.6	18.9	
PETERSON FARMS/ 11R10	114		61	1	35.1	19.8	
WENSMAN/ W 3120R2	114	•	61	2	36.3	18.8	
				1			
WENSMAN/ W 3131R2		•	61		34.2	18.7	

Table 1b. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at Warner, SD, 2010-2011 (continued).

5 (2)	DTM [4]	Yield Avera		Other 2011 Averages			
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% MST.#)	Oil % (13% Mst.#)	
PIONEER BR./ 91Y90			60	1	34.3	19.3	
PIONEER BR./ 91Y61			60	1	34.6	20.1	
PIONEER BR./ 91Y41	113		60	1	33.6	19.7	
HEFTY/ H11Y12	114		60	1	36.6	18.9	
PRAIRIE BR./ PB-1320R2			60	1	35.1	18.2	
PRAIRIE BR./ PB-1523R2	118		60	1	35.5	19.4	
HEFTY/ H12Y12			59	1	34.1	19.2	
HEFTY/ H13Y12			59	1	35.9	19.2	
G-2 GENETICS/ 7110	114		59	1	35.3	19.9	
PRAIRIE BR./ EXP 1511	118		59	1	36.0	18.9	
PRAIRIE BR./ PB-1823R2			59	1	35.3	18.8	
WENSMAN/W 3180NR2			59	1	34.9	19.7	
STINE/ 11RC68			58	1	35.7	19.2	
SODAK GEN./ SD2151RR			58	1	34.9	18.4	
PRAIRIE BR./ PB-1483R2	118		57	1	33.5	19.2	
G-2 GENETICS/ 7170			55	1	34.5	19.4	
NUTECH/ 6156			54	1	34.5	18.6	
G-2 GENETICS/ 6142			51	1	35.4	19.7	
Test avg. :	115	54	61	1	35.1	19.2	
High avg. :	119	58	68	3	36.9	20.4	
Low avg. :	112	48	51	1	32.8	18.2	
[3] Test LSD (.05):		8	5	<1	1.3	0.5	
[4] Min.TPG-avg. :		51	63		35.6	19.9	
[5] Max.TPG-avg. :				1			
[6] Test Coef. Var.:		7	5	24	2	2	
No. Entries:	20	19	63	63	63	63	

^[1] DTM= days to maturity from a seeding date of May 26, 2011 at Warner.

 $^{^{\}star}$ Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

 $^{^{**}}$ Indicates differences between values within a column are non-significant (NS).

Table 2a. Glyphosate-resistant maturity group-0 soybean variety yield, lodging score, and seed protein, and oil averages at South Shore, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

5 107	D.T.M. [4]		ages* bu/a Mst.#)	Other 2011 Averages		
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)
G-2 GENETICS/ 6088		54	50	1	36.9	18.5
PRAIRIE BR./ PB0879NRR2		52	51	1	36.0	18.3
SODAK GEN./ SD1093RR		52	47	1	37.4	18.8
ASGROW/ AG0730		51	49	1	37.1	17.9
DAIRYLAND/ DSR-0747/R2Y		51	47	1	36.2	18.3
SEEDS 2000/ 2091 RR2YN		50	49	1	35.8	18.3
PIONEER BR./ 90Y80		50	45	1	36.1	19.6
G-2 GENETICS/ 6098		49	49	1	35.3	18.5
PRAIRIE BR./ PB-1120R2		48	47	1	37.1	17.6
PRAIRIE BR./ EXP 0913			54	1	35.3	18.4
MUSTANG/ 06942			53	1	35.8	18.8
PRAIRIE BR./ PB-0880R2		•	53	1	36.1	17.8
STINE/ 08RC68		•	52	1	35.4	
ASGROW/ AG0832	·	•				18.0
MUSTANG/ 09822		•	51 51	1	37.5 36.8	18.8
		•				18.6
HEFTY/ H06Y12		•	51	1	35.8	18.8
HEFTY/ H09Y10		•	51	1	36.3	18.4
REA/ 67G61		•	51	1	36.5	18.5
PETERSON FARMS/ 11R08			51	1	36.4	17.8
PRAIRIE BR./ PB-0721R2	·		51	1	36.5	17.7
PRAIRIE BR./ PB-0920R2			51	1	37.2	17.9
NUTECH/ 6078			50	1	37.2	18.3
HEFTY/ H07Y12			50	1	36.7	18.0
REA/ 6764RR			50	1	35.7	18.6
PRAIRIE BR./ EXP 0912			50	1	36.6	18.5
HEFTY/ H08Y12			49	1	36.4	17.5
HEFTY/ H09Y11			49	1	36.6	17.9
WENSMAN/W 3099R2			49	1	37.2	18.0
NUTECH/ 6099			48	1	35.8	17.8
REA/ 69G22			48	1	35.1	18.8
PRAIRIE BR./ EXP 0811			48	1	36.4	18.0
SEEDS 2000/ 2082 RR2Y			48	1	36.9	17.7
PIONEER BR./ 90Y90			47	1	38.9	17.6
STINE/ 09RC83			47	1	37.3	17.8
G-2 GENETICS/ 6092			47	1	36.5	18.1
PRAIRIE BR./ PB-1080R2			47	1	35.5	18.5
CHANNEL/ 0905R2		•	46	1	35.2	18.8
SODAK GEN./ SD2091RR		-	43	1	37.1	16.3
	•					
Test avg. :		51	49	1	36.4	18.2
High avg. :		54	54	1	38.9	19.6
Low avg. :		48	43	1	35.1	16.3
[3] Test LSD (.05):		NS**	4	0	0.5	0.4
[4] Min.TPG-avg. :		48	51		38.5	19.3
[5] Max.TPG-avg. :				1	•	
[6] Test Coef. Var.:		4	5	0	1	1
No. Entries:		9	38	38	38	38

^[1] DTM= days to maturity from a seeding date of June 6, 2011 at South Shore.

Missing DTM data (.) is indicated if an entry was exposed to a killing frost before maturity.

 $[\]ensuremath{^{*}}$ Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 2b. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at South Shore, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

			ages* bu/a Mst. #)	Other 2011 Averages			
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
ASGROW/ AG1031		51	50	1	37.6	17.1	
ASGROW/ AG1431		51	48	1	36.8	18.3	
ASGROW/ AG1230		50	50	1	36.4	18.2	
DAIRYLAND/ DSR-1370/R2Y		50	48	1	35.0	17.1	
REA/ 76G10		50	45	1	37.2	17.1	
REA/ 71G20		50	43	1	34.8	18.3	
ASGROW/ AG1631		49	48	1	36.3	17.2	
PRAIRIE BR./ PB-1410R2		48	47	1	36.1	17.0	
REA/ 75G10		48	46	1	35.5	17.8	
HEFTY/ H16Y11		48	45	1	37.5	16.9	
REA/ 72G21		48	44	1	37.5	17.2	
SODAK GEN./ SD2171RR		48	43	_1 _	35.4	17.1	
PIONEER BR./ 91Y22		47	47	1	37.5	18.0	
PRAIRIE BR./ PB-1743R2		47	46	1	36.0	16.4	
NUTECH/ 6145		47	43	1	34.6	18.4	
PRAIRIE BR./ PB-1722R2		47	43	1	37.2	17.0	
PRAIRIE BR./ PB-1920R2		44	39	1	38.9	16.0	
G-2 GENETICS/ 6162			52	1	35.3	18.0	
G-2 GENETICS/ 7110			51	1	36.7	18.4	
MUSTANG/ 11302			50	1	37.2	16.9	
MUSTANG/ 13552			50	1	37.1	17.2	
NUTECH/ 6118			50	1	35.8	18.0	
PRAIRIE BR./ EXP 1511			50	1	36.8	16.9	
ASGROW/ AG1132			49	1	36.1	17.7	
PIONEER BR./ 91Y41			49	1	34.7	17.9	
HEFTY/ H13Y11			49	1	35.9	16.9	
STINE/ 11RC08			49	1	36.8	17.1	
G-2 GENETICS/ 6155			49	1	36.1	18.1	
CHANNEL/ 1405R2			49	1	36.8	17.8	
PETERSON FARMS/ 11R10			49	1	36.6	18.3	
MUSTANG/ 15522			48	1	35.0	17.2	
HEFTY/ H15Y12			48	1	36.8	17.0	
CHANNEL/ 1101R2			48	1	36.6	17.2	
HEFTY/ H12Y12			47	1	35.5	16.9	
HEFTY/ H13Y12			47	1	37.6	16.9	

Table 2b. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at South Shore, SD, 2010-2011 (continued).

Brand/Variety	DTM [1]		ages* bu/a Mst. #)	Other 2011 Averages			
braild/variety	DIWI[I]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
CHANNEL/ 1105R2			47	1	37.4	17.1	
PRAIRIE BR./ PB-1320R2			47	1	35.5	17.0	
PRAIRIE BR./ PB-1483R2			47	1	35.9	16.8	
WENSMAN/ W 3120R2			47	1	37.6	16.7	
SEEDS 2000/ 2121 RR2Y			47	1	37.0	17.0	
DAIRYLAND/ DST16-001/RY2			46	1	35.6	17.3	
REA/ 75G12			46	1	37.8	17.1	
PRAIRIE BR./ PB-1591R2			46	1	35.2	16.6	
PRAIRIE BR./ PB-1523R2			46	1	37.9	17.2	
WENSMAN/W 3108R2			46	1	37.1	17.0	
WENSMAN/ W 3114R2			46	1	37.2	17.3	
WENSMAN/W 3140R2			46	1	35.5	16.8	
SODAK GEN./ SD2151RR			46	1	35.9	16.6	
PIONEER BR./ 91Y61			45	1	36.8	18.0	
DAIRYLAND/ DSR-1808/R2Y			45	1	35.5	16.9	
PIONEER BR./ 91Y60			44	1	38.5	17.1	
G-2 GENETICS/ 6142			43	1	36.5	18.0	
PRAIRIE BR./ PB-1823R2			43	1	37.1	17.1	
WENSMAN/ W 3131R2			43	1	34.7	17.2	
G-2 GENETICS/ 7170			42	1	35.9	18.0	
WENSMAN/ W 3180NR2			42	1	35.7	17.8	
NUTECH/ 6156			41	1	36.4	16.6	
WENSMAN/ W 3174NR2			41	1	37.0	17.6	
HEFTY/ H16Y12			40	1	36.7	18.1	
Test avg. :		48	46	1	36.4	17.3	
High avg. :		51	52	1	38.9	18.4	
Low avg. :		44	39	1	34.6	16.0	
[3] Test LSD (.05):		NS**	3	0	0.9	0.5	
[4] Min.TPG-avg. :		44	49		38.1	17.9	
[5] Max.TPG-avg. :				1			
[6] Test Coef. Var.:		4	4	0	2	2	
No. Entries:		17	59	59	59	59	

^[1] DTM= days to maturity from a seeding date of June 6, 2011 at South Shore.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 3a. Glyphosate-resistant maturity group-0 soybean variety yield, lodging score, and seed protein, and oil averages at Bancroft, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

Brand/Variety	DTM [1]	Yield Averages * bu/a (13% Mst. #)		Other 2011 Averages		
		2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)
SODAK GEN./ SD1093RR	105	51	50	1	33.3	20.1
MUSTANG/ 09822	110		51	1	33.0	20.9
SODAK GEN./ SD2091RR	116		51	1	33.5	18.9
Test avg. :	110	51	51	1	33.3	20.0
High avg. :	116	51	51	1	33.5	20.9
Low avg. :	105	51	50	1	33.0	18.9
[3] Test LSD (.05):			1	0	NS**	NS**
[4] Min.TPG-avg. :		51	51			
[5] Max.TPG-avg. :				1	33.0	18.9
[6] Test Coef. Var.:		0	1	1	3	5
No. Entries:	3	1	3	3	3	3

[1] DTM= days to maturity from a seeding date of June 2, 2011 at Bancroft.

Missing DTM data (.) is indicated if an entry was exposed to a killing frost before maturity.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 3b. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at Bancroft, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

Brand/Variety	DTM 143	Yield Averages* bu/a (13% Mst. #)		Other 2011 Averages			
	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
ASGROW/ AG1631	115	60	62	2	34.8	18.9	
ASGROW/ AG1431	113	59	60	2	35.3	19.8	
PRAIRIE BR./ PB-2278RR	122	59	58	1	34.9	18.1	
STINE/ 13RA08	117	58	57	1	35.6	18.5	
PRAIRIE BR./ PB-1722R2	118	57	60	1	36.3	18.9	
REA/ 71G20	111	57	56	2	34.1	19.1	
SODAK GEN./ SD2171RR	121	56	58	1	33.1	19.1	
PIONEER BR./ 91Y60	116	56	57	1	34.7	19.7	
PRAIRIE BR./ PB-1920R2	122	56	55	1	37.4	17.9	
HEFTY/ H19Y11	117	56	53	2	36.5	18.1	
REA/ 75G10	114	55	59	1	34.4	19.1	
REA/ 72G21	116	54	54	2	36.1	18.6	
HEFTY/ H16Y11	119	53	54	2	37.0	18.1	
PIONEER BR./ 91Y90	116	53	52	1	35.1	18.7	
REA/ 76G10	115	53	51	1	35.0	19.0	
NUTECH/ 6145	113	53	49	1	31.3	20.8	
MUSTANG/ 11302	111		62	2	36.9	18.2	
NUTECH/ 6118	113		61	3	34.1	19.5	
G-2 GENETICS/ 6162	114		61	1	33.2	20.2	
WENSMAN/ W 3140R2	117		61	1	33.6	18.7	
SODAK GEN./ SD2151RR	117	. 🗖	61	2	35.0	17.7	
DAIRYLAND/ DSR-1808/R2Y	117		60	1	34.4	18.7	
PRAIRIE BR./ PB-1823R2	115		60	1	35.8	18.4	
PRAIRIE BR./ EXP 1812	117		60	1	33.9	18.6	
CHANNEL/ 1805R2	115		59	1	35.1	19.3	
PRAIRIE BR./ PB-1591R2	117		59	1	34.7	18.5	
HEFTY/ H13Y12	114		58	2	35.7	18.6	
HEFTY/ H16Y12	118		58	1	34.8	19.2	
REA/ 78G12	116		58	1	35.3	18.3	
MUSTANG/ 15522	116		57	1	33.0	18.6	
MUSTANG/ 19922	118		57	1	34.7	18.7	
PIONEER BR./ 91Y41	112		57	2	32.3	19.6	
STINE/ 16RA02	117		57	1	35.9	18.9	
G-2 GENETICS/ 6155	112		57	1	34.2	20.2	
REA/ 75G12	117		57	1	36.1	19.0	
CHANNEL/ 1405R2	113		57	1	35.5	19.8	
PRAIRIE BR./ PB-2099NRR2	119		57	1	34.7	18.7	
WENSMAN/ W 3180NR2	118		57	2	35.1	19.1	
PRAIRIE BR./ EXP 1511	114		56	2	34.5	18.7	
WENSMAN/ W 3120R2	114		56	2	36.0	19.0	
HEFTY/ H18Y12	116		55	1	35.0	18.6	
G-2 GENETICS/ 7170	116		55	1	33.5	19.9	
WENSMAN/ W 3174NR2	117		55	2	35.8	18.5	
MUSTANG/ 18922	117		54	1	34.0	18.7	
WIGGIANG, 10022	120		54	2	36.5	19.1	

Table 3b. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at Bancroft, SD, 2010-2011 (continued).

Brand/Variety	DTM [1]	Yield Averages* bu/a (13% Mst. #)		Other 2011 Averages			
		2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
WENSMAN/ W 3131R2	115		54	2	33.8	18.6	
PIONEER BR./ 91Y22	113		53	1	34.4	19.6	
HEFTY/ H17Y12	116		53	2	34.6	19.2	
ASGROW/ AG1832	117		52	2	35.5	18.8	
MUSTANG/ 17722	115		52	1	34.7	19.3	
PRAIRIE BR./ PB-1743R2	117		52	1	33.5	18.4	
PIONEER BR./ 91Y61	113		51	1	34.1	19.7	
DAIRYLAND/ DSR-1215/RY2	115		51	1	33.9	18.4	
MUSTANG/ 13552	116		50	1	36.1	18.4	
G-2 GENETICS/ 6142	115		50	1	32.7	19.3	
G-2 GENETICS/ 7192	120		50	1	38.9	17.2	
WENSMAN/ W 3114R2	117		50	2	36.8	18.3	
NUTECH/ 6156	117		48	1	33.6	18.8	
CHANNEL/ 1700R2	119		48	1	33.9	19.1	
PRAIRIE BR./ PB-1942R2	118		46	1	34.6	19.9	
Test avg. :	116	56	56	1	34.9	18.9	
High avg. :	122	60	62	3	38.9	20.8	
Low avg. :	111	53	46	1	31.3	17.2	
[3] Test LSD (.05):		NS**	6	1	1.4	0.6	
[4] Min.TPG-avg. :		53	57		37.6	20.2	
[5] Max.TPG-avg. :				1			
[6] Test Coef. Var.:		5	6	33	3	2	
No. Entries:	60	16	60	60	60	60	

^[1] DTM= days to maturity from a seeding date of June 2, 2011 at Bancroft.

- # Adjusted to 13% moisture basis.
- * Shaded values within a column are included in the top-performance group.
- ** Indicates differences between values within a column are non-significant (NS).

Table 3c. Glyphosate-resistant maturity group-II soybean variety yield, lodging score, and seed protein, and oil averages at Bancroft, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

Brand/Variety	DTM [1]	Yield Averages* bu/a (13% Mst. #)		Other 2011 Averages		
	DIM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)
REA/ 80G11	118	61	61	1	35.3	19.5
REA/ 84G20	123	60	60	2	37.9	18.2
PRAIRIE BR./ PB-2419RR2	123	59	58	1	37.7	18.2
PRAIRIE BR./ PB-2558NRR	122	58	60	2	39.3	17.4
ASGROW/ AG2031	119	57	61	2	36.9	18.5
HEFTY/ H20Y11	119	56	56	1	38.3	17.1
PIONEER BR./ 92Y30	122	56	54	2	35.5	18.7
PUBLIC/ SD(LD)05-16137	117	47	50	2	32.5	19.3
WENSMAN/ W 3200NR2	117		62	1	36.0	19.5
PRAIRIE BR./ PB-2242R2	120		61	2	37.3	17.4
PRAIRIE BR./ EXP 2012	119		61	2	35.8	19.1
PRAIRIE BR./ EXP 231	122		61	2	37.3	17.7
NUTECH/ 6228	122		60	2	36.1	18.8
HEFTY/ H21Y12	118		60	1	38.9	17.2
WENSMAN/ W 3230R2	123		60	1	37.3	18.1
ASGROW/ AG2232	121		59	2	36.9	18.4
ASGROW/ AG2431	123		59	1	37.4	18.4
MUSTANG/ 20622	120		59	2	36.2	17.9
CHANNEL/ 2000R2	119		59	1	36.5	19.0
PRAIRIE BR./ PB-2121R2	121		59	1	36.0	19.0
					35.3	
PRAIRIE BR./ PB-2343R2	121		59	2		18.5
PRAIRIE BR./ PB-2391R2	122		59	1	36.9	17.8
WENSMAN/ W 3212NR2	120		57	2	35.3	18.6
HEFTY/ H20Y12	117		56	1	35.4	17.9
DAIRYLAND/ DSR-2011/RR	119		56	2	35.7	19.0
DAIRYLAND/ DSR-2105/R2Y	120		56	1	34.4	18.6
PRAIRIE BR./ PB-2544R2	122		56	2	36.1	17.8
REA/ EXP22R211	121		55	2	36.8	17.6
NUTECH/ 6245	122		53	2	35.9	18.5
HEFTY/ H22Y11	120		53	2	37.1	17.7
REA/ EXP25R211	123		52	2	38.8	17.4
NUTECH/ 6244	123		51	1	37.1	17.8
PRAIRIE BR./ PB-2221R2	120		51	1	36.2	17.4
PUBLIC/ SD(LD)05-16121	119		41	2	33.3	18.6
Test avg. :	120	57	57	2	36.5	18.3
High avg. :	123	61	62	2	39.3	19.5
Low avg. :	117	47	41	1	32.5	17.1
[3] Test LSD (.05):		6	4	NS**	1.3	0.4
[4] Min.TPG-avg. :		56	58		38.1	19.1
[5] Max.TPG-avg. :				2		
[6] Test Coef. Var.:		4	5	36	2	1
No. Entries:	34	8	34	34	34	34

^[1] DTM= days to maturity from a seeding date of June 2, 2011 at Bancroft.

 $^{^{\}star}$ Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

 $^{^{**}}$ Indicates differences between values within a column are non-significant (NS).

Table 4a. Glyphosate-resistant maturity group-0 soybean variety yield, lodging score, and seed protein, and oil averages at Brookings, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

Brand/Variety	DTM [1]	Yield Averages* bu/a (13% Mst. #)		Other 2011 Averages		
		2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)
SODAK GEN./ SD1093RR	114	62	70	2	35.6	20.2
SODAK GEN./ SD2091RR			73	1	34.8	18.6
MUSTANG/ 09822	114		70	3	36.0	19.8
Test avg. :	114	62	71	2	35.5	19.5
High avg. :	114	62	73	3	36.0	20.2
Low avg. :	114	62	70	1	34.8	18.6
[3] Test LSD (.05):			NS**	1	NS**	0.2
[4] Min.TPG-avg. :			70		34.8	20.2
[5] Max.TPG-avg. :				1		
[6] Test Coef. Var.:			3	29	2	1
No. Entries:	2	1	3	3	3	3

[1] DTM= days to maturity from a seeding date of May 25, 2011 at Brookings.

Missing DTM data (.) is indicated if an entry was exposed to a killing frost before maturity.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 4b. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at Brookings, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

		Yield Aver	ages* bu/a	0.1			
		(13%	Mst. #)	Other 2011 Averages			
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
ASGROW/ AG1631		63	66	2	34.6	18.9	
MUSTANG/ 14441		63	62	2	35.7	17.8	
ASGROW/ AG1431		62	68	3	35.3	19.9	
NUTECH/ 6145		62	66	1	35.2	19.2	
REA/ 72G21		62	65	3	35.0	18.8	
REA/ 76G10		62	64	1	33.8	19.3	
STINE/ 16RA02		62	62	1	34.6	19.0	
REA/ 71G20		61	66	4	34.6	19.1	
REA/ 75G10		61	65	1	34.9	19.0	
SODAK GEN./ SD2171RR		61	62	1	32.8	18.1	
PRAIRIE BR./ PB-1722R2		61	61	1	34.8	18.9	
CHANNEL/ 1700R2		61	59	2	33.3	18.7	
HEFTY/ H19Y11		60	61	3	35.7	18.6	
RENK/ RS181NR2		60	61	3	33.2	19.6	
PIONEER BR./ 91Y90		60	60	1	35.7	18.4	
MUSTANG/ 18821		60	57	2	33.8	19.5	
RENK/ RS140NR2		59	63	1	34.6	18.8	
PIONEER BR./ 91Y60		58	59	1	35.5	19.3	
PRAIRIE BR./ PB-1920R2		57	55	3	35.4	18.3	
PRAIRIE BR./ PB-2278RR		57	51	2	33.3	18.4	
CHANNEL/ 1405R2			70	2	34.9	19.9	
G-2 GENETICS/ 6162			67	2	34.4	19.7	
MUSTANG/ 11302			66	3	35.6	18.6	
NUTECH/ 6118			66	4	34.0	19.6	
DAIRYLAND/ DSR-1215/RY2			66	3	34.3	18.0	
PRAIRIE BR./ PB-1743R2			66	1	35.1	17.7	
WENSMAN/ W 3174NR2			66	1	35.3	18.6	
REA/ 78G12			65	1	35.7	18.4	
WENSMAN/ W 3120R2			65	3	35.5	18.7	
WENSMAN/ W 3140R2			65	2	33.0	18.6	
SODAK GEN./ SD2151RR			65	2	34.1	17.9	
MUSTANG/ 13552			64	3	35.2	18.7	
MUSTANG/ 15522			64	1	32.7	19.0	
CHANNEL/ 1805R2			64	3	35.0	19.5	
PRAIRIE BR./ PB-1591R2			64	2	33.4	18.6	
REA/ 75G12			63	1	36.9	18.6	
WENSMAN/ W 3114R2			63	3	34.4	18.6	
HEFTY/ H16Y12			62	1	35.1	18.9	
DAIRYLAND/ DSR-1808/R2Y			62	1	33.5	18.4	
CHANNEL/ 1901R2			62	2	35.0	19.2	

Table 4b. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at Brookings, SD, 2010-2011 (continued).

			ages* bu/a Mst. #)	Othe	Other 2011 Averages			
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)		
PRAIRIE BR./ EXP 1511			62	3	35.5	18.8		
PRAIRIE BR./ PB-1823R2			62	1	35.6	18.3		
RENK/ RS141NR2			62	2	35.2	18.0		
G-2 GENETICS/ 6155			61	1	36.7	19.5		
PRAIRIE BR./ PB-2099NRR2			61	1	33.5	19.0		
WENSMAN/ W 3180NR2			61	2	33.6	19.5		
MUSTANG/ 18922			60	1	33.6	18.7		
HEFTY/ H17Y12			60	2	35.0	18.7		
HEFTY/ H18Y12			60	1	33.2	18.7		
G-2 GENETICS/ 6142			60	2	35.0	19.9		
WENSMAN/ W 3131R2			60	2	33.5	18.4		
MUSTANG/ 17722			59	2	35.4	18.6		
PRAIRIE BR./ EXP 1812			59	1	33.6	18.6		
RENK/ RS122R2			59	2	34.6	18.5		
RENK/ RS172NR2			59	1	34.7	18.9		
ASGROW/ AG1832	,		58	2	36.1	18.2		
G-2 GENETICS/ 7170			58	2	34.1	19.7		
PIONEER BR./ 91Y61			57	2	36.4	19.3		
STINE/ 19RA02		, 17	56	3	34.0	18.7		
MUSTANG/ 19922			55	2	33.7	18.6		
PRAIRIE BR./ PB-1942R2			54	3	32.8	19.4		
NUTECH/ 6156			51	2	32.9	18.4		
G-2 GENETICS/ 7192			51	2	37.3	17.9		
Test avg. :		61	61	2	34.6	18.8		
High avg. :		63	70	4	37.3	19.9		
Low avg. :		57	51	1	32.7	17.7		
[3] Test LSD (.05):		NS**	5	1	1.1	0.4		
[4] Min.TPG-avg. :		57	65		36.3	19.5		
[5] Max.TPG-avg. :				1				
[6] Test Coef. Var.:		5	5	27	2	2		
No. Entries:	0	20	63	63	63	63		

^[1] DTM= days to maturity from a seeding date of May 25, 2011 at Brookings.

Missing DTM data (.) is indicated if an entry was exposed to a killing frost before maturity.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 4c. Glyphosate-resistant maturity group-II soybean variety yield, lodging score, and seed protein, and oil averages at Brookings, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

		Yield Ave	rages* bu/a	0.1			
	DTM	(13%	Mst. #)	Othe	r 2011 Averag	es	
Brand/Variety	[1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
CHANNEL/ 2000R2		61	61	1	34.0	19.4	
REA/ 80G11		61	60	1	34.7	19.4	
RENK/ RS210NR2		60	59	1	33.4	19.2	
MUSTANG/ 23530		60	53	1	34.6	18.2	
REA/ 84G20		60	53	2	35.2	18.2	
PRAIRIE BR./ PB-2419RR2		60	51	1	34.1	18.5	
ASGROW/ AG2031		59	62	2	34.5	19.1	
PRAIRIE BR./ PB-2558NRR		56	51	1	34.7	17.7	
PUBLIC/ SD(LD)05-16137		52	49	3	30.3	19.5	
WENSMAN/ W 3200NR2			64	2	35.0	19.3	
WENSMAN/ W 3212NR2			62	1	32.7	18.9	
PRAIRIE BR./ EXP 2012			59	2	34.7	18.9	
HEFTY/ H21Y11			58	2	34.4	18.5	
ASGROW/ AG2232			57	3	33.6	19.1	
RENK/ RS202NR2			57	2	33.9	17.9	
NUTECH/ 6228			56	1	35.0	18.8	
HEFTY/ H23Y12			56	1	32.8	19.2	
HEFTY/ H22Y12			55	1	35.0	17.7	
DAIRYLAND/ DSR-2105/R2Y			55	1	32.7	18.8	
REA/ EXP22R211			55	2	34.2	18.1	
PRAIRIE BR./ PB-2121R2			55	1	34.1	19.3	
MUSTANG/ 20622			54	2	34.3	17.5	
HEFTY/ H23Y10			54	2	34.1	18.2	
STINE/ 22RC62			54	1	32.7	19.0	
RENK/ RS222R2			54	1	35.3	17.3	
MUSTANG/ 24322			53	2	33.5	17.3	
DAIRYLAND/ DSR-2011/RR			53	2	35.0	19.1	
STINE/ 20RC32			53	1	35.2	17.8	
PRAIRIE BR./ PB-2343R2			53	1	32.7	19.0	
NUTECH/ 6245			52	1	34.0	18.5	
PRAIRIE BR./ PB-2221R2			52	1	34.8	17.5	
PRAIRIE BR./ PB-2544R2			52	2	33.7	17.5	
ASGROW/ AG2431			51	1	34.0	18.3	
PIONEER BR./ 92Y30			51	1	33.2	18.9	
HEFTY/ H22Y11			51	2	34.4	17.7	
PRAIRIE BR./ PB-2391R2			51	1	34.0	18.2	
WENSMAN/ W 3230R2	•		51	1	34.6	18.1	
PUBLIC/ SD(LD)05-16121	•		51	3	32.3	18.7	
PRAIRIE BR./ PB-2242R2			50	1	35.1	17.2	
PRAIRIE BR./ EXP 231			50	2	34.8	17.5	

Table 4c. Glyphosate-resistant maturity group-II soybean variety yield, lodging score, and seed protein, and oil averages at Brookings, SD, 2010-2011 (continued).

	DTM		rages* bu/a Mst. #)	Other 2011 Averages			
Brand/Variety	[1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
PIONEER BR./ 92Y51			47	2	34.4	18.6	
STINE/ 24RB00			47	1	34.0	18.1	
HEFTY/ H24Y12			45	2	35.4	17.1	
REA/ EXP25R211			44	2	35.3	17.6	
Test avg. :		59	54	2	34.1	18.4	
High avg. :		61	64	3	35.4	19.5	
Low avg. :		52	44	1	30.3	17.1	
[3] Test LSD (.05):		NS**	4	<1	1.2	0.6	
[4] Min.TPG-avg. :		52	60		34.3	19.0	
[5] Max.TPG-avg. :				1			
[6] Test Coef. Var.:		3	5	34	2	2	
No. Entries:		9	45	45	45	45	

[1] DTM= days to maturity from a seeding date of May 25, 2011 at Brookings.

Missing DTM data (.) is indicated if an entry was exposed to a killing frost before maturity.

- * Shaded values within a column are included in the top-performance group.
- # Adjusted to 13% moisture basis.
- ** Indicates differences between values within a column are non-significant (NS).

Table 5a. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at Geddes, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

			rages * bu/a Mst. #)	Other 2011 Averages			
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
PRAIRIE BR./ PB-2278RR	112	55	50	1	30.1	20.0	
PRAIRIE BR./ PB-2042R2	111	53	50	1	35.3	19.7	
SODAK GEN./ SD2171RR	109	52	50	1	34.2	19.6	
PRAIRIE BR./ PB-1920R2	112	52	47	1	34.6	19.3	
PRAIRIE BR./ PB-1942R2	112	50	45	1	32.4	20.6	
G-2 GENETICS/ 6162	106		53	1	32.1	21.0	
G-2 GENETICS/ 7170	108		51	1	31.1	21.7	
PRAIRIE BR./ PB-1591R2	108		50	1	33.0	19.7	
PRAIRIE BR./ PB-1823R2	108		50	1	33.9	20.0	
PRAIRIE BR./ EXP 1812	108		50	1	31.9	20.5	
PRAIRIE BR./ PB-2123R2	109		50	1	35.8	19.3	
G-2 GENETICS/ 7192	111		48	1	37.1	18.4	
PRAIRIE BR./ PB-2099NRR2	108		48	1	30.9	20.1	
PRAIRIE BR./ PB-1722R2	108		47	1	34.2	20.1	
SODAK GEN./ SD2151RR	107		47	1	33.6	18.7	
NUTECH/ 6195	110		40	1	34.3	19.1	
Test avg. :	109	52	49	1	33.4	19.9	
High avg. :	112	55	53	1	37.1	21.7	
Low avg. :	106	50	40	1	30.1	18.4	
[3] Test LSD (.05):		NS**	6	0	1.8	0.8	
[4] Min.TPG-avg. :		50	47		35.4	21.0	
[5] Max.TPG-avg. :				1			
[6] Test Coef. Var.:		8	7	0	3	2	
No. Entries:	16	5	16	16	16	16	

^[1] DTM= days to maturity from a seeding date of May 26, 2011 at Geddes.

Missing DTM data (.) is indicated if an entry was exposed to a killing frost before maturity.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 5b. Glyphosate-resistant maturity group-II soybean variety yield, lodging score, and seed protein, and oil averages at Geddes, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

			verages* u/a	Other 2011 Averages			
Durand Maniata	DTM [4]	(13%	Mst. #)	Other	ZUIT AVCTUGOS	,	
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
ASGROW/ AG2031	113	54	59	1	32.7	20.0	
G-2 GENETICS/ 7250	111	54	54	1	32.5	19.9	
DAIRYLAND/ DSR-2011/RR	112	54	52	1	32.9	20.3	
HEFTY/ H23Y10	115	53	49	1	33.8	19.0	
G-2 GENETICS/ 7290	116	53	49	1	33.4	19.4	
PRAIRIE BR./ PB-2419RR2	115	53	49	1	33.2	19.1	
PRAIRIE BR./ PB-2558NRR	114	52	53	1	33.9	19.1	
PIONEER BR./ 92Y70	115	52	49	1	31.8	19.9	
ASGROW/ AG2931	115	52	48	1	31.4	18.7	
PIONEER BR./ 92Y30	113	51	54	1	31.3	20.8	
G-2 GENETICS/ 7208	111	51	51	1	33.9	19.7	
G-2 GENETICS/ 7249	115	49	49	1	32.3	19.7	
PUBLIC/ SD(LD)05-16137	110	46	46	1	30.2	19.8	
HEFTY/ H22Y12	113		58	_ 1 _	33.9	19.3	
DAIRYLAND/ DSR-2240/R2Y	115		56	1	35.1	17.5	
NUTECH/ 6228	111		55	1	33.2	20.2	
PRAIRIE BR./ PB-2882R2	117		55	1	33.2	17.9	
ASGROW/ AG2431	115		54	1	33.1	19.3	
MUSTANG/ 23530	116		54	1	33.9	18.9	
MUSTANG/ 24322	112		54	1	31.9	19.1	
HEFTY/ H20Y12	108		54	1	33.4	19.1	
CHANNEL/ 2000R2	112		54	1	32.9	20.3	
PRAIRIE BR./ PB-2544R2	112		54	1	31.8	18.8	
WENSMAN/ W 3256NR2	116		54	1	32.4	18.6	
NUTECH/ 6245	115		53	1	32.1	19.9	
HEFTY/ H23Y12	112		53	1	31.7	20.1	
PRAIRIE BR./ PB-2242R2	111		53	1	33.0	19.2	
WENSMAN/ W 3212NR2	111		53	1	31.5	20.1	
ASGROW/ AG2232	114		52	1	33.0	19.9	
PIONEER BR./ 92Y73	117		52	1	32.1	19.6	
DAIRYLAND/ DSR-2105/R2Y	112		52	1	29.7	20.2	
CHANNEL/ 2402R2	115		52	1	33.8	18.8	
CHANNEL/ 2105R2	113		52	1	32.5	20.2	
PRAIRIE BR./ PB-2391R2	115		52	1	34.0	18.6	
WENSMAN/ W 3200NR2	112		52	1	34.1	19.9	
WENSMAN/ W 3230R2	116		52	1	33.3	19.3	
PIONEER BR./ 93M11	117		51	1	32.8	19.7	
PIONEER BR./ 92Y51	115		51	1	32.8	19.8	
CHANNEL/ 2400R2	115		51	1	31.9	19.5	
PRAIRIE BR./ PB-2121R2	111		51	1	33.1	20.3	

Table 5b. Glyphosate-resistant maturity group-II soybean variety yield, lodging score, and seed protein, and oil averages at Geddes, SD, 2010-2011 (continued).

Brand/Variety	DTM [1]	b	verages* u/a Mst. #)	Other 2011 Averages		
	Drw [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)
MUSTANG/ 27721	115		49	1	34.1	17.5
CHANNEL/ 2200R2	112		49	1	30.5	20.5
ASGROW/ AG2732	118		48	1	33.1	18.1
NUTECH/ 6281	117		47	1	34.9	18.7
G-2 GENETICS/ 7272	115		47	1	34.7	18.9
WENSMAN/ W 3284NR2	117		47	1	35.8	17.5
PIONEER BR./ 93Y13	117		46	1	29.4	19.9
G-2 GENETICS/ 7226	115		46	1	30.9	20.2
PRAIRIE BR./ PB-2221R2	114		46	1	34.3	18.1
PRAIRIE BR./ PB-2903R2	115		46	1	31.5	19.1
NUTECH/ 6265	114		45	1	33.7	19.6
PUBLIC/ SD(LD)05-16121	109		45	1	30.5	20.5
PRAIRIE BR./ PB-2743R2	117		43	1	37.2	16.9
G-2 GENETICS/ 7262	113		40	1	33.6	19.6
Test avg. :	114	52	51	1	32.9	19.3
High avg. :	118	54	59	1	37.2	20.8
Low avg. :	108	46	40	1	29.4	16.9
[3] Test LSD (.05):		NS**	6	0	1.9	0.8
[4] Min.TPG-avg. :		46	53		35.4	20.1
[5] Max.TPG-avg. :				1		
[6] Test Coef. Var.:		8	7	0	3	3
No. Entries:	54	13	54	54	54	54

[1] DTM= days to maturity from a seeding date of May 26, 2011 at Geddes.

Missing DTM data (.) is indicated if an entry was exposed to a killing frost before maturity.

 $^{^{\}star}$ Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 6a. Glyphosate-resistant maturity group-I soybean variety yield, lodging score, and seed protein, and oil averages at Beresford, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

			ages* bu/a Vist. #)	О	ther 2011 Avera	ges
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)
PRAIRIE BR./ PB-2042R2	115	65	55	1	38.3	20.5
PRAIRIE BR./ PB-2278RR	118	64	50	1	37.1	19.1
SODAK GEN./ SD2171RR	115	63	51	1	36.7	20.2
PRAIRIE BR./ PB-1942R2	115	63	50	1	36.7	21.1
PRAIRIE BR./ PB-1920R2	114	62	50	2	38.8	19.3
PRAIRIE BR./ PB-2123R2	114		58	1	40.1	18.5
G-2 GENETICS/ 6162	113		57	1	34.9	21.9
PRAIRIE BR./ PB-1722R2	114		55	1	39.1	20.3
PRAIRIE BR./ EXP 1812	115		55	1	37.1	20.1
G-2 GENETICS/ 7170	115		54	1	36.7	21.0
PRAIRIE BR./ PB-1823R2	116		54	1	37.5	20.5
PRAIRIE BR./ PB-1591R2	114		53	1	37.8	19.9
SODAK GEN./ SD2151RR	114		51	1	37.4	19.5
PRAIRIE BR./ PB-2099NRR2	116		49	2	36.8	19.7
G-2 GENETICS/ 7192	114		48	2	39,4	19.0
NUTECH/ 6195	118		44	1	37.3	19.5
Test avg.:	115	63	52	1	37.6	20.0
High avg. :	118	65	58	2	40.1	21.9
Low avg. :	113	62	44	1	34.9	18.5
[3] Test LSD (.05):		NS**	5	<1	1.5	0.8
[4] Min.TPG-avg. :		62	54		38.7	21.2
[5] Max.TPG-avg. :				1		
[6] Test Coef. Var.:		4	5	33	2	2
No. Entries:	16	5	16	16	16	16

^[1] DTM= days to maturity from a seeding date of June 8, 2011 at Beresford.

Missing DTM data (.) is indicated if an entry was exposed to a killing frost before maturity.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 6b. Glyphosate-resistant maturity group-II soybean variety yield, lodging score, and seed protein, and oil averages at Beresford, SD, 2010-2011. Sorted by 2-Yr then by 2011 yield average.

			rages* bu/a Mst. #)	0	ther 2011 Avera	ges
Brand/Variety	DTM [1]	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)
CHANNEL/ 2000R2	115	64	55	1	37.6	20.2
PIONEER BR./ 92Y51	120	64	54	1	38.2	19.7
ASGROW/ AG2031	115	64	53	1	37.6	20.0
RENK/ RS241R2	116	63	54	1	37.6	19.4
MUSTANG/ 23530	117	63	52	1	37.8	19.6
G-2 GENETICS/ 7250	118	63	52	1	37.0	19.6
PRAIRIE BR./ PB-2419RR2	118	63	51	1	38.6	19.4
ASGROW/ AG2931	122	62	53	1	38.4	19.3
CHANNEL/ 2402R2	115	62	51	1	37.7	19.3
PIONEER BR./ 93Y13	123	62	50	1	37.5	19.8
G-2 GENETICS/ 7249	117	62	50	1	37.9	19.6
STINE/ 29RB22	122	61	51	1	40.4	18.2
PIONEER BR./ 92Y70	122	61	49	1	37.1	19.0
G-2 GENETICS/ 7208	114	60	50	1	37.6	20.3
DAIRYLAND/ DSR-2011/RR	116	60	49	1	37.3	19.8
PRAIRIE BR./ PB-2558NRR	117	60	48	1	38.4	19.1
MUSTANG/ 27721	121	59	51	1	40.1	18.0
G-2 GENETICS/ 7290	123	59	46	1	39.2	19.4
PUBLIC/ SD(LD)05-16137	115	57	50	1	36.2	19.9
MUSTANG/ 25521	121	57	45	1	40.6	17.5
HEFTY/ H21Y12	115		57	1	39.9	19.0
CHANNEL/ 2105R2	115		56	1	37.8	20.1
PRAIRIE BR./ PB-2121R2	114		56	1	37.2	20.2
ASGROW/ AG2232	117		55	1	38.1	20.0
STINE/ 2420-4	115		55	1	39.6	19.1
PRAIRIE BR./ PB-2391R2	117		55	1	37.6	19.3
WENSMAN/ W 3212NR2	115		54	1	37.0	19.6
MUSTANG/ 24322	116		53	1	36.7	19.1
NUTECH/ 6228	116		53	1	37.6	19.8
HEFTY/ H25Y12	116		53	1	36.0	19.1
WENSMAN/ W 3200NR2	114		53	1	37.6	20.4
ASGROW/ AG2431	117		52	1	38.3	19.5
NUTECH/ 6265	117		52	1	37.7	19.6
HEFTY/ H22Y11	117		52	1	37.9	19.4
G-2 GENETICS/ 7272	122		52	1	38.3	18.9
PRAIRIE BR./ PB-2242R2	118		52	1	37.3	19.0
PRAIRIE BR./ PB-2882R2	118		52	1	38.9	18.1
NUTECH/ 6245	117		51	1	36.9	19.7
HEFTY/ H20Y11	114		51	1	38.5	18.7
STINE/ 22RC62	115		51	1	36.8	20.1

Table 6b. Glyphosate-resistant maturity group-II soybean variety yield, lodging score, and seed protein, and oil averages at Beresford, SD, 2010-2011 (continued).

Description of the second	DTM [1]		rages* bu/a Mst. #)	Other 2011 Averages			
Brand/Variety	ן אוט אוט (ון	2-Yr	2011	Lodg. Score (1-5)	Prot. % (13% Mst. #)	Oil % (13% Mst. #)	
CHANNEL/ 2400R2	118		51	1	38.4	19.1	
PRAIRIE BR./ PB-2544R2	116		51	1	37.0	19.1	
PRAIRIE BR./ PB-2743R2	121		51	1	41.4	18.0	
PRAIRIE BR./ PB-2903R2	123		51	1	37.4	19.4	
WENSMAN/ W 3230R2	116		51	1	37.7	19.7	
PIONEER BR./ 93M11	123		50	1	37.7	20.0	
PIONEER BR./ 92Y73	120		50	1	37.7	19.5	
NUTECH/ 6281	122		50	1	39.2	19.1	
STINE/ 24RB00	117		50	1	37.9	19.7	
CHANNEL/ 2200R2	115		50	1	36.7	19.5	
WENSMAN/ W 3256NR2	116		50	1	37.5	19.1	
PUBLIC/ SD(LD)05-16121	115		50	1	36.5	19.6	
DAIRYLAND/ DSR-2105/R2Y	114		49	1	36.8	20.0	
DAIRYLAND/ DSR-2240/R2Y	117		49	_ 1	38.5	18.5	
G-2 GENETICS/ 7262	117		49	1	36.9	20.3	
WENSMAN/ W 3284NR2	122		49	1	40.6	18.6	
G-2 GENETICS/ 7226	117		48	1	37.1	19.7	
RENK/ RS222R2	117		48	1	38.4	18.4	
ASGROW/ AG2732	118		47	1	38.1	18.9	
HEFTY/ H26Y11	118		47	1	40.4	17.5	
HEFTY/ H24Y12	117		47	1	38.5	18.8	
RENK/ RS282R2	116		47	1	37.9	18.6	
PRAIRIE BR./ PB-2221R2	114		44	1	38.0	18.5	
Test avg. :	117	61	51	1	38.0	19.3	
High avg. :	123	64	57	1	41.4	20.4	
Low avg. :	114	57	44	1	36.0	17.5	
[3] Test LSD (.05):		NS**	4	<1	1.0	0.8	
[4] Min.TPG-avg. :		57	53		40.5	19.7	
[5] Max.TPG-avg. :							
[6] Test Coef. Var.:		4	5	19	2	3	
No. Entries:	63	20	63	63	63	63	

^[1] DTM= days to maturity from a seeding date of June 8, 2011 at Beresford.

Missing DTM data (.) is indicated if an entry was exposed to a killing frost before maturity.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 7a. Non-glyphosate-resistant maturity group-0 and -l soybean variety yield and lodging averages, South Shore, 2010-2011.

		Yield & Lodging score averages by maturity group							
			MG	-0		N	/IG-I		
BRAND/VARIETY	DTM [1]	Yield-	 bu/a #	2011 Lodg. (1-	Yield-	bu/a #	2011 Lodg. (1-5)		
		2-yr	2011	5) [2]	2-yr	2011	[2]		
PUBLIC/ SD08CV-0018			49	1					
PUBLIC/ SD03-2154		51	48	1					
PUBLIC/ SD07CV-539		51	47	1					
PUBLIC/ SD06-525		47	46	1					
PUBLIC/ SD08CV-0016			45	1					
PUBLIC/ SD08CV-0019			45	1					
PUBLIC/ SD07CV-528		48	45	1					
PUBLIC/ SD06-418			44	1					
PUBLIC/ SD08CV-0015			43	1					
PUBLIC/ SD06-455			43	1					
PUBLIC/ SURGE		48	43	1					
RICHLAND ORG./ MK831			42	1					
PUBLIC/ SD04CV-613		47	42	1					
PUBLIC/ SD08CV-0024			41	1					
PUBLIC/ SD06-415			41	1					
SK FOOD INTL/ SK0786			40	1					
SK FOOD INTL/ SK095			39	1					
PUBLIC/ SD04CV-611		45	39	_1					
PUBLIC/ SD07CV-935		43	38	1					
RICHLAND ORG./ MK0508	J . T	44	36	1					
PUBLIC/SD06-322		41	36	1		7.			
SK FOOD INTL/ SK9801	. 1	. /	7 .		47	47	1		
PUBLIC/ SD08CV-1061						46	1		
PUBLIC/ SD08CV-1066						46	1		
PUBLIC/ SD08CV-1078						46	1		
PUBLIC/ SD08CV-1041						45	1		
PUBLIC/ SD07CV-523						45	1		
PUBLIC/ SD08CV-1080						44	1		
PUBLIC/ DEUEL					45	44	1		
PUBLIC/ SD08CV-1043						43	1		
PUBLIC/ SD08CV-1211						43	1		
PUBLIC/ SD05-240					47	43	1		
RICHLAND ORG./ MK9101					44	42	1		
PUBLIC/ SD07CV-997						42	1		
RICHLAND ORG./ MK1016					40	40	1		
PUBLIC/ SD07CV-673						38	1		
Test avg.:		46	42	1	45	44	1		
High avg.:		51	49	1	47	47	1		
Low avg. :		41	36	1	40	38	1		
[3] LSD (.05):		NS**	5		NS**	3			
[4] Min. TPG avg.:		41	45		40	44			
[5] Max. TPG avg.:				1			1		
[6] Coef. Var.:		7	6	0	5	5	0		

^[1] DTM= days to maturity from seeding dates of June 6 at South Shore.

Note that additional table references are explained in Table F.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 7b. Non-glyphosate resistant maturity group-0 and -I soybean variety protein and oil averages-South Shore, 2011. Sorted by maturity group and protein average.

		Protein &	by maturity group #		
		MG			G-I
		Protein %	Oil %	Protein %	Oil %
SK FOOD INTL/ SK0786		41.8	17.8		
PUBLIC/ SD07CV-935		39.9	17.2		
SK FOOD INTL/ SK095		39.4	16.5		
PUBLIC/ SURGE		39.3	18.6		
RICHLAND ORG./ MK831		39.2	17.4		
PUBLIC/ SD08CV-0024		39.2	18.3		
PUBLIC/ SD04CV-611		38.7	18.7		
PUBLIC/ SD04CV-613		38.5	17.8		
PUBLIC/ SD06-525		38.3	17.8		
PUBLIC/ SD08CV-0019		38.2	18.4		
PUBLIC/ SD08CV-0016		38.0	18.9		
PUBLIC/ SD03-2154		37.9	18.8		
PUBLIC/ SD08CV-0015		37.6	18.0		
RICHLAND ORG./ MK0508		37.5	16.0		
PUBLIC/ SD06-455		36.9	19.3		
PUBLIC/ SD06-415		36.9	20.1		
PUBLIC/ SD06-418		36.9	19.0		
PUBLIC/ SD08CV-0018		36.8	19.8		
PUBLIC/ SD06-322		36.7	20.1		
PUBLIC/ SD07CV-528		36.5	19.4		
PUBLIC/ SD07CV-539		35.9	18.9		7.
PUBLIC/ SD07CV-673				38.8	17.1
RICHLAND ORG./ MK1016				38.4	16.9
RICHLAND ORG./ MK9101				38.2	20.9
PUBLIC/ SD08CV-1061				38.0	17.8
PUBLIC/ SD08CV-1211				37.8	18.6
PUBLIC/ DEUEL				37.6	17.4
PUBLIC/ SD05-240				37.6	15.9
PUBLIC/ SD08CV-1041				37.2	18.2
PUBLIC/ SD08CV-1078				37.2	17.8
PUBLIC/ SD08CV-1066				36.9	18.3
PUBLIC/ SD07CV-523				36.9	18.9
SK FOOD INTL/ SK9801				36.8	20.6
PUBLIC/ SD08CV-1043				36.8	18.2
PUBLIC/ SD07CV-997				36.6	18.3
PUBLIC/ SD08CV-1080				36.3	18.1
Test avg. :	-	38.1	18.4	37.4	18.2
High avg. :		41.8	20.1	38.8	20.9
Low avg. :		35.9	16.0	36.3	15.9
[3] LSD(.05) :		0.9	0.5	1.3	2.1
[4] Min. TPG avg.:		41.0	19.7	37.5	18.9
[4] Will. 1FG avg		1	2	2	7

^[1] DTM= days to maturity from seeding dates of June 6 at South Shore.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 8a. Non-glyphosate resi	stant maturi	ty group-	u, -I, and							JIT.
		Yield & lodging score averages by maturity group								
DD AND WARIETY	DTM		MG-	-0	MG-I			MG-II		
BRAND/VARIETY	[1]	Yield-bu/a #		2011	Yield-bu/a #		2011	Yield-bu/a #		2011
		2-yr	2011	Lodg. (1- 5) [2]	2-yr	2011	Lodg. (1-5) [2]	2-yr	2011	Lodg. (1-5) [2
PUBLIC/ SD08CV-0018			68	2						
RICHLAND ORG./ MK0508			65	5						
PUBLIC/ SD07CV-539		59	63	2						
PUBLIC/ SD06-455			63	4						
PUBLIC/ SD08CV-0024			62	1						
PUBLIC/ SD07CV-935		57	62	1						
PUBLIC/ SD08CV-0015			61	2						
PUBLIC/ SD08CV-0016			61	2						
PUBLIC/ SD03-2154		56	61	2						
PUBLIC/ SD06-415			61	2						
PUBLIC/ SD08CV-0019			60	1						
PUBLIC/ SD04CV-611		54	60	2						
PUBLIC/ SURGE		57	59	3						
PUBLIC/ SD06-418			58	3			•			
PUBLIC/ SD06-525		57	58	2						
PUBLIC/ SD04-523		54	57	2				7		·
PUBLIC/ SD04-013	.)	48	57	2 2						
PUBLIC/ SD07CV-528		54	56	3					·	
RICHLAND ORG./ MK831		54	55	2						
PUBLIC/ SD08CV-1066				2		60	1			
	•									
PUBLIC/ SD08CV-1043						59	1			
PUBLIC/ SD08CV-1078						58	1			
PUBLIC/ DEUEL					59	58	4			
PUBLIC/ SD08CV-1061						57	2			
PUBLIC/ SD07CV-523					55	57	2			
SK FOOD INTL/ SK9801						56	2			
PUBLIC/ SD08CV-1211						56	2			
PUBLIC/ SD07CV-997					56	56	2			
PUBLIC/ SD08CV-1041						55	2			
PUBLIC/ SD08CV-1080						55	3			
RICHLAND ORG./ MK1016					45	54	4			
PUBLIC/ SD05-240					59	51	2			
PUBLIC/ SD07CV-673					52	45	2			
RICHLAND ORG./ MK9101					46	43	2			
PUBLIC/ DAVISON								58	55	1
PUBLIC/ SD07CV-770								51	48	1
PUBLIC/ SD08CV-2094									43	2
PUBLIC/ SD07CV-800						.		49	43	2
PUBLIC/ SD08CV-2080						.			41	1

Table 8a. Non-glyphosate resistant maturity group-0, -I, and -II soybean variety yield and lodging averages- Brookings, 210-2011 (Continued).

		Yield & lodging score averages by maturity group								
			MG-	-0	MG-I			MG-II		
BRAND/VARIETY	DTM [1]	Yield-	Yield-bu/a # 2011 Lodg.		Yield-bu/a #		2011	Yield-bu/a #		2011
		2-yr	2011	(1-5) [2]	2-yr	2011	Lodg. (1- 5) [2]	2-yr	2011	Lodg. (1-5) [2]
PUBLIC/ SD08CV-2083									41	2
PUBLIC/ SD07CV-603								53	40	3
PUBLIC/ SD08CV-2088									39	1
PUBLIC/ SD08CV-2096									35	1
PUBLIC/ SD08CV-2102									34	1
PUBLIC/ SD07CV-631								46	34	1
PUBLIC/ SD07CV-367								46	33	3
Test avg.:		55	60	2	50	53	2	50	40	2
High avg.:		59	68	5	59	60	4	58	55	3
Low avg. :		48	55	1	45	43	1	46	33	1
[3] LSD (.05):		NS**	4	1	NS	5	1	NS	4	1
[4] Min. TPG avg.:		48	65		45	56		46	52	
[5] Max. TPG avg.:				1			1	<i>7.</i>		1
[6] Coef. Var.:	.)		4	26	5	6	27	4	6	31

[1] DTM= days to maturity from seeding dates of May 25 at Brookings.

- * Shaded values within a column are included in the top-performance group.
- # Adjusted to 13% moisture basis.
- ** Indicates differences between values within a column are non-significant (NS).

Table 8b. Non-glyphosate resistant maturity group-O, -I, and -II soybean variety protein and oil averages-Brookings, 2011. Sorted by maturity group & protein average

		Prot	ein & oi	l averages by maturity group #				
BRAND/VARIETY	DTM MG-0		0	MG-		MG-II		
	[1]	Protein %	Oil %	Protein %	Oil %	Protein %	Oil %	
PUBLIC/ SD08CV-0016		37.9	19.6					
PUBLIC/ SURGE		37.0	20.1					
PUBLIC/ SD08CV-0015		36.9	19.4					
PUBLIC/ SD04CV-611		36.6	20.2					
PUBLIC/ SD07CV-935		36.6	19.2					
PUBLIC/ SD08CV-0019		36.4	19.7					
PUBLIC/ SD08CV-0024		36.3	20.1					
PUBLIC/ SD04CV-613		35.9	20.3					
PUBLIC/ SD06-322		35.6	20.9					
PUBLIC/ SD06-525		35.5	20.1					
PUBLIC/ SD06-418		35.5	20.2					
PUBLIC/ SD07CV-528		35.4	20.4					
PUBLIC/ SD06-455		35.2	20.9					
RICHLAND ORG./ MK0508		35.2	18.6					
RICHLAND ORG./ MK831		35.1	19.4					
PUBLIC/ SD03-2154		35.0	20.5			.7		
PUBLIC/ SD08CV-0018		34.7	21.2					
PUBLIC/ SD06-415		34.7	20.4			/ /.		
PUBLIC/ SD07CV-539		33.7	20.2					
SK FOOD INTL/ SK9813		7.		37.5	21.1			
RICHLAND/ ORG. MK1016				37.4	17.1			
PUBLIC/ SD08CV-1211				37.3	19.5			
RICHLAND ORG./ MK9101				35.9	20.9			
PUBLIC/ SD07CV-673				35.3	18.9			
PUBLIC/ SD07CV-523				35.3	20.2			
PUBLIC/ SD08CV-1061				34.9	19.6			
PUBLIC/ SD08CV-1078				34.6	19.4			
SK FOOD INTL/ SK9801				34.5	23.0			
PUBLIC/ DEUEL				34.4	19.6			
PUBLIC/ SD08CV-1041				34.2	19.7			
PUBLIC/ SD05-240				34.0	18.3			
PUBLIC/ SD08CV-1043				33.9	20.0			
PUBLIC/ SD08CV-1066				33.8	19.9			
PUBLIC/ SD08CV-1080				33.7	20.2			
PUBLIC/ SD07CV-997				33.1	20.5			
PUBLIC/ SD08CV-2088						37.2	17.7	
PUBLIC/ SD07CV-631						36.9	17.3	
PUBLIC/ SD08CV-2096						36.6	17.9	
PUBLIC/ SD08CV-2080						36.6	18.4	
PUBLIC/ SD08CV-2094						35.5	18.3	

Table 8b. Non-glyphosate resistant maturity group-O, -I, and -II soybean variety protein and oil averages-Brookings, 2011. (continued).

		Protein & oil averages by maturity group #							
BRAND/VARIETY	DTM [1]	MG-0		MG-I		MG-II			
		Protein %	Oil %	Protein %	Oil %	Protein %	Oil %		
PUBLIC/ SD08CV-2102						35.5	18.1		
PUBLIC/ SD08CV-2083						35.4	18.0		
PUBLIC/ SD07CV-770						35.1	18.6		
PUBLIC/ SD07CV-603						34.9	18.4		
PUBLIC/ SD07CV-800						34.3	18.7		
PUBLIC/ SD07CV-367						34.0	19.7		
PUBLIC/ DAVISON						33.0	17.6		
Test avg. :		35.7	20.1	35.0	19.9	35.4	18.2		
High avg. :		37.9	21.2	37.5	23.0	37.2	19.7		
Low avg. :		33.7	18.6	33.1	17.1	33.0	17.3		
[3] LSD(.05) :		0.9	1.0	1.3	1.0	0.8	0.4		
[4] Min. TPG avg.:		37.0	20.2	36.2	22.1	36.5	19.4		
[6] Coef. Var. :		2	3	2	3	1	1		

^[1] DTM= days to maturity from seeding dates of May 25 at Brookings.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 9a. Non-glyphosate resistant maturity group-I and -II soybean variety yield and lodging averages- Beresford, 2010-2011.

Table 3a. Non-gryphosate resistan				ging score ave				
BBAND WARLETY	D.T.M. [4]		MG-I			MG-II		
BRAND/VARIETY	DTM [1]	Yield-bu/a #		2011 Lodg.	Yield-bu/a #		2011 Lodg.	
		2-yr	2011	(1-5) [2]	2-yr	2011	(1-5) [2]	
PUBLIC/ SD08CV-1061	108		49	1				
PUBLIC/ SD08CV-1041	108		48	1				
PUBLIC/ SD08CV-1043	108		47	1				
PUBLIC/ SD08CV-1066	107		47	1				
PUBLIC/ SD08CV-1211	107		47	1				
PUBLIC/ SD08CV-1078	109		46	1				
PUBLIC/ SD07CV-523	107		46	1				
PUBLIC/ SD07CV-673	116		46	1				
PUBLIC/ SD07CV-997	110		45	2				
PUBLIC/ DEUEL	108	55	45	1				
RICHLAND/ ORG. MK9101	105	52	44	1				
PUBLIC/ SD08CV-1080	107		44	1				
RICHLAND/ ORG. MK1016	107	45	42	2				
PUBLIC/ DAVISON	114				62	52	1	
PUBLIC/ SD08CV-2080	114					46	1	
PUBLIC/ SD08CV-2102	120					46	1	
PUBLIC/ SD08CV-2094	115					45	1	
PUBLIC/ SD08CV-2096	119					45	1	
PUBLIC/ SD08CV-2088	120					44	1	
PUBLIC/ SD07CV-367	116				55	44	1	
PUBLIC/ SD07CV-603	119				58	43	1	
PUBLIC/ SD07CV-631	118				57	43	2	
PUBLIC/ SD07CV-770	115				54	42	1	
PUBLIC/ SD08CV-2083	119					41	1	
PUBLIC/ SD07CV-800	119				53	41	1	
Test avg.:	112	51	46	1	57	44	1	
High avg.:	120	55	49	2	62	52	2	
Low avg. :	105	45	42	1	53	41	1	
[3] LSD (.05):	120	NS**	NS	1	NS	4	NS	
[4] Min. TPG avg.:	120	45	42		53	49		
[5] Max. TPG avg.:	120	4		1			2	
[6] Coef. Var.:	5	<u>'</u>	6	30	4	6	43	

^[1] DTM= days to maturity from seeding dates of June 8 at Beresford.

^{*} Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.

^{**} Indicates differences between values within a column are non-significant (NS).

Table 9b. Non-glyphosate resistant maturity group-I and -II soybean variety protein and oil averages- Beresford, 2011. Sorted by maturity group & protein average

		Protein &		entages by oup #	ges by maturity		
BRAND/VARIETY	DTM [1]	MG	-1	MG	6-II		
		Protein %	Oil %	Protein %	Oil %		
RICHLAND ORG./ MK1016	107	38.2	19.7				
PUBLIC/ SD07CV-673	116	37.3	20.5				
PUBLIC/ SD08CV-1211	107	36.9	21.1				
RICHLAND ORG./ MK9101	105	36.5	21.8				
PUBLIC/ DEUEL	108	36.0	20.7				
PUBLIC/ SD07CV-523	107	35.5	22.3				
PUBLIC/ SD08CV-1078	109	34.6	20.7				
PUBLIC/ SD07CV-997	110	34.5	21.8				
PUBLIC/ SD08CV-1061	108	34.2	20.7				
PUBLIC/ SD08CV-1041	108	33.7	21.1				
PUBLIC/ SD08CV-1080	107	33.5	21.4				
PUBLIC/ SD08CV-1066	107	33.5	21.4				
PUBLIC/ SD08CV-1043	108	32.9	21.2				
PUBLIC/ SD07CV-631	118			39.0	18.4		
PUBLIC/ SD08CV-2088	120			38.6	19.0		
PUBLIC/ SD08CV-2083	119			38.2	18.8		
PUBLIC/ SD08CV-2102	120			37.7	18.6		
PUBLIC/ SD08CV-2096	119			37.7	19.0		
PUBLIC/ SD08CV-2080	114			37.4	19.6		
PUBLIC/ SD07CV-603	119			37.2	19.3		
PUBLIC/ SD07CV-367	116			36.9	20.0		
PUBLIC/ SD07CV-800	119			36.9	20.1		
PUBLIC/ SD07CV-770	115			36.8	20.3		
PUBLIC/ SD08CV-2094	115			36.6	19.8		
PUBLIC/ DAVISON	114			36.0	19.6		
Test avg. :	112	35.2	21.1	37.4	19.4		
High avg. :	120	38.2	22.3	39.0	20.3		
Low avg. :	105	32.9	19.7	36.0	18.4		
[3] LSD(.05) :		1.4	1.0	1.5	0.8		
[4] Min. TPG avg.:		36.9	21.4	37.6	19.6		
[6] Coef. Var. :		2	3	2	2		

[1] DTM= days to maturity from seeding dates of June 8 at Beresford.

Note that additional table references are explained in Table F.

^{**} Indicates differences between values within a column are non-significant (NS).



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 $^{^{\}star}$ Shaded values within a column are included in the top-performance group.

[#] Adjusted to 13% moisture basis.



2012 annual report

OCTOBER 2012

SDSU EXTENSION

Soybean production is greatly affected by variety selection.

This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosateresistant. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Major factors in variety selection include:

- Yield
- Maturity
- Lodging resistance
- Phytophthora root rot resistance

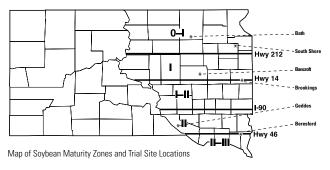
Soybean Variety Performance Trials Results - Bancroft

Robert G. Hall | SDSU Extension Agronomist Kevin K. Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager



Soybean production is greatly affected by variety selection. This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant and non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and therefore are affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to lowa, Nebraska, and south to Texas.



Inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean ground, there is no guarantee that N-fixing bacteria will be present to inoculate the seed, thus, consider inoculation cheap insurance that N-fixing bacteria will be present.

Use care when evaluating the yield performance of entries in each table. Entries tested for two years may also have a top yield group value in the 2012 yield column. Each company selects the appropriate maturity group trial (maturity group-0, -1, or -II trial) and locations for their

entries. There are, however, no standard regional or national check varieties for maturity. It is suggested you compare the reported maturity rating of every entry you are considering with the days to maturity (DTM) calculated for each entry at each location.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, using

varieties with a wide range of rot resistance is strongly suggested. The gene resistance of each variety to PRR is supplied by each seed company (proprietary entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). The PRR gene for each entry, as given by the seed company is reported in each yield table. Specific race resistance to PRR can be determined by cross-referencing the PRR gene reported in each yield table with table A (glyphosate-resistant entries) to find the resistant races. Currently, races -1, -3, and -4 are the most common races in South Dakota.

Table A. Phytop	thora Root Rot race resista	nce by gene code and name.
PRR Code	Gene Name	Race Resistance
0	rps1	None
1 A	Rps1, Rps1a	1-2,10-11,13,15-18,24
1 B	Rps1b	1,3-9,13-15,18,21-22
1 C	Rps1c	1-3,6-11,13,15,17,21,23-24
1 K	Rps1k	1-11,13-15,17-18,21-22,24
2	Rps2	1-5,9-20
3,3a	Rps3, 3a	1-5,8-9,11,13-14,16,18,23,25
4	Rps4	1-4,10,12-16,18-21,25
5	Rps5	1-5,8-9,11-14,18,20,25
6	Rps6	1-4,10,12,14-16,18-21,25
7	Rsp7	16,18,19
K6	Rps1k, Rps6	1-22,24-25
C3	Rps1c, Rps3	1-10,13-18,22-25
В3	Rps1b	1-9,13-16,18,21-23,25
NR	NR	Not Reported

Table	B	General	test in	formation.

LOCATION Glyphosate resistant soybean trial results - MG-0, -I, and -II

COOPERATOR: E. Weerts Farm Inc. - Bancroft

SOIL TYPE: Houdek-Stickney-Tetonka loam, 0-3% slope

TILLAGE: No-till FERTILITY YIELD-GOAL: 70 bushels PREVIOUS CROP: Corn ROW SPACE: 30 inches SEEDING POPULATION 165,000/acre

SOIL INOCULANT: Nitragin-brand Soybean Soil Implant down the seed tube by label instructions

WEED CONTROL: 1 oz. Sharpen with burn down, 1 qt. Roundup

INSECT CONTROL: None DISEASE CONTROL: None

DATE SEEDED: May 17, 2012

Table C	. Explanation of performance table references [.].
No.	Explanation of references
[1]	Seed treatment as reported by seed company.
[2]	Phytopthora root rot (PRR) gene reported by seed company, cross-reference with table A.
[3]	Maturity rating reported by seed company.
[4]	Days to maturity (DTM) – the number of days to maturity from seeding to 95% brown pod. If data is missing [.] the plots were exposed to a killing frost before they attained the 95% brown pod stage.
[5]	Lodging ratings: 0= all plants erect, 3= 50% of plants lodged at 45°-angle, 5= all plants flat.
	Shatter ratings: 1= none, 2= 1-10%, 3= 10-20%, 4= 25-50%, 5= > 50% pods shattered.
[6]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value the difference between the values is nonsignificant (NS).
[7]	TPG-avg. – the minimum value within a column that entry yield values must equal or exceed to qualify for the top-performance group (TPG).
[8]	TPG-avg. – the maximum value within a column that lodging or shatter rating values must equal or be less than to qualify for the TPG.
[9]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV values for yield are less than 15%. If the yield CV values exceed 15% the trial contained too much experimental error to be a valid, thus no data analysis for the table yield column is reported.

ı						
ı	Table 1	. Glyphosate-resistant :	couhoan variatu	norformanco	roculto	NAC O Banaraft

	DTM	Yield Aver	ages* bu/a	2012
Brand/ Variety _Seed Trt.[1] _PRR Gene[2] _Mat. rtg.[3]	[4]	2-Yr	2012	Ldg. Rtg. (1-5) [5]
SODAK GENET./ SD1093RRNR0 0.9	107	48	46	1
HEFTY/ H07Y12NR1k 0.7	108		53	1
HEFTY/ EXP-H02R3 _NR _1k _ 0.2	104		53	1
SODAK GENET./ SD2061R2YCruiser Maxx1c 0.6	110		52	1
HEFTY/ EXP-H08R3 _NR _3 _ 0.8	108		51	1
HEFTY/ H06Y11NR0 0.6	113		42	1
SODAK GENET./ SD2091R2YCruiser Maxx1c 0.9	112		34	1
Test avg. :	109	48	47	1
High avg. :	113		53	1
Low avg. :	104		34	1
[6] Test LSD (.05):			6	0
[7] Min.TPG-avg. :			47	
[8] Max.TPG-avg. :				1
[9] Test Coef. Var.:			7	0
No. Entries:	7	1	7	7

^{*} Shaded values within a yield or lodging rating column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or lodging rating column.

Table 2. Glyphosate-resistant soybean variety performance results - MG-I,	Bancrott	ï			
		Yield Aver	Yield Averages* bu/a		
Brand/ Variety Seed Trt.[1] PRR Gene [2] Mat. rtg. [3]	DTM [4]	2-Yr	2012	Ldg. Rtg (1-5) [5]	
DAIRYLAND/ DSR-1808/R2YCruiser Maxx1c 1.8	121	57	54	1	
ASGROW/ AG1431Acceleron+Poncho/Votivo1c 1.4	114	56	53	1	
PRAIRIE BR./ PB-1823R2NRNR 1.8	117	56	52	1	
REA/ 75G12NR1c 1.5	114	55	52	1	
PRAIRIE BR./ PB-1591R2NRNR 1.5	114	55	50	1	
WENSMAN/ W 3140R2Acceleron0 1.4	116	55	49	1	
MUSTANG/ 11302Acceleron3 1.1	110	55	47	1	
CHANNEL/ 1405R2Acceleron1c 1.4	115	54	52	1	
WENSMAN/ W 3120R2Acceleron1c 1.2	119	54	52	1	
REA/ 78G12NR1c 1.8	119	54	51	1	
ASGROW/ AG1631Acceleron+Poncho/Votivo1c 1.6	117	54	46	1	
PRAIRIE BR./ PB-1722R2NRNR 1.7	118	53	47	1	
PRAIRIE BR./ PB-1743R2NRNR 1.7	119	52	52	1	
HEFTY/ H16Y11NR1c 1.6	119	52	50	1	
HEFTY/ H17Y12NR1k 1.7	118	52	50	1	
STINE/ 16RA02Cruiser1k 1.7	120	52	48	1	
CHANNEL/ 1805R2Acceleron1c 1.8	116	52	44	1	
G-2 GENETICS/ 6162Trilex+Allegiance+Gaucho1c 1.6	118	52	43	1	
PIONEER/ 91Y90PPST PkgNR 1.9	116	51	50	1	
REA/ 72G21 _NR _1c _ 1.3	117	50	46	1	
REA/ 71G20 _NR _0 _ 1.1	110	50	45	1	
HEFTY/ H16Y12NR1k 1.6	117	50	43	1	
HEFTY/ H18Y12NR0 1.8	115	48	42	1	
HEFTY/ H15Y12NR3 1.5	115		55	1	
NORTHSTAR/ NS 1916NR2 _Acceleron _1c _ 1.9	120		55	1	
SODAK GENET./ SD2172R2YCruiser Maxx1c 1.7	119		55	1	
PRAIRIE BR./ PB-2042R2NRNR 1.9	118		54	1	
MUSTANG/ 19723Acceleron0 1.9	115		53	1	
WENSMAN/ W3190NR2Acceleron1k 1.9	120		53	1	
PRAIRIE BR./ EXP 12161NRNR 1.6	118		52	1	
PIONEER/ 91Y74PPST Pkg1k 1.7	120		51	1	
HEFTY/ H12Y11 _NR _3 _ 1.2	113		51	1	
HEFTY/ H10Y12NR1k 1	111		51	1	
MUSTANG/ 14323Acceleron1c 1.4	115		50	1	
PIONEER/ 91Y81PPST Pkg1c 1.8	119		50	1	
HEFTY/ H13Y11 _NR _1c _ 1.3	114		50	1	
HEFTY/ EXP-H14R3NR1c 1.4	115		50	1	
PRAIRIE BR./ PB-1566R2NRNR 1.5	118		50	1	
WENSMAN/ W 3160NR2Acceleron1c 1.6	116		50	1	
HEFTY/ EXP-H10R3NR3 1	115		49	1	

Table 2. Glyphosate-resistant soybean variety performance results - MG-I, Bancroft (continued)								
		Yield Aver	ages* bu/a	2012				
Variety Seed Trt.[1] PRR Gene [2] Mat. rtg. [3]	DTM [4]	2-Yr	2012	Ldg. Rtg.				
		2 11	2012	(1-5) [5]				
STINE/ 16RD02Cruiser1k 1.6	115		49	1				
G-2 GENETICS/ 7183Trilex+Allegiance+Gaucho1c 1.8	118		49	1				
ASGROW/ AG1733Acceleron+Poncho/Votivo1c 1.7	119		48	1				
DAIRYLAND/ DSR-1710/R2YCruiser Maxx1c 1.7	118		48	1				
G-2 GENETICS/ 7186Trilex+Allegiance+Gaucho1k 1.7	117		48	1				
PRAIRIE BR./ PB-1637R2NRNR 1.6	113		48	1				
CHANNEL/ 1606R2Acceleron3a 1.6	116		47	1				
NORTHSTAR/ NS 1726NR2Acceleron1c 1.7	120		46	1				
MUSTANG/ 15523Acceleron1c 1.5	116		45	1				
G-2 GENETICS/ 1191Trilex+Allegiance+Gaucho1k 1.9	116		45	1				
PRAIRIE BR./ EXP 12228PNRNR 1.9	121		45	1				
HEFTY/ H18Y11 _NR _1c _ 1.8	117		44	1				
PRAIRIE BR./ EXP 12245PNRNR 1.9	122		44	1				
WENSMAN/ W 3142NR2 _Acceleron _1k _ 1.4	116		44	1				
SODAK GENET./ SD2101R2YCruiser Maxx1k 1	110		44	1				
SOKAK GENET./ SD2149R2YCruiser MaxxNR 1.4	111		44	1				
SODAK GENET./ SD2181NR2Cruiser Maxx1c 1.8	119		44	1				
PIONEER/ 91Y30 _PPST Pkg1c _ 1.3	110		43	1				
HEFTY/ H11Y12 _NR _3 _ 1.1	110		42	1				
Test avg. :	116	53	48	1				
High avg. :	122	57	55	1				
Low avg. :	110	48	42	1				
[6] Test LSD (.05):		NS**	5	0				
[7] Min.TPG-avg. :		48	50					
[8] Max.TPG-avg. :				1				
[9] Test Coef. Var.:		6	7	0				
No. Entries:	59	23	59	59				

Therefore, look for varieties that have shaded values within each yield or lodging rating column.

^{*} Shaded values within a yield or lodging rating column are included in the top-performance group (TPG).

^{**} Indicates differences between values within a yield or lodging rating column are non-significant (NS).

Table 3. Glyphosate-resistant soybean variety performance results - MG-II, Bancroft

		Yield Ave	rages* bu/a	2012	
Brand/ Variety Seed Trt.[1] PRR Gene [2] Mat. rtg. [3]	DTM [4]	2-Yr	2012	Ldg. Rtg. (1-5) [5]	
WENSMAN/ W 3200NR2 _Acceleron _1c+1k _ 2	119	56	49	1	
MUSTANG/ 20622Acceleron1c 2	118	55	50	1	
WENSMAN/ W 3230R2Acceleron1c 2.3	121	55	49	1	
PRAIRIE BR./ PB-2242R2NRNR 2.2	119	54	48	1	
REA/ 80G11 _NR _1k _ 2	118	54	47	1	
PRAIRIE BR./ PB-2419RR2NRNR 2.4	123	53	48	1	
PRAIRIE BR./ PB-2391R2NRNR 2.3	121	53	47	1	
ASGROW/ AG2031Acceleron+Poncho/Votivo1c 2	118	53	45	1	
DAIRYLAND/ DSR-2105/R2YCruiser Maxx1k 2.1	119	52	49	1	
PRAIRIE BR./ PB-2544R2NRNR 2.5	119	51	46	1	
REA/ 84G20 _NR _1c _ 2.4	121	51	43	1	
HEFTY/ H20Y12NR1c 2	118	50	45	1	
PRAIRIE BR./ PB-2143R2NRNR 2.1	120		54	1	
PRAIRIE BR./ PB-2650R2NRNR 2.6	125		53	1	
HEFTY/ EXP-H20R3 _NR _1c _ 2	119		52	1	
HEFTY/ H22Y12NR1c 2.2	120		51	1	
G-2 GENETICS/ 7203Trilex+Allegiance+Gaucho02	122		51	1	
MUSTANG/ 21993Acceleron1k 2.1	120		50	1	
HEFTY/ EXP-H21R3 _NR _1k _ 2.1	121		50	1	
PRAIRIE BR./ PB-2366R2NRNR 2.3	122		50	1	
PRAIRIE BR./ PB-2230R2NRNR 2.2	119		49	1	
SODAK GENET./ SD2201NR2Cruiser Maxx1c2	121		49	1	
MUSTANG/ 22823 _Acceleron _1k _ 2.2	120		48	1	
HEFTY/ EXP-H24R3 _NR _3 _ 2.4	122		48	1	
PRAIRIE BR./ PB-2351R2NRNR 2.3	121		48	1	
PRAIRIE BR./ EXP 12241NRNR 2.4	120		48	1	
WENSMAN/ W 3222NR2Acceleron1c 2.2	122		48	1	
PIONEER/ 92Y32PPST Pkg1c 2.3	122		47	1	
HEFTY/ H23Y10NR1c 2.3	122		46	1	
HEFTY/ H23Y12 _NR _1k _ 2.3	121		46	1	
G-2 GENETICS/ 7213Trilex+Allegiance+Gaucho1c 2.1	119		46	1	
MUSTANG/ 20823 _Acceleron _1c _ 2	120		45	1	
G-2 GENETICS/ 7208Trilex+Allegiance+Gaucho1c2	118		41	1	
NORTHSTAR/ NS 2077NR2 _Acceleron _1c _ 2	118		41	1	
Test avg. :	120	53	48	1	
High avg. :	125	56	54	1	
Low avg. :	118	50	41	1	
[6] Test LSD (.05):		NS**	5	0	
[7] Min.TPG-avg. :		50	49		
[8] Max.TPG-avg. :				1	
[9] Test Coef. Var.:		5	6	0	
No. Entries:	34	12	34	34	

^{*} Shaded values within a yield or lodging rating column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or lodging rating column.

^{**} Indicates differences between values within a yield or lodging rating column are non-significant (NS).

Glyphosate-Resistant Soybean Variety Trial

Maturity Group-0 (Table 1):

The two-year and 2012 testyield averages were 48 and 47 bushels per acre, respectively; and the lodging score average was 1. There was only one variety that was tested for two years. Varieties had to average 47 bushels or higher to be in the top yield group for 2012. Among the varieties tested for 2012, variety yield differences had to differ by 6 bu. to be significantly different. Variety lodging rating values indicated that all entries scored a rating of 1 for lodging resistance in the varieties in 2012.

Maturity Group-I (Table 2):

The two-year and 2012 testyield averages were 53 and 48 bushels per acre; and the lodging rating average was 1. Varieties had to average 48 and 50 bushels or higher to be in the top yield group for two years and 2012, respectively. Variety yield differences among the two-year averages were not significant, while the 2012 variety yield differences had to differ by 5 bushels to be significantly different. The lodging rating values for all the entries equaled 1 for 2012.

Maturity Group-II (Table 3):

The two-year and 2012 testyield averages were 53 and 48 bushels per acre; the lodging rating average was 1. Varieties had to average 50 and 49 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2012 variety yield differences had to differ by 5 bushels to be significantly different. All varieties were in the top performance group for lodging resistance because there was no significant difference in lodging rating values among the entries





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2012 annual report

OCTOBER 2012

SDSU EXTENSION

Soybean production is greatly affected by variety selection.

This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant and non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Major factors in variety selection include:

- Yield
- Maturity
- Lodging resistance
- Phytophthora root rot resistance

Soybean Variety Performance Trials Results - Volga

Robert G. Hall | SDSU Extension Agronomist Kevin K. Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager



Soybean production is greatly affected by variety selection. This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant and non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and therefore are affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to lowa, Nebraska, and south to Texas.

Inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean ground, there is no guarantee that N-fixing bacteria will be present to inoculate the seed, thus, consider inoculation cheap insurance that N-fixing bacteria will be present.

Use care when evaluating the vield performance of entries in each table. Entries tested for two years may also have a top yield group value in the 2012 yield column. Each company selects the appropriate maturity group trial (maturity group-0, -I, or -II trial) and locations for their entries. There are, however, no standard regional or national check varieties for maturity. It is suggested you compare the reported maturity rating of every entry you are considering with the days to maturity (DTM) calculated for each entry at each location.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, using varieties with a wide range of rot resistance is strongly suggested. The gene resistance of each variety to PRR is supplied by each seed company (proprietary

entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). The PRR gene for each entry, as given by the seed company is reported in each yield table. Specific race resistance to PRR can be determined by cross-referencing the PRR gene reported in each yield table with table A (glyphosate-resistant entries) to find the resistant races. Currently, races -1, -3, and -4 are the most common races in South Dakota.

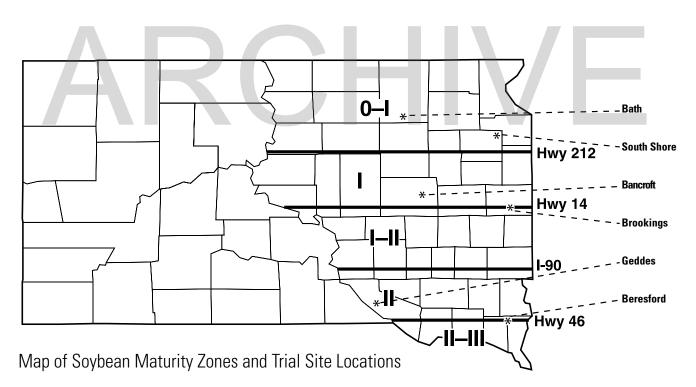


Table A. <i>Phytopthora</i> Root Rot race resistance by gene code and name.								
PRR Code	Gene Name	Race Resistance						
0	rps1	None						
1 A	Rps1, Rps1a	1-2,10-11,13,15-18,24						
1 B	Rps1b	1,3-9,13-15,18,21-22						
1 C	Rps1c	1-3,6-11,13,15,17,21,23-24						
1 K	Rps1k	1-11,13-15,17-18,21-22,24						
2	Rps2	1-5,9-20						
3,3a	Rps3, 3a	1-5,8-9,11,13-14,16,18,23,25						
4	Rps4	1-4,10,12-16,18-21,25						
5	Rps5	1-5,8-9,11-14,18,20,25						
6	Rps6	1-4,10,12,14-16,18-21,25						
7	Rsp7	16,18,19						
K6	Rps1k, Rps6	1-22,24-25						
C3	Rps1c, Rps3	1-10,13-18,22-25						
В3	Rps1b	1-9,13-16,18,21-23,25						
NR	NR	Not Reported						

Table B. General test information. Glyphosate and Non-glyphosate resistant soybean trial results - MG-0, -1, and -11 Location Cooperator: SDSU Plant Science Research Farm - Volga, Doug Doyle and staff Soil Type: Brandt silty clay loam, 0-2% slope Tillage: Conventional Fertility Yield-Goal: 70 bushel Spring wheat (stubble) Previous Crop: Row Space: 30 inches Seeding Population 165,000/acre Soil Inoculant: Nitragin-brand Soybean Soil Implant down the seed tube by label instructions Weed Control: Glyphosate-resistant trials: 1 qt. Roundup Non-glyphosate-resistant trials: Premergence, 1qt Dual 2 + cultivation Insect Control: None Disease Control: None Date Seeded: May 21, 2012

Plot yields were adjusted to 13% moisture content and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine. Explanations of the various references contained within the performance tables can be found in table C.

Table C.	Explanation of performance table references [.].
No.	Explanation of references
[1]	Seed treatment as reported by seed company.
[2]	Phytopthora root rot (PRR) gene reported by seed company, cross-reference with table A.
[3]	Maturity rating reported by seed company.
[4]	Days to maturity (DTM) – the number of days to maturity from seeding to 95% brown pod. If data is missing [.] the plots were exposed to a killing frost before they attained the 95% brown pod stage.
[5]	Lodging ratings: 0= all plants erect, 3= 50% of plants lodged at 45° -angle, 5= all plants flat. Shatter ratings: 1= none, 2= 1-10%, 3= 10-20%, 4= 25-50%, 5= > 50% pods shattered.
[6]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value the difference between the values is nonsignificant (NS).
[7]	TPG-avg. – the minimum value within a column that entry yield values must equal or exceed to qualify for the top-performance group (TPG).
[8]	TPG-avg. – the maximum value within a column that lodging or shatter rating values must equal or be less than to qualify for the TPG.
[9]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV values for yield are less than 15%. If the yield CV values exceed 15% the trial contained too much experimental error to be a valid, thus no data analysis for the table yield column is reported.

lable 1. Glyphosate-resistant soybean variety performance results - MG-0, Volga

		Yield Avera	ages* bu/a	2012
Brand/ VarietySeed Trt.[1]PRR gene [2]Mat. rtg. [3]	DTM [4]	2-Yr	2012	Ldg.Rtg. (1-5) [5]
SODAK GENET./ SD1093RRNR0 0.9	111	55	40	1
SODAK GENET./ SD2061R2YCruiser Maxx1c 0.6	110		45	1
SODAK GENET./ SD2091R2YCruiser Maxx1c 0.9	112		42	1
Test avg. :	111	55	42	1
High avg. :	112	55	45	1
Low avg. :	110	55	40	1
[6] Test LSD (.05):	112	0	NS**	0
[7] Min.TPG-avg. :	112	55	40	
[8] Max.TPG-avg. :	112			1
[9] Test Coef. Var.:	1	0	6	0
No. Entries:	3	1	3	3

Therefore, look for varieties that have shaded values within each yield or lodging rating column.

 $^{^{\}star}$ Shaded values within a yield or lodging rating column are included in the top-performance group (TPG).

^{**} Indicates differences between values within a yield or lodging rating column are non-significant (NS).

		Yield Aver	Yield Averages* bu/a		
Brand/ VarietySeed Trt.[1]PRR gene [2]Mat. rtg. [3]	DTM [4]	2-Yr	2012	Ldg.Rtg (1-5) [5	
CHANNEL/ 1405R2Acceleron1c 1.4	112	58	45	1	
G-2 GENETICS/ 6162Trilex+Allegiance+Gaucho1c 1.6	111	56	45	1	
ASGROW/ AG1431Acceleron+Poncho/Votivo1c 1.4	111	56	44	1	
WENSMAN/ W 3140R2Acceleron0 1.4	115	55	45	1	
MUSTANG/ 11302Acceleron3 1.1	112	55	44	1	
CHANNEL/ 1805R2Acceleron1c 1.8	115	54	44	1	
PRAIRIE BR./ PB-1591R2NRNR 1.5	117	54	44	1	
RENK/ RS140NR2NR1c 1.4	115	54	44	1	
ASGROW/ AG1631Acceleron+Poncho/Votivo1c 1.6	114	54	43	1	
REA/ 72G21NR1c 1.3	117	54	43	1	
REA/ 78G12NR1c 1.8	114	54	43	1	
REA/ 71G20NR0 1.1	111	54	42	1	
PRAIRIE BR./ PB-1743R2NRNR 1.7	119	54	42	1	
DAIRYLAND/ DSR-1808/R2YCruiser Maxx1c 1.8	118	53	45	1	
WENSMAN/ W 3120R2Acceleron1c 1.2	114	53	40	1	
PRAIRIE BR./ PB-1823R2NRNR 1.8	114	52	43	1	
RENK/ RS141R2NR1c1.4	115	52	43	1	
HEFTY/ H16Y12NR1k 1.6	115	52	42	1	
REA/ 75G12NR1c 1.5	114	52	40	1	
HEFTY/ H18Y12NR0 1.8	117	51	42	1	
STINE/ 16RA02Cruiser1k 1.7	114	51	41	1	
PRAIRIE BR./ PB-1722R2NRNR 1.7	115	51	41	1	
RENK/ RS172NR2NR1c 1.7	117	50	41	1	
PIONEER/ 91Y90PPST PkgNR 1.9	116	49	38	1	
HEFTY/ H17Y12NR1k 1.7	118	49	38	1	
SODAK GENET./ SD2172R2YCruiser Maxx1c 1.7	111		48	1	
DAIRYLAND/ DSR-1710/R2Y Cruiser Maxx 1c 1.7	118		46	1	
MUSTANG/ 19723Acceleron0 1.9	117		44	1	
HEFTY/ EXP-H14R3NR1c 1.4	113		44	1	
STINE/ 16RD02Cruiser1k 1.6	115		44	1	
PRAIRIE BR./ EXP 12161NRNR 1.6	117		44	1	
SODAK GENET./ SD2101R2YCruiser Maxx1k 1	110		44	1	
SODAK GENET./ SD2149R2YCruiser MaxxNR 1.4	111		44	1	
ASGROW/ AG1733Acceleron+Poncho/Votivo1c 1.7	117		43	1	
HEFTY/ H13Y11NR1c 1.3	114		43	1	
PRAIRIE BR./ PB-1566R2NRNR 1.5	115		43	1	
NORTHSTAR/ NS 1726NR2Acceleron1c 1.7	117		43	1	
NORTHSTAR/ NS 1916NR2Acceleron1c 1.9	117		43	1	
RENK/ RS153NR2NR1c 1.5	114		43	1	
RENK/ RS183NR2NR1c 1.8	117		43	1	

		Yield Aver	2012	
Brand/ VarietySeed Trt.[1]PRR gene [2]Mat. rtg. [3]	DTM [4]	2-Yr	2012	Ldg.Rtg. (1-5) [5]
MUSTANG/ 14323Acceleron1c 1.4	114		42	1
PIONEER/ 91Y74PPST Pkg1k 1.7	114		42	1
HEFTY/ H16Y11NR1c 1.6	117		42	1
CHANNEL/ 1606R2Acceleron3a 1.6	116		42	1
PRAIRIE BR./ PB-1637R2NRNR 1.6	114		41	1
WENSMAN/ W 3142NR2Acceleron1k 1.4	112		41	1
HEFTY/ H12Y11NR3 1.2	110		40	1
HEFTY/ H15Y12NR3 1.5	118		40	2
G-2 GENETICS/ 7186Trilex+Allegiance+Gaucho1k 1.7	117		40	2
G-2 GENETICS/ 7183Trilex+Allegiance+Gaucho1c 1.8	115		40	1
PRAIRIE BR./ EXP 12228PNRNR 1.9	118		40	1
PRAIRIE BR./ PB-2042R2NRNR 1.9	117		40	1
SODAK GENET./ SD2181NR2YCruiser Maxx1c 1.8	117		40	1
PIONEER/ 91Y81PPST Pkg1c 1.8	114		38	1
HEFTY/ H18Y11NR1c 1.8	118		38	1
WENSMAN/ W 3160NR2Acceleron1c 1.6	111		38	1
WENSMAN/ W3190NR2Acceleron1k 1.9	119		38	1
MUSTANG/ 15523Acceleron1c 1.5	114		37	1
HEFTY/ H11Y12NR3 1.1	110		37	1
PRAIRIE BR./ EXP 12245PNRNR 1.9	121		36	1
G-2 GENETICS/ 1191Trilex+Allegiance+Gaucho1k 1.9	114		35	1
Test avg.	115	53	42	1
High avg.	121	58	48	2
Low avg.	110	49	35	1
[6] Test LSD (.05)		3	5	NS**
[7] Min.TPG-avg.		54	43	
[8] Max.TPG-avg.				2
[9] Test Coef. Var.		6	8	23
No. Entries	61	25	61	61

Therefore, look for varieties that have shaded values within each yield or lodging score column.

 $^{^{\}star}$ Shaded values within a yield or lodging score column are included in the top-performance group (TPG).

^{**} Indicates differences between values within a yield or lodging score column are non-significant (NS).

Table 3. Glyphosate-resistant soybean variety performance results	· MG-II, Volga						
		Yield Aver	2012				
Brand/ VarietySeed Trt.[1]PRR gene [2]Mat. rtg. [3]	DTM [4]	2-Yr	2012	Ldg.Rtg. (1-5) [5]			
WENSMAN/ W 3200NR2Acceleron1c+1k 2	116	55	46	1			
ASGROW/ AG2031Acceleron+Poncho/Votivo1c 2	116	54	46	1			
REA/ 84G20NR1c 2.4	119	52	52	1			
PRAIRIE BR./ PB-2544R2NRNR 2.5	121	51	50	1			
RENK/ RS202NR2NR1c 2	115	51	46	1			
HEFTY/ H23Y12NR1k 2.3	120	51	45	2			
RENK/ RS210NR2NR1c 2.1	120	51	43	1			
REA/ 80G11NR1k 2	115	51	41	1			
PRAIRIE BR./ PB-2242R2NRNR 2.2	118	49	47	1			
WENSMAN/ W 3230R2Acceleron1c 2.3	119	49	47	1			
PIONEER/ 92Y51PPST Pkg1k 2.5	120	47	47	1			
PRAIRIE BR./ PB-2419RR2NRNR 2.4	119	47	42	1			
HEFTY/ H23Y10NR1c 2.3	119	47	40	1			
HEFTY/ H22Y12NR1c 2.2	119	47	38	1			
DAIRYLAND/ DSR-2105/R2YCruiser Maxx1k 2.1	119	46	38	1			
PRAIRIE BR./ PB-2391R2NRNR 2.3	119	45	40	1			
MUSTANG/ 23530Acceleron1c 2.3	118	45	38	1			
WENSMAN/ W 3222NR2Acceleron1c 2.2	118		50	1			
MUSTANG/ 20823Acceleron1c 2	116		49	1			
G-2 GENETICS/ 7213Trilex+Allegiance+Gaucho1c 2.1	120		48	1			
CHANNEL/ 2402R2Acceleron1c 2.4	120		48	1			
HEFTY/ EXP-H24R3NR3 2.4	119		47	1			
PRAIRIE BR./ PB-2143R2NRNR 2.1	123		47	1			
PRAIRIE BR./ PB-2230R2NRNR 2.2	120		47	1			
PRAIRIE BR./ PB-2351R2NRNR 2.3	118		46	1			
PRAIRIE BR./ PB-2366R2NRNR 2.3	117		46	1			
RENK/ RS213NR2NR1c 2.1	117		46	1			
PIONEER/ 92Y32PPST Pkg1c 2.3	124	. \	45	1			
NORTHSTAR/ NS 2077NR2Acceleron1c 2	117		45	1			
MUSTANG/ 22823Acceleron1k 2.2	119		44	1			
G-2 GENETICS/ 7203Trilex+Allegiance+Gaucho0 2	117		43	1			
G-2 GENETICS/ 7208Trilex+Allegiance+Gaucho1c 2	116		43	1			
SODAK GENET./ SD2201NR2YCruiser Maxx1c 2	116		43	1			
HEFTY/ EXP-H21R3NR1k 2.1	118		42	1			
CHANNEL/ 2105R2Acceleron1c 2.1	117		41	1			
PRAIRIE BR./ EXP 12241NRNR 2.4	124		38	1			
MUSTANG/ 21993Acceleron1k 2.1	119		37	1			
HEFTY/ H20Y12NR1c 2	115		37	1			
HEFTY/ EXP-H20R3NR1c 2	117		36	1			
PRAIRIE BR./ PB-2650R2NRNR 2.6	124		36	1			
Test avg. :	118	49	44	1			
High avg. :	124	55	52	2			
Low avg. :	115	45	36	1			
[6] Test LSD (.05):		NS**	NS	NS			
[7] Min.TPG-avg. :		45	36				
[8] Max.TPG-avg.:				2			
[9] Test Coef. Var.:		11	17	0			
No. Entries:	40	17	40	40			

Therefore, look for varieties that have shaded values within each yield or lodging rating column.

^{*} Shaded values within a yield or lodging rating column are included in the top-performance group (TPG).

^{**} Indicates differences between values within a yield or lodging rating column are non-significant (NS).

Table 4. Non-glyphosate resistant soybean variety performance results for maturity groups -0, -I and -II -Volga.										
		Yield average by maturity group								
	DTM	M G - 0			MG-I			MG-II		
Brand/ Variety	[4]	V: - L-		ield-bu/a 2012		-bu/a	2012	Yield-bu/a		2012
		2-yr	2012	Ldg. Rtg. (1-5) [5]	2-yr	2012	Ldg.Rtg. (1-5) [5]	2-yr	2012	Ldg. Rtg. (1-5) [5]
PUBLIC/ SURGE	112	49	39	1						
SK/ FOOD INTL SK095	113		34	2			·			
RICHLAND/ ORG. MK0508	105	49	33	2						
SK/ FOOD INTL SK0796	110		33	2						
RICHLAND/ ORG. MK831	106	43	32	2						
SK/ FOOD INTL SK0786	110		31	2						
NORTHSTAR/ NS1128NLL	113					41	1			
NORTHSTAR/ EXPNS1428NLL	119					41	1			
RICHLAND/ ORG. TITAN	110					40	1			
PUBLIC/ DEUEL	113				49	40	2			
PUBLIC/ BROOKINGS	118				46	40	1			
RICHLAND/ ORG. MK1016	112				44	34	3			
RICHLAND/ ORG. MK9101	112				38	33	1			
RICHLAND/ ORG. CHALLENG	117					33	1			
SK/ FOOD INTL SK9801	109				42	27	2			
PUBLIC/ DAVISON	117							46	37	1
Test avg.:	112	47	34	2	44	37	1	46	37	1
High avg.:	119	49	39	2	49	41	3			
Low avg. :	105	43	31	1	38	27	1			
[6] LSD (.05):		NS**	5	<1	NS	4	<1			
[7] Min. TPG avg.:		43	34		38	37				
[8] Max. TPG avg.:				1			2			

[9] Coef. Var.:

17

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^{*} Shaded values within a yield or lodging score column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or lodging score column.

^{**} Indicates differences between values within a yield or lodging score column are non-significant (NS).

GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Maturity Group-0 (Table 1):

The two-year and 2012 test-yield averages were 55 and 42 bushels per acre, respectively, the lodging score average was 1. Varieties had to average 40 bushels or higher to be in the top yield group for 2012. Only a single variety was tested for two years. Variety yield averages did not differ among varieties tested for 2012. All the variety lodging rating values were in the top performance group for lodging rating because there was no difference among them.

Maturity Group-I (Table 2):

The two-year and 2012 test-yield averages were 53 and 42 bushels per acre, respectively; and the lodging rating average was 1. Varieties had to average 54 and 43 bushels or higher to be in the top yield group for two years and for 2012, respectively. The two-year variety yield differences had to differ by 3 bushels to be significantly different, while the 2012 variety yield differences had to differ by 5 bushels to be significantly different. Varieties did not differ in lodging rating values in 2012.

Maturity Group-II (Table 3):

The two-year and 2012 test-yield averages were 49 and 44 bushels per acre, respectively; and the lodging rating average was 1. Varieties had to average 45 and 36 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among both the twoyear averages and 2012 averages were not significant (NS). Variety lodging rating values had to equal 2 to be in the top performance group for lodging rating and because the lodging rating differences were not significant (NS).

NON-GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Maturity Group-0 (Table 4):

The two-year and 2012 test-yield averages were 47 and 34 bushels per acre, respectively, and the lodging rating average was 2. Varieties had to average 43 and 34 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2012 variety yield differences had to differ by 5 bushels to be significantly

different. Variety lodging rating values had to equal 1 to be in the top performance group for resisting lodging, and the rating values had to differ by 1 to be significantly different.

Maturity Group-I (Table 4):

The two-year and 2012 yield averages were 44 and 37 bushels per acre, respectively, and the lodging rating average was 1. Varieties had to average 38 and 37 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2012 variety yield differences had to differ by 4 bushels to be significantly different. Variety lodging rating values had to equal 1 to be in the top performance group for resisting lodging, and rating values had to differ by 1 to be significantly different.

Maturity Group-II (Table 4):

Only one released variety was tested in this trial in 2011 and 2012.



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2012 annual report

OCTOBER 2012

SDSU EXTENSION

Soybean production is greatly affected by variety selection.

This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant and non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Major factors in variety selection include:

- Yield
- Maturity
- Lodging resistance
- Phytophthora root rot resistance

Soybean Variety Performance Trials Results – South Shore

Robert G. Hall | SDSU Extension Agronomist Kevin K. Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager



Soybean production is greatly affected by variety selection. This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant and non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and therefore are affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to lowa, Nebraska, and south to Texas.

Inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean ground, there is no guarantee that N-fixing bacteria will be present to inoculate the seed, thus, consider inoculation cheap insurance that N-fixing bacteria will be present.

Use care when evaluating the vield performance of entries in each table. Entries tested for two years may also have a top yield group value in the 2012 yield column. Each company selects the appropriate maturity group trial (maturity group-0, -1, or -II trial) and locations for their entries. There are, however, no standard regional or national check varieties for maturity. It is suggested you compare the reported maturity rating of every entry you are considering with the days to maturity (DTM) calculated for each entry at each location.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, using varieties with a wide range of rot resistance is strongly suggested. The gene resistance of each variety to PRR is supplied by each seed company (proprietary

entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). The PRR gene for each entry, as given by the seed company is reported in each yield table. Specific race resistance to PRR can be determined by cross-referencing the PRR gene reported in each yield table with table A (glyphosate-resistant entries) to find the resistant races. Currently, races -1, -3, and -4 are the most common races in South Dakota.

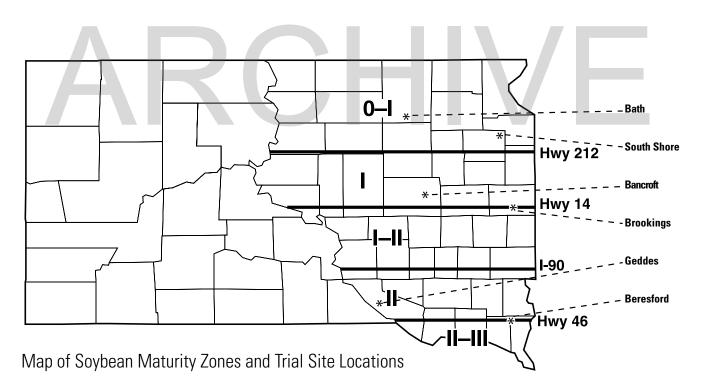


Table A. <i>Phytopthora</i> Root Rot race resistance by gene code and name.				
PRR Code	Gene Name	Race Resistance		
0	rps1	None		
1 A	Rps1, Rps1a	1-2,10-11,13,15-18,24		
1 B	Rps1b	1,3-9,13-15,18,21-22		
1 C	Rps1c	1-3,6-11,13,15,17,21,23-24		
1 K	Rps1k	1-11,13-15,17-18,21-22,24		
2	Rps2	1-5,9-20		
3,3a	Rps3, 3a	1-5,8-9,11,13-14,16,18,23,25		
4	Rps4	1-4,10,12-16,18-21,25		
5	Rps5	1-5,8-9,11-14,18,20,25		
6	Rps6	1-4,10,12,14-16,18-21,25		
7	Rsp7	16,18,19		
K6	Rps1k, Rps6	1-22,24-25		
C3	Rps1c, Rps3	1-10,13-18,22-25		
В3	Rps1b	1-9,13-16,18,21-23,25		
NR	NR	Not Reported		

Table B. General test information.

Trial: Glyphosate and Non-glyphosate resistant soybean trial results - MG-0 & -I

Northeast Research Farm - South Shore, Al Heuer and staff Cooperator:

Soil Type: Kranzburg silty clay loam, 0-6% slope

Tillage: Conventional Fertility Yield-Goal: 70 bushel

Previous Crop: Spring wheat (stubble)

Row Space: 30 inches Seeding Population 165,000/acre

Soil Inoculant: Nitragin-brand Soybean Soil Implant down the seed tube by label instructions

Weed Control: Glyphosate-resistant trials: 1 qt. Roundup

Non-glyphosate-resistant trials: Premergence, 1qt Dual 2

Insect Control: None Disease Control: None

Date Seeded: May 14, 2012

Plot yields were adjusted to 13% moisture content and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine. Explanations of the various references contained within the performance tables can be found in table C.

Table C	Explanation of performance table references [.].
No.	Explanation of references
[1]	Seed treatment as reported by seed company.
[2]	Phytopthora root rot (PRR) gene reported by seed company, cross-reference with table A.
[3]	Maturity rating reported by seed company.
[4]	Days to maturity (DTM) – the number of days to maturity from seeding to 95% brown pod. If data is missing [.] the plots were exposed to a killing frost before they attained the 95% brown pod stage.
[5]	Lodging ratings: 0= all plants erect, 3= 50% of plants lodged at 45°-angle, 5= all plants flat.
	Shatter ratings: 1= none, 2= 1-10%, 3= 10-20%, 4= 25-50%, 5= > 50% pods shattered.
[6]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value the difference between the values is nonsignificant (NS).
[7]	TPG-avg. – the minimum value within a column that entry yield values must equal or exceed to qualify for the top-performance group (TPG).
[8]	TPG-avg. – the maximum value within a column that lodging or shatter rating values must equal or be less than to qualify for the TPG.
[9]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV values for yield are less than 15%. If the yield CV values exceed 15% the trial contained too much experimental error to be a valid, thus no data analysis for the table yield column is reported.

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Table 1. Glyphosate-resistant soybean variety performance results - MG-0, South Shore					
	DTM	Yield Averages* bu/a		2012	
Brand/ VarietySeed Trt.[1]PRR gene [2]Mat. rtg. [3]	[4]	2-Yr	2012	Ldg. Rtg (1-5) [5]	
MUSTANG/ 06942Acceleron0 0.6	105	45	37	1	
PRAIRIE BR./ EXP 0913NRNR 0.9	105	45	36	1	
G-2 GENETICS/ 6098Trilex+Allegiance+Gaucho1k 0.9	103	44	38	1	
ASGROW/ AG0832Acceleron+Poncho/Votivo3 0.8	108	44	37	1	
MUSTANG/ 09822Acceleron1k 0.9	106	44	36	1	
SEEDS 2000/ 2091 RR2YNNR0 0.9	106	43	37	1	
WENSMAN/ W 3099R2Acceleron1k 0.9	111	43	36	1	
HEFTY/ H07Y12NR1k 0.7	107	43	35	1	
PRAIRIE BR./ PB-1120R2NRNR 0.9	112	42	37	1	
DAIRYLAND/ DSR-0747/R2YCruiser Maxx1c 0.7	104	42	36	1	
SODAK GENET./ SD1093RRNR0 0.9	105	42	36	1	
PRAIRIE BR./ PB-0851R2NRNR 0.8	106	42	35	1	
G-2 GENETICS/ 6088Trilex+Allegiance+Gaucho0 0.8	106	42	33	1	
G-2 GENETICS/ 6092Trilex+Allegiance+Gaucho1k 0.9	105	41	34	1	
PRAIRIE BR./ PB-1061R2NRNR 0.9	109		40	1	
SEEDS 2000/ 2051 RR2YNR0 0.5	105		40	1	
PRAIRIE BR./ PB-1261R2NRNR 0.9	108		38	1	
VENSMAN/ W 3076R2Acceleron3 0.7	107		37	1	
PIONEER/ 90Y81PPST Pkg1c 0.8	104		36	1	
DAIRYLAND/ DSR-0904/RY2Cruiser Maxx3 0.8	105	. \	36	1	
PRAIRIE BR./ PB-0920R2NRNR 0.9	106	. 1	36	1	
WENSMAN/ W 3090NR2Acceleron3 0.9	107	. \	36	1	
MUSTANG/ 08733Acceleron3 0.8	106		35	1	
HEFTY/ EXP-H02R3NR1k 0.2	103		35	1	
HEFTY/ EXP-H08R3NR3 0.8	105		35	1	
PRAIRIE BR./ PB-0863R2NRNR 0.7	105		35	1	
SODAK GENET./SD2061R2YCruiser Maxx1c 0.6	106		35	1	
SODAK GENET./SD2091R2YCruiser Maxx1c 0.9	104		34	1	
HEFTY/ H06Y11NR0 0.6	107		33	1	
PETERSON/ PFS 11R08NR3 0.8	107		33	1	
ASGROW/ AG0833Acceleron+Poncho/Votivo3 0.8	106		29	1	
Test avg. :	106	43	36	1	
High avg. :	112	45	40	1	
Low avg. :	103	41	29	1	
[6] Test LSD (.05):		NS**	5	0	
[7] Min.TPG-avg. :		41	35		
[8] Max.TPG-avg. :				1	
[9] Test Coef. Var.:		6	8	0	
No. Entries:	31	14	31	31	

 $^{^{\}star}$ Shaded values within a yield or lodging rating column are included in the top-performance group (TPG).

Therefore, look for varieties that have shaded values within each yield or lodging rating column.

^{**} Indicates differences between values within a yield or lodging rating column are non-significant (NS).

Table 2. Glyphosate-resistant soybean variety performance results - MG-I, South Shore					
Brand/ Variety/Seed Trt.[1]PRR gene [2]Mat. rtg. [3]	DTM [4]	Yield Aver	ages* bu/a 2012	2012 Ldg.R ⁻ (1-5) [
SEEDS 2000/ 2121 RR2YNR3 1.2	109	43	39	1	
HEFTY/ H13Y11NR1c 1.3	113	43	38	1	
MUSTANG/ 11302 Acceleron 3 1.1	107	43	37	1	
ASGROW/ AG1031 Acceleron+Poncho/Votivo 3 1.0	108	43	36	1	
PRAIRIE BR./ PB-1591R2NRNR 1.5	115	42	38	1	
PRAIRIE BR./ PB-1320R2NRNR 1.3	113	42	37	1	
IEFTY/ H15Y12NR3 1.5	112	42	36	1	
DAIRYLAND/ DSR-1370/R2YCruiser Maxx1c 1.3	112	42	35	1	
CHANNEL/ 1405R2Acceleron1c 1.4	105	42	35	1	
TINE/ 11RC08NR3a 1.1	107	42	34	1	
G-2 GENETICS/ 6162Trilex+Allegiance+Gaucho1c 1.6	108	42	31	1	
EEA/ 75G12NR1c 1.5	111	41	36	1	
VENSMAN/ W 3140R2Acceleron0 1.4	114	41	36	1	
CHANNEL/ 1105R2 Acceleron 3 1.1	107	41	35	1	
VENSMAN/ W 3108R2Acceleron3 1.0	108	41	35	1	
SGROW/ AG1431Acceleron+Poncho/Votivo1c 1.4	107	41	34	1	
SGROW/ AG1631Acceleron+Poncho/Votivo1c 1.6	110	41	34	1	
VENSMAN/ W 3120R2Acceleron1c 1.2	111	41	34	1	
RAIRIE BR./ PB-1823R2NRNR 1.8	113	40	36	1	
RAIRIE BR./ PB-1722R2NRNR 1.7	114	39	35	1	
EA/ 71G20 _NR _0 _ 1.1	106	39	34	1	
REA/ 72G21NR1c 1.3	112	39	34	1	
HEFTY/ H16Y11NR1c 1.6	110	39	33	1	
PRAIRIE BR./ PB-1743R2NRNR 1.7	111	39	33	1	
HEFTY/ H16Y12NR1k 1.6	112	37	34	1	
HEFTY/ H11Y12 NR 3 1.1	108		38	1	
STINE/ 16RD66 NR 1c 1.6	114		38	1	
SODAK GENET./SD2172R2YCruiser Maxx1c 1.7	108		38	1	
PRAIRIE BR./ EXP 12151NRNR 1.5	109		37	1	
HEFTY/ EXP-H14R3NR1c 1.4	110		36	1	
DAIRYLAND/ DSR-1710/R2YCruiser Maxx1c 1.7	112		36	1	
CHANNEL/ 1805R2Acceleron1c 1.8	113		36	1	
VENSMAN/ W 3160NR2Acceleron1c 1.6	109		36	1	
SGROW/ AG1233Acceleron+Poncho/Votivo1k 1.2	111		35	1	
G-2 GENETICS/ 7186Trilex+Allegiance+Gaucho1k 1.7	112		35	1	
ETERSON/ PFS 11R10NR1c 1.0	106		35	1	
RAIRIE BR./ EXP 12161NRNR 1.6	115		35	1	
RAIRIE BR./ PB-1637R2NRNR 1.6	111		35	1	
VENSMAN/ W 3101R2Acceleron1c 1.0	106		35	1	
IORTHSTAR/ NS 1257R2Acceleron3 1.1	108		35	1	
ORTHSTAR/ NS 1528NR2Acceleron1c 1.5	112		35	1	
IONEER/ 91Y74PPST Pkg1k 1.7	113		34	1	
IEFTY/ H17Y12NR1k 1.7	111		34	1	
IEFTY/ H18Y11NR1c 1.8	114		34	1	

113

34

G-2 GENETICS/ 7183 __Trilex+Allegiance+Gaucho __1c __ 1.8

Table 2. Glyphosate-resistant soybean variety performance results - MG-I, South Shore (continued)

		Yield Aver	2012	
Brand/ VarietySeed Trt.[1]PRR gene [2]Mat. rtg. [3]	DTM [4]	2-Yr	2012	Ldg.Rtg. (1-5) [5]
CHANNEL/ 1606R2Acceleron3a 1.6	110		34	1
PETERSON/ PFS 12R12NR3 1.1	108		34	1
PRAIRIE BR./ PB-1433R2NRNR 1.4	111		34	1
PRAIRIE BR./ PB-1566R2NRNR 1.5	110		34	1
SODAK GENET./SD2101R2YCruiser Maxx1k 1.0	107		34	1
MUSTANG/ 14323Acceleron1c 1.4	111		33	1
PIONEER/ 91Y01PPST Pkg1c 1.0	106		33	1
HEFTY/ H18Y12NR0 1.8	115		33	1
SODAK GENET./SD2149R2YCruiser MaxxNR 1.4	109		33	1
G-2 GENETICS/ 6143Trilex+Allegiance+Gaucho1c 1.4	107		32	1
SODAK GENET./SD2181NR2YCruiser Maxx1c 1.8	112		32	1
PIONEER/ 91Y10PPST Pkg1c 1.1	105		31	1
WENSMAN/ W 3142NR2Acceleron1k 1.4	109		31	1
HEFTY/ H12Y11NR3 1.2	107		30	1
PIONEER/ 91Y30PPST Pkg1c 1.3	107		28	1
Test avg. :	110	41	35	1
High avg. :	115	43	39	1
Low avg. :	105	37	28	1
[6] Test LSD (.05):		NS**	5	0
[7] Min.TPG-avg. :		37	34	
[8] Max.TPG-avg. :			7 . L	1
[9] Test Coef. Var.:		6	8	0
No. Entries:	60	25	60	60

^{*} Shaded values within a yield or lodging rating column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or lodging rating column.

 $^{{}^{**} \ \}mathsf{Indicates} \ \mathsf{differences} \ \mathsf{between} \ \mathsf{values} \ \mathsf{within} \ \mathsf{a} \ \mathsf{yield} \ \mathsf{or} \ \mathsf{lodging} \ \mathsf{rating} \ \mathsf{column} \ \mathsf{are} \ \mathsf{non-significant} \ \mathsf{(NS)}.$

Table 3. Non-glyphosate resistant soybean variety performance results for maturity groups-0 and -I -South Shore.

		Yield average by maturity group						
Brand/ Variety	DTM [4]	MG	i-0	2012	MC	G-I	2012	
brand/ variety	DTM [1]	Yield-bu/a		Ldg. Rtg.	Yield-bu/a		Ldg. Rtg.	
		2-yr	2012	(1-5) [2]	2-yr	2012 (1-5)		
SEEDS 2000/ 2082L	108		45	1				
PETERSON/ PFS L08-11	108		44	1				
PUBLIC/ SURGE	108	43	43	1				
RICHLAND ORG./ MK0508	106	38	39	1				
SK FOOD INTL/ SK0786	104	39	39	1				
RICHLAND ORG./ MK831	104	40	38	1				
SK FOOD INTL/ SK095	105	36	34	1				
SK FOOD INTL/ SK0796	105		34	1				
RICHLAND ORG./ TITAN	106					43	1	
PETERSON/ PFS L11-13N	109					39	1	
NORTHSTAR/ EXPNS1428NLL	118					39	1	
PUBLIC/ DEUEL	111				41	39	1	
PUBLIC/ BROOKINGS	116				41	39	1	
RICHLAND ORG./ CHALLENGER	114					37	1	
NORTHSTAR/ NS1128NLL	109					36	1	
RICHLAND ORG./ MK9101	108			. \	38	34	1	
SK FOOD INTL/ SK9801	108	P .			41	34	1	
RICHLAND ORG./ MK1016	105				37	33	1	
Test avg.:	108	39	40	1	40	37	1	
High avg.:	118	43	45	1	41	43	1	
Low avg. :	104	36	34	1	37	33	1	
[6] LSD (.05):		NS**	6	0	NS	5	0	
[7] Min. TPG avg.:		36	39		37	38		
[8] Max. TPG avg.:				1			1	
[9] Coef. Var.:	4	6	8	20	6	7	0	

^{*} Shaded values within a yield or lodging rating column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or lodging rating column.

^{**} Indicates differences between values within a yield or lodging rating column are non-significant (NS).

GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Maturity Group-0 (Table 1):

The two-year and 2011 test-yield averages were 43 and 36 bushels per acre, respectively; the lodging rating average was 1. Varieties had to average 41 bushels and 35 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2012 variety vield differences had to differ by 5 bushels to be significantly different. Variety lodging rating value differences were not significant, so all entries were in the top performance group.

Maturity Group-I (Table 2):

The two-year and 2012 test-yield averages were 41 and 35 bushels per acre, respectively, and the lodging rating average was 1. Varieties had to average 37 and 34 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among the two-year

averages were not significant (NS), while the 2012 variety yield differences had to differ by 5 bushels to be significantly different. Variety lodging rating values equaled 1, so all entries were in the top performance group.

NON-GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Maturity Group-0 (Table 3):

The two-year and 2012 yield averages were 39 and 40 bushels per acre, respectively; and the lodging score average was 1 (table 3). Varieties had to average 36 bushels or higher for two years and 39 bushels or higher for 2012 to be in the top yield group. Variety yield differences among the two-year averages were not significant (NS), while the 2012 variety yield differences had to differ by 6 bushels to be significantly different. Variety lodging rating values indicated there was no difference in lodging resistance in the varieties tested in 2012.

Maturity Group-I (Table 3): The two-year and 2012 and test-yield averages were 40 and 37 bushels per acre, respectively; and the lodging rating average was 1 (table 3). Varieties had to average 37 bushels or higher for two years and 38 bushels or higher for 2012 to be in the top yield group. Variety yield differences among the two-year averages were not significant (NS), while the 2012 variety yield differences had to differ by 5 bushels to be significantly different. Variety lodging score values indicated there was no difference in lodging resistance in the varieties tested in 2012.



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2012 annual report

OCTOBER 2012

SDSU EXTENSION

Soybean production is greatly affected by variety selection.

This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosateresistant. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Major factors in variety selection include:

- Yield
- Maturity
- Lodging resistance
- Phytophthora root rot resistance

Soybean Variety Performance Trials Results – Geddes

Robert G. Hall | SDSU Extension Agronomist Kevin K. Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager



Soybean production is greatly affected by variety selection. This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant and non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and therefore are affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to lowa, Nebraska, and south to Texas.

Inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean ground, there is no guarantee that N-fixing bacteria will be present to inoculate the seed, thus, consider inoculation cheap insurance that N-fixing bacteria will be present.

Use care when evaluating the vield performance of entries in each table. Entries tested for two years may also have a top yield group value in the 2012 yield column. Each company selects the appropriate maturity group trial (maturity group-0, -I, or -II trial) and locations for their entries. There are, however, no standard regional or national check varieties for maturity. It is suggested you compare the reported maturity rating of every entry you are considering with the days to maturity (DTM) calculated for each entry at each location.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, using varieties with a wide range of rot resistance is strongly suggested. The gene resistance of each variety to PRR is supplied by each seed company (proprietary

entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). The PRR gene for each entry, as given by the seed company is reported in each yield table. Specific race resistance to PRR can be determined by cross-referencing the PRR gene reported in each yield table with table A (glyphosate-resistant entries) to find the resistant races. Currently, races -1, -3, and -4 are the most common races in South Dakota.

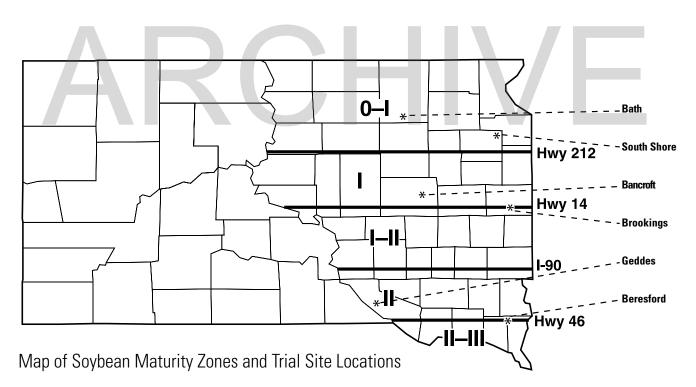


Table A. Phytopthora Root Rot race resistance by gene code and name.				
PRR Code	Gene Name	Race Resistance		
0	rps1	None		
1A	Rps1, Rps1a	1-2,10-11,13,15-18,24		
1 B	Rps1b	1,3-9,13-15,18,21-22		
1 C	Rps1c	1-3,6-11,13,15,17,21,23-24		
1 K	Rps1k	1-11,13-15,17-18,21-22,24		
2	Rps2	1-5,9-20		
3,3a	Rps3, 3a	1-5,8-9,11,13-14,16,18,23,25		
4	Rps4	1-4,10,12-16,18-21,25		
5	Rps5	1-5,8-9,11-14,18,20,25		
6	Rps6	1-4,10,12,14-16,18-21,25		
7	Rsp7	16,18,19		
K6	Rps1k, Rps6	1-22,24-25		
C3	Rps1c, Rps3	1-10,13-18,22-25		
В3	Rps1b	1-9,13-16,18,21-23,25		
NR	NR*	Not Reported		

Table B.General test information. Location

Glyphosate resistant soybean trial results - MG-I and -II

Curtis Sybesma Farm - Geddes Cooperator:

Soil type: Highmore-Walke silt loam, 0-2% slope

Tillage: No-till Fertility yield-goal: 70 bushels Previous crop: Corn Row space: 30 inches Seeding population 165,000/acre

Soil inoculant: Nitragin-brand Soybean Soil Implant down the seed tube by label instructions

Weed control: 1 qt. Roundup

Insect control: None Disease control: None

Date seeded: May 15, 2012

Plot yields were adjusted to 13% moisture content and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine. Explanations of the various references contained within the performance tables can be found in table C.

No.	Explanation of references
[1]	Seed treatment as reported by seed company.
[2]	Phytopthora root rot (PRR) gene reported by seed company, cross-reference with table A.
[3]	Maturity rating reported by seed company.
[4]	Days to maturity (DTM) – the number of days to maturity from seeding to 95% brown pod. If data is missing [.] the plots were exposed to a killing frost before they attained the 95% brown pod stage.
[5]	Lodging ratings: 0= all plants erect, 3= 50% of plants lodged at 45° -angle, 5= all plants flat. Shatter ratings: 1= none, 2= 1-10%, 3= 10-20%, 4= 25-50%, 5= > 50% pods shattered.
[6]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value the difference between the values is nonsignificant (NS).
[7]	TPG-avg. – the minimum value within a column that entry yield values must equal or exceed to qualify for the top-performance group (TPG).
[8]	TPG-avg. – the maximum value within a column that lodging or shatter rating values must equal or be less than to qualify for the TPG.
[9]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV values for yield are less than 15%. If the yield CV values exceed 15% the trial contained too much experimental error to be a valid, thus no data analysis for the table yield column is reported.

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Table 1. Glyphosate-resistant soybean variety performance results - MG-I, Geddes					
Brand/ Variety Seed Trt. [1] PRR Gene [2] Mat. rtg. [3]	DTM [4]	Yield Aver	2012 Shatte		
Branu/ variety Seed III. [1] Fill Gene [2] Mat. Itg. [5]	DTIVI [4]	2-Yr	2012	Rtg. (1-5) [5]	
PRAIRIE BR./ PB-1823R2NRNR 1.8	118	44	37	1	
PRAIRIE BR./ PB-1591R2NRNR 1.5	115	41	32	1	
PRAIRIE BR./ PB-1722R2NRNR 1.7	114	38	29	1	
PRAIRIE BR./ PB-2042R2NRNR 1.9	116	38	26	2	
PRAIRIE BR./ EXP 12161NRNR 1.6	114		38	1	
HEFTY/ H13Y11NR1c 1.3	116		33	1	
HEFTY/ H18Y11NR1c 1.8	114		32	1	
PRAIRIE BR./ EXP 12201NRNR 1.9	118		32	1	
PRAIRIE BR./ EXP 12245PNRNR 1.9	119		32	1	
PRAIRIE BR./ EXP 12228PNRNR 1.9	118		31	1	
HEFTY/ H16Y12NR1k 1.6	115		29	1	
HEFTY/ H15Y12NR3 1.5	114		28	1	
SOKAK GENET./ SD2149R2YCruiser MaxxNR 1.4	115		28	1	
SODAK GENET./ SD2181NR2Cruiser Maxx1c 1.8	118		27	1	
HEFTY/ H18Y12NR0 1.8	115		25	2	
SODAK GENET./ SD2172R2YCruiser Maxx1c 1.7	118		25	1	
HEFTY/ H16Y11NR1c 1.6	118		24	2	
PRAIRIE BR./ PB-1743R2NRNR 1.7	118		24	1	
HEFTY/ H17Y12NR1k 1.7	118		20	2	
SODAK GENET./ SD2101R2YCruiser Maxx1k 1	112	. \	19	3	
PRAIRIE BR./ PB-1566R2NRNR 1.5	116		17	3	
HEFTY/ EXP-H14R3NR1c 1.4	118		16	3	
Test avg. :	116	40	27	1	
High avg. :	119	44	38	3	
Low avg. :	112	38	16	1	
[6] Test LSD (.05):	119	NS**	6	1	
[7] Min.TPG-avg. :	119	38	32		
[8] Max.TPG-avg. :	119			2	
[9] Test Coef. Var.:	2	12	14	33	
No. Entries:	22	4	22	22	

Therefore, look for varieties that have shaded values within each yield or shatter rating column.

 $^{^{\}star}$ Shaded values within a yield or shatter rating column are included in the top-performance group (TPG).

^{**} Indicates differences between values within a yield or shatter rating column are non-significant (NS).

Brand/Variety Seed Trt. [1] PRR Gene [2] Mat. rtg. [3]	DTM [4]	Yield Aver	ages* bu/a	2012 Shatte
2. a.a a.a	57(1)	2-Yr	2012	Rtg. (1-5) [5]
WENSMAN/ W 3256NR2Acceleron3 2.5	115	41	28	1
PRAIRIE BR./ PB-2544R2NRNR 2.5	115	41	27	1
HEFTY/ H23Y12NR1k 2.3	116	40	28	1
ASGROW/ AG2931Acceleron+Poncho/Votivo1c 2.9	125	39	30	1
PIONEER/ 92Y51PPST Pkg1k 2.5	116	39	27	1
G-2 GENETICS/ 7250Trilex+Allegiance+Gaucho1k 2.5	122	39	25	1
ASGROW/ AG2431Acceleron+Poncho/Votivo1c 2.4	122	39	24	1
ASGROW/ AG2031Acceleron+Poncho/Votivo1c 2	120	39	20	3
G-2 GENETICS/ 7290Trilex+Allegiance+Gaucho1k 2.9	122	38	27	1
CHANNEL/ 2105R2Acceleron1c 2.1	121	38	24	3
WENSMAN/ W 3230R2Acceleron1c 2.3	123	38	23	1
HEFTY/ H22Y12NR1c 2.2	121	38	19	1
PIONEER/ 92Y70PPST PkgNR 2.7	124	37	25	2
PRAIRIE BR./ PB-2391R2NRNR 2.3	123	37	23	1
CHANNEL/ 2402R2Acceleron1c 2.4	123	37	22	1
PRAIRIE BR./ PB-2242R2NRNR 2.2	116	37	22	1
MUSTANG/ 23530Acceleron1c 2.3	122	37	20	1
PIONEER/ 93M11PPST Pkg1k 2.9	122	36	22	1
DAIRYLAND/ DSR-2105/R2YCruiser Maxx1k 2.1	115	36	20	1
WENSMAN/ W 3284NR2Acceleron1c 2.8	124	35	24	1
PRAIRIE BR./ PB-2419RR2NRNR 2.4	123	35	22	1
HEFTY/ H23Y10NR1c 2.3	122	35	21	1
ASGROW/ AG2232Acceleron+Poncho/Votivo1c 2.2	120	35	17	2
HEFTY/ H20Y12NR1c 2	117	35	15	3
G-2 GENETICS/ 7203Trilex+Allegiance+Gaucho0 2	121	34	17	2
WENSMAN/ W 3200NR2Acceleron1c+1k 2	120	32	12	4
DAIRYLAND/ DSR-2799/R2YCruiser Maxx0 2.8	123		32	1
HEFTY/ EXP-H27R3NR1c 2.7	125		30	1
PIONEER/ 92Y62PPST Pkg1k 2.6	123		29	1
G-2 GENETICS/ 7230Trilex+Allegiance+Gaucho1c 2.3	122		29	1
G-2 GENETICS/ 1272Trilex+Allegiance+Gaucho1k 2.7	119		29	1
PIONEER/ 92Y32PPST Pkg1c 2.3	121		28	1
DAIRYLAND/ DSR-2677/R2YCruiser Maxx1k 2.7	123		28	1
STINE/ 26RD02NR1c 2.6	122		28	1
ASGROW/ AG2933Acceleron+Poncho/Votivoc3 2.9	123		27	1
MUSTANG/ 25333AcceleronNR 2.4	121		26	1
HEFTY/ H26R3SNR1k 2.6	121		26	1
STINE/ 27RD00Cruiser Maxx1c 2.7	121		26	1
G-2 GENETICS/ 7273Trilex+Allegiance+Gaucho1k 2.7	120		26	1
G-2 GENETICS/ 7270Trilex+Allegiance+Gaucho1k 2.7	122		26	1
PRAIRIE BR./ PB-2351R2NRNR 2.3	122		26	1
PRAIRIE BR./ PB-2668R2NRNR 2.6	122		26	1
PIONEER/ 92Y83PPST Pkg1k 2.8	123		25	1
PRAIRIE BR./ PB-2366R2NRNR 2.3	123		25	2
ASGROW/ AG2433Acceleron+Poncho/Votivo1c 2.4	117		24	1

Table 2. Glyphosate-resistant soybean variety performance results - MG-II, Geddes (continued)

Table 2. Glyphosate-resistant soybean variety performance results -			ages* bu/a	2012 Shatter
Brand/ Variety Seed Trt. [1] PRR Gene [2] Mat. rtg. [3]	DTM [4]	2-Yr	2012	Rtg. (1-5) [5]
MUSTANG/ 22823Acceleron1k 2.2	116		24	1
STINE/ 25RD00Cruiser Maxx0 2.5	124		24	1
SODAK GENET./ SD2201NR2Cruiser Maxx1c 2	123		24	1
ASGROW/ AG2733Acceleron+Poncho/Votivo1k 2.7	122		23	1
MUSTANG/ 26623Acceleron1c 2.6	122		23	1
HEFTY/ EXP-H20R3NR1c 2	121		23	1
HEFTY/ EXP-H24R3NR3 2.4	119		23	1
STINE/ 24RB00Cruiser Maxx1c 2.4	123		23	1
G-2 GENETICS/ 7243Trilex+Allegiance+Gaucho1k 2.4	116		23	1
NORTHSTAR/ NS 2377NR2Acceleron1k 2.3	117		23	1
RENK/ RS241R2NR1c 2.4	123		23	1
RENK/ RS263NR2NR1k 2.6	121		23	1
G-2 GENETICS/ 7286Trilex+Allegiance+Gaucho1c 2.8	125		22	1
PRAIRIE BR./ PB-2143R2NRNR 2.1	121		22	1
PRAIRIE BR./ PB-2230R2NRNR 2.2	121		22	1
WENSMAN/ W 3222NR2Acceleron1c 2.2	122		22	1
NORTHSTAR/ NS 2118NR2Acceleron1k 21.4	123		22	2
DAIRYLAND/ DSR-2411/R2YCruiser Maxx1c 2.4	122		21	1
CHANNEL/ 2305R2Acceleron1k 2.3	117		21	1
PRAIRIE BR./ PB-2650R2NRNR 2.6	121		21	1
MUSTANG/ 21993Acceleron1k 2.1	121		20	2
HEFTY/ EXP-H26R3NR1c 2.6	122		20	2
STINE/ 20RD20Cruiser Maxx1c 2	121		19	2
G-2 GENETICS/ 7213Trilex+Allegiance+Gaucho1c 2.1	122		19	1
HEFTY/ EXP-H21R3NR1k 2.1	120		17	2
G-2 GENETICS/ 7208Trilex+Allegiance+Gaucho1c 2	116		11	4
Test avg. :	121	37	23	1
High avg. :	125	41	32	4
Low avg. :	115	32	11	1
[6] Test LSD (.05):		8	5	<1
[7] Min.TPG-avg. :		33	27	
[8] Max.TPG-avg. :				1
[9] Test Coef. Var.:		9	13	28
No. Entries:	71	26	71	71

^{*} Shaded values within a yield or shatter rating column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or shatter rating column.

GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

MaturityGroup-I (Table 1): The two-year and 2012 test-yield averages were 40 and 27 bushels per acre, respectively; the lodging rating average was 1. Varieties had to average 38 bushels and 32 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2012 variety vield differences had to differ by 6 bushels to be significantly different. Lodging was not a problem at Geddes, but shattering was a significant issue. Therefore, shattering ratings were taken and reported.Look for low numbers in the shatter rating column. Variety shatter rating values of 2 or less were in the top-performance group for shattering resistance in this test trial in 2012.

Maturity Group-II (Table 2):

The two-year and 2012 test-yield averages were 37 and 23 bushels per acre, respectively; and the shatter rating average was 1. Varieties had to average 33 and 27 bushels or higher to be in the top yield group for two years and for 2012, respectively. The two-year yield differences had to differ by 8 bushels per acre to be significantly different; while the 2012 variety yield differences had to differ by 5 bushels to be significantly different. Variety shattering rating values of 1 were in the top-performance group for shattering resistance. Variety shatter rating values had to differ by 1 to be significantly different in 2012. The level of shattering at Geddes undoubtedly had an effect on the poor yield performance because of the drought at this

site.





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Major factors in variety selection include:

- Yield
- Maturity
- Lodging resistance
- Phytophthora root rot resistance

Soybean Variety Performance Trials Results – Beresford

Robert G. Hall | SDSU Extension Agronomist Kevin K. Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager



Soybean production is greatly affected by variety selection. This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant and non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and Phytophthora root rot resistance.

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and therefore are affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to lowa, Nebraska, and south to Texas.

Inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean ground, there is no guarantee that N-fixing bacteria will be present to inoculate the seed, thus, consider inoculation cheap insurance that N-fixing bacteria will be present.

Use care when evaluating the yield performance of entries in each table. Entries tested for two years may also have a top yield group value in the 2012 yield column. Each company selects the appropriate maturity group trial (maturity group-0, -I, or -II trial) and locations for their entries. There are, however, no standard regional or national check varieties for maturity. It is suggested you compare the reported maturity rating of every entry you are considering with the days to maturity (DTM) calculated for each entry at each location.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, using varieties with a wide range of rot resistance is strongly suggested. The gene resistance of each variety to PRR is supplied by each seed company (proprietary

entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). The PRR gene for each entry, as given by the seed company is reported in each yield table. Specific race resistance to PRR can be determined by cross-referencing the PRR gene reported in each yield table with table A (glyphosate-resistant entries) to find the resistant races. Currently, races -1, -3, and -4 are the most common races in South Dakota.

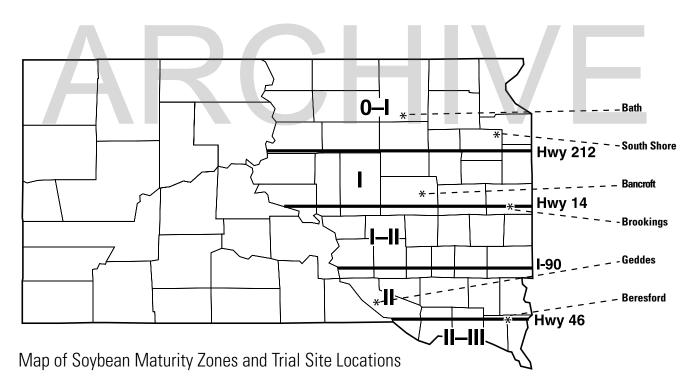


Table A. Phytopthora Root Rot race resistance by gene code and nam				
PRR Code	Gene Name	Race Resistance		
0	rps1	None		
1 A	Rps1, Rps1a	1-2,10-11,13,15-18,24		
1 B	Rps1b	1,3-9,13-15,18,21-22		
1 C	Rps1c	1-3,6-11,13,15,17,21,23-24		
1 K	Rps1k	1-11,13-15,17-18,21-22,24		
2	Rps2	1-5,9-20		
3,3a	Rps3, 3a	1-5,8-9,11,13-14,16,18,23,25		
4	Rps4	1-4,10,12-16,18-21,25		
5	Rps5	1-5,8-9,11-14,18,20,25		
6	Rps6	1-4,10,12,14-16,18-21,25		
7	Rsp7	16,18,19		
K6	Rps1k, Rps6	1-22,24-25		
C3	Rps1c, Rps3	1-10,13-18,22-25		
В3	Rps1b	1-9,13-16,18,21-23,25		
NR	NR	Not Reported		

Table B. General test information. Glyphosate and Non-glyphosate resistant soybean trial results - MG-I &-II Location

Cooperator: Southeast Experiment Station - Beresford, Peter Sexton and staff

Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope

Tillage: Conventional Fertility Yield-Goal: 70 bushels Previous Crop: Corn Row Space: 30 inches Seeding Population 165,000/acre

Soil Inoculant: Nitragin-brand Soybean Soil Implant down the seed tube by label instructions

Weed Control: Glyphosate-resistant trials:2 qt./a Roundup+1 qt./a Dual+10 oz./a Border, 1 qt. Roundup

Non-glyphosate-resistant trials: Post, 4 oz./a Raptor + 4 oz./a Cadet

Insect Control: 1.5 pt./a Lorsban for spider mites

Disease Control: None

Date Seeded: May 16, 2012

Plot yields were adjusted to 13% moisture content and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine. Explanations of the various references contained within the performance tables can be found in table C.

Table C. E	explanation of performance table references [.].
No.	Explanation of references
[1]	Seed treatment as reported by seed company.
[2]	Phytopthora root rot (PRR) gene reported by seed company, cross-reference with table A.
[3]	Maturity rating reported by seed company.
[4]	Days to maturity (DTM) - the number of days to maturity from seeding to 95% brown pod. If data is missing [.] the plots were exposed to a killing frost before they attained the 95% brown pod stage.
[5]	Lodging ratings: 0= all plants erect, $3=50\%$ of plants lodged at 45° -angle, $5=$ all plants flat. Shatter ratings: $1=$ none, $2=$ $1-10\%$, $3=$ $10-20\%$, $4=$ $25-50\%$, $5=$ $>$ 50% pods shattered.
[6]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value the difference between the values is nonsignificant (NS).
[7]	TPG-avg. – the minimum value within a column that entry yield values must equal or exceed to qualify for the top-performance group (TPG).
[8]	TPG-avg. – the maximum value within a column that lodging or shatter rating values must equal or be less than to qualify for the TPG.
[9]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV values for yield are less than 15%. If the yield CV values exceed 15% the trial contained too much experimental error to be a valid, thus no data analysis for the table yield column is reported.

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Table 1. Glyphosate-resistant soybean variety performance resu	ılts - MG-I, E	Beresford.		
Brand/ Variety_Seed Trt.[1]PRR gene [2]Mat. rtg. [3]	DTM [4]	Yield Aver	ages* bu/a	2012 Shatter
Braild/ VarietySeed Itt.[1]1 NN gene [2]wat. Itg. [3]	DTIVI [4]	2-Yr	2012	Rtg. (1-5) [5]
PRAIRIE BR./ PB-1591R2NRNR 1.5	108	40	27	2
PRAIRIE BR./ PB-1823R2NRNR 1.8	110	39	24	1
PRAIRIE BR./ PB-2042R2NRNR 1.9	110	38	20	2
PRAIRIE BR./ PB-1722R2NRNR 1.7	105	36	17	1
HEFTY/ H13Y11NR1c 1.3	106		24	1
PRAIRIE BR./ EXP 12228PNRNR 1.9	109		24	1
PRAIRIE BR./ EXP 12201NRNR 1.9	106		23	1
PRAIRIE BR./ EXP 12161NRNR 1.6	107		22	1
PRAIRIE BR./ EXP 12245PNRNR 1.9	112		22	1
HEFTY/ H18Y11NR1c 1.8	110		21	1
HEFTY/ H16Y11NR1c 1.6	107		20	2
PRAIRIE BR./ PB-1743R2NRNR 1.7	106		20	1
HEFTY/ H15Y12NR3 1.5	106		19	1
HEFTY/ H16Y12NR1k 1.6	105		19	1
SODAK GENET./SD2181NR2Y/Cruiser Maxx1c 1.8	107		19	1
HEFTY/ H17Y12NR1k 1.7	108		18	1
PRAIRIE BR./ PB-1566R2NRNR 1.5	103		18	3
SODAK GENET./SD2149R2Y/Cruiser MaxxNR 1.4	102		18	3
HEFTY/ H18Y12NR0 1.8	105		17	1
HEFTY/ EXP-H14R3NR1c 1.4	102	. 1	17	2
SODAK GENET./SD2172R2Y/Cruiser Maxx1c 1.7	101		15	3
SODAK GENET./SD2101R2Y/Cruiser Maxx1k 1.0	103		11	3
Test avg. :	106	38	20	2
High avg. :	112	40	27	3
Low avg. :	101	36	11	1
[6] Test LSD (.05):		NS**	4	< 1
[7] Min.TPG-avg. :		36	23	
[8] Max.TPG-avg. :				1
[9] Test Coef. Var.:		6	12	21
No. Entries:	22	4	22	22

Therefore, look for varieties that have shaded values within each yield or shatter rating column.

 $^{^{\}star}$ Shaded values within a yield or shatter rating column are included in the top-performance group (TPG).

^{**} Indicates differences between values within a yield or shatter rating column are non-significant (NS).

Table 2. Glyphosate-resistant soybean variety performance results - MG-II, Beresford						
Brand/ VarietySeed Trt.[1]PRR gene [2]Mat. rtg. [3]	DTM [4]	Yield Avera	ges* bu/a	2012 Shatter		
Brand/ varietySeed Trt.[1]FNN gene [2]Wat. ftg. [3]	DTIVI[4]	2-Yr	2012	Rtg. (1-5) [5]		
PIONEER/ 93M11PPST Pkg1k 2.9	119	36	22	1		
PRAIRIE BR./ PB-2391R2NRNR 2.3	110	36	18	1		
WENSMAN/ W 3284NR2Acceleron1c 2.8	119	35	22	1		
PRAIRIE BR./ PB-2544R2NRNR 2.5	108	35	19	1		
PIONEER/ 92Y51PPST Pkg1k 2.5	112	35	15	1		
G-2 GENETICS/ 7250Trilex+Allegiance+Gaucho1k 2.5	116	34	16	2		
ASGROW/ AG2931Acceleron+Poncho/Votivo1c 2.9	118	34	15	1		
ASGROW/ AG2031Acceleron+Poncho/Votivo1c 2.0	106	34	14	3		
G-2 GENETICS/ 7203Trilex+Allegiance+Gaucho0 2.0	109	33	15	3		
PRAIRIE BR./ PB-2242R2NRNR 2.2	108	33	14	1		
MUSTANG/ 23530Acceleron1c 2.3	111	33	13	1		
ASGROW/ AG2232Acceleron+Poncho/Votivo1c 2.2	109	33	12	2		
WENSMAN/ W 3200NR2Acceleron1c+1k 2.0	107	33	12	4		
G-2 GENETICS/ 7290Trilex+Allegiance+Gaucho1k 2.9	117	32	19	1		
PIONEER/ 92Y70PPST PkgNR 2.7	119	32	15	1		
WENSMAN/ W 3256NR2Acceleron3 2.5	110	32	15	1		
PRAIRIE BR./ PB-2419RR2NRNR 2.4	113	32	13	2		
ASGROW/ AG2431Acceleron+Poncho/Votivo1c 2.4	111	32	12	1		
CHANNEL/ 2105R2Acceleron1c 2.1	107	32	7	3		
STINE/ 24RB00Cruiser Maxx1c 2.4	109	31	13	1		
DAIRYLAND/ DSR-2105/R2YCruiser Maxx1k 2.1	108	31	12	2		
RENK/ RS241R2NR1c 2.4	111	31	9	1		
WENSMAN/ W 3230R2Acceleron1c 2.3	110	30	10	1		
CHANNEL/ 2402R2Acceleron1c 2.4	110	30	9	1		
ASGROW/ AG2933Acceleron+Poncho/Votivoc3 2.9	118		22	2		
PIONEER/ 92Y83PPST Pkg1k 2.8	121		22	1		
G-2 GENETICS/ 7273Trilex+Allegiance+Gaucho1k 2.7	117		21	1		
ASGROW/ AG2433Acceleron+Poncho/Votivo1c 2.4	112		20	1		
PIONEER/ 92Y62PPST Pkg1k 2.6	118		20	1		
G-2 GENETICS/ 7243Trilex+Allegiance+Gaucho1k 2.4	111		20	1		
DAIRYLAND/ DSR-2677/R2YCruiser Maxx1k 2.7	117		19	1		
G-2 GENETICS/ 1272Trilex+Allegiance+Gaucho1k 2.7	115		19	2		
ASGROW/ AG2733Acceleron+Poncho/Votivo1k 2.7	118		18	1		
MUSTANG/ 26623Acceleron1c 2.6	110		18	2		
G-2 GENETICS/ 7270Trilex+Allegiance+Gaucho1k 2.7	114		18	1		
HEFTY/ H22Y12NR1c 2.2	109		17	1		
HEFTY/ EXP-H26R3NR1c 2.6	111		17	1		
G-2 GENETICS/ 7230Trilex+Allegiance+Gaucho1c 2.3	115		17	1		
G-2 GENETICS/ 7213Trilex+Allegiance+Gaucho1c 2.1	107		17	1		
G-2 GENETICS/ 7286Trilex+Allegiance+Gaucho1c 2.8	118		17	1		
PRAIRIE BR./ PB-2351R2NRNR 2.3	112		17	1		
SODAK GENET./SD2201NR2YCruiser Maxx1c 2.0	106		17	2		
HEFTY/ H23Y10NR1c 2.3	112		16	2		
STINE/ 25RD00Cruiser Maxx0 2.5	110		16	2		
PRAIRIE BR./ PB-2366R2NRNR 2.3	108		16	2		

Table 2. Glyphosate-resistant soybean variety performance results - MG-II, Beresford (continued)

Brand Varioty Cood Tet [1] BBB mana [2] Max men [2]	DTM [4]	Yield Averages* bu 2-Yr 2012		2012 Shatter
Brand/ VarietySeed Trt.[1]PRR gene [2]Mat. rtg. [3]	DIWI[4]	2-Yr	2012	Rtg. (1-5) [5]
HEFTY/ EXP-H27R3NR1c 2.7	119		15	1
DAIRYLAND/ DSR-2799/R2YCruiser Maxx0 2.8	111		15	2
NORTHSTAR/ NS 2377NR2Acceleron1k 2.3	106		15	1
MUSTANG/ 25333AcceleronNR 2.4	112		14	1
HEFTY/ EXP-H21R3NR1k 2.1	108		14	3
NORTHSTAR/ NS 2118NR2Acceleron1k 2.4	107		14	2
HEFTY/ H23Y12NR1k 2.3	108		13	2
HEFTY/ H26R3SNR1k 2.6	114		13	1
DAIRYLAND/ DSR-2411/R2YCruiser Maxx1c 2.4	113		13	1
PRAIRIE BR./ PB-2650R2NRNR 2.6	112		13	1
PRAIRIE BR./ PB-2668R2NRNR 2.6	116		13	1
RENK/ RS213NR2NR1c 2.1	108		13	3
STINE/ 20RD20Cruiser Maxx1c 2.0	106		12	2
STINE/ 26RD02NR1c 2.6	111		12	1
STINE/ 27RD00Cruiser Maxx1c 2.7	110		12	1
MUSTANG/ 21993Acceleron1k 2.1	109		11	3
HEFTY/ EXP-H20R3NR1c 2.0	108		11	2
PRAIRIE BR./ PB-2143R2NRNR 2.1	110		11	1
WENSMAN/ W 3222NR2Acceleron1c 2.2	107		11	2
MUSTANG/ 22823Acceleron1k 2.2	108		10	1
HEFTY/ H20Y12NR1c 2.0	108		10	2
HEFTY/ EXP-H24R3NR3 2.4	108		10	3
CHANNEL/ 2305R2Acceleron1k 2.3	106	. \	10	1
PRAIRIE BR./ PB-2230R2NRNR 2.2	110		10	3
RENK/ RS263NR2NR1k 2.6	107		10	1
G-2 GENETICS/ 7208Trilex+Allegiance+Gaucho1c 2.0	107		7	3
Test avg. :	111	33	15	2
High avg. :	121	36	22	4
Low avg. :	106	30	7	1
[6] Test LSD (.05):		NS**		1
[7] Min.TPG-avg. :		30		
[8] Max.TPG-avg. :				2
[9] Test Coef. Var.:		10	28	43
No. Entries:	71	24	71	71

^{*} Shaded values within a yield or shatter rating column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or shatter rating column.

^{**} Indicates differences between values within a yield or shatter rating column are non-significant (NS).

Table 3. Non-glyphosate resistant soybean variety performance results for maturity groups-I and -II -Beresford.

		Yield and Shatter Rtg. averages by maturity group						
Brand/ Variety	DTM [4]		MG-	I	MG-II			
Brailu/ Variety		Yield-bu/a		2012 Shatter.	Yield-bu/a		2012 Shatter	
		2-yr	2012	Rtg. (1-5) [5]	2-yr	2012	Rtg (1-5) [5]	
RICHLAND ORG./ CHALLENGER	108		21	1	•		-	
NORTHSTAR/ EXPNS1428NLL	111		21	1	•		-	
PUBLIC/ DEUEL	107	33	20	1				
PUBLIC/ BROOKINGS	113		20	1				
RICHLAND ORG./ MK1016	104	30	18	2				
RICHLAND ORG./TITAN	99		18	3				
NORTHSTAR/ NS1128NLL	103		18	2				
RICHLAND ORG./ MK9101	101	30	15	2				
PUBLIC/ DAVISON	110				37	22	1	
Test avg.:	106	31	19	2	37	22	1	
High avg.:	113	33	21	3				
Low avg. :	99	30	15	1				
[6] LSD (.05):		NS**	4	1				
[7] Min. TPG avg.:		30	17					
[8] Max. TPG avg.:				1 1				
[9] Coef. Var.:	5	6	12	0				

^{*} Shaded values within a yield or lodging score column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or lodging score column.

^{**} Indicates differences between values within a yield or lodging score column are non-significant (NS).

GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Maturity Group-I (Table 1):

The two-year and 2012 testyield averages were 38 and 20 bushels per acre, respectively; the shatter rating average was 2. Varieties had to average 36 and 23 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2012 variety vield differences had to differ by 4 bushels to be significantly different. Variety shatter rating values had to equal 1 to be in the top performance group for shattering resistance.

Maturity Group-II (Table 2):

The two-year and 2012 test-yield averages were 33 and 15 bushels per acre, respectively, the shatter rating average was 2. In the 2012 yield column, the CV (coefficient of variation) value of 28% indicates there was a high level of experimental effort associated with this yield trial. Generally, CV values exceeding 15% indicates the test trials is invalid because of the high level of experimental error associated with it. Therefore,

no least significant difference (LSD) values or minimum topperformance-group values for yield in 2012 are given. These results show that the MG-I varieties at Beresford were not as affected by the drought in 2012 as was the later maturing MG-II varieties. At this location, as was the case at Geddes, lodging rating (lodging resistance) was not recorded because lodging was not a problem. However, shattering was an issue so the shatter rating (shattering resistance) was recorded, so look for low values. The shattering level at Beresford undoubtedly hand an effect on the poor yield performance because

of the drought at this site. NON-GLYPHOSATERESISTANT SOYBEAN VARIETY TRIAL RESULTS

Maturity Group-I (Table 3):

The two-year and 2012 yield averages were 31 and 19 bushels per acre, respectively, and the shattering rating average was 2. Varieties had to average 30 and 17 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among the two-year averages were not significant (NS), while the 2012 variety

yield differences had to differ by 4 bushels to be significantly different. Variety shattering rating values had to equal 1 to be in the top performance group for resisting shattering, and shattering values had to differ by 1 to be significantly different.

Maturity Group-II (Table 3):

There was only one released variety tested in 2011 and 2012.



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2012 annual report

OCTOBER 2012

SDSU EXTENSION

Soybean production is greatly affected by variety selection.

This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosateresistant. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Major factors in variety selection include:

- Yield
- Maturity
- Lodging resistance
- Phytophthora root rot resistance

Soybean Variety Performance Trials Results – Bath

Robert G. Hall | SDSU Extension Agronomist Kevin K. Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager



Soybean production is greatly affected by variety selection. This circular reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant and non-glyphosate-resistant soybean varieties. Major factors in variety selection include yield, maturity, lodging resistance, and *Phytophthora* root rot resistance.

Soybean varieties are classified according to maturity groups that in turn are adapted to maturity zones. Maturity zones are based on day length and therefore are affected by latitude. The very early maturity group-00 varieties are best suited to Canada and bordering regions of the U.S., while maturity group-0, group-I, and group-II varieties are suited to South Dakota. The later groups III-VIII are suited to lowa, Nebraska, and south to Texas.

Inoculation of seed with the appropriate nitrogen-fixing bacterium is a good practice. Always inoculate if seeding soybeans in soils not previously cropped to soybeans. On older soybean ground, there is no guarantee that N-fixing bacteria will be present to inoculate the seed, thus, consider inoculation cheap insurance that N-fixing bacteria will be present.

Use care when evaluating the yield performance of entries in each table. Entries tested for two years may also have a top yield group value in the 2012 yield column. Each company selects the appropriate maturity group trial (maturity group-0, -I, or -II trial) and locations for their entries. There are, however, no standard regional or national check varieties for maturity. It is suggested you compare the reported maturity rating of every entry you are considering with the days to maturity (DTM) calculated for each entry at each location.

Phytophthora root rot (PRR) is an important soybean disease in South Dakota and is often controlled or managed with the use of resistant varieties. Resistance to Phytophthora root rot is fungus-race specific. Thus, resistance to one PRR race does not always impart resistance to other races. Knowledge of the prevalent PRR races in your area is important. If you suspect you have a PRR problem, using varieties with a wide range of rot resistance is strongly suggested. The gene resistance of each variety to PRR is supplied by each seed company (proprietary

entries) or by the USDA (Uniform Soybean Tests, Northern States, public entries). The PRR gene for each entry, as given by the seed company is reported in each yield table. Specific race resistance to PRR can be determined by cross-referencing the PRR gene reported in each yield table with table A (glyphosate-resistant entries) to find the resistant races. Currently, races -1, -3, and -4 are the most common races in South Dakota.

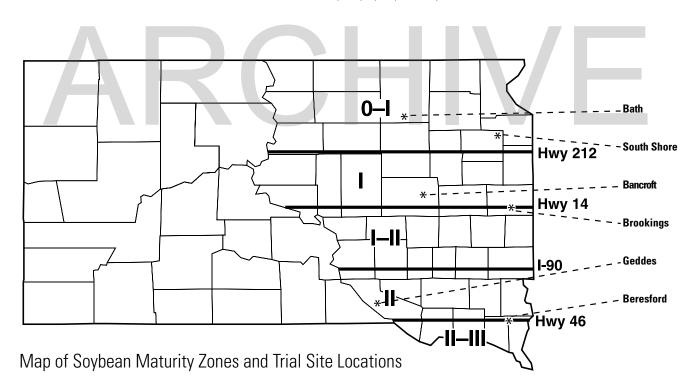


Table A. Phyto	opthora Root Rot ra	ce resistance by gene code and name.
PRR Code	Gene Name	Race Resistance
0	rps1	None
1 A	Rps1, Rps1a	1-2,10-11,13,15-18,24
1 B	Rps1b	1,3-9,13-15,18,21-22
1 C	Rps1c	1-3,6-11,13,15,17,21,23-24
1 K	Rps1k	1-11,13-15,17-18,21-22,24
2	Rps2	1-5,9-20
3,3a	Rps3, 3a	1-5,8-9,11,13-14,16,18,23,25
4	Rps4	1-4,10,12-16,18-21,25
5	Rps5	1-5,8-9,11-14,18,20,25
6	Rps6	1-4,10,12,14-16,18-21,25
7	Rsp7	16,18,19
K6	Rps1k, Rps6	1-22,24-25
C3	Rps1c, Rps3	1-10,13-18,22-25
В3	Rps1b	1-9,13-16,18,21-23,25
NR	NR	Not Reported

Table B. General test information.

Location Glyphosate resistant soybean trial results - MG-0 and -I

Cooperator: Gordon and Roger Locken Farms - Bath Soil Type: Great Bend silt loam, 0-2% slope

Tillage: No-till Fertility Yield-Goal: 70 bushels Previous Crop: Corn Row Space: 30 inches Seeding Population 165,000/acre

Soil Inoculant: Nitragin-brand Soybean Soil Implant down the seed tube by label instructions

Weed Control: Optill Pro label rates/ 1 oz. Sharpen, 1 qt. Roundup

Insect Control: None Disease Control: None

Date Seeded: May 24, 2012

Plot yields were adjusted to 13% moisture content and expressed in bushels per acre. Harvest was accomplished using a Massey Ferguson 8XP small plot combine. Explanations of the various references contained within the performance tables can be found in table C.

No.	Explanation of references
[1]	Seed treatment as reported by seed company.
[2]	Phytopthora root rot (PRR) gene reported by seed company, cross-reference with table A.
[3]	Maturity rating reported by seed company.
[4]	Days to maturity (DTM) – the number of days to maturity from seeding to 95% brown pod. If dat is missing [.] the plots were exposed to a killing frost before they attained the 95% brown pod stage.
[5]	Lodging ratings: 0= all plants erect, 3= 50% of plants lodged at 45° -angle, 5= all plants flat. Shatter ratings: 1= none, 2= 1-10%, 3= 10-20%, 4= 25-50%, 5= > 50% pods shattered.
[6]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different from one another at the 0.05 level of probability. If the difference is less than the LSD value the difference between the values is nonsignificant (NS).
[7]	TPG-avg. – the minimum value within a column that entry yield values must equal or exceed to qualify for the top-performance group (TPG).
[8]	TPG-avg. – the maximum value within a column that lodging or shatter rating values must equal of be less than to qualify for the TPG.
[9]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV values for yield are less than 15%. If the yield CV values exceed 15% the trial contained too much experimental error to be a valid, thus no data analysis for the table yield column is reported.

Table 1. Glyphosate-resistant soybean variety performance results				
Brand/ Variety Seed Trt. [1] PRR Gene [2] Mat. rtg. [3]	DTM [4]	Yield Aver	2012 Ldg.	
bianu/ variety seed iit. [i] Fhn Gene [2] Wat. itg. [5]	DTWI[4]	2-Yr	2012	Rtg. (1-5) [5]
DAIRYLAND/ DSR-0747/R2YCruiser Maxx1c 0.7	111	68	65	1
MUSTANG/ 09822Acceleron1k 0.9	107	67	65	2
G-2 GENETICS/ 6088Trilex+Allegiance+Gaucho0 0.8	109	67	65	1
SEEDS 2000/ 2091 RR2YNNR0 0.9	112	67	63	1
ASGROW/ AG0832Acceleron+Poncho/Votivo3 0.8	109	65	64	1
G-2 GENETICS/ 6098Trilex+Allegiance+Gaucho1k 0.9	108	65	64	2
G-2 GENETICS/ 6092Trilex+Allegiance+Gaucho1k 0.9	107	65	63	2
PRAIRIE BR./ EXP 0913NRNR 0.9	108	65	63	2
PRAIRIE BR./ PB-0851R2NRNR 0.8	109	65	62	1
WENSMAN/ W 3099R2Acceleron1k 0.9	110	64	62	1
SODAK GENET./ SD1093RRNR0 0.9	108	62	59	1
PRAIRIE BR./ PB-1120R2NRNR 0.9	120	61	61	2
WENSMAN/ W 3090NR2Acceleron3 0.9	108		69	1
PRAIRIE BR./ PB-1261R2NRNR 0.9	112		68	1
PRAIRIE BR./ PB-0863R2NRNR 0.7	110		67	1
PRAIRIE BR./ PB-0920R2NRNR 0.9	111		66	1
WENSMAN/ W 3076R2Acceleron3 0.7	109		66	1
SODAK GENET./ SD2061R2YCruiser Maxx1c 0.6	108		66	1
DAIRYLAND/ DSR-0904/RY2Cruiser Maxx3 0.8	108		65	1
PRAIRIE BR./ PB-1061R2NRNR 0.9	111		64	1
HEFTY/ H07Y12NR1k 0.7	108		63	1
SEEDS 2000/ 2051 RR2YNR0 0.5	107	. '	62	2
SODAK GENET./ SD2091R2YCruiser Maxx1c 0.9	111		62	1
MUSTANG/ 08733Acceleron3 0.8	108		61	1
HEFTY/ EXP-H02R3NR1k 0.2	107		61	1
HEFTY/ EXP-H08R3NR3 0.8	108		61	1
PETERSON/ PFS 11R08NR3 0.8	108		60	1
PIONEER/ 90Y81PPST Pkg1c 0.8	108		58	1
ASGROW/ AG0833Acceleron+Poncho/Votivo3 0.8	107		57	1
HEFTY/ H06Y11NR0 0.6	108		54	2
Test avg. :	109	65	63	1
High avg. :	120	68	69	2
Low avg. :	107	61	54	1
[6] Test LSD (.05):		5	5	<1
[7] Min.TPG-avg. :		63	64	
[8] Max.TPG-avg. :				1
[9] Test Coef. Var.:		4	4	27
No. Entries:	30	12	30	30

^{*} Shaded values within a yield or lodging rating column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or lodging rating column.

Brand/ Variety Seed Trt. [1] PRR Gene [2] Mat. rtg. [3]	DTM [4]	Yield Ave	rages* bu/a	2012 Ldg.
2. a.a., 7 a. 101, 200 a. 11. [1] . 11. 2010 [2] . 11. 11.	J ()	2-Yr	2012	Rtg. (1-5) [5
CHANNEL/ 1405R2Acceleron1c 1.4	116	68	68	1
G-2 GENETICS/ 6162Trilex+Allegiance+Gaucho1c 1.6	114	67	70	2
REA/ 71G20NR0 1.1	112	67	68	2
PRAIRIE BR./ PB-1743R2NRNR 1.7	117	67	67	1
PRAIRIE BR./ PB-1320R2NRNR 1.3	118	65	70	2
PRAIRIE BR./ PB-1823R2NRNR 1.8	118	65	70	2
ASGROW/ AG1431Acceleron+Poncho/Votivo1c 1.4	113	65	67	2
PRAIRIE BR./ PB-1591R2NRNR 1.5	117	65	67	2
REA/ 75G12NR1c 1.5	115	65	66	1
CHANNEL/ 1105R2Acceleron3 1.1	116	65	66	2
WENSMAN/ W 3108R2Acceleron3 1	111	65	65	2
DAIRYLAND/ DSR-1370/R2YCruiser Maxx1c 1.3	118	64	68	2
PRAIRIE BR./ PB-1722R2NRNR 1.7	116	64	67	1
WENSMAN/ W 3140R2Acceleron0 1.4	117	64	66	2
REA/ 72G21NR1c 1.3	120	63	66	2
HEFTY/ H11Y12NR3 1.1	116	63	65	2
WENSMAN/ W 3120R2Acceleron1c 1.2	118	63	65	2
ASGROW/ AG1631Acceleron+Poncho/Votivo1c 1.6	114	63	63	2
SEEDS 2000/ 2121 RR2YNR3 1.2	111	62	62	1
STINE/ 11RC08NR3a 1.1	109	61	62	2
ASGROW/ AG1031Acceleron+Poncho/Votivo3 1	110	61	60	11_
PIONEER/ 91Y90PPST PkgNR 1.9	119	60	61	1
ASGROW/ AG1233Acceleron+Poncho/Votivo1k 1.2	116	00	74	1
WENSMAN/ W 3101R2Acceleron1c 1	110		72	1
SODAK GENET./ SD2172R2YCruiser Maxx1c 1.7	119	·	72	2
PRAIRIE BR./ EXP 12151NRNR 1.5	118		70	2
WENSMAN/ W 3160NR2Acceleron1c 1.6	118		70	1
HEFTY/ H10Y12NR1k 1	109		69	2
PRAIRIE BR./ PB-1566R2NRNR 1.5	114		69	2
SODAK GENET./ SD2181NR2Cruiser Maxx1c 1.8	119	·	69	2
HEFTY/ H16Y12NR1k 1.6	120		68	1
STINE/ 16RD66NR1c 1.6	119		68	2
SODAK GENET./ SD2101R2YCruiser Maxx1k 1	109		68	2
PIONEER/ 91Y74PPST Pkg1k 1.7	118		67	1
HEFTY/ H13Y11NR1c 1.3	117		67	2
PRAIRIE BR./ PB-1433R2NRNR 1.4	116		67	2
MUSTANG/ 14323Acceleron1c 1.4	116		66	1
HEFTY/ EXP-H14R3NR1c 1.4	115		66	1
PETERSON/ PFS 11R10NR1c 1	112		66	1
PRAIRIE BR./ EXP 12161NRNR 1.6	118		66	2
PRAIRIE BR./ PB-1637R2NRNR 1.6	118		66	2
PIONEER/ 91Y30PPST Pkg1c 1.3	109		65	1
PIONEER/ 91Y01PPST Pkg1c 1	108		65	2
HEFTY/ H15Y12NR3 1.5	115		65	2
,			65	2

- 1	T 1 1 0	01 1	and the second second			,	1. 1.10		/
1	lable 2.	Glyphosat	e-resistant	soybean	variety	performance	results - MG	I, Bath	(continued)

Brand/ Variety Seed Trt. [1] PRR Gene [2] Mat. rtg. [3]	DTM [4]	Yield Ave	Yield Averages* bu/a		
Brand/ Variety Seed Irt. [1] FRN Gene [2] Mat. rtg. [3]	DTIVI[4]	2-Yr	2012	Rtg. (1-5) [5]	
PETERSON/ PFS 12R12NR3 1.1	109		65	2	
HEFTY/ H12Y11NR3 1.2	112		64	2	
HEFTY/ H16Y11NR1c 1.6	119		64	2	
HEFTY/ EXP-H10R3NR3 1	115		63	1	
NORTHSTAR/ NS 1257R2Acceleron3 1.1	109		63	2	
WENSMAN/ W 3142NR2Acceleron1k 1.4	118		62	2	
NORTHSTAR/ NS 1528NR2Acceleron1c 1.5	114		62	1	
G-2 GENETICS/ 6143Trilex+Allegiance+Gaucho1c 1.4	109		61	2	
PIONEER/ 91Y81PPST Pkg1c 1.8	118		60	1	
HEFTY/ H18Y11NR1c 1.8	114		60	2	
SOKAK GENET./ SD2149R2YCruiser MaxxNR 1.4	110		60	2	
PIONEER/ 91Y10PPST Pkg1c 1.1	108		59	1	
G-2 GENETICS/ 7186Trilex+Allegiance+Gaucho1k 1.7	115		59	2	
G-2 GENETICS/ 7183Trilex+Allegiance+Gaucho1c 1.8	118		59	1	
MUSTANG/ 15523Acceleron1c 1.5	113		57	2	
Test avg. :	115	64	65	2	
High avg. :	120	68	74	2	
Low avg. :	108	60	57	1	
[6] Test LSD (.05):		NS**	5	<1	
[7] Min.TPG-avg. :		60	69		
[8] Max.TPG-avg. :			7	1	
[9] Test Coef. Var.:		4	5	28	
No. Entries:	60	22	60	60	

^{*} Shaded values within a yield or lodging rating column are included in the top-performance group (TPG). Therefore, look for varieties that have shaded values within each yield or lodging rating column.

^{**} Indicates differences between values within a yield or lodging rating column are non-significant (NS).

GLYPHOSATE-RESISTANT SOYBEAN VARIETY TRIAL RESULTS

Maturity Group-0 (Table 1):

The two-year and 2012 yield averages were 65 and 63 bushels per acre, respectively; and the lodging rating average was 1. Varieties had to average 63 and 64 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety yield differences among both the two-year and 2012 averages had to differ by 5 bu. Variety lodging rating values had to equal 1 to be in the top performance group for lodging resistance and had to differ by less than 1 to be significantly different.

Maturity Group-I (Table 2):

The two-year and 2012 testyield averages were 64 and 65 bushels per acre, respectively; the lodging rating average was 2. Varieties had to average 60 and 69 bushels or higher to be in the top yield group for two years and for 2012, respectively. Variety twoyear yield averages did not differ significantly. The 2012 variety yield differences had to differ by 5 bushels to be significantly different. Variety lodging score values had to equal 1 to be in the top performance group for lodging resistance and had to differ by 1 to be significantly different.





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2013 South Dakota Soybean Variety Trial Results – Geddes

Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: Geddes (57342) in Charles Mix County (GPS: UTM 14N, 525540 m East 4797186 m North)

Cooperator: Curtis Sybesma Farm

Soil Type: Highmore silt loam, 0-2% slope, non-irrigated

Soil Tests: 3.8% OM, 6.3 pH, 19 ppm P (Bray P1), 444 ppm K, 1.4 ppm Zn

Previous Crop: Winter Wheat

Tillage: No-till

Row Spacing: 30 inches Seeding Rate: 165,000/acre

Pest Management: Authority Assist – Pre, Glyphosate - Post

Date planted/harvested: May 31/Oct. 2

Group 1 Trial at G	Group 1 Trial at Geddes (1 Brand, 5 varieties).								
Vari	etal Information		Measurements						
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity			
Sodak Genetics	SD2172R2Y	1.7	61.6	8.3	1	115			
-	CHECK	1.8	59.9	8.3	1	115			
Sodak Genetics	SD2101R2Y	1.0	59.4	8.4	1	109			
Sodak Genetics	SD2179	1.7	55.9	8.3	1	114			
Sodak Genetics	SD2102R2Y	1.0	54.4	8.1	1	108			
Sodak Genetics	SD2182R2Y	1.8	50.5	8.5	1	115			
		Trial Average	57.1	8.3	1	112			
		LSD (0.05)†	5.5	0.2	NS	4			
		C.V	5.5	1.5	_	1 7			

Table 1. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity



[†] Yield, moisture, lodging, or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2013 Soybean Variety Trial Results - Geddes

Table 2a. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 2 Trial at Geddes (10 Brands, 55 varieties)

sorted by yield) – Maturity Group 2 Trial at Geddes (10 Brands, 55 varieties).								
Va	rietal Information		Measurements					
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity		
Prairie Brand	PB-2419RR2	2.3	69.7	9.1	1.0	123		
Wensman	W 3230R2	2.3	69.0	8.3	1.0	122		
Channel	2607R2	2.6	68.4	8.5	1.0	123		
Renk	RS241R2	2.4	68.3	8.7	1.0	120		
Wensman	W 3222NR2	2.2	67.4	8.1	1.3	118		
Stine	22RD00	2.2	66.4	8.0	1.0	117		
Asgrow	AG2134	2.1	65.9	8.0	1.0	116		
Pioneer	P25T51R	2.5	65.7	8.9	1.3	119		
Asgrow	AG2031	2.0	65.6	8.4	1.3	117		
Prairie Brand	PB-2024R2	2.0	65.5	8.4	1.0	120		
Prairie Brand	PB-2668R2	2.6	65.2	8.3	1.3	119		
Prairie Brand	PB-2544R2	2.5	65.2	8.8	2.0	119		
Hefty	H23Y10	2.9	65.2	8.4	1.0	119		
Wensman	W 3200NR2	2.0	64.7	8.2	1.0	117		
Prairie Brand	PB-2798R2	2.7	64.1	8.3	1.0	119		
Prairie Brand	PB-2997R2	2.8	63.8	9.0	1.3	121		
Channel	2105R2	2.1	63.2	8.7	1.0	119		
-	CHECK	1.8	63.0	8.0	1.0	115		
Channel	2706R2	2.7	62.8	8.1	1.3	120		
Hefty	H23R3	2.9	62.7	8.4	1.7	120		
Wensman	W 3214NR2	2.1	62.4	8.2	1.3	116		
Channel	2402R2	2.4	62.2	8.2	1.0	119		
Renk	RS283NR2	2.8	62.2	8.7	2.0	124		
Hefty	H20Y12	2.1	62.1	8.0	1.0	116		
Channel	2306R2	2.3	62.1	8.2	1.0	117		
Channel	2207R2	2.2	61.8	8.0	1.3	115		
Mustang	24322	2.4	61.5	8.7	1.3	118		
Prairie Brand	PB-2230R2	2.3	61.4	8.4	1.3	120		
Prairie Brand	PB-2650R2	2.5	61.4	8.5	1.0	119		
Hefty	H20R3	2.0	61.4	8.5	1.0	117		
Prairie Brand	PB-2351R2	2.3	61.3	8.3	1.3	120		
Dairyland	DSR-2105/R2Y	2.1	61.0	8.8	1.0	117		
Asgrow	AG2733	2.7	60.9	8.7	1.0	121		
Pioneer	P22T69R	2.2	60.7	7.6	1.0	115		
Hefty	H26R3	2.6	60.5	8.6	1.7	121		
	61.5	8.5	1.2	119				
	6.5	0.6	0.6	3				
		C.V.	6.5	4.3	27.5	1.4		

[†] Yield, moisture, lodging, or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2013 Soybean Variety Trial Results - Geddes

Table 2a. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 2 Trial at Geddes (10 Brands 55 varieties)

sorted by yield) – Maturity Group 2 Trial at Geddes (10 Brands, 55 varieties).									
Varietal Information Measurements									
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity			
Pioneer	92Y51	2.5	60.4	8.3	1.0	118			
Hefty	H26R3S	2.6	60.4	8.5	1.0	121			
Dairyland	DSR-2250/R2Y	2.2	59.8	8.2	1.3	118			
Dairyland	DSR-2612/R2Y	2.6	59.6	9.4	1.0	121			
Channel	2907R2	2.9	59.2	8.2	1.7	118			
Wensman	W 3284NR2	2.8	59.1	8.9	1.3	123			
Wensman	W 3256NR2	2.5	58.7	8.5	1.7	119			
Pioneer	92Y83	2.8	58.7	8.7	1.0	121			
Stine	29RD22	2.8	58.5	10.0	2.0	123			
Mustang	26623	2.6	58.1	8.3	1.7	116			
Prairie Brand	PB-2506R2	2.5	57.4	8.3	1.0	117			
Asgrow	AG2433	2.4	56.8	8.5	1.0	117			
Dairyland	DSR-2340/R2Y	2.3	55.6	8.2	1.7	116			
Mustang	25333	2.5	55.6	8.7	1.0	119			
Pioneer	P24T19R	2.4	55.5	9.1	2.0	120			
Stine	24RD03	2.4	55.4	8.4	1.3	118			
Asgrow	AG2933	2.9	55.3	9.6	1.3	121			
Pioneer	93M11	2.9	55.2	8.9	1.0	120			
Hefty	EXP H28R4	2.8	55.0	8.5	1.3	121			
Stine	20RD20	2.1	54.1	8.5	1.0	117			
	61.5	8.5	1.2	119					
LSD (0.05)			6.5	0.6	0.6	3			
	6.5	4.3	27.5	1.4					

[†] Yield, moisture, lodging, or days to maturirty value required (≥LSD) to determine if varieties are different from each other with confidence

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2013 South Dakota Soybean Variety Trial Results – Beresford

Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 6 miles west & 3 miles south of Beresford (57342) in Clay County

(GPS: UTM 14N, 671008 m East 4768053 m North)

Cooperator: SDSU Southeast Research Center – Peter Sexton and staff Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Previous Crop: Corn Tillage: Conventional Row Spacing: 30 inches Seeding Rate: 165,000/acre

Pest Management: Glyphosate, Dual, Sharpen, Metribuzen – Pre; First Rate, Flexstar – Post

Date seeded/harvested: May 23/Oct. 8

Table 1. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity									
Group 1 Trial at Be	eresford (1 Brand	d, 5 varieties).							
Vari	etal Information		Measurements						
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity			
Sodak Genetics	SD2172R2Y	1.7	74.3	10.7	1.7	121			
Sodak Genetics	SD2182R2Y	1.8	72.9	10.5	1.0	123			
Sodak Genetics	SD2179	1.7	72.6	10.8	1.0	123			
-	CHECK	1.8	68.8	10.8	1.7	121			
Sodak Genetics	SD2101R2Y	1.0	68.0	10.6	1.0	120			
Sodak Genetics	SD2102R2Y	1.0	64.8	10.8	2.0	120			
		Trial Average	70.3	10.7	1.5	121			
		LSD (0.05)†	4.5	0.2	NS	2			
		C.V.	3.6	1.0	-	0.6			

[†] Yield, moisture, lodging, or days to maturity value required (>LSD) to determine if varieties are different from each other with confidence



[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2013 Soybean Variety Trial Results - Beresford

Table 2a. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 2 Trial at Beresford (10 Brands, 55 varieties).

sorted by yield) – Maturity Group 2 Trial at Beresford (10 Brands, 55 varieties).						
Va	arietal Information			Measu	rements	
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity
Dairyland	DSR-2250/R2Y	2.2	70.7	10.9	1.3	123
Asgrow	AG2134	2.1	70.0	10.6	1.3	123
Prairie Brand	PB-2230R2	2.3	70.0	10.7	1.0	123
Channel	2706R2	2.7	68.9	10.8	2.0	128
Channel	2306R2	2.3	68.8	10.8	1.3	125
Channel	2207R2	2.2	68.6	10.9	1.7	124
Wensman	W 3222NR2	2.2	68.5	10.6	1.3	122
Asgrow	AG2733	2.7	68.0	10.5	1.0	127
Prairie Brand	PB-2351R2	2.3	68.0	10.9	2.0	123
Prairie Brand	PB-2506R2	2.5	67.9	10.8	1.0	126
Mustang	26623	2.6	67.8	10.8	2.3	125
Prairie Brand	PB-2650R2	2.5	67.6	11.1	1.0	129
Pioneer	92Y83	2.8	67.6	10.8	1.3	129
Stine	22RD00	2.2	67.6	10.7	1.7	121
Mustang	24322	2.4	67.5	11.4	2.0	126
Wensman	W 3230R2	2.3	67.4	10.7	1.0	125
Hefty	H23R3	2.9	67.2	10.9	1.7	127
Renk	RS241R2	2.4	67.0	10.7	1.3	126
Prairie Brand	PB-2668R2	2.6	66.6	10.7	1.3	128
Wensman	W3214NR2	2.1	66.3	10.8	1.0	123
Hefty	H26R3	2.6	66.2	10.8	1.7	128
Stine	24RD03	2.4	65.9	10.9	1.3	124
Dairyland	DSR-2105/R2Y	2.1	65.3	10.7	1.0	123
Mustang	25333	2.5	65.1	11.0	1.0	126
Hefty	EXP H28R4	2.8	65.1	11.1	1.7	128
Prairie Brand	PB-2544R2	2.5	65.0	11.5	2.0	125
Stine	26RD02	2.6	65.0	10.9	1.7	128
Wensman	W 3200NR2	2.0	64.9	10.7	1.7	125
Dairyland	DSR-2340/R2Y	2.3	64.9	10.9	1.7	124
Pioneer	93M11	2.9	64.5	10.9	1.0	131
Wensman	W 3256NR2	2.5	64.3	11.2	2.0	125
Prairie Brand	PB-2419RR2	2.3	64.3	10.5	1.7	124
Stine	28RE20	2.8	64.3	10.5	1.3	128
-	CHECK	1.8	64.2	10.7	2.3	123
Asgrow	AG2433	2.4	64.1	10.7	1.0	126
	Tria	al Average	64.9	10.8	1.4	126
		LSD (0.05)	5.0	0.3	0.8	1
		C.V.	4.8	2.0	36.6	0.5

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2013 Soybean Variety Trial Results - Beresford

Table 2a. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 2 Trial at Beresford (10 Brands, 55 varieties)

sorted by yield) – Maturity Group 2 Trial at Beresford (10 Brands, 55 varieties).								
Va	rietal Information		Measurements					
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity		
Prairie Brand	PB-2798R2	2.7	63.7	10.8	1.0	129		
Pioneer	P24T19R	2.4	63.4	10.8	1.0	124		
Pioneer	P25T51R	2.5	63.2	11.1	1.0	124		
Hefty	H20R3	2.0	62.8	10.8	1.7	125		
Asgrow	AG2933	2.9	62.7	11.0	1.0	128		
Asgrow	AG2031	2.0	62.6	10.6	2.0	128		
Hefty	H26R3S	2.6	62.5	11.0	1.0	124		
Hefty	H23Y10	2.9	62.4	10.6	1.0	124		
Prairie Brand	PB-2997R2	2.8	62.2	10.9	2.3	128		
Prairie Brand	PB-2024R2	2.0	62.2	10.8	1.3	126		
Dairyland	DSR-2612/R2Y	2.6	62.1	10.9	1.0	127		
Hefty	H20Y12	2.1	61.9	10.5	1.0	124		
Channel	2607R2	2.6	61.8	10.7	1.0	128		
Channel	2402R2	2.4	61.7	10.6	1.7	124		
Pioneer	92Y51	2.5	61.7	10.9	1.3	128		
Channel	2105R2	2.1	61.4	11.3	1.3	128		
Channel	2907R2	2.9	61.1	10.8	1.7	126		
Stine	29RD22	2.8	60.4	10.9	1.3	131		
Renk	RS283NR2	2.8	58.5	10.9	1.3	129		
Wensman	W 3284NR2	2.8	56.5	10.9	1.7	132		
	Tria	al Average	64.9	10.8	1.4	126		
	LSD (0.05)				0.8	1		
		C.V.	4.8	2.0	36.6	0.5		

[†] Yield, moisture, lodging, or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2013 South Dakota Soybean Variety Trial Results – Volga

Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 1.5 miles south of Volga (57071) in Brookings County

(GPS: UTM 14N, 665888 m East 4907622 m North)

Cooperator: SDSU Volga Research Farm – Doug Doyle and staff

Soil Type: Brandt silty clay loam, 0-2% slope, non-irrigated

Soil Test: 4.9 % OM, 5.7 pH, 50 ppm P (Bray-P1), 143 ppm K, 1.8 ppm Zn

Previous Crop: Spring wheat

Tillage: Conventional Row Spacing: 30 inches Seeding Rate: 165,000/acre

Pest Management: Dual – Pre, Glyphosate – Post

Date seeded/harvested: Jun. 3/ Oct. 1 (Mat. Grp 0s, 1s) & Oct. 9 (Mat. Grp 2s)





Table 1a. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 0 to 1 Trial at Volga (13 Brands, 46 varieties).

sorted by yield) - N	Maturity Group 0 to 1	Trial at Vol	ga (13 Brand	ls, 46 varietie	es).	
Vari	etal Information			Measu	rements	
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity
Proseed	PX11	1.1	53.9	8.1	1.0	109
Sodak Genetics	SD2091R2Y	0.9	51.5	8.1	1.0	103
Hefty	EXP H17R4	1.7	51.4	9.0	1.0	112
Sodak Genetics	SD2101R2Y	1.0	51.4	8.1	1.0	106
Sodak Genetics	SD2081R2Y	0.8	51.2	8.0	1.0	106
Proseed	2-140	1.4	50.1	8.5	1.0	109
Rea	71G20	1.1	49.8	8.3	1.0	106
Dairyland	DSR-1515/R2Y	1.5	49.6	8.2	1.0	109
Asgrow	AG1733	1.7	49.3	8.1	1.0	110
Prairie Brand	PB-1539R2	1.5	49.0	8.5	1.0	110
Channel	1405R2	1.4	49.0	8.5	1.0	109
Proseed	PX12	1.2	48.8	8.4	1.0	109
Prairie Brand	PB-1481R2	1.4	48.7	8.4	1.7	110
Rea	71G14	1.1	48.4	8.4	1.3	108
Mustang	12224	1.2	47.9	8.3	1.0	106
Asgrow	AG1431	1.4	47.7	8.2	1.0	108
Wensman	W 3160NR2	1.6	47.3	8.3	1.0	110
Channel	1805R2	1.8	47.3	8.7	1.0	112
Prairie Brand	PB-1611R2	1.6	47.0	8.9	1.0	111
Sodak Genetics	SD2179	1.7	46.6	8.3	1.0	113
Dairyland	DSR-1808/R2Y	1.8	46.6	8.5	1.0	111
Prairie Brand	EXP13151R2	1.5	46.2	8.5	1.0	109
Stine	16RD66	1.6	46.1	8.2	1.0	110
Mustang	14323	1.4	46.0	8.1	1.0	109
Rea	73G13	1.3	45.8	8.2	2.0	109
Prairie Brand	PB-1722R2	1.7	45.6	8.6	1.0	111
Wensman	W 3140R2	1.5	45.5	8.3	1.0	107
Prairie Brand	PB-1566R2	1.5	45.4	8.3	1.0	110
Renk	RS183NR2	1.8	45.3	8.3	1.0	112
Prairie Brand	PB-1982R2	1.9	44.8	8.6	1.0	112
Rea	75G12	1.5	44.3	8.2	1.0	107
Stine	14RD62	1.4	44.2	8.2	1.0	110
Prairie Brand	PB-1843R2	1.8	43.7	8.1	1.0	111
Sodak Genetics	SD2102R2Y	1.0	43.5	8.3	1.0	108
Asgrow	AG1534	1.5	43.5	8.3	1.0	107
	Tria	al Average	45.9	8.4	1.0	109
	L	SD (0.05)	4.5	0.5	0.4	1
		C.V.	6.0	3.5	16.6	0.6

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Table 1b. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 0 to 1 Trial at Volga (13 Brands, 46 varieties).

Vari	etal Information		Measurements			
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity
Stine	20RD20	1.9	43.0	8.6	1.0	114
Proseed	PX18	1.8	42.9	8.3	1.0	112
-	CHECK	1.8	42.5	8.2	1.0	109
Pioneer	91Y90	1.9	42.5	8.8	1.0	111
Pioneer	P19T60R	1.9	42.3	8.4	1.3	110
Prairie Brand	PB-1591R2	1.5	42.0	8.6	1.0	108
Hefty	EXP H16R4	1.6	41.6	8.1	1.0	110
Prairie Brand	PB-2042R2	1.9	41.2	8.6	1.0	112
Sodak Genetics	SD2172R2Y	1.7	40.2	8.3	1.0	107
Rea	78G12	1.8	37.5	8.3	1.0	112
Sodak Genetics	SD2182R2Y	1.8	35.1	8.2	1.0	111
	Trial Average			8.4	1.0	109
	Ī	LSD (0.05)	4.5	0.5	0.4	1
		C.V.	6.0	3.5	16.6	0.6

[†] Yield, moisture, lodging, or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Table 2a. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 2 Trial at Volga (11 Brands, 37 varieties).

	sorted by yield) – Maturity Group 2 Trial at Volga (11 Brands, 37 varieties).							
Va	rietal Information		V:al-	Measu	rements			
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity		
Prairie Brand	PB-2136R2	2.1	51.4	10.5	1.0	116		
-	CHECK	1.8	50.0	10.1	1.0	111		
Pioneer	P25T51R	2.5	48.9	11.0	1.0	117		
Dairyland	DSR-2105/R2Y	2.1	48.6	10.6	1.0	116		
Channel	2207R2	2.2	48.6	10.3	1.0	114		
Renk	RS213NR2	2.1	48.5	10.5	1.0	116		
Mustang	21993	2.1	47.8	10.3	1.0	115		
Pioneer	P22T69R	2.2	47.5	10.6	1.0	114		
Prairie Brand	EXP 13241	2.3	47.0	10.8	1.0	118		
Asgrow	AG2134	2.1	46.7	10.4	1.0	114		
Prairie Brand	PB-2230R2	2.3	46.7	10.5	1.0	116		
Pioneer	92Y51	2.5	46.6	10.6	1.3	118		
Asgrow	AG2031	2.0	46.3	10.6	1.0	112		
Wensman	W 3222NR2	2.2	45.4	10.3	1.0	113		
Wensman	W 3200NR2	2.0	45.4	10.3	1.0	112		
Prairie Brand	PB-2024R2	2.0	44.6	10.9	1.0	113		
Hefty	H20Y12	2.1	44.3	10.2	1.0	112		
Proseed	PX21	2.1	44.2	10.5	1.0	112		
Rea	82G14	2.2	43.4	10.6	1.0	114		
Rea	80G11	2.0	43.0	10.5	1.0	114		
Prairie Brand	PB-2419RR2	2.3	42.5	10.4	1.0	117		
Prairie Brand	PB-2506R2	2.5	42.0	10.5	1.0	114		
Wensman	W 3214NR2	2.1	41.7	10.2	1.0	115		
Prairie Brand	PB-2351R2	2.3	41.6	10.4	1.0	112		
Pioneer	P24T19R	2.4	40.9	10.9	1.3	116		
Wensman	W 3230R2	2.3	40.4	10.2	1.0	112		
Hefty	H20R3	2.0	40.3	10.4	1.0	112		
Channel	2105R2	2.1	40.3	10.9	1.3	117		
Prairie Brand	PB-2544R2	2.5	40.1	11.1	1.0	116		
Hefty	H23Y10	2.9	39.9	10.5	1.0	116		
Hefty	EXP H28R4	2.8	39.6	10.7	1.0	118		
Renk	RS224NR2	2.2	39.5	10.5	1.0	112		
Prairie Brand	PB-2668R2	2.6	39.2	10.6	1.0	116		
Hefty	H26R3	2.6	37.9	10.7	1.0	116		
Prairie Brand	PB-2650R2	2.5	37.9	10.8	1.0	115		
	Tria	al Average	43.5	10.6	1.0	114		
	L	SD (0.05)	3.8	0.4	0.3	1		
		C.V.	5.4	2.3	16.0	0.6		

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Table 2b. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 2 Trial at Volga (11 Brands, 37 varieties).								
Varietal Information				Measu	irements			
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score	Days to Maturity		
Hefty	H26R3S	2.6	36.1	10.7	1.0	115		
Hefty	H23R3	2.9	35.0	10.5	1.0	114		
	Trial Average				1.0	114		
	3.8	0.4	0.3	1				
	5.4	2.3	16.0	0.6				

[†] Yield, moisture, lodging, or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence

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[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2013 South Dakota Soybean Variety Trial Results – Bancroft

Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 4 miles north and 0.5 miles west of Bancroft (57353) in Kingsbury County

(GPS: UTM 14N, 597828 m East 4932887 m North)

Cooperator: E. Weerts Farm Inc.

Soil Type: Houdek-Stickney loam, 0-2% slope, non-irrigated

Previous Crop: Corn

Tillage: No-till

Row Spacing: 30 inches Seeding Rate: 165,000/acre

Pest Management: Sharpen - Pre, Glyphosate - Post

Date seeded/harvested: Jun. 5/Oct. 10





2013 Soybean Variety Trial Results - Bancroft

Table 1a. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) - Maturity Group 0 to 1 Trial at Bancroft (12 Brands, 50 varieties). Varietal Information Measurements Yield Lodging Maturity Bu/A Moisture Score Days to **Brand** Variety Rating (13%)% (1-5)*Maturity Hefty EXP H17R4 1.7 65.2 11.3 118 1.0 Channel 1805R2 1.8 61.5 10.6 1.0 119 Wensman W 3178R2 1.7 61.5 11.3 1.0 117 Prairie Brand PB-1611R2 60.6 1.0 116 1.6 11.2 Prairie Brand PB-1591R2 1.5 59.9 10.9 1.0 117 Stine 20RD20 1.9 1.0 59.4 11.2 121 Prairie Brand PB-1481R2 1.4 58.9 10.7 1.0 118 Wensman W 3140R2 58.8 1.0 1.5 11.0 117 Prairie Brand PB-1566R2 1.5 57.9 10.8 1.0 117 Rea 71G14 1 1 57.9 10.9 1 0 112 Wensman W 3160NR2 1.6 57.7 10.5 1.0 119 PX12 57.6 Proseed 1.2 10.8 1.0 114 Prairie Brand PB-2042R2 1.9 57.3 11.0 1.0 120 Asgrow AG1431 1.4 57.3 10.6 1.0 116 Rea 78G12 1.8 57.1 10.7 1.0 119 Mustang 12224 1.2 57.1 11.0 1.0 113 Proseed 2-140 1.4 57.0 10.3 1.0 119 DSR-1515/R2Y Dairyland 1.5 56.8 10.8 1.0 121 Mustang 16624 1.6 56.4 10.7 1.0 118 Prairie Brand PB-1722R2 1.7 56.3 10.7 1.0 117 CHECK 1.8 56.2 10.6 1.0 119 Rea 71G20 1.1 56.0 10.7 1.0 113 Stine 16RD66 1.6 55.6 10.8 1.0 114 EXP H16R4 55.3 Hefty 1.6 10.5 10 119 55.3 Rea 73G13 1.3 11.0 1.0 113 Channel 1405R2 1.4 54.5 11.0 1.0 117 Mustang 14323 1.4 53.9 10.5 1.0 119 AG1733 53.9 10.7 1.0 120 17 Asgrow Sodak Genetics SD2172R2Y 1.7 53.3 10.8 1.0 120 Sodak Genetics SD2179 1.7 53.1 10.9 1.0 118 1.0 Stine 14RD62 1.4 53.1 10.7 118 Asgrow AG1534 1.5 53.0 10.4 1.0 112 Prairie Brand PB-1982R2 1.9 53.0 11.0 1.0 118 Proseed PX11 1.1 52.2 10.8 1.0 110 P19T60R Pioneer 1.9 52.1 120 10.4 10 Trial Average 54.7 10.7 1.0 117 LSD (0.05)† 4.2 0.5 NS 3 C.V.‡ 4.7 2.9 12

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground) ‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2013 Soybean Variety Trial Results - Bancroft

Table 1b. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) - Maturity Group 0 to 1 Trial at Bancroft (12 Brands, 50 varieties).

	etal Information	Thai at Bai	Measurements			
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1- 5)*	Days to Maturity
Sodak Genetics	SD2102R2Y	1.0	51.9	10.6	1.0	111
Pioneer	P16T04R	1.6	51.7	11.2	1.0	118
Prairie Brand	PB-1539R2	1.5	51.7	10.4	1.0	121
Sodak Genetics	SD2182R2Y	1.8	51.5	10.9	1.0	119
Prairie Brand	EXP13151R2	1.5	51.4	10.3	1.0	120
Proseed	PX18	1.8	51.3	10.7	1.0	118
Prairie Brand	PB-1843R2	1.8	51.1	10.6	1.0	120
Dairyland	DSR-1808/R2Y	1.8	51.0	10.5	1.0	119
Rea	75G12	1.5	50.5	10.8	1.0	118
Pioneer	91Y90	1.9	50.4	10.6	1.0	120
Pioneer	91Y01	1.0	49.4	10.3	1.0	118
Sodak Genetics	SD2081R2Y	0.8	49.2	10.6	1.0	110
Sodak Genetics	SD2101R2Y	1.0	48.9	10.7	1.0	112
Pioneer	91Y30	1.3	47.4	10.6	1.0	113
Sodak Genetics	SD2091R2Y	0.9	44.3	10.9	1.0	119
	Trial Average				1.0	117
	LSD (0.05)†				NS	3
		C.V.‡	4.7	2.9	-	1.2

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground) ‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2013 Soybean Variety Trial Results - Bancroft

Table 2. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 2 Trial at Bancroft (9 Brands, 25 varieties).

sorted by yield) – Maturity Group 2 Trial at Bancroft (9 Brands, 25 varieties).							
Va		Measu	rements				
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity	
Prairie Brand	PB-2650R2	2.5	63.2	13.0	1.0	126	
Prairie Brand	PB-2419RR2	2.3	62.4	12.3	1.0	124	
Wensman	W 3230R2	2.3	62.3	10.5	1.0	124	
Prairie Brand	EXP 13241	2.3	61.5	11.7	1.0	124	
Wensman	W 3222NR2	2.2	60.2	10.6	1.0	122	
Channel	2105R2	2.1	59.1	12.0	1.0	123	
Pioneer	P22T69R	2.2	57.9	11.6	1.0	125	
Prairie Brand	PB-2544R2	2.5	57.9	11.7	1.0	120	
Hefty	H20R3	2.0	56.9	11.6	1.0	123	
Prairie Brand	PB-2024R2	2.0	56.0	11.0	1.0	123	
Proseed	PX21	2.1	55.4	10.8	1.0	119	
Hefty	H20Y12	2.1	54.9	10.4	1.0	121	
Prairie Brand	PB-2351R2	2.3	54.9	10.9	1.0	122	
Dairyland	DSR-2105/R2Y	2.1	54.6	10.8	1.0	119	
Channel	2207R2	2.2	54.6	10.7	1.0	119	
Wensman	W 3214NR2	2.1	54.4	11.0	1.0	122	
-	CHECK	1.8	53.8	10.7	1.0	120	
Rea	80G11	2.0	53.7	10.7	1.0	121	
Wensman	W 3200NR2	2.0	53.4	10.6	1.0	121	
Prairie Brand	PB-2668R2	2.6	53.0	11.1	1.0	124	
Prairie Brand	PB-2230R2	2.3	52.7	10.7	1.0	122	
Prairie Brand	PB-2136R2	2.1	52.4	10.8	1.0	123	
Mustang	21993	2.1	50.6	10.5	1.0	121	
Prairie Brand	PB-2506R2	2.5	49.3	11.6	1.0	121	
Rea	82G14	2.2	48.4	10.6	1.0	121	
	Tria	al Average	55.7	11.1	1.0	122	
	LS	SD (0.05)†	5.1	1.1	NS	3	
		C.V.‡	5.5	6.0	-	1.2	

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground) ‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2013 South Dakota Soybean Variety Trial Results – Bath

Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 2.5 miles south and 1 mile east of Bath (57427) in Brown County

(GPS: UTM 14N, 554169 m East 5030612 m North)

Cooperator: Gordon and Roger Locken Farms.

Soil Type: Great Bend silt loam, 0-2% slope, non-irrigated

Previous Crop: Corn

Tillage: No-till

Row Spacing: 30 inches Seeding Rate: 165,000/acre

Pest Management: Glyphosate and Sharpen – Pre, Glyphosate – Post

Date seeded/harvested: Jun. 5/Oct. 11





Table 1. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 0 Trial at Bath (12 Brands, 27 varieties).

by yield) – Maturity Group 0 Trial at Bath (12 Brands, 27 varieties). Varietal Information Measurements								
vari		Measu						
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity		
Asgrow	AG0934	0.9	66.6	11.2	1.0	114		
Wensman	W 3076R2	0.7	66.4	11.4	1.0	112		
Latham	L0885R2	0.8	66.0	11.4	1.0	113		
Wensman	W 3090NR2	0.8	65.7	11.3	1.0	113		
Prairie Brand	PB-1234R2	0.9	65.3	11.4	1.0	115		
Nuseed	2071 RR2YN	0.7	64.6	11.0	1.0	114		
Nuseed	2093 RR2YN	0.9	64.6	11.6	1.0	113		
Hefty	EXP H09R4	0.9	64.2	12.0	1.0	113		
Prairie Brand	PB-0863R2	0.8	64.2	11.3	1.0	114		
Prairie Brand	PB-0991R2	0.9	63.4	11.7	1.0	116		
Dairyland	DSR-0904/R2Y	0.9	63.0	11.3	1.0	114		
Channel	0906R2	8.0	62.8	11.2	1.0	113		
Prairie Brand	PB-0777R2	8.0	62.4	11.7	1.0	114		
Peterson Farms	PFS 13R08N	8.0	62.2	11.4	1.0	113		
Prairie Brand	PB-1040R2	0.9	61.5	11.4	1.0	112		
Mustang	8824	0.8	61.4	11.4	1.0	114		
Prairie Brand	PB-0866R2	0.8	60.8	11.6	1.0	114		
Mustang	7724	0.7	60.1	11.6	1.0	114		
Latham	L0648R2	0.6	60.1	11.4	1.0	108		
Hefty	H07Y12	0.7	59.8	11.2	1.0	111		
Sodak Genetics	SD2081R2Y	0.8	58.9	11.1	1.0	111		
-	CHECK	1.8	58.5	11.5	1.0	116		
Prairie Brand	PB-1031R2	0.9	57.2	11.4	1.0	113		
Prairie Brand	PB0879NRR2	0.9	57.0	11.1	1.0	115		
Asgrow	AG0832	0.8	55.6	11.6	1.0	114		
Pioneer	90Y80	0.8	53.5	11.4	1.0	109		
Sodak Genetics	SD2091R2Y	0.9	53.4	11.3	1.0	116		
	Tria	al Average	61.3	11.4	1.0	113		
	LS	SD (0.05)†	4.3	0.4	NS	2		
		C.V.‡	4.3	2.0	-	1.1		

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground) ‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Table 2a. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 1 Trial at Bath (16 Brands, 60 varieties)

sorted by yield) – Maturity Group 1 Trial at Bath (16 Brands, 60 varieties).						
Var	ietal Information			Measu	rements	
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity
Prairie Brand	PB-1611R2	1.6	65.9	12.1	1.0	118
Hefty	EXP H12R4	1.2	65.0	11.3	1.0	115
Asgrow	AG1431	1.4	64.0	11.2	1.0	116
Stine	10RD03	1.1	62.9	11.1	1.0	115
Asgrow	AG1534	1.5	62.8	11.8	1.0	116
Federal Hybrids	F143RR2Y	1.4	62.8	11.6	1.0	120
Dairyland	DSR-1515/R2Y	1.5	62.8	11.3	1.0	124
Hefty	H10R3	1.0	62.7	11.2	1.0	119
Prairie Brand	PB-1481R2	1.4	62.4	11.5	1.0	116
Proseed	PX12	1.2	62.2	11.7	1.0	115
Latham	L1345R2	1.3	62.1	11.5	1.0	115
Wensman	W 3128R2	1.2	62.1	11.2	1.0	114
Proseed	2-140	1.4	61.7	11.2	1.0	117
Hefty	EXP H10R4	1.0	61.5	11.3	1.0	113
Wensman	W 3121NR2	1.2	61.4	11.5	1.0	116
Prairie Brand	PB-1539R2	1.5	61.4	11.3	1.0	125
Latham	L1948R2	1.9	61.3	11.5	1.0	121
Mustang	12224	1.2	61.1	11.4	1.0	116
Wensman	W 3106R2	1.0	60.6	11.3	1.0	114
Sodak Genetics	SD2172R2Y	1.7	60.5	11.5	1.0	126
	CHECK	1.8	60.0	11.5	1.0	124
Federal Hybrids	F154NRR2Y	1.5	59.9	11.4	1.0	121
Wensman	W 3140R2	1.5	59.7	12.0	1.0	118
Channel	1207R2	1.2	59.4	11.5	1.0	115
Pioneer	P16T04R	1.6	59.2	11.3	1.0	119
Proseed	PX18	1.8	59.1	11.5	1.0	119
Mustang	16624	1.6	59.1	11.5	1.0	121
Rea	71G14	1.1	58.6	11.5	1.0	115
Sodak Genetics	SD2182R2Y	1.8	58.6	12.0	1.0	122
Stine	14RD62	1.4	58.5	11.7	1.0	118
Latham	L1084R2	1.0	58.4	11.3	1.0	116
Latham	L1585R2	1.5	58.2	11.4	1.0	120
Prairie Brand	PB-1982R2	1.9	58.2	11.6	1.0	118
Rea	73G13	1.3	58.2	11.2	1.0	114
Latham	L1783R2	1.7	58.1	11.2	1.0	116
		al Average	58.9	11.5	1.0	118
	LS	SD (0.05)†	5.7	0.7	NS	5
		C.V.‡	6.0	4.0	-	2.2

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground) ‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Table 2b. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 1 Trial at Bath (16 Brands. 60 varieties).

sorted by yield) – Maturity Group 1 Trial at Bath (16 Brands, 60 varieties).							
Vari	Varietal Information				rements		
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1- 5)*	Days to Maturity	
Peterson Farms	PFS 12R12	1.2	58.0	11.2	1.0	114	
Nuseed	2122 RR2YN	1.2	57.9	11.4	1.0	116	
Dairyland	DSR-1120/R2Y	1.1	57.9	11.2	1.0	118	
Proseed	PX11	1.1	57.7	11.3	1.0	113	
Hefty	H11R3	1.1	57.6	11.1	1.0	114	
Mustang	14323	1.4	57.6	11.7	1.0	124	
Prairie Brand	PB-1591R2	1.5	57.5	12.7	1.0	121	
Pioneer	91Y90	1.9	57.4	11.6	1.0	124	
Prairie Brand	PB-1566R2	1.5	57.3	11.5	1.0	121	
Rea	75G12	1.5	57.1	11.6	1.0	121	
Sodak Genetics	SD2102R2Y	1.0	57.0	12.3	1.0	113	
Latham	L1568R2	1.5	56.6	11.3	1.0	120	
Latham	1985R2	1.9	56.5	11.9	1.0	123	
Peterson Farms	PFS 14R13	1.0	56.2	12.4	1.0	119	
Prairie Brand	PB-1722R2	1.7	56.1	11.6	1.0	120	
Asgrow	AG1234	1.2	55.9	11.4	1.0	117	
Pioneer	91Y01	1.0	55.8	11.1	1.0	116	
Prairie Brand	PB-1843R2	1.8	55.0	11.8	1.0	126	
Sodak Genetics	SD2101R2Y	1.0	54.6	11.4	1.0	114	
Rea	71G20	1.1	54.3	11.1	1.0	117	
Sodak Genetics	SD2179	1.7	53.8	11.7	1.0	123	
Pioneer	91Y30	1.3	53.3	11.2	1.0	114	
Pioneer	P19T60R	1.9	53.2	11.5	1.0	123	
Rea	78G12	1.8	52.6	12.3	1.0	125	
Prairie Brand	EXP13151R2	1.5	51.9	11.1	1.0	119	
		al Average	58.9	11.5	1.0	118	
	LS	SD (0.05)† C.V.‡	5.7	0.7	NS	5	
	6.0	4.0	-	2.2			

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground)

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2013 South Dakota Soybean Variety Trial Results – South Shore

Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 8.5 miles west of South Shore (57263) in Codington County

(GPS: UTM 14N, 649382 m East 4996615 m North) Cooperator: SDSU Northeast Research Farm – Allen Heuer.

Soil Type: Kranzburg-Brookings silty clay loam, 0-2% slope, non-irrigated

Soil Test/Fertilizer: 18 ppm P (Bray P1), 157 ppm K / 100 lbs P₂0₅ and 50 lbs K₂0

Previous Crop: Spring wheat

Tillage: Conventional Row Spacing: 30 inches Seeding Rate: 165,000/acre

Pest Management: Dual II - Pre, Glyphosate - Post

Date seeded/harvested: Jun. 13/Oct. 25





2013 Soybean Variety Trial Results - South Shore

Table 1. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) - Maturity Group 0 Trial at South Shore (13 Brands, 29 varieties).

by yield) – Maturity Group 0 Trial at South Shore (13 Brands, 29 varieties).										
Vari	etal Information		Measurements Violation							
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity				
Nuseed	2071 RR2YN	0.7	63.9	14.8	1.0	106				
Asgrow	AG0934	0.9	62.7	14.2	1.7	109				
Mustang	7724	0.7	62.5	14.5	1.0	104				
Peterson Farms	PFS 13R08N	0.8	61.4	14.5	1.3	108				
Channel	0906R2	0.8	61.4	14.6	1.0	108				
Wensman	W 3076R2	0.7	61.1	14.2	1.0	105				
Latham	L0648R2	0.6	61.0	14.4	2.3	102				
Prairie Brand	PB-0863R2	0.8	60.5	14.5	1.7	107				
Prairie Brand	PB-1031R2	0.9	60.5	14.6	2.3	106				
Prairie Brand	PB-0866R2	0.8	60.1	15.0	1.3	106				
Latham	L0885R2	0.8	59.7	14.6	1.3	107				
Prairie Brand	PB-0991R2	0.9	59.6	15.1	1.0	112				
Hefty	EXP H09R4	0.9	59.5	15.3	2.0	109				
Wensman	W 3090NR2	0.8	59.0	14.7	1.7	107				
Sodak Genetics	SD2081R2Y	0.8	58.7	15.0	1.3	106				
-	CHECK	1.8	58.4	14.9	1.7	108				
Dairyland	DSR-0904/R2Y	0.9	58.1	14.4	1.3	107				
Sodak Genetics	SD2091R2Y	0.9	57.1	14.7	1.7	108				
Prairie Brand	PPB0879NRR2	0.9	56.9	15.3	2.0	104				
Asgrow	AG0832	0.8	56.7	14.7	1.7	107				
Nuseed	2093 RR2YN	0.9	56.5	15.1	2.0	106				
Prairie Brand	PB-0777R2	0.7	55.9	15.3	1.7	110				
Prairie Brand	PB-1040R2	0.9	55.7	14.7	2.0	109				
Hefty	H07Y12	0.7	55.7	14.3	1.0	107				
Pioneer	90Y80	0.8	55.1	15.2	2.7	105				
Federal Hybrids	F084NRR2Y	0.8	54.3	15.2	2.0	107				
Prairie Brand	PB-1234R2	0.9	53.9	15.2	1.7	109				
Mustang	6942	0.6	53.1	14.7	2.0	103				
Mustang	8824	0.8	51.9	15.6	2.0	106				
	Tria	al Average	58.4	14.8	1.6	107				
	LS	SD (0.05)†	4.6	0.5	0.8	1				
+ Viold mainture l	adaina ar daya ta m	C.V.‡	4.8	2.1	28.3	0.5				

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground) ‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2013 Soybean Variety Trial Results - South Shore

Table 2a. Glyphos sorted by vield) – I	ate-resistant soybea Maturity Group 1 Tria	n variety pe	rformance re Shore (16 Bra	sults (averag	ge of 3 replications.	ations
	ietal Information		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		rements	
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity
Peterson Farms	PFS 14R13	1.3	63.5	14.6	1.0	109
Dairyland	DSR-1515/R2Y	1.5	62.4	14.8	1.3	109
Stine	10RD03	1.1	61.7	14.2	2.0	106
Prairie Brand	PB-1611R2	1.6	61.4	14.8	1.3	112
Prairie Brand	PB-1539R2	1.5	61.1	14.7	2.0	108
Proseed	PX12	1.2	61.1	14.9	2.0	108
Prairie Brand	PB-1722R2	1.7	60.9	14.7	1.0	112
Federal Hybrids	F114RR2Y	1.1	60.9	15.1	1.0	107
Hefty	EXP H10R4	1.0	60.6	14.6	1.3	106
Sodak Genetics	SD2172R2Y	1.7	60.0	14.7	2.0	107
Nuseed	2122 RR2YN	1.2	59.6	15.0	2.0	109
Wensman	W 3140R2	1.5	59.3	14.8	1.7	113
Latham	L1568R2	1.5	59.3	14.8	1.3	109
Asgrow	AG1534	1.5	59.2	14.5	1.7	108
Wensman	W 3128R2	1.2	58.8	14.5	1.0	106
Prairie Brand	PB-1982R2	1.9	58.6	15.2	1.0	113
Wensman	W 3102NR2	1.0	58.4	15.0	2.0	107
Latham	L1585R2	1.5	58.3	14.9	1.3	111
Channel	1405R2	1.4	58.2	14.4	2.0	109
Pioneer	P16T04R	1.6	57.9	14.6	1.7	111
Sodak Genetics	SD2101R2Y	1.0	57.8	14.4	1.3	107
Hefty	H11R3	1.1	57.5	14.5	1.7	104
-	CHECK	1.8	57.5	14.9	2.0	112
Prairie Brand	PB-1591R2	1.5	57.4	15.0	2.3	110
Channel	1207R2	1.2	57.4	15.1	2.0	108
Dairyland	DSR-1120/R2Y	1.1	57.3	14.8	1.3	107
Mustang	16624	1.6	57.2	14.5	2.0	110
Prairie Brand	PB-1566R2	1.5	57.1	14.7	2.0	109
Channel	1805R2	1.8	56.9	14.6	2.0	113
Latham	L1345R2	1.3	56.9	14.4	1.0	106
Latham	L1783R2	1.7	56.6	14.4	1.3	112
Rea	71G14	1.1	56.5	15.2	2.3	107
Sodak Genetics	SD2182R2Y	1.8	56.3	14.1	1.3	110
Hefty	EXP H12R4	1.2	56.2	14.7	2.0	108
Asgrow	AG1234	1.2	56.2	14.5	1.7	105
	Tria	al Average	56.9	14.7	1.6	108
	LS	SD (0.05)†	3.8	0.5	0.7	1
		C.V.‡	4.1	2.3	25.4	0.5

C.V.‡ 4.1 2.3 25.4 0.5 † Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground) ‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2013 Soybean Variety Trial Results – South Shore

Table 2b. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) - Maturity Group 1 Trial at South Shore (16 Brands, 59 varieties). Varietal Information Measurements Yield Lodging Maturity Bu/A Moisture Score Days to **Brand** Variety Rating (13%)(1-5)*Maturity Hefty H10R3 1.0 56.1 14.2 1.3 107 Wensman W 3121NR2 1.2 56.1 14.6 1.7 105 Proseed 2-140 56.1 1.4 14.9 2.0 109 Prairie Brand PB-1843R2 1.8 56.1 14.9 2.0 110 78G12 Rea 1.8 56.1 14.5 1.3 111 Latham 1985R2 1.9 56.0 14.8 1.3 111 Rea 73G13 1.3 55.8 14.4 2.0 109 Latham L1948R2 1.9 55.4 15.0 1.7 113 Prairie Brand PB-1481R2 1.4 55.0 14.8 1.7 107 Sodak Genetics SD2179 1.7 54.7 15.0 1.0 110 Proseed PX11 108 1.1 54.7 14.3 1.3 Mustang 12224 1.2 54.6 14.9 1.3 106 Rea 71G20 1.1 54.4 15.0 2.0 104 W 3106R2 Wensman 1.0 54.1 14.6 1.0 105 Proseed PX18 1.8 53.8 14.7 1.3 113 Latham L1084R2 1.0 53.7 14.8 1.7 107 PFS 12R12 Peterson Farms 1.2 53.5 14.7 2.0 109 2.0 AG1431 53.4 Asgrow 1.4 15.1 109 EXP13151R2 Prairie Brand 1.5 53.4 14.5 2.3 109 SD2102R2Y 1.0 Sodak Genetics 53.2 2.0 104 15.2 Stine 14RD62 51.9 14.7 1.7 1.4 109 91Y30 Pioneer 1.3 51.1 14.8 1.3 106 Rea 75G12 1.5 51.0 14.4 1.0 109 Pioneer 91Y01 1.0 50.4 15.0 2.3 105 Trial Average 56.9 14.7 1.6 108 LSD (0.05)† 3.8 0.5 0.7 1 C.V.‡ 4.1 2.3 25.4 0.5

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground)

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2013 South Dakota Soybean Variety Trial Results – Miller

Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 17 miles south and 8.5 miles east of Miller (57362) in Hand County

(GPS: UTM 14N, 514690 m East 4901684 m North)

Cooperator: Marlen Winter

Soil Type: Raber-Eakin loam, 3-5% slope, non-irrigated

Fertilizer: Foliar application of SG ReLEAF, MaxGrow, & Presto-Gold on July 16th

Previous Crop: Corn

Tillage: No-till

Row Spacing: 30 inches Seeding Rate: 165,000/acre

Pest Management: Authority Assist & 2,4-D - Pre, Glyphosate - Post

Date seeded/harvested: Jun. 4/Oct. 26





2013 Soybean Variety Trial Results - Miller

	ate-resistant soybea Maturity Group 0 and					ations			
	etal Information			Measurements					
			Yield		Lodging				
Brand	Variety	Maturity Rating	Bu/A (13%)	Moisture %	Score (1-5)*	Days to Maturity			
Asgrow	AG1431	1.4	59.2	13.5	1.0	114			
Rea	75G12	1.5	58.4	13.3	1.0	116			
Sodak Genetics	SD2182R2Y	1.8	58.4	13.2	1.0	118			
Rea	71G20	1.1	58.1	13.9	1.0	112			
Wensman	W 3160NR2	1.6	57.7	13.4	1.0	116			
Hefty	EXP H16R4	1.6	57.7	13.5	1.0	116			
Prairie Brand	PB-1611R2	1.6	57.7	13.6	1.0	116			
Prairie Brand	PB-1982R2	1.9	57.4	13.9	1.0	117			
Prairie Brand	PB-1843R2	1.8	57.3	13.7	1.0	117			
Stine	16RD66	1.6	57.2	13.7	1.0	115			
Hefty	EXP H17R4	1.7	57.0	13.6	1.0	115			
Sodak Genetics	SD2091R2Y	0.9	56.8	13.7	1.0	113			
-	CHECK	1.8	56.7	13.8	1.0	115			
Prairie Brand	PB-1566R2	1.5	56.2	13.5	1.0	116			
Prairie Brand	PB-1481R2	1.4	56.1	14.2	1.0	114			
Wensman	W 3140R2	1.5	55.7	13.5	1.0	113			
Asgrow	AG1733	1.7	55.5	13.5	1.0	117			
Sodak Genetics	SD2172R2Y	1.7	55.2	13.6	1.0	116			
Prairie Brand	PB-1722R2	1.7	55.0	13.5	1.0	115			
Prairie Brand	PB-2042R2	1.9	55.0	13.8	1.0	118			
Rea	71G14	1.1	54.5	13.9	1.0	113			
Dairyland	DSR-1515/R2Y	1.5	54.5	13.7	1.0	112			
Prairie Brand	EXP13151R2	1.5	54.1	13.4	1.0	114			
Rea	73G13	1.3	54.0	13.4	1.0	114			
Asgrow	AG1534	1.5	54.0	13.6	1.0	109			
Stine	20RD20	1.9	54.0	13.5	1.0	119			
Mustang	16624	1.6	53.9	13.3	1.0	115			
Pioneer	91Y30	1.3	53.7	14.0	1.0	114			
Channel	1405R2	1.4	53.7	13.9	1.0	114			
Prairie Brand	PB-1539R2	1.5	53.2	13.4	1.0	113			
Rea	78G12	1.8	53.1	13.7	1.0	115			
Dairyland	DSR-1808/R2Y	1.8	52.7	14.0	1.0	115			
Pioneer	91Y90	1.9	51.2	13.7	1.0	116			
Stine	14RD62	1.4	51.2	13.7	1.0	114			
Pioneer	P19T60R	1.9	50.8	13.7	1.0	114			
	Tria	al Average	54.2	13.7	1.0	114			
	LS	SD (0.05)†	5.6	0.5	NS	4			
		C.V.‡	6.3	2.4	-	1.5			

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground) ‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2013 Soybean Variety Trial Results - Miller

Table 1b. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 0 and 1 Trial at Miller (11 Brands, 44 varieties).										
Var	ietal Information		Measurements							
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1- 5)*	Days to Maturity				
Pioneer	91Y01	1.0	50.8	13.8	1.0	111				
Prairie Brand	PB-1591R2	1.5	50.7	13.8	1.0	113				
Wensman	W 3178R2	1.7	50.3	13.2	1.0	115				
Pioneer	P16T04R	1.6	50.2	13.9	1.0	116				
Channel	1805R2	1.8	49.7	13.9	1.0	116				
Sodak Genetics	SD2081R2Y	0.8	49.7	14.0	1.0	111				
Sodak Genetics	SD2179	1.7	48.2	13.8	1.0	115				
Sodak Genetics	SD2102R2Y	1.0	48.2	14.0	1.0	111				
Sodak Genetics	SD2101R2Y	1.0	47.1	13.4	1.0	111				
	Tria	al Average	54.2	13.7	1.0	114				
	LS	SD (0.05)†	5.6	0.5	NS	4				
		C.V.‡	6.3	2.4	-	1.5				

Tyield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground) ‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

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2013 Soybean Variety Trial Results - Miller

Table 2. Glyphosate-resistant soybean variety performance results (average of 3 replications sorted by yield) – Maturity Group 2 Trial at Miller (7 Brands, 19 varieties).

by yield) – Maturity Group 2 Trial at Miller (7 Brands, 19 varieties). Varietal Information Measurements								
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity		
Prairie Brand	PB-2136R2	2.1	58.8	13.2	1.0	124		
Pioneer	P22T69R	2.2	58.4	13.3	1.0	124		
-	CHECK	1.8	58.0	13.6	1.0	126		
Rea	82G14	2.2	57.8	13.0	1.0	126		
Hefty	H20Y12	2.1	57.3	13.1	1.0	125		
Prairie Brand	PB-2230R2	2.3	56.9	13.1	1.0	125		
Dairyland	DSR-2105/R2Y	2.1	56.6	13.4	1.0	123		
Prairie Brand	PB-2419RR2	2.3	56.3	13.1	1.0	125		
Prairie Brand	PB-2506R2	2.5	56.0	13.3	1.0	126		
Hefty	H20R3	2.0	56.0	13.8	1.0	125		
Prairie Brand	PB-2544R2	2.5	55.1	14.2	1.0	125		
Wensman	W 3200NR2	2.0	54.4	13.5	1.0	125		
Mustang	21993	2.1	54.2	13.0	1.0	125		
Prairie Brand	PB-2024R2	2.0	53.7	13.5	1.0	125		
Prairie Brand	PB-2668R2	2.6	53.1	13.6	1.0	127		
Rea	80G11	2.0	52.8	13.6	1.0	124		
Prairie Brand	PB-2650R2	2.5	51.6	13.7	1.0	124		
Prairie Brand	EXP 13241	2.3	51.3	13.9	1.0	126		
Prairie Brand	PB-2351R2	2.3	49.3	13.5	1.0	124		
	Tria	al Average	55.1	13.4	1.0	125		
	LS	SD (0.05)†	5.7	0.4	NS	3		
		C.V.‡	6.2	1.6	-	1.0		

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground)

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Beresford: 6 miles west & 3 miles south of Beresford (57342) in Clay County

(GPS: UTM 14N, 671008 m East 4768053 m North)

Cooperator: SDSU Southeast Research Center – Peter Sexton and staff Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Previous Crop: Corn
Tillage: Conventional
Row Spacing: 30 inches
Seeding Rate: 165,000/acre

Pre-emergent herbicide: Glyphosate, Dual, Sharpen, & Metribuzen on May 23

Post herbicide: Dual & Raptor on June 7 Date seeded/harvested: May 23/Oct. 8

Table 1. Conventional or non-glyphosate resistant so	bean variety performance results (average of 3 replications sorted
by yield) - Beresford Maturity Group 1 Trial	

Var	ietal Information		Measurements						
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity	Oil %	Protein %	
SD-AES	BROOKINGS	1.7	66.7	11.5	2.0	124	19.0	35.2	
SDSU Exp	SD09CV-1040	-	62.2	11.0	2.0	121	19.1	36.9	
SD-AES	DEUEL	1.1	61.3	11.0	3.7	122	19.1	36.7	
SDSU Exp	SD08CV-1043	-	58.8	11.1	1.7	120	19.6	37.3	
Richland IFC	CHALLENGER	1.3	55.2	11.8	3.3	122	18.5	39.8	
Richland IFC	MK9101	1.1	51.3	10.2	1.0	122	20.7	35.3	
Richland IFC	MK1016	1.0	46.4	11.0	4.3	118	17.8	37.5	
	Trial Average			11.1	2.6	121	19.1	37.0	
	LSD (0.05)†			0.4	1.1	3	1.0	0.7	
		C.V.‡	5.3	2.1	25.0	0.9	2.8	1.0	

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground).



[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Table 2. Conventional or non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) – **Beresford Maturity Group 2 Trial.**

by yiola, Doloc	by yield, Derociora matarity of our I frian											
Va	arietal Information		Measurements									
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity	Oil %	Protein %				
SD-AES	DAVISON	2.2	60.0	11.1	2.7	121	18.7	35.6				
SDSU Exp	SD10CV-2005	-	50.3	11.5	2.0	123	19.5	36.6				
SDSU Exp	SD10CV-2013		50.0	11.1	2.3	123	19.6	37.4				
	Tri	al Average	53.4	11.2	2.3	122	19.3	36.5				
LSD (0.05)†			2.3	0.3	NS	2	0.4	0.7				
		C.V.‡	1.9	1.4	17.5	0.3	1.0	0.8				

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground). No significant (NS) difference between varieties.



[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Volga: 1.5 miles south of Volga (57071) in Brookings County

(GPS: UTM 14N, 665888 m East 4907622 m North)

Cooperator: SDSU Volga Research Farm – Doug Doyle and staff

Soil Type: Brandt silty clay loam, 0-2% slope, non-irrigated

Soil Test: 4.9 % OM, 5.7 pH, 50 ppm P (Bray-P1), 143 ppm K, 1.8 ppm Zn

Previous Crop: Spring wheat

Tillage: Conventional Row Spacing: 30 inches Seeding Rate: 165,000/acre Pre-emergent herbicide: Dual

Post herbicide: None, only row cultivation Date seeded/harvested: Jun. 3/ Oct. 1

Table 3. Conventional or non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) – **Volga Maturity Group 0 Trial.**

by yield) – Volga I	by yield) – Volga Maturity Group 0 Trial.										
Var	ietal Information				Measuren	nents					
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity	Oil %	Protein %			
SDSU Exp	SD08CV-0015		51.0	8.7	1.0	109	17.9	36.7			
Richland IFC	MK831	0.8	49.1	8.4	2.0	107	17.3	36.5			
SDSU Exp	SD08CV-0018	·	49.1	8.4	1.0	106	18.9	36.1			
SDSU-AES	SURGE	0.7	48.7	8.7	2.0	108	18.4	37.1			
SDSU-AES	CODINGTON	0.9	48.5	8.5	1.7	111	18.0	37.9			
SDSU-AES	ROBERTS	0.6	47.5	8.6	2.0	103	17.8	37.5			
SDSU Exp	SD09CV-0133	-	47.4	8.9	2.0	108	17.6	38.4			
SDSU Exp	SD06-415	•	47.0	9.2	1.0	112	19.9	35.3			
SDSU Exp	SD07CV-539	-	44.1	8.6	2.0	110	17.9	35.4			
SDSU Exp	SD06-418	-	44.1	8.7	2.0	108	18.4	35.8			
Richland IFC	MK0508	0.8	42.4	8.7	4.7	103	15.5	38.2			
Richland IFC	MK850	0.8	41.9	8.2	1.0	107	18.7	35.8			
	Tria	al Average	46.7	8.6	1.9	107	18.0	36.7			
	LS	SD (0.05)†	3.1	0.5	0.4	1	0.6	1.3			
		C.V.‡	4.0	3.5	12.9	0.5	2.0	2.1			

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground).

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Table 4. Conventional or non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) – **Volga Maturity Group 1 Trial.**

Val	rietal Information		Measurements						
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity	Oil %	Protein %	
SDSU Exp	SD08CV-1043	-	43.2	9.0	1.0	110	17.2	38.8	
SDSU Exp	SD09CV-1040	ē	39.6	9.0	1.7	111	16.3	39.1	
SDSU-AES	DEUEL	1.1	38.5	9.1	3.3	112	16.8	37.8	
SDSU-AES	BROOKINGS	1.7	37.4	9.2	1.0	114	14.7	39.1	
Richland IFC	MK1016	1.0	36.9	8.8	2.7	111	14.7	41.2	
Richland IFC	MK9101	1.1	34.0	10.3	1.0	112	20.1	35.4	
Richland IFC	CHALLENGER	1.3	27.0	9.3	3.7	110	14.8	43.1	
Trial Average			36.6	9.2	2.0	111	16.4	39.2	
LSD (0.05)†			3.8	0.5	1.0	2	1.6	2.1	
		C.V.‡	5.8	3.0	28.2	0.7	5.4	3.0	

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground).

Table 5. Conventional or non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) – **Volga Maturity Group 2 Trial.**

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Va	rietal Information				Measurer	nents	/	
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity	Oil %	Protein %
SDSU-AES	DAVISON	2.2	40.3	11.2	1.0	114	15.1	39.6
SDSU Exp	SD10CV-2013		39.0	12.4	3.0	119	18.7	37.1
SDSU Exp	SD10CV-2005		35.4	13.3	3.7	120	18.3	37.0
	Tri	al Average	38.2	12.3	2.6	117	17.4	37.9
LSD (0.05)†		2.2	0.9	0.8	-	0.5	0.3	
		C.V.±	2.6	3.2	13.0	-	1.3	0.4

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground).

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

South Shore: 8.5 miles west of South Shore (57263) in Codington County

(GPS: UTM 14N, 649382 m East 4996615 m North) Cooperator: SDSU Northeast Research Farm – Allen Heuer.

Soil Type: Kranzburg-Brookings silty clay loam, 0-2% slope, non-irrigated

Soil Test/Fertilizer: 18 ppm P (Bray P1), 157 ppm K / 100 lbs P₂0₅ and 50 lbs K₂0

Previous Crop: Spring wheat

Tillage: Conventional Row Spacing: 30 inches Seeding Rate: 165,000/acre Pre-emergent: Dual II on June 14

Post herbicide: Harmony on July 11 Date seeded/harvested: Jun. 13/Oct. 25

	onal or non-glyphosa Shore Maturity Gro		soybean var	iety performa	ance results (average of 3 i	eplication	ns sorted	
Var	rietal Information		Measurements						
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity	Oil %	Protein %	
SDSU-AES	ROBERTS	0.6	54.3	14.1	1.7	107	19.6	38.8	
SDSU Exp	SD07CV-539		53.7	14.2	1.3	106	19.9	36.3	
SDSU-AES	CODINGTON	0.9	53.5	15.1	1.0	107	19.3	39.4	
SDSU-AES	SURGE	0.7	52.5	14.4	1.7	107	18.9	40.7	
SDSU Exp	SD08CV-0018		51.0	14.1	1.3	108	19.9	37.8	
SDSU Exp	SD06-415		50.5	14.2	1.7	104	20.3	37.8	
SDSU Exp	SD08CV-0015		50.2	14.0	1.3	109	18.9	39.1	
SDSU Exp	SD06-418		49.9	14.4	2.3	109	19.7	38.3	
Peterson Farms	PFS L08-11§	0.8	49.9	14.2	1.0	108	19.1	38.0	
Richland IFC	MK831	0.8	46.7	14.7	2.7	105	17.5	40.8	
SDSU Exp	SD09CV-0133		46.3	14.4	1.3	108	18.6	40.9	
Richland IFC	MK0508	0.8	41.7	14.5	3.3	106	16.9	40.4	
Richland IFC	MK850	0.8	41.0	14.4	2.0	106	19.2	40.7	
	Tria	al Average	49.3	14.4	1.7	107	19.1	39.1	
1			1	1			1 .		

^{3.7} † Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground).

0.3

1.3

0.9

30.5

0.4

1.4

0.5

1.2

1.8

LSD (0.05)†

C.V.‡

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[§] Liberty Link variety

Table 7. Conventional or non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) - South Shore Maturity Group 1 Trial.

Varietal Information			Measurements					
Brand	Variety	Maturity Rating	Yield Bu/A (13%)	Moisture %	Lodging Score (1-5)*	Days to Maturity	Oil %	Protein %
SDSU-AES	BROOKINGS	1.7	53.1	14.8	1.0	115	18.7	36.9
SDSU-AES	DEUEL	1.1	49.5	14.9	1.7	108	18.7	39.2
Peterson Farms	PFS L11-13N§	1.1	48.0	13.9	1.3	111	18.8	38.7
SDSU Exp	SD08CV-1043		47.2	14.6	1.3	109	18.8	39.5
SDSU Exp	SD09CV-1040	•	45.6	13.9	1.3	111	17.9	39.3
Richland IFC	MK9101	1.1	44.4	13.9	1.0	109	20.5	36.0
Richland IFC	CHALLENGER	1.3	43.9	15.3	1.7	112	17.5	43.5
Richland IFC	MK1016	1.0	41.8	14.6	2.3	106	16.4	41.3
Trial Average		46.7	14.5	1.5	110	18.4	39.3	
LSD (0.05)†			3.3	0.6	NS	1	0.7	2.1
C.V.‡			4.1	2.5	35.1	0.5	2.1	3.0

[†] Yield, moisture, lodging or days to maturity value required (≥LSD) to determine if varieties are different from each other with confidence. *Lodging score (1 = no lodging to 5 = flat on ground). No significant (NS) difference between



[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable. § Liberty Link variety



2014 South Dakota Soybean Variety Trail Results - Miller

Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 11 miles north and 2.75 miles west of Miller (57362) in Hand County, SD

(GPS: N 44°41.589' W 099°02.612')

Cooperator: Reno Brueggeman

Soil Type: Houdek-Dudley loams, nearly level

Fertilizer: none Previous crop: Corn Tillage: No-till

Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Valor, Dimetric & Glyphosate

Post: Glyphosate, Extreme, Warrant, Cadet, and Select Max

Date seeded: 5/23/2014

Date harvested: 10/2/2014



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2014 South Dakota Soybean Variety Trial Results - Miller

Table 1a. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Groups 0 & 1 at Miller, SD).

Variet	Agronomic Performance				
	<u></u>	Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	PB-1611R2	1.6	39.4	10.3	1.0
Wensman	W 3140R2	1.5	38.3	11.1	1.0
Prairie Brand	PB-1947R2	1.9	38.1	10.9	1.0
Dairyland	DSR-1515/R2Y	1.5	38.0	11.2	1.0
Sodak Genetics	2172R2Y	1.7	37.9	11.2	1.0
Wensman	W 3195NR2	1.9	37.8	10.6	1.0
Pioneer	P19T60R	1.9	37.6	10.8	1.0
Hefty	EXP H18R5	1.8	37.4	10.5	1.0
Sodak Genetics	2091R2Y	0.9	37.3	11.1	1.0
Federal Hybrids	F143RR2Y	1.4	37.3	10.8	1.0
Hefty	EXP H13R5	1.3	37.2	11.4	1.0
Check	Check	1.7	37.2	11.0	1.0
Hefty	EXP H16R5	1.6	37.1	11.0	1.0
Pioneer	P16T04R	1.6	36.9	9.8	1.0
Channel	1808R2	1.8	36.4	10.6	1.0
Prairie Brand	PB-1822R2	1.8	36.3	10.4	1.0
Prairie Brand	PB-1466R2	1.4	36.2	11.3	1.0
Hefty	EXP H15R5	1.5	35.8	11.3	1.0
Federal Hybrids	F115NRR2Y	1.1	35.6	11.4	1.0
REA Hybrids	R1515	1.5	35.3	10.2	1.0
REA Hybrids	75G12	1.5	35.2	11.0	1.0
Prairie	PB-1566R2	1.5	35.1	10.8	1.0
Hefty	EXP H17R5	1.7	35.0	11.5	1.0
Federal Hybrids	F154NRR2Y	1.5	34.7	10.6	1.0
Titan Pro	TP-17R54	1.7	34.6	11.0	1.0
Prairie Brand	PB-1956R2	1.9	34.5	11.4	1.0
Wensman	W 3158NR2	1.5	34.5	11.1	1.0
Nutech/G2 Genetics	7104	1.0	34.2	11.2	1.0
Nutech/G2 Genetics	6112	1.1	34.1	9.8	1.0
Nutech/G2 Genetics	6143	1.4	34.1	11.0	1.0
Trial Average			35.4	10.9	1.0
LSD (0.0			2.7	0.6	-
		C.V.‡	4.6	3.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable



2014 South Dakota Soybean Variety Trial Results - Miller

Table 1a. Glyphosate-resistant soybean variety performance results, continued (average of 3 replications) - Maturity Groups 0 & 1 at Miller, SD).

Variety	Agronomic Performance				
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Wensman	W 3170NR2	1.7	34.0	11.1	1.0
REA Hybrids	78G12	1.8	34.0	10.8	1.0
Channel	1508R2	1.5	34.0	10.4	1.0
Titan Pro	15M22	1.5	33.8	10.8	1.0
Channel	1308R2	1.3	33.5	11.0	1.0
REA Hybrids	R1815	1.8	33.5	10.9	1.0
Sodak Genetics	2101R2Y	1.0	33.5	10.9	1.0
Prairie Brand	PB-1794R2	1.7	33.4	11.8	1.0
Wensman	W 3160NR2	1.6	33.4	11.0	1.0
Wensman	W 3128R2	1.2	32.9	11.3	1.0
Dairyland	DSR-1990/R2Y	1.9	32.6	10.8	1.0
Nutech/G2 Genetics	7157	1.5	32.6	11.3	1.0
		Trial Average	35.4	10.9	1.0
	LSD (0.05)+	2.7	0.6	-	
		C.V.‡	4.6	3.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable



2014 South Dakota Soybean Variety Trial Results - Miller

Table 2. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Group 2 at Miller, SD).

Variety	Agronomic Performance				
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Pioneer	P22T69R	2.2	38.5	10.6	1.0
Prairie Brand	PB-2188R2	2.1	37.7	11.0	1.0
Titan Pro	20M1	2.0	37.2	10.6	1.0
Check	Check	1.7	36.9	10.7	1.0
Prairie Brand	PB-2600R2	2.6	36.5	13.8	1.0
Great Lakes Hybrids	2569R2	2.0	35.9	12.6	1.0
Prairie Brand	EXP-1947R2	2.0	35.7	10.5	1.0
Nutech/G2 Genetics	7233	2.3	35.1	11.3	1.0
REA Hybrids	80G11	2.0	35.1	10.6	1.0
Great Lakes Hybrids	2469R2	2.0	35.1	11.0	1.0
Great Lakes Hybrids	2289R2	2.0	34.9	10.9	1.0
Pioneer	P22T61R	2.2	34.9	10.5	1.0
Channel	2108R2	2.1	34.7	10.9	1.0
Pioneer	P21T66R2	2.1	34.6	10.5	1.0
Prairie Brand	PB-2319R2	2.3	34.4	11.6	1.0
Prairie Brand	PB-2556R2	2.5	34.2	13.8	1.0
Nutech/G2 Genetics	7216	2.1	34.2	10.8	1.0
Prairie Brand	PB-2024R2	2.0	33.5	11.0	1.0
Prairie Brand	PB-2230R2	2.1	33.2	10.3	1.0
Pioneer	P25T51R	2.5	33.2	11.5	1.0
REA Hybrids	R2115	2.1	33.1	10.8	1.0
Nutech/G2 Genetics	7204R2	2.0	32.9	9.7	1.0
		Trial Average	35.1	11.1	1.0
	LSD (0.05)†	1.9	0.9	-	
		C.V.‡	3.3	4.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable



2014 South Dakota Soybean Variety Trail Results - Bancroft

Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 2.5 miles north of Bancroft (57353) in Kingsbury County

(GPS: N 44°31.091' W 097°45.244)

Cooperator: Weerts Farm, Inc.

Soil Type: Houdek-Stickney-Tetonka loam, 0-2% slope

Fertilizer: none Previous crop: Corn

Tillage: No-till

Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Sharpen

Post: Glyphosate, Select

Date seeded: 5/23/2014

Date harvested: 10/9/2014



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2014 South Dakota Grow® Soybean Variety Trial Results - Bancroft

Table 1a. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Groups 0 & 1 at Bancroft, SD).

Varie	Agronomic Performance				
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Hefty	EXP H18R5	1.8	63.7	10.9	1.0
Hefty	EXP H15R5	1.5	63.6	10.5	1.0
Wensman	W 3170NR2	1.7	63.6	11.0	1.0
Prairie Brand	PB-1611R2	1.6	63.5	10.9	1.0
Prairie Brand	PB-1956R2	1.9	62.2	10.8	1.0
Hefty	EXP H16R5	1.6	62.1	10.4	1.0
Federal Hybrids	F143RR2Y	1.4	62.0	10.3	1.0
Wensman	W 3140R2	1.4	62.0	11.1	1.0
REA Hybrids	78G12	1.8	61.3	10.4	1.0
Titan Pro	15M22	1.5	61.0	10.8	1.0
REA Hybrids	R1515	1.5	60.6	10.8	1.0
Prairie Brand	PB-1947R2	1.9	60.3	10.3	1.0
Legend Seeds	LS 13R556N	1.3	60.1	10.4	1.0
REA Hybrids	75G12	1.5	60.0	10.9	1.0
Legend Seeds	LS 12R24N	1.2	60.0	10.7	1.0
Nutech/G2 Genetics	7104	1	60.0	10.8	1.0
Wensman	W 3158NR2	1.5	59.5	10.8	1.0
Hefty	EXP H17R5	1.7	59.5	10.6	1.0
REA Hybrids	R1815	1.8	59.4	10.6	1.0
Prairie Brand	PB-1566R2	1.5	59.3	11.0	1.0
Prairie	PB-1466R2	1.4	59.2	10.8	1.0
Wensman	W 3160NR2	1.6	59.2	10.6	1.0
Channel	1508R2	1.5	59.1	10.5	1.0
Wensman	W 3128R2	1.2	58.9	10.7	1.0
Prairie Brand	PB-1822R2	1.8	58.8	11.0	1.0
Pioneer	P16T04R	1.6	58.6	10.2	1.0
Nutech/G2 Genetics	6112	1.1	58.6	10.7	1.0
Channel	1808R2	1.8	58.5	10.5	1.0
Nutech/G2 Genetics	7157	1.5	58.3	10.7	1.0
Legend Seeds	LS 17R500N	1.7	58.0	10.5	1.0
Trial Average			58.8	10.6	1.0
		LSD (0.05)+	4.1	0.6	-
	C.V.‡	4.4	3.4		

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable



Table 1a. Glyphosate-resistant soybean variety performance results, continued (average of 3 replications) -Maturity Groups 0 & 1 at Bancroft, SD).

Variety	Agronomic Performance				
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Channel	1308R2	1.3	57.4	10.8	1.0
Dairyland Seeds	DSR-1515/R2Y	1.5	57.3	10.7	1.0
Dairyland Seeds	DSR-1990/R2Y	1.9	57.0	10.7	1.0
Nutech/G2 Genetics	6143	1.4	57.0	10.1	1.0
Titan Pro	TP-17R54	1.7	56.7	10.6	1.0
Pioneer	P19T60R	1.9	56.5	10.6	1.0
Check	Check	1.7	56.5	10.3	1.0
Federal Hybrids	F175NRR2Y	1.7	56.2	10.9	1.0
Wensman	W 3195NR2	1.9	56.1	10.5	1.0
Sodak Genetics	SD2172R2Y	1.7	55.8	10.6	1.0
Stine	19RF32	1.9	55.1	10.5	1.0
Sodak Genetics	SD2091R2Y	0.9	54.2	10.4	1.0
Sodak Genetics	SD2101R2Y	1	54.0	10.6	1.0
Prairie Brand	PB-1794R2	1.7	52.6	10.9	1.0
		Trial Average	58.8	10.6	1.0
7 1		LSD (0.05)+	4.1	0.6	-
		C.V.‡	4.4	3.4	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable

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2014 South Dakota Grow[®] Soybean Variety Trial Results - Bancroft

Table 2. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Group 2 at Bancroft, SD).

at Bancroπ, SD).					
Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	EXP-1947R2	2.1	63.2	10.3	1.0
Prairie Brand	PB-2024R2	2.0	62.0	10.3	1.0
Pioneer	P22T69R	2.2	61.6	10.2	1.0
Wensman	W 3200NR2	2.0	60.4	10.4	1.0
Hefty	H21Y11	2.1	59.0	10.3	1.0
Titan Pro	20M1	2.0	58.7	10.1	1.0
Legend	20R524N	2.0	58.6	10.5	1.0
Prairie Brand	PB-2188R2	2.1	58.1	10.3	1.0
Channel	2108R2	2.1	58.0	10.4	1.0
Prairie Brand	PB-2600R2	2.6	57.4	11.2	1.0
Prairie Brand	PB-2230R2	2.1	57.3	10.4	1.0
Great Lakes Hybrids	2039R2	2.0	57.0	10.4	1.0
Hefty	EXP H23R5	2.3	57.0	10.4	1.0
REA Hybrids	80G11	2.0	56.8	10.3	1.0
Pioneer	P22T61R	2.2	56.4	10.4	1.0
Hefty	EXP H20R5	2.0	56.4	10.3	1.0
Stine	22RD00	2.2	56.1	10.3	1.0
Nutech/G2 Genetics	7233	2.3	56.1	10.5	1.0
Prairie Brand	PB-2319R2	2.3	56.0	10.4	1.0
Check	Check	1.7	56.0	10.1	1.0
Federal Hybrids	F205NRR2Y	2.0	55.3	10.4	1.0
Pioneer	P21T66R2	2.1	55.3	10.4	1.0
Pioneer	P25T51R	2.5	55.2	10.7	1.0
Prairie Brand	PB-2556R2	2.5	55.0	10.4	1.0
Great Lakes Hybrids	2569R2	2.5	54.8	10.9	1.0
Nutech/G2 Genetics	7204R2	2.0	53.6	10.4	1.0
Wensman	W 3214NR2	2.1	53.4	10.3	1.0
REA Hybrids	R2115	2.1	53.0	10.3	1.0
Nutech/G2 Genetics	7216	2.1	52.9	10.3	1.0
		Trial Average	56.9	10.4	1.0
		LSD (0.05)†	5.0	0.5	-
		C.V.‡	5.4	3.0	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable



2014 South Dakota Soybean Variety Trail Results - Geddes

Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 2 miles east and 1/2 mile north of Geddes (57432) in Charles Mix County, SD

(N 43°15.956' W 098°39.844')

Cooperator: Curtis Sybesma

Soil Type: Highmore-Eakin silt loam, 0-2% slope

Fertilizer: none Previous crop: Corn

Tillage: No-till

Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Authority Assist

Post: Glyphosate

Date seeded: 5/22/2014

Date harvested: 10/6/2014





2014 South Dakota Soybean Variety Trial Results - Geddes

Table 1. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Group 1 at Geddes, SD).

Variet	y Information		Agronomic Perforr		mance	
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Hefty	HR18R5	1.8	59.8	9.9	1.0	
Nutech/G2 Genetics	7157	1.5	57.9	10.0	1.0	
Prairie Brand	EXP-1947R2	1.9	57.2	9.7	1.0	
Channel	1808R2	1.8	55.9	10.1	1.0	
Sodak Genetics	SD2172R2Y	1.7	55.5	9.8	1.0	
Check	Check	1.7	54.7	9.7	1.0	
Sodak Genetics	SD2101R2Y	1.0	52.8	10.0	1.0	
	-	Trial Average	56.3	9.9	1.0	
		LSD (0.05)+	3.8	0.4	-	
		C.V.‡	3.9	2.6	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable

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2014 South Dakota Soybean Variety Trial Results - Geddes

Table 2a. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Group 2 at Geddes, SD).

Variety Information			Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Channel	2508R2	2.5	69.7	10.6	1.0	
Dairyland Seed	DSR-2411/R2Y	2.4	69.3	10.3	1.0	
Nutech/G2 Genetics	7273	2.7	69.3	11.7	1.0	
Wensman	W 3275NR2	2.7	68.9	10.9	1.7	
Hoegemeyer	HPT 2511NRR	2.5	68.7	10.0	1.0	
Prairie Brand	PB-2188R2	2.1	68.4	10.1	1.0	
REA Hybrids	R2115	2.1	68.4	10.0	1.0	
Pioneer	P22T69R	2.2	67.4	9.5	1.0	
Nutech/G2 Genetics	7250	2.5	66.9	10.7	1.0	
Prairie Brand	PB-2419RR2	2.4	66.9	10.2	1.0	
Dairyland Seed	DST-26-005R2	2.6	66.7	10.9	1.0	
Prairie Brand	PB-2024R2	2	66.5	9.9	1.0	
Renk	RS224NR2	2.2	66.0	9.9	1.0	
Great Lakes Hybrids	2789R2	2.7	65.7	10.6	1.7	
Channel	2408R2	2.4	65.3	10.3	1.0	
Wensman	W 3230R2	2.3	65.2	10.1	1.0	
Hefty	EXP H20R5	2	65.1	10.0	1.0	
Pioneer	P25T51R	2.5	64.9	10.3	1.0	
Pioneer	P27T87R2	2.7	64.7	10.8	1.0	
Channel	2108R2	2.1	64.7	9.7	1.0	
Prairie Brand	PB-2997R2	2.9	64.6	11.8	1.0	
Prairie Brand	PB-2600R2	2.6	64.4	11.2	1.0	
Channel	2808R2	2.8	64.3	12.1	1.0	
REA Hybrids	R2415	2.4	63.9	10.0	1.0	
Prairie Brand	PB-2556R2	2.5	63.8	10.0	1.0	
Nutech/G2 Genetics	7204R2	2	63.6	10.0	1.0	
Nutech/G2 Genetics	7261	2.6	63.4	10.6	1.0	
Wensman	W 3254NR2	2.5	63.3	10.0	1.0	
Titan Pro	TP-23R04	2.3	62.5	9.8	1.0	
Hefty	EXP H23R5	2.3	62.3	9.8	1.0	
Renk	RS265NR2	2.6	62.1	10.8	1.0	
		Trial Average		10.3	1.0	
		LSD (0.05)† C.V.‡	5.8	0.7	-	
	5.8	4.0	-			

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable

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2014 South Dakota Soybean Variety Trial Results - Geddes

Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 3 replications) - Maturity Group 2 at Geddes, SD).

Variety Information			Agro	nomic Perform	nance
Maturity		Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Nutech/G2 Genetics	7233	2.3	61.9	10.4	1.0
Wensman	W 3228NR2	2.2	61.9	9.9	1.0
Renk	RS213NR2	2.1	61.3	10.0	1.0
Hefty	EXP H25R5	2.5	61.2	10.2	1.0
Hoegemeyer	HPT 2707RR	2.7	61.1	10.2	1.0
Wensman	W 3214NR2	2.1	60.9	10.3	1.0
REA Hybrids	86G14	2.5	60.8	10.3	1.0
Titan Pro	20M1	2.3	60.2	10.4	1.0
Stine	28RE20	2.8	60.0	10.2	1.0
Great Lakes Hybrids	2869R2	2.8	59.9	10.3	1.0
Prairie Brand	PB-2319R2	2.3	59.7	9.9	1.0
Hefty	H21Y11	2.3	59.5	10.4	1.0
Hefty	EXP H24R5	2.2	59.5	10.4	1.0
Wensman	W 3200NR2	2.4	59.4	10.1	1.0
Channel	2607R2	2.6	59.3	9.8	1.0
Nutech/G2 Genetics	7240	2.4	59.1	10.1	1.0
Pioneer	92Y83	2.4	59.1	11.4	1.0
Titan Pro	TP-20R44	2.8	59.0	10.1	1.0
Prairie Brand	PB-2230R2	2.2	58.6	10.1	1.0
Stine	24RE03	2.4	58.6	9.9	1.0
Pioneer	P22T61R	2.4	58.2	9.6	1.0
Channel	2306R2	2.2	58.2	10.2	1.0
Stine	22RD00	2.3	58.1	10.2	1.0
REA Hybrids	80G11	2.2	57.9	9.8	1.0
Dairyland Seed	DSR-2250/R2Y	2.2	57.5 57.5	10.0	1.0
Titan Pro	TP-21R63	2.2	56.0	10.0	1.0
Hoegemeyer	HPT 2233NRR	2.2	55.6	9.8	1.0
Channel	2207R2	2.2	55.6	10.0	1.0
Check	Check	1.7	54.7	9.7	1.0
Nutech/G2 Genetics	7216	2.1	53.1	9.7	1.0
Tracedif 02 Octiones	1,210	Trial Average		10.3	1.0
		LSD (0.05)†		0.7	_
		C.V.‡		4.0	_
		C. V. T	٥.٥	4.0	_

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 4 miles south and 1 mile east of Bath (57427) in Brown County, SD

(GPS: N 45°23.580' W 098°18.325')

Cooperator: Gordon and Roger Locken Farms

Soil Type: Great Bend-Beotia silt loams, 0-2% slope

Fertilizer: none
Previous crop: Corn
Tillage: No-till
Row spacing: 30 inche

Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Authority MTZ

Post: Glyphosate

Date seeded: 5/20/2014 Date harvested: 10/15/2014





2014 South Dakota Compared to the South Dakota Soybean Variety Trial Results - Bath

Table 1. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Group 0 at Bath, SD).

Variet	y Information		Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	PB-0863R2	0.8	70.0	9.4	1.0
Prairie Brand	PB-1234R2	0.9	69.3	9.5	1.0
Dairyland Seeds	DSR-0904/R2Y	0.9	67.9	9.4	1.0
Wensman	W 3090NR2	0.8	67.3	9.2	1.0
Peterson Farms Seed	14R09N	0.9	67.2	9.4	1.0
Prairie Brand	PB-1147R2	0.9	66.9	9.4	1.0
Peterson Farms Seed	13R08N	0.8	66.7	9.3	1.0
Prairie Brand	PB-0777R2	0.7	64.8	9.6	1.0
Dairyland Seeds	DSR-0711/R2Y	0.7	64.8	9.3	1.0
Check	Check	1.7	64.0	9.3	1.0
Legacy Seeds	LS0833 NRR2	0.8	63.0	9.5	1.0
Sodak Genetics	SD2091R2Y	0.9	62.8	9.4	1.0
Federal Hybrids	F084NRR2Y	0.8	62.3	9.4	1.0
Nuseed	2093 RR2YN	0.9	60.8	9.4	1.0
Nuseed	2074 RR2YN	0.7	60.5	9.4	1.0
Wensman	W 3076R2	0.7	59.1	9.4	1.0
Nutech/G2 Genetics	6084R2	0.8	57.8	9.5	1.0
		Trial Average	64.4	9.4	1.0
		LSD (0.05)†	3.9	0.4	-
		C.V.‡	3.7	2.2	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Group 1 at Bath, SD).

Variety Information			Agronomic Performance			
- Turre		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Federal Hybrids	F143RR2Y	1.4	69.9	9.1	1.0	
Prairie Brand	PB-1956R2	1.9	68.3	9.1	1.0	
Prairie Brand	PB-1947R2	1.9	67.6	9.1	1.0	
Prairie Brand	PB-1611R2	1.6	66.7	9.0	1.0	
Peterson Farms Seed	14R13	1.3	66.0	9.3	1.0	
Prairie Brand	PB-1566R2	1.5	65.9	9.1	1.0	
Channel	1508R2	1.5	65.4	8.8	1.0	
Wensman	W 3102NR2	1.0	65.4	9.0	1.0	
Proseed	30-18	1.8	65.1	8.9	1.0	
Prairie Brand	PB-1794R2	1.7	65.0	9.3	1.0	
Dairyland Seed	DSR-1340/R2Y	1.3	64.9	9.0	1.0	
Proseed	30-11	1.1	64.8	9.3	1.0	
Stine	14RF06	1.4	64.7	8.8	1.0	
Peterson Farms Seed	14R11N	1.1	64.7	9.2	1.0	
Pioneer	P13T99R	1.3	64.6	9.4	1.0	
REA Hybrids	R1515	1.5	64.6	8.9	1.0	
Legacy Seeds	LS1134 NRR2	1.1	64.6	9.1	1.0	
Great Lakes Hybrids	1441R2	1.4	64.2	9.0	1.0	
REA Hybrids	R1215	1.2	64.1	9.2	1.0	
Hefty	EXP H15R5	1.5	64.0	9.0	1.0	
Proseed	30-12	1.2	63.8	9.0	1.0	
Dairyland Seed	DSR-1120/R2Y	1.1	63.8	8.9	1.0	
Wensman	W 3121NR2	1.2	63.8	8.9	1.0	
Hefty	EXP H13R5	1.3	63.7	9.0	1.0	
Hefty	EXP H16R5	1.6	63.7	9.0	1.0	
Wensman	W 3158NR2	1.5	63.6	8.8	1.0	
Channel	1207R2	1.2	63.1	9.1	1.0	
Pioneer	P16T04R	1.3	62.9	8.9	1.0	
Great Lakes Hybrids	1829R2	1.8	62.8	9.0	1.0	
Nutech/G2 Genetics	7157	1.5	62.8	9.1	1.0	
		Trial Average	62.9	9.1	1.0	
		LSD (0.05)†	4.1	0.3	-	
		C.V.‡	4.0	2.3	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 3 replications) -Maturity Group 1 at Bath, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	PB-1822R2	1.8	62.1	9.1	1.0
Nutech/G2 Genetics	7104	1.0	62.1	9.1	1.0
Proseed	PX411N	1.0	61.8	8.9	1.0
Check	Check	1.7	61.7	8.7	1.0
Nuseed	2122 RR2YN	1.2	61.6	9.0	1.0
Legacy Seeds	LS1314 NRR2	1.3	61.5	9.0	1.0
Prairie Brand	PB-1466R2	1.4	61.3	9.0	1.0
Hefty	EXP H11R5	1.1	61.2	9.4	1.0
Stine	10RD03	1.0	61.2	8.9	1.0
Sodak Genetics	SD2172R2Y	1.7	61.1	8.9	1.0
Pioneer	P19T60R	1.9	61.1	9.1	1.0
Nutech/G2 Genetics	6112	1.1	61.1	9.0	1.0
REA Hybrids	71G20	1.1	61.0	9.4	1.0
Pioneer	P10T02R	1.0	61.0	9.3	1.0
Dairyland Seed	DSR-1515/R2Y	1.2	60.7	9.1	1.0
Channel	1308R2	1.3	60.5	9.1	1.0
REA Hybrids	71G14	1.1	60.4	9.3	1.0
Federal Hybrids	F115NRR2Y	1.1	60.0	9.1	1.0
REA Hybrids	75G12	1.5	59.8	8.8	1.0
Peterson Farms Seed	12R12	1.1	59.7	9.2	1.0
Wensman	W 3128R2	1.2	59.4	9.2	1.0
Sodak Genetics	SD2101R2Y	1.0	59.3	8.9	1.0
Nutech/G2 Genetics	6143	1.4	58.0	8.9	1.0
Channel	1108R2	1.1	57.5	9.2	1.0
		Trial Average	62.9	9.1	1.0
		LSD (0.05)†	4.1	0.3	-
		C.V.‡	4.0	2.3	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: N 45°06.368' W 097°06.120')

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: 0-100-50 preplant incorporated

Previous crop: Spring Wheat Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Dual II

Post: Glyphosate

Date seeded: 5/21/2014

Date harvested: 10/10/2014



2014 South Dakota Grow Soybean Variety Trial Results - South Shore

Table 1. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Group 0 at South Shore, SD).

Varie	ty Information		Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Wensman	3090NR2	0.8	68.7	10.1	1.0
Prairie Brand	PB-1234R2	0.9	68.2	10.5	1.0
Legacy Seeds	LS0833 NRR2	0.8	68.1	10.3	1.3
Peterson Farms Seed	14R09N	0.9	67.6	10.3	1.0
Dairyland Seeds	DSR-0904/R2Y	0.9	67.3	10.2	1.0
Dairyland Seeds	DSR-0711/R2Y	0.7	66.8	10.4	1.0
Peterson Farms Seed	13R08N	0.8	66.7	10.2	1.0
Nuseed	2093 RR2YN	0.9	66.6	10.4	1.3
Federal Hybrids	F084NRR2Y	0.8	66.4	10.4	1.3
Prairie Brand	PB-0777R2	0.7	66.3	10.3	1.0
Wensman	3076R2	0.7	65.7	10.1	1.0
Check	Check	1.7	65.6	10.2	1.0
Prairie Brand	PB-0863R2	0.8	65.4	10.2	1.0
Sodak Genetics	SD2091R2Y	0.9	63.8	10.0	1.0
Nuseed	2074 RR2YN	0.7	61.0	10.2	1.0
Nutech/G2 Genetics	6084R2	0.8	60.8	10.2	1.0
Prairie Brand	PB-1147R2	0.9	58.7	10.7	2.0
		Trial Average	65.5	10.3	1.1
		LSD (0.05)†	3.1	0.2	0.4
		C.V.‡	3.0	1.2	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Table 2a. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Group 1 at South Shore, SD).

1 at South Shore, SD).	Λ = ν.	an anaia Danfann			
Variety Information			Agro Yield	onomic Perform	
Dunand	Verietre	Maturity		Maisture 0/	Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Peterson Farms Seed	14R13	1.3	69.7	10.0	1.0
Stine	10RD03	1.0	69.7	9.9	1.3
NK Brand	S14-J7	1.4	68.7	10.2	1.0
NK Brand	S12-H2	1.2	68.2	10.0	1.0
NK Brand	S10-P9	1.0	68.0	10.0	1.0
Wensman	W 3128R2	1.2	68.0	10.1	1.0
Wensman	W 3160NR2	1.6	67.3	10.4	1.0
Nutech/G2 Genetics	6112	1.1	67.2	10.1	1.0
Proseed	30-12	1.2	67.0	10.4	1.3
Dairyland Seeds	DSR-1340/R2Y	1.3	66.9	10.2	1.0
Prairie Brand	PB-1611R2	1.6	66.8	11.4	1.0
Proseed	30-11	1.1	66.5	10.2	1.0
Pioneer	P10T02R	1.0	66.3	10.2	2.0
Peterson Farms Seed	15R14N	1.4	66.3	10.0	1.0
Wensman	W 3102NR2	1.0	66.2	10.2	1.3
Peterson Farms Seed	14R11N	1.1	66.2	10.1	1.3
Wensman	W 3158NR2	1.5	66.2	10.1	1.0
REA Hybrids	71G14	1.1	66.2	10.6	1.7
Sodak Genetics	SD2172R2Y	1.7	66.1	9.9	1.0
Nuseed	2122 RR2YN	1.2	66.1	10.4	1.0
Nutech/G2 Genetics	7104	1.0	65.9	10.1	2.0
Proseed	PX411N	1.0	65.7	10.5	1.3
Channel	1207R2	1.2	65.5	10.2	2.0
Legacy Seeds	LS1314 NRR2	1.3	65.5	10.3	1.0
Hefty	EXP H15R5	1.5	65.4	10.2	1.0
Prairie Brand	PB-1566R2	1.5	65.2	10.8	1.0
Prairie Brand	PB-1947R2	1.9	65.1	11.1	2.3
Check	Check	1.7	65.0	9.9	1.0
Titan Pro	15M22	1.5	64.7	10.5	1.0
Dairyland Seeds	DSR-1515/R2Y	1.5	64.6	10.0	1.0
	•	Trial Average	64.4	10.4	1.4
	LSD (0.05)†				0.7
		C.V.‡		0.7 4.2	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Soybean Variety Trial Results - South Shore

Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 3 replications) - Maturity Group 1 at South Shore, SD).

Maturity Group 1 at South Shore, SD).						
Varie	ty Information		Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Hefty	EXP H13R5	1.3	64.6	10.5	2.0	
Great Lakes Hybrids	1441R2	1.4	64.5	10.1	1.0	
Pioneer	P13T99R	1.3	64.5	10.4	1.0	
Wensman	W 3121NR2	1.2	64.3	10.1	1.0	
REA Hybrids	R1215	1.2	64.2	10.2	2.0	
Channel	1308R2	1.3	64.0	10.2	1.7	
Great Lakes Hybrids	1829R2	1.8	63.9	11.7	2.0	
Nutech/G2 Genetics	7157	1.5	63.8	9.9	1.0	
Pioneer	P19T60R	1.9	63.7	10.3	1.3	
Prairie Brand	PB-1466R2	1.4	63.6	10.5	2.0	
Dairyland Seeds	DSR-1120/R2Y	1.1	63.5	10.2	1.3	
Sodak Genetics	SD2101R2Y	1.0	63.5	10.0	1.0	
NK Brand	S15-P1	1.5	63.3	11.0	2.3	
REA Hybrids	71G20	1.1	63.2	10.3	2.7	
Peterson Farms Seed	12R12	1.1	63.1	10.2	1.0	
Prairie Brand	PB-1956R2	1.9	62.7	12.2	1.7	
Prairie Brand	PB-1822R2	1.8	62.7	11.2	1.3	
Hefty	EXP H16R5	1.6	62.5	10.5	1.0	
Stine	14RF06	1.4	62.5	10.5	1.7	
Channel	1508R2	1.2	62.0	10.4	1.7	
Nutech/G2 Genetics	6143	1.4	61.7	10.1	1.3	
REA Hybrids	R1515	1.5	61.6	10.9	2.0	
Pioneer	P16T04R	1.6	61.4	10.5	1.0	
Prairie Brand	PB-1794R2	1.7	61.3	13.0	2.0	
Federal Hybrids	F143RR2Y	1.4	61.3	10.4	2.0	
Channel	1108R2	1.1	61.2	10.3	2.3	
Proseed	30-18	1.8	61.1	10.9	1.0	
REA Hybrids	75G12	1.5	60.1	10.1	1.0	
Legacy Seeds	LS1134 NRR2	1.1	58.0	10.5	2.7	
Federal Hybrids	F115NRR2Y	1.1	57.8	10.4	2.3	
Hefty	EXP H11R5	1.1	57.1	10.4	2.7	
		Trial Average	64.4	10.4	1.4	
		LSD (0.05)† C.V.‡	3.0	0.7	0.7	
	2.9	4.2				

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 1.5 mile south of Volga (57101) in Brookings County, SD

(GPS: N 44°17.915' W 096°55.393')

Cooperator: SDSU Volga Research Farm - Jack Ingemansen, manager

Soil Type: Brandt silty clay loam, 0-2% slope

Fertilizer: none

Previous crop: Spring wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Dual II

Post: Glyphosate

Date seeded: 5/19/2014

Date harvested: 10/6/2014 (Groups 0&1), 10/13/14 (Group 2)





2014 South Dakota COV® Soybean Variety Trial Results - Volga

Table 1a. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Groups 0 & 1 at Volga, SD).

Groups 0 & 1 at Volga, SI	Agre	onomic Perform	ance		
	y Information	Maturity	Yield	monnic Periorii	Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Peterson Farms Seed	13R08N	0.8	64.1	11.2	1.0
Titan Pro	15M22	1.5	62.9	11.5	1.3
Peterson Farms Seed	14R13	1.3	62.7	11.1	1.0
Sodak Genetics	SD2172R2Y	1.7	61.2	11.0	2.0
Prairie Brand	PB-1611R2	1.6	61.1	12.0	1.0
Wensman	W 3195NR2	1.9	60.6	12.0	2.0
Sodak Genetics	SD2091R2Y	0.9	60.2	10.9	2.0
Wensman	W 3160NR2	1.6	59.9	11.4	1.3
Nutech/G2 Genetics	7157	1.5	59.7	10.9	1.3
Check	Check	1.3 1.7	59.7 59.5	10.9	1.3
Wensman	W 3140R2	1.5	59.3	11.6	2.0
	W 3140R2 W 3128R2	1.2	59.2 59.2	11.0	1.0
Wensman Peterson Farms Seed	15R14N	1.4	58.9	11.1	1.0
	7104				
Nutech/G2 Genetics		1.0	58.8	11.2	1.3
Nutech/G2 Genetics Prairie Brand	6143	1.4	58.7	10.8	1.7
	PB-1566R2	1.5	58.6	12.1	1.3
NK Brand	S14-J7	1.4	58.4	11.2	1.0
Nutech/G2 Genetics	6112	1.1	58.3	11.4	1.7
Peterson Farms Seed	14R09N	0.9	58.1	11.4	2.0
NK Brand	S15-P1	1.5	58.1	11.8	1.3
Channel	1308R2	1.3	57.8	11.1	2.0
Prairie Brand	PB-1466R2	1.4	57.8	11.2	2.0
Prairie Brand	PB-1947R2	1.9	57.6	11.5	1.3
Hefty	EXP H17R5	1.7	57.4	15.1	2.0
Dairyland Seeds	DSR-1515/R2Y	1.5	57.4	10.9	1.7
Channel	1808R2	1.8	56.9	13.6	2.0
Renk	RS195NR2	1.9	56.9	11.9	1.3
REA Hybrids	78G12	1.8	56.8	11.5	1.7
REA Hybrids	R1515	1.5	56.7	11.8	1.7
Wensman	W 3158NR2	1.5	56.6	11.0	1.0
		Trial Average	57.0	12.0	1.5
		LSD (0.05)†	3.0	0.8	-
		C.V.‡	3.3	4.4	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2014 South Dakota Grow[®] Soybean Variety Trial Results - Volga

Table 1b. Glyphosate-resistant soybean variety performance results, continued (average of 3 replications) -Maturity Groups 0 & 1 at Volga, SD).

Varie	ety Information		Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Titan Pro	TP-17R54	1.7	56.4	12.9	2.0	
NK Brand	S19-Z9	1.9	55.8	19.0	2.3	
Peterson Farms Seed	12R12	1.1	55.7	11.2	2.0	
Prairie Brand	PB-1956R2	1.9	55.7	16.7	2.0	
Sodak Genetics	SD2101R2Y	1.0	55.4	10.9	1.0	
Proseed	30-18	1.8	55.3	11.9	1.7	
Peterson Farms Seed	14R11N	1.1	55.2	11.0	1.0	
Channel	1508R2	1.5	55.0	11.9	1.3	
REA Hybrids	75G12	1.5	54.4	11.1	1.0	
Renk	RS175NR2	1.7	54.3	13.6	1.7	
REA Hybrids	R1815	1.8	54.3	13.2	1.0	
Stine	19RF32	1.9	54.1	11.8	1.0	
Pioneer	P19T60R	1.9	54.0	11.2	2.0	
Prairie Brand	PB-1822R2	1.8	53.8	11.9	1.3	
Renk	RS183NR2	1.8	53.8	12.3	1.0	
Prairie Brand	PB-1794R2	1.7	52.8	12.4	1.3	
Pioneer	P16T04R	1.6	52.8	12.2	1.3	
Wensman	W 3170NR2	1.7	52.6	11.7	1.7	
Hefty	EXP H18R5	1.8	52.5	11.5	1.3	
Dairyland Seeds	DSR-1990/R2Y	1.9	52.4	15.7	2.3	
Stine	14RF06	1.4	52.0	11.4	1.3	
		Trial Average	57.0	12.0	1.5	
		LSD (0.05)†	3.0	0.8	-	
		C.V.‡	3.3	4.4	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Grow Soybean Variety Trial Results - Volga

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Table 2. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Group 2 at Volga, SD).

at volga, SD). Variet	y Information		Agronomic Performance			
	<u></u>	Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
NK Brand	S20-T6	2.0	58.3	11.4	1.0	
Check	Check	1.7	58.2	11.3	1.0	
Wensman	W 3200NR2	2.0	55.4	11.5	1.0	
Proseed	30-21	2.1	54.3	11.6	1.0	
Prairie Brand	EXP-1947R2	2.0	53.7	11.6	1.0	
REA Hybrids	80G11	2.0	53.4	11.9	1.0	
Prairie Brand	PB-2600R2	2.6	53.1	12.6	1.0	
Channel	2108R2	2.1	53.1	12.3	1.0	
Pioneer	P25T51R	2.5	53.0	14.9	1.0	
Federal Hybrids	F230RR2Y	2.3	52.8	12.8	1.3	
Renk	RS213NR2	2.1	52.6	12.1	1.0	
Prairie Brand	PB-2024R2	2.0	51.9	11.7	1.0	
Hefty	H21Y11	2.1	51.9	11.6	1.0	
Pioneer	P22T69R	2.2	51.5	11.8	1.0	
Nutech/G2 Genetics	7216	2.1	51.5	11.8	1.0	
Pioneer	P21T66R2	2.1	51.2	12.0	1.3	
Hefty	H23R5	2.3	51.2	11.9	1.3	
REA Hybrids	R2115	2.1	51.0	12.4	1.3	
Prairie Brand	PB-2230R2	2.2	50.9	12.0	1.0	
Titan Pro	20M1	2.0	50.7	11.5	1.0	
Prairie Brand	PB-2319R2	2.3	50.6	11.9	1.0	
Great Lakes Hybrids	2469R2	2.4	50.4	12.1	1.0	
Federal Hybrids	F224NRR2Y	2.2	49.9	11.9	1.0	
Hefty	H20R5	2.0	49.8	11.9	1.0	
Pioneer	P22T61R	2.2	49.7	11.7	1.0	
Nutech/G2 Genetics	7204R2	2.0	49.4	12.0	1.0	
Great Lakes Hybrids	2289R2	2.2	48.9	11.4	1.0	
Nutech/G2 Genetics	7233	2.3	48.2	11.9	1.0	
Prairie Brand	PB-2188R2	2.1	47.9	12.1	1.3	
Prairie Brand	PB-2556R2	2.5	43.1	13.7	1.3	
		Trial Average		12.0	1.1	
		LSD (0.05)†	2.9	0.5	0.4	
		C.V.‡	3.4	2.3	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Jonathan Kleinjan | SDSU Extension Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: N 44°17.915' W 096°55.393')

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Fertilizer: 0-0-80 preplant incorporated

Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Glyphosate, Authority MTZ

Post: Glyphosate, Select

Date seeded: 5/22/2014 Date harvested: 10/14/2014





Table 1a. Glyphosate-resistant soybean variety performance results (average of 3 replications) - Maturity Groups 1 & 2 at Beresford, SD).

Variet	y Information		Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Prairie Brand	EXP-1947R2	2.0	76.0	10.7	1.0	
Prairie Brand	PB-2419RR2	2.4	73.8	10.5	1.0	
Hoegemeyer	HPT 2860NRR	2.8	73.6	11.1	1.0	
Dairyland Seed	DST-26-005R2	2.6	73.1	10.7	1.3	
Channel	2207R2	2.2	72.8	10.8	1.0	
Dairyland Seed	DSR-2411/R2Y	2.4	72.7	10.4	1.0	
Channel	2306R2	2.3	72.5	10.6	1.0	
Nutech/G2 Genetics	7250	2.5	72.4	10.6	1.0	
Hoegemeyer	HPT 2511NRR	2.5	72.3	10.9	1.0	
Nutech/G2 Genetics	7157	1.5	72.3	10.7	1.0	
Hefty	EXP H20R5	2.0	72.2	10.8	1.7	
Stine	19RF32	1.9	72.1	10.7	1.0	
Prairie Brand	PB-2188R2	2.1	71.9	10.6	1.0	
Channel	2408R2	2.4	71.8	10.4	1.0	
Nutech/G2 Genetics	7240	2.4	71.8	10.8	1.3	
Prairie Brand	PB-2319R2	2.3	71.8	10.8	1.0	
Hefty	EXP H23R5	2.3	71.8	10.7	1.0	
Channel	2108R2	2.1	71.7	10.8	1.7	
Legend Seeds	LS 20R524N	2.0	71.7	10.8	1.0	
REA Hybrids	R2115	2.1	71.7	10.6	2.0	
Wensman	W 3228NR2	2.2	71.7	10.7	1.0	
Pioneer	P22T61R	2.2	71.6	10.8	1.3	
Pioneer	P22T69R	2.2	71.6	10.6	1.0	
Wensman	W 3214NR2	2.1	71.4	10.7	1.3	
Prairie Brand	PB-2600R2	2.6	71.3	10.8	1.3	
Hoegemeyer	HPT 2707RR	2.7	71.3	10.6	1.0	
Channel	1808R2	1.8	71.1	10.9	1.0	
Prairie Brand	PB-2024R2	2.0	70.9	10.7	1.3	
Wensman	W 3230R2	2.3	70.7	10.7	1.3	
Nutech/G2 Genetics	7273	2.7	70.7	10.9	1.3	
		Trial Average	69.5	10.8	1.2	
		LSD (0.05)†	3.9	0.3	0.6	
		C.V.‡	3.5	2.0	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 1b. Glyphosate-resistant soybean variety performance results, continued (average of 3 replications) -Maturity Groups 1 & 2 at Beresford, SD).

Variet	y Information		Agronomic Performance			
- Control		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Renk	RS265NR2	2.6	70.6	10.6	1.0	
Check	Check	1.7	70.5	10.6	1.0	
Pioneer	P25T51R	2.5	69.9	11.1	1.3	
Wensman	W 3254NR2	2.5	69.5	10.3	1.7	
REA Hybrids	R2415	2.4	69.4	10.6	1.3	
Wensman	W 3200NR2	2.0	69.3	10.5	1.0	
Titan Pro	TP-23R04	2.3	69.3	10.7	1.0	
Pioneer	92Y83	2.8	69.2	10.7	1.0	
Stine	28RE20	2.8	69.1	10.8	1.0	
Channel	2508R2	2.5	69.1	10.8	2.3	
Great Lakes Hybrids	2869R2	2.8	69.0	10.7	1.0	
Prairie Brand	PB-2556R2	2.5	68.9	10.6	1.0	
Sodak Genetics	SD2172R2Y	1.7	68.8	10.8	1.0	
Nutech/G2 Genetics	7204R2	2.0	68.8	10.7	1.0	
Nutech/G2 Genetics	7233	2.3	68.8	10.8	1.0	
Legend Seeds	LS 25R21N	2.5	68.7	11.2	2.3	
REA Hybrids	86G14	2.5	68.5	10.8	1.3	
Hefty	H21Y11	2.1	68.1	10.6	1.0	
Hefty	EXP H24R5	2.4	68.1	10.7	1.3	
Legend Seeds	LS 24R563N	2.4	67.6	10.9	1.0	
Titan Pro	TP-20R44	2.0	67.5	10.9	1.0	
Hefty	EXP H28R5	2.8	67.4	11.6	1.7	
Prairie Brand	PB-2997R2	2.9	67.3	11.0	1.7	
Nutech/G2 Genetics	7216	2.1	67.1	10.7	1.0	
Pioneer	P27T87R2	2.7	67.1	11.1	1.7	
Titan Pro	TP-21R63	2.1	67.0	10.8	1.0	
REA Hybrids	80G11	2.0	66.9	10.6	1.0	
Dairyland Seed	DSR-2250/R2Y	2.2	66.8	10.5	1.0	
Channel	2607R2	2.6	66.7	10.5	1.0	
Prairie Brand	PB-2230R2	2.1	66.6	10.6	1.3	
		Trial Average	69.5	10.8	1.2	
		LSD (0.05)†	3.9	0.3	0.6	
		C.V.‡	3.5	2.0	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

© Soybean Variety Trial Results - Beresford

Table 1c. Glyphosate-resistant soybean variety performance results, continued (average of 3 replications) -Maturity Groups 1 & 2 at Beresford, SD).

Varie	ty Information		Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Stine	24RE03	2.4	66.4	10.9	2.0	
Titan Pro	20M1	2.0	66.4	10.5	1.0	
Wensman	W 3275NR2	2.7	66.3	10.7	2.7	
Hefty	EXP H25R5	2.5	66.2	10.8	1.3	
Channel	2808R2	2.8	66.1	11.7	1.3	
Stine	22RD00	2.2	65.7	10.6	1.0	
Nutech/G2 Genetics	7261	2.6	64.9	10.9	1.0	
Great Lakes Hybrids	2789R2	2.7	64.6	11.0	2.0	
Sodak Genetics	SD2101R2Y	1.0	64.1	11.2	1.0	
Legend Seeds	LS 28R20N	2.8	62.1	10.8	1.7	
	_	Trial Average	69.5	10.8	1.2	
		LSD (0.05)+	3.9	0.3	0.6	
Λ		c.v.‡	3.5	2.0	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Beresford

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: N 44°17.915' W 096°55.393')

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Fertilizer: none Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Glyphosate, Authority MTZ

Post: none (hand-weeded)

Date seeded: 5/22/2014
Date harvested: 10/14/2014

Table 1. Non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) - Maturity Groups 1 & 2 at Beresford, SD).

Var	iety Information		Agronomic Performance					
		Maturity	Yield	Moisture			Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %	Oil %	(1-5)*	
Check	Check	1.7	72.5	11.6	35.0	19.7	1.0	
SD-AES	BROOKINGS	1.7	72.2	11.4	35.7	18.6	1.3	
Royhal	EXP-RS2101	1.9	70.8	11.7	38.1	17.8	1.7	
SD-AES	DEUEL	1.1	70.0	10.9	36.2	18.7	2.7	
SD-AES	DAVISON	2.2	68.7	11.2	36.2	17.5	1.3	
Richland IFC	MK9101	1.0	58.9	10.2	35.8	19.9	1.0	
Richland IFC	MK1016	1.0	52.0	12.1	37.4	17.1	1.3	
Trial Average			63.3	11.3	36.3	18.5	1.5	
LSD (0.05)†			3.9	0.7	0.6	0.3	0.9	
		C.V.‡	3.5	3.7	0.8	0.9	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Volga

Location: 1.5 mile south of Volga (57101) in Brookings County, SD

(GPS: N 44°17.915' W 096°55.393')

Cooperator: SDSU Volga Research Farm - Jack Ingemansen, manager

Soil Type: Brandt silty clay loam, 0-2% slope

Fertilizer: none

Previous crop: Spring wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Dual II

Post: Harmony GT

Date seeded: 5/19/2014

Date harvested: 10/6/2014 (Groups 0&1), 10/13/14 (Group 2)

Table 2. Non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) - Maturity Group 0 at Volga, SD).

Variet	y Information		Agronomic Performance					
		Maturity	Yield	Moisture			Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %	Oil %	(1-5)*	
Check	Check	1.7	57.9	9.8	33.8	17.9	1.3	
Peterson Farms Seed	L08-14§	0.8	55.0	9.1	33.2	17.7	1.0	
SD-AES	SURGE	0.7	52.2	9.3	33.3	18.7	1.0	
SD-AES	ROBERTS	0.6	51.0	8.7	32.4	18.6	1.3	
SD-AES	CODINGTON	0.9	50.2	8.9	34.9	18.0	1.0	
SDSU EXP	SD07CV-539	-	49.7	10.5	32.1	19.3	1.0	
SDSU EXP	SD08CV-0015	-	48.9	8.8	32.5	17.9	1.0	
SDSU EXP	SD06-415	-	47.0	9.1	31.4	19.8	1.7	
Richland IFC	MK0508	0.8	41.2	8.7	31.8	16.1	3.0	
Trial Average			50.3	9.2	32.8	18.2	1.4	
	LSD (0.05)†			1.5	0.7	0.6	0.6	
		C.V.‡	4.6	9.3	1.3	1.8	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

§ Liberty Link variety

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 3. Non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) - Maturity Groups 1 & 2 at Volga, SD).

Variet	Variety Information				Agronomic Performance				
		Maturity	Yield	Moisture			Lodging Score		
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %	Oil %	(1-5)*		
Check	Check	1.7	56.6	11.5	35.0	18.3	1.0		
SD-AES	BROOKINGS	1.7	48.3	12.4	36.0	16.9	1.0		
SD-AES	DAVISON	2.2	48.2	11.8	35.8	16.7	1.0		
Peterson Farms Seed	L11-13N§	1.1	48.0	11.6	35.3	18.5	1.0		
SD-AES	DEUEL	1.1	47.4	11.2	35.3	17.6	1.7		
Royhal	EXP-RS2101	1.9	46.1	13.4	38.4	17.1	1.0		
Richland IFC	MK1016	1	42.5	11.6	35.8	16.1	1.3		
Richland IFC	MK9101	1	39.5	11.6	35.0	20.3	1.0		
		Trial Average	45.6	12.1	36.0	17.8	1.1		
		LSD (0.05)+	3.8	1.6	1.1	0.9	0.8		
		C.V.‡	4.9	7.6	1.8	2.9	-		

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[§] Liberty Link variety



South Shore

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: N 45°06.368' W 097°06.120')

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: 0-100-50 preplant incorporated

Previous crop: Spring Wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Dual II

Post: Poast, Harmony SG

Date seeded: 5/21/2014

Date harvested: 10/10/2014

Table 4. Non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) - Maturity Group 0 at South Shore, SD).

Variet	Agronomic Performance						
Brand	Variety	Maturity Rating	Yield (bu/ac@13%)	Moisture %	Protein %	Oil %	Lodging Score (1-5)*
SDSU EXP	SD08CV-0015	-	62.1	9.8	35.4	17.3	1.3
SDSU EXP	SD07CV-539	-	61.2	10.4	32.7	18.9	1.0
Check	Check	1.7	61.1	9.5	34.3	17.5	1.0
Peterson Seed Farms	L08-14§	0.8	59.0	10.0	34.9	17.5	1.0
SD-AES	ROBERTS	0.6	59.0	9.7	34.6	18.1	1.0
SD-AES	SURGE	0.7	58.7	9.5	35.7	17.6	1.0
SD-AES	CODINGTON	0.9	57.9	9.4	35.2	17.9	1.0
SDSU EXP	SD06-415	-	55.7	9.7	34.4	18.7	1.3
Richland IFC	MK0508	0.8	50.0	9.4	33.9	15.9	3.7
		Trial Average	58.3	9.7	34.6	17.7	1.4
		LSD (0.05)+	2.3	0.7	0.7	0.3	0.5
		C.V.‡	2.3	4.2	1.2	1.1	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[§] Liberty Link variety



Table 5. Non-glyphosate resistant soybean variety performance results (average of 3 replications sorted by yield) - Maturity Group 1 at South Shore, SD).

Variet	Variety Information				Agronomic Performance				
Brand	Variety	Maturity Rating	Yield (bu/ac@13%)	Moisture %	Protein %	Oil %	Lodging Score (1-5)*		
Royhal	EXP-RS2101	1.9	64.2	11.6	38.4	16.5	2.3		
Check	Check	1.7	61.9	9.4	33.9	17.4	1.3		
SD-AES	DEUEL	1.1	59.8	10.5	36.2	16.9	2.0		
Peterson Farms Seed	L11-13N§	1.1	59.5	10.5	35.3	17.8	1.0		
SD-AES	BROOKINGS	1.7	58.9	12.3	36.5	17.3	1.3		
Richland IFC	MK1016	1.0	49.0	9.2	36.4	14.9	3.0		
Richland IFC	MK9101	1.0	48.9	11.3	35.4	20.0	1.0		
		Trial Average	55.9	11.5	36.3	17.6	1.8		
		LSD (0.05)†	4.5	1.3	0.8	0.7	0.6		
		C.V.‡	4.7	6.4	1.2	2.4	-		

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[§] Liberty Link variety



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 4 miles north and 1/2 mile west of Bancroft (57353) in Kingsbury County

(GPS: N 44°31.091' W 097°45.244)

Cooperator: Weerts Farm, Inc.

Soil Type: Houdek-Stickney loam, 0-2% slope, non-irrigated

Fertilizer: None
Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: Sulfentrazone + Metribuzin (Authority MTZ)

Post: Glyphosate (Roundup Power Max) + Fomesafen (Marvel)

Insecticide: None
Date seeded: 5/22/2015
Date harvested: 10/9/2015







Table 1a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Groups 0 & 1 at Bancroft, SD).

Varie	ety Information	Agronomic Performance			
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Thunder Seed	3619N R2Y	1.9	65.5	11.8	1.0
Rea Hybrids	R1815	1.8	65.1	12.1	1.0
Dairyland Seed	DSR-1721/R2Y	1.7	65.0	12.0	1.0
Thunder Seed	3114 R2Y	1.4	65.0	11.9	1.0
Channel	1808R2	1.8	65.0	11.9	1.0
NK Brand	S13-H5	1.3	64.8	12.1	1.0
Legend Seeds	LS 17R645N	1.6	64.5	11.8	1.0
Thunder Seed	3617 R2Y	1.7	64.4	11.7	1.0
Renk Seed	RS195NR2	1.9	64.3	11.8	1.0
Thunder Seed	3511N R2Y	1.1	64.3	12.1	1.0
NK Brand	S14-J7	1.4	64.2	12.0	1.0
Thunder Seed	3614N R2Y	1.4	64.1	11.9	1.0
Thunder Seed	3408N R2Y	0.8	64.0	12.7	1.0
Wensman	W3160NR2	1.6	64.0	12.1	1.0
Great Lakes Hybrids	1953NR2	1.9	63.9	11.8	1.0
Wensman	W3140R2	1.5	63.8	12.4	1.0
Prairie Brand	PB-1947R2	1.9	63.6	12.0	1.0
Rea Hybrids	R1716	1.7	63.6	11.5	1.0
Prairie Brand	PB-1611R2	1.6	63.3	11.5	1.0
Nutech/G2 Genetics	7169	1.6	63.3	12.3	1.0
Thunder Seed	3609N R2Y	0.9	63.2	12.9	1.0
Legend Seeds	LS 13R556N	1.3	63.1	12.0	1.0
Credenz	CZ 1787 RY	1.7	63.0	11.7	1.0
Wensman	W3195NR2	1.9	62.5	12.3	1.0
Prairie Brand	X15175R2	1.7	62.4	11.7	1.0
Wensman	W3170NR2	1.7	62.4	12.2	1.0
Federal Hybrids	F165RR2Y	1.6	62.4	11.5	1.0
Federal Hybrids	F195NRR2Y	1.9	62.3	11.7	1.0
Federal Hybrids	F185NRR2Y	1.8	62.3	12.3	1.0
Dairyland Seed	· I		62.3	12.0	1.0
		Trial Average	61.7	12.0	1.0
		LSD (0.05)+	3.4	0.4	0.0
		C.V.‡	4.1	2.5	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

 $[\]ddagger$ C.V. is a measure of variability or experimental error, 15% or less is acceptable. **Page 2**



Table 1b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Groups 0 & 1 at Bancroft, SD).

Variet	ty Information		Agronomic Performance			
Varie		Maturity	Yield	monne i errorn	Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Legend Seeds	LS 14R22N	1.4	62.1	12.0	1.0	
Pioneer	P18T26R2	1.8	62.1	11.9	1.0	
Rea Hybrids	R1515	1.5	62.1	11.6	1.0	
Prairie Brand	X15143R2	1.3	62.1	12.1	1.0	
NK Brand	S12-H2	1.2	62.1	12.0	1.0	
Federal Hybrids	F145NRR2Y	1.4	62.0	12.3	1.0	
Wensman	W3143NR2	1.4	61.8	12.0	1.0	
Prairie Brand	PB-1956R2	1.9	61.7	12.5	1.0	
Federal Hybrids	F154NRR2Y	1.5	61.5	12.1	1.0	
NK Brand	S15-P1	1.5	61.4	12.0	1.0	
Prairie Brand	PB-1466R2	1.4	61.4	12.2	1.0	
Titan Pro	TP-18R24	1.8	61.3	12.9	1.0	
NK Brand	S11-C8	1.1	61.2	12.5	1.0	
Prairie Brand	PB-1822R2	1.8	60.5	11.9	1.0	
Nutech/G2 Genetics	7172R2	1.7	60.3	11.8	1.0	
Legend Seeds	LS 17R500N	1.7	60.2	12.2	1.0	
Channel	1508R2	1.5	60.2	11.7	1.0	
Federal Hybrids	F124NRR2Y	1.2	59.4	12.0	1.0	
Renk Seed	RS175NR2	1.7	59.3	12.1	1.0	
Legend Seeds	LS 12R24N	1.2	59.3	12.6	1.0	
Sodak Genetics	SD2092R2Y	0.9	58.7	12.1	1.0	
Titan Pro	15M22	1.5	58.7	12.1	1.0	
Prairie Brand	PB-1586R2	1.5	58.2	11.6	1.0	
Check	Check	1.4	58.0	12.0	1.0	
Sodak Genetics	SD2172R2Y	1.7	56.9	11.7	1.0	
Federal Hybrids	F106NRR2Y	1.0	56.8	12.7	1.0	
Sodak Genetics	SD2173R2Y	1.7	56.3	12.0	1.0	
Dairyland Seed	DSR-1515/R2Y	1.5	55.5	11.9	1.0	
Credenz	CZ 767 RY	0.7	55.0	11.8	1.0	
Sodak Genetics	SD2101R2Y	1.0	54.5	12.3	1.0	
Sodak Genetics	SD2061R2Y	0.6	54.1	12.4	1.0	
		Trial Average	61.7	12.0	1.0	
		LSD (0.05)+	3.4	0.4	0.0	
		C.V.‡	4.1	2.5	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Bancroft, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Nutech/G2 Genetics	7250	2.5	67.8	21.7	1.0
Legend Seeds	LS 20R663N	2.0	67.4	11.7	1.0
Nutech/G2 Genetics	7204R2	2.0	66.4	13.4	1.0
Wensman	W3201NR2	2.0	66.1	13.2	1.0
Titan Pro	TP-20R25	2.0	66.0	13.1	1.0
Prairie Brand	PB-2296R2	2.2	65.6	14.5	1.0
Wensman	W3226NR2	2.2	65.4	13.2	1.0
Channel	2009R2	2.0	65.4	13.9	1.0
Great Lakes Hybrids	2469R2	2.4	65.0	13.1	1.0
Rea Hybrids	R2115	2.1	64.7	12.8	1.0
Dairyland Seed	DSR-2110/R2Y	2.1	64.5	14.1	1.0
Channel	2108R2	2.1	64.2	12.8	1.0
Channel	2408R2	2.4	64.1	19.6	1.0
Prairie Brand	PB-2419RR2	2.4	64.0	15.5	1.0
Rea Hybrids	R2016	2.0	63.8	13.2	1.0
Prairie Brand	PB-2230R2	2.1	63.4	13.5	1.0
Prairie Brand	PB-2156R2	2.1	63.4	12.7	1.0
Prairie Brand	PB-2024R2	2.1	63.3	13.0	1.0
Pioneer	P20T79R2	2.0	63.1	12.1	1.0
Federal Hybrids	F205NRR2Y	2.0	63.1	13.2	1.0
Wensman	W3200NR2	2.0	63.1	12.8	1.0
Nutech/G2 Genetics	7217R2	2.1	62.8	13.7	1.0
Channel	2309R2	2.3	62.2	15.5	1.0
Titan Pro	20M1	2.0	62.1	11.9	1.0
Great Lakes Hybrids	2258NR2	2.2	61.9	14.0	1.0
Nutech/G2 Genetics	7240	2.4	61.9	14.6	1.0
Great Lakes Hybrids	2551NR2	2.5	61.9	17.7	1.0
Prairie Brand	PB-2188R2	2.1	61.9	13.2	1.0
Credenz	CZ 2474 RY	2.4	61.4	15.2	1.0
Prairie Brand	PB-2600R2	2.6	61.3	35.4	1.0
Check	Check	1.4	60.3	12.1	1.0
Titan Pro	TP-20R44	2.0	59.3	12.5	1.0
Credenz	CZ 2788 RY	2.7	55.3	41.4	1.0
		Trial Average	63.3	15.6	1.0
		LSD (0.05)†		2.4	0.0
		C.V.‡	4.1	10.8	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 4 miles south and 2.5 miles east of Bath (57427) in Brown County, SD

(GPS: N 45°23.953' W 098°23.953')

Cooperator: Gordon and Roger Locken Farms

Soil Type: Great Bend-Beotia silt loams, 0-2% slopes

Fertilizer: none
Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: Roundup & Authority Assist

Post: Glyphosate (Roundup Power Max)

Insecticide: Tundra Supreme Date seeded: 5/21/2015

Date harvested: 10/1/2015





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at Bath, SD).

Variety Information			Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Proseed	PX509 N	0.9	72.5	7.8	1.0	
Nutech/G2 Genetics	6097R2	0.9	72.2	7.7	1.0	
Rea Hybrids	R0815	0.8	71.0	7.8	1.0	
Thunder Seed	3609N R2Y	0.9	70.3	8.0	1.0	
Check	Check	1.4	70.3	8.1	1.0	
Peterson Farms Seed	16R09N	0.9	70.2	8.0	1.0	
Prairie Brand	PB-0777R2	0.7	70.0	7.8	1.0	
Legacy Seeds	LS-0833N	0.8	69.4	7.9	1.0	
Prairie Brand	X15093R2	0.9	69.2	8.0	1.0	
Rea Hybrids	69G14	0.9	69.0	8.0	1.0	
Thunder Seed	3408N R2Y	0.8	68.7	7.8	1.0	
Prairie Brand	PB-0966R2	0.9	68.7	8.2	1.0	
Prairie Brand	PB-0863R2	0.8	68.5	7.7	1.0	
Wensman	W3072NR2	0.7	68.3	7.9	1.0	
Federal Hybrids	F084NRR2Y	0.8	68.3	8.0	1.0	
Wensman	W3090NR2	0.8	68.2	7.7	1.0	
Legacy Seeds	LS-0935N	0.9	68.1	8.0	1.0	
Dairyland Seed	DSR-0904/R2Y	0.9	68.0	7.7	1.0	
Prairie Brand	PB-1234R2	0.9	68.0	8.2	1.0	
Stine	07RF33	0.7	67.6	7.8	1.0	
Federal Hybrids	F066NRR2Y	0.6	67.5	7.9	1.0	
Dairyland Seed	DSR-0711/R2Y	0.7	66.9	8.3	1.0	
Credenz	CZ 767 RY	0.7	66.6	7.4	1.0	
Sodak Genetics	SD2061R2Y	0.6	66.4	7.6	1.0	
Sodak Genetics	SD2091R2Y	0.9	65.4	7.9	1.0	
Sodak Genetics	SD2092R2Y	0.9	62.7	8.3	1.0	
Channel	0709R2	0.7	60.8	7.9	1.0	
		Trial Average	68.2	7.9	1.0	
		LSD (0.05)†	2.8	0.3	0.0	
		C.V.‡	2.9	3.0		

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Bath, SD).

Variety Information			Agronomic Performance			
7 01.10		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
NK Brand	S13-H5	1.3	71.3	8.9	1.0	
Legacy Seeds	LS-1335N	1.3	71.3	7.9	1.0	
Prairie Brand	X15143R2	1.3	71.0	8.0	1.0	
Channel	1405R2	1.4	71.0	8.4	1.0	
Wensman	W3143NR2	1.4	71.0	8.2	1.0	
Thunder Seed	3614N R2Y	1.4	70.8	8.2	1.0	
Thunder Seed	3619N R2Y	1.9	70.4	9.5	1.0	
Peterson Farms Seed	16R10	1.0	70.3	8.1	1.0	
Stine	10RD03	1.0	70.2	7.7	1.0	
NK Brand	S10-P9	1.0	70.2	7.8	1.0	
Prairie Brand	X15175R2	1.7	70.1	9.0	1.0	
Pioneer	P14T52R2	1.4	70.1	7.7	1.0	
Prairie Brand	PB-1466R2	1.4	69.8	7.9	1.0	
Wensman	W3140R2	1.5	69.8	9.1	1.0	
Thunder Seed	3114 R2Y	1.4	69.7	8.8	1.0	
Credenz	CZ 1787 RY	1.7	69.5	8.5	1.0	
NK Brand	S14-J7	1.4	69.5	7.9	1.0	
Rea Hybrids	71G14	1.1	69.5	8.1	1.0	
Federal Hybrids	F145NRR2Y	1.4	69.4	8.3	1.0	
Check	Check	1.4	69.4	7.9	1.0	
Prairie Brand	PB-1947R2	1.9	69.4	11.0	1.0	
Renk Seed	RS175NR2	1.7	69.4	10.1	1.0	
Proseed	41-30 N	1.3	69.3	8.2	1.0	
Prairie Brand	PB-1822R2	1.8	69.3	9.4	1.0	
Thunder Seed	3617 R2Y	1.7	69.2	8.7	1.0	
Channel	1808R2	1.8	68.9	9.1	1.0	
Renk Seed	RS145NR2	1.4	68.7	8.1	1.0	
Federal Hybrids	F124NRR2Y	1.2	68.7	8.0	1.0	
Wensman	W3100NR2	1.0	68.6	8.1	1.0	
Sodak Genetics	SD2172R2Y	1.7	68.6	8.5	1.0	
		Trial Average	68.0	8.5	1.0	
		LSD (0.05)†	2.7	0.6	0.0	
		C.V.‡	2.9	5.3	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at Bath, SD).

Variety Information			Agronomic Performance		
rane		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Dairyland Seed	DSR-1120/R2Y	1.1	68.3	7.9	1.0
Dairyland Seed	DSR-1515/R2Y	1.5	68.3	8.0	1.0
Peterson Farms Seed	14R11N	1.1	68.3	8.0	1.0
Wensman	W3128R2	1.2	68.2	8.1	1.0
Pioneer	P16T17R2	1.6	68.1	8.0	1.0
Peterson Farms Seed	15R14N	1.4	67.9	8.2	1.0
Prairie Brand	PB-1956R2	1.9	67.8	10.2	1.0
Prairie Brand	PB-1611R2	1.6	67.8	9.1	1.0
Proseed	P230-18	1.9	67.3	9.2	1.0
Federal Hybrids	F106NRR2Y	1.0	67.3	8.0	1.0
Nutech/G2 Genetics	7138	1.3	67.1	8.3	1.0
NK Brand	S12-H2	1.2	67.0	8.3	1.0
Prairie Brand	PB-1794R2	1.7	66.6	9.5	1.0
Proseed	31-10N	1.1	66.5	8.0	1.0
Legacy Seeds	LS-1134N	1.1	66.2	8.3	1.0
NK Brand	S11-C8	1.1	66.1	8.0	1.0
Dairyland Seed	DSR-1340/R2Y	1.3	66.1	8.4	1.0
Channel	1508R2	1.5	65.9	8.4	1.0
Channel	1108R2	1.1	65.8	8.3	1.0
Nutech/G2 Genetics	7169	1.6	65.5	8.1	1.0
NK Brand	S15-P1	1.5	65.3	10.7	1.0
Peterson Farms Seed	14R13	1.3	65.1	8.4	1.0
Proseed	41-10 N	1.1	65.0	8.0	1.0
Sodak Genetics	SD2101R2Y	1.0	64.9	7.9	1.0
Thunder Seed	3511N R2Y	1.1	64.4	8.2	1.0
Pioneer	P15T46R2	1.5	63.8	8.3	1.0
Rea Hybrids	R1515	1.5	63.5	8.5	1.0
Prairie Brand	PB-1586R2	1.5	62.3	8.7	1.0
Sodak Genetics	SD2173R2Y	1.7	60.6	9.2	1.0
Trial Average			68.0	8.5	1.0
LSD (0.05)†			2.7	0.6	0.0
C.V.‡			2.9	5.3	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

 $[\]ddagger$ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: N 43°02.776' W 096°54.068')

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Fertilizer: 0-78-90 preplant incorporated

Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Roundup Power Max (glyphosate) + Dual (metolachlor) + Metribuzen

(metribuzen) + Sharpen (saflufenacil)

Post: Roundup Power Max (glyphosate) + Select Max (clethodim)

Insecticide: None

Date seeded: 5/19/2015 Date harvested: 10/13/2015



Soybean Variety Trial Results - Beresford

Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) -Maturity Group 1 at Beresford, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Thunder Seed	3619N R2Y	1.9	76.7	8.3	2.5
Channel	1808R2	1.8	73.7	8.3	2.8
Rend Seed	RS195NR2	1.9	73.4	8.2	1.5
Thunder Seed	3614N R2Y	1.4	72.9	8.2	2.8
Credenz	CZ 1787 RY	1.7	71.6	8.1	2.8
Check	Check	1.4	70.0	8.3	3.0
Thunder Seed	3511N R2Y	1.1	69.9	8.4	4.0
Thunder Seed	3617 R2Y	1.7	68.6	8.2	1.8
Thunder Seed	3114 R2Y	1.4	68.6	8.0	3.0
Sodak Genetics	SD2172R2Y	1.7	68.1	7.9	3.3
Sodak Genetics	SD2101R2Y	1.0	64.7	8.3	1.8
Sodak Genetics	SD2173R2Y	1.7	63.5	8.2	2.0
Λ		Trial Average	70.1	8.2	2.6
		LSD (0.05)+	2.7	0.2	0.7
		C.V.‡	2.7	1.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Soybean Variety Trial Results - Beresford

Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Beresford, SD).

Maturity Group 2 at Beresford, SD). Variety Information Agronomic Performance					
Variet	Agronomic Performance				
Drand	Varioty	Maturity	Yield	Moisture 9/	Lodging Score
Brand Dairyland Sood	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Dairyland Seed	DSR-2616/R2Y	2.6	75.9	8.0	2.3
Channel	2108R2	2.1	75.1	8.0	3.5
Pioneer	P31T11R	3.1	74.7	8.3	2.5
Channel	2808R2	2.8	74.2	8.3	2.3
Nutech/G2 Genetics	7273	2.7	74.0	8.2	2.0
Pioneer	P28T08R	2.8	73.9	7.6	2.0
Rea Hybrids	R2016	2.0	73.8	8.1	3.8
Stine	24RE03	2.4	73.6	8.3	3.0
Titan Pro	22M12	2.2	73.4	7.9	2.8
Nutech/G2 Genetics	7250	2.5	73.4	8.1	2.5
Prairie Brand	PB-2188R2	2.1	72.8	8.0	3.3
Great Lakes Hybrids	2551NR2	2.5	72.6	8.1	2.8
Rea Hybrids	R2115	2.1	72.5	8.2	3.8
Rea Hybrids	R2815	2.8	72.4	8.6	2.8
Dairyland Seed	DSR-2110/R2Y	2.1	72.1	8.2	3.3
Wensman	W3200NR2	2.0	71.8	8.1	2.3
Rea Hybrids	R2615	2.6	71.8	8.0	2.8
Channel	2908R2	2.9	71.7	8.3	3.8
Prairie Brand	PB-2600R2	2.6	71.7	8.0	2.0
Prairie Brand	PB-2556R2	2.5	71.4	8.1	3.0
Great Lakes Hybrids	2469R2	2.4	71.3	8.0	3.3
Credenz	CZ 2474 RY	2.4	71.2	8.3	2.8
Prairie Brand	PB-2876R2	2.8	70.9	8.3	2.3
Stine	24RH62	2.4	70.9	8.3	2.3
Rea Hybrids	R2316	2.3	70.9	8.0	2.8
Wensman	W3201NR2	2.0	70.8	8.1	3.0
Wensman	W3226NR2	2.2	70.7	8.0	3.3
Prairie Brand	PB-2419RR2	2.3	70.7	8.1	2.8
Prairie Brand	X15263R2	2.6	70.3	8.1	3.0
Channel	2607R2	2.6	70.3	7.9	3.0
	l	Trial Average	70.5	8.1	2.9
		LSD (0.05)†	3.4	0.3	0.7
		C.V.‡		2.7	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Soybean Variety Trial Results - Beresford

Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 2 at Beresford, SD).

Variety Information			Agronomic Performance		
Maturity			Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Channel	2408R2	2.1	70.2	8.1	2.8
Credenz	CZ 2788 RY	2.7	70.2	8.6	2.3
Renk Seed	RS246NR2	2.4	70.1	8.2	2.5
Prairie Brand	PB-2156R2	2.1	69.9	7.9	3.8
Channel	2609R2	2.6	69.7	8.1	4.0
Wensman	W3254NR2	2.5	69.7	8.1	2.5
Stine	29RE22	2.9	69.6	8.4	2.3
Check	Check	1.4	69.4	7.8	4.0
Prairie Brand	PB-2024R2	2.1	69.3	8.1	2.5
Titan Pro	TP-23R04	2.3	69.0	7.9	3.0
Titan Pro	TP-21R55	2.1	69.0	8.0	3.5
Channel	2009R2	2.0	68.9	8.0	3.8
Prairie Brand	PB-2296R2	2.2	68.5	8.1	3.3
Prairie Brand	PB-2486R2	2.4	68.1	8.2	2.3
Channel	2309R2	2.3	68.0	8.0	3.0
Dairyland Seed	DSR-2330/R2Y	2.3	68.0	8.1	2.5
Wensman	W3275NR2	2.7	68.0	8.4	3.8
Wensman	W3228NR2	2.2	67.8	7.7	3.0
Renk Seed	RS213NR2	2.1	67.7	8.1	3.0
Great Lakes Hybrids	2789R2	2.7	67.5	8.1	3.8
Renk Seed	RS216NR2	2.1	66.9	7.8	4.3
Nutech/G2 Genetics	7240	2.4	66.5	8.3	2.3
Stine	28RF02	2.8	66.2	7.9	2.0
Pioneer	P24T93R	2.4	64.4	8.0	2.0
Great Lakes Hybrids	2959NR2	2.9	62.4	8.0	2.0
		Trial Average	70.5	8.1	2.9
	3.4	0.3	0.7		
		3.5	2.7	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 2 miles east and 3/4 mile north of Geddes (57432) in Charles Mix County, SD

(GPS: N 43°15.997' W 098°39.898')

Cooperator: Curtis Sybesma

Soil Type: Highmore-Eakin silt loam, 0-2% slope

Fertilizer: none
Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: 2, 4-D Ester, Flumioxazin (Gangster), & Metribuzin (Tricor DF)

Post: Glyphosate (Roundup Power Max) + Clethodim (Intensity)

Insecticide: None
Date seeded: 5/27/2015
Date harvested: 10/6/2015





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Geddes, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Sodak Genetics	SD2172R2Y	1.7	62.5	11.2	1.0
Check	Check	1.4	61.5	11.3	1.0
Thunder Seed	3619N R2Y	1.9	61.0	11.2	1.0
Credenz	CZ 1787 RY	1.7	60.6	11.3	1.0
Thunder Seed	3614N R2Y	1.4	60.3	11.4	1.0
Thunder Seed	3114 R2Y	1.4	59.9	11.3	1.0
Renk Seed	RS195NR2	1.9	59.7	11.2	1.0
Thunder Seed	3617 R2Y	1.7	57.6	11.2	1.0
Sodak Genetics	SD2101R2Y	1	57.2	11.2	1.0
Thunder Seed	3511N R2Y	1.1	55.5	11.5	1.5
Rea Hybrids	R1815	1.8	54.4	11.2	1.0
Channel	1808R2	11.8	51.6	11.4	1.3
Sodak Genetics	SD2173R2Y	1.7	47.9	11.4	1.0
		Trial Average	57.7	11.3	1.0
		LSD (0.05)+	3.4	0.2	0.3
		C.V.‡	4.2	1.3	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Geddes, SD).

Variety Information			Agronomic Performance			
Maturity			Yield	monne i eriorn	Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Prairie Brand	PB-2296R2	2.2	60.6	10.4	1.0	
Prairie Brand	PB-2188R2	2.1	60.5	10.5	1.0	
Renk Seed	RS213NR2	2.1	60.2	10.5	1.0	
Channel	2607R2	2.6	60.0	10.4	1.3	
Rea Hybrids	R2316	2.3	60.0	10.6	1.3	
Wensman	W3228NR2	2.2	59.7	10.5	1.0	
Prairie Brand	PB-2419RR2	2.4	59.6	10.5	1.0	
Dairyland Seed	DSR-2110/R2Y	2.1	59.4	10.8	1.0	
Prairie Brand	PB-2486R2	2.4	59.3	10.9	1.0	
Titan Pro	22M12	2.2	59.3	10.8	1.0	
Renk Seed	RS246NR2	2.4	58.9	10.5	1.0	
Channel	2908R2	2.9	58.8	11.1	1.3	
Check	Check	1.4	58.8	10.4	1.0	
Dairyland Seed	DSR-2616/R2Y	2.6	58.7	10.8	1.0	
Prairie Brand	PB-2024R2	2.1	58.6	10.5	1.0	
Channel	2408R2	2.4	58.5	10.3	1.0	
Great Lakes Hybrids	2551NR2	2.5	58.4	10.7	1.0	
Titan Pro	TP-23R04	2.3	58.4	10.6	1.0	
Channel	2108R2	2.1	57.8	10.4	1.3	
Pioneer	P20T79R2	2	57.5	10.5	1.0	
Pioneer	P28T08R	2.8	57.5	10.8	1.0	
Prairie Brand	PB-2600R2	2.6	57.5	10.6	1.0	
Prairie Brand	PB-2876R2	2.8	57.4	11.0	1.0	
Nutech/G2 Genetics	7273	2.7	57.4	10.7	1.0	
Rea Hybrids	R2115	2.1	57.3	10.5	1.3	
Nutech/G2 Genetics	7250	2.5	57.3	10.4	1.0	
Prairie Brand	PB-2156R2	2.1	57.1	10.4	1.3	
Wensman	W3275NR2	2.7	57.1	10.8	1.5	
Pioneer	P24T93R	2.4	57.1	10.3	1.0	
Wensman	W3254NR2	2.5	56.9	10.5	1.0	
		Trial Average	57.2	10.6	1.1	
		LSD (0.05)†	3.4	0.6	0.3	
		C.V.‡	4.3	4.1	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 2 at Geddes, SD).

Variety Information			Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Channel	2009R2	2	56.8	10.7	1.0	
Titan Pro	TP-21R55	2.1	56.8	10.6	1.0	
Dairyland Seed	DSR-2330/R2Y	2.3	56.7	10.6	1.0	
Wensman	W3226NR2	2.2	56.5	10.5	1.0	
Renk Seed	RS216NR2	2.1	56.4	10.4	1.0	
Prairie Brand	PB-2556R2	2.5	56.0	10.7	1.0	
Wensman	W3214NR2	2.1	55.8	10.5	1.3	
Great Lakes Hybrids	2469R2	2.4	55.8	10.4	1.0	
Channel	2309R2	2.3	55.6	10.5	1.0	
Wensman	W3201NR2	2	55.4	10.4	1.0	
Great Lakes Hybrids	2789R2	2.7	55.3	10.6	1.5	
Credenz	CZ 2474 RY	2.4	55.0	10.9	1.0	
Credenz	CZ 2788 RY	2.7	54.8	11.5	1.0	
Channel	2808R2	2.8	54.7	11.7	1.0	
Prairie Brand	X15263R2	2.6	54.4	11.0	1.0	
Great Lakes Hybrids	2959NR2	2.9	54.2	11.9	1.0	
Rea Hybrids	R2016	2	54.0	10.4	1.0	
Channel	2609R2	2.6	53.9	10.6	1.3	
Nutech/G2 Genetics	7240	2.4	50.1	10.5	1.0	
		Trial Average	57.2	10.6	1.1	
		LSD (0.05)†	3.4	0.6	0.3	
		C.V.‡	4.3	4.1	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 7 1/2 miles south and 2 miles east of Wessington (57381) in Beadle County

(GPS: N 44°20.766' W 098°39.548')

Cooperator: Paul Fulton

Soil Type: Houdek-Prosper loams, 0-2% slopes

Fertilizer: 11-52-0 preplant

Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: RT3 (glyphosate) + Authority Assist (sulfentrazone) + LV6 (2,4-D)

Post: Roundup Weather Max (glyphosate)

Insecticide: None
Date seeded: 5/26/2015
Date harvested: 10/14/2015





Table 1a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Groups 0 & 1 at Miller, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Thunder Seed	3619N R2Y	1.9	59.8	7.5	1.0
Federal Hybrids	F165RR2Y	1.3	59.1	7.5	1.0
NK Brand	S13-H5	1.3	58.8	7.6	1.0
Prairie Brand	PB-1611R2	1.6	58.6	7.7	1.0
Pioneer	P18T26R2	1.8	58.3	7.5	1.0
Prairie Brand	X15143R2	1.3	58.2	7.4	1.0
Rea Hybrids	R1716	1.7	58.2	7.5	1.0
Thunder Seed	3114 R2Y	1.4	58.1	7.6	1.0
Thunder Seed	3614N R2Y	1.4	57.9	7.8	1.0
Wensman	W3143NR2	1.4	57.9	7.8	1.0
Wensman	W3140R2	1.5	57.8	7.6	1.0
Thunder Seed	3609N R2Y	0.9	57.5	8.3	1.0
Federal Hybrids	F154NRR2Y	1.5	57.4	7.5	1.0
Wensman	W3195NR2	1.9	57.4	7.7	1.0
Thunder Seed	3617 R2Y	1.7	57.3	7.5	1.0
Federal Hybrids	F195NRR2Y	1.9	57.2	7.6	1.0
Thunder Seed	3408N R2Y	0.8	56.8	8.3	1.0
Prairie Brand	X15175R2	1.7	56.8	7.5	1.0
Dairyland Seed	DSR-1515/R2Y	1.5	56.7	7.7	1.0
Credenz	CZ 1787 RY	1.7	56.6	7.7	1.0
Nutech/G2 Genetics	7172R2	1.7	56.4	7.5	1.0
NK Brand	S15-P1	1.5	56.3	8.1	1.0
NK Brand	S12-H2	1.2	56.3	7.6	1.0
Wensman	W3160NR2	1.6	56.1	7.4	1.0
Sodak Genetics	SD2061R2Y	0.6	56.1	7.8	1.0
NK Brand	S14-J7	1.4	56.0	7.5	1.0
Prairie Brand	PB-1822R2	1.8	55.9	7.7	1.0
Prairie Brand	PB-1947R2	1.9	55.9	7.8	1.0
Rea Hybrids	R1515	1.5	55.5	7.6	1.0
Rea Hybrids	R1815	1.8	55.4	7.3	1.0
		Trial Average LSD (0.05)†	55.3	7.7	1.0
		2.6	0.4	0.0	
		C.V.‡	3.4	3.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 1b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Groups 0 & 1 at Miller, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	Check	1.4	55.2	7.6	1.0
Channel	1808R2	1.8	55.1	7.3	1.0
Renk Seed	RS195NR2	1.9	54.9	7.6	1.0
Federal Hybrids	F145NRR2Y	1.4	54.6	7.7	1.0
Federal Hybrids	F124NRR2Y	1.2	54.5	7.5	1.0
Federal Hybrids	F185NRR2Y	1.8	54.5	7.6	1.0
Nutech/G2 Genetics	7169	1.6	54.4	7.7	1.0
Titan Pro	15M22	1.5	54.3	8.0	1.0
Dairyland Seed	DSR-1721/R2Y	1.7	53.8	7.8	1.0
Prairie Brand	PB-1466R2	1.4	53.7	7.5	1.0
Titan Pro	TP-18R24	1.8	53.7	7.6	1.0
Credenz	CZ 767 RY	0.7	53.5	7.8	1.0
Channel	1508R2	1.5	53.4	7.5	1.0
Thunder Seed	3511N R2Y	1.1	53.1	7.6	1.0
Sodak Genetics	SD2092R2Y	0.9	53.0	8.0	1.0
NK Brand	S11-C8	1.1	52.7	7.8	1.0
Sodak Genetics	SD2173R2Y	1.7	52.3	7.7	1.0
Federal Hybrids	F106NRR2Y	1.0	52.0	7.7	1.0
Wensman	W3170NR2	1.7	51.7	7.8	1.0
Prairie Brand	PB-1586R2	1.5	51.2	7.6	1.0
Sodak Genetics	SD2172R2Y	1.7	51.1	7.5	1.0
Sodak Genetics	SD2101R2Y	1.0	50.6	7.9	1.0
Prairie Brand	PB-1956R2	1.9	50.3	7.6	1.0
Renk Seed	RS175NR2	1.7	50.0	7.8	1.0
Dairyland Seed	DSR-1990/R2Y	1.7	48.9	7.8	1.0
		Trial Average	55.3	7.7	1.0
		LSD (0.05)†	2.6	0.4	0.0
		C.V.‡	3.4	3.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Miller, SD).

Variety Information			Agronomic Performance				
		Maturity	Yield		Lodging Score		
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*		
Nutech/G2 Genetics	7250	2.5	58.8	7.9	1.0		
Pioneer	P24T93R	2.4	58.6	7.4	1.0		
Prairie Brand	PB-2600R2	2.6	57.9	8.1	1.0		
Prairie Brand	PB-2419RR2	2.3	57.5	7.5	1.0		
Prairie Brand	PB-2230R2	2.1	56.6	7.4	1.0		
Nutech/G2 Genetics	7240	2.4	56.3	8.1	1.0		
Dairyland Seed	DSR-2110/R2Y	2.1	56.2	7.5	1.0		
Credenz	CZ 2788 RY	2.7	55.7	8.4	1.0		
Nutech/G2 Genetics	7204R2	2.0	55.5	7.5	1.0		
Rea Hybrids	R2016	2.0	55.4	7.3	1.0		
Prairie Brand	PB-2156R2	2.1	55.3	7.7	1.0		
Channel	2009R2	2.0	54.5	7.7	1.0		
Check	Check	1.4	54.5	7.4	1.0		
Nutech/G2 Genetics	7217R2	2.1	53.7	7.7	1.0		
Titan Pro	20M1	2.0	53.7	7.3	1.0		
Channel	2408R2	2.4	53.6	7.5	1.0		
Prairie Brand	PB-2024R2	2.1	53.3	7.4	1.0		
Credenz	CZ 2474 RY	2.4	53.2	7.8	1.0		
Prairie Brand	PB-2296R2	2.2	53.0	7.6	1.0		
Wensman	W3200NR2	2.0	52.9	7.4	1.0		
Federal Hybrids	F205NRR2Y	2.0	52.6	7.3	1.0		
Channel	2309R2	2.3	51.8	7.5	1.0		
Prairie Brand	PB-2188R2	2.1	51.7	7.6	1.0		
Wensman	W3201NR2	2.0	51.7	7.4	1.0		
Rea Hybrids	R2316	2.3	51.3	7.5	1.0		
Titan Pro	TP-20R25	2.0	51.0	7.3	1.0		
Pioneer	P20T79R2	2.0	50.5	7.4	1.0		
Titan Pro	TP-20R44	2.0	50.2	7.4	1.0		
Rea Hybrids	R2115	2.1	49.5	7.5	1.0		
Channel	2108R2	2.1	48.7	7.4	1.0		
		Trial Average LSD (0.05)†	53.8	7.5	1.0		
		2.5	0.4	0.0			
	C.V.‡ 3.3 3.3 -						

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: N 45°06.368' W 097°06.120')

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: 0-100-0 preplant incorporated

Previous crop: Spring Wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Dual II

Post: Glyphosate (Roundup Ultramax)

Date seeded: 5/28/2015 Date harvested: 9/29/2015





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at South Shore, SD).

Variety Information			Agronomic Performance		
Maturity			Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Dairyland Seed	DSR-0711/R2Y	0.7	54.9	9.2	2.5
Nutech/G2 Genetics	6097R2	0.9	54.3	8.9	2.0
Legend Seeds	LS 06R665N	0.6	54.1	9.0	2.3
Prairie Brand	X15093R2	0.9	53.4	9.1	2.0
Legend Seeds	LS 09R606N	0.9	53.3	9.1	2.5
Thunder Seed	3609N R2Y	0.9	52.8	9.2	2.0
Proseed	PX509 N	0.9	52.5	9.0	2.0
Wensman	W3072NR2	0.7	52.4	9.1	2.0
Legend Seeds	LS 06R565N	0.6	52.1	9.1	2.0
Prairie Brand	PB-0777R2	0.7	51.6	9.1	2.0
Dairyland Seed	DSR-0904/R2Y	0.9	51.5	8.9	2.0
Prairie Brand	PB-0966R2	0.9	51.5	9.2	2.0
Thunder Seed	3408N R2Y	0.8	51.4	9.1	2.3
Check	Check	1.4	51.3	9.1	2.0
Federal Hybrids	F084NRR2Y	0.8	51.1	9.1	1.5
Prairie Brand	PB-0863R2	0.8	51.0	9.0	2.0
Legend Seeds	LS 08R22N	0.8	50.5	8.9	1.8
Peterson Farms Seed	16R09N	0.9	50.4	9.1	2.5
Stine	07RF33	0.7	50.4	9.1	2.0
Prairie Brand	PB-1234R2	0.9	50.4	9.1	2.0
Federal Hybrids	F066NRR2Y	0.6	50.3	9.0	1.5
Channel	0709R2	0.7	50.2	8.9	2.0
Rea Hybrids	69G14	0.9	50.0	9.1	2.0
Sodak Genetics	SD2061R2Y	0.6	49.8	8.9	2.5
Legacy Seeds	LS-0935N	0.9	49.8	9.2	2.3
Pioneer	P09T74R2	0.9	49.0	8.9	2.3
Wensman	W3090NR2	0.9	48.5	8.9	1.8
Sodak Genetics	SD2091R2Y	0.9	48.0	9.0	2.3
Legacy Seeds	LS-0833N	0.8	47.9	9.0	2.0
Sodak Genetics	SD2092R2Y	0.9	47.6	9.1	2.0
Credenz	CZ 767 RY	0.7	47.5	8.9	2.8
		Trial Average	51.0	9.0	2.1
		LSD (0.05)†		0.2	0.6
		C.V.‡	3.8	1.2	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at South Shore, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Channel	1405R2	1.4	54.0	9.2	2.0
Prairie Brand	X15143R2	1.3	53.6	9.2	2.0
Proseed	31-10N	1.1	53.2	9.2	2.0
Prairie Brand	PB-1586R2	1.5	52.7	9.5	2.0
Legend Seeds	LS 10R551N	1.0	52.0	9.1	2.0
Check	Check	1.4	51.8	9.1	2.0
Prairie Brand	PB-1947R2	1.9	51.5	10.7	2.0
Peterson Farms Seed	16R10	1.0	51.5	9.4	1.5
Thunder Seed	3619N R2Y	1.9	51.4	9.8	1.8
Pioneer	P15T46R2	1.5	51.3	9.3	2.0
Proseed	41-10 N	1.1	51.2	9.4	2.3
Thunder Seed	3614N R2Y	1.4	51.2	9.4	1.8
Prairie Brand	PB-1822R2	1.8	51.1	9.6	2.0
Thunder Seed	3114 R2Y	1.4	51.1	9.1	2.0
Legacy Seeds	LS-1335N	1.3	51.1	9.2	2.0
NK Brand	S11-C8	1.1	51.0	9.2	1.8
Renk Seed	RS145NR2	1.4	51.0	9.2	2.0
Legend Seeds	LS 13R556N	1.3	50.9	9.2	1.8
Rea Hybrids	R1716	1.7	50.9	9.4	2.0
Peterson Farms Seed	15R14N	1.4	50.8	9.1	1.8
Dairyland Seed	DSR-1340/R2Y	1.3	50.8	9.3	2.0
Proseed	41-30 N	1.3	50.7	9.2	2.0
Wensman	W3143NR2	1.4	50.6	9.4	2.0
Federal Hybrids	F145NRR2Y	1.4	50.6	9.7	2.0
Wensman	W3121NR2	1.2	50.5	9.2	1.8
Federal Hybrids	F106NRR2Y	1.0	50.5	9.2	2.0
NK Brand	S10-P9	1.0	50.5	9.3	1.3
Legend Seeds	LS 12R24N	1.2	50.3	9.3	2.0
NK Brand	S13-H5	1.3	50.3	9.4	1.8
Wensman	W3128R2	1.2	50.1	9.3	1.5
Rea Hybrids	71G14	1.1	50.1	9.2	2.0
Sodak Genetics	SD2172R2Y	1.7	50.1	9.0	2.0
NK Brand	S12-H2	1.2	49.8	9.3	1.5
		Trial Average LSD (0.05)†	49.8	9.4	1.9
	2.9 4.2	0.6 4.4	0.5		
	C.V.‡				-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at South Shore, SD).

Variety Information			Agronomic Performance		
Maturity			Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Titan Pro	15M22	1.5	49.8	9.5	2.0
NK Brand	S15-P1	1.5	49.8	9.4	1.8
Wensman	W3140R2	1.5	49.7	9.8	1.8
NK Brand	S14-J7	1.4	49.7	9.2	1.8
Wensman	W3160NR2	1.6	49.4	9.4	1.8
Nutech/G2 Genetics	7169	1.6	49.4	9.5	1.8
Prairie Brand	PB-1466R2	1.4	49.3	9.2	2.0
Dairyland Seed	DSR-1120/R2Y	1.1	49.3	8.8	1.8
Rea Hybrids	R1515	1.5	49.3	9.5	2.0
Prairie Brand	PB-1956R2	1.9	49.2	11.5	2.0
Thunder Seed	3511N R2Y	1.1	49.1	9.3	2.0
Sodak Genetics	SD2101R2Y	1.0	49.0	9.0	2.0
Prairie Brand	PB-1611R2	1.6	49.0	9.6	1.8
Credenz	CZ 1787 RY	1.7	48.9	9.3	2.0
Channel	1808R2	1.8	48.8	10.3	2.0
Dairyland Seed	DSR-1515/R2Y	1.5	48.6	9.1	2.0
Nutech/G2 Genetics	7138	1.3	48.5	9.7	1.8
Federal Hybrids	F124NRR2Y	1.2	48.4	9.1	2.0
Thunder Seed	3617 R2Y	1.7	48.4	9.5	1.3
Pioneer	P16T17R2	1.6	48.3	9.3	2.0
Renk Seed	RS175NR2	1.7	48.2	10.4	2.0
Legacy Seeds	LS-1134N	1.1	48.1	9.2	2.0
Prairie Brand	PB-1794R2	1.7	47.9	10.1	1.8
Peterson Farms Seed	14R11N	1.1	47.9	9.4	2.0
Peterson Farms Seed	14R13	1.3	47.8	9.5	1.8
Wensman	W3100NR2	1.0	47.6	9.4	2.0
Stine	10RD03	1.0	47.5	9.0	1.8
Prairie Brand	X15175R2	1.7	47.3	9.3	2.0
Channel	1108R2	1.1	47.2	9.4	2.0
Proseed	P230-18	1.9	47.0	9.8	1.3
Renk Seed	RS166NR2	1.6	46.6	9.8	1.5
Channel	1508R2	1.5	46.4	9.7	2.0
Sodak Genetics	SD2173R2Y	1.7	44.3	9.5	1.8
		Trial Average	49.8	9.4	1.9
		LSD (0.05)†	2.9	0.6	0.5
		C.V.‡	4.2	4.4	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 1.5 miles south of Volga in Brookings County, SD

(GPS: N 44°18.152' W 096°55.138')

Cooperator: SDSU Volga Research Farm - Jack Ingemansen, manager

Soil Type: Brandt silty clay loam, 0-2% slope

Fertilizer: none Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Metolachlor (Dual II Magnum)

Post: Glyphosate (Roundup Power Max)

Insecticide: None Date seeded: 5/20/2015

Date harvested: 9/30/2015 (Group 0&1), 10/7/2015 (Group 2)





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at Volga, SD).

Varie	ty Information		Agro	onomic Perform	ance
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Thunder Seed	3408N R2Y	0.8	58.7	10.1	2.5
Check	Check	1.4	58.3	9.8	2.0
Proseed	PX509 N	0.9	57.9	10.1	2.5
Peterson Farms Seed	16R09N	0.9	57.8	10.0	2.3
Thunder Seed	3609N R2Y	0.9	57.1	9.9	2.3
Credenz	CZ 767 RY	0.7	56.1	9.7	2.5
Sodak Genetics	SD2092R2Y	0.9	53.3	9.7	2.5
Sodak Genetics	SD2061R2Y	0.6	51.3	9.8	2.5
	-	Trial Average	56.3	9.9	2.4
		LSD (0.05)+	3.1	0.4	0.7
		C.V.‡	3.8	2.5	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Volga, SD).

Variet	ty Information		Agronomic Performance			
7 01.10		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Credenz	CZ 1787 RY	1.7	60.2	9.8	2.3	
Great Lakes Hybrids	1953NR2	1.9	60.1	10.0	2.0	
Wensman	W3195NR2	1.9	59.9	11.5	2.5	
Wensman	W3170NR2	1.7	59.6	10.0	2.5	
Thunder Seed	3619N R2Y	1.9	59.5	9.9	2.3	
Prairie Brand	PB-1956R2	1.9	59.1	12.1	2.3	
Legend Seeds	LS 14R22N	1.4	59.0	9.7	2.3	
Legend Seeds	LS 13R556N	1.3	58.4	9.6	2.0	
Stine	19RF32	1.9	58.2	10.1	2.3	
Prairie Brand	PB-1822R2	1.8	58.0	10.2	2.5	
NK Brand	S19-B2	1.9	57.9	10.4	2.0	
Legend Seeds	LS 17R500N	1.7	57.7	9.9	2.0	
Federal Hybrids	F195NRR2Y	1.9	57.6	10.1	2.0	
Wensman	W3140R2	1.5	57.4	9.6	2.0	
Prairie Brand	PB-1586R2	1.5	57.1	9.6	2.0	
Proseed	P230-18	1.9	57.1	10.3	2.0	
Titan Pro	15M22	1.5	57.0	9.5	2.0	
Nutech/G2 Genetics	7169	1.6	56.9	9.9	2.0	
Wensman	W3160NR2	1.6	56.9	9.5	2.3	
Peterson Farms Seed	15R14N	1.4	56.8	9.4	2.3	
Prairie Brand	PB-1947R2	1.9	56.6	10.1	2.0	
Stine	18RH02	1.8	56.5	14.5	2.8	
Titan Pro	TP-18R24	1.8	56.5	10.2	2.8	
Proseed	41-10 N	1.1	56.4	9.8	3.0	
Sodak Genetics	SD2172R2Y	1.7	56.4	9.5	2.0	
Rea Hybrids	R1716	1.7	56.3	9.7	2.3	
NK Brand	S15-P1	1.5	56.3	9.7	2.0	
Pioneer	P19T78R	1.9	56.2	9.9	2.3	
Prairie Brand	PB-1466R2	1.4	56.2	9.6	2.3	
Dairyland Seed	DSR-1721/R2Y	1.7	56.1	10.1	2.0	
		Trial Average	56.0	9.9	2.2	
		LSD (0.05)†	2.6	0.5	0.6	
		C.V.‡	3.4	3.8	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at Volga, SD).

Varie	ety Information		Agronomic Performance				
		Maturity	Yield		Lodging Score		
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*		
Thunder Seed	3114 R2Y	1.4	56.1	9.8	2.3		
Renk Seed	RS195NR2	1.9	56.1	10.1	2.3		
Federal Hybrids	F185NRR2Y	1.8	55.9	10.2	2.0		
Thunder Seed	3511N R2Y	1.1	55.7	9.7	3.3		
Channel	1808R2	1.8	55.7	10.5	2.5		
Stine	14RD62	1.5	55.6	9.6	2.3		
Thunder Seed	3614N R2Y	1.4	55.5	9.4	2.3		
Nutech/G2 Genetics	7172R2	1.7	55.3	9.6	2.3		
Dairyland Seed	DSR-1990/R2Y	1.9	55.1	10.3	2.5		
Proseed	41-30 N	1.3	55.1	9.6	2.0		
Prairie Brand	PB-1611R2	1.6	55.0	9.5	2.3		
Prairie Brand	X15175R2	1.7	54.8	9.7	2.3		
Check	Check	1.4	54.7	9.4	2.0		
Dairyland Seed	DSR-1515/R2Y	1.5	54.7	9.4	2.0		
Legend Seeds	LS 17R645N	1.7	54.7	9.6	2.3		
Stine	14RF06	1.4	54.7	9.6	2.3		
Prairie Brand	X15143R2	1.3	54.5	9.4	2.0		
Wensman	W3143NR2	1.4	54.3	9.3	2.0		
Renk Seed	RS175NR2	1.7	54.3	10.2	2.3		
Peterson Farms Seed	16R10	1.0	53.7	9.7	2.8		
Proseed	31-10N	1.1	53.7	9.4	2.0		
Thunder Seed	3617R2Y	1.7	53.3	9.7	2.0		
Rea Hybrids	R1515	1.5	53.1	9.6	2.0		
Peterson Farms Seed	14R13	1.3	52.2	9.6	2.3		
Channel	1508R2	1.5	51.8	9.7	2.5		
Sodak Genetics	SD2101R2Y	1.0	51.5	9.4	2.3		
Peterson Farms Seed	14R11N	1.1	50.8	9.7	2.5		
Sodak Genetics	SD2173R2Y	1.7	50.5	9.7	2.0		
		Trial Average LSD (0.05)†	56.0	9.9	2.2		
		2.6	0.5	0.6			
		C.V.‡	3.4	3.8	-		

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground) statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 3a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Volga, SD).

	ty Information		Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
NK Brand	S20-T6	2.0	64.9	10.4	2.0	
Prairie Brand	PB-2296R2	2.2	62.8	12.3	3.0	
Great Lakes Hybrids	2551NR2	2.5	62.7	10.8	2.0	
NUTECH/G2 Genetics	7250	2.5	62.7	10.6	2.0	
Prairie Brand	PB-2230R2	2.1	62.3	10.6	2.3	
Wensman	W3200NR2	2.0	61.4	10.4	2.0	
Great Lakes Hybrids	2258NR2	2.2	61.3	11.1	2.3	
NUTECH/G2 Genetics	7204R2	2.0	61.3	11.1	2.5	
NK Brand	S21-M7	2.1	61.0	10.4	2.3	
Prairie Brand	PB-2419RR2	2.4	60.7	13.5	2.5	
Prairie Brand	PB-2600R2	2.6	60.3	12.9	2.0	
Rea Hybrids	R2016	2.0	60.3	11.2	2.8	
Legend Seeds	LS 20R663N	2.0	60.3	9.9	2.0	
Wensman	W3201NR2	2.0	60.3	10.7	2.0	
Channel	2408R2	2.4	60.2	16.7	2.8	
Channel	2108R2	2.1	60.2	10.6	2.5	
Legend Seeds	LS 20R524N	2.0	59.9	10.6	2.3	
Great Lakes Hybrids	2469R2	2.4	59.8	10.7	2.0	
Dairyland Seed	DSR-2110/R2Y	2.1	59.6	10.9	2.3	
Channel	2009R2	2.0	59.6	11.5	2.5	
Federal Hybrids	F205NRR2Y	2.0	59.3	10.7	2.3	
Pioneer	P24T93R	2.4	59.2	11.5	2.3	
Prairie Brand	PB-2188R2	2.1	59.1	12.1	2.8	
NUTECH/G2 Genetics	7217R2	2.1	59.0	11.0	2.0	
Channel	2309R2	2.3	59.0	10.9	2.5	
Prairie Brand	PB-2024R2	2.1	59.0	10.4	2.3	
Rea Hybrids	R2316	2.3	58.9	11.0	2.5	
Pioneer	P20T79R2	2.0	58.6	10.8	2.3	
Prairie Brand	PB-2156R2	2.1	58.4	11.1	2.5	
Check	Check	1.4	58.1	10.5	2.3	
		Trial Average	59.2	12.0	2.4	
		LSD (0.05)†	2.6	0.8	0.7	
		C.V.‡	3.2	4.6	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 3b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 2 at Volga, SD).

Varie	ety Information		Agro	onomic Perform	ance
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Titan Pro	TP-20R25	2.0	58.1	10.7	2.3
NUTECH/G2 Genetics	7240	2.4	57.6	11.7	2.3
Credenz	CZ 2474 RY	2.4	57.4	11.4	2.3
Federal Hybrids	F226NRR2Y	2.2	57.2	11.2	2.5
Titan Pro	TP-20R44	2.0	56.8	10.4	2.5
Titan Pro	20M1	2.0	55.3	10.8	2.3
Credenz	CZ 2788 RY	2.7	40.4	40.3	3.8
		Trial Average	59.2	12.0	2.4
		LSD (0.05)+	2.6	0.8	0.7
		C.V.‡	3.2	4.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Beresford

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: N 43°02.776' W 096°54.068')

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Fertilizer: 0-78-90 preplant incorporated

Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Roundup Power Max (glyphosate) + Dual (metolachlor) + Metribuzen

(metribuzen) + Sharpen (saflufenacil)

Post: Flexstar (fomesafen) + FirstRate (cloransulam) + Select (clethodim)

Insecticide: None
Date seeded: 5/19/2015
Date harvested: 10/13/2015

Table 1. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 1 & 2 at Beresford, SD).

Vari	ety Information		Agronomic Performance					
		Maturity	Yield	Moisture			Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %	Oil %	(1-5)*	
Check	Check	1.4	68.8	7.6	33.1	19.6	2.3	
Royhal	EXP-RS1601	1.9	66.4	7.6	33.6	18.5	2.3	
SD AES	Davison	2.2	65.5	8.1	33.4	18.5	2.5	
Royhal	EXP-RS2101	1.9	63.6	7.7	34.2	18.6	2.0	
SD AES	Brookings	1.7	60.4	7.8	32.9	19.7	3.0	
Richland IFC	MK41	1.4	56.8	7.9	34.4	18.3	1.3	
Richland IFC	MK9101	1.1	54.3	7.9	34.7	20.9	2.3	
Richland IFC	MK1016	1.0	44.7	7.8	35.8	16.7	4.3	
Trial Average		60.1	7.8	34.0	18.8	2.5		
LSD (0.05)†			4.2	0.2	1.2	1.5	0.9	
		C.V.‡	4.7	1.8	2.3	5.3	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Volga

Location: 1.5 mile south of Volga (57101) in Brookings County, SD

(GPS: N 44°18.152' W 096°55.138')

Cooperator: SDSU Volga Research Farm - Jack Ingemansen, manager

Soil Type: Brandt silty clay loam, 0-2% slope

Fertilizer: none Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Metolachlor (Dual II Magnum)

Post: None (cultivation and hand weeding)

Insecticide: None Date seeded: 5/20/2015

Date harvested: 9/30/2015 (Group 0&1), 10/7/2015 (Group 2)

Table 2. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 0, 1, & 2 at Volga, SD).

G10aps 0, 1, a 2 at vo	31 oups 0, 1, a 2 at 1016a, 35).								
Variet	y Information		Agronomic Performance						
		Maturity	Yield	Moisture			Lodging Score		
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %	Oil %	(1-5)*		
SD AES	Davison	2.2	57.5	10.9	35.3	17.8	1.8		
Check	Check	1.4	55.1	9.3	33.8	18.7	1.5		
SD AES	Brookings	1.7	54.6	9.9	34.0	18.1	2.0		
Royhal	EXP-RS1601	1.9	52.6	10.0	35.7	18.0	2.0		
Royhal	EXP-RS2101	1.9	51.3	11.4	36.4	18.4	2.0		
SD AES	Roberts	0.6	51.1	9.1	34.4	18.2	2.3		
SD AES	Codington	0.9	49.1	9.6	35.3	18.2	2.0		
Richland IFC	MK41	1.4	48.8	9.5	35.6	17.1	1.3		
Richland IFC	MK42	0.7	47.3	9.4	39.0	16.3	3.5		
Richland IFC	MK1016	1.0	45.9	9.4	36.6	15.4	2.5		
Richland IFC	EXP603	0.7	44.7	9.4	37.5	14.3	3.8		
Richland IFC	MK9101	1.1	43.1	10.1	35.0	21.0	2.0		
Richland IFC	MK0508	0.8	41.2	9.5	35.6	14.7	3.5		
Trial Average			49.4	9.8	35.7	17.4	2.3		
		LSD (0.05)+	2.7	0.3	0.9	0.9	0.6		
		C.V.‡	3.7	2.4	1.8	3.4	-		

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[§] Liberty Link variety



South Shore

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: N 45°06.368' W 097°06.120')

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: 0-100-0 preplant incorporated

Previous crop: Spring Wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Dual II

Post: Select (clethodim) + Harmony SG (thifensulfuron)

Insecticide: None

Date seeded: 5/28/2015
Date harvested: 9/29/2015

Table 3. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 0 & 1 at South Shore, SD).

Variet	y Information			Agrono	mic Perforn	nance	
		Maturity	Yield	Moisture			Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %		(1-5)*
Check	Check	1.4	48.1	10.3	34.9	18.3	2.0
Royhal	EXP-RS1601	1.9	44.7	12.2	37.8	17.5	2.0
Royhal	EXP-RS2101	1.9	43.3	14.5	38.4	18.6	2.0
SD AES	Roberts	0.6	42.1	9.1	33.8	18.4	2.0
SD AES	Brookings	1.7	42.0	11.2	36.1	17.5	2.0
SD AES	Codington	0.9	40.9	9.8	35.1	18.2	1.8
Richland IFC	EXP603	0.7	36.5	9.7	37.8	14.6	2.5
Richland IFC	MK9101	1.1	35.7	11.6	35.0	20.3	2.0
Richland IFC	MK42	0.7	35.3	9.3	38.5	15.8	2.3
Richland IFC	MK1016	1.0	31.7	9.8	38.8	15.2	2.0
Richland IFC	MK0508	0.8	30.8	9.4	36.0	14.7	2.3
Richland IFC	MK41	1.4	28.8	10.5	39.0	15.7	2.0
		Trial Average	38.3	10.6	36.8	17.1	2.1
		LSD (0.05)+	3.0	0.8	0.8	0.6	0.4
		C.V.‡	5.6	5.4	1.5	2.5	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[§] Liberty Link variety



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Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Beresford Location:

6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: N 43°02.776' W 096°54.068')

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Fertilizer: 0-78-90 preplant incorporated

Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Roundup Power Max (glyphosate) + Dual (metolachlor) + Metribuzen

(metribuzen) + Sharpen (saflufenacil)

Post: Flexstar (fomesafen) + FirstRate (cloransulam) + Select (clethodim)

Insecticide: None
Date seeded: 5/19/2015
Date harvested: 10/13/2015





Table 1. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 1 & 2 at Beresford, SD).

Varie	ty Information		Agronomic Performance				
		Maturity	Yield	Moisture			Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %	Oil %	(1-5)*
Credenz	CZ 2810 LL	2.8	71.4	8.2	33.8	18.9	1.5
NuTech	3252L	2.5	70.3	7.9	33.2	19.0	2.0
Credenz	CZ 1332 LL	1.3	69.5	7.7	31.7	18.5	1.3
Credenz	CZ 2312 LL	2.3	68.8	7.8	33.6	18.3	1.8
Credenz	CZ 2915 LL	2.9	68.0	8.4	34.3	18.3	2.3
NuTech	3205L	2.0	67.7	7.8	32.3	19.0	1.0
Check	Check	1.4	67.4	7.6	33.1	19.0	2.3
Credenz	CZ 1623 LL	1.6	67.3	7.9	33.6	17.9	2.5
NuTech	3273L	2.7	67.1	8.2	34.3	18.3	2.0
Credenz	CZ 2510 LL	2.5	67.0	7.7	34.1	18.1	1.8
Thunder Seed	5615LLN	1.5	66.3	7.8	33.0	18.7	2.3
Credenz	CZ 1845 LL	1.8	64.3	7.6	31.6	18.3	1.8
NuTech	3243L	2.4	63.3	7.7	33.8	18.3	1.5
Thunder Seed	5411LLN	1.1	62.6	7.7	34.1	18.2	3.0
		Trial Average	67.2	7.8	33.3	18.5	1.9
		LSD (0.05)+	4.4	0.2	1.2	1.2	0.6
		C.V.‡	4.7	1.7	2.6	4.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Volga

Location: 1.5 mile south of Volga (57101) in Brookings County, SD

(GPS: N 44°18.152' W 096°55.138')

Cooperator: SDSU Volga Research Farm - Jack Ingemansen, manager

Soil Type: Brandt silty clay loam, 0-2% slope

Fertilizer: none Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Metolachlor (Dual II Magnum)

Post: None (cultivation and hand weeding)

Insecticide: None Date seeded: 5/20/2015

Date harvested: 9/30/2015 (Group 0&1), 10/7/2015 (Group 2)

Table 2. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 0 & 1 at Volga, SD).

5 5. 2 5. 5 5. 5 5. 5 5. 5 5. 5 5. 5 5.								
Variet	y Information		Agronomic Performance					
		Maturity	Yield	Moisture			Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %	Oil %	(1-5)*	
Credenz	CZ 525 LL	0.5	61.7	9.2	35.0	19.5	2.0	
Credenz	CZ 1332 LL	1.3	60.5	9.4	34.9	18.4	1.3	
Credenz	CZ 1845 LL	1.8	59.2	9.9	33.1	19.6	1.8	
Credenz	CZ 1623 LL	1.6	58.8	10.2	35.5	18.7	2.0	
Check	Check	1.4	57.5	9.3	33.9	19.5	2.0	
Credenz	CZ 848 LL	0.8	57.2	9.1	34.1	19.2	1.5	
Thunder Seed	5411LLN	1.1	56.3	9.1	34.4	20.0	2.0	
Thunder Seed	5615LLN	1.5	55.7	10.0	35.0	18.9	2.3	
NuTech	3181L	1.8	55.1	9.9	35.5	18.7	2.0	
Credenz	CZ 121 LL	0.1	48.7	9.1	33.4	19.3	2.0	
		Trial Average	57.1	9.5	34.5	19.2	1.9	
		LSD (0.05)†	2.4	0.4	0.5	0.3	0.4	
		C.V.‡	2.9	2.9	0.9	1.1	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[§] Liberty Link variety



Table 3. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 2 at Volga, SD).

Var	iety Information		Agronomic Performance				
		Maturity	Yield	Moisture			Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %	Oil %	(1-5)*
Credenz	CZ 2510 LL	2.5	64.9	12.2	36.4	19.5	1.8
Credenz	CZ 2312 LL	2.3	62.8	11.0	36.1	18.7	2.0
NuTech	3243L	2.4	62.3	11.9	36.4	19.0	2.0
NuTech	3252L	2.5	60.0	15.6	37.7	21.0	2.3
Check	Check	1.4	57.6	10.6	34.6	19.3	2.0
NuTech	3205L	2.0	57.4	11.2	34.2	19.4	2.0
Credenz	CZ 2915 LL	2.9	53.7	31.5	41.6	21.7	2.5
		Trial Average	59.8	14.8	36.7	19.8	2.1
		LSD (0.05)+	2.6	0.8	0.9	0.4	0.5
		C.V.‡	3.0	3.8	1.7	1.4	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[§] Liberty Link variety



South Shore

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: N 45°06.368' W 097°06.120')

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: 0-100-0 preplant incorporated

Previous crop: Spring Wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Dual II

Post: Select (clethodim) + Harmony SG (thifensulfuron)

Insecticide: None

Date seeded: 5/28/2015
Date harvested: 9/29/2015

Table 4. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 0 & 1 at South Shore, SD).

0 & 1 at South Shore, Sb).									
Varie	ty Information		Agronomic Performance						
		Maturity	Yield	Moisture			Lodging Score		
Brand	Variety	Rating	(bu/ac@13%)	%	Protein %	Oil %	(1-5)*		
NuTech	3126L	1.2	51.4	9.4	35.0	18.0	2.0		
Credenz	CZ 1332 LL	1.3	48.5	9.3	35.4	18.0	2.0		
Thunder Seed	5615LLN	1.5	48.5	10.6	35.9	18.4	2.0		
Credenz	CZ 525 LL	0.5	47.2	8.9	34.5	19.4	2.0		
Check	Check	1.4	47.0	9.1	34.8	19.2	2.0		
NuTech	3181L	1.8	46.8	10.8	36.1	18.2	2.0		
NuTech	3153L	1.5	44.8	10.8	37.2	18.3	2.0		
Credenz	CZ 1623 LL	1.6	44.7	10.1	35.7	18.4	2.0		
Credenz	CZ 848 LL	0.8	43.2	9.4	35.0	18.7	1.5		
Credenz	CZ 1845 LL	1.8	42.6	10.9	36.6	17.7	2.0		
Thunder Seed	5411LLN	1.1	40.9	9.0	35.7	19.1	2.0		
Credenz	CZ 121 LL	0.1	37.9	8.9	32.7	19.3	2.3		
		Trial Average	45.3	9.8	35.4	18.5	2.0		
		LSD (0.05)+	2.8	0.4	0.8	0.3	0.4		
		C.V.‡	4.2	3.2	1.6	0.9	-		

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[§] Liberty Link variety



2016 South Dakota Soybean Variety Trial Results - Bancroft

Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 2.5 miles north of Bancroft (57353) in Kingsbury County

(GPS: N 44°31.091' W 097°45.244)

Cooperator: Weerts Farm, Inc.

Soil Type: Houdek-Stickney-Tetonka loam, 0-2% slope, non-irrigated

Fertilizer: None
Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: 14 oz Authority MTZ (metribuzin)

Post: 32 oz Roundup (glyphosate); 32 oz Roundup(glyphosate) + 9 oz Sinister

(fomesafen)

Insecticide: None
Date seeded: 5/17/2016
Date harvested: 10/21/2016



A Service of SDSU Extension

2016 South Dakota Soybean Variety Trial Results - Bancroft

Table 1a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Groups 0 & 1 at Bancroft, SD).

Variety Information			Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Thunder Seed	3614 R2YN	1.4	79.3	12.0	1.0	
Prairie Brand	X16153R2	1.5	79.1	12.0	1.0	
Prairie Brand	PB-1566R2	1.5	77.7	12.1	1.0	
Renk	RS147NR2	1.4	77.6	12.2	1.0	
Prairie Brand	PB-1466R2	1.4	77.2	12.4	1.0	
Check	Check	1.4	77.0	12.2	1.0	
Federal Hybrids	F147NRR2Y	1.4	76.5	12.3	1.0	
Peterson Farms Seed	17X13	1.3	76.5	12.3	1.0	
Wensman	W3143NR2	1.4	76.3	12.3	1.0	
Prairie Brand	PB-1376R2	1.3	75.9	12.0	1.0	
NorthStar Genetics	1661NR2	1.6	75.9	12.4	1.0	
Federal Hybrids	F195NRR2Y	1.9	75.2	12.1	1.0	
Wensman	W3160NR2	1.6	75.0	12.1	1.0	
Federal Hybrids	F154NRR2Y	1.5	74.8	12.3	1.0	
NorthStar Genetics	1911NR2	1.9	74.8	11.9	1.0	
Federal Hybrids	F1670NR2X	1.6	74.7	12.1	1.0	
Thunder Seed	EXP 8713N	1.3	74.6	12.3	1.0	
Channel	1405R2	1.4	74.0	12.1	1.0	
Federal Hybrids	F106NRR2Y	1.0	73.9	12.7	1.0	
Prairie Brand	PB-1611R2	1.6	73.8	12.0	1.0	
Federal Hybrids	F1370NR2X	1.3	73.7	12.2	1.0	
Federal Hybrids	F185NRR2Y	1.8	73.6	12.3	1.0	
Thunder Seed	3511 R2YN	1.1	73.5	12.4	1.0	
Prairie Brand	PB-1822R2	1.8	73.4	12.5	1.0	
Renk	RS137NX	1.3	73.3	12.4	1.0	
Thunder Seed	3408 R2YN	0.8	72.3	12.6	1.0	
Thunder Seed	3619 R2YN	1.9	72.2	11.7	1.0	
Renk	RS175NR2	1.7	72.2	12.2	1.0	
Renk	RS107NX	1.0	72.1	12.3	1.0	
Renk	RS145NR2	1.4	71.8	12.5	1.0	
		Trial Average	71.2	12.2	1.0	
LSD (0.05)†			4.2	0.4	-	
C.V.‡			4.2	2.5	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2016 South Dakota Soybean Variety Trial Results - Bancroft

Table 1b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Groups 0 & 1 at Bancroft, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
NuTech	7172R2	1.7	71.4	12.2	1.0
Titan Pro	TP-16X36	1.6	70.8	11.9	1.0
NuTech	7127R2	1.2	70.2	12.7	1.0
Channel	1808R2	1.8	70.0	12.1	1.0
Thunder Seed	EXP 8710N	1.0	69.9	12.3	1.0
Dairyland Seed	DSR-1870/R2Y	1.8	69.7	11.9	1.0
Prairie Brand	PB-1956R2	1.9	69.7	12.1	1.0
Dairyland Seed	DSR-1721/R2Y	1.7	69.1	12.5	1.0
Prairie Brand	PB-1787R2	1.7	68.2	12.2	1.0
Peterson Farms Seed	17X18N	1.8	67.5	12.1	1.0
Prairie Brand	PB-1947R2	1.9	67.1	11.9	1.0
Federal Hybrids	F1260NR2X	1.2	66.8	12.2	1.0
Peterson Farms Seed	16X12N	1.2	66.7	12.3	1.0
Titan Pro	TP-19X06	1.9	66.2	12.1	1.0
Peterson Farms Seed	17X14N	1.4	64.6	12.2	1.0
Titan Pro	TP-17X26	1.7	64.4	12.3	1.0
Thunder Seed	EXP 8718N	1.8	62.3	12.1	1.0
Peterson Farms Seed	17X17N	1.7	60.7	11.9	1.0
Renk	RS177NX	1.7	60.5	12.2	1.0
Wensman	W1183NRX	1.8	60.0	11.9	1.0
Federal Hybrids	F1470NR2X	1.4	45.3	12.3	1.0
		Trial Average	71.2	12.2	1.0
		LSD (0.05)†	4.2	0.4	-
		C.V.‡	4.2	2.5	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2016 South Dakota Soybean Variety Trial Results - Bancroft

Table 2. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Bancroft, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	PB-2419RR2	2.4	71.7	11.3	1.0
Prairie Brand	PB-2296R2	2.2	71.4	11.3	1.0
NorthStar Genetics	2111NR2	2.1	71.2	11.4	1.0
Prairie Brand	PB-2156R2	2.1	70.9	11.4	1.0
Titan Pro	TP-21X46	2.1	70.6	11.4	1.0
Check	Check	1.4	70.4	11.5	1.0
Wensman	W1208NRX	2.0	69.8	11.3	1.0
Wensman	W3226NR2	2.2	69.6	11.3	1.0
NorthStar Genetics	2031NR2	2.0	69.2	11.6	1.0
Prairie Brand	PB-2600R2	2.6	68.8	11.7	1.0
Prairie Brand	PB-2024R2	2.0	68.5	11.6	1.0
Dairyland Seed	DSR-2017/R2Y	2.0	67.7	11.3	1.0
Wensman	W1233RX	2.3	67.7	11.2	1.0
Federal Hybrids	F2170NR2X	2.1	67.6	11.3	1.0
Wensman	W3201NR2	2.0	67.1	11.4	1.0
Federal Hybrids	F205NRR2Y	2.0	66.8	11.6	1.0
NuTech	7224	2.2	66.4	11.2	1.0
Titan Pro	TP-20R25	2.0	65.5	11.5	1.0
NorthStar Genetics	2281NR2	2.2	65.1	11.3	1.0
Dairyland Seed	DSR-2110/R2Y	2.1	64.3	11.5	1.0
NuTech	7217R2	2.1	64.2	11.7	1.0
Channel	2108R2	2.1	63.5	11.4	1.0
		Trial Average	68.1	11.4	1.0
		LSD (0.05)†	3.9	0.2	-
		C.V.‡	4.1	1.3	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

 $[\]ddagger$ C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 4.5 miles south and 1.25 miles east of Bath (57427) in Brown County, SD

(GPS: 45.39281, -98.30567)

Cooperator: Gordon and Roger Locken Farms

Soil Type: Great Bend-Beotia silt loams, 0-2% slopes

Fertilizer: none
Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: Authority Assist (sulfentrazone + imazethapyr)

Post: 32 oz Roundup (glyphosate)

Insecticide: none

Date seeded: 5/17/2016

Date harvested: 10/3/2016





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at Bath, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Stine	09RH26	0.9	73.3	9.8	1.3
Renk	RS096NR2	0.9	73.2	9.9	1.0
Legacy Seed	LS-0935NRR2	0.9	73.2	9.9	1.3
Northstar Genetics	NS 0941NR2	0.9	72.9	9.8	1.0
Wensman	W3080NR2	0.8	72.5	9.6	1.0
Thunder Seed	3408 R2YN	0.8	72.4	9.7	1.3
Federal Hybrids	F087NRR2Y	0.8	71.6	9.8	1.0
Legacy Seed	LS-0833NRR2	0.8	71.6	9.8	1.0
Legacy Seed	LS-0837NRR2	0.8	71.5	9.6	1.0
Nutech	6097R2	0.9	71.2	9.3	1.0
Renk	RS084NR2	0.8	71.1	9.7	1.0
Prairie Brand	PB-1257R2	0.9	71.0	9.5	1.3
Dairyland Seed	DSR-0988/R2Y	0.9	71.0	9.7	1.0
Check	Check	1.4	70.3	9.5	1.0
Prairie Brand	PB-0777R2	0.7	70.2	9.8	1.3
Prairie Brand	PB-0987R2	0.8	70.0	9.8	1.0
Channel	0906R2	0.9	69.7	9.3	1.0
Dairyland Seed	DSR-0807/R2Y	0.8	68.8	9.4	1.0
Stine	07RF33	0.7	68.6	9.5	1.0
Renk	RS067NR2	0.6	68.4	9.7	1.0
Proseed	XT609	0.9	67.7	9.8	1.0
Dairyland Seed	DSR-0711/R2Y	0.7	67.0	9.1	1.0
Mycogen Seeds	5B033R2	0.3	66.3	9.7	1.0
Prairie Brand	PB-0863R2	0.8	65.8	9.5	1.0
Federal Hybrids	F067NRR2Y	0.6	63.9	9.7	1.0
Mycogen Seeds	5B040R2	0.4	62.5	9.5	1.0
Federal Hybrids	F0960NR2X	0.9	61.9	9.8	1.0
Federal Hybrids	F0860NR2X	0.8	61.3	9.4	1.3
Wensman	W3072NR2	0.7	61.1	9.7	1.0
Mycogen Seeds	5B024R2	0.2	61.0	9.2	1.0
Mycogen Seeds	5G009R2	0.09	58.0	9.3	1.0
		Trial Average	68.4	9.6	1.0
		LSD (0.05)†	3.4	0.2	0.3
		C.V.‡	3.5	1.5	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Bath, SD).

Vario			Agronomic Performance			
Variety Information Maturity						
Drand	Variati	•		Maisture 0/	Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Prairie Brand	PB-1566R2	1.5	75.5	9.1	1.0	
Thunder Seed	3614 R2YN	1.4	75.3	9.2	1.3	
Peterson Farms Seed	16R10	1.0	74.7	9.2	1.0	
Wensman	W3100NR2	1.0	74.2	9.4	1.0	
Stine	10RD03	1.0	73.8	9.0	1.0	
Dairyland Seed	DSR-1526/R2Y	1.5	73.8	9.1	1.0	
Federal Hybrids	F106NRR2Y	1.0	73.3	9.4	1.0	
Stine	19RF32	1.9	73.0	9.6	1.0	
Wensman	W1129NRX	1.2	72.8	9.3	1.0	
Prairie Brand	PB-1376R2	1.3	72.7	9.1	1.0	
Federal Hybrids	F1370NR2X	1.3	72.5	9.2	1.0	
Northstar Genetics	NS 1390NR2	1.3	72.4	9.3	1.0	
Prairie Brand	PB-1947R2	1.9	72.3	9.4	1.0	
Channel	1405R2	1.4	72.3	9.2	1.0	
Legacy Seed	LS-1335NRR2	1.3	72.3	9.2	1.0	
Proseed	XT613	1.3	72.2	9.1	1.0	
Prairie Brand	PB-1466R2	1.4	71.7	9.2	1.5	
Thunder Seed	3511 R2YN	1.1	71.7	9.2	1.3	
Northstar Genetics	NS 1661 NR2	1.6	71.6	9.1	1.3	
Wensman	W3143NR2	1.4	71.5	9.0	1.0	
Dairyland Seed	DSR-1313/R2Y	1.3	71.2	9.1	1.3	
Check	Check	1.4	71.2	9.2	1.0	
Stine	14RD62	1.4	71.2	9.1	1.0	
Peterson Farms Seed	17X13	1.3	70.9	9.2	1.0	
Thunder Seed	3619 R2YN	1.9	70.3	9.0	1.0	
Thunder Seed	EXP 8713N	1.3	70.2	9.2	1.0	
Prairie Brand	PB-1611R2	1.6	70.2	9.1	1.0	
Prairie Brand	PB-1822R2	1.8	69.9	9.2	1.0	
Renk	RS107NX	1.0	69.5	9.3	1.0	
Prairie Brand	X16153R2	1.5	69.2	9.2	1.3	
	1	Trial Average	70.0	9.2	1.1	
	3.1	0.2	0.4			
		LSD (0.05)† C.V.‡	3.1	1.3	-	
		0.1.1	ÿ.±	1.5	l	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at Bath, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Legacy Seed	LS-1134NRR2	1.1	69.1	9.3	1.5
Federal Hybrids	F1470NR2X	1.4	69.1	9.1	1.3
Proseed	XT614	1.4	67.8	9.2	2.5
Proseed	XT610	1.0	67.4	9.3	1.0
Northstar Genetics	NS 1040NR2	1.1	66.9	9.3	1.5
Wensman	W1106NRX	1.0	66.4	9.2	1.0
Thunder Seed	EXP 8710N	1.0	66.1	9.3	1.0
Dairyland Seed	DSR-1120/R2Y	1.1	65.8	9.0	1.0
Prairie Brand	PB-1787R2	1.7	65.7	9.3	1.0
Prairie Brand	PB-1956R2	1.9	65.4	9.7	1.0
Peterson Farms Seed	17X14N	1.4	64.6	9.2	1.5
Peterson Farms Seed	16X12N	1.2	63.8	9.3	1.0
Federal Hybrids	F1260NR2X	1.2	61.4	9.3	1.0
Thunder Seed	EXP 8718N	1.8	59.6	9.2	1.0
		Trial Average	70.0	9.2	1.1
		LSD (0.05)+	3.1	0.2	0.4
		C.V.‡	3.1	1.3	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 5 1/4 miles south of St. Lawrence (57381) in Beadle County

(GPS: 44.43811, -98.92559)

Cooperator: Paul Fulton

Soil Type: Houdek-Prosper loams, 0-2% slopes

Fertilizer: None
Previous crop: Millet
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: 6 oz Authority Assist (sulfentrazone + imazethapyr), 32 oz RT3

(glyphosate), 8 oz LV6, 1 qt/100 gal Bronc Max (water conditioner)

Post: 44 oz Roundup Weathermax (glyphosate), 1 gt/100 gal Bronc Max

Insecticide: None
Date seeded: 5/18/2016
Date harvested: 9/29/2016





Table 1a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Groups 0 & 1 at Miller, SD).

Variety Information			Agronomic Performance		
Maturit			Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	PB-1947R2	1.9	66.3	9.8	1.0
Federal Hybrids	F185NRR2Y	1.8	64.5	10.2	1.0
Renk	RS147NR2	1.4	63.6	9.3	1.0
Federal Hybrids	F147NRR2Y	1.4	62.2	9.5	1.0
Federal Hybrids	F195NRR2Y	1.9	59.8	9.5	1.0
Prairie Brand	PB-1822R2	1.8	59.4	9.5	1.0
Prairie Brand	X16153R2	1.5	59.0	9.9	1.0
Peterson Farms Seed	17X17N	1.7	58.9	10.1	1.0
Thunder Seed	EXP 8718N	1.8	58.2	10.1	1.0
Prairie Brand	PB-1956R2	1.9	58.2	10.0	1.0
Renk	RS137NX	1.3	58.0	9.5	1.0
Titan Pro	TP-17X26	1.7	57.5	9.7	1.0
Nutech	7127R2	1.2	57.2	9.8	1.0
Federal Hybrids	F1370NR2X	1.3	57.2	9.8	1.0
Thunder Seed	3511 R2YN	1.1	57.1	10.1	1.0
Renk	RS177NX	1.8	57.0	9.8	1.0
Prairie Brand	PB-1787R2	1.7	56.9	9.8	1.0
Prairie Brand	PB-1566R2	1.2	56.8	9.8	1.0
Check	Check	1.4	56.7	9.9	1.0
Titan Pro	TP-19X06	1.9	56.6	9.6	1.0
Nutech	7172R2	1.7	56.3	9.1	1.0
Renk	RS145NR2	1.4	56.3	9.7	1.0
Channel	1808R2	1.8	56.3	10.1	1.0
Federal Hybrids	F1670NR2X	1.6	56.1	9.3	1.0
Dairyland Seed	DSR-1870/R2Y	1.8	56.1	9.4	1.0
Prairie Brand	PB-1611R2	1.6	56.1	9.5	1.0
Peterson Farms Seed	17X14N	1.4	55.8	9.6	1.0
Thunder Seed	3614 R2YN	1.4	55.8	9.8	1.0
Prairie Brand	PB-1376R2	1.3	55.7	9.6	1.0
Renk	RS175NR2	1.7	55.7	9.9	1.0
		56.5	9.8	1.0	
	4.6	0.7	-		
		C.V.‡	5.8	5	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 1b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Groups 0 & 1 at Miller, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Wensman	W3143NR2	1.4	55.3	10.0	1.0
Federal Hybrids	F154NRR2Y	1.5	55.3	10.1	1.0
Thunder Seed	EXP 8713N	1.3	55.2	10.0	1.0
Dairyland Seed	DSR-1721/R2Y	1.7	55.1	9.6	1.0
Thunder Seed	3619 R2YN	1.9	54.9	9.5	1.0
Thunder Seed	3408 R2YN	0.8	54.9	10.1	1.0
Wensman	W1183NRX	1.8	54.9	10.7	1.0
Federal Hybrids	F1470NR2X	1.4	54.9	9.5	1.0
Peterson Farms Seed	17X13	1.3	54.8	9.8	1.0
Federal Hybrids	F106NRR2Y	1	54.8	10.1	1.0
Wensman	W3160NR2	1.6	54.7	9.9	1.0
Peterson Farms Seed	17X18N	1.8	54.4	9.5	1.0
Renk	RS107NX	1	54.0	9.7	1.0
Peterson Farms Seed	16X12N	1.2	53.8	9.9	1.0
Titan Pro	TP-16X36	1.6	53.8	9.9	1.0
Prairie Brand	PB-1466R2	1.4	53.5	9.8	1.0
Channel	1405R2	1.4	52.8	9.6	1.0
Thunder Seed	EXP 8710N	1	49.9	9.8	1.0
Federal Hybrids	F1260NR2X	1.2	48.6	9.8	1.0
		Trial Average	56.5	9.8	1.0
		LSD (0.05)†	4.6	0.7	-
		C.V.‡	5.8	5	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Miller, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Titan Pro	TP-21X46	2.1	64.3	9.5	1.0
Prairie Brand	PB-2419RR2	2.4	63.7	11.6	1.0
Prairie Brand	PB-2156R2	2.1	61.6	10.1	1.0
Wensman	W3201NR2	2.0	61.6	9.9	1.0
Nutech	7224	2.2	60.1	10.0	1.0
Prairie Brand	PB-2296R2	2.2	59.9	9.4	1.0
Nutech	7217R2	2.1	59.6	10.5	1.0
Dairyland Seed	DSR-2017/R2Y	2.0	58.6	10.0	1.0
Wensman	W3226NR2	2.2	57.4	9.8	1.0
Titan Pro	TP-20R25	2.0	56.8	10.0	1.0
Dairyland Seed	DSR-2110/R2Y	2.1	56.5	10.0	1.0
Federal Hybrids	F2170NR2X	2.1	56.5	9.4	1.0
Wensman	W1208NRX	2.0	56.5	9.6	1.0
Prairie Brand	PB-2600R2	2.6	55.3	15.2	1.0
Check	Check	1.4	55.3	9.5	1.0
Federal Hybrids	F205NRR2Y	2.0	54.8	9.7	1.0
Channel	2108R2	2.1	53.0	10.0	1.0
Prairie Brand	PB-2024R2	2.0	52.6	9.6	1.0
		Trial Average		10.2	1.0
		LSD (0.05)†	3.8	0.9	-
		C.V.‡	4.7	5.9	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: 45.106822, -97.099983)

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: None Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: 32 oz Dual II Magnum (s-metolachlor)

Post: 32 oz Roundup Ultramax (glyphosate)

Insecticide: None

Date seeded: 5/17/2016

Date harvested: 9/30/2016



Soybean Variety Trial Results - South Shore

Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at South Shore SD)

Variety Information			Agı	ronomic Perform	ance
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
NorthStar Genetics	NS 0941NR2	0.9	56.8	12.7	1.0
Check	Check	1.4	56.0	12.2	1.0
Channel	0906R2	0.9	55.4	11.8	1.0
Prairie Brand	PB-1257R2	0.9	55.3	12.0	1.0
Legacy Seed	LS-0837NRR2	0.8	55.1	12.6	1.0
Nutech	6097R2	0.9	54.1	12.4	1.0
Proseed	XT609	0.9	53.6	12.3	1.0
Thunder Seed	3408 R2YN	0.8	53.6	12.5	1.0
Federal Hybrids	F087NRR2Y	0.8	53.4	12.1	1.0
Renk	RS067NR2	0.6	53.2	12.3	1.0
Stine	07RF33	0.7	52.6	12.3	1.0
Stine	09RH26	0.9	52.3	12.4	1.0
Dairyland Seed	DSR-0988/R2Y	0.9	52.0	12.3	1.0
Renk	RS096NR2	0.9	52.0	12.7	1.0
Legacy Seed	LS-0833NRR2	0.8	51.8	12.4	1.0
Dairyland Seed	DSR-0711/R2Y	0.7	51.7	12.1	1.0
Prairie Brand	PB-0987R2	0.8	51.7	12.5	1.0
Wensman	W3080NR2	0.8	51.6	12.6	1.0
Renk	RS084NR2	0.8	51.5	12.3	1.0
Federal Hybrids	F067NRR2Y	0.6	51.5	12.2	1.0
Prairie Brand	PB-0777R2	0.7	50.8	12.5	1.0
Legacy Seed	LS-0935NRR2	0.9	50.8	12.5	1.0
Federal Hybrids	F0960NR2X	0.9	50.8	12.4	1.0
Federal Hybrids	F0860NR2X	0.8	50.7	12.4	1.0
Dairyland Seed	DSR-0807/R2Y	0.8	50.6	12.0	1.0
Prairie Brand	PB-0863R2	0.8	50.5	11.9	1.0
Wensman	W3072NR2	0.7	48.7	12.4	1.0
Wensman	W1067RX	0.6	48.2	12.2	1.0
Mycogen Seeds	5B033R2	0.3	48.1	12.0	1.0
Mycogen Seeds	5B040R2	0.4	46.0	12.2	1.0
Mycogen Seeds	5G009R2	0.09	40.9	12.1	1.0
Mycogen Seeds	5B024R2	0.2	39.0	12.5	1.0
		Trial Average	51.3	12.3	1.0
		2.9	0.5	-	
		C.V.‡	3.9	2.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Soybean Variety Trial Results - South Shore

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Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at South Shore, SD).

Varie	Agronomic Performance				
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Legacy Seed	LS-1335NRR2	1.3	58.3	11.1	1.0
Prairie Brand	PB-1611R2	1.6	57.5	12.3	1.0
Prairie Brand	PB-1822R2	1.8	56.7	12.8	1.0
Thunder Seed	3614 R2YN	1.4	56.3	11.2	1.0
Wensman	W3143NR2	1.4	56.2	11.2	1.0
Prairie Brand	PB-1566R2	1.5	55.5	11.6	1.0
Prairie Brand	PB-1947R2	1.9	55.5	14.4	1.0
Stine	10RD03	1.0	55.4	11.0	1.0
Peterson Farms Seed	16R10	1.0	55.2	11.9	1.0
Check	Check	1.4	54.6	11.3	1.0
Wensman	W3160NR2	1.6	54.5	11.5	1.0
Peterson Farms Seed	16X12N	1.2	54.5	11.5	1.0
Prairie Brand	PB-1956R2	1.9	54.3	13.2	1.0
Proseed	XT613	1.3	54.2	11.6	1.0
Dairyland Seed	DSR-1313/R2Y	1.3	54.2	11.0	1.0
Thunder Seed	3511 R2YN	1.1	54.0	11.5	1.0
Dairyland Seed	DSR-1526/R2Y	1.5	53.9	11.1	1.0
Thunder Seed	3619 R2YN	1.9	53.9	11.5	1.0
Federal Hybrids	F106NRR2Y	1.0	53.7	11.8	1.0
Wensman	W1129NRX	1.2	53.5	11.5	1.0
Wensman	W1106NRX	1.0	53.5	11.5	1.0
Peterson Farms Seed	17X13	1.3	53.3	11.5	1.0
Wensman	W3100NR2	1.0	53.2	11.7	1.0
Prairie Brand	PB-1376R2	1.3	53.0	11.3	1.0
Prairie Brand	X16153R2	1.5	53.0	11.1	1.0
Channel	1405R2	1.4	52.9	11.5	1.0
Prairie Brand	PB-1787R2	1.7	52.9	11.6	1.0
Thunder Seed	EXP 8718N	1.8	52.7	12.3	1.0
Federal Hybrids	F1470NR2X	1.4	52.6	11.4	1.0
Federal Hybrids	F1260NR2X	1.2	52.6	11.5	1.0
		Trial Average LSD (0.05)†	53.4	11.6	1.0
		2.4	0.6	-	
		C.V.‡	3.3	3.7	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at South Shore, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Thunder Seed	EXP 8710N	1.0	52.5	11.3	1.0
NorthStar Genetics	NS 1390NR2	1.3	52.5	11.7	1.0
Peterson Farms Seed	17X14N	1.4	52.4	11.5	1.0
Proseed	XT614	1.4	52.0	11.7	1.0
Titan Pro	TP-17X26	1.7	51.9	12.7	1.0
NorthStar Genetics	NS 1661 NR2	1.6	51.9	11.3	1.0
Prairie Brand	PB-1466R2	1.4	51.7	11.7	1.0
Proseed	XT610	1.1	51.7	11.4	1.0
Federal Hybrids	F1370NR2X	1.3	51.7	11.4	1.0
Renk	RS107NX	1.0	51.7	11.4	1.0
Thunder Seed	EXP 8713N	1.3	50.7	11.4	1.0
Dairyland Seed	DSR-1120/R2Y	1.1	50.6	11.2	1.0
Legacy Seed	LS-1134NRR2	1.1	49.6	11.9	1.0
NorthStar Genetics	NS 1040NR2	1.1	49.5	11.7	1.0
		Trial Average	53.4	11.6	1.0
		LSD (0.05)†	2.4	0.6	-
		C.V.‡	3.3	3.7	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

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[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 1.5 miles south of Volga in Brookings County, SD

(GPS: 44.298780, -96.926099)

Cooperator: SDSU Volga Research Farm - Jack Ingemansen, manager

Soil Type: Brandt silty clay loam, 0-2% slope

Fertilizer: None Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Dual II Magnum (metolachlor)

Post: Roundup Power Max (glyphosate)

Insecticide: None Date seeded: 5/12/2016

Date harvested: 10/14/2016 (Group 1), 10/17/2016 (Group 2)





Table 1a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Volga, SD).

Brand Variety Rating Variety Rating (bu/ac@13%) Moisture % (1-5)*	Waterity Group 1 at Vo	<u> </u>		Λ = ν.	Daufauu	
Brand Variety Rating (bu/ac@13%) Moisture % (1-5)*	Variety Information			Agronomic Performance		
Federal Hybrids F195NRR2Y 1.9 83.2 11.2 2.5 Prairie Brand PB-1566R2 1.5 82.9 11.3 2.0 Wensman W3143NR2 1.4 82.6 11.2 2.3 Wensman W1129NRX 1.2 82.4 11.4 2.8 Thunder Seed 3614 R2YN 1.4 82.1 11.4 2.5 Dairyland Seed DSR-1870/R2Y 1.8 81.9 11.3 3.3 Wensman W3160NR2 1.6 81.7 11.3 2.3 Prairie Brand PB-1956R2 1.9 81.4 11.3 3.3 NorthStar Genetics 1911NR2 1.9 81.2 11.1 2.8 Stine 19RF32 1.9 81.2 11.1 2.8 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRRY 1.8 80.2 11.4 3.3 Renk RS137NX 1.3 79.9 11.5 2.5 Stine 14RD62 1.4 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Preterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NUTECH 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.8 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Renk RS147NR2 1.4 78.9 11.3 2.5 Thunder Seed 3408 R2YN 1.9 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3408 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3408 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3408 R2YN 1.1 78.6 11.6 3.0 Thunder Seed 3408 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3408 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3408 R2YN 1.1 78.6 11.6 3.0 Thunder Seed 3408 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3408 R2YN 1.1 78.6 11.3 2.7 Thunder Seed 3408 R2YN 1.1 78.6 11.3 2.7 Thinder Seed 3408 R2YN 1.1 78.6 11.3 2.7 Thinder Seed 3511 R2YN 1.1 78.6 11.3 2.7 Thinder Seed 3511			-			
Prairie Brand PB-1566R2 1.5 82.9 11.3 2.0 Wensman W3143NR2 1.4 82.6 11.2 2.3 Wensman W1129NRX 1.2 82.4 11.4 2.8 Thunder Seed 3614 R2YN 1.4 82.1 11.4 2.5 Dairyland Seed DSR-1870/R2Y 1.8 81.9 11.3 3.3 Wensman W3160NR2 1.6 81.7 11.3 2.3 Prairie Brand PB-1956R2 1.9 81.4 11.3 3.3 Prairie Brand PB-1956R2 1.9 81.2 11.1 2.8 Stine 1911NR2 1.9 81.2 11.1 2.8 Stine 19RF32 1.9 81.2 11.3 2.3 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1947R2 1.9 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 Prairie Brand PBSNRRY 1.8 80.2 11.4 3.3 Prairie Brand PRSSNRRY 1.8 80.2 11.4 3.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Prairie Brand X16153R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.7 11.1 2.8 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-161R2 1.6 79.2 11.3 3.3 Prairie Brand PB-161R2 1.3 78.7 11.2 2.5 Prairie Brand PB-161R2 1.3 78.7 11.2 2.5 Prairie Brand PB-161R2 1.3 78.7 11.2 2.5 Prairie Brand PB-161R2 1.3 78.7 11.2 2.8 Prairie						. ,
Wensman W3143NR2 1.4 82.6 11.2 2.3 Wensman W1129NRX 1.2 82.4 11.4 2.8 Thunder Seed 3614 R2YN 1.4 82.1 11.4 2.5 Dairyland Seed DSR-1870/R2Y 1.8 81.9 11.3 3.3 Wensman W3160NR2 1.6 81.7 11.3 2.3 Prairie Brand PB-1956R2 1.9 81.4 11.3 3.3 NorthStar Genetics 1911NR2 1.9 81.2 11.1 2.8 Stine 19RF32 1.9 80.7 11.2 2.3 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1927R2 1.9 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRR2Y 1.8 80.2<	•					
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Thunder Seed 3614 R2YN 1.4 82.1 11.4 2.5 Dairyland Seed DSR-1870/R2Y 1.8 81.9 11.3 3.3 Wensman W3160NR2 1.6 81.7 11.3 2.3 Prairie Brand PB-1956R2 1.9 81.4 11.3 3.3 NorthStar Genetics 1911NR2 1.9 81.2 11.1 2.8 Stine 19RF32 1.9 80.7 11.2 2.3 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRR2Y 1.8 80.2 11.4 3.3 Renk RS137NX 1.3 79.9 11.5 2.5 Federal Hybrids F185NR2Y 1.8 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Preterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Preterson Farms Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.8 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Trial Average 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Wensman					
Dairyland Seed DSR-1870/R2Y 1.8 81.9 11.3 3.3 Wensman W3160NR2 1.6 81.7 11.3 2.3 Prairie Brand PB-1956R2 1.9 81.4 11.3 3.3 NorthStar Genetics 1911NR2 1.9 81.2 11.1 2.8 Stine 19RF32 1.9 81.2 11.3 2.3 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1947R2 1.9 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRR2Y 1.8 80.2 11.4 3.3 Renk RS137NX 1.3 79.9 11.5 2.5 Stine 14RD62 1.4 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Peterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.8 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7	Wensman	W1129NRX		82.4	11.4	
Wensman W3160NR2 1.6 81.7 11.3 2.3 Prairie Brand PB-1956R2 1.9 81.4 11.3 3.3 NorthStar Genetics 1911NR2 1.9 81.2 11.1 2.8 Stine 198F32 1.9 80.7 11.2 2.3 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRR2Y 1.8 80.2 11.4 3.3 Renk RS137NX 1.3 79.9 11.5 2.5 Stine 14RD62 1.4 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Preterson Farms Seed 17X18N 1.8 79.7	Thunder Seed	3614 R2YN	1.4	82.1	11.4	2.5
Prairie Brand PB-1956R2 1.9 81.4 11.3 3.3 PorthStar Genetics 1911NR2 1.9 81.2 11.1 2.8 Prairie Brand PB-1947R2 1.9 81.2 11.3 2.3 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 Prairie Brand PB-1827R2 1.8 80.2 11.4 3.3 Prairie Brand PB-185NR2Y 1.8 80.2 11.4 3.3 Prairie Brand RS137NX 1.3 79.9 11.5 2.5 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Preterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Preterson Farms Seed 17X18N 1.8 79.7 11.1 2.8 Prairie Brand Seed 3619 R2YN 1.9 79.7 11.1 2.8 Prairie Brand PB-1817R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Prairie Brand PB-1376R2 1.3 78.6 11.3 2.7 2.8 Prairie Brand PB-1376R2 1	Dairyland Seed	DSR-1870/R2Y	1.8	81.9	11.3	3.3
NorthStar Genetics 1911NR2 1.9 81.2 11.1 2.8 5tine 19RF32 1.9 81.2 11.3 2.3 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRR2Y 1.8 80.2 11.4 3.3 Prairie Brand X16153R2 1.5 79.9 11.5 2.5 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Preterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Prairie Brand X16153R2 1.7 79.6 11.2 2.8 Prairie Brand Brand X16153R2 1.8 79.4 11.3 2.8 Prairie Brand X16153R2 1.8 79.4 11.3 2.8 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Prairie Brand PB-1376R2 1.3 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Prairie Brand PB-1376R2 1.3 78.6 11.3 2.7 2.5 EXD (0.05)† 3.9 0.2 0.7	Wensman	W3160NR2	1.6	81.7	11.3	2.3
Particle 19RF32 1.9 81.2 11.3 2.3 Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRR2Y 1.8 80.2 11.4 3.3 Renk RS137NX 1.3 79.9 11.5 2.5 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Preterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Preterson Farms Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7	Prairie Brand	PB-1956R2	1.9	81.4	11.3	3.3
Prairie Brand PB-1947R2 1.9 80.7 11.2 2.3 Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRR2Y 1.8 80.2 11.4 3.3 Renk RS137NX 1.3 79.9 11.5 2.5 Stine 14RD62 1.4 79.9 11.5 2.5 Stine 14RD62 1.4 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Preterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 <td>NorthStar Genetics</td> <td>1911NR2</td> <td>1.9</td> <td>81.2</td> <td>11.1</td> <td>2.8</td>	NorthStar Genetics	1911NR2	1.9	81.2	11.1	2.8
Prairie Brand PB-1822R2 1.8 80.6 11.3 3.0 Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRR2Y 1.8 80.2 11.4 3.3 Renk RS137NX 1.3 79.9 11.5 2.5 Stine 14RD62 1.4 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Preterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check 1.4 79.3 11.3 3.0	Stine	19RF32	1.9	81.2	11.3	2.3
Dairyland Seed DSR-1721/R2Y 1.7 80.6 11.6 2.5 NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0 Federal Hybrids F185NRR2Y 1.8 80.2 11.4 3.3 Renk RS137NX 1.3 79.9 11.5 2.5 Stine 14RD62 1.4 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Peterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7 Trial Average LSD (0.05)† 3.9 0.2 0.7	Prairie Brand	PB-1947R2	1.9	80.7	11.2	2.3
NorthStar Genetics 1661NR2 1.6 80.3 11.5 2.0	Prairie Brand	PB-1822R2	1.8	80.6	11.3	3.0
Federal Hybrids F185NRR2Y 1.8 80.2 11.4 3.3 Renk RS137NX 1,3 79.9 11.5 2.5 Stine 14RD62 1.4 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Peterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Renk RS147NR2 1.4 78.9 11.3 2.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 </td <td>Dairyland Seed</td> <td>DSR-1721/R2Y</td> <td>1.7</td> <td>80.6</td> <td>11.6</td> <td>2.5</td>	Dairyland Seed	DSR-1721/R2Y	1.7	80.6	11.6	2.5
Renk RS137NX 1.3 79.9 11.5 2.5 Stine 14RD62 1.4 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Peterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.4 78.9 11.3 2.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7	NorthStar Genetics	1661NR2	1.6	80.3	11.5	2.0
Stine 14RD62 1.4 79.9 11.5 2.3 Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Peterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Renk RS147NR2 1.4 78.9 11.3 2.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7	Federal Hybrids	F185NRR2Y	1.8	80.2	11.4	3.3
Prairie Brand X16153R2 1.5 79.8 11.5 2.0 Peterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7	Renk	RS137NX	1.3	79.9	11.5	2.5
Peterson Farms Seed 17X18N 1.8 79.7 11.3 3.0 Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.4 78.9 11.3 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7	Stine	14RD62	1.4	79.9	11.5	2.3
Thunder Seed 3619 R2YN 1.9 79.7 11.1 2.8 NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Renk RS147NR2 1.4 78.9 11.3 2.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7	Prairie Brand	X16153R2	1.5	79.8	11.5	2.0
NuTech 7172R2 1.7 79.6 11.2 2.0 Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Prairie Brand PB-1376R2 1.4 78.9 11.3 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7	Peterson Farms Seed	17X18N	1.8	79.7	11.3	3.0
Channel 1808R2 1.8 79.4 11.3 2.8 Thunder Seed EXP 8713N 1.3 79.4 11.3 2.5 Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Renk RS147NR2 1.4 78.9 11.3 2.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Thunder Seed	3619 R2YN	1.9	79.7	11.1	2.8
Thunder Seed	NuTech	7172R2	1.7	79.6	11.2	2.0
Check Check 1.4 79.3 11.3 3.0 Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Renk RS147NR2 1.4 78.9 11.3 2.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Channel	1808R2	1.8	79.4	11.3	2.8
Prairie Brand PB-1611R2 1.6 79.2 11.3 3.3 Renk RS147NR2 1.4 78.9 11.3 2.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Thunder Seed	EXP 8713N	1.3	79.4	11.3	2.5
Renk RS147NR2 1.4 78.9 11.3 2.3 Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Check	Check	1.4	79.3	11.3	3.0
Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Prairie Brand	PB-1611R2	1.6	79.2	11.3	3.3
Prairie Brand PB-1376R2 1.3 78.7 11.2 2.5 Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Renk	+		78.9		2.3
Thunder Seed 3408 R2YN 0.8 78.6 11.6 3.0 Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Prairie Brand	PB-1376R2				
Thunder Seed 3511 R2YN 1.1 78.2 11.4 2.8 Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 3.9 0.2 0.7	Thunder Seed					
Titan Pro TP-19X06 1.9 78.0 11.2 2.8 Trial Average LSD (0.05)† 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Thunder Seed					
Trial Average 78.6 11.3 2.7 LSD (0.05)† 3.9 0.2 0.7	Titan Pro					
LSD (0.05)† 3.9 0.2 0.7		1				
			C.V.‡		1.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 1b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at Volga, SD).

Variety Information			Agronomic Performance			
		Maturity	Yield		Lodging Score	
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*	
Prairie Brand	PB-1787R2	1.7	77.9	11.2	3.3	
NuTech	7127R2	1.2	77.8	11.5	2.3	
Renk	RS145NR2	1.4	77.5	11.4	2.8	
Renk	RS177NX	1.8	77.5	11.3	3.0	
Renk	RS107NX	1.0	77.2	11.4	2.0	
Prairie Brand	PB-1466R2	1.4	77.1	11.5	2.3	
Stine	17RH03	1.8	77.0	11.4	3.3	
Peterson Farms Seed	16X12N	1.2	76.5	11.3	2.0	
Peterson Farms Seed	17X14N	1.4	75.9	11.6	3.0	
Thunder Seed	EXP 8710N	1.0	75.9	11.4	2.5	
Titan Pro	TP-16X36	1.6	75.5	11.3	3.0	
Renk	RS175NR2	1.7	75.3	11.4	2.8	
Thunder Seed	EXP 8718N	1.8	75.1	11.4	3.3	
Peterson Farms Seed	17X17N	1.7	71.6	11.2	3.3	
Titan Pro	TP-17X26	1.7	69.9	11.4	2.5	
Wensman	W1183NRX	1.8	67.1	11.3	3.0	
		Trial Average	78.6	11.3	2.7	
		LSD (0.05)†	3.9	0.2	0.7	
		C.V.‡	3.6	1.6	-	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 3. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Volga, SD).

Variety Information			Agronomic Performance		
	Í	Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Titan Pro	TP-21X46	2.1	79.7	12.5	2.8
NorthStar Genetics	2281NR2	2.2	77.3	12.5	2.5
Check	Check	1.4	77.3	12.9	3.0
Wensman	W1208NRX	2.0	77.1	12.4	2.5
NorthStar Genetics	2111NR2	2.1	76.6	12.7	2.0
Dairyland Seed	DSR-2017/R2Y	2.0	76.5	12.5	2.5
Federal Hybrids	F226NRR2Y	2.2	76.5	12.4	2.5
NuTech	7224	2.2	76.4	13.0	2.0
NorthStar Genetics	2031NR2	2.0	75.8	12.6	2.3
Prairie Brand	PB-2419RR2	2.4	75.7	12.3	3.8
Federal Hybrids	F2170NR2X	2.1	75.6	12.4	2.5
Stine	20RD20	2.1	75.0	12.6	2.5
Prairie Brand	PB-2600R2	2.6	74.7	12.8	2.8
Dairyland Seed	DSR-2110/R2Y	2.1	74.7	12.6	2.0
Stine	24RH62	2.4	74.4	12.7	3.0
Titan Pro	TP-20R25	2.0	74.0	12.6	2.8
Federal Hybrids	F205NRR2Y	2.0	73.6	12.7	2.5
Wensman	W3201NR2	2.0	73.4	12.7	3.0
Wensman	W1233RX	2.3	72.8	12.5	3.5
NuTech	7217R2	2.1	72.6	12.9	3.3
Prairie Brand	PB-2296R2	2.2	72.6	12.5	3.8
Prairie Brand	PB-2024R2	2.0	72.6	12.7	2.5
Prairie Brand	PB-2156R2	2.1	72.0	12.4	2.5
Channel	2306R2	2.3	71.5	12.3	3.5
		Trial Average	74.9	12.6	2.7
		3.3	0.2	0.6	
		C.V.‡	3.1	1.0	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 5 miles north and 1 mile east of Geddes (57432) in Charles Mix County, SD

(GPS: 43.326899, -98.685335)

Cooperator: Curtis Sybesma

Soil Type: Highmore-Eakin silt loam, 0-2% slope

Fertilizer: 6-26-0 broadcast

Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: 2, 4-D Ester, Authority First, & Metribuzin 75

Post: 1 qt Roundup Power Max (glyphosate) (2X) + Intensity (clethodim)

Insecticide: None
Date seeded: 6/2/2016
Date harvested: 10/13/2016





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Geddes, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Great Lakes Hybrids	GL1953NR2	1.9	69.4	12.1	1.0
Great Lakes Hybrids	GL1760NRX	1.7	67.6	12.5	1.0
Check	Check	1.4	67.4	12.7	1.0
Thunder Seed	3619 R2YN	1.9	64.4	12.2	1.0
Channel	1808R2	1.8	64.2	12.4	1.0
Thunder Seed	3511 R2YN	1.1	63.4	12.9	1.0
Thunder Seed	3614 R2YN	1.4	62.9	12.8	1.0
Thunder Seed	EXP 8718N	1.8	62.4	12.6	1.0
Thunder Seed	EXP 8713N	1.3	61.6	12.8	1.0
Thunder Seed	EXP 8710N	1.0	58.4	12.9	1.0
		Trial Average	64.2	12.6	1.0
		LSD (0.05)†	2.8	0.3	_
		C.V.‡	3.0	1.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Geddes, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	PB-2156R2	2.1	78.8	11.6	1.0
Prairie Brand	PB-2600R2	2.6	77.8	11.6	1.0
Wensman	W3228NR2	2.2	74.3	11.9	1.0
Wensman	W1233RX	2.3	73.8	11.7	1.0
Prairie Brand	PB-2419RR2	2.4	73.7	11.5	1.0
Great Lakes Hybrids	GL2063NRX	2.0	73.4	11.5	1.0
Dairyland Seed	DSR-2616/R2Y	2.6	72.0	11.7	1.0
Great Lakes Hybrids	GL2269NR2	2.2	71.7	11.6	1.0
Prairie Brand	PB-2876R2	2.8	71.6	11.8	1.0
Wensman	W3226NR2	2.2	71.3	11.9	1.0
Great Lakes Hybrids	GL2469R2	2.4	70.9	11.8	1.0
Prairie Brand	PB-2296R2	2.2	70.5	11.2	1.0
Prairie Brand	PB-2486R2	2.4	69.9	11.8	1.0
Wensman	W3201NR2	2.0	69.8	12.0	1.0
Titan Pro	22M12	2.2	69.8	12.0	1.0
Wensman	W1208NRX	2.0	69.1	11.5	1.0
Prairie Brand	PB-2024R2	2.0	69.1	11.9	1.0
NuTech	7279	2.7	69.0	11.3	1.0
Great Lakes Hybrids	GL2465NRX	2.4	68.4	11.4	1.0
Prairie Brand	PB-3087R2	2.9	68.3	11.8	1.0
NuTech	7224	2.2	68.2	11.8	1.0
Check	Check	1.4	68.0	12.2	1.0
Titan Pro	TP-24R26	2.4	67.8	11.6	1.0
Prairie Brand	PB-2576R2	2.5	67.6	12.1	1.0
Prairie Brand	PB-2788R2	2.7	67.4	11.4	1.0
		Trial Average	69.6	11.7	1.0
		LSD (0.05)†	3.7	0.4	-
		C.V.‡	3.8	2.2	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

 $[\]ddagger$ C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 2 at Geddes, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Dyna-Gro Seed	S26RS75	2.6	67.1	12.3	1.0
Wensman	W1255NRX	2.5	67.0	11.5	1.0
NuTech	7217R2	2.1	66.4	12.2	1.0
Channel	2108R2	2.1	66.4	11.8	1.0
Dyna-Gro Seed	S23RY85	2.3	66.3	12.1	1.0
Channel	2306R2	2.3	66.0	11.9	1.0
Titan Pro	TP-28X45	2.8	65.8	11.4	1.0
Dairyland Seed	DSR-2330/R2Y	2.3	64.6	11.9	1.0
Dyna-Gro Seed	S20RY45	2.0	64.0	12.1	1.0
		Trial Average	69.6	11.7	1.0
		LSD (0.05)†	3.7	0.4	-
		C.V.‡	3.8	2.2	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: 43.046386, -96.902161)

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Fertilizer: None
Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: 32 oz Roundup Power Max (glyphosate) + 1.33 pt Dual (metolachlor) + 4 oz

Glory (metribuzen) + 1 oz Sharpen (saflufenacil)

Post: 0.3 oz FirstRate (cloransulam) + 12 oz Flexstar (fomesafen) + 6 oz Select

(clethodim)

Insecticide: None

Date seeded: 5/20/2016 Date harvested: 10/24/2016



Soybean Variety Trial Results - Beresford

Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Beresford, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Great Lakes Hybrids	GL1953NR2	1.9	81.8	12.9	1.0
Channel	1808R2	1.8	78.1	13.0	1.0
Thunder Seed	3614 R2YN	1.4	77.1	13.2	1.0
Thunder Seed	3619 R2YN	1.9	76.7	12.8	1.0
Thunder Seed	3511 R2YN	1.1	75.8	13.2	1.0
Thunder Seed	EXP 8713N	1.3	71.4	13.2	1.0
Great Lakes Hybrids	GL1760NRX	1.7	71.4	13.0	1.0
Check	Check	1.4	71.2	13.3	1.0
Thunder Seed	EXP 8710N	1.0	68.3	13.2	1.0
Thunder Seed	EXP 8718N	1.8	67.6	12.8	1.0
		Trial Average	73.9	13.0	1.0
		LSD (0.05)†	4.1	0.2	_
		C.V.‡	3.8	1.0	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[®] Soybean Variety Trial Results - Beresford

Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Beresford, SD).

Maturity Group 2 at Bo Varie	Agronomic Performance				
	ĺ	Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Stine	24RH62	2.4	84.1	12.6	1.0
Great Lakes Hybrids	GL2469R2	2.4	82.2	12.8	1.0
Stine	28RH02	2.8	81.8	12.7	1.0
Dyna-Gro Seed	S23RY85	2.3	81.3	12.6	1.0
Prairie Brand	PB-2876R2	2.8	81.3	12.5	1.0
Prairie Brand	PB-2600R2	2.6	80.6	12.4	1.0
Prairie Brand	PB-2419RR2	2.4	80.3	12.2	1.0
Wensman	W3228NR2	2.2	79.7	12.3	1.0
Wensman	W1208NRX	2.0	79.3	12.3	1.0
Wensman	W3226NR2	2.2	79.1	12.7	1.0
Great Lakes Hybrids	GL2063NRX	2.0	78.5	12.4	1.0
Prairie Brand	PB-3087R2	2.9	78.2	12.4	1.0
NuTech	7279	2.7	78.2	12.5	1.0
Dairyland Seed	DSR-2330/R2Y	2.3	77.7	12.8	1.0
Dairyland Seed	DSR-2616/R2Y	2.6	77.3	12.3	1.0
Titan Pro	TP-24R26	2.4	77.2	12.7	1.0
Dyna-Gro Seed	S26RS75	2.6	77.0	12.9	1.0
Prairie Brand	PB-2486R2	2.4	76.6	12.7	1.0
Titan Pro	TP-28X45	2.8	76.5	12.5	1.0
Prairie Brand	PB-2576R2	2.5	76.1	12.7	1.0
Wensman	W3201NR2	2.0	76.0	13.2	1.0
Wensman	W1233RX	2.3	75.7	12.3	1.0
Channel	2607R2	2.6	74.9	12.6	1.0
Channel	2306R2	2.3	74.9	12.3	1.0
Prairie Brand	PB-2296R2	2.2	74.8	12.4	1.0
Dyna-Gro Seed	S20RY45	2.0	74.6	12.8	1.0
Prairie Brand	PB-2788R2	2.7	74.5	12.4	1.0
Prairie Brand	PB-2156R2	2.1	74.3	12.8	1.0
Great Lakes Hybrids	GL2269NR2	2.2	74.3	12.4	1.0
Wensman	W1255NRX	2.5	73.3	12.4	1.0
		Trial Average	75.9	12.6	1.0
		LSD (0.05)†	4.6	0.4	-
		C.V.‡	4.3	2.1	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Soybean Variety Trial Results - Beresford

Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 2 at Beresford, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Great Lakes Hybrids	GL2465NRX	2.4	72.9	12.4	1.0
Check	Check	1.4	70.7	12.9	1.0
Prairie Brand	PB-2024R2	2.0	70.2	12.6	1.0
NuTech	7217R2	2.1	69.7	12.9	1.0
NuTech	7224	2.2	68.8	12.9	1.0
Titan Pro	22M12	2.2	68.6	12.8	1.0
Stine	29RE22	2.9	63.4	12.3	1.0
		Trial Average	75.9	12.6	1.0
		LSD (0.05)+	4.6	0.4	-
		C.V.‡	4.3	2.1	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Beresford

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: 43.046386, -96.902161)

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Fertilizer: None
Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Pre: 32 oz Roundup Power Max (glyphosate) + 1.33 pt Dual (metolachlor) + 4

Herbicide: oz Glory (metribuzen) + 1 oz Sharpen (saflufenacil)

Post: 0.3 oz FirstRate (cloransulam) + 12 oz Flexstar (fomesafen) + 6 oz Select

(clethodim)

Insecticide: None
Date seeded: 5/20/2016
Date harvested: 10/24/2016





Table 1. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 1 & 2 at Beresford, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Oil %	(1-5)*
Simplex	V1967A	1.8	76.0	12.1	1.0
Halls Seed	2101	1.9	75.2	12.2	1.0
Great Lakes Hybrids	GL2765N	2.7	75.0	11.7	1.0
Halls Seed	1601	1.9	73.9	12.1	1.0
Simplex	V2267A	1.9	73.2	13.0	1.0
Simplex	V2367B	2.3	71.3	12.5	1.0
Great Lakes Hybrids	GL2254N	2.2	69.2	12.2	1.0
SD AES	Brookings	1.7	67.3	12.2	1.0
Check	Check	1.4	65.9	12.4	1.0
Richland IFC	MK41	1.4	60.0	12.5	1.0
SD AES	Davison	2.2	58.1	9.8	1.0
MN AES	MN1701CN	1.7	52.2	12.3	1.0
MN AES	MN1806CN	1.8	52.2	12.1	1.0
MN AES	MN1612CN	1.6	48.2	12.2	1.0
Richland IFC	EXP373	2.0	47.9	12.2	1.0
Richland IFC	MK9101	1.1	35.7	10.8	1.0
Richland IFC	MK1016	1.0	19.6	12.5	1.0
Trial Average			60.1	12.0	1.0
		LSD (0.05)†	7.0	1.7	-
		C.V.‡	8.5	10.2	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Volga

Location: 1.5 mile south of Volga (57101) in Brookings County, SD

(GPS: 44.298780, -96.926099)

Cooperator: SDSU Volga Research Farm - Jack Ingemansen, manager

Soil Type: Brandt silty clay loam, 0-2% slope

Fertilizer: none Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Dual II Magnum (metolachlor)

Post: Harmony SG (thifensulferon)

Insecticide: None Date seeded: 5/12/2016

Date harvested: 10/14/2016 (Group 1), 10/17/2016 (Group 2)

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Table 2. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 0, 1, & 2 at Volga, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	Check	1.4	79.1	14.1	2.8
Simplex	V2367B	2.3	76.9	13.8	2.8
SD AES	Brookings	1.7	76.4	14.3	3.0
Simplex	V2267A	1.9	75.6	14.1	3.0
Halls Seed	2101	1.9	74.9	13.5	2.8
SD AES	Roberts	0.6	74.3	14.4	2.3
Simplex	V1767A	1.5	74.1	14.1	2.8
Halls Seed	1601	1.9	73.8	13.7	2.5
Richland IFC	FG0822CN	0.8	72.1	14.4	2.8
Richland IFC	EXP373	2.0	72.0	13.8	3.0
Simplex	V1967A	1.8	71.1	14.0	3.0
SD AES	Codington	0.9	70.8	15.5	2.3
SD AES	Davison	2.2	68.8	14.2	3.3
Richland IFC	MK41	1.4	68.8	14.7	2.3
MN AES	MN1806CN	1.8	68.1	13.6	4.5
MN AES	MN1701CN	1.7	68.1	13.7	4.5
Richland IFC	MK0603	0.6	65.5	14.7	4.0
Richland IFC	MK808CN	0.8	64.3	15.7	3.3
MN AES	MN1612CN	1.6	63.6	13.9	2.8
Richland IFC	MK9404CN	0.6	62.6	14.0	2.3
Richland IFC	MK42	0.7	61.7	14.4	4.0
Richland IFC	MK1016	1.0	61.0	15.2	4.0
Richland IFC	MK9101	1.1	60.2	12.2	2.0
Richland IFC	MK0508	0.8	59.8	15.2	4.5
		Trial Average	69.3	14.2	3.1
		LSD (0.05)†	3.6	0.5	0.6
		C.V.‡	3.6	2.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



South Shore

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: 45.106822, -97.099983)

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: None Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Dual II

Post: Select (clethodim) + Harmony SG (thifensulfuron)

Insecticide: None

Date seeded: 5/17/2016

Date harvested: 9/30/2016 (Group 0)

10/10/2016 (Group 1)



Table 3. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 0 at South Shore, SD).

Variety Information			Agronomic Performance		
Durand	Mi-t-	Material Datin	Yield	NA = := t 0/	Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	Check	1.4	52.9	10.8	1.0
Richland IFC	FG0822CN	0.8	50.3	11.1	1.0
SD AES	Roberts	0.6	45.5	10.9	1.0
Richland IFC	MK808CN	0.8	43.6	12.0	1.0
SD AES	Codington	0.9	43.5	11.7	1.0
Richland IFC	MK0603	0.6	42.8	11.2	1.8
Richland IFC	MK0508	0.8	41.6	11.3	1.0
Richland IFC	MK9404CN	0.6	41.0	11.8	1.0
Richland IFC	MK42	0.7	37.4	11.1	1.3
	-	Trial Average	44.3	11.3	1.1
		LSD (0.05)+	3.5	0.3	0.2
		C.V.‡	5.5	1.9	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 4. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 1 at South Shore, SD).

Variety Information			Agronomic Performance		
Brand	Variety	Maturity Rating	Yield (bu/ac@13%)	Moisture %	Lodging Score (1-5)*
Stine	14F06	1.4	58.2	12.0	1.0
Halls Seed	1601	1.9	55.6	11.9	1.0
SD AES	Brookings	1.7	55.4	12.4	1.0
Check	Check	1.4	54.4	11.9	1.0
Simplex	V1767A	1.5	54.3	12.3	1.0
Halls Seed	2101	1.9	53.8	12.5	1.0
Simplex	V1567B	1.4	53.5	11.8	1.0
Richland IFC	MK41	1.4	50.1	12.4	1.0
MN AES	MN1701CN	1.7	49.7	12.5	2.5
MN AES	MN1612CN	1.6	48.1	12.1	1.0
MN AES	MN1806CN	1.8	47.7	12.3	1.0
Richland IFC	MK9101	1.1	45.7	12.0	1.0
Richland IFC	MK1016	1.0	40.0	12.2	1.8
		Trial Average	51.4	12.2	1.2
		LSD (0.05)+	2.3	0.5	0.3
		C.V.‡	3.2	2.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



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Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Beresford

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: 43.046386, -96.902161)

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated

Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Pre: 32 oz Roundup Power Max (glyphosate) + 1.33 pt Dual (metolachlor) + 4 oz

Herbicide: Glory (metribuzen) + 1 oz Sharpen (saflufenacil)

Post: 0.3 oz FirstRate (cloransulam) + 12 oz Flexstar (fomesafen) + 6 oz Select

(clethodim)

Insecticide: None
Date seeded: 5/20/2016
Date harvested: 10/24/2016

Table 1. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 1 at Beresford, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Credenz	CZ 1845 LL	1.8	66.6	11.8	1.0
Check	Check	1.4	65.9	12.4	1.0
Thunder Seed	5411LLN	1.1	65.3	12.2	1.0
Great Lakes Hybrids	GL1769NLL	1.7	61.5	12.2	1.0
Thunder Seed	5615LLN	1.5	61.1	12.0	1.0
Credenz	CZ 1332 LL	1.3	60.6	12.4	1.0
Credenz	CZ 1623 LL	1.6	59.0	12.3	1.0
		Trial Average	62.8	12.2	1.0
		LSD (0.05)†	9.3	0.3	-
		C.V.‡	9.9	1.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 2 at Beresford, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
NuTech	3252L	2.5	71.9	12.0	1.0
Credenz	CZ 2601 LL	2.6	70.4	11.8	1.0
Credenz	CZ 2312 LL	2.3	69.5	11.8	1.0
Great Lakes Hybrids	GL2557NLL	2.5	69.3	11.9	1.0
Great Lakes Hybrids	GL2264NLL	2.2	65.1	11.8	1.0
NuTech	3205L	2.0	63.9	12.0	1.0
Great Lakes Hybrids	GL2860NLL	2.8	63.6	11.6	1.0
Check	Check	1.4	62.1	12.0	1.0
Credenz	CZ 2101 LL	2.1	59.4	11.9	1.0
Credenz	CZ 2510 LL	2.5	56.8	11.9	1.0
		Trial Average	66.4	11.9	1.0
		LSD (0.05)+	8.9	0.2	-
		C.V.‡	9.3	1.2	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Volga

Location: 1.5 mile south of Volga (57101) in Brookings County, SD

(GPS: N 44°18.152' W 096°55.138')

Cooperator: SDSU Volga Research Farm - Jack Ingemansen, manager

Soil Type: Brandt silty clay loam, 0-2% slope

Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: Metolachlor (Dual II Magnum)

Post: Harmony SG (thifensulferon)

Insecticide: None

Date seeded: 5/12/2016

Date harvested: 10/14/2016 (Group 1), 10/17/2016 (Group 2)

Table 3. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 0 & 1 at Volga, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Peterson Farms Seed	L17-16N	1.7	82.5	13.7	2.3
Credenz	CZ 1332 LL	1.3	81.1	14.2	2.3
NuTech	3174L	1.7	79.9	13.6	2.8
Check	Check	1.4	79.1	14.1	2.8
Credenz	CZ 1201 LL	1.2	77.0	13.7	3.0
Peterson Farms Seed	L13-15N	1.3	76.7	13.9	2.5
Peterson Farms Seed	L12-16N	1.2	76.7	14.3	3.0
Credenz	CZ 1845 LL	1.8	75.7	13.7	3.3
Thunder Seed	5615LLN	1.5	74.9	14.1	3.0
Peterson Farms Seed	L07-16N	0.7	74.8	14.4	2.0
Credenz	CZ 1623 LL	1.6	74.5	13.9	3.0
Peterson Farms Seed	L11-13N	1.1	73.0	14.2	2.8
Thunder Seed	5411LLN	1.1	72.6	13.8	2.8
		Trial Average	76.8	14.0	2.7
		LSD (0.05)†	4.4	0.6	0.5
		C.V.‡	4.0	3.0	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 4. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 2 at Volga, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Credenz	CZ 2312 LL	2.3	84.0	13.3	2.8
Credenz	CZ 2601 LL	2.6	76.2	14.0	3.0
NuTech	3205L	2.0	75.8	13.5	2.3
Credenz	CZ 2510 LL	2.5	75.3	13.4	3.3
Check	Check	1.4	75.3	13.6	3.0
Credenz	CZ 2101 LL	2.1	72.7	13.3	2.0
		Trial Average	76.5	13.5	2.7
		LSD (0.05)†	4.3	0.2	0.5
		C.V.‡	3.7	1.0	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



South Shore

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: 45.106822, -97.099983)

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: 0-100-0 preplant incorporated

Previous crop: Spring Wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre Herbicide: Pre: Dual II

Post: Select (clethodim) + Harmony SG (thifensulfuron)

Insecticide: None

Date seeded: 5/17/2016

Date harvested: 9/30/2016 (Group 0)

10/10/2016 (Group 1)

Table 5. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 0 at South Shore, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	Check	1.4	52.9	10.8	1.0
Nutech	3066L	0.6	50.5	10.9	1.0
Stine	06LH26	0.6	48.2	10.9	1.0
Stine	05LH60	0.6	48.1	11.0	1.0
Peterson Farms Seed	L07-16N	0.7	47.3	11.6	1.0
Credenz	CZ 201 LL	0.5	44.7	10.8	1.0
		Trial Average	48.6	11.0	1.0
		LSD (0.05)+	3.6	0.3	-
		C.V.‡	4.9	2.0	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 6. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 1 at South Shore, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Credenz	CZ 1332 LL	1.3	57.5	11.7	1.0
Stine	13LH62	1.3	57.0	12.1	1.0
Nutech	3115L	1.1	56.5	12.4	1.0
Credenz	CZ 1201 LL	1.2	55.9	12.4	1.0
Stine	14LF62	1.4	55.4	12.1	1.0
Peterson Farms Seed	L17-16N	1.7	54.8	12.3	1.0
Credenz	CZ 1845 LL	1.8	54.6	12.1	1.0
Credenz	CZ 1623 LL	1.6	54.6	12.1	1.0
Peterson Farms Seed	L12-16N	1.2	54.5	12.2	1.0
Check	Check	1.4	54.4	11.9	1.0
Peterson Farms Seed	L13-15N	1.3	53.6	11.9	1.0
Thunder Seed	5615LLN	1.5	53.5	12.1	1.0
Peterson Farms Seed	L11-13N	1.1	50.6	11.9	1.0
Thunder Seed	5411LLN	1.1	49.5	11.9	1.0
		Trial Average	54.5	12.1	1.0
		LSD (0.05)+	2.5	0.4	-
		C.V.‡	3.2	2.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 4.5 miles south and 2.5 miles east of Bath (57427) in Brown County, SD

(GPS: 45.399915, -98.278796)

Cooperator: Gordon and Roger Locken Farms

Soil Type: Great Bend-Beotia silt loams, 0-2% slopes

Fertilizer: none
Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Pre: 32 oz Roundup RT3 (glyphosate), 1 oz Aim EC (carfentrazone), 7.5 oz

Herbicide: Authority Assist (sulfentrazone + imazethapyr)

Post: 32 oz Roundup Powermax (glyphosate)

Insecticide: none

Date seeded: 5/25/2017 Date harvested: 10/16/2017





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at Bath, SD).

Variety Information			Agronomic Performance		
Varie		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	CHECK	1.4	69.2	11.2	1.0
Renk	RS096NR2	0.9	68.0	12.1	1.0
Legacy Seeds	LS-0935N RR2	0.9	67.7	11.9	1.0
Stine	09BA02	0.9	66.7	11.2	1.0
Prairie Brand	PB-0987R2	0.9	66.3	12.1	1.0
Dairyland Seed	DSR-0807/R2Y	0.8	65.9	11.7	1.0
Federal Hybrids	F087N RR2Y	0.8	65.3	12.0	1.0
Dairyland Seed	DSR-0988/R2Y	0.9	65.1	12.3	1.0
Peterson Farms Seed	18X08N	0.8	64.6	11.8	1.3
Stine	09RI62	0.9	63.8	12.3	1.0
Thunder Seed	3408 R2YN	0.8	63.4	11.9	1.0
Renk	RS078NX	0.7	63.0	11.9	1.0
Prairie Brand	PB-0777R2	0.7	62.7	12.0	1.0
Dahlman Seed	6808XN	0.8	62.2	12.1	1.0
Thunder Seed	SB8805N	0.5	61.7	11.5	1.0
Dahlman Seed	6806XN	0.6	61.1	11.6	1.0
Thunder Seed	SB8807N	0.7	60.8	11.5	1.0
Thunder Seed	3606 R2YN	0.6	60.5	12.0	1.0
Federal Hybrids	F0880N R2X	0.8	60.2	11.6	1.0
Legacy Seeds	LS-0836N RR2X	0.8	60.1	11.7	1.0
Thunder Seed	SB8703	0.3	59.6	11.5	1.5
Dahlman Seed	6709XN	0.9	58.7	11.7	1.0
Wensman	W1086NRX	0.8	57.2	11.9	1.0
Peterson Farms Seed	17X09N	0.9	54.7	12.0	1.0
		Trial Average	62.8	11.8	1.0
		LSD (0.05)†	3.5	0.5	0.2
		C.V.‡	4.0	2.5	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Bath, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Dairyland Seed	DSR-1313/R2Y	1.3	74.1	10.7	1.0
Prairie Brand	PB-1566R2	1.5	73.3	11.1	1.0
Prairie Brand	PB-1376R2	1.3	73.0	10.7	1.0
Stine	14RD62	1.4	72.3	11.0	1.0
Federal Hybrids	F1680N R2X	1.6	72.2	10.7	1.0
Check	CHECK	1.4	72.1	10.8	1.0
Prairie Brand	PB-1787R2	1.7	71.2	10.9	1.5
Legacy Seeds	LS-1638N RR2X	1.6	71.1	11.0	1.0
Dairyland Seed	DSR-1120/R2Y	1.1	71.0	10.7	1.0
Federal Hybrids	F147N RR2Y	1.4	70.9	10.8	1.0
Prairie Brand	PB-1947R2	1.9	70.5	11.2	1.0
Thunder Seed	3614 R2YN	1.4	70.5	10.9	1.0
Dairyland Seed	DSR-1475/R2Y	1.4	70.1	10.6	1.0
Wensman	W1165NRX	1.6	70.0	11.2	1.3
Dairyland Seed	DSR-1526/R2Y	1.5	69.6	11.0	1.0
Stine	15BA30	1.5	69.1	11.4	1.3
Wensman	W1129NRX	1.2	68.8	11.2	1.0
Federal Hybrids	F154N RR2Y	1.5	68.7	10.9	1.0
Stine	19BA23	1.9	68.1	12.0	1.0
Prairie Brand	PB-1257R2	1.2	67.7	11.3	1.5
Thunder Seed	SB8710N	1.0	67.6	11.5	1.0
Legacy Seeds	LS-1134N RR2	1.1	67.5	11.5	1.8
Peterson Farms Seed	18X11N	1.1	67.2	11.1	1.0
Stine	13RI32	1.3	67.1	10.9	1.0
Legacy Seeds	LS-1335N RR2	1.3	66.8	11.0	1.0
		Trial Average	68.0	11.0	1.1
		LSD (0.05)†	3.9	0.4	0.3
	C.V.‡				-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at Bath, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Peterson Farms Seed	18X13N	1.3	66.2	10.8	1.0
Wensman	W1140NRX	1.4	65.9	10.6	1.0
Federal Hybrids	F1180N R2X	1.1	65.5	11.3	1.0
Legacy Seeds	LS-1136N RR2X	1.1	65.2	11.4	1.0
Stine	14BA03	1.4	65.0	10.7	1.5
Federal Hybrids	F1480N R2X	1.4	64.9	11.1	1.0
Wensman	W1121NRX	1.2	64.9	11.4	1.0
Thunder Seed	SB8811N	1.1	64.1	11.1	1.0
Wensman	W1106NRX	1.0	63.8	11.5	1.0
Renk	RS118NX	1.1	63.4	11.1	1.0
Legacy Seeds	LS-1338N RR2X	1.3	63.3	10.9	1.0
Peterson Farms Seed	18X14N	1.4	62.1	11.2	1.0
Legacy Seeds	LS-1138N RR2X	1.1	60.9	11.0	1.0
		Trial Average	68.0	11.0	1.1
		LSD (0.05)†	3.9	0.4	0.3
		C.V.‡	4.1	2.5	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 4.5 miles north and 1.5 mile east of Geddes (57432) in Charles Mix County, SD

(GPS: 43.320134, -98.664704)

Cooperator: Curtis Sybesma

Soil Type: Eakin silt loam, 0-2% slopes

Fertilizer: none

Previous crop: Soybeans Tillage: No-till

Row spacing: 30 inches Seeding Rate: 165,000/acre

Pre: 5 oz Authority First (sulfentrazone+cloransulam), 4 oz Sencore (metribuzin),

Herbicide: 24 oz Roundup (glyphosate)

Post: 33 oz Roundup Power Max (glyphosate)

Insecticide: None
Date seeded: 6/1/2017
Date harvested: 10/11/2017





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Geddes, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Great Lakes Hybrids	1953NR2	1.9	63.9	10.0	1.0
Dairyland Seed	DSR-1950/R2Y	1.9	63.6	10.0	1.0
Check	CHECK	1.4	59.9	10.0	1.0
Wensman	W1184NRX	1.8	57.4	10.0	1.0
Thunder Seed	3614 R2YN	1.4	56.0	9.9	1.0
Thunder Seed	SB8811N	1.1	54.5	10.2	1.0
Thunder Seed	SB8710N	1.0	53.9	10.1	1.0
		Trial Average	58.3	10.0	1.0
		LSD (0.05)†	2.6	0.2	-
		C.V.‡	3.2	1.1	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Geddes, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Renk	RS265NR2	2.6	67.3	11.0	1.0
Renk	RS248NX	2.4	66.5	10.7	1.0
Wensman	W1208NRX	2.0	65.6	10.0	1.0
Great Lakes Hybrids	2063NRX	2.0	63.8	10.1	1.0
Dairyland Seed	DSR-2616/R2Y	2.6	63.7	11.5	1.0
Dyna-Gro	S26RS75	2.6	63.3	10.3	1.0
Dyna-Gro	S23RY85	2.3	62.1	9.9	1.0
Great Lakes Hybrids	2269NR2	2.2	62.0	9.9	1.0
Wensman	W3228NR2	2.3	61.4	9.9	1.0
Dairyland Seed	DSR-2110/R2Y	2.1	61.4	10.0	1.0
Great Lakes Hybrids	2372NRX	2.3	61.1	9.9	1.0
Check	CHECK	1.4	60.5	9.9	1.0
Wensman	W1218NRX	2.1	60.3	10.0	1.0
Great Lakes Hybrids	2870NRX	2.8	60.0	11.6	1.0
Wensman	W1233RX	2.2	59.7	9.9	1.0
Great Lakes Hybrids	2551NR2	2.5	59.6	10.1	1.0
Great Lakes Hybrids	2469R2	2.4	59.2	10.0	1.0
Peterson Farms Seed	17X21N	2.1	59.2	9.9	1.0
Peterson Farms Seed	18X23N	2.3	59.1	10.2	1.0
Great Lakes Hybrids	2673NRX	2.6	59.1	10.1	1.0
Dyna-Gro	S24RY87	2.4	58.3	10.1	1.0
Wensman	W1220NRX	2.2	58.0	9.9	1.0
Renk	RS228NX	2.2	57.1	10.0	1.0
Dairyland Seed	DSR-2330/R2Y	2.3	56.5	10.1	1.0
		Trial Average	61.0	10.2	1.0
		LSD (0.05)†	3.1	0.5	-
		C.V.‡	3.6	3.3	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2017 South Dakota

Soybean Variety Trial Results - Bancroft

Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 4 miles north and 1/2 mile west of Bancroft (57353) in Kingsbury County

(GPS: 44.543921, -97.767418)

Cooperator: Weerts Farm, Inc.

Soil Type: Houdek-Stickney loam, 0-2% slope, non-irrigated

Fertilizer: None Previous crop: Corn

Tillage: Minimum-till Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: 14 oz Authority MTZ (sulfentrazone+metribuzin)

Post: 1) 32 oz Roundup Powermax (glyphosate) + 12 oz Andros (fomesafen) + 4

oz Section Three (clethodim); 2) 44 oz Roundup Powermax (glyphosate)

Insecticide: None
Date seeded: 5/30/2017
Date harvested: 10/12/2017





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at Bancroft, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	CHECK	1.4	62.8	9.5	1.0
Legacy Seeds	LS-0935N RR2	0.9	58.9	9.6	1.0
Thunder Seed	3408 R2YN	0.8	58.3	9.6	1.0
Thunder Seed	SB8807N	0.7	58.1	9.4	1.0
Thunder Seed	3606 R2YN	0.6	55.2	9.5	1.0
Thunder Seed	SB8805N	0.5	54.7	9.1	1.0
Legacy Seeds	LS-0836N RR2X	0.8	51.8	9.5	1.0
Thunder Seed	SB8703	0.3	49.7	9.2	1.0
		Trial Average	56.2	9.4	1.0
		LSD (0.05)†	3.4	0.2	-
		C.V.‡	4.0	1.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Groups 1 at Bancroft, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	CHECK	1.4	66.1	10.0	1.0
Prairie Brand	PB-1566R2	1.5	65.8	9.7	1.0
Federal Hybrids	F147N RR2Y	1.4	65.5	9.7	1.0
Prairie Brand	PB-1947R2	1.9	65.4	10.0	1.0
Dairyland Seed	DSR-1950/R2Y	1.9	65.1	9.8	1.0
Renk	RS147NR2	1.4	65.1	9.7	1.0
Peterson Farms Seed	18X16N	1.6	64.2	9.8	1.0
Federal Hybrids	F154N RR2Y	1.5	63.9	9.8	1.0
Prairie Brand	PB-1376R2	1.3	63.9	9.8	1.0
Thunder Seed	3614 R2YN	1.4	63.8	9.5	1.0
Renk	RS168NX	1.6	63.7	9.9	1.0
Wensman	W1184NRX	1.8	63.6	10.0	1.0
Renk	RS188NX	1.8	62.6	10.1	1.0
Proseed	XT718N	1.8	62.4	10.0	1.0
Proseed	XT714N	1.4	62.4	10.0	1.0
Legacy Seeds	LS-1335N RR2	1.3	62.3	9.8	1.0
Peterson Farms Seed	18X13N	1.3	62.2	9.7	1.0
Wensman	W1165NRX	1.6	62.2	9.7	1.0
Legacy Seeds	LS-1638N RR2X	1.6	61.9	9.8	1.0
Prairie Brand	PB-1822R2	1.8	61.9	10.0	1.0
Legacy Seeds	LS-1134N RR2	1.1	61.8	9.7	1.0
Federal Hybrids	F1880N R2X	1.8	61.7	9.8	1.0
Peterson Farms Seed	18X14N	1.4	61.1	9.7	1.0
Prairie Brand	PB-1956R2	1.9	60.9	10.0	1.0
Dairyland Seed	DSR-1870/R2Y	1.8	60.9	9.8	1.0
		Trial Average	61.4	9.8	1.0
		LSD (0.05)†	3.1	0.3	-
		C.V.‡	3.6	2.0	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2017 South Dakota COV® Soybean Variety Trial Results - Bancroft

Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at Bancroft, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Proseed	XT716N	1.6	60.8	10.0	1.0
Peterson Farms Seed	18X11N	1.1	60.7	9.8	1.0
Renk	RS148NX	1.4	60.4	9.9	1.0
Prairie Brand	PB-1787R2	1.7	60.0	9.6	1.0
Dairyland Seed	DSR-1721/R2Y	1.7	59.7	10.0	1.0
Federal Hybrids	F1180N R2X	1.1	59.6	9.8	1.0
Thunder Seed	SB8811N	1.1	59.5	9.9	1.0
Federal Hybrids	F1680N R2X	1.6	59.0	10.0	1.0
Federal Hybrids	F1480N R2X	1.4	58.6	10.0	1.0
Peterson Farms Seed	17X18N	1.8	58.2	9.8	1.0
Legacy Seeds	LS-1138N RR2X	1.1	57.1	9.6	1.0
Thunder Seed	SB8710N	1.0	55.7	9.7	1.0
Wensman	W1173NRX	1.7	55.5	9.6	1.0
Legacy Seeds	LS-1136N RR2X	1.1	55.4	9.7	1.0
Legacy Seeds	LS-1338N RR2X	1.3	53.3	9.7	1.0
		Trial Average	61.4	9.8	1.0
		LSD (0.05)+	3.1	0.3	_
		C.V.‡	3.6	2.0	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 3. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Bancroft, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	PB-2419R2	2.4	70.8	11.8	1.3
Wensman	W1233RX	2.2	68.3	10.3	1.3
Prairie Brand	PB-2296R2	2.2	67.7	10.2	1.0
Federal Hybrids	F2170N R2X	2.1	67.3	10.2	1.3
Renk	RS207NX	2.0	66.6	10.3	1.0
Check	CHECK	1.4	66.6	9.7	1.0
Wensman	W1220NRX	2.2	66.1	10.3	1.0
Wensman	W1208NRX	2.0	65.4	10.3	1.5
Federal Hybrids	F2080N R2X	2.0	64.5	11.1	1.0
Federal Hybrids	F2280N R2X	2.2	64.1	10.4	1.3
Proseed	XT720N	2.0	63.5	10.8	1.0
Renk	RS208NX	2.0	63.3	11.2	1.0
Wensman	W1218NRX	2.1	63.3	11.1	1.3
Dairyland Seed	DSR-2110/R2Y	2.1	62.8	10.4	1.0
		Trial Average	65.7	10.6	1.1
		LSD (0.05)+	3.7	0.7	0.5
		C.V.‡	3.9	4.7	_

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2017 South Dakota Soybean Variety Trial Results - South Shore

Jonathan Kleinjan | SDSU Extension Crop Production Associate

Kevin Kirby | Agricultural Research Manager **Shawn Hawks** | Agricultural Research Manager

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: 43.046221, -96.901055)

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: None

Previous crop: Spring Wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: 1 pt Dual II Magnum (s-metolachlor)

Post: 32 oz Roundup (glyphosate)

Insecticide: None

Date seeded: 5/26/2017 Date harvested: 10/18/2017





2017 South Dakota Soybean Variety Trial Results - South Shore

Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at South Shore, SD).

Variety Information			Agronomic Performance		
	ĺ	Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	PB-0987R2	0.9	70.0	10.5	1.0
Federal Hybrids	F087N RR2Y	0.8	69.9	10.6	1.0
Check	CHECK	1.4	67.7	10.5	1.0
Dairyland Seed	DSR-0988/R2Y	0.9	67.1	10.6	1.0
Wensman	W1060NRX	0.6	66.8	10.5	1.0
Renk	RS096NR2	0.9	66.8	10.6	1.0
Thunder Seed	SB8805N	0.5	66.6	10.2	1.0
Legacy Seeds	LS-0836N RR2X	0.8	66.5	10.8	1.0
Legacy Seeds	LS-0935N RR2	0.9	66.0	10.7	1.0
Titan Pro	TP-08X17	0.8	65.9	10.5	1.0
Dairyland Seed	DSR-0807/R2Y	0.8	65.9	10.2	1.0
Prairie Brand	PB-0777R2	0.7	65.9	10.6	1.0
Renk	RS078NX	0.7	65.3	10.5	1.0
Federal Hybrids	F0880N R2X	0.8	65.2	10.3	1.0
Peterson Farms Seed	17X09N	0.9	65.1	10.7	1.0
Peterson Farms Seed	18X08N	0.8	64.6	10.6	1.0
Thunder Seed	3408 R2YN	0.8	64.3	10.7	1.0
Wensman	W1086NRX	0.8	63.2	10.6	1.0
Wensman	W1074NRX	0.7	62.9	10.3	1.0
Thunder Seed	3606 R2YN	0.6	62.1	10.6	1.0
Titan Pro	TP-06X57	0.6	61.5	10.4	1.0
Thunder Seed	SB8703	0.3	59.4	10.3	1.5
Thunder Seed	SB8807N	0.7	57.6	10.5	1.0
	-	Trial Average	65.1	10.5	1.0
		LSD (0.05)†	2.5	0.2	0.2
		C.V.‡	2.8	1.7	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Soybean Variety Trial Results - South Shore 2017 South Dakota

Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at South Shore, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Federal Hybrids	F154N RR2Y	1.5	72.2	10.3	1.0
Federal Hybrids	F147N RR2Y	1.4	70.4	10.2	1.5
Dairyland Seed	DSR-1526/R2Y	1.5	69.9	10.3	1.0
Check	CHECK	1.4	69.4	10.1	1.0
Prairie Brand	PB-1257R2	1.2	68.8	10.3	1.8
Titan Pro	TP-14X27	1.4	68.0	10.5	1.0
Federal Hybrids	F1680N R2X	1.6	68.0	10.3	1.0
Prairie Brand	PB-1566R2	1.5	67.8	10.2	1.0
Titan Pro	TP-18X97	1.8	67.8	11.1	1.5
Wensman	W1129NRX	1.2	67.8	10.2	1.3
Dairyland Seed	DSR-1120/R2Y	1.1	67.5	10.1	1.3
Renk	RS118NX	1.1	67.4	10.4	1.0
Wensman	W1140NRX	1.4	67.3	10.2	1.3
Federal Hybrids	F1480N R2X	1.4	67.2	10.4	1.0
Prairie Brand	PB-1376R2	1.3	67.2	10.2	1.3
Thunder Seed	SB8811N	1.1	67.1	10.5	1.0
Legacy Seeds	LS-1335N RR2	1.3	67.1	10.2	1.3
Legacy Seeds	LS-1638N RR2X	1.6	67.0	10.4	1.0
Dairyland Seed	DSR-1313/R2Y	1.3	66.9	10.2	1.8
Wensman	W1165NRX	1.6	66.7	10.5	1.0
Legacy Seeds	LS-1134N RR2	1.1	66.5	10.5	1.5
Titan Pro	TP-16X77	1.6	66.5	10.6	1.3
Dairyland Seed	DSR-1475/R2Y	1.4	66.5	10.2	1.0
Legacy Seeds	LS-1338N RR2X	1.3	66.4	10.1	1.0
Peterson Farms Seed	18X11N	1.1	66.4	10.4	1.3
		Trial Average	66.9	10.4	1.2
		LSD (0.05)†	2.6	0.2	0.5
		C.V.‡	2.8	1.4	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

2017 South Dakota Soybean Variety Trial Results - South Shore

Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at South Shore, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Prairie Brand	PB-1787R2	1.7	66.3	10.4	1.5
Thunder Seed	3614 R2YN	1.4	66.1	10.2	1.5
Prairie Brand	PB-1947R2	1.9	65.7	10.6	1.3
Wensman	W1121NRX	1.2	65.6	10.5	1.0
Titan Pro	TP-11X37	1.1	65.5	10.6	1.3
Federal Hybrids	F1180N R2X	1.1	64.9	10.5	1.0
Legacy Seeds	LS-1138N RR2X	1.1	64.4	10.2	1.0
Legacy Seeds	LS-1136N RR2X	1.1	63.8	10.5	1.0
Wensman	W1106NRX	1.0	62.2	10.4	1.0
Thunder Seed	SB8710N	1.0	61.2	10.4	1.0
		Trial Average	66.9	10.4	1.2
		LSD (0.05)†	2.6	0.2	0.5
		C.V.‡	2.8	1.4	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Extension Crop Production Associate
Kevin Kirby | Agricultural Research Manager
Shawn Hawks | Agricultural Research Manager

Location: SDSU (57007) Brookings County, SD

(GPS: 44.319737, -96.771296)

Cooperator: SDSU Research Farm - Jack Ingemansen, manager

Soil Type: Barnes clay loam, 0-2% slopes

Fertilizer: None Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: 1 pt Dual II Magnum (metolachlor)

Post: 32 oz Roundup Power Max (glyphosate)

Insecticide: None Date seeded: 5/31/2017

Date harvested: 10/13/2017 (Group 0&1), 10/19/2017 (Group 2)





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at Brookings, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	CHECK	1.4	64.9	10.2	1.0
Legacy Seeds	LS-0935N RR2	0.9	64.5	10.4	1.0
Legacy Seeds	LS-0836N RR2X	0.8	64.4	10.3	1.0
Thunder Seed	3408 R2YN	0.8	63.3	10.3	1.0
Thunder Seed	SB8807N	0.7	59.2	10.3	1.0
Thunder Seed	SB8805N	0.5	57.4	9.9	1.0
Thunder Seed	SB8703	0.3	56.9	10.0	2.5
Thunder Seed	3606 R2YN	0.6	54.5	10.2	1.0
		Trial Average	60.7	10.2	1.2
		LSD (0.05)†	2.7	0.2	0.3
		C.V.‡	3.1	1.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Brookings, SD).

Maturity Group 1 at Br	Agronomic Performance				
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Stine	19BA23	1.9	72.6	11.0	1.0
Wensman	W1184NRX	1.8	70.4	10.5	1.5
Prairie Brand	PB-1787R2	1.7	69.9	9.8	1.3
Prairie Brand	PB-1956R2	1.9	69.0	11.1	1.8
Stine	18XB32	1.8	68.9	10.5	1.3
Federal Hybrids	F154N RR2Y	1.5	68.6	9.8	1.0
Prairie Brand	PB-1566R2	1.5	68.4	10.1	1.0
Renk	RS188NX	1.8	68.0	10.2	1.0
Dairyland Seed	DSR-1721/R2Y	1.7	68.0	10.1	1.8
Federal Hybrids	F1880N R2X	1.8	67.6	10.4	1.3
Dairyland Seed	DSR-1870/R2Y	1.8	67.6	10.3	1.0
Prairie Brand	PB-1822R2	1.8	67.2	10.0	1.0
Prairie Brand	PB-1947R2	1.9	67.1	10.1	1.3
Federal Hybrids	F1680N R2X	1.6	67.0	10.1	1.5
Titan Pro	TP-14X27	1.4	66.9	10.0	1.0
Titan Pro	TP-18X97	1.8	66.7	10.6	1.0
Check	CHECK	1.4	66.4	9.7	1.3
Titan Pro	TP-16X77	1.6	66.2	10.1	1.3
Peterson Farms Seed	18X14N	1.4	66.2	10.0	1.0
Peterson Farms Seed	18X11N	1.1	66.2	10.0	1.0
Thunder Seed	SB8710N	1.0	66.0	9.9	1.0
Wensman	W1140NRX	1.4	66.0	9.7	1.0
Legacy Seeds	LS-1335N RR2	1.3	65.9	9.6	1.0
Dairyland Seed	DSR-1950/R2Y	1.9	65.8	10.0	1.3
Thunder Seed	SB8811N	1.1	65.6	9.8	1.0
Legacy Seeds	LS-1338N RR2X	1.3	65.2	9.8	1.0
Peterson Farms Seed	17X18N	1.8	65.2	9.9	1.0
Wensman	W1165NRX	1.6	65.0	10.0	1.3
Legacy Seeds	LS-1138N RR2X	1.1	65.0	9.8	1.0
Renk	RS147NR2	1.4	64.9	9.8	1.3
		Trial Average	66.2	10.0	1.2
		LSD (0.05)†	2.8	0.4	0.5
		C.V.‡	3.0	2.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at Brookings, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Renk	RS147NR2	1.4	64.9	9.8	1.3
Peterson Farms Seed	18X16N	1.6	64.7	10.0	1.8
Wensman	W1173NRX	1.7	64.7	10.0	1.5
Stine	19RF32	1.9	64.5	10.0	1.0
Renk	RS168NX	1.6	64.0	10.0	1.8
Renk	RS148NX	1.4	64.0	9.9	1.0
Legacy Seeds	LS-1134N RR2	1.1	63.9	10.1	2.3
Thunder Seed	3614 R2YN	1.4	63.5	9.7	1.0
Peterson Farms Seed	18X13N	1.3	63.4	9.8	1.0
Legacy Seeds	LS-1638N RR2X	1.6	62.9	10.1	1.3
Legacy Seeds	LS-1136N RR2X	1.1	62.4	10.1	1.0
Stine	15BA30	1.5	62.2	10.2	1.0
Λ		Trial Average	66.2	10.0	1.2
/		LSD (0.05)+	2.8	0.4	0.5
		C.V.‡	3.0	2.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 3. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Brookings, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Dairyland Seed	DSR-2110/R2Y	2.1	69.8	9.1	1.0
Renk	RS207NX	2.0	68.7	9.3	1.5
Wensman	W1208NRX	2.0	68.6	9.2	2.5
Credenz	CZ 2188 EXP	2.1	68.1	9.4	1.3
Titan Pro	TP-21X46	2.1	67.6	9.2	1.5
Prairie Brand	PB-2419R2	2.4	66.7	9.2	1.5
Titan Pro	TP-24X87	2.4	66.2	10.2	1.5
Prairie Brand	PB-2296R2	2.2	65.9	9.3	2.3
Titan Pro	TP-20X57	2.0	65.8	9.4	1.0
Federal Hybrids	F2280N R2X	2.2	65.5	9.2	1.0
Federal Hybrids	F2480N R2X	2.4	65.5	10.0	1.5
Federal Hybrids	F2170N R2X	2.1	65.5	9.2	1.8
Wensman	W1220NRX	2.2	65.3	9.2	1.3
Wensman	W1218NRX	2.1	65.1	9.5	1.5
Check	CHECK	1.4	63.7	9.1	1.0
Renk	RS208NX	2.0	63.1	9.4	1.0
Titan Pro	TP-24R26	2.4	62.8	9.3	1.3
Federal Hybrids	F2080N R2X	2.0	62.0	9.4	1.0
		Trial Average	65.9	9.4	1.4
		LSD (0.05)†	2.6	0.3	0.6
		C.V.‡	2.8	2.2	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: 43.046221, -96.901055)

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent complex, 1-6% slopes, non-irrigated

Fertilizer: None

Previous crop: Corn (cover crop: Rye)

Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: 32 oz Roundup Power Max (glyphosate) + 1.33 pt Dual (metolachlor) + 4

oz Sencor (metribuzin) + 1 oz Sharpen (saflufenacil)

Post: 0.3 oz FirstRate (cloransulam) + 10 oz Flexstar (fomesafen) + 4 oz Latch

(drift retardant) + 1% UAN + 1% COC

Insecticide: None
Date seeded: 6/1/2017
Date harvested: 10/17/2017





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Beresford, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Great Lakes Hybrids	1953NR2	1.9	80.3	10.9	1.0
Dairyland Seed	DSR-1950/R2Y	1.9	79.5	11.0	1.0
Check	CHECK	1.4	77.5	11.1	1.0
Thunder Seed	SB8811N	1.1	75.7	11.3	1.0
Thunder Seed	3614 R2YN	1.4	75.5	10.9	1.0
Peterson Farms Seed	18X16N	1.6	75.3	11.1	1.0
Peterson Farms Seed	17X18N	1.8	72.4	10.9	1.0
Thunder Seed	SB8710N	1.0	72.4	11.3	1.0
		Trial Average	76.4	11.1	1.0
		LSD (0.05)†	2.6	0.5	-
		C.V.‡	2.4	3.1	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Beresford, SD).

Maturity Group 2 at Be	Agronomic Performance				
Variety Information Maturity			Yield	Monnic r errorn	Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Dairyland Seed	DSR-2616/R2Y	2.6	84.3	10.9	1.0
Prairie Brand	PB-2600R2	2.6	83.2	11.4	1.0
Titan Pro	TP-24X87	2.4	82.4	11.1	1.0
Wensman	W1208NRX	2.4	82.4	10.3	1.0
Great Lakes Hybrids	2063NRX	2.0	81.7	10.3	1.0
Credenz	CZ 2188 EXP	2.0	81.3	10.3	1.0
Renk	RS248NX	2.1	81.2	10.4	1.0
Prairie Brand	PB-2228R2	2.2	81.1	10.1	1.0
Renk	RS265NR2	2.6	80.6	10.8	1.0
Prairie Brand	PB-2197R2	2.1	80.0	10.3	1.0
Great Lakes Hybrids	2469R2	2.4	79.8	10.3	1.0
Titan Pro	TP-24R26	2.4	79.8	10.5	1.0
Stine	28BA02	2.8	79.3	11.3	1.0
Great Lakes Hybrids	2269NR2	2.2	79.2	10.4	1.0
Dyna-Gro	S23RY85	2.3	78.8	10.3	1.0
Prairie Brand	PB-2876R2	2.8	78.8	11.2	1.0
Great Lakes Hybrids	2870NRX	2.8	78.1	10.7	1.0
Stine	26BA32	2.6	78.1	10.7	1.0
Dairyland Seed	DSR-2330/R2Y	2.3	78.1	10.5	1.0
Wensman	W3228NR2	2.3	78.0	10.4	1.0
Peterson Farms Seed	17X21N	2.1	78.0	10.2	1.0
Prairie Brand	PB-2419R2	2.4	77.9	10.1	1.0
Great Lakes Hybrids	2673NRX	2.6	77.8	10.5	1.0
Prairie Brand	PB-2486R2	2.4	77.8	10.6	1.0
Wensman	W1233RX	2.2	77.6	10.3	1.0
Titan Pro	TP-21X46	2.1	77.4	10.2	1.0
Credenz	CZ 2558 EXP	2.5	77.1	10.9	1.0
Dyna-Gro	S26RS75	2.6	76.9	10.7	1.0
Prairie Brand	PB-2296R2	2.2	76.7	10.4	1.0
Titan Pro	TP-28X47	2.8	76.6	10.8	1.0
	•	Trial Average	77.9	10.6	1.0
		LSD (0.05)†	3.1	0.4	-
		C.V.‡		2.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 2 at Beresford, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Dyna-Gro	S24RY87	2.4	76.4	10.5	1.0
Great Lakes Hybrids	2551NR2	2.5	75.9	10.4	1.0
Check	CHECK	1.4	75.7	10.5	1.0
Dairyland Seed	DSR-2110/R2Y	2.1	75.4	10.3	1.0
Wensman	W1218NRX	2.1	75.4	10.6	1.0
Titan Pro	TP-20X57	2.0	74.8	10.9	1.0
Wensman	W1220NRX	2.2	74.7	10.4	1.0
Titan Pro	TP-26X37	2.6	74.0	10.6	1.0
Great Lakes Hybrids	2372NRX	2.3	73.3	10.2	1.0
Peterson Farms Seed	18X23N	2.3	72.3	10.5	1.0
Renk	RS228NX	2.2	72.2	10.8	1.0
Stine	26XB32	2.6	70.6	10.5	1.0
		Trial Average	77.9	10.6	1.0
/		LSD (0.05)+	3.1	0.4	
		C.V.‡	2.8	2.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Extension Crop Production Associate
Kevin Kirby | Agricultural Research Manager
Shawn Hawks | Agricultural Research Manager

Location: 3 miles south and 1 mile west of Miller (57362) in Beadle County, SD

(GPS: 44.473122, -99.003088)

Cooperator: Paul Fulton

Soil Type: Houdek-Prosper loams, 0-2% slopes

Fertilizer: 22-52-18-12S-5Z preplant

Previous crop: Corn
Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Herbicide: Pre: 6 oz Authority Assist (sulfentrazone + imazethapyr), 32 oz RT3

(glyphosate), 8 oz LV6

Post: 32 oz Roundup Weathermax (glyphosate), 4 oz Vaquero (clethodim), 4 oz

Crosshair (drift retardant), 1 qt/100 gal Bronc Max

Insecticide: None

Date seeded: 5/30/2017 Date harvested: 10/12/2016





Table 1. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 0 at Miller, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Thunder Seed	3408 R2YN	0.8	49.7	9.6	1.0
Check	CHECK	1.4	49.3	9.5	1.0
Legacy Seeds	LS-0935N RR2	0.9	47.5	9.7	1.0
Legacy Seeds	LS-0836N RR2X	0.8	46.8	9.5	1.0
Thunder Seed	SB8807N	0.7	45.6	9.1	1.0
Thunder Seed	SB8805N	0.5	44.0	9.1	1.0
Thunder Seed	3606 R2YN	0.6	43.6	9.5	1.0
Thunder Seed	SB8703	0.3	40.8	9.0	1.0
Trial Average			45.9	9.4	1.0
LSD (0.05)†			4.8	0.3	-
		C.V.‡	7.1	2.1	

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2a. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 1 at Miller, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Peterson Farms Seed	18X13N	1.3	51.3	9.1	1.0
Legacy Seeds	LS-1338N RR2X	1.3	49.3	9.1	1.0
Renk	RS168NX	1.6	49.1	9.2	1.0
Wensman	W1165NRX	1.6	49.1	9.1	1.0
Legacy Seeds	LS-1134N RR2	1.1	48.8	9.0	1.0
Peterson Farms Seed	18X16N	1.6	48.6	9.2	1.0
Federal Hybrids	F154N RR2Y	1.5	48.0	8.8	1.0
Peterson Farms Seed	17X18N	1.8	47.7	9.1	1.0
Check	CHECK	1.4	47.4	9.0	1.0
Legacy Seeds	LS-1638N RR2X	1.6	47.4	9.1	1.0
Legacy Seeds	LS-1138N RR2X	1.1	47.2	9.0	1.0
Thunder Seed	3614 R2YN	1.4	47.1	8.8	1.0
Legacy Seeds	LS-1136N RR2X	1.1	47.1	9.1	1.0
Prairie Brand	PB-1822R2	1.8	46.5	9.2	1.0
Renk	RS147NR2	1.4	46.4	8.8	1.0
Prairie Brand	PB-1566R2	1.5	46.2	9.0	1.0
Prairie Brand	PB-1376R2	1.3	46.1	9.0	1.0
Prairie Brand	PB-1947R2	1.9	46.0	9.3	1.0
Wensman	W1140NRX	1.4	45.9	8.9	1.0
Thunder Seed	SB8811N	1.1	45.8	9.1	1.0
Federal Hybrids	F147N RR2Y	1.4	45.7	9.2	1.0
Dairyland Seed	DSR-1950/R2Y	1.9	45.6	9.0	1.0
Peterson Farms Seed	18X14N	1.4	45.4	9.4	1.0
Dairyland Seed	DSR-1870/R2Y	1.8	44.6	9.2	1.0
Proseed	XT716N	1.6	44.6	9.1	1.0
		Trial Average	45.4 4.6	9.1 0.4	1.0
	LSD (0.05)†				-
		C.V.‡	7.3	2.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2b. Glyphosate-resistant soybean variety performance results, continued (average of 4 replications) - Maturity Group 1 at Miller, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Proseed	XT714N	1.4	44.4	9.1	1.0
Peterson Farms Seed	18X11N	1.1	43.9	9.0	1.0
Wensman	W1184NRX	1.8	43.9	9.1	1.0
Dairyland Seed	DSR-1721/R2Y	1.7	43.7	9.3	1.0
Proseed	XT718N	1.8	43.4	8.9	1.0
Federal Hybrids	F1180N R2X	1.1	42.8	9.0	1.0
Federal Hybrids	F1480N R2X	1.4	42.4	9.2	1.0
Renk	RS148NX	1.4	42.4	9.3	1.0
Federal Hybrids	F1680N R2X	1.6	42.3	9.0	1.0
Prairie Brand	PB-1787R2	1.7	42.2	9.0	1.0
Thunder Seed	SB8710N	1	41.9	9.0	1.0
Legacy Seeds	LS-1335N RR2	1.3	40.3	9.0	1.0
Federal Hybrids	F1880N R2X	1.8	38.4	9.0	1.0
Renk	RS188NX	1.8	37.6	9.0	1.0
		Trial Average	45.4	9.1	1.0
		LSD (0.05)†	4.6	0.4	
		C.V.‡	7.3	2.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 3. Glyphosate-resistant soybean variety performance results (average of 4 replications) - Maturity Group 2 at Miller, SD).

Variety Information			Agronomic Performance		
		Maturity	Yield		Lodging Score
Brand	Variety	Rating	(bu/ac@13%)	Moisture %	(1-5)*
Renk	RS207NX	2.0	47.3	9.0	1.0
Check	CHECK	1.4	46.3	8.9	1.0
Dairyland Seed	DSR-2110/R2Y	2.1	45.8	9.1	1.0
Credenz	CZ 2188 EXP	2.1	45.1	9.0	1.0
Wensman	W1208NRX	2.0	44.7	9.0	1.0
Federal Hybrids	F2170N R2X	2.1	43.1	9.0	1.0
Proseed	XT720N	2.0	42.8	9.2	1.0
Renk	RS208NX	2.0	42.4	9.1	1.0
Wensman	W1218NRX	2.1	42.4	9.1	1.0
Wensman	W1220NRX	2.2	41.8	9.1	1.0
Federal Hybrids	F2080N R2X	2.0	41.4	9.2	1.0
Federal Hybrids	F2280N R2X	2.2	39.9	9.1	1.0
		Trial Average	43.5	9.1	1.0
		LSD (0.05)†	4.2	0.2	-
		C.V.‡	6.9	1.3	<u>-</u>

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another. Yield values statistically similar to the overall trial winner are shown in **boldface**.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Extension Crop Production Associate
Kevin Kirby | Agricultural Research Manager
Shawn Hawks | Agricultural Research Manager

Beresford

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: 43.046221, -96.901055)

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent complex, 1-6% slopes, non-irrigated

Fertilizer: None

Previous crop: Corn (cover crop: Rye)

Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Pre: 32 oz Roundup Power Max (glyphosate) + 1.33 pt Dual (metolachlor) + 4 oz

Herbicide: Sencor (metribuzin) + 1 oz Sharpen (saflufenacil)

Post: 0.3 oz FirstRate (cloransulam) + 10 oz Flexstar (fomesafen) + 4 oz Latch

(drift retardant) + 1% UAN + 1% COC

Insecticide: None
Date seeded: 6/1/2017
Date harvested: 10/17/2017





Table 1. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 1 at Beresford, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Peterson Farms Seed	L17-16N	1.7	75.0	9.9	1.0
Check	CHECK	1.4	73.2	9.9	1.0
Credenz	CZ 1332 LL	1.3	73.0	10.0	1.0
Thunder Seed	5712 LLN	1.2	72.8	9.9	1.0
Thunder Seed	5717 LLN	1.7	72.6	10.0	1.0
Great Lakes Hybrids	1769NLL	1.7	72.4	10.1	1.0
Miller Hybrids	17269LL	1.7	72.4	9.8	1.0
Credenz	CZ 1738 LL	1.7	69.2	10.1	1.0
Thunder Seed	5411 LLN	1.1	63.6	9.6	1.0
Trial Average			71.6	9.9	1.0
		LSD (0.05)†	3.7	0.2	-
		C.V.‡	3.6	1.4	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 2 at Beresford, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Stine	24LJ20	2.5	77.1	9.7	1.0
Credenz	CZ 2601 LL	2.6	76.6	9.7	1.0
Miller Hybrids	25159LL	2.5	76.2	9.6	1.0
Great Lakes Hybrids	2557NLL	2.5	75.7	9.7	1.0
Credenz	CZ 2101 LL	2.1	75.4	9.6	1.0
Credenz	CZ 2312 LL	2.3	75.1	9.3	1.0
Great Lakes Hybrids	2860NLL	2.8	74.1	10.4	1.0
Stine	26LH02	2.6	73.9	9.8	1.0
Great Lakes Hybrids	2264NLL	2.2	73.7	9.6	1.0
Stine	25LH62	2.5	73.7	9.6	1.0
Miller Hybrids	23159LL	2.3	73.7	9.4	1.0
Credenz	CZ 2510 LL	2.5	73.4	9.5	1.0
Peterson Farms Seed	L21-17N	2.1	73.1	9.6	1.0
Check	CHECK	1.4	71.2	9.6	1.0
		Trial Average	74.5	9.6	1.0
		LSD (0.05)†	2.9	0.3	-
		C.V.‡	2.7	2.1	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Brookings

Location: SDSU (57007) Brookings County, SD

(GPS: 44.319737, -96.771296)

Cooperator: SDSU Research Farm - Jack Ingemansen, manager

Soil Type: Barnes clay loam, 0-2% slopes

Fertilizer: None Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: 1 pt Dual II Magnum (metolachlor)

Post: 0.125 oz Harmony SG (thifensulferon)

Insecticide: None

Date seeded: 5/31/2017 Date harvested: 10/19/2017

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Table 3. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Groups 0 & 1 at Brookings, SD).

Var	iety Information		Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Thunder Seed	5717 LLN	1.7	69.0	9.1	1.8
Credenz	CZ 1332 LL	1.3	67.4	9.3	1.0
Stine	19Ll32	1.9	67.4	9.3	2.3
Credenz	CZ 1738 LL	1.7	67.0	9.1	2.3
Credenz	CZ 1201 LL	1.2	67.0	9.1	2.3
Check	CHECK	1.4	66.9	8.8	1.0
Peterson Farms Seed	L17-16N	1.7	66.4	9.1	2.0
Stine	17LH62	1.7	65.3	9.2	2.0
Thunder Seed	5712 LLN	1.2	65.0	9.1	2.0
Miller Hybrids	13269LL	1.3	64.8	9.2	1.8
Peterson Farms Seed	L12-16N	1.2	64.7	9.1	2.0
Credenz	CZ 1028 LL	1.0	64.5	9.2	1.0
Miller Hybrids	17269LL	1.7	63.4	9.0	1.3
Stine	13LH62	1.4	63.0	9.1	2.0
Peterson Farms Seed	L13-15N	1.3	62.8	9.1	1.0
Thunder Seed	5605 LLN	0.5	61.8	9.1	2.3
Thunder Seed	5411 LLN	1.1	61.5	8.9	1.5
Thunder Seed	5707 LLN	0.7	58.7	9.3	1.0
		Trial Average	64.8	9.1	1.7
		LSD (0.05)†	3.1	0.2	0.7
		C.V.‡	3.4	1.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 4. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 2 at Volga, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Credenz	CZ 2601 LL	2.6	70.8	9.5	1.3
Credenz	CZ 2312 LL	2.3	68.1	9.1	1.3
Miller Hybrids	23159LL	2.3	67.8	9.1	1.3
Credenz	CZ 2510 LL	2.5	67.1	9.3	1.3
Miller Hybrids	25159LL	2.5	66.9	9.4	1.0
Credenz	CZ 2101 LL	2.1	66.1	9.1	1.3
Check	CHECK	1.4	65.9	9.0	1.0
		Trial Average	67.5	9.2	1.2
		LSD (0.05)+	2.1	0.2	0.4
		C.V.‡	2.1	1.7	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2017 South Dakota Liberty Link Soybean Variety Trial Results

South Shore

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: 45.106822, -97.099983)

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: None

Previous crop: Spring Wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: 1 pt Dual II Magnum (s-metolachlor)

Post: 0.125 oz Harmony SG (thifensulfuron)

Insecticide: None

Date seeded: 5/26/2017

Date harvested: 10/18/2017

Table 5. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 0 at South Shore, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	CHECK	1.4	69.4	9.9	1.0
Credenz	CZ 0525 LL	0.5	66.2	9.9	1.0
Credenz	CZ 0601 LL	0.6	66.0	10.3	1.0
Thunder Seed	5707 LLN	0.7	64.3	10.4	1.0
Thunder Seed	5605 LLN	0.5	63.5	10.0	1.0
Credenz	CZ 0448 LL	0.4	62.3	10.3	1.0
		Trial Average	65.2	10.1	1.0
		LSD (0.05)†	2.8	0.3	-
		C.V.‡	2.9	2.2	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



2017 South Dakota Liberty Link Soybean Variety Trial Results

Table 6. Liberty Link soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 1 at South Shore, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Credenz	CZ 1332 LL	1.3	71.9	10.4	1.0
Credenz	CZ 1738 LL	1.7	71.4	10.2	1.5
Proseed	41-30	1.3	70.1	10.2	1.0
Credenz	CZ 1028 LL	1	69.7	10.3	1.0
Peterson Farms Seed	L17-16N	1.7	69.2	10.1	1.3
Peterson Farms Seed	L12-16N	1.2	68.7	10.1	1.5
Credenz	CZ 1201 LL	1.2	68.6	10.1	1.5
Peterson Farms Seed	L11-18N	1.1	68.3	11.1	1.0
Check	CHECK	1.4	68.1	9.9	1.0
Proseed	51-21	1.2	67.6	10.2	1.5
Thunder Seed	5717 LLN	1.7	67.4	10.2	1.8
Miller Hybrids	11269LL	1.1	67.3	10.2	1.3
Peterson Farms Seed	L13-15N	1.3	66.8	13.9	1.0
Thunder Seed	5712 LLN	1.2	65.2	10.5	1.5
Miller Hybrids	13269LL	1.3	63.6	10.5	1.3
Proseed	21-00	1.1	60.7	9.9	1.0
Thunder Seed	5411 LLN	1.1	57.7	9.8	1.0
Trial Average			67.2	10.4	1.2
	LSD (0.05)†			2.6	0.5
		C.V.‡	3.3	1.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Beresford

Location: 6 miles west and 3 miles south of Beresford (57432) in Clay county, SD

(GPS: 43.046221, -96.901055)

Cooperator: SDSU Southeast Research Farm - Peter Sexton, manager Soil Type: Egan-Clarno-Trent complex, 1-6% slopes, non-irrigated

Fertilizer: None

Previous crop: Corn (cover crop: Rye)

Tillage: No-till
Row spacing: 30 inches
Seeding Rate: 165,000/acre

Pre: 32 oz Roundup Power Max (glyphosate) + 1.33 pt Dual (metolachlor) + 4

Herbicide: oz Sencor (metribuzin) + 1 oz Sharpen (saflufenacil)

Post: 0.3 oz FirstRate (cloransulam) + 10 oz Flexstar (fomesafen) + 4 oz Latch

(drift retardant) + 1% UAN + 1% COC

Insecticide: None
Date seeded: 6/1/2017
Date harvested: 10/17/2017





Table 1. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 1 at Beresford, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Oil %	(1-5)*
Check	CHECK	1.4	73.2	9.9	1.0
Miller	1968	1.9	70.4	10.4	1.0
Halls Seed	HBK69BL	1.9	69.8	10.0	1.0
SD AES	BROOKINGS	1.7	68.2	10.1	1.0
Brushvale	BS1512	1.5	66.8	9.8	1.8
MN AES	MN1613CN	1.6	66.4	10.0	1.5
Halls Seed	H69P2	1.9	65.8	9.9	1.0
MN AES	MN1806CN	1.8	65.1	9.9	1.0
MN AES	MN1312CN	1.3	60.8	9.7	1.0
Brushvale	BS1146	1.1	60.2	10.1	1.0
Richland IFC	MK41	1.4	55.4	10.2	1.0
Richland IFC	MK9101	1.0	52.9	10.5	1.0
Richland IFC	MK1016	1.0	50.4	10.2	3.0
		Trial Average	63.5	10.0	1.3
		LSD (0.05)†	2.6	0.2	0.3
		C.V.‡	2.9	1.5	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 2. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 2 at Beresford, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Great Lakes Hybrids	GL2765N	2.7	78.0	9.9	1.0
Great Lakes Hybrids	GL2254N	2.2	75.8	10.1	1.0
Ag Performance	AP 2718	2.7	75.4	9.8	1.0
Viking	O.2188AT12N	2.5	75.2	9.9	2.0
Viking	2155N	2.1	74.6	10.1	1.0
Ag Performance	AP 2215	2.2	74.4	9.9	1.0
Ag Performance	AP 2218	2.2	73.7	9.8	1.0
Miller Hybrids	2668	2.6	72.7	9.3	1.0
Ag Performance	AP 2918	2.9	71.5	11.1	1.0
Check	CHECK	1.4	71.2	9.6	1.0
Viking	2322N	2.3	70.6	9.9	2.0
Viking	O.2446	2.4	69.3	9.8	1.0
SD AES	DAVISON	2.2	69.1	9.8	1.3
Miller Hybrids	2368	2.3	68.3	9.9	1.5
Richland IFC	MK373	2	66.9	10.1	1.0
Viking	O.2023	2	64.9	9.9	1.0
		Trial Average	72.0	9.9	1.2
		LSD (0.05)†	2.6	0.4	0.3
		C.V.‡	2.5	2.6	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Brookings

Location: SDSU (57007) Brookings County, SD

(GPS: 44.319737, -96.771296)

Cooperator: SDSU Research Farm - Jack Ingemansen, manager

Soil Type: Barnes clay loam, 0-2% slopes

Fertilizer: None Previous crop: Corn

Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: 1 pt Dual II Magnum (metolachlor)

Post: 0.125 oz Harmony SG (thifensulferon)

Insecticide: None
Date seeded: 5/31/2017
Date harvested: 10/19/2017

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Table 3. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 0 at Brookings, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	CHECK	1.4	65.1	9.2	1.0
SD AES	ROBERTS	0.6	58.0	9.2	2.3
SD AES	CODINGTON	0.9	55.6	9.6	1.0
Richland IFC	MK808CN	0.8	52.5	9.7	3.5
MN AES	MN0810CN	0.8	51.5	9.3	3.0
Richland IFC	MK0603	0.6	51.2	9.4	4.3
Richland IFC	MK0508	0.8	49.6	9.5	4.5
Richland IFC	MK42	0.7	44.3	9.4	3.3
		Trial Average	53.5	9.4	2.8
		LSD (0.05)+	3.8	0.3	0.8
		C.V.‡	4.8	2.0	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

Table 4. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 2 at Brookings, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Viking	2155N	2.1	67.5	9.6	1.3
Ag Performance	AP 2215	2.2	67.3	9.8	1.5
Check	CHECK	1.4	65.9	9.0	1.0
Miller Hybrids	2368	2.3	61.7	9.4	3.0
Ag Performance	AP 2218	2.2	59.1	9.3	1.3
SD AES	DAVISON	2.2	59.0	9.2	1.0
Richland IFC	MK373	2.0	58.0	9.3	1.3
Viking	O.2023	2.0	56.9	9.2	1.0
		Trial Average	61.9	9.3	1.4
		LSD (0.05)+	2.9	0.3	0.4
		C.V.‡	3.1	1.9	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 5. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 1 at Brookings, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	CHECK	1.4	66.9	8.8	1.0
Viking	1518N	1.5	65.3	9.0	1.0
Ag Performance	AP 1515	1.5	65.2	9.0	1.0
Halls Seed	HBK69BL	1.9	63.6	8.9	1.5
Halls Seed	H69P2	1.9	63.2	8.9	1.0
Viking	1218N	1.2	62.8	8.9	1.0
Viking	O.1202N	1.2	61.7	8.8	1.3
SD AES	BROOKINGS	1.7	61.4	9.1	1.5
MN AES	MN1613CN	1.6	60.8	9.0	2.3
Ag Performance	AP 1816	1.8	60.7	9.3	2.5
Richland IFC	MK41	1.4	60.3	9.1	1.0
Ag Performance	AP 1216	1.2	58.9	8.8	1.0
Miller Hybrids	1968	1.9	58.6	9.6	1.3
Brushvale	BS1146	1.1	58.4	9.2	1.0
MN AES	MN1806CN	1.8	56.8	9.5	3.0
Brushvale	BS1512	1.4	56.3	8.8	1.8
MN AES	MN1312CN	1.3	54.3	8.9	1.0
Richland IFC	MK9101	1.0	44.1	10.0	1.5
Richland IFC	MK1016	1.0	41.5	9.2	2.0
Trial Average			59.0	9.1	1.4
		LSD (0.05)+	3.4	0.3	0.7
		C.V.‡	4.1	2.2	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



South Shore

Location: 8.5 miles west of South Shore (57263) in Codington County, SD

(GPS: 45.106822, -97.099983)

Cooperator: SDSU Northeast Research Farm - Allen Heuer, manager

Soil Type: Kranzburg-Brookings silty clay loams, 0-2% slope

Fertilizer: None

Previous crop: Spring Wheat Tillage: Conventional Row spacing: 30 inches Seeding Rate: 165,000/acre

Herbicide: Pre: 1 pt Dual II Magnum (s-metolachlor)

Post: 0.125 oz Harmony SG (thifensulfuron)

Insecticide: None

Date seeded: 5/26/2017 Date harvested: 10/18/2017

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Table 6. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 0 at South Shore, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	CHECK	1.4	69.4	9.9	1.0
SD AES	ROBERTS	0.6	62.8	9.8	1.3
SD AES	CODINGTON	0.9	61.0	10.3	1.3
MN AES	MN0810CN	0.8	59.1	10.1	2.0
Richland IFC	MK0603	0.6	55.5	10.3	3.0
Richland IFC	MK808CN	0.8	53.4	10.4	1.5
Richland IFC	MK0508	0.8	52.8	10.5	2.8
Richland IFC	MK42	0.7	52.6	10.0	1.5
		Trial Average	58.3	10.2	1.8
		LSD (0.05)+	2.1	0.2	0.6
		C.V.‡	2.5	1.3	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



Table 7. Conventional soybean variety performance results (average of 4 replications sorted by yield) - Maturity Group 1 at South Shore, SD).

Variety Information			Agronomic Performance		
			Yield		Lodging Score
Brand	Variety	Maturity Rating	(bu/ac@13%)	Moisture %	(1-5)*
Check	CHECK	1.4	68.1	9.9	1.0
MN AES	MN1613CN	1.6	66.5	10.0	1.3
Ag Performance	AP 1515	1.5	65.3	10.0	1.0
Ag Performance	AP 1216	1.2	65.2	9.9	1.0
Viking	O.1202N	1.2	65.0	9.8	1.0
Miller Hybrids	1268	1.2	64.8	10.0	1.0
Viking	1218N	1.2	64.8	9.9	1.0
Viking	1518N	1.5	64.7	10.1	1.3
Halls Seed	H69P2	1.9	62.7	10.3	1.5
Richland IFC	MK41	1.4	62.5	10.1	1.0
Brushvale	BS1146	1.1	60.9	10.0	1.0
Halls Seed	HBK69BL	1.9	60.8	10.3	1.5
SD AES	BROOKINGS	1.7	60.5	10.1	1.0
Ag Performance	AP 1816	1.8	59.9	10.9	1.3
MN AES	MN1806CN	1.8	59.3	10.8	1.5
MN AES	MN1312CN	1.3	58.2	9.9	1.0
Brushvale	BS1512	1.4	58.1	9.9	1.0
Richland IFC	MK9101	1.0	47.9	10.9	1.3
Richland IFC	MK1016	1.0	45.6	10.3	1.5
Trial Average			61.1	10.2	1.2
	LSD (0.05)†			0.3	0.5
		C.V.‡	3.0	1.8	-

^{*} Lodging Score (1 = no lodging to 5 = flat on the ground)

[†] Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is acceptable.



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