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Soybeans: 2008 Crop Performance Results

Cooperative Extension Service, South Dakota State University

EC 775
Revised
Annually

SOYBEAN

Variety Performance Trials–2008 Results

South Dakota State University • Cooperative Extension Service • U.S. Department of Agriculture

The crop performance trials are available at http://plantsci.sdstate.edu/varietytrials/vartrial.html

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EC 775—Precision Planted Soybeans 2008 Crop Performance Results is available electronically on the internet

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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.

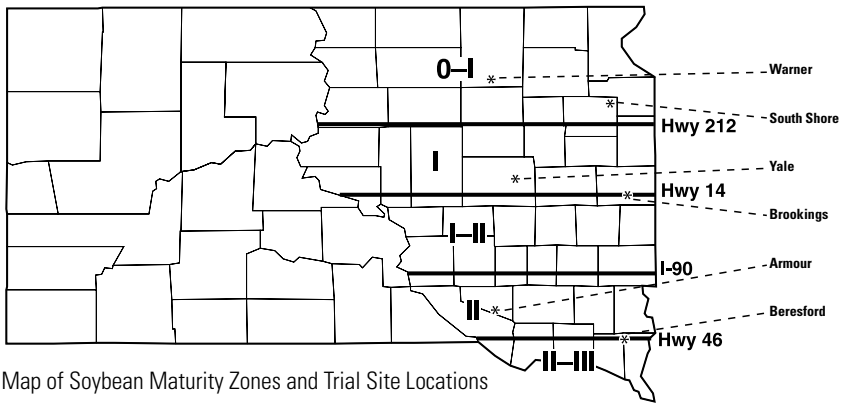
These soybean trial results are reported according to the prevalent maturity zones in South Dakota (see map). The glyphosate-resistant soybean variety trials were conducted by the following test zones and locations: Northern test zone: Maturity groups-0 and -I at South Shore and Warner; Central test 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 transition 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



Map of Soybean Maturity Zones and Trial Site Locations

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 Sybesma, 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 -9o below average in April, May, and June; and from 0-2o 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.

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 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.

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 45o-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 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.

Southern test zone, Group-II (Tables 7a & 7b): 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.

South Shore, Group-I (Tables 8a & 8b): 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)	Variable	Monthly data - April 1 to September 30						Total
		April	May	June	July	Aug	Sept	
Aberdeen Airport (Warner)	Precip.- inches '08	0.86	2.19	3.21	6.26	1.24	3.62	17.38
	1971-2000 avg.	1.83	2.69	3.49	2.92	2.42	1.81	15.16
	DFA*	-0.97	-0.50	-0.28	3.34	-1.18	1.81	2.22
	Avg.Temp. -ºF '08	43	49	65	73	71	62	
	1971-2000 avg.	45	58	67	72	71	60	
	DFA	-2	-9	-2	1	0	2	
South Shore (NE Farm)	Precip.- inches '08	0.57	2.67	4.48	4.04	1.74	2.25	15.75
	1971-2000 avg.	1.96	2.61	4.01	2.91	2.85	2.03	16.37
	DFA	-1.39	0.06	0.47	1.13	-1.11	0.22	-0.62
	Avg.Temp. -ºF '08	39	53	62	70	68	59	
	1971-2000 avg.	43	56	65	70	68	58	
	DFA	-4	-3	-3	0	0	1	
Huron (Bancroft)	Precip.- inches '08	0.19	4.33	4.51	2.47	2.79	1.48	15.77
	1971-2000 avg.	2.29	3.00	3.28	2.86	2.07	1.80	15.30
	DFA	-2.10	1.33	1.23	-0.39	0.72	-0.32	0.47
	Avg.Temp. -ºF '08	41	50	66	74	73	62	
	1971-2000 avg.	46	58	68	73	72	61	
	DFA	-5	-8	-2	1	1	1	
Brookings (Agronomy Farm)	Precip.- inches '08	0.84	2.76	5.60	1.60	0.67	1.46	12.93
	1971-2000 avg.	2.03	2.95	4.23	3.11	2.94	2.48	17.74
	DFA	-1.19	-0.19	1.37	-1.51	-2.27	-1.02	-4.81
	Avg.Temp. -ºF '08	41	48	64	71	69	62	
	1971-2000 avg.	44	57	66	71	69	59	
	DFA	-3	-9	-2	0	0	3	
Centerville, 6 SE (Beresford-SE Farm)	Precip.- inches '08	1.84	5.76	4.68	2.63	1.70	2.40	19.01
	1971-2000 avg.	2.47	3.65	3.95	3.35	2.83	2.26	18.51
	DFA	-0.63	2.11	0.73	-0.72	-1.13	0.14	0.50
	Avg.Temp. -ºF '08	44	57	69	75	71	62	
	1971-2000 avg.	47	60	69	74	72	62	
	DFA	-3	-3	0	1	-1	0	
Mitchell (Geddes)	Precip.- inches '08	3.31	5.9	4.9	2.46	0.76	1.07	18.40
	1971-2000 avg.	2.71	3.33	3.52	2.64	2.32	2.27	16.79
	DFA	0.60	2.57	1.38	-0.18	-1.56	-1.20	1.61
	Avg.Temp. -ºF '08	44	51	68	76	73	66	
	1971-2000 avg.	47	59	69	74	72	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 type, tillage methods, previous crop, herbicides and inoculants used, and seeding dates.

Location (County)	Soils & Management			Herbicides Applied at label rates				Nitragin Soybean Soil Implant	Date seeded
				Glypohosate Trials		Non- glyphosate Trials			
	Type	Tillage Method	Previous crop	Pre	Post	Pre	Post	Down seed tube 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	Trial was abandoned following an error in herbicide application			

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 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	0.8	1K	1	HEFTY/ EXP089R	0.8	1K	1
ASGROW/ AG1102	1.1	1K	2,4	HEFTY/ EXP139R	1.3	0	2
ASGROW/ AG1403	1.4	0	2,4	HEFTY/ EXP159RN	1.5	1K	2,4
ASGROW/ AG1406	1.4	0	2,4	HEFTY/ EXP179RN	1.7	0	4
ASGROW/ AG1702	1.7	1K	2,4	HEFTY/ EXP199R	1.9	0	4
ASGROW/ AG1802	1.8	1K	2,4	HEFTY/ EXP229RN	2.2	0	5,7
ASGROW/ AG2002	1.9	1C	4	HEFTY/ EXP259RN	2.5	1K	7
ASGROW/ AG2108	2.1	0	5	HEFTY/ EXP279RN	2.7	1C	7
ASGROW/ AG2403	2.4	1K	7	JGL/ EXP 601	1.8	0	4,6
ASGROW/ AG2406	2.4	1C	7	JGL/ EXP 602	0.9	0	1,3
ASGROW/ AG2909	2.9	1C	7	JGL/ EXP 603	0.9	1C	1,3
ASGROW/ DKB22-52	2.2	0	5	KALTENBERG/ KB1809RR	1.8	0	4
ASGROW/ DKB25-51	2.5	1K	7	KALTENBERG/ KB196RR	1.9	1K	4
ASGROW/ DKB27-52	2.7	1C	7	KALTENBERG/ KB249RR	2.4	0	7
DAIRYLAND/ DSR-0903/RR	0.9	NR	1	KALTENBERG/ KB2609RR	2.6	0	7
DAIRYLAND/ DSR-1055/RR	1	NR	2	KALTENBERG/ KB278RR	2.7	0	7
DAIRYLAND/ DSR-1601/RR	1.6	1K	4	KRUGER/ EXPKX1987R	1.9	NR	2,4,6
DAIRYLAND/ DSR-2200/RR	2.2	NR	7	KRUGER/ K-042RR	0.4	1A	1,3
DAIRYLAND/ DSR-2600/RR	2.6	1K	7	KRUGER/ K-058RR	0.5	1K	1,3
DAIRYLAND/ DSR-2770/RR	2.7	1K	7	KRUGER/ K-072+RR	0.8	1A	1,3
DAIRYLAND/ DSR1302RRSTS	1.3	1K	2	KRUGER/ K-079RR	0.7	1K	1,3
DAIRYLAND/ DSR1850RRSTS	1.8	NR	4	KRUGER/ K-091RR	0.9	0	1,3
DAIRYLAND/ DST10-000/RR	1	NR	2	KRUGER/ K-100RR	1	1K	2,4
DAIRYLAND/ DST14-002/RR	1.4	NR	2	KRUGER/ K-129RR	1.2	0	2,4
DAIRYLAND/ DST24-004/RR	2.4	NR	7	KRUGER/ K-142RR	1.4	1K	2,4,6
DAIRYLAND/ DST25-002/RR	2.5	NR	7	KRUGER/ K-147RR/SCN	1.2	1K	2
G-2 GENETICS/ 6099	0.9	1C	1,3	KRUGER/ K-163RR	1.6	1K	2,4,6
G-2 GENETICS/ 7095	0.9	1K	1	KRUGER/ K-167RR/SCN	1.6	1K	2,4,6
G-2 GENETICS/ 7151	1.5	K6	2,4	KRUGER/ K-170RR/SCN	0.7	0	2,4,6
G-2 GENETICS/ 7186	1.8	1K	4,6	KRUGER/ K-189RR/SCN	1.8	1K	2,4,6
G-2 GENETICS/ 7226	2.2	1K	5,7	KRUGER/ K-194RR	1.9	1K	2,4,6
G-2 GENETICS/ 7241	2.4	1K	7	KRUGER/ K-195+RR/SCN	1.9	1K	4,6
G-2 GENETICS/ 7255	2.5	1K	7	KRUGER/ K-201RR/SCN	2	1C	5,7
GOLD COUNTRY/ 1913RR	1.3	0	2	KRUGER/ K-204RR/SCN	2	1K	5,7
GOLD COUNTRY/ 1915NRR	1.5	1K	2,4	KRUGER/ K-228RR/SCN	2.2	1K	5,7
GOLD COUNTRY/ 1918RR	1.8	1K	4,6	KRUGER/ K-239RR	2.3	0	5,7
GOLD COUNTRY/ 2509RR	0.9	0	1	KRUGER/ K-248RR/SCN	2.4	0	5,7
GOLD COUNTRY/ 2713RR	1.3	1K	2	KRUGER/ K-249RR/SCN	2.4	0	5
GOLD COUNTRY/ 2815RR	1.5	0	2,4	KRUGER/ K-251RR/SCN	2.5	1K	5,7
GOLD COUNTRY/ 8820NRR	2	1K	7	KRUGER/ K-256RR	2.5	1K	5,7
GOLD COUNTRY/ 9822RR	2.2	1K	7	KRUGER/ K-271RR	2.7	1K	7
HEFTY/ 117R	1.1	0	2	KRUGER/ K-274RR/SCN	2.7	0	7
HEFTY/ 168R	1.6	0	2,4	KRUGER/ K-275RR/SCN	2.7	1K	7
HEFTY/ 218RN	2.1	1C	5,7	LATHAM/ EXP-E2680R	2.6	0	7
HEFTY/ 248R	2.4	3	7	LATHAM/ EXP-E2935R	2.9	1K	7
LATHAM/ L1738R	1.7	0	4	NUTECH/ NT-0886	0.8	NR	1
LATHAM/ L1983R	1.9	1C	4	NUTECH/ NT-0990	0.9	NR	1,3
LATHAM/ L2158R	2.1	1K	7	NUTECH/ NT-1808/SCN RR	1.8	1C	4
LATHAM/ L2285R	2.2	1K	7	NUTECH/ NT-2324+RR/SCN	2.3	NR	7
LATHAM/ L2303R	2.3	0	7	NUTECH/ NT-6205+RR	1.9	1K	2,4,6
LATHAM/ L2348R	2.3	1K	7	NUTECH/ NT-6234RR	2.3	1K	5
LATHAM/ L2658R	2.6	1C	7	NUTECH/ NT-7193+RR/SCN	1.9	1K	4,6
LATHAM/ L2740R	2.7	0	7	NUTECH/ NT-7206	2	1K	7
MUSTANG/ M-089RR	0.8	1K	1	PIONEER/ 91Y90	1.9	0	2,4
MUSTANG/ M-095RR	0.9	0	1,3	PIONEER/ 92M61	2.6	0	7

Table D. Index to 2008 Glyphosate-resistant soybean entries (Continued).							
Brand / Variety	**Mat. Grp.**	**Gene Code**	**Table No.(s)**	**Brand / Variety**	**Mat. Grp.**	**Gene Code**	**Table No.(s)**
MUSTANG/ M-096RR	0.9	0	1,3	PIONEER/ 92Y30	2.3	1K	5,7
MUSTANG/ M-139RR	1.3	NR	2	PIONEER/ 93M11	2.9	1K	7
MUSTANG/ M-159NRR	1.5	1K	4	PRAIRIE BR./ EXP PB-0186	0.6	0	1
MUSTANG/ M-168RR	1.6	0	2,4	PRAIRIE BR./ EXP PB-1170	1.9	0	4,6
MUSTANG/ M-177NRR	1.7	1K	4	PRAIRIE BR./ EXP PB-1182	1	1C	2,4
MUSTANG/ M-190NRR	1.9	1C	4	PRAIRIE BR./ EXP PB-1189	1.8	0	6
MUSTANG/ M-199RR	1.9	0	4,6	PRAIRIE BR./ EXP PB-1470	1.9	0	6
MUSTANG/ M-207RR	2	0	5	PRAIRIE BR./ EXP PB-2024	2.4	0	5
MUSTANG/ M-209NRR	2	0	5,7	PRAIRIE BR./ EXP PB-2082	1.9	0	2,4,6
MUSTANG/ M-217NRR	2.1	1K	5	PRAIRIE BR./ EXP PB-2083	1.9	0	6
MUSTANG/ M-219RR	2.1	0	5,7	PRAIRIE BR./ EXP PB-2086	2.6	0	7
MUSTANG/ M-237RR	2.3	1K	7	PRAIRIE BR./ EXP PB-2182	2.2	1K	5
MUSTANG/ M-246NRR	2.4	0	7	PRAIRIE BR./ EXP PB-2282	1.9	1K	6
MUSTANG/ M-264RR	2.6	1K	7	PRAIRIE BR./ PB-0738RR	0.7	1K	1
MUSTANG/ M-277NRR	2.7	0	7	PRAIRIE BR./ PB-0923RR	0.9	1K	1
MUSTANG/ M-318RR	3.1	1C	7	PRAIRIE BR./ PB-0936RR	0.9	0	1
MUSTANG/M-115RR	1.1	1C	2,4	PRAIRIE BR./ PB-0954RR	0.9	0	1
NORTHSTAR/ NS 1012RR	1	NR	2	PRAIRIE BR./ PB-1337RR	1.3	0	2,4
NORTHSTAR/ NS 1212RR	1.2	NR	2	PRAIRIE BR./ PB-1358RR	1.2	0	2
NORTHSTAR/ NS 1311RR	1.3	NR	2	PRAIRIE BR./ PB-1578NRR	1.5	1K	2,4
NORTHSTAR/ NS 1423RR	1.4	NR	2	PRAIRIE BR./ PB-1597RR	1.5	0	2,4
NUTECH/ 6105	0.9	1K	1,3	PRAIRIE BR./ PB-1607RR	1.6	1K	2
NUTECH/ 6133	1.3	NR	2,4	PRAIRIE BR./ PB-1754RR	1.7	0	2,4
NUTECH/ 6134	1.3	NR	2	PRAIRIE BR./ PB-1918RR	1.8	0	2,4,6
NUTECH/ 6156	1.5	NR	2,4	PRAIRIE BR./ PB-1954RR	1.9	0	2,4,6
NUTECH/ 6193	1.9	NR	4,6	PRAIRIE BR./ PB-1956RR	1.9	1C	2,4,6
NUTECH/ 6211	2.1	NR	5,7	PRAIRIE BR./ PB-2058NRR	1.9	1K	4,6
NUTECH/ 6212	2.1	NR	5	PRAIRIE BR./ PB-2117NRR	2.1	0	5
NUTECH/ 6224	2.3	NR	7	PRAIRIE BR./ PB-2147RR	2.1	0	5
NUTECH/ 6242	2.4	NR	5	PRAIRIE BR./ PB-2207NRR	2.2	1K	5,7
NUTECH/ 6242	2.5	NR	7	PRAIRIE BR./ PB-2243RR	2.2	1K	5,7
NUTECH/ 7154	1.5	NR	2	PRAIRIE BR./ PB-2337NRR	2.3	1K	5
NUTECH/ 7176	1.8	NR	6	PRAIRIE BR./ PB-2421RR	2.4	1K	5,7
NUTECH/ 7251	2.5	NR	7	PRAIRIE BR./ PB-2515RR	2.5	1K	5,7
NUTECH/ 7274	2.7	NR	7	PRAIRIE BR./ PB-2558NRR	2.5	1K	5,7
PRAIRIE BR./ PB-2565RR	2.5	1C	7	SODAK GEN./ 1161RR/SCN	1.6	1A	2,4,6
PRAIRIE BR./ PB-2698NRR	2.6	1K	7	STINE/ 1008-4	1	0	2
PRAIRIE BR./ PB-2897NRR	2.8	1C	7	STINE/ 1108-4	1.1	0	2,4
PRAIRIE BR./ PB-3058NRR	2.9	1C	7	STINE/ 1568-4	1.5	0	2,4
PROSEED/ 61-00	1	0	2	STINE/ 2432-94	2.4	1C	7
PROSEED/ 80-90	0.9	0	1	STINE/ 2532-94	2.5	1C	7
PROSEED/ 81-30	1.3	0	2,4	THUNDER/ 2908RR	0.8	1K	1
PROSEED/ 81-50	1.5	1K	4	THUNDER/ 2910RR	1	NR	2
PROSEED/ 81-90	1.9	C3	6	THUNDER/ 2911RR	1.1	1C	4
PROSEED/ 82-00	2	1K	7	WENSMAN/ W 2090RR	0.9	0	1
RENK/ RS129NRR	1.2	1C	4	WENSMAN/ W 2108RR	1	0	2
RENK/ RS179NRR	1.7	NR	4	WENSMAN/ W 2126RR	1.2	0	2
RENK/ RS187NRR	1.8	1C	4	WENSMAN/ W 2152NRR	1.5	1K	4
RENK/ RS204NRR	2	1C	5	WENSMAN/ W 2166RR	1.6	0	2,4
RENK/ RS239RR	2.3	1K	7	WENSMAN/ W 2195NRR	1.9	1K	4
RENK/ RS259NRR	2.5	NR	7	WENSMAN/ W 2196RR	1.9	0	4,6
RENK/ RS277NRR	2.7	NR	7	WENSMAN/ W 2222NRR	2.2	1K	7
SEEDS 2000/ 2090RR	0.9	NR	1	ZILLER/ BT 7156NR	1.5	0	2,4
SEEDS 2000/ 2120RR	1.2	1K	2	ZILLER/ BT 7208NR	2	1C	5,7
SODAK GEN./ 1071RR	0.7	NR	1,3	ZILLER/ BT 7217NR	2.1	1K	7
SODAK GEN./ 1093RR	0.9	NR	1,3	ZILLER/ EXP 37411NR	1.2	1C	2
SODAK GEN./ 1111RR	1.1	1A	2,4,6				

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.

Brand/Variety	DTM [1]	Northern Averages by Location						Northern Zone Averages		
		South Shore			Warner					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
NUTECH/ NT-0886RR	116	54	52	1	52	49	2	53	51	1
KRUGER/ K-072+RR	116	53	51	1	51	49	2	52	50	2
NUTECH/ NT-6105	116	49	46	1	51	46	2	50	46	1
KRUGER/ K-091RR	115	50	46	2	49	42	2	50	44	2
NUTECH/ NT-0990RR	114	52	50	2	46	40	2	49	45	2
PRAIRIE/ BR. PB-0923RR	115	51	48	1	46	41	1	49	45	1
PRAIRIE/ BR. PB-0936RR	114	50	46	2	47	42	2	49	44	2
SEEDS 2000/ 2090RR	116	50	46	1	46	41	2	48	44	1
MUSTANG/ M-096RR	115	46	39	2	49	45	3	48	42	2
MUSTANG/ M-095RR	114	47	43	3	47	44	3	47	44	3
WENSMAN/ W 2090RR	113	49	44	3	45	41	3	47	43	3
PRAIRIE/ BR. PB-0954RR	114	47	43	3	44	43	3	46	43	3
DAIRYLAND/ DSR-0903/RR	112	47	40	1	45	37	2	46	39	2
KRUGER/ K-042RR	111	46	40	1	43	38	3	45	39	2
ASGROW/ AG0808	113	.	42	2	.	44	3	.	43	3
PRAIRIE BR./ PB-0738RR	115	.	43	3	.	40	3	.	42	3
THUNDER/ 2908RR	114	.	44	2	.	38	3	.	41	3
HEFTY/ EXP089R	114	.	43	2	.	38	3	.	41	2
KRUGER/ K-058RR	112	.	44	2	.	37	3	.	41	2
KRUGER/ K-079RR	111	.	42	1	.	39	2	.	41	1
JGL/ EXP 603	116	.	42	3	.	40	4	.	41	4
JGL/ EXP 602	111	.	39	1	.	41	2	.	40	1
PROSEED/ 80-90	112	.	42	2	.	37	2	.	40	2
G-2 GENETICS/ 7095	112	.	39	1	.	39	2	.	39	1
SODAK GEN./ 1071RR	111	.	38	2	.	39	3	.	39	3
G-2 GENETICS/ 6099	112	.	38	2	.	38	3	.	38	3
SODAK GEN./ 1093RR	111	.	40	2	.	36	2	.	38	2
PRAIRIE BR./ EXP PB-01860	113	.	38	2	.	36	4	.	37	3
MUSTANG/ M-089RR	117	.	42	2	.	.	.	.	.	.
GOLD COUNTRY/ 2509RR	114	.	42	3	.	.	.	.	.	.
Test avg. :	114	49	43	2	47	41	2	48	42	2
High avg. :	117	54	52	3	52	49	4	53	51	4
Low avg. :	111	46	38	1	43	36	1	45	37	1
[3] Test LSD (.05):	.	NS	4	1	NS	4	1	*	*	*
[4] Min.TPG-avg. :	.	46	49	.	43	46	.			
[5] Max.TPG-avg. :	.	.	.	1	.	.	1			
[6] Test Coef. Var.:	.	4	6	6	6	6	22			
No. Entries:	60	14	31	31	14	29	29			

[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.

Brand/Variety	DTM*	Northern Averages by Location				Northern Zone Averages	
		South Shore		Warner			
		Protein %	Oil %	Protein %	Oil %	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.

Brand/Variety	DTM [1]	Northern Averages by Location						Northern Zone Averages		
		South Shore			Warner					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
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	115	52	49	1	50	42	1	51	46	1
HEFTY/ 117R	114	50	46	1	52	43	3	51	45	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	49	46	1	48	36	2	49	41	2
PRAIRIE BR/. PB-1754RR	118	49	47	1	47	39	2	48	43	2
ASGROW/ AG1702	117	50	46	1	46	36	2	48	41	2
ASGROW/ AG1403	115	48	47	1	47	35	2	48	41	2
KRUGER/ K-100RR	115	47	42	1	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	115	47	43	2	43	33	2	45	38	2
PRAIRIE/ BR. PB-1956RR	121	42	42	2	47	32	3	45	37	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	118	.	48	1	.	37	2	.	43	2
PRAIRIE BR./ EXP PB-2082	122	.	47	2	.	39	2	.	43	2
PRAIRIE BR./ PB-1578NRR	117	.	47	1	.	39	2	.	43	1
PROSEED/ 61-00	115	.	45	1	.	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	115	.	45	2	.	38	3	.	42	2
NUTECH/ 6134	114	.	46	1	.	36	3	.	41	2
NUTECH / 7154	117	.	45	1	.	37	2	.	41	2
HEFTY/ EXP139R	115	.	46	2	.	36	3	.	41	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).

Brand/Variety	DTM [1]	Northern Averages by Location						Northern Zone Averages		
		South Shore			Warner					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
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	.		
[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.

Brand/Variety	DTM*	Northern Averages by Location				Northern Zone Averages	
		South Shore		Warner			
		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).

Brand/Variety	DTM*	Northern Averages by Location				Northern Zone Averages	
		South Shore		Warner			
		Protein %	Oil %	Protein %	Oil %	Protein %	Oil %
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.

Brand/Variety	DTM [1]	Central Averages by Location						Central Zone Averages		
		Brookings			Bancroft					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
KRUGER/ K-072+RR	115	54	45	1	61	58	1	58	52	1
NUTECH/ 6105	116	54	47	1	60	56	1	57	52	1
KRUGER/ K-091RR	113	53	46	1	58	55	1	56	51	1
MUSTANG/ M-096RR	114	53	47	1	58	52	2	56	50	2
NUTECH/ NT-0990	113	54	46	1	56	53	1	55	50	1
MUSTANG/ M-095RR	113	53	43	1	56	52	2	55	48	2
KRUGER/ K-042RR	110	49	42	1	56	50	1	53	46	1
KRUGER/ K-058RR	112	.	44	1	.	52	2	.	48	2
KRUGER/ K-079RR	111	.	44	1	.	52	1	.	48	1
JGL/ EXP 602	109	.	43	1	.	50	1	.	47	1
SODAK GEN./ 1071RR	111	.	40	1	.	49	2	.	45	2
JGL/ EXP 603	117	.	40	1	.	47	3	.	44	2
G-2 GENETICS/ 6099	111	.	41	1	.	45	2	.	43	2
SODAK GEN./ 1093RR	112	.	38	1	.	48	2	.	43	1
Test avg. :	113	52	42	1	57	50	2	54	47	1
High avg. :	117	54	47	1	61	58	3	58	52	2
Low avg. :	109	49	38	1	56	45	1	53	43	1
[3] Test LSD (.05):	.	4	4	0	5	5	1	2	3	1
[4] Min.TPG-avg. :	.	51	44	.	57	54	.	57	50	.
[5] Max.TPG-avg. :	.	.	.	1	.	.	1	.	.	1
[6] Test Coef. Var.:	.	5	6	0	4	5	33	4	6	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 averages-central South Dakota locations, 2008. Entries are sorted by 2008 zone protein.

Brand/Variety	DTM*	Central Averages by Location				Northern Zone Averages	
		Brookings		Bancroft			
		Protein %	Oil %	Protein %	Oil %	Protein %	Oil %
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.

Brand/Variety	DTM [1]	Central Averages by Location						Central Zone Averages		
		Brookings			Bancroft					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
HEFTY/ 168R	115	58	47	1	59	56	1	59	52	1
MUSTANG/ M-168RR	115	56	47	1	59	55	1	58	51	1
WENSMAN/ W 2166RR	117	56	47	1	57	56	1	57	52	1
KRUGER/ K-100RR	116	54	45	1	59	56	1	57	51	1
PRAIRIE BR./ PB-1337RR	117	54	46	1	59	56	2	57	51	2
NUTECH/ 6156	116	55	46	1	58	54	2	57	50	1
PRAIRIE BR./ PB-1597RR	116	55	43	1	59	54	2	57	49	1
ASGROW/ AG1403	118	53	47	1	59	56	2	56	52	1
KRUGER/ K-195+RR/SCN	119	56	49	1	56	52	1	56	51	1
WENSMAN/ W 2195NRR	119	55	46	1	57	55	1	56	51	1
NUTECH/ 6133	117	53	43	1	59	55	2	56	49	2
ASGROW/ AG1102	117	50	45	1	59	57	2	55	51	2
NUTECH/ NT-6205+RR	121	52	47	1	56	49	1	54	48	1
NUTECH/ NT-7193+RR/SCN	121	54	45	1	54	51	1	54	48	1
KRUGER/ K-170RR/SCN	120	54	45	1	53	47	2	54	46	2
ASGROW/ AG1702	117	54	44	1	52	48	1	53	46	1
PRAIRIE BR./ PB-1754RR	118	52	43	1	53	47	2	53	45	2
PRAIRIE BR./ PB-1954RR	119	49	42	1	54	51	3	52	47	2
PRAIRIE BR./ PB-1956RR	121	51	42	1	53	49	3	52	46	2
SODAK GEN./ 1161RR/SCN	116	50	43	1	53	48	3	52	46	2
KRUGER/ K-194RR	119	52	42	1	52	47	2	52	45	1
DAIRYLAND/ DSR-1601/RR	118	50	40	1	54	49	2	52	45	2
DAIRYLAND/ DSR1850RRSTS	120	50	40	1	54	50	2	52	45	2
KRUGER/ K-142RR	116	48	41	1	54	49	2	51	45	1
ASGROW/ AG2002	120	52	42	1	48	41	2	50	42	2
SODAK GEN./ 1111RR	114	47	41	1	51	49	3	49	45	2
ASGROW/ AG1802	117	.	46	1	.	55	1	.	51	1
STINE/ 1108-4	115	.	43	1	.	57	2	.	50	2
PRAIRIE BR./ EXP PB-2082	122	.	44	1	.	56	1	.	50	1
PRAIRIE BR./ PB-1578NRR	119	.	47	1	.	53	2	.	50	1
PROSEED/ 81-50	117	.	47	1	.	53	1	.	50	1
MUSTANG/ M-159NRR	118	.	46	1	.	52	1	.	49	1
THUNDER/ 2911RR	118	.	43	1	.	54	4	.	49	3
NUTECH/ 6193	122	.	42	1	.	56	2	.	49	2
HEFTY/ EXP159RN	119	.	46	1	.	51	1	.	49	1
KRUGER/ K-163RR	118	.	45	1	.	53	1	.	49	1
KRUGER/ K-167RR/SCN	118	.	45	1	.	53	2	.	49	1
LATHAM/ L1983R	118	.	45	1	.	52	1	.	49	1
STINE/ 1568-4	119	.	45	1	.	53	1	.	49	1
PRAIRIE BR./ PB-2058NRR	119	.	48	1	.	50	1	.	49	1
WENSMAN/ W 2152NRR	117	.	44	1	.	54	1	.	49	1
MUSTANG/ M-177NRR	117	.	43	1	.	53	1	.	48	1
KRUGER/ K-129RR	114	.	43	1	.	53	2	.	48	1
KRUGER/ EXPKX1987R	120	.	45	1	.	51	2	.	48	2

Table 4a. Glyphosate-resistant maturity group-I soybean variety yield and lodging averages- central South Dakota locations, 2007-2008 (continued).

Brand/Variety	DTM [1]	Central Averages by Location						Central Zone Averages		
		Brookings			Bancroft					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
PRAIRIE BR./ EXP PB-1170	120	.	45	1	.	50	1	.	48	1
PRAIRIE BR./ PB-1918RR	121	.	44	1	.	52	2	.	48	1
ASGROW/ AG1406	116	.	42	1	.	51	2	.	47	2
MUSTANG/ M-199RR	121	.	44	1	.	49	3	.	47	2
PIONEER/ 91Y90	117	.	41	1	.	52	3	.	47	2
HEFTY/ EXP179RN	119	.	43	1	.	51	2	.	47	2
KRUGER/ K-189RR/SCN	120	.	43	1	.	50	1	.	47	1
LATHAM/ L1738R	118	.	45	1	.	49	2	.	47	2
JGL/ EXP 601	119	.	44	1	.	49	3	.	47	2
PRAIRIE BR./ EXP PB-1182	117	.	43	1	.	51	4	.	47	2
PROSEED/ 81-30	115	.	42	1	.	51	2	.	47	1
HEFTY/ EXP199R	119	.	43	1	.	49	2	.	46	2
WENSMAN/ W 2196RR	120	.	43	1	.	48	2	.	46	2
MUSTANG/ M-190NRR	121	.	43	1	.	46	2	.	45	2
G-2 GENETICS/ 7186	115	.	43	1	.	46	3	.	45	2
NUTECH/ NT-1808/SCN RR	120	.	43	1	.	44	1	.	44	1
G-2 GENETICS/ 7151	115	.	43	1	.	44	3	.	44	2
MUSTANG/M-115RR	116	.	.	.	53	52	3	.	.	.
GOLD COUNTRY/ 2815RR	120	57	49	1	.	.	.	.	.	.
GOLD COUNTRY/ 1915NRR	119	.	44	1	.	.	.	.	.	.
GOLD COUNTRY/ 1918RR	122	.	44	1	.	.	.	.	.	.
KALTENBERG/ KB196RR	123	52	43	1	.	.	.	.	.	.
KALTENBERG/ KB1809RR	124	.	43	1	.	.	.	.	.	.
ZILLER/ BT 7156NR	120	52	42	1	.	.	.	.	.	.
RENK/ RS187NRR	120	54	45	1	.	.	.	.	.	.
RENK/ RS179NRR	121	.	44	1	.	.	.	.	.	.
RENK/ RS129NRR	118	.	43	1	.	.	.	.	.	.
Test avg. :	118	53	44	1	55	51	2	54	48	1
High avg. :	124	58	49	1	59	57	4	59	52	3
Low avg. :	112	47	40	1	48	41	1	49	41	1
[3] Test LSD (.05):		5	4	0	5	5	1	*	*	*
[4] Min.TPG-avg. :	.	54	46	.	55	53	.			
[5] Max.TPG-avg. :	.	.	.	1	.	.	1			
[6] Test Coef. Var.:	.	5	6	0	6	6	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.

Brand/Variety	DTM*	Central Averages by Location				Central Zone Averges	
		Brookings		Bancroft			
		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).

Brand/Variety	DTM*	Central Averages by Location				Central Zone Averges	
		Brookings		Bancroft			
		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. :		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.

Brand/Variety	DTM [1]	Central Averages by Location						Central Zone Averages		
		Brookings			Bancroft					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
ASGROW/ DKB22-52	122	56	50	1	58	55	1	57	53	1
PRAIRIE BR./ PB-2243RR	120	54	52	1	57	54	1	56	53	1
NUTECH/ NT-6234RR	122	53	48	1	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	46	1	54	50	2	55	48	1
NUTECH/ 6242	127	54	50	1	54	49	2	54	50	1
PRAIRIE BR./ PB-2337NRR	122	55	46	1	53	50	1	54	48	1
PRAIRIE BR./ PB-2515RR	124	52	45	1	55	51	2	54	48	2
KRUGER/ K-256RR	123	53	50	1	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	122	.	48	1	.	58	1	.	53	1
MUSTANG/ M-209NRR	121	.	48	1	.	55	1	.	52	1
KRUGER/ K-204RR/SCN	120	.	49	1	.	55	1	.	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	123	.	50	1	.	52	2	.	51	1
G-2 GENETICS/ 7226	122	.	51	1	.	48	1	.	50	1
KRUGER/ K-228RR/SCN	121	.	46	1	.	51	1	.	49	1
KRUGER/ K-251RR/SCN	122	.	45	1	.	51	1	.	48	1
PRAIRIE BR./ EXP PB-2182	122	.	49	1	.	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	124	57	51	1	.	.	.	.	.	.
RENK/ RS204NRR	120	54	44	1	.	.	.	.	.	.
Test avg. :	122	53	47	1	54	50	2	54	49	1
High avg. :	127	57	53	1	59	58	4	57	53	2
Low avg. :	119	50	39	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. :	.	.	.	1	.	.	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.

Brand/Variety	DTM*	Central Averages by Location				Central Zone Averages	
		Brookings		Bancroft			
		Protein (%)	Oil (%)	Protein (%)	Oil (%)	Protein (%)	Oil (%)
KRUGER/ K-249RR/SCN	123	38.7	17.9	42.5	18.6	40.6	18.3
PRAIRIE BR./ PB-2558NRR	123	38.6	17.8	42.4	19.0	40.5	18.4
KRUGER/ K-201RR/SCN	121	38.7	18.6	42.1	18.9	40.4	18.7
NUTECH/ 6211	121	38.4	18.5	41.4	19.7	39.9	19.1
PRAIRIE BR./ PB-2337NRR	122	38.6	18.8	40.8	19.9	39.7	19.4
KRUGER/ K-256RR	123	38.3	18.2	41.0	19.3	39.7	18.8
KRUGER/ K-239RR	125	38.2	18.4	40.9	19.6	39.6	19.0
PRAIRIE BR./ PB-2147RR	122	38.0	18.6	41.0	20.0	39.5	19.3
PRAIRIE BR./ PB-2421RR	123	37.6	18.2	40.7	19.8	39.2	19.0
KRUGER/ K-251RR/SCN	122	37.9	17.9	39.9	19.4	38.9	18.7
MUSTANG/ M-219RR	122	37.3	18.6	40.1	19.6	38.7	19.1
G-2 GENETICS/ 7226	122	36.9	19.0	40.3	19.7	38.6	19.4
NUTECH/ 6242	127	36.9	19.3	40.2	19.7	38.6	19.5
HEFTY/ 218RN	121	36.3	19.3	40.5	20.2	38.4	19.8
PRAIRIE BR./ EXP PB-2182	122	36.4	18.8	40.2	19.8	38.3	19.3
PRAIRIE BR./ PB-2117NRR	120	36.6	19.1	39.9	20.3	38.3	19.7
KRUGER/ K-248RR/SCN	124	36.1	19.5	40.3	19.9	38.2	19.7
ASGROW/ DKB22-52	122	36.7	19.0	39.5	20.2	38.1	19.6
ASGROW/ AG2108	119	36.0	18.9	40.1	19.8	38.0	19.3
MUSTANG/ M-209NRR	121	36.7	18.7	39.3	20.6	38.0	19.6
NUTECH/ 6212	121	36.4	18.4	39.7	19.7	38.0	19.1
KRUGER/ K-204RR/SCN	120	35.8	19.4	40.2	20.2	38.0	19.8
MUSTANG/ M-207RR	121	36.4	17.8	39.4	19.3	37.9	18.6
PRAIRIE BR./ PB-2515RR	124	35.8	18.8	39.9	20.2	37.9	19.5
PRAIRIE BR./ EXP PB-2024	124	36.0	18.8	39.6	20.0	37.8	19.4
KRUGER/ K-228RR/SCN	121	36.1	19.2	39.3	20.3	37.7	19.8
PRAIRIE BR./ PB-2207NRR	121	36.0	19.3	38.9	20.3	37.5	19.8
NUTECH/ NT-6234RR	122	35.8	19.2	38.6	20.7	37.2	20.0
PRAIRIE BR./ PB-2243RR	120	36.5	19.4	35.3	20.5	35.9	20.0
MUSTANG/ M-217NRR	124	35.8	19.2	.	.	.	.
PIONEER/ 92Y30	125	35.8	19.4	.	.	.	.
HEFTY/ EXP229RN	123	36.6	19.2	.	.	.	.
ZILLER/ BT 7208NR	124	35.7	19.5	.	.	.	.
RENK/ RS204NRR	120	35.8	19.1	.	.	.	.
Test avg. :	122	36.9	18.8	40.1	19.8	38.6	19.3
High avg. :	127	40.1	19.5	42.5	20.7	40.7	20.0
Low avg. :	119	35.5	17.8	35.3	18.6	35.9	18.3
[3] LSD(.05) :		0.9	0.6	2.2	0.8	1.2	0.5
[4] Min.TPG-avg. :		39.3	19.0	40.4	20.0	39.6	19.6
[6] Coef. Var. :		2	2	3	3	3	2
No. Entries :	73	39	39	34	34	68	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.

Brand/Variety	DTM [1]	Southern Averages by Location						Southern Zone Averages		
		Beresford			Geddes					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
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	104	51	44	1	54	50	1	53	47	1
KRUGER/ K-195+RR/SCN	103	48	43	1	54	53	1	51	48	1
PRAIRIE/ BR. PB-1954RR	102	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	101	48	42	1	51	45	1	50	44	1
KRUGER/ K-194RR	102	44	35	1	53	49	1	49	42	1
SODAK GEN./ 1161RR/SCN	101	45	39	1	50	47	1	48	43	1
KRUGER/ K-142RR	100	43	35	1	52	47	1	48	41	1
SODAK GEN./ 1111RR	98	40	33	3	47	47	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	.	45	1	.	49	1	.	47	1
PRAIRIE BR./ EXP PB-1189	104	.	45	1	.	49	1	.	47	1
WENSMAN/ W 2196RR	103	.	42	1	.	52	1	.	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	104	.	42	1	.	46	1	.	44	1
JGL/ EXP 601	100	.	36	1	.	45	1	.	41	1
NUTECH/ 7176	99	.	33	1	.	45	1	.	39	1
KRUGER/ K-189RR/SCN	100	.	32	1	.	46	1	.	39	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	44	1	44	39	1
[3] Test LSD (.05):	.	5	4	1	NS	6	0	*	*	*
[4] Min.TPG-avg. :	.	49	45	.	47	48	.			
[5] Max.TPG-avg. :	.	.	.	1	.	.	1			
[6] Test Coef. Var.:	.	5	5	27	7	8	0			

[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.

Brand/Variety	DTM [1]	Southern Averages by Location				Southern Zone Averages	
		Beresford		Geddes			
		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	18.0	34.6	18.8	35.0	18.8
[3] LSD(.05) :		0.7	0.4	2.0	1.1	1.0	0.6
[4] Min.TPG-avg. :		38.3	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.

Brand/Variety	DTM [1]	Southern Averages by Location						Southern Zone Averages		
		Beresford			Geddes					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
ASGROW/ DKB27-52	110	52	49	1	58	54	1	55	52	1
WENSMAN/ W 2222NRR	104	51	46	1	58	55	1	55	51	1
PRAIRIE/ BR. PB-2243RR	93	50	40	1	60	57	1	55	49	1
ASGROW/ AG2406	107	54	52	1	53	54	1	54	53	1
MUSTANG/ M-264RR	111	53	49	1	55	53	1	54	51	1
NUTECH/ NT-7206	105	49	42	1	59	57	1	54	50	1
NUTECH/ NT-6211	104	48	38	1	59	54	1	54	46	1
KRUGER/ K-275RR/SCN	109	51	49	2	55	54	1	53	52	2
KRUGER/ K-256RR	107	51	47	1	54	54	1	53	51	1
KRUGER/ K-239RR	107	48	42	1	57	54	1	53	48	1
ASGROW/ DKB25-51	106	48	41	1	57	51	1	53	46	1
DAIRYLAND/ DSR-2770/RR	110	49	45	1	54	52	1	52	49	1
DAIRYLAND/ DSR-2600/RR	109	50	43	1	54	52	1	52	48	1
MUSTANG/ M-237RR	106	49	41	1	54	52	1	52	47	1
LATHAM/ L2158R	104	48	40	1	55	54	1	52	47	1
PRAIRIE BR./ PB-2515RR	108	46	41	1	58	52	1	52	47	1
KRUGER/ K-271RR	111	48	43	1	53	52	1	51	48	1
MUSTANG/ M-246NRR	106	48	43	1	53	50	1	51	47	1
DAIRYLAND/ DSR-2200/RR	107	45	39	1	56	53	1	51	46	1
PRAIRIE BR./ PB-2421RR	105	48	40	1	53	47	1	51	44	1
MUSTANG/ M-277NRR	111	47	42	1	53	54	1	50	48	1
PRAIRIE BR./ PB-2565RR	107	48	43	2	51	50	1	50	47	1
NUTECH/ NT-6242	109	48	43	1	52	49	1	50	46	1
KRUGER/ K-248RR/SCN	108	46	40	1	52	54	1	49	47	1
KRUGER/ K-201RR/SCN	104	46	37	1	51	51	1	49	44	1
MUSTANG/ M-318RR	113	43	37	1	51	47	1	47	42	1
PIONEER/ 93M11	112	.	53	1	.	56	1	.	55	1
LATHAM/ L2658R	108	.	54	1	.	56	1	.	55	1
LATHAM/ L2740R	112	.	49	1	.	57	1	.	53	1
ASGROW/ AG2909	112	.	50	1	.	54	1	.	52	1
PIONEER/ 92Y30	105	.	48	1	.	56	1	.	52	1
NUTECH/ NT-2324+RR/SCN	106	.	47	1	.	57	1	.	52	1
KRUGER/ K-228RR/SCN	105	.	45	1	.	56	1	.	51	1
LATHAM/ L2285R	105	.	44	1	.	57	1	.	51	1
PRAIRIE BR./ PB-2207NRR	105	.	47	1	.	55	1	.	51	1
PRAIRIE BR./ PB-2558NRR	106	.	44	1	.	58	1	.	51	1
HEFTY/ EXP229RN	105	.	45	1	.	55	1	.	50	1
KRUGER/ K-204RR/SCN	104	.	45	1	.	55	1	.	50	1
KALTENBERG/ KB249RR	106	.	42	1	.	57	1	.	50	1
ASGROW/ AG2403	105	.	41	1	.	56	1	.	49	1
PIONEER/ 92M61	107	.	47	1	.	50	1	.	49	1
NUTECH/ 6224	107	.	46	1	.	52	1	.	49	1
NUTECH/ 7251	106	.	40	1	.	58	1	.	49	1

Table 7a. Glyphosate-resistant maturity group-II soybean variety yield and lodging averages- southern South Dakota locations, 2007-2008 (continued).

Brand/Variety	DTM [1]	Southern Averages by Location						Southern Zone Averages		
		Beresford			Geddes					
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2-Yr	2008		2-Yr	2008		2-Yr	2008	
KRUGER/ K-251RR/SCN	105	.	44	1	.	53	1	.	49	1
DAIRYLAND/ DST24-004/RR	107	.	44	2	.	53	1	.	49	1
PROSEED/ 82-00	103	.	45	1	.	53	1	.	49	1
HEFTY/ EXP248R	108	.	45	1	53	51	1	.	48	1
HEFTY/ EXP259RN	106	.	42	1	.	53	1	.	48	1
PRAIRIE BR/. PB-2897NRR	112	.	43	1	.	53	1	.	48	1
PRAIRIE BR./ PB-3058NRR	111	.	49	1	.	47	1	.	48	1
NUTECH / 7274	108	.	40	1	.	53	1	.	47	1
KRUGER/ K-274RR/SCN	108	.	43	1	.	50	1	.	47	1
LATHAM/ EXP-E2680R	108	.	41	1	.	52	1	.	47	1
LATHAM/ EXP-E2935R	110	.	45	1	.	48	1	.	47	1
DAIRYLAND/ DST25-002/RR	105	.	48	2	.	45	1	.	47	1
KALTENBERG/ KB2609RR	107	.	41	1	.	50	1	.	46	1
G-2 GENETICS/ 7255	110	.	42	1	.	50	1	.	46	1
PRAIRIE BR./ PB-2698NRR	107	.	42	1	.	50	1	.	46	1
PRAIRIE BR./ EXP PB-2086	108	.	42	1	.	49	1	.	46	1
KALTENBERG/ KB278RR	111	.	42	1	.	48	1	.	45	1
G-2 GENETICS/ 7226	104	.	37	1	.	52	1	.	45	1
G-2 GENETICS/ 7241	102	.	41	1	.	48	1	.	45	1
LATHAM/ L2303R	106	.	36	1	.	51	1	.	44	1
LATHAM/ L2348R	104	.	35	1	.	52	1	.	44	1
MUSTANG/ M-209NRR	103	.	43	1	.	.	.	.	.	.
MUSTANG/ M-219RR	103	.	38	1	.	.	.	.	.	.
HEFTY/ EXP218RN	103	48	42	1	.	.	.	.	.	.
HEFTY/ EXP279RN	109	.	47	1	.	.	.	.	.	.
GOLD COUNTRY/ 9822RR	106	48	43	1	.	.	.	.	.	.
GOLD COUNTRY/ 8820NRR	103	.	44	1	.	.	.	.	.	.
STINE/ 2432-94	107	.	51	1	.	.	.	.	.	.
STINE/ 2532-94	110	.	43	2	.	.	.	.	.	.
ZILLER/ BT 7208NR	103	.	41	1	.	.	.	.	.	.
ZILLER/ BT 7217NR	102	48	41	1	.	.	.	.	.	.
RENK/ RS277NRR	112	53	48	1	.	.	.	.	.	.
RENK/ RS259NRR	105	.	46	1	.	.	.	.	.	.
RENK/ RS239RR	106	.	46	1	.	.	.	.	.	.
Test avg. :	107	49	44	1	55	53	1	52	48	1
High avg. :	113	54	55	2	60	58	2	55	55	2
Low avg. :	93	43	35	1	51	45	1	47	42	1
[3] Test LSD (.05):	.	6	5	1	6	6	1	*	*	*
[4] Min.TPG-avg. :	.	49	51	.	55	53	.			
[5] Max.TPG-avg. :	.	.	.	1	.	.	1			
[6] Test Coef. Var.:	.	6	7	21	8	6	16			

[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.

Brand/Variety	DTM [1]	Southern Averages by Location				Southern Zone Averges	
		Beresford		Geddes			
		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).

Brand/Variety	DTM [1]	Southern Averages by Location				Southern Zone Averges	
		Beresford		Geddes			
		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.

BRAND/VARIETY	DTM [1]	Yield average (bu/a) by maturity group					
		MG-0			MG-I		
		Yield-bu/a		2008 Lodg. (1-5) [2]	Yield-bu/a		2008 Lodg. (1-5) [2]
		2008	2-yr		2008	2-yr	
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-0 and -I soybean variety protein and oil averages- South Shore, 2008.

BRAND/VARIETY by maturity group & protein average	DTM*	Northern protein and oil averages by maturity group in 2008			
		MG-0		MG-I	
		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.