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### Soybeans: 2004 Crop Performance Results

Cooperative Extension Service, South Dakota State University

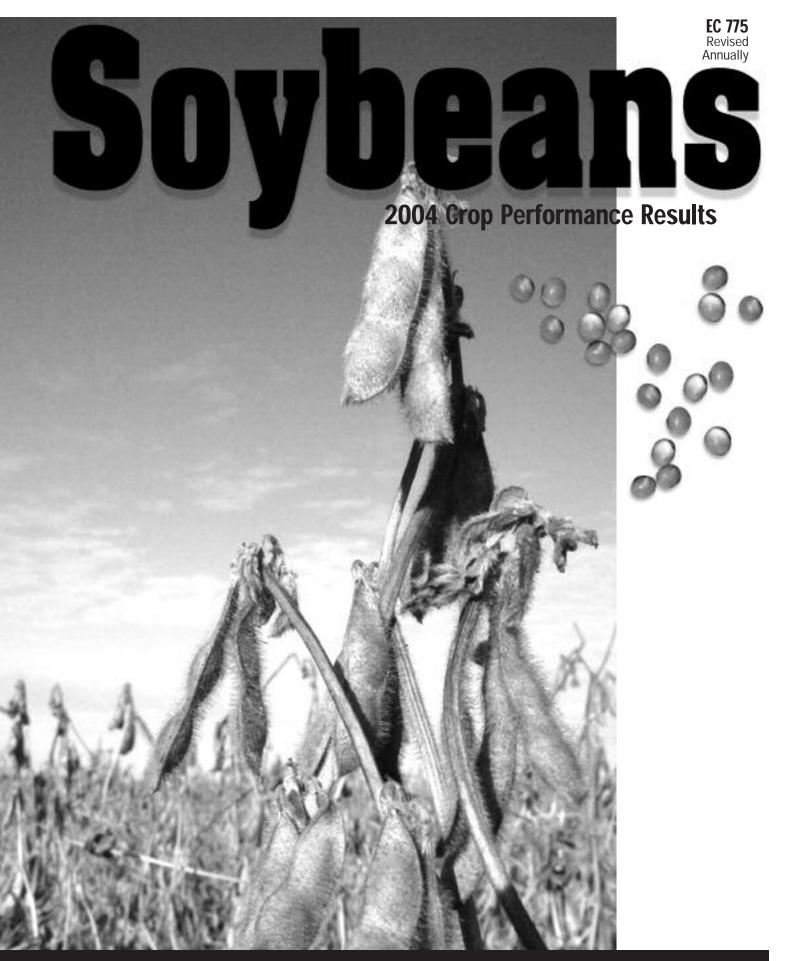
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## EC 775—Precision PlantedSoybeans 2004 Crop Performance Results is available electronically on the internet

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



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# Soybeans

#### 2004 South Dakota Precision Planted Soybean Variety Performance Trials

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**Table A** – Traits of some public soybean varieties.

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

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

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

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

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

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

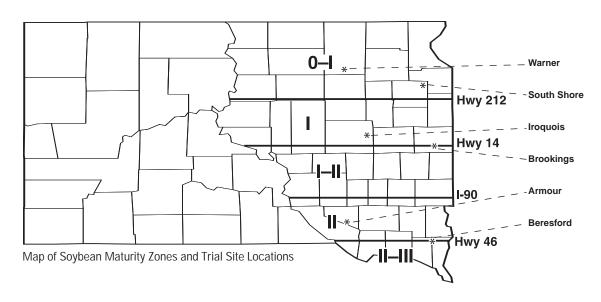
These soybean performance trial results are reported according to the prevalent maturity zones in South Dakota (see map). The Roundup-Ready<sup>TM</sup> soybean variety trials are conducted in the following test zones at these locations: Northern test zone: Maturity group-0 and -I trials at South Shore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

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

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

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

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



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

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

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

#### Yield

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

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

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

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

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

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

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

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

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

#### **Protein and Oil Content**

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

#### **General Test Procedures**

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

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

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

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

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

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

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

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

#### **Soybean Traits of Public Entries**

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

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

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

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

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

#### ROUNDUP READY<sup>TM</sup> SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

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

#### **NORTHERN TEST ZONE**

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

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

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

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

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

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

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

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

#### **CENTRAL TEST ZONE**

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

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

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

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

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

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

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

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

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

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

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

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

#### **SOUTHERN TEST ZONE**

BERESFORD– South Dakota Agricultural Experiment Station Farm

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

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

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

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

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

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

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

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

#### NON-ROUNDUP READY™ SOYBEAN VARIETY PERFORMANCE TRIAL RESULTS

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

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

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

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

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

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

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

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

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

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

Table A. Traits of some public soybean varieties.

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

<sup>\*</sup> Indicates Roundup Ready variety.

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

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

See additional comments in evaluation methods.

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

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

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

Brand / Variety			Phytophthora Race resistance
ASGROW/AG0801	1,3	0	Not Reported
ASGROW/AG1001	1,3	0	Not Reported
ASGROW/AG1401	2,4	I	Not Reported
ASGROW/AG1603	2,4,6	I	Not Reported
ASGROW/AG1903	2,4,6	I	Not Reported
· ·	2,4,0 7	II	•
ASGROW/AG2107		II	Not Reported Not Reported
ASGROW/AG2203	5,7		·
ASGROW/AG2302	7	II	Not Reported
ASGROW/AG2403	5,7	II	Not Reported
ASGROW/AG2801	7	II	Not Reported
BIO GENE/BG0913RR	1,3	0	Not Reported
BIO GENE/BG100RR	1,3	0	Not Reported
BIO GENE/BG150RR	2,4	I	1-3,6-11,13,15,17,21,23-24
COYOTE/4523RR	5,7	II	1-11,13-15,17-18,21-22,24
COYOTE/4527RR	7	II	1-11,13-15,17-18,21-22,24
COYOTE/4719RR	4,6	I	1-11,13-15,17-18,21-22,24
COYOTE/9524RR	7	II	1-11,13-15,17-18,21-22,24
COYOTE/EX325RR	7	II	No Resistance
DAIRYLAND/DSR-040/RR	1	0	No Resistance
DAIRYLAND/DSR-050/RR	1,3	0	No Resistance
DAIRYLAND/DSR-091/RR	1	0	No Resistance
DAIRYLAND/DSR-130/RR	2	I	No Resistance
DAIRYLAND/DSR-155/RR	4	I	1-11,13-15,17-18,21-22,24
DAIRYLAND/DSR-184/RR	4	I	1-11,13-15,17-18,21-22,24
		I	1-11,13-15,17-18,21-22,24
DAIRYLAND/DSR-199/RR	4		
DAIRYLAND/DSR-234/RR	5,7	II	1-11,13-15,17-18,21-22,24
DAIRYLAND/DSR-2500/RR	7	II	1-11,13-15,17-18,21-22,24
DAIRYLAND/DSR-277/RR	7	II	1-11,13-15,17-18,21-22,24
DAIRYLAND/DST08-000/RR	1,3	0	No Resistance
DAIRYLAND/DST13-000/RR	2,4	I	No Resistance
DAIRYLAND/DST15-000/RR	2,4	I	No Resistance
DAIRYLAND/DST20-000/RR	5	II	1-11,13-15,17-18,21-22,24
DEKALB/DKB07-52	1,3	0	Not Reported
DEKALB/DKB19-52	2,4,6	I	Not Reported
DEKALB/DKB22-52	5,7	II	Not Reported
DEKALB/DKB25-51	7	II	Not Reported
DYNA-GRO/DG 31B08	1,3	0	1-11,13-15,17-18,21-22,24
DYNA-GRO/DG 31C15	2,4	I	No Resistance
DYNA-GRO/DG 32F12	2,4	I	No Resistance
DYNA-GRO/DG 32Y09	1,3	0	1-3,6-11,13,15,17,21,23-24
DYNA-GRO/DG 33R09	1,3	0	1-11,13-15,17-18,21-22,24
JIWA GIRO/DG GORGS	1,0		
DYNA-GRO/DG 34R12	2,4	I	No Resistance

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

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

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

	Table	Mat.	Phytophthora
Brand / Variety	Number(s)	Grp.	Race resistance
KRUGER / 233+RR	5,7	II	1-11,13-15,17-18,21-22,24
KRUGER/252RR	5,7	II	1-11,13-15,17-18,21-22,24
KRUGER/268+RR	5,7	II	No Resistance
KRUGER/270RR	7	II	No Resistance
KRUGER/273RR	7	II	1-3,6-11,13,15,17,21,23-24
KRUGER/277+RR/SCN	7	II	Not Reported
KRUGER/289+RR	7	II	1-11,13-15,17-18,21-22,24
KRUGER/EXP089RR	1,3	0	Unknown
KRUGER/EXP152RR	2	I	No Resistance
KRUGER/EXP167RR	2,4	I	Unknown
KRUGER/EXP234RR	5,7	II	1-11,13-15,17-18,21-22,24
KRUGER/EXP257RR	5,7	II	1-11,13-15,17-18,21-22,24
KRUGER/EXP268RR	5,7	II	1-11,13-15,17-18,21-22,24
KRUGER/EXP287RR	7	II	1-11,13-15,17-18,21-22,24
LATHAM/497RR	7	II	1-5,9-20
LATHAM/738RR	7	II	1-11,13-15,17-18,21-22,24
LATHAM/EXP-E1230R	2	I	No Resistance
LATHAM/EXP-E1330R	2	I	No Resistance
LATHAM/EXP-E1635R	4	I	1-11,13-15,17-18,21-22,24
LATHAM/EXP-E1936R	4,6	I	No Resistance
LATHAM/EXP-E2450R	7	II	1-11,13-15,17-18,21-22,24
LATHAM/EXP-E2635R	7	II	1-3,6-11,13,15,17,21,23-24
LATHAM/EXP-E2646R	7	II	No Resistance
LATHAM/L2136R	5,7	II	No Resistance
LATHAM/L2857R	7	II	1-11,13-15,17-18,21-22,24
LATHAM/L2900R	7	II	No Resistance
MALLARD/EXP RR0914	1	0	1-11,13-15,17-18,21-22,24
MALLARD/EXP RR1111	2	I	No Resistance
MALLARD/EXP RR1314	2	I	1-3,6-11,13,15,17,21,23-24
MALLARD/EXP RR1512	2	I	1-11,13-15,17-18,21-22,24
MALLARD/EXP RR2411	7	II	No Resistance
MUSTANG/E-1852NRR	4	I	1-2,10-11,13,15-18,24
MUSTANG/M-053RR	1	0	No Resistance
MUSTANG/M-055RR	1	0	No Resistance
MUSTANG/M-075RR	1	0	1-2,10-11,13,15-18,24
MUSTANG/M-083RR	1,3	0	No Resistance
MUSTANG/M-092RR	1	0	No Resistance
MUSTANG/M-094RR	1,3	0	No Resistance
MUSTANG/M-095RR	1,3	0	No Resistance
MUSTANG/M-115RR	2,4	I	1-3,6-11,13,15,17,21,23-24
MUSTANG/M-124RR	2,4	I	No Resistance
MUSTANG/M-151RR	2,4	I	1-3,6-11,13,15,17,21,23-24
MUSTANG/M-153RR	2,4	I	No Resistance
MUSTANG/M-155RR	2,4	I	1-11,13-15,17-18,21-22,24
MUSTANG/M-174RR	2,4	I	1-11,13-15,17-18,21-22,24
·	•		
MUSTANG/M-194NRR	4	I	1-11,13-15,17-18,21-22,24

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

	Table	Mat.	Phytophthora
Brand / Variety	Number(s)	Grp.	Race resistance
MUSTANG/M-203RR	5,7	II	No Resistance
MUSTANG/M-223RR	5,7	II	No Resistance
MUSTANG/M-243RR	7	II	1-11,13-15,17-18,21-22,24
MUSTANG/M-255RR	7	II	No Resistance
MUSTANG/M-264RR	7	II	1-11,13-15,17-18,21-22,24
MUSTANG/M-284RR	7	II	1-11,13-15,17-18,21-22,24
NK BRAND/S14-A7	2,4	I	1-3,6-11,13,15,17,21,23-24
NK BRAND/S17-P9	2,4	I	1-3,6-11,13,15,17,21,23-24
NK BRAND/S19-R5	4,6	I	1-2,10-11,13,15-18,24
NK BRAND/S27-T7	7	II	No Resistance
NORTHSTAR/NS OFFICER	1	0	1 11 13 15 17 10 01 00 04
NORTHSTAR/NS 0509RR	1	0	1-11,13-15,17-18,21-22,24 No Resistance
NORTHSTAR/NS 0517RR		0	
NORTHSTAR/NS 0609RR	1	0	1-3,6-11,13,15,17,21,23-24
NORTHSTAR/NS 0805RR	1	0	1-11,13-15,17-18,21-22,24
NORTHSTAR/NS 0923RR	3	0	No Resistance
NORTHSTAR/NS 0954RR	1,3	0	No Resistance
NORTHSTAR/NS 1019RR	2,4	I	1-11,13-15,17-18,21-22,24
NORTHSTAR/NS 1407RR	2,4	I	No Resistance
NORTHSTAR/NS 1409RR	2,4	I	1-11,13-15,17-18,21-22,24
NORTHSTAR/NS 1624RR	4	Ι	1-3,6-11,13,15,17,21,23-24
NORTHSTAR/NS 1710RR	4	I	Unknown
NORTHSTAR/NS 2009RR	5	II	1-11,13-15,17-18,21-22,24
NUTECH/NT-0606RR	1	0	No Resistance
NUTECH/NT-0676+RR	1	0	1-2,10-11,13,15-18,24
NUTECH/NT-0711ARR	1	0	Not Reported
NUTECH/NT-0811RR	3	0	No Resistance
NUTECH/NT-0848RR	1,3	0	Not Reported
NUTECH/NT-0889RR	1,3	0	No Resistance
NUTECH/NT-0999RR	1,3	0	1-11,13-15,17-18,21-22,24
NUTECH/NT-1010RR	2,4	I	1-2,10-11,13,15-18,24
NUTECH/NT-1901RR	6	I	Not Reported
NUTECH/NT-1909RR	2,4,6	I	No Resistance
NUTECH/NT-2002RR	2,4,6	I	1-11,13-15,17-18,21-22,24
NUTECH/NT-2202RR	2,4,6	I	1-11,13-15,17-18,21-22,24
NUTECH/NT-2404RR	5,7	II	1-11,13-15,17-18,21-22,24
NUTECH/NT-2505RR	7	II	No Resistance
NUTECH/NT-2550RR	7	II	1-11,13-15,17-18,21-22,24
NUTECH/NT-2707RR	7	II	1-3,6-11,13,15,17,21,23-24
NUTECH/NT-2790+RR	7	II	1-2,10-11,13,15-18,24
PETERSON/EXP 1.2RR	2,4	I	No Resistance
PETERSON/PFS 0410RR	2,4	I	1-11,13-15,17-18,21-22,24
PETERSON/PFS 0415RR	2,4	I	No Resistance
PETERSON/PFS 0511RR	2,4	I	No Resistance
PRAIRIE BR./PB-0812RR	1	0	Not Reported
PRAIRIE BR./PB-0923RR	1,3	0	1-11,13-15,17-18,21-22,24
110 THIL DH. / 1 D-0920HH	1,0	J	1 11,10-10,17-10,21-22,24

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

	Table	Ma+	Dhytophthona
Brand / Vaniaty	Table		Phytophthora
Brand / Variety	Number(s)	diγ.	Race resistance
PRAIRIE BR./PB-0954RR	1,3	0	Not Reported
PRAIRIE BR./PB-1043RR	1	0	Not Reported
PRAIRIE BR./PB-1063RR	1	0	Not Reported
PRAIRIE BR./PB-1254RR	2	I	Not Reported
PRAIRIE BR./PB-1294RR	2,4	I	1-3,6-11,13,15,17,21,23-24
PRAIRIE BR./PB-1354RR	2	I	Not Reported
PRAIRIE BR./PB-1552RR	2,4	I	Not Reported
PRAIRIE BR./PB-1620RR	2,4	I	1-3,6-11,13,15,17,21,23-24
PRAIRIE BR./PB-1634RR	2,4	I	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-1754RR	2,4,6	I	Not Reported
PRAIRIE BR./PB-1914RR	2,4,6	I	Not Reported
PRAIRIE BR./PB-1914RR	4	I	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-1954RR		I	Not Reported
PRAIRIE BR./PB-1954RR	2,4,6		•
	4,6	I	Not Reported
PRAIRIE BR./PB-2141RR	5,7	II	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2243RR	5,7	II	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2343RR	5,7	II	Not Reported
PRAIRIE BR./PB-2374RR	5,7	II	Not Reported
PRAIRIE BR./PB-2421RR	5,7	II	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2443RR	7	II	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2474RR	5,7	II	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2534RR	5,7	II	Not Reported
PRAIRIE BR./PB-2643RR	7	II	1-11,13-15,17-18,21-22,24
PRAIRIE BR./PB-2934RR	7	II	1-3,6-11,13,15,17,21,23-24
PUBLIC/MN-0904RR	1,3	0	1-11,13-15,17-18,21-22,24
PUBLIC/MN-1803RR	2,4,6	I	Not Reported
PUBLIC/SD00-1018R	2,6	I	Not Reported
PUBLIC/SD00-1037R	1,3	0	Not Reported
PUBLIC/SD00-1251R	1,3	0	Not Reported
PUBLIC/SD00-1258R	1,3	0	Not Reported
PUBLIC/SD00-236R	2,4,6	I	Not Reported
PUBLIC/SD01-1071R	3	0	Not Reported
PUBLIC/SD01-1075R	2,4,6	I	Not Reported
PUBLIC/SD01-1094R	2,4,6	I	Not Reported
PUBLIC/SD01-1120R	4,6	Ī	Not Reported
PUBLIC/SD01-1135R	5,7	II	Not Reported
PUBLIC/SD01-1200R	3	0	Not Reported
PUBLIC/SD01-1253R	1	0	Not Reported
PUBLIC/SD01-1780R	1	0	Not Reported
PUBLIC/SD01-1792R	2,4,6	I	Not Reported
PUBLIC/SD01-187R	1,3	0	Not Reported
PUBLIC/SD01-167R	5,7	II	Not Reported
PUBLIC/SD01-2475R		0	Not Reported
·	1,3		•
PUBLIC/SD01-2493R	5,7 5.7	II	Not Reported
PUBLIC/SD01-2509R	5,7	II	Not Reported
PUBLIC/SD01-2736R	1,3	0	Not Reported
PUBLIC/SD01-2961R	5,7	II	Not Reported
PUBLIC/SD01-3219R	2,4,6	I	Not Reported
PUBLIC/SD01-3387R	4,6,6	I	Not Reported

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

	Table	Mat. Phytophthora
Brand / Variety	Number(s)	Grp. Race resistance
2. aa. , va. 202,		a. p
PUBLIC/SD01-3402R	2,6	I Not Reported
PUBLIC/SD01-3603R	5,7	II Not Reported
PUBLIC/SD01-5R	5,7	II Not Reported
PUBLIC/SD01-67R	2,4,6	I Not Reported
PUBLIC/SD01-76R	5,7	II Not Reported
PUBLIC/SD1091RR-4	1,3	O Not Reported
PUBLIC/SD93-1233T	1,3	O Not Reported
PUBLIC/SD93-828R	5,7	II Not Reported
PUBLIC/SD96-170RR-28L	2,4,6	I Not Reported
PUBLIC/SDX00-022R-23	2,4,6	I Not Reported
PUBLIC/SDX00-022R-53	2,4	I Not Reported
PUBLIC/SDX00-024R-14	2,4,6	I Not Reported
PUBLIC/SDX00-051R-23	5,7	II Not Reported
PUBLIC/SDX00-053R-46	2,4,6	I Not Reported
PUBLIC/SDX00R-014-50	5,7	II Not Reported
PUBLIC/SDX00R-015-4	5,7	II Not Reported
PUBLIC/SDX00R-022-66	4,6	I Not Reported
PUBLIC/SDX00R-029-3	2,6	I Not Reported
PUBLIC/SDX00R-030-16	5,7	II Not Reported
PUBLIC/SDX00R-035-12	2,4	I Not Reported
PUBLIC/SDX00R-035-24	3	O Not Reported
PUBLIC/SDX00R-035-39	1,3	O Not Reported
PUBLIC/SDX00R-035-42	4,6	I Not Reported
PUBLIC/SDX00R-035-59	2,4,6	I Not Reported
PUBLIC/SDX00R-039-42	5,7	II Not Reported
RENK/RS159RR	4	I 1-3,6-11,13,15,17,21,23-24
RENK/RS199RR	4	I 1-11,13-15,17-18,21-22,24
RENK/RS223RR	5,7	II 1-11,13-15,17-18,21-22,24
RENK/RS234RR	7	II Not Reported
RENK/RS244NRR	7	II 1-2,10-11,13,15-18,24
RENK/RS253RR	7	II Not Reported
SANDS/EXP 0969RR	1,3	0 1-11,13-15,17-18,21-22,24
SANDS/EXP 1766RR	2,4	I 1-2,10-11,13,15-18,24
SANDS/EXP 2669RR	7	II 1-3,6-11,13,15,17,21,23-24
SANDS/SOI 0661RR	1,3	O No Resistance
SANDS/SOI 0931RR	1,3	0 1-2,10-11,13,15-18,24
SANDS/SOI 1261RR	2,4	I 1-3,6-11,13,15,17,21,23-24
SANDS/SOI 1540RR	2,4	I No Resistance
SANDS/SOI 2143RR	5,7	II 1-11,13-15,17-18,21-22,24
SANDS/SOI 2151NRR	7	II 1-11,13-15,17-18,21-22,24
SANDS/SOI 2169RR	5,7	II 1-2,10-11,13,15-18,24
SANDS/SOI 226RR	7	II No Resistance
SANDS/SOI 2642NRR	7	II 1-2,10-11,13,15-18,24
SANDS/SOI 2754RR	7	II 1-11,13-15,17-18,21-22,24
SANDS/SOI 2872RR	7	II 1-3,6-11,13,15,17,21,23-24
SEEDS 2000/2090RR	1	O No Resistance
SEEDS 2000/2130RR	2	I Unknown

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

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

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

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

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

		Northern Locations 2003-04 Yield Averages				Nontho	on 7ono
		South Shore		Warner		Northern Zone Averages	
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
NUTECH/NT-0999RR	126	45		52		49	
PRAIRIE BR./PB-0954RR	128	44		51		48	
KRUGER / 101RR	128	42	31	51	49	47	40
GOLD COUNTRY/2509RR	126	43		50		47	
DYNA-GRO/DG 33R09	126	44		49		47	
WENSMAN/W 2103RR	126	44	32	49	47	47	40
MUSTANG/M-094RR	127	44	33	48	49	46	41
MUSTANG/M-095RR	127	43		48		46	
KRUGER/098RR	126	42	30	50	50	46	40
KRUGER/090RR	126	42		49		46	
DDAIDIE DD /DD 0000DD	126	40	30	51	50	46	40
PRAIRIE BR./PB-0923RR	126	40	30	51	50	46	40
DYNA-GRO/DG 37A10	120	45	34	46	45	46	40
NORTHSTAR/NS 0954RR	!	43	34	!	45	!	40
NUTECH/NT-0889RR	126	43		47		45 45	
TECH. DIRECT/TD-099RR	127	43	•	46	•	45	•
THOMPSON/T-0889+RR	126	42		47		45	
MUSTANG/M-092RR	127	39	31	48	46	44	39
MALLARD/EXP RR0914	125	40		47		44	
NUTECH/NT-0676+RR	125	41		46		44	
NUTECH/NT-0711ARR	129	42		45		44	
KRUGER/EXP089RR	126	44		43		44	
PRAIRIE BR./PB-1063RR	126	38	29	49	48	44	39
SEEDS 2000/2090RR	127	40		48		44	
BIO GENE/BG0913RR	127	40		48		44	
MUSTANG/M-075RR	124	40		45		43	
NUTECH/NT-0606RR	122	41		45		43	_
TECH. DIRECT/TD-077RR	124	41		45		43	
STINE/S0900-4	127	41		45		43	
PRAIRIE BR./PB-1043RR	130	40	30	46	46	43	38
DYNA-GRO/DG 32Y09	123	39		46	.0	43	

<sup>\*</sup> DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

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

		No	orthern I	Locations	s		
		200	3-04 Yie	ld Averaç	ges	ļ	_
		South	Shore	Warı	ner	Northe Aver	rn Zone ages
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
WENSMAN/W 2090RR	126	36		49		43	
NORTHSTAR/NS 0609RR	125	41		44		43	
ASGROW/AG0801	124	38	29	45	47	42	38
ASGROW/AG1001	125	39		44		42	
MUSTANG/M-083RR	125	38	31	46	46	42	39
DEKALB/DKB07-52	121	38	30	45	46	42	38
NUTECH/NT-0848RR	126	42		42		42	
KRUGER/099+RR	126	40	32	44	48	42	40
PRAIRIE BR./PB-0812RR	126	39	30	45	45	42	38
NORTHSTAR/NS 0517RR	122	40		44		42	
SODAK GENETICS/SD1091RR	126	38	28	45	46	42	37
MUSTANG/M-055RR	124	37		45		41	
TECH. DIRECT/TD-055RR	122	40		42		41	
WENSMAN/W 2062RR	122	37	29	44	47	41	38
PUBLIC/SD01-1253R	123	37		45		41	
PUBLIC/SD1091RR-4	129	37		44		41	
PUBLIC/MN-0904RR	126	36	28	45	47	41	38
MUSTANG/M-053RR	121	37	31	42	45	40	38
PUBLIC/SDX00R-035-39	127	39		41		40	
DYNA-GRO/DG 31B08	123	33		45		39	
BIO GENE/BG100RR	128	38		39		39	
PUBLIC/SD01-187R	128	34		43		39	
THUNDER/2209RR	126	35		41		38	
STINE/S0906-4	128	34		41		38	
SODAK GENETICS/SD1081RR	126	36	28	39	43	38	36
PUBLIC/SD01-2736R	126	35		41		38	
PUBLIC/SD01-1780R	127	33	.	35		34	
SANDS/SOI 0931RR	126	40	31			.	
SANDS/EXP 0969RR	129	44	.			.	
SANDS/SOI 0661RR	126	35	.			.	

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

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

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

<sup>\*</sup> DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

<sup>##</sup> TPG-value= minimum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

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

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

		1		orthern I in, Oil,							
		Sou	th Sho	ore	\	Warne	r	Northern Zone Averages			
			I				l		I	I	
Brand/Variety (By zone protein)	DTM*	Protein (%)	(%)	Lodging (1-5)*	Protein (%)	(%)	Lodging (1-5)*	Protein (%)	011 (%)	Lodging (1-5)*	
MUSTANG/M-055RR	124	22.2	16.5	1	24.1	17.0	1	22.7	16.8	1	
WENSMAN/W 2103RR	124		16.8	'		17.0	'		17.0	'1	
NUTECH/NT-0676+RR	125	1	16.2	'	!	17.1	'	!	16.7	'1	
PRAIRIE BR./PB-0923RR	126		17.0	'		17.1	1		17.2	'1	
PRAIRIE BR./PB-1043RR	130	1	17.6	'1	ı	18.0	'	ı	17.2	'1	
PRAIRIE DR./PD-1045RR	130	33.0	17.6	'	33.7	10.0	' 	33.4	17.0	'	
NUTECH/NT-0999RR	126	32.9	16.9	1	33.8	17.2	1	33.3	17.1	1	
KRUGER / 101RR	128	32.9	17.0	1	33.8	17.2	1	33.3	17.1	1	
ASGROW/AG1001	125	33.2	16.8	1	33.2	17.7	1	33.2	17.3	1	
DYNA-GRO/DG 37A10	126	32.8	16.9	1	33.6	17.3	1	33.2	17.1	1	
PRAIRIE BR./PB-0954RR	128	32.7	17.4	1	33.6	17.8	1	33.2	17.6	1	
GOLD COUNTRY/2509RR	126	32.8	17.3	1	33.5	17.8	1	33.2	17.6	1	
BIO GENE/BG100RR	128		17.0	1		17.6	1		17.3	1	
KRUGER/098RR	126	1	17.1	1	ı	17.8	1	ı	17.5	1	
PUBLIC/SD01-2736R	126		17.2	1		18.5	1		17.9	1	
SODAK GENETICS/SD1081RR	126	ļ.	17.2	1	!	18.2	1	!	17.7	1	
NUTECH/NT-0889RR	126	32.8	17.5	1	33.0	17.8	1	32.9	17.7	1	
MUSTANG/M-095RR	127	1	17.2	1	!	17.7	1	!	17.5	1 1	
TECH. DIRECT/TD-099RR	127	1	17.1	1	!	18.0	1		17.6	1 1	
MALLARD/EXP RR0914	125	1	16.3	1	!	17.2	1	!	16.8	1	
STINE/S0900-4	127		17.7	1		18.0	1		17.9	1	
THOMPSON/T-0889+RR	126	32.4	17.4	1	33.2	18.0	1	32.8	17.7	1	
WENSMAN/W 2090RR	126	1	17.2	1	!	17.8	1		17.5	1 1	
DYNA-GRO/DG 33R09	126	1	16.3	1	!	16.8	1	!	16.6	'1	
DYNA-GRO/DG 32Y09	123		17.1	1	!	18.0	1	!	17.6		
DYNA-GRO/DG 31B08	123	1	17.4	1	!	17.7	1	!	17.6	1	
PUBLIC/SDX00R-035-39	127	31.0	17.6	1	21.0	18.8	1	21.0	18.2	1	
ASGROW/AG0801	127	1	16.4	1	1	17.5	1	l	17.0	'	
•	124		1	1	31.1	17.5	'	31.8	17.0	'	
SANDS/SOI 0931RR SANDS/EXP 0969RR	120	1	16.8	1							
,	129		16.2	1 1							
SANDS/SOI 0661RR	120	35.3	10.2	'							

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

		!		orthern I		Nonth	nern Z	'one		
		Sou	th Sh	ore	V	Varner	•		verage	
  Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	Oil	Lodging
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*
DAIRYLAND/DSR-040/RR	126	33.3	17.0	1						
DAIRYLAND/DSR-050/RR	122				33.3	17.5	1		i . i	
DAIRYLAND/DST08-000/RR	130	33.0	17.1	1		.			.	
DAIRYLAND/DSR-091/RR	124				34.9	17.1	1			
TOP FARM/6102RR	126	33.7	16.9	1					.	
  STINE/S0504-4	123				33.3	17.0	1			
NORTHSTAR/NS 0509RR	123	33.7	17.0	1					.	
NORTHSTAR/NS 0805RR	127	31.9	17.3	1						
EXCEL/8055RR	122				33.3	17.5	1		i . i	
EXCEL/8020RR	118				34.1	16.9	1		.	
  PUBLIC/SD01-2475R	131	31.8	17.2	1					.	
PUBLIC/SD00-1037R	131	31.6	17.0	1						
PUBLIC/SD00-1251R	130	34.3	16.7	1					.	
PUBLIC/SD00-1258R	133	34.1	16.2	1						
PUBLIC/SD93-1233T	130	34.7	16.2	1	.	.		.		.
Test avg.:	126	33.5	16.7		1 34.1	1 17.3	3	1 33	.9 17.	0 1
High value:	133	36.3	17.7	:	36.8	18.8	3	1 36	.6 18.	2 1
# Lsd(.05):				N:	3		1	NS		NS
## TPG-value:					1			1		1
@ Coef. Var.:				19	9			0		7
No. Entries:		70	70	70	62	2 62	2 (	62 5	57 5	57 57

<sup>\*</sup> DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error, 15% or less is best.

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

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

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

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

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

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

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

<b></b>		Ι				г	
		No	orthern I	Locations	3		
		200	3-04 Yie	ld Averaç	ges		
						Northe	rn Zone
		South	Shore	Warı	ner	Aver	ages
  Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
MALLARD/EXP RR1111	126	37		44		41	
GOLD COUNTRY/6016RR	128	37	29	45	41	41	35
DAIRYLAND/DST15-000/RR	129	37		45		41	
KELTGEN AGVENTURE/AV 10	126	36		44		40	
PRAIRIE BR./PB-1354RR	129	38		41		40	
  PRAIRIE BR./PB-1634RR	131	34		45		40	
DYNA-GRO/DG 32F12	127	37		43		40	
THOMPSON/T-1818RR/SCN	١.	36		44		40	
THOMPSON/T-2121RR/SCN	١.	37		43		40	
PUBLIC/MN-1803RR	135	38	28	42	39	40	34
MUSTANG/M-174RR		37	29				
DEKALB/DKB19-52				44	43		
SANDS/SOI 1540RR	134	43					
SANDS/SOI 1261RR	134	44					
SANDS/EXP 1766RR		43					
PUBLIC/SDX00-022R-23	130	35					
PUBLIC/SDX00-022R-53	132	43					
PUBLIC/SDX00-024R-14	.			40			
LATHAM/EXP-E1230R	132	36					
LATHAM/EXP-E1330R	134	41					
GOLD COUNTRY/6117RR		25					
DAIRYLAND/DSR-130/RR	128			46			
PUBLIC/SDX00-053R-46	134	39					
ZILLER/EXP44310R	130	38					
ZILLER/EXP33513R	134	42					
ZILLER/BT 7145R	131	41					
JACOBSEN/J647R	133	39					
NORTHSTAR/NS 1407RR	126			44	42		
NORTHSTAR/NS 1409RR	132	39					
BIO GENE/BG150RR	134	41					
						·	

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

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

		l	orthern I 3-04 Yie	Nontho	n Zone		
		South	Shore	Warr	ner	Avera	
  Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
EXCEL/8151RR	132	39					
EXCEL/8160RR	135	38					
PUBLIC/SDX00R-035-12		30					
PUBLIC/SDX00R-035-59	134	37				į .	
PUBLIC/SD01-3219R	127			42			
PUBLIC/SD01-67R	132			44			
PUBLIC/SD96-170RR-28L	124			48			
PUBLIC/SD01-1075R	127			44			
PUBLIC/SD01-1094R	.			42			
PUBLIC/SD01-1792R	130	36					
PUBLIC/SD01-3402R	124			41			
PUBLIC/SD00-1018R	122			41	38	į .	
PUBLIC/SD00-236R	130	39	29				
PUBLIC/SDX00R-029-3				43			
Test avg.:	130	41	30	47	44	45	38
High value:	135	48	34	55	49	51	42
# Lsd (.05):		5	NS	6	6	4	.
## TPG-value:		43	29	49	43	47	.
@ Coef. Var.:		8	10	7	9	6	.
No. Entries:		92	17	82	17	70	

<sup>\*</sup> DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

 $<sup>\</sup>ensuremath{\mbox{\#\#}}$  TPG-value= minimum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

		2004			Locations & Lodgin						
								Northern Zone			
		Sou	th Sh	ore 	Warner			Α'	Averages		
Brand/Variety		Protein	Oil	, ,	Protein	Oil		Protein	Oil	Lodging	
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	
THOMPSON/T-1818RR/SCN		33.9	16.8	1	35.3	16.9	1	34.6	16.9	1	
KRUGER/125RR	125	34.5	16.7	1	33.8	17.6	1	34.2	17.2	1	
PRAIRIE BR./PB-1354RR	129	34.3	16.8	1	34.0	17.1	1	34.2	17.0	1	
MALLARD/EXP RR1111	126	34.1	17.1	1	33.9	17.6	1	34.0	17.4	1	
DYNA-GRO/DG 32F12	127	34.1	16.7	1	33.8	17.5	1	34.0	17.1	1	
KELTGEN AGVENTURE/AV 10	126	33.3	17.4	1	34.2	17.1	1	33.8	17.3	1	
JACOBSEN/J642R	127	33.6	16.9	1	33.9	17.1	1	33.8	17.0	1	
THOMPSON/T-1901RR		34.0	16.6	1	33.5	17.1	1	33.8	16.9	1	
PETERSON/EXP 1.2RR	125	!	17.1	1	33.7	17.5	1	33.6	17.3	1	
MUSTANG/M-155RR	130	33.5	16.6	2	1	17.5	1	!	17.1	1	
MALLARD/EXP RR1512	134	33.3	16.9	1	33.8	17.5	1	33.6	17.2	1	
PRAIRIE BR./PB-1754RR	131	1	16.9	1	!	17.0	1	!	17.0	1	
SODAK GENETICS/SD1151RR	127	1	16.8	1	1	17.3	1	Į.	17.1	1	
KRUGER / 149+RR	132	!	16.9	1		17.3	1		17.1	1	
THOMPSON/T-2121RR/SCN		!	17.0	1	!	17.8	1	!	17.4	1	
DAIRYLAND/DST15-000/RR	129	33.0	17.2	1	33.6	17.2	1	33.3	17.2	1	
PETERSON/PFS 0410RR	127	32.9	16.8	1	33.5	17.4	1	33.2	17.1	1	
PRAIRIE BR./PB-1634RR	131	32.1	17.4	1	34.1	17.4	1	33.1	17.4	1	
WENSMAN/W 2144RR	131	1	17.2	1	!	17.4	1	33.1	17.3	1	
KRUGER/EXP152RR	129	1	17.1	1	!	17.7	1	!	17.4	1	
ASGROW/AG1603	129	32.4	17.5	1	33.5	17.6	1	33.0	17.6	1	
STINE/S0992-4	126	32.7	17.3	1	33.2	18.0	1	33.0	17.7	1	
THOMPSON/T-1577RR	130	32.7	17.1	1	33.2	17.6	1	33.0	17.4	1	
MUSTANG/M-124RR	128	32.6	18.0	1	33.2	17.7	1	32.9	17.9	1	
DYNA-GRO/DG 34R12	133	32.5	17.4	1	33.3	17.9	1	32.9	17.7	1	
STINE/S0943-4	127	32.4	16.9	1	33.3	17.3	1	32.8	17.1	1	
ASGROW/AG1903			16.3	1		17.2	1		16.8	1	
PUBLIC/MN-1803RR	135		17.1	2		17.9	1		17.5	1	
DAIRYLAND/DST13-000/RR	128	32.2	!	1	!	17.7	1	!	17.7	1	
STINE/S1300-4	130	I	17.5	1	Į.	18.0	1	Į.	17.8	1	

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

			NI.	anthann I						
		2004			Location: & Lodgi					
		Sou	th Sh	ore	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Warne			nern Z verage	
Danad (Maniatus		Dunata i u	041	Ladadaa	Dunatain	041	Ladadaa	Dunatain	041	
Brand/Variety (By zone protein)	DTM*	Protein (%)	(%)	(1-5)*	Protein (%)	(%)	(1-5)*	Protein (%)	(%)	Lodging (1-5)*
NORTHSTAR/NS 1019RR	126	31.9	16.8	1	33.0	17.2	1	32.5	17.0	1
TECH. DIRECT/TD-202RR		32.1	17.6	2	32.7	17.9	1	32.4	17.8	1
KRUGER / 192RR	131	32.2	17.4	1	32.5	18.1	1	32.4	17.8	1
THOMPSON/T-1444RR	126	32.5	16.8	1	32.2	17.0	1	32.4	16.9	1
NUTECH/NT-1010RR	126	32.2	17.8	1	32.4	17.9	1	32.3	17.9	1
STINE/S1918-4	132	32.2	17.6	1	32.3	17.9	1	32.3	17.8	1
PRAIRIE BR./PB-1954RR	130	32.6	17.0	1	31.9	17.8	1	32.3	17.4	1
NK BRAND/S14-A7	126	32.2	17.3	1	32.2	17.8	1	32.2	17.6	1
NUTECH/NT-2202RR	.	31.8	17.6	1	32.3	18.2	1	32.1	17.9	1
ASGROW/AG1401	127	32.1	17.5	1	31.9	18.1	1	32.0	17.8	1
PRAIRIE BR./PB-1254RR	127	31.2	18.0	1	32.8	18.0	1	32.0	18.0	1
THOMPSON/T-7234RR	131	32.0	17.7	1	32.0	18.2	1	32.0	18.0	1
NUTECH/NT-1909RR	130	32.1	17.7	1	31.8	18.4	1	32.0	18.1	1
KRUGER/211+RR	135	31.7	17.7	1	32.2	18.1	1	32.0	17.9	1
PRAIRIE BR./PB-1914RR	130	31.5	17.8	1	32.4	18.3	1	32.0	18.1	1
MUSTANG/M-153RR	131	31.0	17.5	1	32.6	17.2	1	31.8	17.4	1
NUTECH/NT-2002RR		1	17.6	1	31.5	18.5	1	31.7	18.1	1
KRUGER/191RR		1	17.3	1		18.1	1	!	17.7	1
STINE/S1586-4	132	1	16.9	1	1	17.7	1	!	17.3	1
PRAIRIE BR./PB-1552RR	131	31.0	16.9	1	32.0	17.7	1	31.5	17.3	1
KRUGER/223RR	132	1	17.8	1	1	18.6	1	!	18.2	1
KRUGER/223+RR		1	17.5	1	1	18.4	1	!	18.0	1
DYNA-GRO/DG 31C15RR	133	l .	17.3	1		17.5	1		17.4	1
SEEDS 2000/2130RR	128	1	17.4	1		17.6	1		17.5	1
KRUGER/EXP167RR	131	30.8	17.4	1	31.8	18.0	1	31.3	17.7	1
THOMPSON/T-7193RR/SCN			18.5	1		18.7	1		18.6	1
THOMPSON/T-7205RR	129		18.0	1		18.4	1	!	18.2	1
KRUGER/195+RR/SCN	130	1	18.3	1		18.7	1	!	18.5	1
TECH. DIRECT/TD-199RR	132	30.7	l	1	I	18.2	1	1	17.8	1
PRAIRIE BR./PB-1620RR	130	30.9	17.1	1	31.2	17.5	1	31.1	17.3	1

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

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

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

		Northern Locations 2004 Protein, Oil, & Lodging Averages					- Northern Zone			
		South Shore			Warner			Averages		
  Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	Oil	Lodging
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*
EXCEL/8151RR	132	33.9	16.7	1						
EXCEL/8160RR	135	31.7	17.2	1						
PUBLIC/SDX00R-035-12		31.8	16.6	2						
PUBLIC/SDX00R-035-59	134	33.5	16.9	1						
PUBLIC/SD01-3219R	127				31.8	17.3	1			
PUBLIC/SD01-67R	132				35.1	18.1	1			
PUBLIC/SD96-170RR-28L	124				32.8	17.9	1			
PUBLIC/SD01-1075R	127				32.9	18.3	1			
PUBLIC/SD01-1094R					32.6	18.4	1			
PUBLIC/SD01-1792R	130	34.2	16.4	1						-
PUBLIC/SD01-3402R	124				36.4	16.0	1			
PUBLIC/SD00-1018R	122				31.3	18.2	1			
PUBLIC/SD00-236R	130	34.6	16.9	1					.	
PUBLIC/SDX00R-029-3					32.5	18.4	1			
Test avg.:	130	32.2	17.2	1	32.5	17.7	1	32.3	17.5	1
High value:	135	35.5	18.5	2	36.4	18.7	1	34.6	18.6	1
# Lsd(.05):				0			NS			NS
## TPG-value:				1			1			1
@ Coef.Var.:				28			11			20
No. Entries:		92	92	92	82	82	82	70	70	70

<sup>\*</sup> DTM= days from seeding (South Shore- May 21, Warner- May 27, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error, 15% or less is best.

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

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

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

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

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

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

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

<sup>##</sup> TPG-value= minimum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

<b>_</b>						
		Central Location				
		2004 Protein, Oil, &				
		Lodging Averages				
		Brookings				
		- Brookings				
		Protein	Oil	Lodging		
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*		
PUBLIC/SD00-1251R	119	38.5	15.4	3		
PUBLIC/SD93-1233T	116	38.2	15.3	2		
SODAK GENETICS/SD1091RR	115	38.1	15.8	2		
PUBLIC/SD01-1071R	118	38.0	15.3	2		
PUBLIC/SD1091RR-4	121	37.3	15.9	3		
  MUSTANG/M-094RR	121	37.1	15.7	2		
KRUGER/099+RR	117	37.1	16.3	2		
NUTECH/NT-0811RR	119	37.0	16.2	2		
SANDS/SOI 0661RR	116	36.9	16.4	2		
BIO GENE/BG0913RR	119	36.9	15.6	2		
BIO GENE/BOOSTONN	113	30.9	13.0	-		
PUBLIC/MN-0904RR	117	36.8	16.4	2		
MUSTANG/M-083RR	119	36.7	16.5	2		
KRUGER/090RR	118	36.7	15.5	1		
NORTHSTAR/NS 0954RR	118	36.7	16.4	2		
PUBLIC/SD00-1258R	121	36.7	15.7	2		
  SANDS/SOI 0931RR	117	36.1	16.3	2		
DEKALB/DKB07-52	112	35.8	16.5	2		
NUTECH/NT-0999RR	120	35.7	16.3	2		
PUBLIC/SD01-1200R	117	35.7	16.7	2		
TOP FARM/6102RR	116	35.6	16.5	1		
THOMPSON/T-0889+RR	118	35.6	16.7	3		
NUTECH/NT-0848RR	117	35.5	16.6	2		
TECH. DIRECT/TD-099RR	122	35.5	16.9	3		
KRUGER/101RR	119	35.5	16.5	2		
DYNA-GRO/DG 37A10	118	35.4	16.6	2		
BINA-GRO/DG STATO	110	00.4	10.0	2		
MUSTANG/M-095RR	119	35.2	17.0	3		
NUTECH/NT-0889RR	118	35.2	16.6	2		
KRUGER/098RR	119	35.2	16.7	2		
DYNA-GRO/DG 32Y09	115	35.2	16.5	2		
BIO GENE/BG100RR	118	35.1	16.6	3		
L	L	L				

 $<sup>\</sup>mbox{\scriptsize *}$  DTM= days from seeding (Brookings- June 3, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

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

<sup>\*</sup> DTM= days from seeding (Brookings- June 3, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error, 15% or less is best.

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

		Central Location 2003-04 Yield Averages		
		Brookings		
Brand/Variety		Bu/Acre	Bu/Acre	
(By 2004 yield)	DTM*	2004	2-Yr	
NK BRAND/S19-R5		53		
NORTHSTAR/NS 1019RR	120	53	.	
SANDS/EXP 1766RR		52		
KRUGER/191RR	.	51	.	
KRUGER/192RR	.	51		
LATHAM/EXP-E1936R	.	51	_	
TOP FARM/E34904RR		51		
PETERSON/PFS 0410RR	119	51	49	
MUSTANG/M-153RR	123	50	46	
MUSTANG/M-124RR	120	50	47	
KRUGER/223+RR		50	50	
KRUGER/223RR		50	48	
TOP FARM/E34714RR		50		
PRAIRIE BR./PB-1914RR		50	-	
THOMPSON/T-7214RR	.	50		
THOMPSON/T-7193RR/SCN		50		
COYOTE/4719RR		49		
MUSTANG/M-194NRR		49	44	
NK BRAND/S14-A7	118	49		
FARM ADVANTAGE/7192		49		
THUNDER/2413NRR	120	49		
TECH. DIRECT/TD-199RR		49		
PRAIRIE BR./PB-1754RR		49		
PRAIRIE BR./PB-1954RR	.	49		
NORTHSTAR/NS 1407RR		49	46	
ASGROW/AG1903	122	48		
SANDS/SOI 1540RR		48		
NUTECH/NT-2002RR		48		
TOP FARM/6174RR		48		
PRAIRIE BR./PB-1552RR		48	48	

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

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

	-	Central Location 2003-04 Yield Averages		
		Brookings		
  Brand/Variety		Bu/Acre	Bu/Acre	
1	   *DTM	2004	2-Yr	
(2) 200. 32020,				
PRAIRIE BR./PB-2112RR		48	46	
WENSMAN/W 2163RR		48		
ASGROW/AG1603		47		
MUSTANG/M-115RR	123	47		
NUTECH/NT-1909RR	.	47		
KRUGER / 155+RR	122	47		
KRUGER/EXP167RR	.	47		
STINE/S1918-4	.	47	47	
PRAIRIE BR./PB-1921RR	.	47	46	
DYNA-GRO/DG 31C15RR	-	47	47	
DYNA-GRO/DG 34R12		47		
ZILLER/BT 7145R	123	47		
THOMPSON/T-7234RR		47		
PETERSON/EXP 1.2RR	119	47		
ASGROW/AG1401		46		
NUTECH/NT-1010RR	118	46		
NUTECH/NT-2202RR	.	46		
TECH. DIRECT/TD-202RR	.	46		
KRUGER/211+RR	.	46	46	
DAIRYLAND/DST13-000/RR	119	46		
TOP FARM/E3M321RR		46		
NORTHSTAR/NS 1710RR	123	46		
PETERSON/PFS 0415RR	.	46		
PUBLIC/SD96-170RR-28L	121	46		
NK BRAND/S17-P9		45		
KRUGER/125RR	120	45		
TOP FARM/6144RR	121	45		
WENSMAN/W 2144RR		45		
THOMPSON/T-7205RR	.	45	46	
THOMPSON/T-1212RR/SCN	.	45		

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

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

		Central Location 2003-04 Yield Averages		
		Brookings		
  Brand/Variety		Bu/Acre	Bu/Acre	
(By 2004 yield)	DTM*	2004	2-Yr	
THOMPSON/T-1901RR		45		
NORTHSTAR/NS 1409RR	121	45		
SODAK GENETICS/SD1151RR	121	45	42	
MUSTANG/M-174RR		44	44	
MUSTANG/E-1852NRR		44	•	
SANDS/SOI 1261RR	122	44		
LATHAM/EXP-E1635R		44	.	
DAIRYLAND/DSR-155/RR	122	44	44	
DAIRYLAND/DSR-199/RR		44	44	
DAIRYLAND/DST15-000/RR		44	•	
TOP FARM/E34514RR		44		
DYNA-GRO/DG 32F12	120	44	.	
EXCEL/8160RR	.	44	.	
PUBLIC/SDX00R-035-59	123	44	.	
PUBLIC/MN-1803RR		44	41	
MUSTANG/M-151RR	122	43	42	
MUSTANG/M-155RR		43	.	
DAIRYLAND/DSR-184/RR		43	.	
PUBLIC/SDX00-053R-46		43	.	
BIO GENE/BG150RR	120	43	•	
EXCEL/8192RR		43		
EXCEL/8194RR	.	43	.	
PRAIRIE BR./PB-1294RR	.	42	.	
PRAIRIE BR./PB-1634RR	120	42	.	
ZILLER/BT 7150R	.	42	45	
  ZILLER/BT 7193R		42	43	
RENK/RS199RR	.	42	40	
EXCEL/8151RR	.	42	.	
PETERSON/PFS 0511RR	.	42	.	
PUBLIC/SDX00R-022-66	119	42		

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

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

Brand/Variety (By 2004 yield)		Central Location 2003-04 Yield Averages	
		Brookings	
	DTM*	Bu/Acre 2004	Bu/Acre 2-Yr
PRAIRIE BR./PB-1620RR		41	40
RENK/RS159RR		41	.
PUBLIC/SD00-236R	122	41	39
THOMPSON/T-1818RR/SCN		40	.
PUBLIC/SD01-1120R		40	•
PUBLIC/SDX00-022R-53	119	39	
PUBLIC/SD01-1792R	119	9 39	
PUBLIC/SDX00-022R-23	119	38	.
PUBLIC/SD01-3387R	120	38	
Test avg.:	121	46	45
High value:	123	53	50
# Lsd (.05):		4	5
## TPG-value:		49	45
### Coef.Var.:		6	7
No. Entries:		99	25

 $<sup>\</sup>mbox{\scriptsize *}$  DTM= days from seeding (Brookings- June 3, 2004) to maturity.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

<sup>##</sup> TPG-value= minimum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

		т			
		Central Location			
		2004 Protein, Oil, &			
		Lodging Averages			
		Ві	rookings	3	
		Protein	Oil	Lodging	
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*	
THOMPSON/T-1818RR/SCN		38.0	15.5	3	
DAIRYLAND/DSR-155/RR	122	37.7	16.6	3	
MUSTANG/E-1852NRR		37.6	15.9	3	
DAIRYLAND/DSR-199/RR		37.6		3	
ZILLER/BT 7193R		37.5	!!!	3	
				_	
PUBLIC/MN-1803RR		37.5	15.6	3	
PUBLIC/SD01-1792R	119	37.4	15.7	2	
PUBLIC/SD00-236R	122	37.4	16.3	3	
KRUGER / 125RR	120	37.1	16.1	2	
PRAIRIE BR./PB-1634RR	120	37.1	16.0	2	
PETERSON/EXP 1.2RR	119	36.9	16.4	3	
SODAK GENETICS/SD1151RR	121	36.9	16.0	3	
PUBLIC/SDX00-022R-23	119	36.8	16.1	2	
PRAIRIE BR./PB-1754RR		36.8	15.8	2	
PUBLIC/SD01-3387R	120	36.8	15.9	2	
DYNA-GRO/DG 32F12	120	36.7	16.2	2	
TOP FARM/E34514RR		36.6		3	
RENK/RS199RR		36.6	!	3	
MUSTANG/M-124RR	120	36.5	16.5	2	
MUSTANG/M-174RR		36.5	15.8	2	
CANDO (EVP. 1700PP		00.5	10.0	0	
SANDS/EXP 1766RR		36.5 36.5	16.0 16.3	2	
LATHAM/EXP-E1635R			!		
WENSMAN/W 2144RR		36.5	16.1	2	
WENSMAN/W 2163RR		36.5	15.7	2	
ASGROW/AG1603		36.4	16.0	2	
EXCEL/8151RR		36.4	16.0	1	
PUBLIC/SDX00R-035-59	123	36.4	16.1	3	
THOMPSON/T-1901RR	.	36.3	16.0	3	
MUSTANG/M-155RR		36.2	16.0	3	
DAIRYLAND/DST13-000/RR	119	36.0	16.6	2	
Ĺ	<u> </u>	İ			

 $<sup>\</sup>mbox{\scriptsize *}$  DTM= days from seeding (Brookings- June 3, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

		Central Location			
		2004 Protein, Oil, &			
		Lodging Averages			
		Ві	rookings	;	
		Protein	Oil	Lodging	
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*	
EXCEL/8192RR		36.0	16.0	2	
EXCEL/8194RR		35.9	16.9	2	
PUBLIC/SDX00-022R-53	119	35.8	16.1	3	
DYNA-GRO/DG 34R12		35.8	16.9	2	
EXCEL/8160RR	١.	35.8	16.5	3	
PETERSON/PFS 0410RR	119	35.7	16.5	2	
NORTHSTAR/NS 1409RR	121	35.6	16.3	2	
TOP FARM/E34714RR		35.5	16.8	2	
NORTHSTAR/NS 1019RR	120	35.4	16.7	2	
PUBLIC/SD96-170RR-28L	121	35.4	16.5	3	
KDUOED (455 LDD	100	05.0	40.7	4	
KRUGER/155+RR	122	35.3		1	
TOP FARM/6144RR	121	35.3	!!!	2	
PUBLIC/SD01-1120R		35.3	!!	3	
PUBLIC/SDX00R-022-66	119	35.0	16.7	3	
MUSTANG/M-151RR	122	34.9	15.9	3	
NUTECH/NT-1010RR	118	34.9	17.2	2	
NUTECH/NT-2202RR		34.9	16.8	2	
KRUGER/211+RR		34.9	16.9	2	
KRUGER/223RR		34.9	16.3	1	
TOP FARM/E3M321RR		34.9	17.3	2	
THOMPSON /T 7234PP		34.9	17.2	1	
THOMPSON/T-7234RR NORTHSTAR/NS 1407RR		34.9		2	
1	123	34.9	16.9	3	
NORTHSTAR/NS 1710RR	118	34.9	!	1	
NK BRAND/S14-A7	118	!	!		
SANDS/SOI 1540RR		34.8	16.2	2	
THUNDER/2413NRR	120	34.8	16.5	2	
TOP FARM/E34904RR		34.8	17.0	2	
PRAIRIE BR./PB-1552RR		34.8	16.2	1	
PRAIRIE BR./PB-2112RR		34.8	16.9	2	
PRAIRIE BR./PB-1954RR		34.8	16.7	2	
	L				

 $<sup>\</sup>mbox{\scriptsize *}$  DTM= days from seeding (Brookings- June 3, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

		Central Location			
		2004 Protein, Oil, &			
		Lodging Averages			
		Brookings			
		Protein	Oil	Lodging	
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*	
ZILLER/BT 7145R	123	34.8	17.0	1	
LATHAM/EXP-E1936R		34.7	17.3	2	
DAIRYLAND/DSR-184/RR		34.7	17.0	2	
PUBLIC/SDX00-053R-46		34.7	16.7	4	
NK BRAND/S19-R5		34.6	16.4	2	
KRUGER/192RR		34.6	17.0	2	
DAIRYLAND/DST15-000/RR		34.6	16.8	2	
PRAIRIE BR./PB-1914RR		34.6	17.2	1	
DYNA-GRO/DG 31C15RR		34.6	16.1	1	
TECH. DIRECT/TD-202RR		34.5	17.2	1	
MUSTANG/M-153RR	123	34.4	16.5	2	
RENK/RS159RR		34.4	15.8	3	
BIO GENE/BG150RR	120	34.4	15.6	2	
NK BRAND/S17-P9	١.	34.3	16.2	2	
NUTECH/NT-1909RR		34.3	17.3	1	
KRUGER/EXP167RR		34.3	17.1	1	
TOP FARM/6174RR		34.3	17.4	1	
THOMPSON/T-7214RR		34.3	17.3	2	
NUTECH/NT-2002RR		34.2	17.0	2	
TECH. DIRECT/TD-199RR		34.2	17.1	1	
  STINE/S1918-4		34.2	17.0	2	
ZILLER/BT 7150R		34.2	16.1	2	
THOMPSON/T-7205RR		34.2	17.4	1	
PETERSON/PFS 0511RR		34.2	15.9	3	
PETERSON/PFS 0415RR		34.2	16.3	3	
ASGROW/AG1401		34.1	16.8	2	
PRAIRIE BR./PB-1620RR		34.1	16.4	3	
ASGROW/AG1903	122	34.0	16.4	2	
FARM ADVANTAGE/7192		34.0	17.1	1	
SANDS/SOI 1261RR	122	34.0	16.3	3	
		L			

 $<sup>\</sup>mbox{\scriptsize *}$  DTM= days from seeding (Brookings- June 3, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

		Central Location 2004 Protein, Oil, & Lodging Averages Brookings		
		Protein	0il	Lodging
Brand/Variety (By protein)	DTM*	(%)	(%)	(1-5)*
MUSTANG/M-194NRR		33.9	17.7	2
PRAIRIE BR./PB-1294RR		33.9	16.1	2
COYOTE/4719RR		33.8	17.2	2
THOMPSON/T-7193RR/SCN		33.8	17.5	2
PRAIRIE BR./PB-1921RR		33.7	17.0	1
MUSTANG/M-115RR	123	33.5	16.3	2
KRUGER/223+RR		33.5	17.2	1
KRUGER/191RR	.	33.5	17.4	2
THOMPSON/T-1212RR/SCN		33.4	16.5	2
Test avg.:	121	35.3	16.5	2
High value:	123	38.0	17.7	4
* Lsd(.05):				1
## TPG-value:				2
@ Coef. Var.:				28
No. Entries:		99	99	99

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error, 15% or less is best.

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

		Central Location 2003-04 Yield Averages		
		Brookings		
Brand/Variety		Bu/Acre	Bu/Acre	
(By 2004 yield)	DTM*	2004	2-Yr	
(By 2004 yield)	DIW		2 11	
FARM ADVANTAGE/7205		55		
SANDS/SOI 2143RR		54	52	
SANDS/SOI 2169RR		54		
MUSTANG/M-203RR		53	52	
KRUGER/200RR		53	.	
		, -		
LATHAM/L2136R		53	50	
GOLD COUNTRY/6221RR		53	49	
THOMPSON/T-7243RR		53	47	
NORTHSTAR/NS 2009RR		53		
ASGROW/AG2403		52		
DEKALB/DKB22-52		52		
PRAIRIE BR./PB-2243RR		52	48	
JACOBSEN/J730NR		52	48	
MUSTANG/M-201RR		51	49	
TOP FARM/E34412RR		51		
  PRAIRIE BR./PB-2141RR		51	50	
RENK/RS223RR		51	50	
TOP FARM/E34104RR		50		
PRAIRIE BR./PB-2343RR		50	50	
JACOBSEN/J733R		50	48	
  WENSMAN/W 2211RR		50	49	
MUSTANG/M-223RR		49		
DAIRYLAND/DSR-234/RR		48	47	
STINE/S2116-4		48	46	
KRUGER/233+RR		47	47	
TOP FARM/E34520RR		47	_	
PUBLIC/SDX00R-014-50		47		
PUBLIC/SD01-76R		47		
DAIRYLAND/DST20-000/RR		46		
PRAIRIE BR./PB-2421RR		46	43	

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

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

		Central Location 2003-04 Yield Averages		
		Brookings		
  Brand/Variety		Bu/Acre	Bu/Acre	
(By 2004 yield)	DTM*	2004	2-Yr	
(By 2004 yield)	DTW		2-11	
  PRAIRIE BR./PB-2374RR		46		
THOMPSON/T-2343RR		46	.	
PUBLIC/SDX00R-039-42		46	_	
PUBLIC/SD01-5R		46		
PUBLIC/SD93-828R	i .	46	40	
	-			
COYOTE/4523RR		45	.	
KRUGER/EXP234RR		45		
PRAIRIE BR./PB-2534RR		45	.	
EXCEL/8211NRR		45	.	
PUBLIC/SD01-2493R		45		
PUBLIC/SD01-2509R		45		
ASGROW/AG2203		44		
KRUGER/EXP268RR		43	44	
KRUGER/EXP257RR	i .	43	.	
KRUGER/268+RR		43		
TOP FARM/E3M278RR		43		
PUBLIC/SDX00R-030-16		40		
TOP FARM/E3M245RR		39	.	
NUTECH/NT-2404RR		35	.	
PRAIRIE BR./PB-2474RR		35		
PUBLIC/SD01-3603R		35		
KRUGER/252RR		34	.	
WENSMAN/W 2400RR		34		
Test avg.:	.	47	48	
High value:		55	52	
# Lsd (.05):		3	6	
## TPG-value:		52	46	
@ Coef. Var.:		4	7	
No. Entries:		53	19	
L	1	L	L	

<sup>\*</sup> DTM= days from seeding (Brookings- June 3, 2004) to maturity.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

<sup>##</sup> TPG-value= minimum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

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

 $<sup>\</sup>mbox{\scriptsize *}$  DTM= days from seeding (Brookings- June 3, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

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

<sup>\*</sup> DTM= days from seeding (Brookings- June 3, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error, 15% or less is best.

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

				_ocations ld Avera			
		Beres	sford	Armo	our	Southe Avera	rn Zone ages
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
ASGROW/AG1903	122	68		44		56	
TECH. DIRECT/TD-199RR	122	68		43		56	
THOMPSON/T-7214RR	121	65	58	44		55	
NUTECH/NT-1909RR	123	67		41		54	
NUTECH/NT-2002RR	123	67		41		54	
KRUGER/211+RR	121	65	59	41	33	53	46
PRAIRIE BR./PB-1954RR	118	67		38		53	
TECH. DIRECT/TD-202RR	122	64		39		52	
KRUGER/223+RR	118	67	59	37	28	52	44
KRUGER/191RR	121	65	56	38	32	52	44
KRUGER / 223RR	118	63	57	40	29	52	43
KRUGER / 192RR	121	64		39		52	
THOMPSON/T-7205RR	120	67	61	36		52	
NUTECH/NT-2202RR	122	62		39		51	
STINE/S1918-4	121	65	60	36		51	
THOMPSON/T-7234RR	119	65		35		50	
NK BRAND/S19-R5	117	66		32		49	
KRUGER / 155+RR	115	59		33		46	
KALTENBERG/KB153RR	117	61		31		46	
PUBLIC/MN-1803RR	122	53	46	37	28	45	37
PUBLIC/SD01-3387R	114	51		30		41	
SODAK GENETICS/SD1151RR	116	51	48	29	21	40	35
ASGROW/AG1603	112			34			
COYOTE/4719RR	112			34			
DEKALB/DKB19-52	111			35	29		
NUTECH/NT-1901RR	127	63					
PUBLIC/SDX00-022R-23	116	45					
PUBLIC/SDX00-024R-14	111			30			
LATHAM/EXP-E1936R	125	64					
GOLD COUNTRY/EXP-318RR	113			38			

 $<sup>\</sup>star$  DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

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

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

<sup>\*</sup> DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity. # Lsd, (.05)= amount values in a column must differ to be significantly different.

<sup>##</sup> TPG-value= minimum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

								<u> </u>			
		2004 1			Location: Lodgiı &						
					T			Southern Zone			
		Bei	resfo	rd 	,	Armou	r 	Averages			
Brand/Variety		Protein	Oil	Lodging	Protein	Oil	Lodging	Protein	Oil	Lodging	
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	
SODAK GENETICS/SD1151RR	116	32.8	17.6	3	33.3	18.7	1	33.1	18.2	2	
PUBLIC/SD01-3387R	114	32.6	17.3	2	33.3	19.3	1	33.0	18.3	2	
PUBLIC/MN-1803RR	122	33.5	17.4	4	32.4	19.7	1	33.0	18.6	2	
NK BRAND/S19-R5	117	31.9	17.6	1	33.3	18.3	1	32.6	18.0	1	
KRUGER / 155+RR	115	31.7	17.7	1	33.3	19.5	1	32.5	18.6	1	
NUTECH/NT-1909RR	123	32.2	18.1	2	32.3	19.7	1	32.3	18.9	1	
NUTECH/NT-2202RR	122	32.5	17.9	1	32.0	19.4	1	32.3	18.7	1	
TECH. DIRECT/TD-202RR	122	I	17.8	1	I	19.6	1	Į.	18.7	1	
KRUGER/211+RR	121	1	17.9	1	1	19.1	1	!	18.5	1	
PRAIRIE BR./PB-1954RR	118		17.7	2		19.5	1	32.0	18.6	2	
THOMPSON/T-7234RR	119	32.0	17.9	1	31.9	19.3	1	32.0	18.6	1	
KRUGER/192RR	121	I	18.2	1	!	19.6	1	!	18.9	1	
KRUGER/223RR	118	I	18.0	1	I	20.1	1	Į.	19.1	1	
KALTENBERG/KB153RR	117	1	17.8	1		18.9	1		18.4	1	
THOMPSON/T-7214RR	121	!	18.0	1	!	20.2	1	!	19.1	1	
STINE/S1918-4	121	31.4	18.1	1	31.5	19.6	1	31.5	18.9	1	
NUTECH/NT-2002RR	123	31.7	18.1	1	31.0	20.4	1	31.4	19.3	1	
THOMPSON/T-7205RR	120	31.7	18.0	1	31.0	20.0	1	31.4	19.0	1	
ASGROW/AG1903	122	31.6	17.4	1	!	19.5	1	31.3	18.5	1	
KRUGER/223+RR	118	31.5	18.1	1	30.9	19.8	1	31.2	19.0	1	
KRUGER/191RR	121	31.2	18.0	1	31.1	19.8	1	31.2	18.9	1	
TECH. DIRECT/TD-199RR	122	32.1	17.7	1	21.5	20.1	1	26.8	18.9	1	
ASGROW/AG1603	112				32.2	19.5	1				
COYOTE/4719RR	112				31.5	19.8	1				
DEKALB/DKB19-52	111				31.8	20.2	1				
NUTECH/NT-1901RR	127	33.0	17.0	2							
PUBLIC/SDX00-022R-23	116	31.4	18.6	3							
PUBLIC/SDX00-024R-14	111				31.8	19.2	1				
LATHAM/EXP-E1936R	125	32.1	18.0	1		ļ .					
GOLD COUNTRY/EXP-318RR	113		.		31.7	19.3	1				
GOLD COUNTRY/EXP-318RK	113	•	•	•	31.7	19.3	I	•	•		

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

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

<sup>\*</sup> DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error, 15% or less is best.

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

<b></b>	<del></del>					I		
		S	outhern I	Location	3			
		2003	-2004 Yi	eld Avera	ages			
						Southern Zone		
		Bere	sford	Armo	our	Aver	ages	
  Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr	
SANDS/SOI 2754RR	128	72		43		58		
MUSTANG/M-201RR	122	73	60	41		57		
MUSTANG/M-284RR	129	73	60	40	31	57	46	
FARM ADVANTAGE/7264	127	69		44		57		
DEKALB/DKB25-51	125	70	60	44	39	57	50	
KRUGER/EXP268RR	125	68		45	37	57		
PRAIRIE BR./PB-2141RR	124	71	•	42	36	57	•	
ASGROW/AG2403	124	69	60	42	36	56	48	
MUSTANG/M-243RR	126	71	59	40		56		
MUSTANG/M-264RR	127	66	33	45	•	56	•	
WOOTANG/W-204NN	127	00		43		30	•	
STINE/S2103-4	122	72		40		56		
PRAIRIE BR./PB-2421RR	126	70	61	42	32	56	47	
PRAIRIE BR./PB-2643RR	127	67	59	44	37	56	48	
COYOTE/9524RR	125	68	60	41	36	55	48	
COYOTE / 4527RR	127	69		41		55		
  SANDS/SOI 2143RR	122	70	62	39	35	55	49	
PRAIRIE BR./PB-2343RR	120	71	59	39	35	55	47	
MUSTANG/M-203RR	124	65	58	42	32	54	45	
SANDS/EXP 2669RR	125	65		42		54		
TECH. DIRECT/TD-266RR	129	63		44		54		
KRUGER/289+RR	129	64		44		54		
DAIRYLAND/DSR-234/RR	122	67	56	40	35	54	46	
DAIRYLAND/DSR-2500/RR	125	70	30	38	55	54	40	
RENK/RS253RR	126	66	57	41	34	54	46	
ASGROW/AG2203	120	61	37	41	34	53		
ACCOUNT AUCEUS	122			44		55	•	
COYOTE/EX325RR	125	68		37		53		
MUSTANG/M-255RR	125	65		40		53		
MALLARD/EXP RR2411	125	66		39		53		
NUTECH/NT-2790+RR	127	65		41		53		
KRUGER/233+RR	124	68		38	34	53		
		l				l		

 $<sup>\</sup>star$  DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

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

		Sc	 3				
		2003	-2004 Yi	eld Avera	ages	0	7
		Beres	sford	Armo	our	Aver	rn Zone ages
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
KRUGER/EXP257RR	126	65		40		53	
KRUGER/200RR	121	67		39		53	
KRUGER/252RR	127	63		42		53	
STINE/S2116-4	123	65	59	41		53	
PRAIRIE BR./PB-2443RR	122	66		40		53	
THOMPSON/T-7243RR	119	67	53	39	30	53	42
THOMPSON/T-2404+RR	126	66		40		53	
THOMPSON/T-2707+RR	125	68		38		53	
MUSTANG/M-223RR	123	62		41		52	
NK BRAND/S27-T7	126	67		37		52	
NUTECH/NT-2404RR	126	64		39		52	
NUTECH/NT-2707RR	125	62		41		52	
TECH. DIRECT/TD-233RR	128	64		40		52	
KRUGER/268+RR	125	63		40		52	
GOLD COUNTRY/EXP-325RR	124	62		42		52	
  PRAIRIE BR./PB-2243RR	123	67	60	36	31	52	46
PRAIRIE BR./PB-2374RR	124	64		39		52	
SANDS/SOI 2169RR	119	66		36		51	
TECH. DIRECT/TD-255RR	124	68		34		51	
TECH. DIRECT/TD-262RR	126	62		40		51	
KRUGER/270RR	128	61	55	41	31	51	43
KRUGER/273RR	126	62		40		51	
KALTENBERG/KB275RR	127	60	54	41	34	51	44
STINE/S2783-4	127	63		38		51	
PRAIRIE BR./PB-2534RR	125	65		37		51	
JACOBSEN/J828R	128	62	54	40	32	51	43
THOMPSON/T-2790+RR	127	62		40		51	
RENK/RS223RR	120	62	55	39	32	51	44
COYOTE/4523RR	125	64		35		50	
SANDS/SOI 226RR	123	62	57	38	31	50	44

 $<sup>\</sup>star$  DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

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

		Sc	outhern	·····			
		2003	-2004 Yi	eld Avera	ages		
		Beres	 sford	Armo	 our	Souther Aver	rn Zone ages
							Γ
Brand/Variety		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
(By zone 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	2004	2-Yr
SANDS/SOI 2872RR	128	58	51	42	35	50	43
PRAIRIE BR./PB-2474RR	126	62		38		50	
NUTECH/NT-2505RR	125	62		36		49	
THOMPSON/T-2505+RR	124	61		37		49	
PUBLIC/SDX00R-039-42	126	60		37		49	
KALTENBERG/KB245RR	126	54	_	41	_	48	_
PRAIRIE BR./PB-2934RR	130	59	•	36		48	
PUBLIC/SD01-5R	120	60		36		48	
FARM ADVANTAGE/7254N	126	54		39	•	47	•
KRUGER/277+RR/SCN	127	58		36		47	
INIOUEN/277 THAY SON	127	36		30		47	•
SANDS/SOI 2642NRR	126	53	50	38	31	46	41
PUBLIC/SD01-3603R	131	54		38		46	
ASGROW/AG2302	119			41	37		
ASGROW/AG2107	115			40	37		
ASGROW/AG2801	130	60	52				
DEKALB/DKB22-52	126	66					
SANDS/SOI 2151NRR	126	67					
NUTECH/NT-2550RR	127	66					
KRUGER/EXP234RR	122	_	_	41	_	_	
KRUGER/EXP287RR	128	60					
LATHAM/497RR	126	71	61				
LATHAM/L2136R	126	66	61	•	•	•	•
LATHAM/EXP-E2450R	129	61	01	•	•	•	•
LATHAM/738RR	129	66		•	•	•	
· ·				•	•	•	•
LATHAM/EXP-E2635R	128	62		•	•	•	•
LATHAM/EXP-E2646R	129	62					
LATHAM/L2857R	132	60					
LATHAM/L2900R	133	67		.			
GOLD COUNTRY/6221RR	121			39			.
DAIRYLAND/DSR-277/RR	124			44			
TOP FARM/E34412RR	125	62					
TOP FARM/E34520RR	130	67					
TOP FARM/E34104RR	127	69					
				<u>.</u>	<u> </u>	<u> </u>	<u> </u>

<sup>\*</sup> DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

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

				Locations		Southe	rn Zone
		Beres	sford	Armo	our	Aver	
Brand/Variety (By zone 2004 yield)	DTM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr
TOP FARM/E3M278RR	132	68					
TOP FARM/E3M245RR	128	55					
KALTENBERG/KB203RR	127	66					
STINE/S2404-4	129	64					
STINE/S2403-4	130	64					
PUBLIC/SDX00-051R-23	111			22		_	_
ZILLER/BT 7215R	127	73		<del></del>			
JACOBSEN/J730NR	124	69					
JACOBSEN/J733R	126	64	58				
JACOBSEN/J744NR	125	62					
THOMPSON/T-7293RR	122			36	29	_	
THOMPSON/T-2343RR	127	63					
THOMPSON/T-2422RR	127	67					
RENK/RS234RR	127	68					
RENK/RS244NRR	129	56					
EXCEL/8236NRR	127	68	57				
PUBLIC/SDX00R-014-50	124	58					
PUBLIC/SDX00R-030-16	126			30			
PUBLIC/SD01-76R	124	57					
PUBLIC/SD01-1135R	117			38			
PUBLIC/SD01-2469R	116			33			
PUBLIC/SD01-2493R	117			33			
PUBLIC/SD01-2509R	129	67					
PUBLIC/SD01-2961R	131	53					
PUBLIC/SD93-828R	118	55	47				
PUBLIC/SDX00R-015-4	111			26			
Test avg.:	125	64	57	39	34	53	46
High value:	133	73	62	45	39	58	50
# Lsd (.05):		5	8	5	6	4	.
## TPG-value:		68	54	40	33	54	.
@ Coef. Var.:		5	6	8	11	6	.
No. Entries:		107	29	84	26	72	.

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

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

<sup>##</sup> TPG-value= minimum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

		!			Locations & Lodgin			01		7		
		Bei	resfo	rd	,	Armou	r		hern i verag			
Brand/Variety		Protein		,	Protein	ł	,	Protein	ł	Lodging		
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*		
NUTECH/NT-2505RR	125	34.4	16.6	1	33.5	18.4	1	34.0	17.5	1		
MUSTANG/M-255RR	125	35.3	16.4	1	32.5	19.1	1	33.9	17.8	1		
COYOTE/EX325RR	125	35.0	16.6	2	32.7	18.9	1	33.9	17.8	1		
KRUGER/277+RR/SCN	127	34.6	16.9	1	32.7	19.7	1	33.7	18.3	1		
PRAIRIE BR./PB-2534RR	125	34.3	16.6	1	33.0	19.0	1	33.7	17.8	1		
TECH. DIRECT/TD-255RR	124	34.3	16.6	1	32.8	18.9	1	33.6	17.8	1		
THOMPSON/T-2505+RR	124	1	16.3	1	32.2	19.2	1	33.6	17.8	1		
KALTENBERG/KB245RR	126	!	16.8	!	31.8	19.9	1	33.5	18.4	2		
KRUGER/268+RR	125	34.2	16.9	1	32.7	19.1	1	33.5	18.0	1		
FARM ADVANTAGE/7254N	126	34.6	16.9	3	32.1	19.8	1	33.4	18.4	2		
SANDS/SOI 2642NRR	126	34.0	16.9	3	32.1	19.5	1	33.1	18.2	2		
PRAIRIE BR./PB-2343RR	120	33.6	16.7	1	32.3	19.0	1	33.0	17.9	1		
PRAIRIE BR./PB-2934RR	130	33.4	17.5	2	32.4	21.0	1	32.9	19.3	2		
PRAIRIE BR./PB-2443RR	122	33.9	17.3	1	31.7	19.5	1	32.8	18.4	1		
STINE/S2783-4	127	35.1	16.7	2	30.3	20.7	1	32.7	18.7	1		
MALLARD/EXP RR2411	125	33.5	16.6	1	l .	19.1	1	32.7	17.9	1		
SANDS/SOI 226RR	123		17.2	2		19.4	1	32.7	18.3	2		
RENK/RS253RR	126	33.3	17.3	1	31.8	20.0	1	32.6	18.7	1		
KRUGER/233+RR	124	33.9	17.1	2	31.1	19.7	1	32.5	18.4	1		
DAIRYLAND/DSR-234/RR	122	33.3	17.3	1	31.5	19.7	1	32.4	18.5	1		
ASGROW/AG2203	122	34.1	16.9	2	1	l	1	32.4	18.5	2		
NUTECH/NT-2707RR	125	!	17.0	!	!	20.3	1	!	18.7	1		
THOMPSON/T-2707+RR	125	!	16.9	!	I	20.1	1	!	18.5	2		
PUBLIC/SD01-3603R	131	!	16.8	4	!	20.3	1	!	18.6	3		
TECH. DIRECT/TD-262RR	126	32.8	17.4	2	31.3	19.9	1	32.1	18.7	1		
KRUGER/EXP257RR	126	!	17.1	2	!	19.7	1	!	18.4	2		
SANDS/EXP 2669RR	125		17.1	1	1	20.1	1	!	18.6	1		
SANDS/SOI 2872RR	128	I	17.5	I	!	20.5	1	I	19.0	3		
DAIRYLAND/DSR-2500/RR	125		17.3	1	ł	19.7	1	1	18.5	Į.		
TECH. DIRECT/TD-233RR	128	33.7	16.4	2	30.1	19.6	1	31.9	18.0	2		
MUSTANG/M-223RR	123	!	17.6	!	!	19.7	1	!	18.7	1		
KRUGER/273RR	126	1	17.3	1	!	20.2	1	!	18.8	1		
COYOTE / 4523RR	125	!	16.9	!	!	19.7	1	!	18.3	1		
KRUGER/200RR	121	1	17.2		1	19.8	1	1	18.5	2		
PRAIRIE BR./PB-2243RR	123	32.6	17.5	1	30.9	19.8	1	31.8	18.7	1		

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

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

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

		1		outhern I				0	<b>.</b>	7
		Be	resfo	rd	,	Armou	r	Soutl A	zone es	
Brand/Variety		Protein	Oil		Protein	Oil		Protein	Oil	Lodging
(By zone protein)	DTM*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*	(%)	(%)	(1-5)*
DEKALB/DKB25-51	125	30.7	18.0	2	28.4	21.1	1	29.6	19.6	1
PUBLIC/SDX00R-039-42	126	30.4	17.1	3	26.7	20.7	1	28.6	18.9	2
ASGROW/AG2302	119				30.5	19.7	1			
ASGROW/AG2107	115				31.0	20.7	1			
ASGROW/AG2801	130	34.8	16.0	2						
DEKALB/DKB22-52	126	31.8	17.9	1						
SANDS/SOI 2151NRR	126	31.4	18.1	1						
NUTECH/NT-2550RR	127	33.0	17.5	1		.			.	
KRUGER/EXP234RR	122	ļ .			31.7	19.5	1			
KRUGER/EXP287RR	128	35.0	17.0	1						
  LATHAM/497RR	126	31.2	17.5	1						
LATHAM/L2136R	126	31.7	17.7	1						
LATHAM/EXP-E2450R	129	33.4	16.8	2					.	
LATHAM/738RR	129	33.0	17.5	1					.	
LATHAM/EXP-E2635R	128	33.0	17.2	1						
  LATHAM/EXP-E2646R	129	32.3	17.0	2						
LATHAM/L2857R	132	34.1	17.6	3					.	
LATHAM/L2900R	133	32.9	17.0	1					.	
GOLD COUNTRY/6221RR	121				29.8	20.3	1		.	
DAIRYLAND/DSR-277/RR	124				30.6	20.6	1			
TOP FARM/E34412RR	125	31.6	17.7	1						
TOP FARM/E34520RR	130	33.4	17.1	1						
TOP FARM/E34104RR	127	33.1	17.2	2						
TOP FARM/E3M278RR	132	32.0	17.7	1						
TOP FARM/E3M245RR	128	34.1	16.5	3						
KALTENBERG/KB203RR	127	32.4	17.4	1						
STINE/S2404-4	129	34.2	16.2	1					.	.
STINE/S2403-4	130	33.0	16.9	2					.	.
PUBLIC/SDX00-051R-23	111				31.0	19.5	1			
ZILLER/BT 7215R	127	31.8	17.7	1						
JACOBSEN/J730NR	124	1	18.1	1						
JACOBSEN/J733R	126	31.9	17.6	1						
JACOBSEN/J744NR	125	33.8	17.3	1						
THOMPSON/T-7293RR	122	1	.		30.7	20.2	1			
THOMPSON/T-2343RR	127	33.6	17.1	1						

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

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

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

<sup>\*</sup> DTM= days from seeding (Beresford- May 19, Armour- May 27, 2004) to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error, 15% or less is best.

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

	Table	Mat.	Phytophthora
Brand / Variety	Number(s)	Grp.	Race resistance
201075 12525			
COYOTE / 9525	10	II	No Resistance
COYOTE/9723	9,10	II	1-2,10-11,13,15-18,24
COYOTE/EX525	9,10	II	1-11,13-15,17-18,21-22,24
GOLD COUNTRY/5329CYST	10	II	No Resistance
GOLD COUNTRY/6024FG	9,10	II	1-2,10-11,13,15-18,24
JACOBSEN/J772	9	II	Not Reported
JACOBSEN/J814	10	ΙΙ	Not Reported
JACOBSEN/J826	10	II	Not Reported
LATHAM/1840	9,10	I	No Resistance
LATHAM/280	10	I	No Resistance
LATHAM/570	9	II	No Resistance
LATHAM/EXP E1863	10	I	No Resistance
LATHAM/EXP E2380	10	II	No Resistance
LATHAM/EXP-E2980	10	II	No Resistance
MUSTANG/M-1185	9	I	No Resistance
MUSTANG/M-2255	10	II	1-11,13-15,17-18,21-22,24
NUTECH/NT-170	8-10	I	No Resistance
NUTECH/NT-180	8-10	I	No Resistance
NUTECH/NT-190	8	I	No Resistance
NUTECH/NT-242 SCN	10	II	No Resistance
NUTECH/NT-282 SCN	10	II	No Resistance
Public/HENDRICKS	8,9	0	1-2,10-11,13,15-18,24
Public/MN 0901	8,9	0	1-2,10-11,13,15-18,24
Public/SD00-141	8,9	0	Not Reported
Public/SD00-1587	9,10	II	Not Reported
Public/SD00-1588	8,9	0	Not Reported
Public/SD00-1638	8-10	I	Not Reported
Public/SD00-307	8-10	I	Not Reported
Public/SD00-314	9,10	II	Not Reported
Public/SD00-377	9,10	II	Not Reported
Public/SD00-405	8,9	0	Not Reported
Public/SD00-41	8,9	0	Not Reported
Public/SD00-533	8-10	I	Not Reported
Public/SD00-622	8-10	I	Not Reported
		_	::
Public/SD00-632	9,10	II	Not Reported

Table D. 2004 Conventional soybean entries (Continued).

	Table	Mat. Phytophthora
Brand / Variety	Number(s)	Grp. Race resistance
Dublic /CD00 700	0.10	TT Not Deported
Public/SD00-732	9,10	II Not Reported
Public/SD00-735	8-10	I Not Reported
Public/SD00-746	9,10	II Not Reported
Public/SD96-135-3	8-10	I Not Reported
Public/SD98-99-2	9,10	II Not Reported
Public/SD99-1358	8,9	O Not Reported
Public/SD99-1909	8,9	O Not Reported
Public/SD99-700	8,9	O Not Reported
Public/SDX98-74331	8-10	I Not Reported
Public/SDX98-82302	8-10	I Not Reported
Public/SPINK	8,9	0 1-2,10-11,13,15-18,24
Public/STRIDE	8-10	I 1-2,10-11,13,15-18,24
Public/SURGE	8,9	0 1-2,10-11,13,15-18,24
Public/TURNER-SCN	9,10	II 1-3,6-11,13,15,17,21,23-24
SANDS/SOI 187	8,9	I 1-2,10-11,13,15-18,24
SANDS/SOI 228N	10	II No Resistance
SANDS/SOI 256	10	II No Resistance
SANDS/SOI 288	10	II No Resistance
THOMPSON/T-3182	8-10	I 1-2,10-11,13,15-18,24
THOMPSON/T-3189	8-10	I Not Reported
THOMPSON/T-3201	9	II No Resistance
THOMPSON/T-3222	9,10	II No Resistance
THOMPSON/T-3288	10	II 1-11,13-15,17-18,21-22,24

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

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

 $<sup>\</sup>mbox{\scriptsize *}$  DTM= days from seeding on May 21, 2004 to maturity.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>@</sup> Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

		2004	Prote	in, Oil & Maturit		Aver	ages by	
			MG-0		MG-I			
Brand/Variety (By maturity group	DTM+	Protein %	0il %	Lodging*	Protein %	0il %	Lodging*	
& protein)	DTM*	76	6	(1-5)	76	6	(1-5)	
PUBLIC/SD00-405EXP	130	37.5	15.3	1				
PUBLIC/SD99-1358EXP	127	36.2	15.6	1				
PUBLIC/SURGE	128	35.6	16.5	1				
PUBLIC/SD99-700EXP	130	35.5	16.5	1				
PUBLIC/SD00-719EXP	127	35.0	16.0	1				
PUBLIC/SD99-1909EXP	129	35.0	16.0	1			_	
PUBLIC/MN 0901	129		16.7	1		.		
PUBLIC/SD00-1588EXP	130	ı	16.6	1				
PUBLIC/SD00-141EXP	131	34.0	16.1	1				
PUBLIC/SD00-41EXP	132	33.9	16.6	1				
  PUBLIC/SPINK	124	33.9	16.6	1				
PUBLIC/SDX98-82302E	128				38.4	14.6	1	
PUBLIC/SDX98-74331E	134				37.7	15.7	1	
NUTECH/NT-180	135				36.1	17.0	1	
PUBLIC/SD00-735EXP	135				34.5	16.5	1	
PUBLIC/SD00-533EXP	130				34.4	16.2	1	
THOMPSON/T-3189	134				34.0	16.9	1	
SANDS/SOI 187	133				33.9	17.1	1	
PUBLIC/SD00-1638EXP	130				33.9	16.8	1	
PUBLIC/SD96-135-3EX	131				33.9	17.6	1	
NUTECH/NT-190	135				33.8	16.5	1	
PUBLIC/SD00-622EXP	135				33.6	17.2	1	
PUBLIC/SD00-307EXP	131				33.4	17.4	1	
THOMPSON/T-3182	133				33.2	17.1	1	
PUBLIC/STRIDE	132				32.9	16.4	1	
NUTECH/NT-170	133				32.7	16.9	1	
Test avg.:	131	35.1	16.2	1	34.4	16.7	1	
High value:	135	37.5	16.7	1	38.4	17.6	1	
* Lsd(.05):				NS			NS	
## TPG-value:				1			1	
@ Coef. Var.:				0			0	
No. Entries:		11	11	11	15	15	15	

<sup>\*</sup> DTM= days from seeding on May 21, 2004 to maturity;

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error.

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

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

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

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

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

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

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>##</sup> TPG-value= minimum value to qualify for top performance group.

 $<sup>\</sup>mbox{\tt \#\#\#}$  Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

		200	04 Pro	otein, Oi	l, & Lod	ging /	Averages I	by Matur	ity G	roup	
December 100 and a trans			MG-0			MG-I		MG-II			
Brand/Variety (By maturity group		Protein	Oi l	Lodging*	Protein	Oi l	Lodging*	Protein	Oi l	Lodging*	
& protein)	DTM*	(%)	(%)	(1-5)	(%)	(%)	(1-5)	(%)	(%)	(1-5)	
									<u> </u>	[	
PUBLIC/SD00-405EXP	136	1	15.0	1							
PUBLIC/SD00-41EXP	140	1	l	1							
PUBLIC/SURGE	131	1	16.0	1							
PUBLIC/SD99-1358EXP	134	1	15.6	1							
PUBLIC/HENDRICKS	139	36.6	15.8	1							
PUBLIC/SD00-719EXP	134	36.4	15.9	1		١.					
PUBLIC/SD99-700EXP	136	36.2	16.2	1							
PUBLIC/SD00-1588EXP	138	36.2	16.3	1							
PUBLIC/SD99-1909EXP	138	35.7	16.6	1							
PUBLIC/SD00-141EXP	135	35.2	16.5	1							
PUBLIC/MN 0901	134	35.0	17.4	1							
PUBLIC/SPINK	132	34.6	16.6	1							
PUBLIC/SDX98-82302E	135				41.3	13.5	1				
PUBLIC/SDX98-74331E	141				l	15.4	1				
THOMPSON/T-3189	141				37.2	16.0	1				
PUBLIC/SD00-735EXP	142				36.5	16.2	1				
PUBLIC/SD00-533EXP	135				1	15.7	I				
NUTECH/NT-180	141				1	16.8	I				
PUBLIC/SD96-135-3EX	136				!	17.3	!				
LATHAM/EXP-E1840T	140				!	16.7	1				
PUBLIC/SD00-307EXP	138		_	_	35.0	17.0	1		_		
PUBLIC/SD00-622EXP	143				ı	17.2	I				
SANDS/SOI 187	141				1	16.6	I		١.		
PUBLIC/SD00-1638EXP	140				34.5	16.2	1				
PUBLIC/STRIDE	137				34.2	16.6	1				
NUTECH/NT-170	139				34.1	16.6	1				
MUSTANG/M-1185	139		•		!	16.8	' '				
THOMPSON/T-3182	142		•		!	17.3	' '				
PUBLIC/SD00-746EXP	1-72		•		34.0		'	38.5	14.7	2	
PUBLIC/SD00-377EXP	'		•		·			!	16.2	!	
	'							33.2			
PUBLIC/SD00-732EXP	.	.				.		38.2	15.1	1	
THOMPSON/T-3222	.	.				.		37.4	15.6	1	
GOLD COUNTRY/6024FG	.	.	.			.		36.7	16.2	1	
PUBLIC/TURNER-SCN	.	.	.			.		36.7	15.6	1	
LATHAM/570	.	.		.				36.4	16.2	1	

<sup>\*</sup> DTM= days from seeding on May 14, 2004 to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

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

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

<sup>\*</sup> DTM= days from seeding on May 14, 2004 to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

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

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error.

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

		2003-04 Y	es by Matur	by Maturity Group		
		MG	- I	MG-II		
Brand/Variety						
(By maturity group	D.T.1.1	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	
& 2004 yield)	DTM*	2004	2-Yr	2004	2-Yr	
NUTECH/NT-180	123	69				
LATHAM/EXP-E1840T	123	69	61			
LATHAM/280	123	68	59			
LATHAM/EXP E1863	121	68				
NUTECH/NT-170	121	67				
THOMPSON/T-3189	123	67	59			
PUBLIC/SD00-307EXP	120	61				
THOMPSON/T-3182	124	59	54			
PUBLIC/SD00-735EXP	124	58			.	
PUBLIC/SD00-622EXP	124	56				
PUBLIC/SDX98-74331E	122	55				
PUBLIC/SD00-533EXP	119	54				
PUBLIC/STRIDE	120	54	51			
PUBLIC/SD96-135-3EX	119	51	48			
PUBLIC/SDX98-82302E	116	44				
PUBLIC/SD00-1638EXP	121	43				
JACOBSEN/J826	126			70	60	
COY0TE/9723	126			69	58	
SANDS/SOI 288	129			69	57	
COYOTE/EX525	131			68		
JACOBSEN/J814	126			67	58	
THOMPSON/T-3222	125			67		
PUBLIC/SD98-99-2EXP	123			67		
MUSTANG/M-2255	131			66		
NUTECH/NT-282 SCN	131			66		
NUTECH/NT-242 SCN	130			65		
PUBLIC/SD00-732EXP	123			65		
SANDS/SOI 256	126		.	64	56	
LATHAM/EXP-E2980	132		.	64		
PUBLIC/SD00-746EXP	124		.	64		

 $<sup>^{\</sup>star}$  DTM= days from seeding on May 19, 2004 to maturity.

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

		2003-04 Yield Averages by Maturity Group									
		MG	- I	MG	-II						
Brand/Variety		D., / A = ==	D., / A = ==	D.: / A = :==	D., / A = = =						
(By maturity group	  DTM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr						
& 2004 yield)	רוווט"	2004	Z-YI'	2004	Z- YI'						
LATHAM/EXP E2380	131			63							
SANDS/SOI 228N	131			62							
GOLD COUNTRY/5329CY	129			62							
THOMPSON/T-3288	131			62	55						
PUBLIC/SD00-632EXP	123			59							
  C0Y0TE/9525	129			58	51						
GOLD COUNTRY/6024FG	128			57							
PUBLIC/SD00-1587EXP	125			56							
PUBLIC/TURNER-SCN	126			53	47						
PUBLIC/SD00-314EXP	124			51							
PUBLIC/SD00-377EXP	121			44							
Test avg.:	125	59	55	62	55						
High value:	132	69	61	70	60						
# Lsd (.05):		5	9	7	8						
## TPG-value:	İ	64	52	63	52						
@ Coef. Var.:		5	7	7	6						
No. Entries:		16	6	25	8						

<sup>\*</sup> DTM= days from seeding on May 19, 2004 to maturity.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

 $<sup>\</sup>ensuremath{\mbox{\#\#}}$  TPG-value= minimum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= a measure of trial experimental error, 15% or less is best.

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

		2004 Protein, Oil, & Lodging Averge by Maturity Group							
		MG-I			MG-II				
Brand/Variety		Dunatain	0:1	1	Dunatain	0 : 1			
(By maturity group & protein)	DTM*	Protein %	0il %	Lodging* (1-5)	Protein %	%	Lodging* (1-5)		
PUBLIC/SDX98-82302E	116	37.9	15.3	4					
PUBLIC/SDX98-74331E	122	37.6	15.6	3					
THOMPSON/T-3189	123	34.3	16.3	2					
PUBLIC/SD00-735EXP	124	33.8	16.8	3					
LATHAM/280	123	33.7	17.1	1					
NUTECH/NT-180	123	33.4	17.0	1					
PUBLIC/SD96-135-3EX	119	33.3	18.1	2					
LATHAM/EXP-E1840T	123	33.2	17.1	2					
PUBLIC/SD00-533EXP	119	32.5	17.1	4					
PUBLIC/SD00-1638EXP	121	32.5	17.6	3					
LATHAM/EXP E1863	121	31.7	16.7	2					
PUBLIC/SD00-622EXP	124	31.7	18.1	1					
NUTECH/NT-170	121	31.2	16.9	2					
PUBLIC/STRIDE	120	30.9	17.6	2					
THOMPSON/T-3182	124	30.7	17.4	2					
PUBLIC/SD00-307EXP	120	30.6	18.1	2					
PUBLIC/SD00-377EXP	121				35.2	17.4	2		
GOLD COUNTRY/6024FG	128				I	16.9	3		
NUTECH/NT-282 SCN	131				34.0	17.4	3		
PUBLIC/SD00-732EXP	123				33.8	17.0	2		
THOMPSON/T-3222	125				33.7	16.7	3		
PUBLIC/SD00-746EXP	124				33.7	17.1	2		
GOLD COUNTRY/5329CY	129				!	17.4	3		
LATHAM/EXP-E2980	132				33.5	17.4	3		
JACOBSEN/J826	126				33.5	16.8	1		
SANDS/SOI 228N	131				33.2	17.3	3		
LATHAM/EXP E2380	131	.			33.2	17.2	3		
PUBLIC/SD00-1587EXP	125	.			33.0	17.2	4		
JACOBSEN/J814	126					16.9	2		
C0Y0TE/9723	126				32.8	16.9	2		

 $<sup>\</sup>mbox{\scriptsize \star}$  DTM= days from seeding on May xx to maturity.

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

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

	2004 Protein, Oil, & Lodging Averge by Maturity Group								
		MG-I			MG-I	[			
			Lodging*		l	Lodging*			
DTM*	%	%	(1-5)	%	%	(1-5)			
130				32.6	17.7	3			
126				32.5	17.8	1			
129				32.4	17.2	2			
131				32.2	17.2	4			
123				32.1	16.6	3			
126				32.1	18.1	2			
123				32.0	18.1	2			
131				31.5	17.5	4			
131				31.2	17.5	3			
124				31.2	17.9	4			
129				31.0	18.0	2			
125	33.1	17.1	2	32.9	17.3	3			
132	37.9	18.1	4	35.2	18.1	4			
İ			1		İ	1			
			2			2			
			31			17			
	16	16	16	25	25	25			
	126 129 131 123 126 123 131 131 124 129	Protein DTM* %  130	MG-I  Protein Oil %  130 126 129 131 123 124 129 125 33.1 17.1 132 37.9 18.1	Maturity  MG-I  Protein Oil Lodging* (1-5)  130 126 129 123 124 129 129 121 122 124 125 125 132 124 125 137 128 129 129 129 129	Maturity Group  MG-I  Protein Oil Lodging* Protein (1-5) %  130	Maturity Group  MG-I  Protein Oil Lodging* Protein Oil %  130			

<sup>\*</sup> DTM= days from seeding on May 19, 2004 to maturity.

<sup>\*</sup> Lodging, 1= all plants erect, 5= all plants flat.

<sup>#</sup> Lsd,(.05)= amount values in a column must differ to be significantly different.

<sup>##</sup> TPG-value= minimum or maximum value to qualify for top performance group.

<sup>@</sup> Coef. Var.= measure of trial experimental error, 15% or less is best.

Company name (brand name)

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

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

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

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

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

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

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

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

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

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

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

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