Minnesota Agricultural
Experiment Station
University of Minnesota

Varietal Trials Results

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Soybean

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Minnesota Experiment Station scientists conduct tests of adapted public and private soybean varieties annually. Companies are charged a fee for each variety they enter, which partially covers the costs of conducting these tests. A stipulation of the testing program is that the company is marketing the variety entered or intends to market it in the next growing season.

The 2007 growing season was drier than normal early, then adequate moisture occurred during pod filling. It was also warmer than normal in 2007. Locations in the central zone were affected to a greater degree than locations in the northern and southern zones.

Tables 1 to 3 present data from the regular public and private variety tests conducted annually at various locations within the northern, central and southern production zones. The map shows test locations and zone boundaries. All of these tests were planted between May 3 and June 5 at planting rates of 160,000 plants/acre. Herbicides were used as necessary for good weed control. Row spacings were 30 inches at Becker and Jackson and 10 inches at other locations. Plot combines were used to harvest the plots. The 2005 data from Becker were not included due to a late season hailstorm.

Tables 4 to 7 provide results from specific tests of available Roundup Ready® varieties adapted to the far northern, northern, central, and southern production zones. Data from 2005 from Becker were not included due to a late-season hailstorm.

Tables 8 and 9 provide results from the special performance tests of soybean-cyst-nematode-resistant varieties in "infested" field sites near Lamberton, Waseca and Gaylord in the southern zone and Rosemount, Lester Prairie and Hector in the central zone. "Non-infested" field sites were located near Lamberton, Jackson, and Waseca in the southern zone and Morris, Becker and Rosemount in the central zones. Planting techniques were the same as the regular performance tests.

Tables 10 to 12 provide performance and characteristics data from special-use soybean variety tests. These tests were conducted to provide reliable data for growers interested in producing these types of soybeans, which are typically grown under contract.

Table 13 provides important variety characteristics of publicly developed varieties entered in the 2007 tests.

To better understand and use the data provided in these tables, please read the following additional information very carefully.

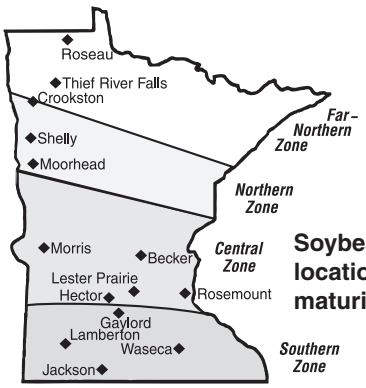
Relative Maturity and Calendar Dates of Maturity:

Soybeans respond to changing day length, so the actual calendar date of maturity achievement is affected by latitude. Each variety has a narrow range of north-south adaptation. Soybean yield and quality are assured if a variety arrives at physiological maturity before a season-ending freeze occurs. This date is determined visually by noting the actual date when 95 percent of the pods show their genetically programmed mature color. These dates for 2007 are provided in the tables. Harvest dates are typically 7 to 14 days later, depending upon drying conditions. Relative maturity ratings are also provided for each variety. These ratings consist of a number for the maturity group designation (000, 00, 0, 1, 2) followed by a decimal and another number, ranging from 0-9, which indicates a ranking within each maturity group. For example the variety MN0302 is indicated as 0.3, making it an early group 0 variety, while MN0901, with a 0.9 rating, is the latest. These values for public varieties are developed after observing them for several years in many locations. Relative maturity ratings for private varieties in these tables were provided by their owners, and were developed in a similar manner.

Yield:

Because maturity is a very important attribute, varieties are arranged in the tables in order of their actual 2007 calendar date of maturity and not yield performance.

Later-maturing varieties can usually be expected to have higher yields than earlier maturing types. If you wish to correctly compare yields, do so only between varieties with similar calendar dates of maturity, usually within 3 to 5 days. More reliable comparisons can be made using variety yields from several consecu-



Soybean test locations and maturity zones.

tive years. All yield determinations were made from replicated tests harvested with a plot combine.

In 2007 the yield information is presented as a percent of the mean of the test. The actual mean value is given at the bottom of each table. Values over 100 indicate the variety had a yield greater than the mean while those less than 100 have a yield less than the mean.

LSD values associated with data in these tables are measures of variability within the trials. The LSD values are given on the percent of mean data not the actual yields. If a yield difference between two varieties within a single column exceeds this LSD value you can assume that the higher yielding variety was truly better yielding. A 20-percent level of significance is used in all these tables. This means that yield differences exceeding the stated LSD value are real 80 percent of the time.

Chlorosis:

These ratings are based on how much of the leaf area was yellowing in tests conducted on high-lime (high pH) soils near Granite Falls and Foxhome in 2007. Comparing chlorosis scores of varieties enables you to estimate how well they perform relative to each other. Actual chlorosis ratings can vary depending on the specific site and year of test. Scores and evaluation dates from 2007 tests are at the web site www.soybeans.umn.edu/home.htm. Some universities and companies use numerical scores rather than word descriptors to describe chlorosis tolerance. A comparison of these systems follows:

Numerical Score		Word Description
1-5 scale	1-9 scale	Rating
1 to 2	1 to 2.5	Tolerant (T)
2.1 to 3	2.6 to 5	Moderately Tolerant (MT)
3.1 to 4	5.1 to 7.5	Moderately Susceptible (MS)
4.1 to 5	7.5 to 9	Susceptible (S)

Protein and Oil:

Protein and oil values were determined from mature seed using near infrared reflectance analysis equipment. **Table values are for the 2007 season only. The protein and oil information is presented on a percent of the mean of the test. The actual mean values are given at the bottom of each table.** Values more than 100 indicate the protein and/or oil contents of the variety were greater than the mean value while those less than 100 have protein and/or oil contents less than the mean. **Absolute values of protein and oil can vary from year to year.** The mean protein and oil values are expressed on a 13-percent moisture basis. This formula converts the protein and oil values to another moisture basis:

$$\frac{100 - \text{desired moisture}}{87} \times \text{protein or oil value given in the table}$$

The value of a bushel of soybeans (APV) based on its oil and protein content can be calculated by:

$$APV = 60\,[Po\,(X) + \frac{Pm}{.44}(Y)]$$

Where:

APV = approximate value of a bushel of soybeans

Po = soybean oil price (in $ per pound)

Pm = price of 44% meal (in $ per pound)*

X = oil content at 13% moisture (in decimals)

Y = protein content at 13% moisture (in decimals)

And:

$$\frac{\text{* price of meal \$/ton}}{2{,}000} = \text{\$/pound}$$

The value of an acre of soybeans can be calculated by multiplying the APV by the yield in bushels per acre.

Phytophthora:

Phytophthora root rot can cause significant yield reductions if susceptible varieties are planted in poorly drained, infested fields. There are several known races of this fungus, so it is important to know which are present in your field. Genes can be incorporated into varieties to provide resistance to specific races of this disease.

Some published information refers to Phytophthora "tolerance" or "field resistance," which is not race-specific and should not be confused with race-specific resistance. Reliable tests for tolerance have not yet been developed.

The data tables in this report indicate which Phytophthora gene or genes is/are present in each variety. The "genes for resistance" chart shows which resistance genes provide resistance to the various races.

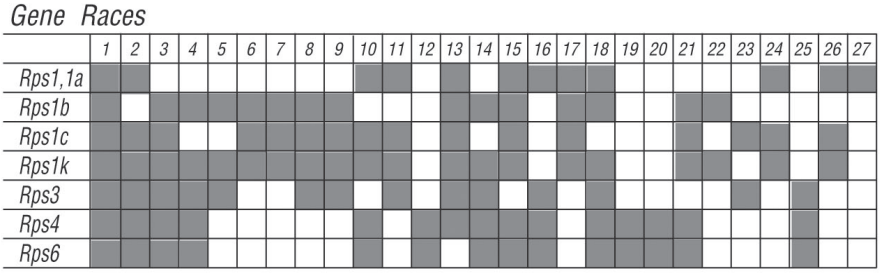
Soybean Cyst Nematode:

Soybean Cyst Nematode (SCN) was first identified in Minnesota in 1978 and is now known to occur in many Minnesota counties where the soybean is grown. Both the area of infestation and numbers of nematodes per unit of soil appear to be increasing. Several races of this pest are known to occur in Minnesota. When SCN numbers are high, significant yield losses can occur. Rotations to non-host crops and planting of resistant varieties can assist both in reducing nematode populations and reducing their impact on yield.

Yield performance results of susceptible (S), moderately susceptible (MS), moderately resistant (MR) and resistant (R) varieties planted in infested and non-infested fields in southern Minnesota are provided in Table 9. Ratings for SCN resistance were determined using molecular markers.

For proper management of fields with SCN it is recommended that varieties with an R rating be planted. If the SCN population numbers are relatively low (<3000) a variety with an MR rating might be considered. Although SCN reproduction is less on MS-rated varieties than S-rated varieties, for practical purposes these varieties should not be considered for planting in fields where SCN is present and being managed.

Genes for resistance to various races of Phytophthora root rot.



Management information is available from the web site www.soybeans.umn.edu or from the Minnesota Soybean Research and Promotion Council, 360 Pierce Avenue, Suite 110, North Mankato, MN 56003, 1-888-896-9678, www.mnsoybean.org

White Mold:

White mold, also known as Sclerotinia stem rot, develops in infested fields when high relative humidity and moderate temperatures occur during soybean flowering. Planting less-susceptible varieties in wider row spacings or at lower populations is the most effective method of reducing white mold severity.

Accurate ratings for soybean variety resistance to white mold are difficult to obtain because both infection and disease development are dependent on weather conditions. Because of this variability, a variety's performance can change significantly among locations and years depending on the interaction of plant development, precipitation, relative humidity, and temperature.

White mold severity also tends to be greater if lodging occurs. Growers concerned about variety performance in the presence of white mold should select varieties that show consistently less white mold during several years of testing.

Brown Stem Rot:

Brown stem rot (BSR) is a fungal disease that can cause yield losses in certain situations. The disease occurs most frequently when soybeans follow soybeans but can occur where soybeans are planted every other year. Resistant varieties, or longer rotations, assist in the management of this disease.

MN0304, MN0902CN, MN1302, Freeborn, IA1006, and IA2008R are available public varieties with resistance to BSR, and Latham E2348R, Latham E2246R and Trelay 2233 are privately developed varieties reported to be resistant to BSR.

Some information refers to "tolerance" or "field resistance." Reliable tests for tolerance or field resistance have not yet been developed.

Special Use Varieties:

There continues to be increased interest in producing soybeans with special characteristics important to specialty food product manufacturers. Soybean scientists previously developed some of these special-use varieties, which were general releases, but more recently varieties have been released under exclusive or nonexclusive licenses to specific companies who then contract with growers for production.

For further information go to the MCIA site: www.mncia@.umn.edu, or call 612-625-7766.

Brand Names Versus Variety Names

"Brand" names and "variety" names are different and are meant to be used for different purposes. Brand names refer to the seed source or the person labeling and selling the seed. Brand does not refer to the genetic makeup of the seed.

Variety names refer to the genetic makeup of seed; they may only refer to a specific genetic makeup. Plant breeders are constantly improving varieties but whenever the genetic makeup is changed a new variety is created and it must have a new variety name. The rate at which new varieties are being developed has increased dramatically in recent years.

"Branding" is a useful way for companies to market their products without having to constantly redo the identification and promotional information they offer.

If a farmer wishes to spread risk by planting products with different genetic makeup, the variety name must be used to determine if two products are truly different. Relying on a brand name alone to make this determination may not result in different varieties being planted.

Test Plot Research

Test plot establishment and management were supervised by Darcy Weston, Gerald Decker, Rafael Echinique, Gerald Holz, Bob Bouvette, Derek Crompton, George Nelson, Steve Quiring, Mark Hanson, John Wiersma, Tom Hoverstad, Matt Bickell, Dave Nicolai and Howard Persons.

Contact addresses and brand names for varieties entered in 2007.

Advantage Seed Inc (Advantage)	17303 Highway 22, Good Thunder, MN 56037	507-278-4087	Adv@myclearwave.net
Albert Lea Seed House	1414 W. Main, Albert Lea, MN 56007	507-373-3161	alseed@alseed.com
AgSource Seed	1800 L Ave, Nevada, IA 50201	641-567-3721	sales@agsourceseed.com
Anderson Seeds (Anderson)	37825 County Rd 63, St. Peter, MN 56082	507-246-5032	njandrsn@myclearwave.net
Bluestem Farm Supply LLC	55346 390th St, Mountain Lake, MN	507-427-2097	ericksonlee@earthlink.net
Blue River Hybrids	27087 Timber Road, Kelley, Iowa 50134	800-370-7979	maury@blueriverorgseed.com
Dairyland Seed Co., Inc. (Dairyland)	PO Box 958, West Bend, WI 53095	515-233-9610	www.dairylandseed.com
Dyna-Gro (Dyna-Gro)	PO Box 99, Wall Lake, IA 51466	218-731-6792	stan.rund@uap.com
Farm Advantage	1275 Hwy 69, Belmond, IA 50421	641-444-3344	www.farmadvantage.com
Garst Seed Company	2369 330th St., Box 500, Slater, IA 50244	888-GO-GARST	www.garstseed.com
Hyland Seeds (Hyland)	2 Hyland Drive, Blenheim, Ontario, Canada NOP1A0	800-265-7403	rsnobelen@hylandseeds.com
Kruger Seeds Inc (Kruger)	33938 160th Ave., Box A, Dike, IA 50624	800-772-2721	info@krugerseeds.com
KSC/Challenger (KSC/Challenger)	33938 160th Ave., Box A, Dike, IA 50624	800-772-2721	info@krugerseeds.com
Latham Seed Company (Latham)	131 180th St., Alexander, IA 50420	800-798-3258	donl@lathamseeds.com
Legend Seeds (Legend)	PO Box 241, De Smet, SD 57231	605-203-0763	Legend@legendseeds.net
LG Seeds (LG Seeds)	N8181 940th St., River Falls, WI 54022	715-821-7788.	www.lgseeds.com

Contact addresses and brand names for varieties entered in 2007 (continued).

Monsanto	800 N. Lindberg Blvd, St. Louis, MO 63167	815-754-4809	diane.freeman@monsanto.com
Mustang Seeds (Mustang)	PO Box 466, Madison, SD 57042	605-256-6529	dalenelson@mustangseeds.com
Northland Seed & Grain Corp (Northland Organic Foods Corp.)	495 Portland Ave, St Paul, MN 55102	651-221-0855	Soybean@northlandorganic.com
NorthStar Genetics, Limited	PO Box 40, Wanamingo, MN 55983	701-793-9257	nsgen1@frontiernet.net
NuTech Seed (NuTech Seed)	40321 130th Ave, Leland, IA 50453	641-567-3350	www.nutechseed.com
NK Brand, Syngenta Seed Inc.	7500 Olson Memorial Highway, Golden Valley, MN 55427	507-920-8834	gary.prescher@syngenta.com
Peterson Farms Seed (PFS)	3104 164th Ave SE, Harwood, ND 58078	701-282-7476	ron@petersonfarmsseed.com
Pioneer HiBred International, Inc. (Pioneer)	99 Navaho Ave. Suite 101A, Mankato MN 56001	507-625-3045	alan.scott@pioneer.com
Prairie Brand Seed	15 X Ave., Story City, IA 50248	515-733-2101	mike@prairiebrandseed.com
Proseed, Inc (Proseed)	705 E Brewster, Harvey, ND 58341	701-324-4177	proseed@ndak.net
Renk Seed Co. (Renk)	6800 Wilburn Rd., Sun Prairie, WI 53590	608-837-7351	arenk@renkseed.com
Richland Organics (Richland Organics)	100N 10th St, Breckenridge, MN 56520	218-643-1797	andy@richlandorganics.com
Sansgaard Seed Farms, Inc. (Sansgaard)	15 X Avenue, Story City, IA 50248	515-733-2101	mike@prairiebrandseed.com
Seeds 2000 Inc (Seeds 2000)	PO Box 200, Breckenridge, MN 56520	888-786-7333	vjohnson@seeds200.net
Sodak Genetics (Sodak Genetics)	Box 2207A, SDSU, Brookings, SD 57007	605-688-5418	jack.ingemansen@sdstate.edu
SunOpta-Earthwise (Earthwise)	4111 30th Ave S., Moorhead MN	218-287-5510	Jay.rehder@sunopta.com
Syngenta Seeds (NK Brand)	201 N Weber Ave, Stc 200, Sioux Falls, SD 57103	605-212-8367	jeff.spicler@syngenta.com
Stine Seed Company	22555 Laredo Trail, Adel, Iowa 50003	701-799-0356	egrafstrom@earthlink
Thompson Seeds (Thompson Seeds)	40321 130th Ave. (Thompson), Leland, IA 50453	641-567-3350	tom.thoompson@yieldleader.com
Thunder Seed (Thunder)	3008 210th St. N, Hawley, MN 56549	218-483-4637	mpetermann7@yahoo.com
Trelay Seeds (Trelay)	11623 Highway 80, Livingston, WI 53544	608-778-2841	jasonb@trelay.com
Wensman Seed Company (Wensman)	P.O. Box 190, Wadena, MN 56482	218-631-2954	wensman@wensmanseed.com
Ziller Seed Co., Inc. (Ziller)	76374 380th St, Bird Island, MN 55310	320-365-3674	zscsales@zillerseed.com

Table 1. Performance and characteristics of public and private soybean varieties, northern zone; Crookston, Moorhead and Shelly, 2005-2007.

Variety		Maturity	Yield, Percent of Mean			Percent of Mean		Maturity	Phytophthora	Chlorosis
or Brand	Originator	Date	2005-2007	2006-2007	2007	Protein	Oil	Rating	Gene	Score
7005	Thunder	9-8	-	-	99	103	98	00.5	S	3.0
Jim	No. Dakota AES	9-10	95	98	107	99	99	00.7	S	3.2
Bravado	Sunopta	9-14	-	93	92	94	103	00.8	S	3.2
MN0071	Minnesota AES	9-15	86	85	94	97	105	00.7	Rps1	3.5
Traill	No. Dakota AES	9-16	-	-	99	101	98	0.0	S	2.9
8009	Thunder	9-17	-	-	86	102	98	00.9	S	3.4
MN0201	Minnesota AES	9-18	98	101	98	106	98	0.2	Rps1	2.8
Ibis	Sunopta	9-19	-	-	81	101	99	0.1	S	2.9
MN0101	Minnesota AES	9-20	104	104	112	99	99	0.1	Rps1	3.2
MN0105	Minnesota AES	9-20	101	104	112	102	99	0.1	Rps1c	3.3
MN0302	Minnesota AES	9-22	106	111	106	98	103	0.3	Rps1k	3.0
Kamichis	Sunopta	9-22	-	89	77	113	89	00.3	S	4.3
Lambert	Minnesota AES	9-23	109	114	109	94	106	0.7	Rps6	3.2
MN0701	Minnesota AES	9-23	-	-	102	99	100	0.7	Rps1	3.4
Sheyenne	No. Dakota AES	9-24	-	-	122	93	102	0.7	Rps1c	2.9
MN0604	Minnesota AES	9-24	-	-	107	99	101	0.6	Rps6	3.3
Mean		9-18	43.1 bu/a	41.8 bu/a	38.6 bu/a	33.8%	17.5%			
LSD 20%			5%	5%	7%					

Table 2. Performance and characteristics of public and private soybean varieties, central zone; Becker, Morris and Rosemount, 2005-2007.

Variety		Maturity	Yield, Percent of Mean			Percent of Mean		Maturity	Phytophthora	Chlorosis
or Brand	Originator	Date	2005-2007	2006-2007	2007	Protein	Oil	Rating	Gene	Score
Panther	Sunopta	9-15	101	83	91	106	97	0.5	S	3.7
Sheyenne	No. Dakota AES	9-16	-	-	109	94	102	0.7	Rps1c	2.9
MN0302	Minnesota AES	9-16	92	95	97	97	105	0.3	Rps1k	3.2
MN0604	Minnesota AES	9-16	-	-	93	98	102	0.6	Rps6	3.3
MN0606CN	Minnesota AES	9-16	-	-	92	97	102	0.6	-	3.7
MN0701	Minnesota AES	9-17	-	-	99	101	98	0.7	Rps1	3.2
Lambert	Minnesota AES	9-17	98	98	97	97	105	0.7	Rps1	3.3
Surge	Minn.& S.D. AES	9-18	103	104	101	100	102	0.9	Rps1	3.5
MN1005	Minnesota AES	9-19	103	101	106	96	100	1.0	Rps1k	3.3
MN1401	Minnesota AES	9-19	-	96	104	102	98	1.4	Rps1	3.4
Minori	Sunopta	9-19	-	98	98	106	94	1.4	Rps1k	4.3
MN0806CN	Minnesota AES	9-19	-	-	94	99	102	0.8	S	2.9

Table 2 (continued). Performance and characteristics of public and private soybean varieties, central zone; Becker, Morris and Rosemount, 2005-2007.

Variety		Maturity	Yield, Percent of Mean			Percent of Mean		Maturity	Phytophthora	Chlorosis
or Brand	Originator	Date	2005-2007	2006-2007	2007	Protein	Oil	Rating	Gene	Score
MN1009	Minnesota AES	9-21	102	101	114	99	100	1.0	Rps1k	3.5
MN1410	Minnesota AES	9-21	-	108	110	101	101	1.4	-	3.9
MN1302	Minnesota AES	9-21	101	100	100	107	92	1.3	Rps1k	3.3
Parker	Minnesota AES	9-21	103	100	96	100	100	1.5	Rps1	3.9
Mean		9-18	50.8 bu/a	46.0 bu/a	44.0 bu/a	36.3%	17.1%			
LSD 20%			4%	6%	8%					

Table 3. Performance and characteristics of public and private soybean varieties, southern zone; Jackson, Lamberton and Waseca, 2005-2007.

Variety		Maturity	Yield, Percent of Mean			Percent of Mean		Maturity	Phytophthora	Chlorosis
or Brand	Originator	Date	2005-2007	2006-2007	2007	Protein	Oil	Rating	Gene	Score
909	Bluestem	9-16	-	-	94	99	102	0.9	S	3.5
IA1021	Iowa AES	9-17	-	104	99	100	99	1.6	S	3.8
MN1410	Minnesota AES	9-17	-	102	94	97	101	1.4	-	3.9
1607	Bluestem	9-17	-	-	91	107	96	1.6	S	3.7
1307	Bluestem	9-17	-	-	87	99	101	1.3	S	4.0
MN1302	Minnesota AES	9-17	98	98	85	106	97	1.3	Rps1k	3.3
MN1801	Minnesota AES	9-18	101	100	98	102	99	1.8	Rps1c	3.8
NT-176	Nutech	9-19	-	-	116	99	99	1.7	S	3.9
IA1022	Iowa AES	9-20	-	-	113	94	104	1.8	S	3.9
1907	Bluestem	9-20	-	-	94	105	96	1.9	Rps1k#	3.5
IA2050	Iowa AES	9-20	101	101	86	96	104	2.1	S	4.3
NT-164	Nutech	9-21	-	-	122	99	99	1.6	S	3.4
NT-212CN	Nutech	9-21	-	-	114	99	101	2.1	S	3.8
IA2068	Iowa AES	9-21	-	-	107	97	99	2.1	S	4.2
IA2008R	Iowa AES	9-21	99	96	93	98	99	2.1	Rps1k	3.9
NT-236CN	Nutech	9-22	-	-	110	101	98	2.3	S	3.8
Mean		9-18	53.8 bu/a	49.5 bu/a	49.4 bu/a	35.6%	17.9%			
LSD 20%			5%	6%	8%					

Greenhouse test results do not agree with originator's designation.

Table 4. Performance and characteristics of conventional and Roundup Ready public and private soybean varieties, far northern zone; Crookston, Roseau and Thief River Falls, 2005-2007.

Variety		Maturity	Yield, Percent of Mean			Percent of Mean		Maturity	Phytophthora	Chlorosis
or Brand	Originator	Date	2005-2007	2006-2007	2007	Protein	Oil	Rating	Gene	Score
AG00603	Asgrow	9-13	-	95	98	99	98	0.06	Rps1	3.0
50-045	Proseed	9-14	-	-	101	98	103	0.04	S	2.3
50-04	Proseed	9-14	-	-	96	103	99	0.04	S	3.0
MN0071	Minnesota AES	9-14	91	90	88	100	101	00.7	Rps1	3.5
Bravado	Sunopta	9-15	107	109	113	97	99	00.8	S	2.9
W20051RR	Wensman	9-15	100	101	101	98	102	00.5	Rps1k#	2.7
30B04	Dyna-Gro	9-15	103	100	100	97	105	0.04	Rps1k#	2.4
LS0036RR	Legend Seeds	9-15	-	99	94	98	103	0.03	S	2.7
06004RR	PFS	9-16	106	107	110	98	102	00.4	Rps1k#	2.7
KY0077R	KSC/Challenger	9-16	-	-	109	98	104	0.07	S	2.8
KX0067R	KSC/Challenger	9-16	-	-	102	98	104	0.06	-	2.9
K-005RR	KSC/Challenger	9-16	-	102	100	99	102	0.05	S	2.9
K-006RR	Kruger	9-16	-	99	100	97	104	0.07	Rps1k#	2.8
KY0047R	KSC/Challenger	9-16	-	-	100	98	101	0.04	S	2.4
AG00901	Asgrow	9-16	-	-	99	101	100	0.09	S	2.5
27005RR	Thunder	9-16	-	-	96	99	103	00.5	S	3.2
26004RR	Thunder	9-16	-	90	85	103	98	00.4	Rps1k#	3.2
500-W3	NK Brand	9-16	-	-	75	101	98	0.03	Rps1	3.5
W20084	Wensman	9-17	-	-	113	100	100	00.8	-	3.0
NT-0090RR	Nutech	9-17	-	-	112	99	102	0.09	S	3.0
PB-00645RR	Prairie Brand	9-17	-	109	110	100	102	00.6	S	3.0
M-0096ERR	Mustang Seeds	9-17	-	-	107	99	104	0.09	-	2.7
PB-0107RR	PBR	9-17	-	-	105	100	97	0.1	S	3.0
W20074RR	Wensman	9-17	-	108	105	99	100	00.7	Rps1k	3.3
07008RR	PFS	9-17	-	108	102	97	101	00.8	Rps1k	2.7

Table 4 (continued). Performance and characteristics of conventional and Roundup Ready public and private soybean varieties, far northern zone; Crookston, Roseau and Thief River Falls, 2005-2007.

Variety		Maturity	Yield, Percent of Mean			Percent of Mean		Maturity	Phytophthora	Chlorosis
or Brand	Originator	Date	2005-2007	2006-2007	2007	Protein	Oil	Rating	Gene	Score
MN0095	Minnesota AES	9-17	-	-	102	100	102	0.0	Rps1	2.5
Traill	No. Dakota AES	9-17	101	102	100	105	95	0.0	S	3.2
MN0105	Minnesota AES	9-17	-	-	100	105	95	0.1	Rps1c	3.5
NS0031RR	Northstar Genetics	9-17	-	100	95	96	103	00.5	S	3.0
90M01	Pioneer Brand	9-17	93	93	88	100	104	00	Rps1k	3.3
RR Ramsey	Hyland Seeds	9-17	92	93	87	103	101	00.5	S	3.4
Colibri	Sunopta	9-17	-	83	77	100	95	00.3	S	3.7
NT-6015	Nutech	9-18	-	-	113	99	98	0.1	S	2.8
NT-6006	Nutech	9-18	-	-	112	97	101	0.0	S	3.5
LS0087RR	Legend Seeds	9-18	-	-	110	99	102	0.08	S	2.4
0090-64	Stine	9-18	-	-	109	101	102	00.8	-	3.2
PB-00965	Prairie Brand	9-18	-	-	107	100	104	00.9	S	3.3
LS0065RR	Legend Seeds	9-18	-	111	106	97	103	0.06	S	2.8
32J01	Dyna-Gro	9-18	-	-	106	102	95	0.1	-	2.9
K-009+RR	Kruger	9-18	106	106	105	100	102	0.09	S	2.7
MN0101	Minnesota AES	9-18	102	104	104	102	96	0.1	Rps1	3.2
501-T5	NK Brand	9-18	-	-	101	103	98	0.1	Rps1	3.5
PB-00845	Prairie Brand	9-18	-	-	101	97	103	00.8	Rps1k	2.9
50-07	Proseed	9-18	-	-	101	98	101	0.07	S	3.0
30M09	Dyna-Gro	9-18	100	98	101	100	103	0.09	S	2.8
26009RR	Thunder	9-18	-	104	100	100	102	00.9	S	3.3
K-008	Kruger	9-18	-	-	98	99	100	0.08	S	3.3
DSR-C750/RR	Dairyland	9-18	-	-	97	100	98	00.7	S	3.5
90M02	Pioneer Brand	9-18	-	-	96	103	99	02	Rps1k	3.2
NS 0092RR	Northstar Genetics	9-18	-	-	92	97	102	00.8	Rps1k#	2.9
07006RR	PFS	9-18	-	93	89	101	99	00.6	Rps1k#	3.0
W2010RR	Wensman	9-19	-	-	110	100	96	0.1	-	3.4
NT-0220RR	Nutech	9-19	-	113	108	97	102	0.1	Rps1k	3.5
90M20	Pioneer Brand	9-19	-	103	107	97	100	02	Rps1k	3.5
901	PFS	9-19	-	-	104	101	96	0.1	S	3.3
NS 0091RR	Northstar Genetics	9-19	-	-	102	102	99	00.9	S	2.9
RR Royal	Hyland Seeds	9-19	101	104	98	102	95	00.9	S	2.9
PB-0356RR	PBR	9-20	-	-	113	97	99	0.3	Rps1	2.8
K-011RR	Kruger	9-20	-	-	108	97	98	-	S	2.9
DSR-0303/RR	Dairyland	9-20	-	-	102	103	96	0.3	S	3.2
60-06	Proseed	9-20	-	-	94	99	99	0.06	S	3.2
MN0106RR	Minnesota AES	9-20	-	-	93	105	93	0.1	-	3.2
NS 0021RR	Northstar Genetics	9-20	-	-	91	103	97	00.8	Rps1k#	3.4
Kamichis	Sunopta	9-20	-	77	58	119	81	00.3	S	4.2
Mean		9-17	41.8 bu/a	44.4 bu/a	40.8 bu/a	34.5%	16.6%			
LSD 20%			4%	6%	7%					

Greenhouse test results do not agree with originator's designation.

Table 5. Performance and characteristics of Roundup Ready soybean varieties, northern zone; Crookston, Moorhead and Shelly, 2005-2007.

Variety		Maturity	Yield, Percent of Mean			Percent of Mean		Maturity	Phytophthora	Chlorosis
or Brand	Originator	Date	2005-2007	2006-2007	2007	Protein	Oil	Rating	Gene	Score
RG7008RR	RoughRider Genetics	9-10	-	-	87	106	97	00.8	Rps1k#	2.9
W20051RR	Wensman	9-12	-	85	93	102	99	00.5	Rps1k#	3.2
K-005RR	KSC/Challenger	9-13	-	89	92	101	100	0.05	-	2.9
RG200	RoughRider Genetics	9-13	-	84	84	105	98	0.0	Rps1	3.2
RG600RR	RoughRider Genetics	9-14	-	-	96	102	106	0.0	Rps6	2.9
K-006RR	Kruger	9-14	-	88	94	97	106	0.07	Rps1k#	2.5
90M02	Pioneer Brand	9-15	-	-	104	101	102	0.0	Rps1k	2.7
0081RR	Seeds 2000	9-15	-	100	103	97	102	0.08	Rps1k	2.8
KX0067R	KSC/Challenger	9-15	-	-	99	99	101	0.06	S	2.9
KY0047R	KSC/Challenger	9-15	-	-	98	100	101	0.04	S	3.0
W20074RR	Wensman	9-16	-	-	104	98	104	00.7	Rps1k#	3.3
KY0077R	KSC/Challenger	9-16	-	-	90	103	98	0.07	S	2.9

Table 5 (continued). Performance and characteristics of Roundup Ready soybean varieties, northern zone; Crookston, Moorhead and Shelly, 2005-2007.

Variety or Brand	Originator	Maturity Date	Yield, Percent of Mean 2005-2007	2006-2007	2007	Percent of Mean Protein	Oil	Maturity Rating	Phytophthora Gene	Chlorosis Score
RG601NRR	RoughRider Genetics	9-16	-	-	82	104	98	0.1	Rps6	3.0
K-009+RR	Kruger	9-17	99	99	111	99	104	0.09	S	2.9
W2010RR	Wensman	9-17	-	-	109	98	98	0.1	-	2.9
NS 0091RR	Northstar Genetics	9-17	-	-	104	99	104	00.9	S	2.7
0901RR	PFS	9-17	-	-	104	101	98	0.1	S	3.7
31F02	Dyna-Grow	9-17	89	86	93	98	97	0.2	S	2.9
RR Ridgeway	Hyland Seeds	9-17	-	89	92	94	102	0.2	S	2.9
K-008RR	Kruger	9-17	-	95	88	100	101	0.08	S	2.7
PB-0107RR	Prairie Brand	9-18	-	-	112	103	93	0.1	S	2.8
DSR-0501/RRSTS	Dairyland	9-18	101	101	108	101	103	0.5	S	2.4
PB-0216RR	PBR	9-19	-	104	114	95	103	0.3	-	3.0
PB-00965RR	Prairie Brand	9-19	100	101	107	100	101	00.9	Rps1k#	3.0
M-036RR	Mustang Seeds	9-19	98	101	96	99	101	0.3	Rps1	3.2
DSR-041/RR	Dairyland	9-20	-	-	113	100	103	0.4	S	2.8
AG-0401	Asgrow	9-20	-	-	105	99	99	0.4	Rps1	2.9
AG-0202	Asgrow	9-20	-	-	105	98	100	0.2	Rps1k	2.8
NT-0642RR	Nutech	9-20	-	-	100	102	98	0.3	-	2.8
RG603RR	RoughRider Genetics	9-20	-	-	91	102	98	0.3	Rps6	2.9
RG604RR	RoughRider Genetics	9-20	-	-	87	102	99	0.4	Rps6	2.5
EX03A07	Kruger	9-21	-	-	108	96	101	-	-	2.8
NT-0636RR	Nutech	9-21	-	103	105	98	101	0.3	S	2.8
70-30	Proseed	9-21	-	-	104	102	98	0.3	S	2.3
NT-0330RR	Nutech	9-21	-	106	100	98	101	0.3	Rps1	2.7
90M20	Pioneer Brand	9-21	98	97	97	94	104	0.2	Rps1k	3.0
90M60	Pioneer Brand	9-22	-	-	110	101	97	0.6	Rps1c#	2.7
60-40	Proseed	9-22	-	-	110	97	100	0.3	Rps1*	2.9
NS 0413RR	Northstar Genetics	9-22	-	-	108	100	99	0.4	S	2.4
M-047RR	Mustang Seeds	9-22	-	107	107	98	97	0.4	S	2.4
PB-0554RR	Prairie Brand	9-22	108	107	107	102	99	0.5	S	2.9
32T03	Dyna-Grow	9-22	-	106	106	98	101	0.3	S	2.4
DSR-0701/RR	Dairyland	9-22	-	107	104	101	99	0.7	Rps1k#	3.5
PB-0356RR	PBR	9-22	-	106	104	96	103	0.3	Rps1	2.8
PB-0636RR	PBR	9-22	-	111	102	100	101	0.6	S	3.0
0806RR	PFS	9-22	-	-	101	99	99	0.6	S	2.8
NS 0021RR	Northstar Genetics	9-22	-	-	98	102	97	00.8	Rps1k#	3.0
RG607RR	RoughRider Genetics	9-22	-	-	91	108	97	0.7	Rps6	2.8
MN0503RR	Minnesota AES	9-22	-	-	85	107	97	0.5	Rps1	2.9
AG0604	Asgrow	9-23	-	105	111	96	104	0.6	Rps1k	2.8
W2030RR	Wensman	9-23	-	111	111	98	103	0.3	Rps1	2.8
M-066RR	Mustang Seeds	9-23	-	-	105	97	102	0.6	Rps1	2.8
NT-0660RR	Nutech	9-23	-	102	99	100	99	0.3	Rps1k#	2.7
2703RR	Thunder	9-23	-	113	99	102	94	0.3	S	2.9
0704RR	PFS	9-23	-	100	97	97	103	0.4	S	3.0
PB-0565RR	Prairie Brand	9-24	107	104	106	100	98	0.5	Rps1	2.8
RS037RR	Renk Seed	9-24	-	-	106	98	103	0.3	Rps1	2.9
703RR	Thunder	9-24	-	104	103	99	98	0.3	Rps1	2.7
MN0401RR	Minnesota AES	9-24	-	94	94	102	102	0.4	Rps1	2.8
MN0305RR	Minnesota AES	9-24	-	93	88	104	99	0.3	Rps1k	2.8
0069	Proseed	9-25	-	-	105	99	98	0.3	Rps1k*	2.8
MN0904RR	Minnesota AES	9-25	-	-	90	103	99	0.9	Rps1k	3.2
RR Rockport	Hyland Seeds	9-27	-	-	91	100	102	0.6	S	2.9
Mean		9-20	48.3 bu/a	47.0 bu/a	42.8 bu/a	32.5%	18.1%			
LSD 20%			4%	6%	8%					

Greenhouse test results do not agree with originator's designation.

* Originator provided Rps gene information; not evaluated by U of Minnesota

Table 6. Performance and characteristics of Roundup Ready soybean varieties, central zone; Becker, Morris and Rosemount, 2005-2007.

Variety		Maturity	Yield, Percent of Mean			Percent of Mean		Maturity	Phytophthora	Chlorosis
or Brand	Originator	Date	2005-2007	2006-2007	2007	Protein	Oil	Rating	Gene	Score
K-042RR	Kruger	9-16	-	103	106	97	108	0.4	S	2.7
40-70	Proseed	9-17	-	-	102	104	101	0.7	Rps1*	3.2
7064	Farm Advantage	9-17	-	-	101	98	104	0.6	S	3.0
AG0701	Asgrow	9-17	-	-	99	97	104	0.7	S	2.8
90M92	Pioneer Brand	9-17	-	-	97	104	101	0.9	Rps1c	3.2
2807RR	Thunder	9-17	-	-	95	110	90	0.7	S	2.5
DSR-0903/RR	Dairyland	9-17	-	98	92	103	101	0.9	S	3.3
MN0401RR	Minnesota AES	9-17	-	91	89	98	105	0.4	Rps1	2.8
MN0503RR	Minnesota AES	9-17	-	-	77	107	99	0.5	S	2.8
50-85	Proseed	9-18	-	-	105	103	101	0.8	Rps1k*	3.2
60-95	Proseed	9-18	-	-	102	97	100	0.9	Rps1c*	2.8
2030RR	Seeds 2000	9-18	-	-	101	97	104	0.3	S	2.8
RR Richwood	Hyland Seeds	9-18	-	99	97	98	95	0.9	Rps1k	2.7
SD1092RR	Sodak Genetics	9-18	92	94	95	107	97	0.9	Rps1k	2.8
K-056RR	KSC/Challenger	9-18	94	94	94	100	101	0.6	Rps1k	3.3
M-097RR	Mustang Seeds	9-18	-	99	94	96	104	0.9	S	2.9
DKB08-51	Asgrow	9-18	-	-	92	99	102	0.8	Rps1k	2.8
90M80	Pioneer Brand	9-18	-	-	90	93	107	0.8	S	3.2
NT-0886RR	Nutech	9-19	-	-	107	100	100	0.8	S	3.5
W2108RR	Wensman	9-19	-	107	106	99	99	1.0	-	3.4
W2090RR	Wensman	9-19	103	104	106	103	100	0.9	S	2.9
K-072+RR	Kruger	9-19	-	-	106	101	99	0.8	Rps1	3.2
PB-1007RR	Prairie Brand	9-19	-	-	106	101	96	1.0	S	3.0
PB-0936RR	Prairie Brand	9-19	-	103	104	100	98	0.9	Rps1k	2.9
2120RR	Seeds 2000	9-19	-	-	104	101	96	1.2	S	2.9
BT7131NR	Ziller	9-19	-	-	104	102	101	1.3	Rps1k	3.2
RS107RR	Renk Seed	9-19	-	-	103	99	98	1.0	S	2.8
K-100RR	Kruger	9-19	99	100	102	100	102	1.0	Rps1	2.8
PB-0954RR	PBR	9-19	-	105	102	103	101	0.9	Rps1k#	3.3
K-091RR	KSC/Challenger	9-19	-	-	101	98	102	0.9	Rps1	2.9
61-00	Proseed	9-19	-	-	101	101	99	1.0	S	2.9
RS115RR	Renk Seed	9-19	104	103	101	102	101	1.1	S	2.8
K-147RR/SCN	Kruger	9-19	-	-	100	102	99	-	Rps1k	2.9
K-142RR	KSC/Challenger	9-19	-	-	100	98	104	-	Rps1k	2.9
M-096RR	Mustang Seeds	9-19	107	109	100	100	103	0.9	Rps1k	3.7
2806RR	Thunder	9-19	-	-	100	101	102	0.6	Rps1	3.0
AG1102	Asgrow	9-19	-	-	99	96	102	1.1	Rps1k	2.9
358C10	Dyna-Gro	9-19	-	-	99	103	96	1.0	Rps1k#	3.0
2811RR	Thunder	9-19	-	-	99	99	99	1.1	S	2.9
AG1002	Asgrow	9-19	-	98	97	99	102	1.0	S	2.8
MN1107RR	Minnesota AES	9-19	-	-	94	105	99	1.1	Rps1	2.8
SD1111RR	Sodak Genetics	9-19	-	93	92	99	103	1.1	Rps1k	3.4
RR Rockport	Hyland Seeds	9-19	-	83	85	100	106	0.6	S	3.7
PB-1337RR	PBR	9-20	-	-	109	103	96	1.3	S	3.2
AG1403	Asgrow	9-20	-	-	106	100	96	1.4	Rps1k#	2.7
M-168RR	Mustang Seeds	9-20	-	-	105	96	105	1.5	Rps1c	3.3
W2124RR	Wensman	9-20	-	-	105	104	96	1.2	-	2.9
NT-6133	Nutech	9-20	-	-	105	103	96	1.3	S	3.5
NT-6166	Nutech	9-20	-	-	103	99	96	1.5	Rps1	2.8
NT-6105	Agsource	9-20	-	-	103	99	99	1.0	Rps1k#	2.9
7094	Farm Advantage	9-20	-	99	103	99	100	0.9	S	3.2
PB-1597RR	PBR	9-20	-	-	103	96	104	1.4	S	3.0
NT-6156	Agsource	9-20	-	-	102	94	107	1.5	S	3.2
BT7156NR	Ziller	9-20	-	108	101	105	98	1.5	Rps1k	2.8
K-140RR	KSC/Challenger	9-20	-	-	100	100	104	1.5	S	3.2
91M51	Pioneer Brand	9-20	99	103	100	100	104	1.5	Rps1k	2.9
7122	Farm Advantage	9-20	-	103	99	99	98	1.2	S	2.9
RS124NRR	Renk Seed	9-20	101	103	99	95	101	1.2	Rps1k	2.7
SX07713	Dyna-Gro	9-20	-	-	98	102	96	1.3	-	3.3
SX07915	Dyna-Gro	9-20	-	-	98	97	103	1.5	S	3.2

Table 6 (continued). Performance and characteristics of Roundup Ready soybean varieties, central zone; Becker, Morris and Rosemount, 2005-2007.

Variety or Brand	Originator	Maturity Date	Yield, Percent of Mean 2005-2007	2006-2007	2007	Percent of Mean Protein	Oil	Maturity Rating	Phytophthora Gene	Chlorosis Score
7164	Farm Advantage	9-20	-	-	96	100	96	1.5	Rps1k	2.9
2134	Trelay	9-21	-	-	113	103	96	1.3	S	3.0
NT-7155	Agsource	9-21	-	-	110	98	105	1.5	Rps1k	2.9
PB-1607RR	Prairie Brand	9-21	-	-	106	67	64	1.5	Rps1k	3.2
PB-1557NRR	Prairie Brand	9-21	-	-	105	99	102	1.4	Rps1k#	3.4
RS147RR	Renk Seed	9-21	-	-	102	105	95	1.4	Rps1k#	2.9
DSR-1500/RRSTS	Dairyland	9-21	-	101	101	103	97	1.5	S	3.5
91M61	Pioneer Brand	9-21	-	102	98	100	105	1.6	Rps1k	2.5
W2147NRR	Wensman	9-21	-	-	97	99	101	1.4	-	2.5
NT-6145	Agsource	9-22	-	-	104	97	102	1.4	S	2.9
DSR-1601/RR	Dairyland	9-22	-	-	100	102	100	1.6	S	3.2
Mean		9-19	54.1 bu/a	51.5 bu/a	52.8 bu/a	35.4%	16.5%			
LSD 20%			4%	6%	8%					

Greenhouse test results do not agree with originator's designation.

* Originator provided Rps gene information; not evaluated by U of Minnesota

Table 7. Performance and characteristics of Roundup Ready soybean varieties, southern zone; Jackson, Lamberton and Waseca, 2005-2007.

Variety or Brand	Originator	Maturity Date	Yield, Percent of Mean 2005-2007	2006-2007	2007	Percent of Mean Protein	Oil	Maturity Rating	Phytophthora Gene	Chlorosis Score
MN1504RR	Minnesota AES	9-16	-	85	76	103	101	1.5	Rps1k	2.8
152CNR	Anderson Seeds	9-19	-	99	100	98	101	1.5	S	3.2
181CNR	Anderson Seeds	9-19	-	110	96	92	107	1.7	Rps1k	3.5
SD1161RR/SCN	Sodak Genetics	9-19	-	-	93	101	92	1.6	Rps1	3.5
RS187NRR	Renk Seed	9-20	-	-	109	97	105	1.8	Rps1k	3.5
K-201RR/SCN	Kruger	9-20	-	102	106	100	101	2.0	Rps1c	3.4
7174N	Farm Advantage	9-20	-	-	104	103	97	1.7	S	3.5
W2172NRR	Wensman	9-20	-	-	104	97	104	1.7	Rps1k	3.2
PB-1885NRR	Prairie Brand	9-20	-	104	102	97	105	1.8	Rps1k	3.3
NT-1808RR/SCN	Nutech	9-20	-	-	101	101	101	1.8	Rps1c	3.7
AG1702	Asgrow	9-20	-	98	95	101	100	-	Rps1k	2.4
2166	Trelay	9-20	-	-	92	98	103	1.6	Rps1k#	3.0
PB-1607RR	Sangaard	9-20	-	-	92	99	98	1.6	Rps1k#	3.3
PB-1725RR	PBR	9-20	97	97	91	100	99	1.8	Rps1k	3.7
MN1803RR	Minnesota AES	9-20	91	95	89	103	99	1.8	Rps1	3.3
K-170RR/SCN	Kruger	9-21	-	-	109	103	95	-	S	3.7
7194N	Farm Advantage	9-21	-	-	108	95	105	1.9	Rps1c	3.3
W2200NRR	Wensman	9-21	-	-	107	99	104	2.0	Rps1c	3.2
PB-2056NRR	PBR	9-21	-	113	107	102	101	2.0	Rps1c	3.5
EX19A07	KSC/Challenger	9-21	-	-	102	101	97	1.6	-	3.5
NT-1717RR/SCN	Agsource	9-21	-	-	101	98	101	1.7	Rps1k	3.3
KY2107RN	KSC/Challenger	9-21	-	-	97	103	101	2.3	-	3.9
92M02	Pioneer Brand	9-21	-	98	96	98	103	2.0	Rps1k	3.3
BT 7208NR	Ziller	9-22	-	-	108	99	104	2.0	Rps1c	3.3
PB-2007NRR	Sangaard	9-22	-	-	106	99	104	2.0	Rps1c	3.2
92M21	Pioneer Brand	9-22	-	-	104	96	107	2.2	Rps1k	3.4
W2195NRR	Wensman	9-22	-	-	103	99	101	1.9	Rps1k	3.2
AG2222V	Asgrow	9-22	-	-	103	100	103	2.2	Rps1c#	3.3
2088NRR	Viking	9-22	-	-	102	98	103	2.0	Rps1c	3.7
KY2027RN	KSC/Challenger	9-22	-	-	102	98	99	2.2	-	3.2
K-194RR	KSC/Challenger	9-22	-	-	101	99	100	1.9	Rps1k	3.3
7211	Farm Advantage	9-22	-	-	100	102	97	2.1	S	3.3
NT-6175	Agsource	9-22	-	-	99	101	99	1.7	S	3.8
191CNR	Anderson Seeds	9-22	103	103	98	93	103	1.9	Rps1k	3.3
RS217RR	Renk Seed	9-22	-	-	98	106	98	2.1	S	3.8
PB-2147RR	Prairie Brand	9-22	-	-	90	103	96	2.1	S	2.8

Table 7 (continued). Performance and characteristics of Roundup Ready soybean varieties, southern zone; Jackson, Lamberton and Waseca, 2005-2007.

Variety		Maturity	Yield, Percent of Mean			Percent of Mean		Maturity	Phytophthora	Chlorosis
or Brand	Originator	Date	2005-2007	2006-2007	2007	Protein	Oil	Rating	Gene	Score
PB-2117NRR	PBR	9-23	-	-	111	99	99	2.1	Rps1k#	3.2
E2285R	Latham	9-23	-	-	111	97	101	2.2	Rps1k	3.3
E1983R	Latham Farms	9-23	-	-	109	97	105	1.9	Rps1c	3.0
ADV22A08CR	Advantage	9-23	-	-	108	102	93	2.2	Rps1k	3.7
NT-7222	Nutech	9-23	-	-	108	99	101	2.2	Rps1k	3.2
M-207RR	Mustang Seeds	9-23	-	105	106	99	98	2.0	Rps1k	3.0
ADV2214R	Advantage	9-23	-	102	105	98	98	2.2	Rps1k	3.2
PB-2297NRR	Sangaard	9-23	-	-	105	103	98	2.2	Rps1k	3.2
PB-2207NRR	PBR	9-23	-	-	105	97	101	2.2	Rps1k	3.5
NT-1991RR	Nutech	9-23	-	105	104	99	98	1.9	Rps1k	2.9
BT 7217NR	Ziller	9-23	-	-	104	101	102	2.1	S	3.4
ADV2141R	Advantage	9-23	-	-	104	101	97	2.1	Rps1k#	2.9
AG2108	Asgrow	9-23	-	-	103	101	99	-	-	3.5
RS247NRR	Renk Seed	9-23	-	-	102	104	99	2.4	Rps1c#	3.8
E2348R	Latham Farms	9-23	-	-	102	101	98	2.3	Rps1k	2.9
201CNR	Anderson Seeds	9-23	-	-	101	96	105	2.0	Rps1c	3.9
M-237RR	Mustang Seeds	9-23	-	-	99	102	99	2.3	Rps1k#	3.3
PB-2183NRR	Prairie Brand	9-23	103	104	99	99	101	2.0	Rps1k	3.4
7192	Farm Advantage	9-23	102	101	97	98	103	1.9	S	2.8
RS223RR	Renk Seed	9-23	101	99	95	99	101	2.2	Rps1k#	3.3
DSR-1850/RR/STS	Dairyland	9-23	-	-	95	104	99	1.8	S	3.7
1981RR	Viking	9-23	-	-	94	99	99	1.9	Rps1k	3.0
2157RR	Viking	9-23	101	98	88	99	101	2.1	Rps1k#	3.3
DKB22-52	Asgrow	9-23	-	93	87	97	101	2.2	S	3.2
PB-2243RR	Prairie Brand	9-23	99	92	84	100	98	2.2	Rps1k	3.3
K-204RR/SCN	Kruger	9-24	-	-	110	95	102	-	S	3.3
W2222NRR	Wensman	9-24	-	-	108	97	103	2.2	Rps1k	2.9
2368CNRR	Viking	9-24	-	-	100	103	102	2.3	Rps1c#	3.5
2214	Trelay	9-24	-	-	99	97	99	2.1	S	3.2
E2238RV	Latham	9-24	-	-	97	105	97	2.2	Rps1c	3.3
92M32	Pioneer Brand	9-24	102	99	94	99	97	2.3	Rps1k	3.4
PB-X217NRR	Sangaard	9-24	-	-	89	107	95	2.2	Rps1c	3.2
NT-2220RR	Agsource	9-25	-	-	102	102	95	2.2	S	3.4
92M40	Pioneer Brand	9-25	-	-	99	105	93	2.4	Rps1c	3.4
2233	Trelay	9-25	-	-	97	104	98	2.3	S	2.8
E2338R	Latham	9-25	-	-	97	106	99	2.3	Rps1k	3.9
E2246R	Latham	9-25	-	-	97	99	95	2.2	S	3.2
ADV2207R	Advantage	9-25	-	-	96	98	102	2.2	Rps1k#	3.5
NT-6242	Nutech	9-26	-	-	106	101	99	2.1	S	3.5
AG2423V	Asgrow	9-26	-	-	101	101	100	2.4	Rps1k	3.5
NT-6242	Agsource	9-26	-	-	101	101	99	2.4	S	3.7
DSR-2200/RR	Dairyland	9-26	-	-	99	103	96	2.2	S	3.5
K-248RR/SCN	Kruger	9-26	-	-	95	102	97	-	S	3.5
Mean		9-24	58.8 bu/a	52.9 bu/a	51.9 bu/a	34.4%	18.2%			
LSD 20%			4%	6%	8%					

Greenhouse test results do not agree with originator's designation.

Table 8. Performance and characteristics of soybean varieties,central zone; at soybean-cyst-nematode infested (Hector, Lester Prairie and Rosemount) and non-infested (Becker, Morris and Rosemount) sites, 2005-2007.

Variety		Maturity	Yield, Percent of Mean						Percent of Mean		Maturity	Phytoph-thora	Chlorosis	SCN
			Infested Sites			Non-infested Sites								
or Brand	Originator	Date	05-07	06-07	2007	05-07	06-07	2007	Protein	Oil	Rating	Gene	Score	Rating
MN0308CN	Minnesota AES	9-10	-	81	77	-	76	72	105	100	0.3	Rps1k	2.8	R
Lambert	Minnesota AES	9-12	81	88	80	101	103	98	105	99	0.7	Rps1	3.3	S
MN0602CN	Minnesota AES	9-12	80	78	64	90	90	85	103	98	0.6	-	2.5	R
MN0902CN	Minnesota AES	9-13	83	93	93	92	90	83	104	94	0.9	S	2.8	R

Table 8 (continued). Performance and characteristics of soybean varieties,central zone; at soybean-cyst-nematode infested (Hector, Lester Prairie and Rosemount) and non-infested (Becker, Morris and Rosemount) sites, 2005-2007.

Variety		Maturity	Yield, Percent of Mean						Percent of Mean		Maturity	Phytoph-thora	Chlorosis	SCN
			Infested Sites			Non-infested Sites								
or Brand	Originator	Date	05-07	06-07	2007	05-07	06-07	2007	Protein	Oil	Rating	Gene	Score	Rating
Sheyenne	No. Dakota AES	9-13	-	-	87	-	-	106	100	101	0.7	Rps1c	2.9	S
MN1011CN	Minnesota AES	9-14	-	98	101	-	95	93	103	94	1.0	Rps1	2.9	R
S08-M8	NK Brand	9-14	-	114	101	-	97	95	98	96	0.8	S	3.5	R
MN1005	Minnesota AES	9-14	-	-	88	-	-	99	100	100	1.0	Rps1k	3.2	S
MN0606CN	Minnesota AES	9-14	-	89	86	-	91	89	103	98	0.6	-	3.5	R
AG0803	Asgrow	9-15	116	114	106	99	102	97	102	99	0.8	Rps1k	2.9	R
90M80	Pioneer Brand	9-15	-	-	98	-	-	94	94	103	0.8	Rps1c	3.0	R
MN0806CN	Minnesota AES	9-15	-	-	94	-	-	91	101	101	0.8	S	2.9	R
S13-K2	NK Brand	9-19	-	-	119	-	-	107	95	103	1.3	Rps1k	3.3	R
AG1402	Asgrow	9-19	-	-	101	-	-	93	103	95	1.4	Rps1k	3.5	R
K-147RR/SCN	Kruger	9-20	-	-	101	-	-	101	102	100	-	Rps1k	3.0	R
91M61	Pioneer Brand	9-20	-	102	96	-	102	98	101	102	1.6	Rps1c	3.2	R
MN1410	Minnesota AES	9-20	-	96	78	-	105	107	103	101	1.4	-	3.5	S
NT-7155	Nutech	9-21	-	-	120	-	-	108	93	105	1.5	Rps1c	3.3	R
39D11	Dyna-Gro	9-21	-	-	85	-	-	104	95	101	1.1	S	2.9	S
PB-1885NRR	Prairie Brand	9-22	128	117	116	114	115	108	97	101	1.8	Rps1k	3.3	R
NT-7167	Nutech	9-22	-	-	98	-	-	100	100	98	1.5	S	3.9	R
PB-1585NRR	Prairie Brand	9-22	113	102	94	105	105	103	106	95	1.5	S	2.8	R
KY1507RN	Kruger	9-23	-	-	123	-	-	107	98	103	1.5	S	3.4	R
1432-4	Stine	9-23	-	-	117	-	-	109	99	101	1.4	Rps1k#	3.5	R
M-177NRR	Mustang Seeds	9-23	-	117	116	-	118	111	96	104	1.7	Rps1k	3.0	R
PB-1557NRR	Prairie Brand	9-23	-	-	113	-	-	111	98	103	1.5	Rps1k	3.5	R
NT-7193RR/SCN	Nutech	9-23	-	-	112	-	-	106	95	105	1.5	Rps1k#	3.3	R
K-167RR/SCN	Kruger	9-23	-	-	109	-	-	110	99	101	-	Rps1k	3.3	R
PB-1737NRR	Prairie Brand	9-23	-	-	103	-	-	105	105	93	1.7	S	3.8	R
S19-L7	NK Brand	9-23	-	-	100	-	-	96	97	101	1.9	S	3.2	R
NT-1808RR/SCN	Nutech	9-23	-	109	100	-	111	98	99	103	1.5	Rps1c	3.4	R
36B14	Dyna-Gro	9-24	-	-	122	-	-	107	98	102	1.4	Rps1k	3.2	R
K-170RR/SCN	Kruger	9-25	-	-	100	-	-	104	106	93	-	S	3.9	R
Mean		9-19	39.4 bu/a	35.6 bu/a	37.3 bu/a	53.8 bu/a	49.4 bu/a	51.3 bu/a	35.5%	17.5%				
LSD 20%			5%	6%	9%	4%	6%	8%						

Greenhouse test results do not agree with originator's designation.

Table 9. Performance and characteristics of soybean varieties,southern zone; at soybean-cyst-nematode infested (Gaylord, Lamberton and Waseca) and non-infested (Jackson, Lamberton and Waseca) sites, 2005-2007.

Variety		Maturity	Yield, Percent of Mean						Percent of Mean		Maturity	Phytoph-thora	Chlorosis	SCN
			Infested Sites			Non-infested Sites								
or Brand	Originator	Date	05-07	06-07	2007	05-07	06-07	2007	Protein	Oil	Rating	Gene	Score	Rating
0906N	Bluestem	9-13	-	-	87	-	-	80	106	102	0.9	Rps1k	2.5	R
MN1011CN	Minnesota AES	9-15	-	90	90	-	84	87	105	95	1.0	Rps1	2.7	R
MN1410	Minnesota AES	9-18	-	89	92	-	99	95	103	101	1.4	-	3.4	S
Freeborn	Minnesota AES	9-19	83	86	85	82	83	82	106	99	1.6	Rps1	2.9	R
91M80	Pioneer Brand	9-20	-	-	90	-	-	93	103	99	1.8	Rps1k	2.7	R
AG1802	Asgrow	9-21	-	-	111	-	-	104	97	105	1.8	Rps1c	2.8	R
PB-1885NRR	Prairie Brand	9-21	103	107	107	102	106	104	97	107	1.8	Rps1k	3.4	R
2165	Trelay	9-21	-	-	105	-	-	99	96	106	1.6	Rps1k	3.3	R
1832-4	Stine	9-21	-	-	102	-	-	100	98	103	1.7	S	3.5	R
K-201RR/SCN	Kruger	9-21	-	-	100	-	-	99	101	100	2.0	Rps1c	2.9	R
152CNR	Anderson Seeds	9-21	-	98	97	-	99	98	101	101	1.5	S	2.9	R
IA1022	Iowa AES	9-21	-	-	96	-	-	97	97	104	1.8	S	3.4	R
MN1701CN	Minnesota AES	9-21	-	99	90	-	99	95	101	97	1.7	-	3.8	R
181CNR	Anderson Seeds	9-22	-	108	106	-	104	103	96	105	1.7	Rps1k	3.4	R
1932-4	Stine	9-22	-	-	105	-	-	104	100	101	2.0	S	3.5	R
92M01	Pioneer Brand	9-22	-	101	105	-	103	102	102	97	2.0	S	3.4	R

Table 9 (continued). Performance and characteristics of soybean varieties,southern zone; at soybean-cyst-nematode infested (Gaylord, Lamberton and Waseca) and non-infested (Jackson, Lamberton and Waseca) sites, 2005-2007.

Variety or Brand	Originator	Maturity Date	Yield, Percent of Mean: Infested Sites 05-07	Infested Sites 06-07	Infested Sites 2007	Non-infested Sites 05-07	Non-infested Sites 06-07	Non-infested Sites 2007	Percent of Mean: Protein	Percent of Mean: Oil	Maturity Rating	Phytophthora Gene	Chlorosis Score	SCN Rating
PB-2207NRR	PBR	9-22	-	-	104	-	-	104	96	103	2.2	Rps1k	3.3	R
PB-2183NRR	Prairie Brand	9-22	107	105	104	104	104	108	98	105	2.1	Rps1k	3.0	R
ADV1740CR	Advantage	9-22	-	-	104	-	-	105	97	103	1.7	Rps1k	3.2	R
M-194NRR	Mustang Seeds	9-22	105	103	101	107	105	104	99	102	1.9	Rps1k#	3.4	R
PB-2056NRR	PBR	9-22	-	99	101	-	103	103	100	98	2.0	Rps1c	2.9	R
AG2107	Asgrow	9-22	101	102	100	103	103	100	100	103	2.1	Rps1k	3.2	R
K-170RR/SCN	Kruger	9-22	-	-	97	-	-	106	104	94	-	S	3.4	R
191CNR	Anderson Seeds	9-22	103	106	97	102	103	99	98	102	1.9	Rps1k#	3.3	R
PB-1887NRR	PBR	9-22	-	-	89	-	-	97	101	99	1.8	Rps1k	3.0	R
PB-2007NRR	Prairie Brand	9-23	-	-	110	-	-	101	97	103	2.0	Rps1c	3.0	R
L2085R Brand	Latham	9-23	-	-	109	-	-	96	99	102	2.0	Rps1c	3.2	R
NT-7201	Nutech	9-23	-	-	108	-	-	106	98	103	2.0	Rps1k	3.2	R
1798NRR	Viking	9-23	-	-	105	-	-	105	105	91	1.7	S	3.4	R
92M21	Pioneer Brand	9-23	-	-	104	-	-	98	96	102	2.2	Rps1k#	3.3	R
PB-2297NRR	Prairie Brand	9-23	-	-	104	-	-	95	100	100	2.2	Rps1k	3.2	R
2062-4	Stine	9-23	-	-	103	-	-	105	96	102	2.0	Rps1k	3.0	R
M-217NRR	Mustang Seeds	9-23	-	101	103	-	101	103	101	101	2.1	Rps1c	3.7	R
PB-2117NRR	PBR	9-23	-	-	102	-	-	100	100	101	2.1	Rps1k#	3.3	R
2203RR	Trelay	9-23	-	-	101	-	-	103	98	101	2.0	Rps1k	3.5	R
31D20	Dyna-Gro	9-23	-	101	101	-	100	99	100	101	2.0	Rps1c#	3.3	R
XR2374	NK Brand	9-23	-	-	101	-	-	95	101	96	2.3	Rps1	3.4	R
NT-7242	Nutech	9-23	-	-	100	-	-	99	101	97	2.4	Rps1k#	2.7	R
1978CBR	Viking	9-23	-	96	98	-	101	97	102	103	1.9	Rps1c	3.5	R
IA2068	Iowa AES	9-23	97	98	98	97	95	89	100	96	2.1	S	3.3	R
201CNR	Anderson Seeds	9-23	-	-	97	-	-	99	99	105	2.0	Rps1c	3.3	R
M-228NRR	Mustang Seeds	9-23	-	-	97	-	-	94	101	95	2.2	Rps1k#	3.3	R
K-204RR/SCN	Kruger	9-24	-	-	113	-	-	107	96	105	-	Rps1k#	2.8	R
NT-7222	Nutech	9-24	-	-	111	-	-	109	97	101	2.2	Rps1k#	3.4	R
S19-L7	NK Brand	9-24	-	107	106	-	103	105	100	98	1.9	-	3.5	R
37Y21	Dyna-Gro	9-24	-	-	104	-	-	94	100	99	2.1	Rps1k	3.8	R
7193RR/SCN	Agsource	9-24	-	-	99	-	-	110	99	105	1.9	Rps1k	3.2	R
AG2002	Asgrow	9-24	-	-	96	-	-	96	100	101	2.0	Rps1c	3.2	R
KY2027RN	KSC/Challenger	9-24	-	-	94	-	-	106	101	98	-	-	3.2	R
1808RR/SCN	Agsource	9-24	-	-	94	-	-	99	100	99	1.8	Rps1c	3.5	R
ADV1881CR	Advantage	9-24	-	-	94	-	-	104	101	97	1.8	S	3.2	R
K-220RR/SCN/LINO	KSC/Challenger	9-24	-	-	94	-	-	98	103	95	-	Rps1c	3.2	R
K-248RR/SCN	Kruger	9-25	-	-	108	-	-	100	102	96	-	S	3.5	R
92M40	Pioneer Brand	9-25	102	103	105	104	105	104	104	96	2.4	Rps1c	3.5	R
38G23	Dyna-Gro	9-25	-	-	104	-	-	114	97	102	2.3	Rps1k#	3.2	R
K-222RR/SCN	KSC/Challenger	9-25	-	99	102	-	99	95	103	97	2.2	Rps1k	3.7	R
AG2108	Asgrow	9-25	-	-	101	-	-	102	99	101	2.1	Rps1k	3.2	R
XR2373	NK Brand	9-25	-	-	101	-	-	97	98	101	2.3	Rps1	3.8	R
L2158 Brand	Latham	9-25	-	-	97	-	-	103	100	101	2.1	Rps1k#	3.5	R
NT-2219RR/SCN	Nutech	9-25	-	-	93	-	-	100	104	96	2.1	Rps1c	2.8	R
K-245RR/SCN/LINO	KSC/Challenger	9-25	-	-	87	-	-	89	103	98	-	Rps1c	3.5	R
M-238NRR	Mustang Seeds	9-26	-	-	101	-	-	104	106	97	2.3	Rps1k	3.4	R
7222	Agsource	9-26	-	-	100	-	-	108	96	102	2.2	Rps1k	3.2	R
2324+RR/SCN	Agsource	9-27	-	-	91	-	-	97	101	97	2.3	Rps1c	3.4	R
Mean		9-23	45.8 bu/a	41.8 bu/a	41.2 bu/a	60.3 bu/a	54.7 bu/a	53.3 bu/a	35.5%	17.3%				
LSD 20%			6%	7%	8%	4%	6%	8%						

Greenhouse test results do not agree with originator's designation.

Table 10a. Characteristics of special-use soybean varieties, northern zone; Crookston, Moorhead and Shelly, 2007.

Variety or Brand	Originator	Maturity Rating	Special Characteristics	Hilum Color	Phytophthora Gene	Chlorosis Score	Seeds/Lb.
MN0071	Minnesota AES	00.7	General Purpose	Brown	Rsp1	2.8	3,047
Traill	No. Dakota AES	0.0	General Purpose	Yellow	Rps1	3.0	3,243
MN0201	Minnesota AES	0.2	General Purpose	Yellow	Rps1	2.9	3,547
MN0103SP	Minnesota AES	0.1	Small Seed	Yellow	Rps1	3.5	6,053
MN0104SP	Minnesota AES	0.1	Large Seed, Higher Protein	Black	Rps1	3.7	2,655
MK0205	Richland Organics	0.2	Small Seed	Yellow	S	3.4	5,470
MN0082SP	Minnesota AES	00.8	Small Seed	Yellow	Rps1	3.2	8,107
MN0302	Minnesota AES	0.3	General Purpose	Buff	Rps1k	2.8	3,363
MN0096SP	Minnesota AES	0.0	Large Seed, Higher Protein	Yellow	S	3.5	2,415
MN0094SP	Minnesota AES	00.9	Large Seed, Higher Protein	Black	Rps1	3.7	2,389
MN0306SP	Minnesota AES	0.3	Large Seed	Black	Rps1	3.9	2,481
MK0649	Richland Organics	0.3	Small Seed	Yellow	S	3.5	6,306
MN0303SP	Minnesota AES	0.3	Small Seed	Yellow	Rps1	3.0	5,159
Nannonatto	No. Dakota AES	0.3	Small Seed	Yellow	S	3.2	4,540
MN0202SP	Minnesota AES	0.2	Small Seed	Yellow	Rps1	3.2	5,044
MN0093SP	Minnesota AES	00.9	Small Seed	Grey	Rps1	3.6	6,053
MN0207SP	Minnesota AES	0.2	Small Seed	Yellow	Rps1	3.5	7,206
Norpro	No. Dakota AES	0.2	Higher Protein	Yellow	S	4.2	2,838
Prosoy	No. Dakota AES	0.4	Higher Protein	Yellow	S	3.2	3,047
MN0402SP	Minnesota AES	0.4	Small Seed	Yellow	Rps1	3.5	5,537
MN0403SP	Minnesota AES	0.4	Small Seed	Yellow	Rps1	3.0	6,219
MN0307SP	Minnesota AES	0.3	Large Seed	Yellow	Rps1c	3.3	2,536
MN0605SP	Minnesota AES	0.6	Higher Protein	Buff	Rps1c	3.5	3,153
MN0102SP	Minnesota AES	0.1	Small Seed	Yellow	Rps1	3.2	5,675

Table 10b. Performance of special-use soybean varieties, northern zone; Crookston, Moorhead and Shelly, 2005-2007.

Variety or Brand	Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean	
			2005-2007	2006-2007	2007	Protein	Oil
MN0071	Minnesota AES	9-13	-	94	109	96	108
Traill	No. Dakota AES	9-17	112	112	119	99	102
MN0201	Minnesota AES	9-19	111	111	112	102	101
MN0103SP	Minnesota AES	9-20	-	93	82	96	102
MN0104SP	Minnesota AES	9-21	-	-	125	103	98
MK0205	Richland Organics	9-21	101	101	90	98	105
MN0082SP	Minnesota AES	9-21	99	98	88	97	101
MN0302	Minnesota AES	9-22	-	125	127	97	108
MN0096SP	Minnesota AES	9-22	-	-	121	101	99
MN0094SP	Minnesota AES	9-22	-	-	106	101	101
MN0306SP	Minnesota AES	9-22	100	100	103	100	104
MK0649	Richland Organics	9-22	-	99	95	96	101
MN0303SP	Minnesota AES	9-22	98	99	90	103	95
Nannonatto	No. Dakota AES	9-22	98	95	86	95	102
MN0202SP	Minnesota AES	9-22	88	86	72	96	102
MN0093SP	Minnesota AES	9-23	-	-	102	91	106
MN0207SP	Minnesota AES	9-23	-	-	96	93	98
Norpro	No. Dakota AES	9-23	93	93	93	108	95
Prosoy	No. Dakota AES	9-24	-	-	121	103	99
MN0402SP	Minnesota AES	9-24	-	-	83	101	94
MN0403SP	Minnesota AES	9-24	-	-	65	107	92
MN0307SP	Minnesota AES	9-25	-	-	126	100	102
MN0605SP	Minnesota AES	9-26	-	-	112	114	89
MN0102SP	Minnesota AES	9-27	99	94	78	104	94
Mean		9-22	37.7 bu/a	37.7 bu/a	33.5 bu/a	34.5%	17.0%
LSD 20%			5%	6%	9%		

Table 11a. Characteristics of special use soybean varieties, central zone; Becker, Morris and Rosemount, 2007.

Variety or Brand	Originator	Maturity Rating	Special Characteristics	Hilum Color	Phytophthora Gene	Chlorosis Score	Seeds/Lb.
MN0603SP	Minnesota AES	0.3	Small Seed	Yellow	Rps1	3.0	6,486
Toyopro	Northland Seed	0.8	Higher Protein	Yellow	S	4.0	2,838
MN1004SP	Minnesota AES	1.0	Low Sat., Low Linolenic Acid	Black	Rps1	4.4	2,428
MN0603SP	Minnesota AES	0.3	Small Seed	Yellow	Rps1	3.3	6,053
MN0402SP	Minnesota AES	0.4	Small Seed	Yellow	Rps1	3.2	4,830
MN0501SP	Minnesota AES	0.5	Small Seed	Yellow	Rps1	3.7	4,090
Sheyenne	No. Dakota AES	0.7	General Purpose	Yellow	Rps1c	2.9	2,536
Lambert	Minnesota AES	0.7	General Purpose	Buff	Rps1	3.4	2,671
MN1201SP	Minnesota AES	1.2	Large Seed, Higher Protein	Yellow	Rps1	3.9	1,957
MK9532	Richland Organics	0.9	Small Seed	Yellow	S	4.3	3,691
MN0906SP	Minnesota AES	0.9	Small Seed	Yellow	Rps1	4.0	4,882
Altapro	Northland Seed	1.0	Higher Protein	Yellow	S	4.0	3,153
Surge	Minn. & S.D. AES	0.9	General Purpose	Imperfect Black	Rsp1	3.3	2,415
MN0804SP	Minnesota AES	0.8	Higher Protein	Yellow	Rps1	4.4	2,580
MN0903SP	Minnesota AES	0.9	Large Seed, Higher Protein	Yellow	Rps1	4.3	2,389
MN1203SP	Minnesota AES	1.2	Small Seed	Yellow	-	3.8	4,989
Minnpro	Northland Seed	0.8	Higher Protein	Yellow	S	3.9	2,481
MN0803SP	Minnesota AES	0.8	Higher Protein	Yellow	Rps1	3.3	3,847
MK1016	Richland Organics	1.0	Small Seed	Yellow	S	3.8	4,729
MN1101SP	Minnesota AES	1.1	Large Seed, Higher Protein	Yellow	Rps1	4.0	1,916
MN1103SP	Minnesota AES	1.1	Low Linolenic Acid	Black	Rps1	4.0	2,536
BR10F8	Blue River Hybrids	1.0	-	Yellow	S	3.7	2,671
MN0805SP	Minnesota AES	0.8	Small Seed	Yellow	-	3.2	4,989
BR15F9	Blue River Hybrids	1.5	Higher Protein	Yellow	S	3.9	2,428
BR1F44	Blue River Hybrids	1.4	Large Seed, Higher Protein	Yellow	S	3.9	2,073
MN1410	Minnesota AES	1.4	General Purpose	Buff	-	3.7	2,609
MN1503SP	Minnesota AES	1.5	Higher Protein	Yellow	Rps1	2.9	2,305

Table 11b. Performance of special-use soybean varieties, central zone; Becker, Morris and Rosemount, 2005-2007.

Variety or Brand	Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean	
			2005-2007	2006-2007	2007	Protein	Oil
MN0603SP	Minnesota AES	9-14	-	-	79	98	97
Toyopro	Northland Seed	9-16	100	100	99	106	95
MN1004SP	Minnesota AES	9-16	88	86	82	101	101
MN0603SP	Minnesota AES	9-16	82	81	80	97	99
MN0402SP	Minnesota AES	9-16	87	85	76	97	100
MN0501SP	Minnesota AES	9-16	85	79	63	97	108
Sheyenne	No. Dakota AES	9-17	-	-	132	91	111
Lambert	Minnesota AES	9-17	121	117	114	94	113
MN1201SP	Minnesota AES	9-17	104	101	107	99	102
MK9532	Richland Organics	9-17	102	100	92	93	106
MN0906SP	Minnesota AES	9-17	97	92	88	99	96
Altapro	Northland Seed	9-17	90	87	81	113	82
Surge	Minn. & S.D. AES	9-18	121	126	121	98	106
MN0804SP	Minnesota AES	9-18	-	-	116	105	96
MN0903SP	Minnesota AES	9-18	98	100	106	107	95
MN1203SP	Minnesota AES	9-18	103	105	103	96	103
Minnpro	Northland Seed	9-18	94	92	97	105	94
MN0803SP	Minnesota AES	9-18	92	92	89	104	96
MK1016	Richland Organics	9-18	-	-	76	96	101
MN1101SP	Minnesota AES	9-19	111	113	118	102	100
MN1103SP	Minnesota AES	9-19	112	112	114	100	101
BR10F8	Blue River Hybrids	9-19	-	-	113	89	111
MN0805SP	Minnesota AES	9-19	98	94	96	109	86
BR15F9	Blue River Hybrids	9-20	-	-	118	99	101
BR1F44	Blue River Hybrids	9-20	-	-	104	105	95
MN1410	Minnesota AES	9-21	-	124	116	97	107
MN1503SP	Minnesota AES	9-22	116	115	114	102	100
Mean		9-18	42.3 bu/a	38.9 bu/a	39.0 bu/a	38.5%	15.9%
LSD 20%			5%	7%	8%		

Table 12a. Characteristics of special use soybean varieties, southern zone; Jackson, Lamberton and Waseca, 2007.

Variety or Brand	Originator	Maturity Rating	Special Characteristics	Hilum Color	Phytophthora Gene	Chlorosis Score	Seeds/Lb.
MN1004SP	Minnesota AES	1.0	Low Sat., Low Linolenic Acid	Black	Rps1	3.9	2,415
Surge	Minn. & S.D AES	0.9	General Purpose	Imperfect Black	Rps1	3.7	2,162
MN1202SP	Minnesota AES	1.2	Large Seed, Higher Protein	Yellow	S	3.7	1,846
Winpro	Northland Seed	1.2	Large Seed	Yellow	S	4.2	2,365
MN1505SP	Minnesota AES	1.5	Large Seed, Higher Protein	Yellow	Rps1	3.8	2,102
MN1101SP	Minnesota AES	1.1	Large Seed, Higher Protein	Yellow	Rps1	4.2	1,991
MN1409SP	Minnesota AES	1.4	Large Seed, Higher Protein	Yellow	S	3.0	2,054
MN1410	Minnesota AES	1.4	General Purpose	Buff	-	3.8	2,454
MN1302	Minnesota AES	1.3	General Purpose	Buff	Rps1k	3.3	2,204
MN1608SP	Minnesota AES	1.6	Large Seed, Higher Protein	Buff	Rps1k	3.3	2,152
0.18	Viking	1.8	-	Brown	Rps1	4.0	2,415
BR16A7	Blue River Hybrids	1.6	-	Brown	S	3.0	2,987
IA1021	Iowa AES	1.6	General Purpose	Yellow	S	4.3	2,594
MN1607SP	Minnesota AES	1.6	Large Seed, Higher Protein	Yellow	Rps1	3.5	2,083
MN1502SP	Minnesota AES	1.5	Large Seed, Higher Protein	Yellow	Rps1	3.7	2,009
MN1503SP	Minnesota AES	1.5	Large Seed, Higher Protein	Yellow	Rps1	3.5	2,092
MN1606SP	Minnesota AES	1.6	Large Seed, Higher Protein	Yellow	Rps1	4.2	2,215
Royalpro	Northland Seeds	1.6	Large Seed, Higher Protein	Yellow	S	3.5	1,739
MN1805SP	Minnesota AES	1.8	Large Seed, Higher Protein	Yellow	Rps1	3.9	1,876
Surepro	Northland Seed	1.9	Large Seed, Higher Protein	Yellow	S	3.7	1,940
IA2053	Iowa AES	2.5	Large Seed, Higher Protein	Yellow	-	4.2	2,162
MN2001SP	Minnesota AES	2.0	Large Seed, Higher Protein	Yellow	Rps1	3.8	1,916
IA1010	Iowa AES	1.9	Large Seed	Yellow	-	4.5	1,794
IA2067	Iowa AES	2.4	Large Seed, Higher Protein	Yellow	-	4.2	1,816
IA2073	Iowa AES	2.4	1% Linolenic Acid	Black	S	4.0	2,467
BR24F8	Blue River Hybrids	2.4	Large Seed, Higher Protein	Yellow	S	4.0	2,102
BR21YP7	Blue River Hybrids	2.1	Large Seed, Higher Protein	Yellow	S	4.4	2,248
IA2016	Iowa AES	2.2	Large Seed, Higher Protein	Yellow	-	4.4	1,868
Vinton 81	Iowa AES	2.0	Large Seed, Higher Protein	Yellow	Rps1k	4.0	2,142
K-220RR/SCN/LINO	KSC/Challenger	-	< 3% Linolenic Acid	Imperfect Black	Rps1c	3.8	2,402
K-245RR/SCN/LINO	KSC/Challenger	-	< 3% Linolenic Acid	Buff	Rps1c	4.4	2,892
2300	Bluestem	2.3	Large Seed, Higher Protein	Yellow	S	3.9	1,900

Table 12b. Performance of special-use soybean varieties, southern zone; Jackson, Lamberton and Waseca, 2005-2007.

Variety or Brand	Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean	
			2004-2006	2005-2006	2006	Protein	Oil
MN1004SP	Minnesota AES	9-13	85	88	84	103	99
Surge	Minn. & S.D AES	9-14	101	98	93	98	105
MN1202SP	Minnesota AES	9-14	92	94	90	100	96
Winpro	Northland Seed	9-14	-	-	89	97	103
MN1505SP	Minnesota AES	9-16	-	112	109	103	103
MN1101SP	Minnesota AES	9-16	96	96	101	102	97
MN1409SP	Minnesota AES	9-16	97	96	96	98	99
MN1410	Minnesota AES	9-17	-	120	123	96	105
MN1302	Minnesota AES	9-17	114	111	106	101	101
MN1608SP	Minnesota AES	9-17	103	104	100	102	102
0.18	Viking	9-18	-	-	121	92	106
BR16A7	Blue River Hybrids	9-18	-	-	120	91	107
IA1021	Iowa AES	9-18	-	111	108	95	103
MN1607SP	Minnesota AES	9-18	105	102	102	101	101
MN1502SP	Minnesota AES	9-18	96	94	95	99	99
MN1503SP	Minnesota AES	9-19	102	100	107	101	101
MN1606SP	Minnesota AES	9-20	104	99	98	102	96
Royalpro	Northland Seed	9-20	101	99	96	104	94
MN1805SP	Minnesota AES	9-21	108	101	95	107	96
Surepro	Northland Seed	9-21	105	100	92	106	92

Table 12b (continued). Performance of special-use soybean varieties, southern zone; Jackson, Lamberton and Waseca, 2005-2007.

Variety or Brand	Originator	Maturity Date	Yield, Percent of Mean 2004-2006	2005-2006	2006	Percent of Mean Protein	Oil
IA2053	Iowa AES	9-21	107	98	92	104	100
MN2001SP	Minnesota AES	9-21	95	91	91	106	93
IA1010	Iowa AES	9-21	96	91	87	98	95
IA2067	Iowa AES	9-22	108	109	116	103	96
IA2073	Iowa AES	9-22	-	112	105	98	98
BR24F8	Blue River Hybrids	9-22	-	-	102	99	102
BR21YP7	Blue River Hybrids	9-22	-	-	101	102	99
IA2016	Iowa AES	9-22	104	102	96	101	99
Vinton 81	Iowa AES	9-22	80	72	61	101	98
K-220RR/SCN/LINO	KSC/Challenger	9-23	-	-	115	99	104
K-245RR/SCN/LINO	KSC/Challenger	9-23	-	-	113	96	101
2300	Bluestem	9-23	103	103	97	100	99
Mean		9-19	47.3 bu/a	46.3 bu/a	45.4 bu/a	37.4%	17.0%
LSD 20%			5%	7%	10%		

Table 13. Characteristics of publicly developed soybean varieties entered in 2007 tests.

Variety or Brand	Originator	Maturity Rating	Phytophthora Gene	BSR Reaction	SCN Reaction	Chlorosis Score
Jim	No. Dakota AES	00.7	S	S	S	3.2
MN0071	Minnesota AES	00.7	Rps1	S	S	3.5
MN0095	Minnesota AES	0.0	Rps1	S	S	2.5
Traill	No. Dakota AES	0.0	S	S	S	2.9
MN0101	Minnesota AES	0.1	Rps1	-	S	3.2
MN0105	Minnesota AES	0.1	Rps1c	-	S	3.2
MN0106RR	Minnesota AES	0.1	-	-	S	3.2
MN0201	Minnesota AES	0.2	Rps1	-	S	2.8
MN0302	Minnesota AES	0.3	Rps1k	S	S	3.0
MN0305RR	Minnesota AES	0.3	Rps1k	-	S	2.8
MN0308CN	Minnesota AES	0.3	Rps1k	-	R	2.8
MN0401RR	Minnesota AES	0.4	Rps1	-	S	2.8
MN0503RR	Minnesota AES	0.5	S	-	S	2.8
MN0602CN	Minnesota AES	0.6	-	-	R	2.5
MN0604	Minnesota AES	0.6	Rps6	-	S	3.3
MN0606CN	Minnesota AES	0.6	-	-	R	3.5
Lambert	Minnesota AES	0.7	Rps1	S	S	3.3
MN0701	Minnesota AES	0.7	Rps1	-	S	3.2
Sheyenne	No. Dakota AES	0.7	Rps1c	-	S	2.9
MN0806CN	Minnesota AES	0.8	S	-	R	2.9
MN0902CN	Minnesota AES	0.9	S	R	R	2.8
MN0904RR	Minnesota AES	0.9	Rps1k	-	S	3.2
Surge	Minn. & S.D. AES	0.9	Rsp1	S	S	3.3
MN1005	Minnesota AES	1.0	Rps1k	S	S	3.2
MN1009	Minnesota AES	1.0	Rps1k	-	S	3.5
MN1011CN	Minnesota AES	1.0	Rps1	-	R	2.7
MN1107RR	Minnesota AES	1.1	Rps1	-	S	2.8
MN1302	Minnesota AES	1.3	Rps1k	-	S	3.3
MN1401	Minnesota AES	1.4	Rps1	-	S	3.4
MN1410	Minnesota AES	1.4	-	R	S	3.5
MN1504RR	Minnesota AES	1.5	Rps1k	-	S	2.8
Parker	Minnesota AES	1.5	Rps1	S	S	3.9
Freeborn	Minnesota AES	1.6	Rps1	R	R	2.9
IA1021	Iowa AES	1.6	S	S	S	4.3
MN1701CN	Minnesota AES	1.7	-	-	R	3.8
MN1801	Minnesota AES	1.8	Rps1c	S	S	3.8
MN1803RR	Minnesota AES	1.8	Rps1	-	S	3.3
IA1022	Iowa AES	2.0	S	S	R	3.9
IA2008R	Iowa AES	2.1	Rps1k	R	S	3.9
IA2050	Iowa AES	2.1	S	S	S	4.3
IA2068	Iowa AES	2.1	S	S	R	4.2