



**Soybean Maturity Zones.**

# SOYBEAN

The table on page 77 provides results from the special performance tests of soybean cyst nematode resistant varieties in “infested” field sites near Lamberton, Waseca, and Madelia and “non-infested” field sites near Fairmont, Lamberton,

Potsdam and Waseca. Planting techniques were the same as the regular performance tests.

Tables on pages 78-79 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.

The table on page 80 provides important variety characteristics of publicly developed varieties entered in the 2001 tests.

**To better understand and use 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 2001 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 Agassiz is indicated as 0.0, making it the earliest 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 2001 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 consecutive years. All yield determinations were made from replicated tests harvested with a plot combine.

This year 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 2001. 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.

Minnesota Agricultural Experiment Station scientists annually conduct these tests of adapted public and private soybean varieties. Companies are charged a fee for each variety they enter and these fees partially cover the costs of conducting these tests. One of the stipulations of the testing program is that the company is marketing or intends to begin marketing the variety in the next growing season.

Tables on pages 66-69 present data from the regular public and private variety tests that are conducted annually at various locations within the northern, central and southern production zones. The map shows maturity zone boundaries. All of these tests were planted between May 1 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 Fairmont and 10 inches at other locations. Plot combines were used to harvest the yield from all plots.

Tables on page 69 provide results of the very early (northern Minnesota) and special southeastern Minnesota public variety tests. These locations were added to provide data for environments not represented by the other location tests.

Tables on pages 69-76 provide results from specific tests of available Roundup Ready® varieties adapted to the northern, central and southern production zones. Planting was accomplished as described above, except that the only herbicide used was two applications of labeled rates of Roundup®.

**Chlorosis symptoms for all varieties in these 2001 tests were much more severe than in some of the previous years.** Specific scores and evaluation dates from the 2001 test at both locations are provided at the web site: [www.soybeans.umn.edu/home.htm](http://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. The table values are for the 2001 season only. This year the protein and oil information is being presented as a percent of the mean of the test. The actual mean values are given at the bottom of each table. Values over 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:

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

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

### 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 genes provide resistance to the various races.

### Genes for resistance to various races of Phytophthora root rot.

#### Gene Races

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
<i>Rps1,1a</i>																											
<i>Rps1b</i>																											
<i>Rps1c</i>																											
<i>Rps1k</i>																											
<i>Rps3</i>																											
<i>Rps4</i>																											
<i>Rps6</i>																											

### 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 in reducing nematode populations as well as reducing its impact on yield.

Yield performance results of susceptible, moderately resistant, moderately susceptible and resistant varieties planted in infested and non-infested fields in southern Minnesota are provided on page 77. The ratings for SCN resistance were determined using nematode counts from naturally infested field sites and a greenhouse test using a Minnesota field population of SCN.

Additional information on procedures for testing your fields for SCN can be obtained from your county extension office or the Soybean Nematology Lab at the Southern Research and Outreach Center, Waseca, MN 56093.

Management information is available from your county extension office or from the Minnesota Soybean Research and Promotion Council, 360 Pierce Avenue, Suite 110, North Mankato, MN 56003, 1-888-896-9678, [www.mnssoybean.org](http://www.mnssoybean.org).

### White Mold

White mold, also known as Sclerotinia stem rot, has developed with increasing frequency in Minnesota soybean fields. Planting less-susceptible varieties in wider row spacings and planting at lower populations are the most effective methods of reducing disease severity.

Accurate ratings for soybean variety resistance to white mold are difficult to obtain because both infection and disease development are affected by weather conditions during and after flowering. Because of this variability, a

variety's performance can change significantly among locations and years, depending on the interaction of plant development, precipitation and temperature. Growers concerned about variety performance in the presence of white mold should select varieties that show consistently less white mold often several years of testing.

In 2001 White mold evaluation plots were planted at eight locations in Minnesota (Shelly, Fosston, Staples, Morris, Farmington, Rosemount, Lamberton, and Waseca). Because environmental conditions were not favorable for consistent white mold growth, no meaningful data were obtained from these plots.

Additional white mold information is available at:

[www.soybeans.umn.edu/home.htm](http://www.soybeans.umn.edu/home.htm).

### ***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. IA 1006, Freeborn, Granite, Faribault, Archer, and IA2008R are available public varieties with resistance to BSR, while privately developed varieties 2063RR, Ex-547RRN, Ex-097RR, Ex-467RR, Ex-547RRN, 1719RR, and 2169RR are 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***

Recently there has been 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.

### ***Privately developed varieties.***

Contact addresses and brand names for privately developed varieties entered in these tests are:

**Advantage Soybean Seed** (Advantage), 17303 Highway 22, Good Thunder, MN 56037

**AgriPro Seeds** (AP), 2369 330th St., Box 500, Slater, IA 50244

**Albert Lea Seed House** (Viking), P.O. Box 127, 1414 W. Main, Albert Lea, MN 56007

**Anderson Seeds** (Anderson), RR 3 Box 94, St. Peter, MN 56082

**Crow's Hybrid Corn Co.** (Crow's), Box 306, Milford, IL 60953

**Dahlco Seeds** (Dahlco), 14730 15th St. S.W., Cokato, MN 55321

**Dahlman Seeds** (Dahlman), 73504 200th St., Dassel, MN 55325

**Dairyland Seed Co., Inc.** (Dairyland), P.O. Box 150, 209 Main St., Gilbert, IA 50105

**Dennis Ewing Farm Seed** (Yield King), 6131 North Fork Road, Ames, IA 50010

**Farm Advantage** (Farm Advantage), 1275 Hwy 69, Belmond, IA 50421

**Gold Country Seed, Inc.** (GCS), 16506 Hwy. 15 N., P.O. Box 604, Hutchinson, MN 5535

**Golden Harvest** (Golden Harvest), P.O. Box A, Waterloo, NE 68069

**Great Lakes Hybrids, Inc.** (Great Lakes), 9915 W. M-21, Ovid, MI 48866

**Hyland Seeds** (Hyland), Box 130, 2 Hyland Drive, Blenheim, ON, Canada NOP1A0

**Jung Seed Genetics** (Jung), 341 S. High St., Randolph, WI 53956

**Kruger Seed Company** (Kruger), Highway 20 East, Box A, Dike, IA 50624

**KSC/Challenger** (KSC/Challenger), Box A, Dike, IA 50624

**Latham Brothers Farm** (Latham), 131 180th St., Alexander, IA 50420

**Latham Seed Company** (Latham), 131 180th St., Alexander, IA 50420

**LG Seeds** (LG), 710 N. Main St., Suite 201, River Falls, WI 54022

**Mallard Seed Co.** (Mallard), P.O. Box 637, Plainview, MN 55964

**Midwest Seed Genetics** (MW Genetics), P.O. Box 518, Carroll, IA 51401

**Monsanto Global Seed Group** (Dekalb), 3100 Sycamore Road, De Kalb, IL 60115

**Mustang Seed** (Mustang), Box 466, Madison, SD 57042

**NorthStar Genetics** (NS), Box 40, Wanamingo, MN 55983

**Pioneer Hi-Bred International, Inc.** (Pioneer), 921 Darien Dr., Madison WI 53717

**Profiseed, Inc.** (Profiseed), 1691 Highway 65, Hampton, IA 50441

**Prairie Brand Research** (PBR), 15 X Ave., Story City, IA 50248

**Prairie Brand Seed Company** (Prairie Brand), 15 X Ave., Story City, IA 50248

**Ramy International, Ltd.** (Ramy), 1329 N. Riverfront Drive, Mankato, MN 56001

**Renk Seed Co.** (Renk), 6800 Wilburn Rd., Sun Prairie, WI 53590

**Sand Seed Service, Inc.** (Sands), P.O. Box 648, Marcus, IA 51035

**Sansgaard Seed Farms, Inc.** (Sansgaard), 15 X Avenue, Story City, IA 50248

**Seeds 2000** (Seeds 2000), P.O. Box 200, Breckenridge, MN 56520

**Sodak Genetics** (Sodak Genetics), Box 2207A, SDSU, Brookings, SD 57007

**Stine Seed Co.** (Stine), 2225 Laredo Trail, Adel, IA 50003

**Stine Seed Farm** (Stine), 2225 Laredo Trail, Adel, IA 50003

**Syngenta Seeds** (NK Brand), 3701 W 49th St., Suite 206, Sioux Falls, SD 57106

**Thompson Agronomics, Inc.** (Thompson), 40321 130th Avenue, Leland, IA 50453

**Thompson Seeds, Inc.** (Thompson), 40321 130th Ave., Leland, IA 50453

**Thunder Seed** (Thunder) 3008 210th St. N., Hawley, MN 54549

**Top Farm Hybrids** (Top Farm), P.O. Box 850, Cokato, MN 55321

**Trelay Seeds** (High Cycle's Trelay), 11623 State Road 80, Livingston, WI 53544

**UAP Seed** (Dyna-Gro), P.O. Box 10, Wall Lake, IA, 51466

**United Suppliers Inc.** (U.S. Seeds) 30473 260th St., P.O. Box 538, Eldora, IA 50627

**Wensman Seed Company** (Wensman), P.O. Box 190, Wadena, MN 56482

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

Tables on pages 78-79 present the most recent data available on the performance and characteristics of several of these special use varieties. Contact the owner/developer or exclusive marketing company if you are interested in further information about these varieties.

### Publicly Developed Varieties

Important characteristics of the publicly developed varieties entered in 2001 tests are presented on page 80.

### Soybean Planting Rate and Date

Bushel Weight, Pounds .....	60
Seeds/Pound.....	2,800
Planting Rate, Pounds/Acre .....	56
Planting Rate, Seeds/Ft. of Row	
7-inch rows.....	2
10-inch rows.....	3
20-inch rows.....	6
22-inch rows.....	7
30-inch rows.....	9
Planting Date.....	May 1 to May 10

### Performance and characteristics of public and private soybean varieties, northern zone; Crookston, Moorhead and Shelly 1999-2001.

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
McCall	Minn. AES	9-11	76	77	87	97	98	00.7	S	3.7
90A07	Pioneer	9-13	—	87	96	98	107	00.7	S	3.2
Glacier	Minn. AES	9-15	104	98	97	100	98	00.8	Rps6	4.3
Jim	N.D. AES	9-16	96	95	104	101	97	00.8	S	3.7
Traill	N.D. AES	9-18	107	101	108	102	99	0.0	Rps1	3.3
Agassiz	Minn. AES	9-20	94	94	104	103	101	0.0	Rps1	3.3
X3103	Gold Country	9-20	—	—	96	97	102	0.2	S	4.1
Bygland	Gold Country	9-21	—	—	103	101	101	0.3	Rps1	3.1
Walsh	N.D. AES	9-22	—	—	105	100	101	0.2	Rps6	3.7
90B43	Pioneer	9-23	114	112	106	97	104	0.4	Rps1c	3.4
MN0301	Minn. AES	9-23	106	107	102	97	103	0.3	Rps1	3.3
Barnes	N.D. AES	9-23	—	—	96	98	104	0.4	Rps6	3.4
MN0302	Minn. AES	9-24	—	106	96	102	99	0.3	Rps1k	3.2
MN0201	Minn. AES	9-24	—	105	93	108	95	0.2	Rps1	2.9
2030	Thunder	9-24	—	—	92	101	98	0.3	S	3.7
398	Thunder	9-25	—	—	99	102	97	0.3	S	3.6
M-0512	Mustang	9-26	—	—	98	102	99	0.5	S	3.4
Council	N.D. AES	9-26	109	105	98	98	100	0.5	S	3.1
6038	Top Farm	9-27	—	113	109	99	100	0.3	Rps1c	4.0
Cass	Hyland	9-27	—	—	105	101	98	0.4	Rps1k	3.7
DSR-061	Dairyland	9-27	—	—	102	99	102	0.6	Rps1k	4.1
Lambert	Minn. AES	9-27	108	106	98	100	99	0.7	Rps1	4.3
DST0810	Dairyland	9-28	—	—	112	97	103	0.7	S	3.6
M-0700	Mustang	9-28	104	107	102	100	102	0.5	S	3.7
Mean			41.7 bu/a	39.3 bu/a	43.0 bu/a	35.0 %	19.0 %			
LSD 20%			2	3	5					

### Performance and characteristics of public and private soybean varieties, central zone; Becker, Morris and Rosemount 1999-2001.

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
90B43	Pioneer	9-6	94	92	95	93	108	0.4	Rps1c	3.3
2105	Thunder	9-7	—	—	89	101	100	0.5	Rps1k	3.5
Barnes	N.D. AES	9-9	—	87	85	98	109	0.4	Rps6	3.4
MN0301	Minn. AES	9-10	84	88	84	100	104	0.3	Rps1	3.3
MN0302	Minn. AES	9-11	—	—	84	101	102	0.3	Rps1k	3.2

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
T-3163	Thompson	9-13	–	–	101	101	101	1.5	Rps1k	3.3
Surge	Minn. & S.D. AES	9-14	102	105	107	101	102	1.0	Rps1	3.4
406	Northstar	9-14	–	–	95	100	99	0.4	S	4.2
X0108P70	Agripro/Garst	9-15	–	–	98	97	103	0.8	Rps1k	3.4
91B01	Pioneer	9-15	98	99	95	97	104	1.0	Rps1k	3.5
Lambert	Minn. AES	9-15	95	97	95	99	101	0.7	Rps1	4.3
MN0901	Minn. AES	9-15	95	95	87	98	103	0.9	Rps1	4.3
Kato	Minn. AES	9-15	90	94	83	107	95	1.4	Rps1	3.2
USS131	United Suppliers	9-16	–	–	102	99	100	1.5	S	3.5
MN1302	Minn. AES	9-17	–	–	101	94	103	1.3	Rps1k	3.2
EX 0127	Sands	9-17	–	–	100	99	100	1.4	Rps1k	3.5
6077	Topfarm	9-17	97	99	90	96	103	0.7	Rps1c	3.4
E1011	Topfarm	9-18	–	–	107	94	102	1.1	Rps1c	2.8
K-0707	KSC/Challenger	9-18	–	–	106	99	104	0.7	S	2.8
ADV1010	Advantage	9-18	–	–	94	100	100	1.0	Rps1k	3.6
MN0902CN	Minn. AES	9-18	89	91	87	100	99	0.9	S	3.7
933	Northstar	9-19	105	110	109	101	98	0.9	S	3.3
2209	Thunder	9-19	–	–	108	99	100	0.9	S	3.8
PB-1221	Prairie Brand	9-19	–	105	106	99	102	1.2	Rps1k	3.9
USE131	US Seeds	9-19	–	–	97	98	102	1.3	S	3.2
Sargent	N.D. AES	9-19	–	–	89	98	101	1.3	Rps6	3.4
M-1138	Mustang	9-20	110	113	112	101	99	1.3	S	3.6
91B53	Pioneer	9-20	108	108	105	102	97	1.6	S	3.7
MN1301	Minn. AES	9-20	95	97	95	102	101	1.3	Rps1	3.3
MN1401	Minn. AES	9-20	94	96	89	102	99	1.4	Rps1	3.2
1545	Farm Advantage	9-21	–	–	102	103	97	1.4	S	3.3
K-1333	Kruger	9-21	108	107	102	101	98	1.3	S	4.2
PBR-174	PBR	9-21	–	108	101	104	97	1.7	S	3.9
Parker	Minn. AES	9-22	108	111	111	99	102	1.5	Rps1	4.7
PS1600	Profiseed	9-22	–	114	110	103	97	1.5	S	3.0
PB-146	Prairie Brand	9-22	109	110	105	100	99	1.5	S	3.5
M-1172	Mustang	9-22	–	109	103	101	98	1.7	S	3.5
140 Brand	Latham	9-22	109	110	103	103	97	1.4	S	3.4
Freeborn	Minn. AES	9-22	96	98	95	104	98	1.6	Rps1	3.8
K-1888	Yield King	9-22	–	–	94	99	99	1.6	Rps1k	3.5
K-1313	KSC/Challenger	9-23	–	–	119	100	97	1.3	S	4.5
PBR 172	PBR	9-23	–	–	116	100	97	1.7	S	3.9
SOI 144	Sands	9-23	115	116	114	103	96	1.4	S	3.9
K-1808	Kruger	9-24	–	–	115	97	101	1.6	S	3.3
PB-178	Prairie Brand	9-24	–	–	112	103	99	1.7	S	3.4
DSR-160	Dairyland	9-25	–	–	93	102	96	1.6	S	3.7
K-1919	Kruger	9-26	–	118	116	101	99	1.7	S	3.7
K-1909	Yield King	9-26	–	–	110	96	98	1.7	S	3.3
DSR-183	Dairyland	9-26	–	–	102	102	98	1.8	S	3.8
K-1818	KSC/Challenger	9-27	–	–	89	102	99	1.6	S	3.5
M-1182	Mustang	9-29	–	–	101	106	92	1.8	S	3.8
K-1809	KSC/Challenger	9-29	–	–	97	100	96	1.6	Rps1	4.1
Mean			55.5 bu/acre	50.7 bu/acre	46.0 bu/acre	35.0%	19.0%			
LSD 20%			2	2	4					

**Performance and characteristics of public and private soybean varieties, southern zone;  
Waseca, Lamberton and Fairmont 1999-2001.**

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
MN1301	Minn. AES	9-21	92	—	89	105	102	1.3	Rps1	3.3
MN1401	Minn. AES	9-22	91	90	90	102	103	1.4	Rps1	3.2
MN1302	Minn. AES	9-23	—	—	90	98	102	1.3	Rps1k	3.2
91B92	Pioneer	9-25	—	—	95	97	107	1.9	Rps1k	4.4
Parker	Minn. AES	9-26	100	101	100	100	102	1.5	Rps1	4.7
Freeborn	Minn. AES	9-26	92	90	95	103	99	1.6	Rps1	3.8
MN1801	Minn. AES	9-27	101	92	99	101	101	1.8	Rps1c	3.8
91B53	Pioneer	9-27	101	95	92	102	101	1.6	S	3.8
EXP 7217-114	Sands	9-28	—	—	110	97	104	1.8	Rps1	4.0
6161	Top Farm	9-28	—	100	97	102	100	1.7	Rps1c	3.7
Sturdy	Minn. AES	9-28	90	89	89	104	99	2.0	Rps1	3.7
PBR 172	PBR	9-29	—	—	105	99	101	1.7	S	3.2
1922N	Farm Advantage	9-29	—	—	94	100	101	1.9	Rps1k	3.9
K-1888	KSC/Challenger	9-29	—	—	94	99	102	1.7	Rps1k	4.3
K-1909	Kruger	9-30	—	—	108	94	102	1.8	S	3.4
SOI 202	Sands	9-30	—	—	100	96	102	2.0	S	3.9
6197	Top Farm	9-30	—	97	96	99	101	1.9	S	3.6
D208	Garst	9-30	—	—	94	101	99	2.0	Rps1c	3.5
PB-178	Prairie Brand	10-1	—	—	107	99	102	1.7	S	3.9
H-1771	Golden Harvest	10-1	—	—	103	101	98	1.7	S	4.8
IA2021	Iowa AES	10-1	100	98	103	95	102	2.1	Rps1k	4.3
2077	Viking	10-1	—	—	102	102	101	1.9	S	3.6
K-1919	Kruger	10-1	—	103	102	101	101	1.7	S	3.5
Clements	Gold Country	10-1	—	104	101	103	97	2.1	S	3.9
T-3231	Thompson	10-1	—	102	101	102	101	2.3	Rps1	4.5
PB-194	Prairie Brand	10-1	101	100	100	101	101	1.9	S	4.0
USS199	US Seeds	10-1	—	97	95	102	98	1.9	S	3.5
T-3222	Thompson	10-2	107	106	108	100	100	2.2	S	3.9
PS 2209	Profiseed	10-2	—	—	108	99	101	2.2	S	4.1
K-1809	KSC/Challenger	10-2	—	—	104	94	103	1.6	Rps1	4.5
IA2050	Iowa AES	10-2	—	105	103	100	101	2.1	S	4.0
2002	Northstar	10-2	105	105	102	101	96	1.9	S	3.9
PS 2035	Profiseed	10-2	—	—	102	102	99	1.9	S	4.5
EXP 7331	Sands	10-2	—	—	101	101	102	2.4	Rps1	4.1
SOI 169	Sands	10-2	104	102	100	101	98	2.0	S	3.6
T-3201	Thompson	10-2	—	102	100	97	101	2.0	S	4.0
PB-217	Prairie Brand	10-2	103	100	100	100	101	2.1	S	4.1
PBR-202	PBR	10-2	104	102	98	100	99	2.0	S	3.8
K-2333	Yield King	10-2	—	—	96	95	102	2.1	S	4.6
IA1006	Iowa AES	10-2	97	97	93	97	101	1.6	S	3.8
2199	Viking	10-3	107	106	110	102	96	2.1	S	3.6
K-1818	KSC/Challenger	10-3	—	—	106	101	101	1.6	S	4.4
USS250	US Seeds	10-3	—	—	105	100	102	2.4	S	3.8
H-2052	Golden Harvest	10-3	—	—	105	103	94	2.0	S	3.3
392Brand	Latham	10-3	—	105	104	103	96	1.9	S	4.1
K-2325+	Kruger	10-3	—	106	104	100	100	2.2	S	4.3
M-2218	Mustang	10-3	104	104	103	102	97	2.1	S	4.4
230	Trelay	10-3	—	—	103	100	97	2.3	S	3.6
570 Brand	Latham	10-3	—	106	103	100	100	2.2	S	3.7
A2553	Asgrow	10-3	—	—	103	101	99	2.5	Rps1k	4.2

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
K-2525+	Yield King	10-3	–	–	103	101	98	2.3	S	3.4
X0120Y72	Agripro/Garst	10-3	–	–	102	101	101	2.1	S	3.8
K-2313	Kruger	10-3	–	–	101	100	97	2.1	Rps1	4.1
PB-230	Prairie Brand	10-3	–	101	97	99	99	2.3	Rps1	4.1
IA2008R	Iowa AES	10-3	100	98	97	99	97	2.1	Rps1k	3.5
M-2251	Mustang	10-4	–	102	102	99	101	2.5	S	3.9
690 Brand	Latham	10-4	–	–	102	99	103	2.4	S	4.4
K-2343A	KSC/Challenger	10-4	–	–	102	101	95	2.1	S	4.5
IA2052	Iowa AES	10-4	–	97	95	101	99	2.3	Rps1	4.0
M-2252	Mustang	10-5	–	–	92	101	94	2.5	S	3.8
DKB23-73	Dekalb	10-6	–	–	86	101	97	2.3	S	4.8
Mean			53.9 bu/acre	55.8 bu/acre	60.9 bu/acre	34.0%	18.7%			
LSD 20%			4	4	5					

**Performance and characteristics of very early maturing soybean varieties, 1997-2001.**

Variety	Maturity Rating	Yield, Percent of Mean				Percent of Mean		Phytophthora Gene	Chlorosis Score
		Grand Rapids	Roseau	Kennedy	Average	Protein	Oil		
McCall	00.7	99	96	96	97	99	101	S	4.2
Jim	00.8	115	115	109	113	99	100	S	4.0
Agassiz	0.0	98	92	96	95	101	100	Rps1	4.2
Traill	0.0	88	97	99	94	102	98	S	3.9
Mean		25.3 bu/acre	26.8 bu/acre	30.2 bu/acre	27.1 bu/acre	35.6%	17.0%		
LSD 20%		4	6	9	7				

**Performance and characteristics of public soybean varieties, southeastern Minn., 1997-2001.**

Variety	Maturity Rating	Percent of Mean			Phytophthora Gene	Chlorosis Score
		Yield	Protein	Oil		
Lambert	0.8	93	100	105	Rps1	3.6
MN1301	1.3	94	100	101	Rps1c	3.3
Kato	1.3	95	106	97	Rps1	3.2
Parker	1.5	101	99	101	Rps1	3.7
Freeborn	1.6	99	102	97	Rps1	3.3
A1900	1.9	100	94	106	Rps1k	4.2
Sturdy	2.0	106	102	95	Rps1	3.7
IA1006	1.6	107	99	99	S	3.8
IA2021	2.1	103	98	102	Rps1k	4.2
Mean		40.3 bu/acre	36.0%	17.2 %		
LSD 20%		5				

**Performance and characteristics of Roundup Ready soybean varieties, northern zone; Crookston and Shelly 1999-2001.**

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
PBX 0081RR	Sansgaard	9-17	–	–	102	104	101	00.8	Rps1c	4.2
PBX 0071RR	Sansgaard	9-19	–	–	91	99	99	00.7	S	4.3
W 2025RR	Wensman	9-19	–	–	89	100	103	0.2	Rps1c	3.9
90B11	Pioneer	9-20	–	–	110	100	100	0.1	S	4.6
0300-4	Stine	9-21	–	–	102	101	103	0.3	S	4.0

**Performance and characteristics of Roundup Ready soybean varieties, northern zone;  
Crookston and Shelly 1999-2001 (continued).**

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
RR Rally	Hyland	9-22	—	—	100	104	98	0.7	Rps1k	3.4
DKB03-51	Dekalb	9-23	—	102	114	100	104	0.3	Rps1	4.8
0090-4	Stine	9-23	—	—	96	102	100	0.1	S	4.2
PB-0121RR	Prairie Brand	9-23	—	—	80	97	102	0.1	S	4.5
R200RR	Ramy	9-24	—	97	101	99	105	0.2	S	4.3
W2054RR	Wensman	9-26	—	—	106	100	101	0.5	Rps1k	3.6
Q205RR	Northstar	9-26	—	96	96	100	102	0.2	S	4.0
2200RR	Thunder	9-26	—	—	95	101	101	0.1	S	4.5
R0755RR	Ramy	9-26	—	—	89	100	101	00.7	S	4.0
PBX 0201RR	Sansgaard	9-26	—	—	67	97	104	0.2	S	3.8
DKB06-51	Dekalb	9-27	—	103	111	101	98	0.6	Rps1k	4.4
K-080-1RR	KSC/Challenger	9-27	—	—	111	100	100	0.6	Rps1	3.5
6059RR	Top Farm	9-27	101	96	98	98	101	0.3	S	4.4
PB-0601RR	Prairie Brand	9-27	—	—	95	99	100	0.6	S	4.2
RR Rugged	Hyland	9-27	99	93	93	100	100	0.3	S	4.2
PBR 0091RR	PBR	9-27	—	—	86	100	100	00.9	S	4.3
M-021RR	Mustang	9-27	—	—	70	98	104	0.2	S	3.9
2020RR	Seeds2000	9-28	—	—	75	98	102	0.2	S	4.7
M-051RR	Mustang	9-29	—	—	122	100	101	0.5	S	3.8
K-077-1RR	Kruger	9-29	—	105	110	101	98	0.5	Rps1k	3.6
0700-4	Stine	9-29	—	104	109	105	99	0.7	S	4.0
K-051RR	KSC/Challenger	9-29	—	—	109	100	97	0.3	Rps1k	4.0
M-052RR	Mustang	9-29	—	—	108	100	97	0.5	Rps1k	4.4
X-0040RR	Dahlco	9-29	—	—	107	100	99	0.3	S	4.3
PB-0810RR	Prairie Brand	9-29	—	102	107	98	99	0.8	Rps1k	4.3
DSR-030/RR	Dairyland	9-29	—	—	106	104	97	0.3	Rps1c	4.0
W2050RR	Wensman	9-29	—	101	105	102	96	0.5	Rps1k	4.3
0026RR	Northstar	9-29	—	—	103	98	101	0.0	S	4.2
M-079RR	Mustang	9-29	98	103	101	98	100	0.7	Rps1k	4.5
2203RR	Thunder	9-29	—	—	93	98	104	0.3	Rps1k	3.8
0506RR	Northstar	9-30	—	—	125	100	102	0.5	S	4.8
K-077RR	Kruger	9-30	—	110	125	102	97	0.5	S	4.5
PBX 0621RR	Sansgaard	9-30	—	—	120	96	104	0.6	S	4.4
PBR 0561RR	PBR	9-30	—	—	109	100	99	0.5	S	4.2
W2039RR	Wensman	9-30	101	96	96	99	106	0.3	S	4.3
RR Richland	Hyland	9-30	—	—	92	103	95	0.8	Rps1k	3.9
6020RR	Top Farm	9-30	—	95	82	98	104	0.2	S	4.4
K-090RR	Kruger	10-1	—	—	109	101	94	0.7	Rps1c	3.5
K-091-1RR	KSC/Challenger	10-1	—	—	108	98	100	0.6	S	4.0
PBR 0920RR	PBR	10-1	—	—	98	100	97	0.9	S	4.4
K-050RR	KSC/Challenger	10-2	—	—	94	99	100	0.3	S	4.5
PBR 0941RR	PBR	10-3	—	—	94	100	96	0.9	Rps1k	3.8
DST 1114RR	Dairyland	10-4	—	—	94	96	98	0.7	S	3.7
PB-0321RR	Prairie Brand	10-5	—	—	79	101	103	0.3	Rps1k	3.3
Mean			39.5 bu/acre	37.0 bu/acre	32.9 bu/acre	34.5%	18.8%			
LSD 20%			5	5	9					



**Performance and characteristics of Roundup Ready soybean varieties, central zone;  
Rosemount and Morris 1999-2001.**

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
6208RR	Gold Country	9-12	—	—	83	98	100	0.8	Rps1k	3.9
RR Rally	Hyland Seed	9-12	—	82	83	100	102	0.7	Rps1k	3.5
RS071RR	Renk	9-12	—	—	78	99	103	0.7	Rps1k	3.1
PB-0810RR	Prairie Brand	9-13	—	—	95	101	101	0.8	Rps1k	4.4
X-0080RR	Dahlco	9-13	—	—	85	103	100	0.8	Rps1k	3.1
0805RR	Northstar	9-13	—	—	82	99	98	0.8	S	3.8
DKB06-51	Dekalb	9-14	—	89	93	101	97	0.6	Rps1k	4.4
2108RR	Thunder	9-14	—	—	91	98	103	0.8	Rps1k	3.8
RR X0512	Mallard	9-14	—	—	88	98	101	0.5	Rps1k	4.1
AG0801	Asgrow	9-15	97	96	104	99	103	0.8	Rps1k	3.7
ADV0880R	Advantage	9-15	—	—	95	101	101	0.8	Rps1k	3.8
GR0945	Midwest Seed	9-15	—	—	87	106	98	0.9	Rps1	3.9
EX-097RR	Latham	9-15	—	—	85	98	103	0.9	Rps1k	3.7
SOI 0820RR	Sands	9-15	—	—	83	98	101	0.8	Rps1k	3.3
SO8-R4	NK Brand	9-16	—	—	97	100	95	0.8	Rps1k	4.0
XR0105P01	Agripro/Garst	9-16	—	—	95	103	99	0.5	Rps1k	3.4
H-0979RR	Golden Harvest	9-16	93	90	90	105	99	0.9	S	4.4
2109RR	Thunder	9-17	—	—	102	102	100	0.9	Rps1	2.9
M-093RR	Mustang	9-17	—	—	100	100	102	0.9	Rps1	3.8
BT7106R	Ziller	9-17	—	93	96	98	98	1.0	Rps1c	3.7
0905RR	Northstar	9-17	—	—	93	99	103	0.9	S	3.7
E1051RR	Top Farm	9-17	—	—	89	97	104	0.5	Rps1k	4.5
SD1091RR	Sodak Genetics	9-18	—	—	112	101	105	0.9	Rps1	4.2
91B52	Pioneer	9-18	103	100	109	97	107	1.5	Rps1k	4.0
PB-1030RR	Prairie Brand	9-18	—	—	104	102	98	1.0	Rps1c	4.1
R-995	Ramy	9-18	—	—	102	98	105	0.9	Rps1	3.7
EXP. 40302R	Ziller	9-18	—	—	101	102	101	1.0	Rps1	3.6
RR X0912	Mallard	9-18	—	—	96	98	103	0.9	Rps1	3.5
E1091-A RR	Top Farm	9-18	—	—	96	102	99	0.9	Rps1	4.0
1007-4	Stine	9-18	—	—	95	99	104	1.0	S	4.7
8095RR	Jung	9-18	—	—	95	101	101	0.9	Rps1k	3.9
T-3081RR	Thompson	9-18	—	—	90	100	102	0.8	Rps1	3.8
91B12	Pioneer	9-18	—	—	87	99	103	1.1	S	4.5
RR Richland	Hyland Seed	9-18	—	—	84	102	100	0.8	Rps1k	3.7
SOI 1200RR	Sands	9-19	—	106	111	96	101	1.2	Rps1k	4.4
RR 1011	Mallard	9-19	—	101	100	96	105	1.0	Rps1c	3.9
C9093RR	LG Seeds	9-19	—	—	99	97	108	0.9	S	4.6
1016RR	Northstar	9-19	—	—	94	97	102	1.0	S	3.5
DKB10-51	Dekalb	9-19	—	89	88	100	100	1.0	Rps1c	4.3
BT7101R	Ziller	9-19	—	85	87	102	100	1.0	S	4.4
2110RR	Gold Country	9-19	—	—	85	101	97	1.0	Rps1k	4.1
0954RR	Northstar	9-19	—	—	83	99	103	0.9	S	4.6
USS0909RR	US Seeds	9-20	—	94	105	99	104	0.9	S	4.5
DSR-101/RR	Dairyland	9-20	—	—	99	102	103	1.1	S	3.7
S10-T1	NK Brand	9-20	—	—	98	99	98	1.0	Rps1k	4.3
0806-4	Stine	9-20	—	—	93	99	103	0.9	S	3.8
RS101RR	Renk	9-20	—	—	91	99	98	1.0	Rps1c	4.2
XR0114Y06	Agripro/Garst	9-21	—	—	103	99	103	1.4	S	3.9
2102RR	High Cycle	9-21	—	—	101	99	101	1.0	Rps1c	3.8
AG1301	Asgrow	9-21	105	101	100	97	103	1.3	Rps1	4.2

**Performance and characteristics of Roundup Ready soybean varieties, central zone;  
Rosemount and Morris 1999-2001 (continued).**

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
XR0111PO4	Agripro/Garst	9-21	—	—	98	102	96	1.1	Rps1k	3.5
2007RR	Dahlman	9-21	—	—	98	102	98	0.7	S	3.7
USE1002RR	US Seeds	9-21	—	—	96	97	102	1.0	Rps1c	4.1
XR0109Y03	Agripro/Garst	9-21	—	—	96	102	97	0.9	S	3.9
W2100RR	Wensman	9-21	—	92	88	96	102	1.1	Rps1c	4.2
C1432RR	LG Seeds	9-21	—	100	88	94	107	1.4	Rps1k	3.9
1501RR	Agripro/Garst	9-22	—	—	107	97	98	1.5	S	4.0
2110RR	Seeds2000	9-22	—	—	104	99	102	1.1	Rps1k	3.7
RS141RR	Renk	9-22	—	—	104	95	105	1.4	Rps1k	4.2
R-1505	Ramy	9-22	—	—	104	98	101	1.5	Rps1k	4.0
9145RR	Dahico	9-22	—	98	103	99	102	1.4	S	3.9
91B33	Pioneer	9-22	—	—	99	98	106	1.3	Rps1k	4.3
K-121 RR	Kruger	9-22	—	—	96	104	97	1.0	S	3.9
SOI 140RR	Sands	9-22	—	—	93	97	104	1.4	Rps1k	3.1
SOI 174RR	Sands	9-23	—	—	120	97	99	1.5	Rps1c	4.1
USS1501RR	US Seeds	9-23	—	—	117	103	97	1.5	S	3.7
2152RR	High Cycle	9-23	—	114	115	92	105	1.5	Rps1c	4.2
RS159RR	Renk	9-23	115	116	115	95	101	1.5	Rps1c	3.3
DKB16-51	Dekalb	9-23	—	103	110	102	95	1.6	S	3.9
M-151RR	Mustang	9-23	111	111	109	92	102	1.5	Rps1c	3.9
2213RR	Gold Country	9-23	—	—	109	104	98	1.3	S	4.0
1508RR	Anderson	9-23	—	—	109	103	96	1.5	S	4.0
K-149 RR	KSC/Challenger	9-23	—	—	108	96	101	1.3	Rps1c	4.1
PBR 1620RR	PBR	9-23	—	—	108	98	101	1.7	Rps1c	4.0
BT7150R	Ziller	9-23	—	111	106	98	101	1.5	Rps1c	3.5
W2153RR	Wensman	9-23	—	—	105	101	99	1.5	S	3.7
M-132RR	Mustang	9-23	—	—	105	104	102	1.3	S	4.4
7153	Farm Advantage	9-23	—	—	105	105	97	1.5	S	4.1
GR1545	Midwest Seed	9-23	—	—	103	106	92	1.5	S	4.0
AG1602	Asgrow	9-23	—	103	103	99	100	1.6	Rps1k	3.9
1702RR	Agripro/Garst	9-23	—	—	102	97	99	1.5	Rps1c	4.1
2210RR	Thunder	9-23	—	—	99	103	103	1.0	S	3.8
8137RR	Jung	9-23	—	104	99	109	97	1.3	S	3.9
PBR 0941RR	PBR	9-23	—	—	96	102	97	0.9	Rps1k	3.6
H-1565RR-1	Golden Harvest	9-24	—	—	118	95	101	1.5	Rps1c	3.9
PB-1540RR	Prairie Brand	9-24	—	108	117	102	98	1.5	S	4.3
8151RR	Jung	9-24	—	—	116	105	94	1.5	S	3.5
W2160RR	Wensman	9-24	—	106	113	92	104	1.6	Rps1c	4.0
M-152RR	Mustang	9-24	—	106	111	102	98	1.5	S	3.8
RR X1312	Mallard	9-24	—	—	109	101	99	1.3	S	3.9
DSR-130/RR	Dairyland	9-24	—	102	107	96	101	1.3	S	3.7
PB-1246RR	Prairie Brand	9-24	—	104	105	105	99	1.3	S	4.6
1303-4	Stine	9-24	—	—	103	100	101	1.4	Rps1k	4.5
W2131	Wensman	9-24	—	—	102	100	103	1.3	Rps1k	3.8
K-166 RR	Kruger	9-24	—	—	102	94	102	1.4	Rps1c	4.4
K-133 RR	KSC/Challenger	9-24	—	—	102	105	98	1.3	S	4.3
6016RR	Gold Country	9-24	—	—	101	95	99	1.5	Rps1c	3.9
PBX 1241RR	Sansgaard	9-24	—	—	96	101	101	1.2	Rps1k	4.2
909RR	Dahlman	9-24	—	—	91	97	102	0.9	Rps1k	4.4
S14-G3	NK Brand	9-24	—	—	88	100	98	1.4	Rps1k	4.5

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
K-122 RR	KSC/Challenger	9-25	–	–	107	100	98	1.0	S	3.9
1506-4	Stine	9-25	–	100	105	102	100	1.5	S	3.9
6149RR	Top Farm	9-25	–	97	103	99	98	1.4	Rps1k	3.8
8138RR	Jung	9-25	–	–	97	100	98	1.3	S	3.4
T-3155RR	Thompson	9-25	–	–	96	102	99	1.4	S	4.0
X-1131RR	Dahlco	9-25	–	–	95	102	96	1.3	S	3.8
K-199 RR/STS	KSC/Challenger	9-26	–	–	119	96	103	1.7	S	4.0
K-151-1 RR	Yield King	9-26	–	–	113	106	95	1.3	Rps1k	3.8
2015RR	Dahlman	9-26	–	–	111	100	101	1.5	S	3.8
K-161 RR	Kruger	9-26	–	–	109	102	103	1.4	Rps1k	3.8
T-3148RR	Thompson	9-26	–	–	106	104	96	1.3	Rps1k	4.4
PBX 1521RR	Sansgaard	9-26	–	–	106	105	97	1.5	Rps1k	4.5
DSR-151/RR	Dairyland	9-26	–	–	101	98	98	1.5	S	4.0
187RR Brand	Latham	9-26	–	–	97	100	99	1.5	S	3.2
PS4152	Profiseed	9-26	–	–	95	102	94	1.5	S	4.2
1306-4	Stine	9-26	–	–	94	102	98	1.4	S	4.0
K-151 RR	Yield King	9-27	–	–	114	101	101	1.3	S	4.3
PBX 1561RR	Sansgaard	9-27	–	–	108	85	96	1.5	S	4.0
2115RR	Dahlman	9-27	–	–	103	106	94	1.5	Rps1k	4.4
PBR 1821RR	PBR	9-28	–	–	104	100	103	1.8	S	4.0
K-202-1 RR	Yield King	9-28	–	–	92	100	101	1.8	S	4.0
K-221+RR	Yield King	9-29	–	–	95	100	101	1.9	Rps1k	3.6
X-0051RR	Dahlco	9-30	–	–	90	99	103	0.5	S	4.2
PBX 1701RR	Sansgaard	10-1	–	–	118	102	99	1.7	Rps1k	4.3
DSR-181/RR	Dairyland	10-1	–	–	117	96	105	1.8	S	3.7
PBR 1981RR	PBR	10-2	–	–	114	100	101	1.9	S	3.9
K-181 RR	Kruger	10-4	–	–	103	98	103	1.6	Rps1k	4.2
Mean			48.0 bu/acre	46.0 bu/acre	33.9 bu/acre	33.95%	18.35%			
LSD 20%			2	4	6					

***Performance and characteristics of Roundup Ready soybean varieties, southern zone; Lamberton and Waseca 1999-2001.***

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
RS221RR	Renk	9-28	–	–	89	96	102	2.2	Rps1k	3.7
AG1602	Asgrow	9-29	–	–	104	93	102	1.5	Rps1k	3.8
8155RR	Jung	9-29	–	–	99	101	97	1.5	S	4.6
R1505	Ramy	9-29	–	–	90	100	102	1.5	Rps1k	3.2
K-133RR	KSC/Challenger	9-30	–	–	106	104	99	1.3	S	3.8
1702RR	Agripro	9-30	–	–	105	95	99	1.5	Rps1c	3.7
GL1501RR	Great Lakes	9-30	99	99	102	101	98	1.5	Rps1c	3.7
91B64	Pioneer	9-30	101	98	102	96	102	1.6	Rps1c	4.0
RR1511	Mallard	9-30	–	–	100	102	97	1.5	S	4.3
PBR 1620RR	PBR	9-30	–	–	100	100	104	1.7	Rps1c	3.5
H-1565RR	Golden Harvest	9-30	100	103	100	98	99	1.5	Rps1c	3.7
W2160RR	Wensman	9-30		107	96	91	101	1.6	Rps1c	3.7
91B91	Pioneer	9-30	94	94	91	97	103	1.7	S	3.9
G1710R	Midwest Seed	10-1	–	–	113	93	102	1.7	Rps1c	3.4
9160RR	Dahlco	10-1	–	104	107	99	99	1.6	Rps1c	3.8

**Performance and characteristics of Roundup Ready soybean varieties, southern zone;  
Lamberton and Waseca 1999-2001 (continued).**

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
K-149RR	KSC/Challenger	10-1	—	—	106	97	104	1.3	Rps1c	3.3
92B05	Pioneer	10-1	103	102	103	97	101	1.9	Rps1k	4.7
DKB16-51	Dekalb	10-1	—	—	101	102	96	1.6	S	3.8
2015RR	Dahlman	10-1	—	—	98	99	95	1.5	S	4.0
XR0118B07	Agripro/Garst	10-1	—	—	97	102	97	1.8	S	3.7
BT7150R	Ziller	10-1	—	99	94	93	101	1.5	Rps1c	3.5
RS199RR	Renk	10-2	—	—	104	94	103	1.9	Rps1k	4.2
AG2001	Asgrow	10-2	—	—	99	100	103	2.0	Rps1k	4.1
2115RR	Dahlman	10-2	—	—	95	100	99	1.5	Rps1k	4.0
ADV1951R	Advantage	10-2	—	—	95	98	105	1.9	Rps1k	4.5
GL2109RR	Great Lakes	10-3	—	—	101	102	101	2.1	Rps1c	4.2
S19-V2	NK Brand	10-3	—	—	101	96	99	1.9	Rps1	4.0
DG3193RR	Dyna-Gro	10-3	—	—	98	101	96	1.9	Rps1k	3.8
217RR Brand	Latham	10-3	—	100	97	105	147	1.8	Rps1k	3.4
917RR	Dahlman	10-3	98	94	97	99	99	1.7	S	4.1
2211RR	High Cycle	10-3	—	—	95	102	99	2.1	S	3.4
1822RR	Anderson	10-3	—	98	94	97	97	1.8	Rps1k	3.9
C1828RR	LG Seeds	10-3	—	—	93	99	106	1.8	Rps1k	3.7
547RRN Brand	Latham	10-3	—	—	93	103	104	2.2	Rps1c	4.6
C1821R	Crows	10-3	—	—	92	97	98	1.8	Rps1k	3.7
DKB19-51	Dekalb	10-3	—	—	89	99	100	1.9	Rps1k	3.4
C24009RN	Crows	10-3	—	91	86	99	101	2.3	S	4.0
2000RR	Viking	10-4	107	106	108	101	98	2.0	S	3.8
E1701RR	Top Farm	10-4	—	—	108	106	102	1.7	Rps1k	3.7
1719RR	Anderson	10-4	—	—	107	103	97	1.7	Rps1k	4.6
DST-2129/RR	Dairyland	10-4	—	—	106	99	94	2.0	S	3.7
8176RR	Jung	10-4	—	—	106	101	96	1.7	Rps1k	4.0
1613-4	Stine	10-4	—	—	105	103	98	1.8	Rps1k	4.0
K-161RR	Kruger	10-4	—	—	105	100	99	1.4	Rps1k	4.4
PBX 1941RR	Sansgaard	10-4	—	—	104	99	102	1.9	S	3.9
0200RR	Dahlco	10-4	—	—	103	104	97	2.0	S	3.5
PBR 1821RR	PBR	10-4	—	—	103	94	103	1.8	S	3.8
417RR Brand	Latham	10-4	—	—	101	105	99	2.0	S	4.0
E1971RR	Top Farm	10-4	—	100	101	103	99	1.9	S	3.9
GL1903RR	Great Lakes	10-4	—	—	100	104	98	1.9	S	3.9
GL1709RR	Great Lakes	10-4	—	—	99	101	101	1.7	S	3.5
2103-4	Stine	10-4	—	—	99	99	96	2.1	Rps1k	3.3
PS4172	Profiseed	10-4	—	—	99	101	101	1.7	Rps1k	3.8
PB-1721RR	Prairie Brand	10-4	—	—	98	98	99	1.7	Rps1k	4.5
AG2102	Asgrow	10-4	—	97	96	99	99	2.1	Rps1k	3.5
2018RR	Dahlman	10-4	—	—	96	94	103	1.8	S	4.0
RR1912	Mallard	10-4	—	—	95	95	98	1.9	Rps1k	3.8
BT7191R	Ziller	10-4	—	97	94	101	98	1.9	S	4.0
DG3231NRR	Dyna-Gro	10-4	—	—	93	100	102	2.3	S	4.0
1944CNRR	Viking	10-4	—	—	92	99	106	1.9	S	4.0
DKB20-51	Dekalb	10-4	—	—	88	101	99	2.0	S	3.3
X-0171RR	Dahlco	10-4	—	—	88	101	101	1.7	S	4.0
H-2348RR	Golden Harvest	10-4	—	—	86	99	103	2.3	S	3.9
K-221RR	Kruger	10-5	—	106	113	99	97	2.0	Rps1k	3.4
DSR-221/RR	Dairyland	10-5	—	—	110	105	96	2.2	S	4.1

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
8200RR	Jung	10-5	–	–	109	105	97	2.0	S	3.5
92B38	Pioneer	10-5	–	–	109	104	98	2.3	S	4.2
PBR 2141RR	PBR	10-5	–	–	109	100	101	2.1	Rps1k	4.0
R2005	Ramy	10-5	–	–	108	99	98	2.0	S	4.1
S24-K4	NK Brand	10-5	–	109	106	99	107	2.2	Rps1	4.2
AG2302	Asgrow	10-5	–	108	106	99	98	2.3	Rps1k	3.5
1221RR	Gold Country	10-5	–	–	105	102	99	2.1	S	3.7
K-232-2RR	Kruger	10-5	–	–	105	103	98	2.1	S	3.9
T-3176RR	Thompson	10-5	–	–	105	101	99	1.7	S	4.0
PS4192	Profiseed	10-5	–	–	104	100	101	1.9	S	3.9
DG3223RR	Dyna-Gro	10-5	–	–	104	100	99	2.2	S	4.2
EXP203	Farm Advantage	10-5	–	–	103	104	99	2.0	Rps1k	4.1
2136-4	Stine	10-5	–	–	102	97	103	2.2	Rps1k	4.1
2201RR	High Cycle	10-5	–	–	101	103	95	2.0	S	3.7
T-3217RR	Thompson	10-5	–	–	101	98	101	2.1	Rps1k	4.2
2063RR	Anderson	10-5	99	97	101	100	96	2.0	S	3.9
S20-25	NK Brand	10-5	–	100	100	94	99	2.0	Rps1	4.4
C1901R	Crows	10-5	–	–	99	98	98	1.9	S	3.8
EX467RR	Latham	10-5	–	99	98	102	101	2.1	S	3.5
SOI 2111RR	Sands	10-5	–	–	97	101	97	2.1	Rps1k	3.8
2547RR	Agripro/Garst	10-5	–	–	97	104	98	2.4	S	4.3
T-3213RR	Thompson	10-5	–	100	97	98	101	2.1	S	4.4
E2401RR	Top Farm	10-5	–	–	97	100	101	2.4	S	4.4
EXP 21921R	Ziller	10-5	–	–	96	101	100	2.0	S	3.9
AG2202	Asgrow	10-5	–	–	93	100	98	2.2	Rps1k	3.1
C2150RR	LG Seeds	10-5	–	–	92	102	107	2.1	Rps1k	4.1
USE1702RR	US Seeds	10-5	–	–	92	97	98	1.7	Rps1k	3.6
XR0121Y09	Agripro/Garst	10-5	–	–	91	103	96	2.1	S	4.3
K-221+RR	Yield King	10-6	–	–	110	103	105	1.9	Rps1k	3.3
K-212-2RR	Yield King	10-6	–	–	109	101	102	1.9	Rps1k	4.1
K-252-2RR	Kruger	10-6	–	–	108	103	102	2.2	Rps1k	3.7
M-211RR	Mustang	10-6	–	–	107	102	101	2.1	Rps1k	4.2
8226RR	Jung	10-6	–	101	107	100	98	2.2	S	3.4
6224RR	Gold Country	10-6	–	–	107	100	103	2.4	Rps1k	3.3
SOI 2110RR	Sands	10-6	–	–	107	99	97	2.1	Rps1	4.3
M-241RR	Mustang	10-6	–	–	106	101	97	2.4	S	4.3
DSR-228/RR	Dairyland	10-6	–	108	105	99	100	2.3	S	3.8
1122RR	Gold Country	10-6	–	103	105	98	100	2.2	S	3.6
PB-2131RR	Prairie Brand	10-6	–	–	105	98	95	2.1	Rps1k	4.6
ADV2155	Advantage	10-6	–	–	105	96	99	2.1	Rps1k	3.8
PS4211	Profiseed	10-6	–	–	105	104	103	2.1	S	3.8
W2194RR	Wensman	10-6	–	–	104	100	101	1.9	Rps1k	3.2
XR0123W32	Agripro/Garst	10-6	–	–	104	104	96	2.3	S	3.8
RR X211	Mallard	10-6	–	–	103	101	101	2.1	Rps1k	4.1
XR119P08	Agripro/Garst	10-6	–	–	103	90	116	1.9	Rps1k	3.9
2029RR	Viking	10-6	–	–	102	106	101	1.9	S	3.4
GR2132	Midwest Seed	10-6	–	–	102	102	100	2.1	Rps1k	3.8
BT7211R	Ziller	10-6	–	103	102	100	101	2.1	S	4.2
K-236RR	Yield King	10-6	–	–	102	101	99	2.2	S	3.6
PBR 1981RR	PBR	10-6	–	–	102	99	99	1.9	S	4.2

**Performance and characteristics of Roundup Ready soybean varieties, southern zone;  
Lamberton and Waseca 1999-2001 (continued).**

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean			Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2001	2000-2001	2001	Protein	Oil			
PBX 2297RR	Sansgaard	10-6	—	—	102	103	103	2.2	S	4.3
C2118R	Crows	10-6	—	—	101	101	102	2.1	Rps1k	4.0
DKB23-51	Dekalb	10-6	—	98	101	99	99	2.3	Rps1	3.3
PBX 2117RR	Sansgaard	10-6	—	—	101	104	99	2.2	S	3.7
1918-4	Stine	10-6	—	—	100	100	101	2.4	Rps1k	3.5
RR 2312	Mallard	10-6	—	—	100	99	95	2.3	Rps1k	3.8
RS240RR	Renk	10-6	—	99	98	104	99	2.4	Rps1k	3.6
H-2304RR	Golden Harvest	10-6	—	100	98	97	97	2.3	S	4.5
DSR-241/RR	Dairyland	10-6	101	97	97	103	95	2.4	Rps1k	4.0
EXP215	Farm Advantage	10-6	—	—	97	104	99	2.1	Rps1k	3.8
PB-2397RR	Prairie Brand	10-6	98	98	97	99	103	2.3	S	4.3
2212RR	High Cycle	10-6	—	—	96	98	105	2.1	Rps1k	3.9
SOI 226RR	Sands	10-6	—	103	96	103	97	2.2	S	4.1
K-250RR	Yield King	10-6	—	102	96	100	101	2.3	S	3.8
T-3245RR	Thompson	10-6	—	—	96	100	98	2.4	S	4.5
2169RR	Anderson	10-6	—	—	96	101	98	2.1	Rps1k	4.3
W2215	Wensman	10-6	—	—	93	102	105	2.1	Rps1k	4.2
PBX 2261RR	Sansgaard	10-6	—	—	93	101	98	2.2	Rps1k	4.2
PS4212	Profiseed	10-6	—	—	92	97	101	2.1	Rps1k	4.0
M-201RR	Mustang	10-7	—	—	121	98	99	2.0	Rps1k	3.7
PB-2141RR	Prairie Brand	10-7	—	—	110	102	100	2.1	Rps1k	3.4
EXP212	Farm Advantage	10-7	—	—	109	101	102	2.1	S	4.1
USS2101RR	US Seeds	10-7	—	—	106	99	104	2.1	S	3.5
T-3205RR	Thompson	10-7	—	—	106	98	100	2.0	Rps1k	3.8
457RR Brand	Latham	10-7	—	—	103	104	102	2.3	S	4.5
AG2402	Asgrow	10-7	—	—	101	102	101	2.4	Rps1k	3.7
EX-397RR	Latham	10-7	—	—	100	103	98	2.1	Rps1k	3.6
DG3212RR	Dyna-Gro	10-7	—	—	99	95	99	2.1	S	3.6
W2240RR	Wensman	10-7	—	—	98	105	97	2.4	Rps1k	3.5
GR2485	Midwest Seed	10-7	—	—	96	98	99	2.4	Rps1k	3.8
M-230RR	Mustang	10-7	—	—	95	98	102	2.3	Rps1	4.2
K-255-5RR	KSC/Challenger	10-7	—	—	94	93	102	2.3	Rps1k	4.2
USE2402RR	US Seeds	10-8	—	—	102	105	99	2.4	Rps1k	3.8
E2431RR	Top Farm	10-8	—	—	97	100	98	2.4	Rps1k	4.6
SOI 2459RR	Sands	10-8	—	97	89	106	99	2.4	S	4.1
K-252+RR	KSC/Challenger	10-9	—	—	100	104	99	2.3	Rps1	4.0
Mean			57.1 bu/acre	54.4 bu/acre	59.9 bu/acre	34.4%	18.9%			
LSD 20%			3	4	5					

**Performance and characteristics of soybean-cyst-nematode-infested (Lamberton, Madelia and Waseca) and non-infested (Fairmont, Lamberton, Potsdam and Waseca) sites, 1999-2001.**

Variety	Brand or Originator	Maturity Date	Yield, Percent of Mean						Percent of Mean		Maturity Rating	Phytophthora Gene	Chlorosis Score	SCN Rating
			Infested Sites			Non-Infested Sites								
			99-01	00-01	2001	99-01	00-01	2001	Protein	Oil				
Freeborn	Minn. AES	9-29	101	96	102	95	91	94	100	101	1.6	Rps1	3.8	R
Parker	Minn. AES	9-29	92	88	91	104	100	107	99	104	1.5	Rps1	4.7	S
1802CN	Northstar	10-1	—	—	111	—	—	100	100	103	1.8	S	4.1	R
R-1815CNRR	Ramy	10-1	—	—	96	—	—	93	99	99	1.8	Rps1k	4.2	MR
IA1008	Iowa AES	10-2	98	95	108	101	99	100	98	100	2.0	S	4.3	MS
K-2220+SCN	Kruger	10-2	—	112	107	—	104	109	100	99	2.0	Rps1	3.4	MR
PBR 198N	PBR	10-2	—	—	102	—	—	102	98	101	1.9	Rps1k	4.2	S
1812RR/N	Agripro/Garst	10-2	—	—	100	—	—	89	103	99	1.7	Rps1k	3.9	MR
1922CN	Viking	10-2	—	—	97	—	—	102	100	103	1.9	Rps1k	4.3	S
1902-4	Stine	10-3	—	100	113	—	96	98	103	103	2.2	S	4.2	MR
K-231RR/SCN	KSC/Challenger	10-3	—	—	113	—	—	93	101	103	2.1	Rps1c	4.4	MR
XR0120N24	Agripro/Garst	10-3	—	—	106	—	—	91	102	101	2.0	S	3.7	MR
K-222RR/SCN	Yield King	10-3	—	—	97	—	—	94	101	100	2.0	S	3.9	R
PBR 1911NRR	PBR	10-3	—	—	94	—	—	96	102	98	1.9	Rps1k	4.3	R
K-202RR/SCN	KSC/Challenger	10-3	—	—	92	—	—	90	103	99	1.8	Rps1k	3.6	R
H-1771	Golden Harvest	10-3	—	—	88	—	—	99	99	101	1.7	S	3.4	R
K-2021 SCN	Kruger	10-3	—	—	83	—	—	108	99	100	1.8	Rps1k	3.7	S
547RRN Brand	Latham	10-4	—	—	117	—	—	93	102	102	2.2	Rps1c	3.8	MR
PB-210N	Prairie Brand	10-4	—	112	112	—	109	118	101	101	2.1	Rps1	3.7	MR
K-199RR/SCN	KSC/Challenger	10-4	—	—	108	—	—	97	98	103	1.7	S	3.6	MS
3221NRR	Gold Country	10-4	—	—	106	—	—	99	101	99	2.1	S	4.0	R
T-3206CN	Thompson	10-4	—	—	106	—	—	103	96	102	2.0	Rps1k	4.4	MS
T-3178CR	Thompson	10-4	—	—	105	—	—	96	99	104	1.7	S	3.5	S
DKB20-51	Dekalb	10-4	—	—	103	—	—	93	98	101	2.0	S	3.7	MR
1892-2	Stine	10-4	—	108	98	—	101	107	102	100	1.9	S	3.8	MR
PB-232N	Prairie Brand	10-4	—	—	92	—	—	110	99	102	2.3	Rps1k	3.7	MR
EX-227RRN	Latham	10-4	—	—	92	—	—	99	100	99	1.8	S	4.1	S
X11905RR	Golden Harvest	10-4	—	—	86	—	—	97	99	102	1.9	S	3.8	S
IA2021	Iowa AES	10-4	85	80	84	103	101	107	97	101	2.1	Rps1k	4.3	S
2121NRR	Gold Country	10-5	—	—	115	—	—	94	101	102	2.1	Rps1c	4.1	MR
2302-4	Stine	10-5	—	—	113	—	—	99	101	99	2.3	S	4.6	MR
EXP 0619N	Sands	10-5	—	—	113	—	—	93	101	101	2.0	S	4.1	MR
R-2200CN	Ramy	10-5	—	—	112	—	—	106	98	99	2.2	S	4.0	MR
PB-2220NRR	Prairie Brand	10-5	—	—	111	—	—	106	103	101	2.2	Rps1c	4.4	MR
T-3236CN	Thompson	10-5	112	107	110	99	96	96	100	100	2.3	S	4.2	MR
SOI 2221NRR	Sands	10-5	—	—	108	—	—	98	101	102	2.2	Rps1c	4.3	MS
K-232RR/SCN	Yield King	10-5	—	—	106	—	—	97	99	101	2.1	S	3.7	MS
GL1709RR	Great Lakes	10-5	—	—	105	—	—	103	96	103	1.7	S	3.7	MR
Turner	S.D. AES	10-5	104	100	103	96	94	93	97	102	2.2	S	3.7	MR
PB-1809NRR	Prairie Brand	10-5	—	—	101	—	—	101	99	101	1.8	S	3.7	MR
SOI 1871NRR	Sands	10-5	—	—	99	—	—	93	99	101	1.8	S	3.3	MS
92B62	Pioneer	10-5	—	—	97	—	—	97	103	95	2.6	S	3.9	R
2234CRR	Northstar	10-5	—	99	95	—	93	98	98	102	2.0	S	3.7	S
H-2348RR-2	Golden Harvest	10-5	—	—	93	—	—	101	99	102	2.3	S	3.8	S
K-2323 SCN	KSC/Challenger	10-5	—	—	91	—	—	106	101	98	2.1	S	4.2	S
2112RR/N	Agripro/Garst	10-6	—	—	97	—	—	84	100	97	2.1	S	3.9	MR
IA2036	Iowa AES	10-6	98	96	89	97	96	94	101	95	2.1	S	3.8	MR
K-262RR/SCN	Yield King	10-8	—	—	87	—	—	102	97	98	2.5	Rps1c	4.0	MR
K-2434 SCN	Kruger	10-8	—	—	79	—	—	98	104	96	2.1	Rps1k	3.1	S
K-266RR/SCN	Yield King	10-10	—	—	68	—	—	72	103	94	2.5	S	4.2	MR
Mean			41.7	43.2	34.4	51.6	54.1	49.5	34.2%	18.7%				
			bu/acre	bu/acre	bu/acre	bu/acre	bu/acre	bu/acre						
LSD 20%			2	2	6	2	2	4						

**Performance of special-use soybean varieties, 1999-2001.**

Variety	Releasing Institution	Maturity Date	Yield, Percent of Mean			Percent of Mean	
			1999-2001	000-2001	2001	Protein	Oil
<b>Northern Zone; Crookston, Moorhead and Shelly</b>							
Jim	N.D. AES	9-15	101	104	107	101	99
MN0201	Minn. AES	9-18	—	—	98	106	98
MN0302	Minn. AES	9-18	—	—	98	101	98
Agassiz	Minn. AES	9-19	104	103	105	102	103
Norpro	N.D. AES	9-21	—	—	103	101	102
UM3	Minn. AES	9-24	103	98	113	101	101
Danatto	N.D. AES	9-25	97	98	85	97	99
Mean			30.0 bu/acre	28.9 bu/acre	33.6 bu/acre	34.1%	18.9%
LSD 20%			3	3	6		
<b>Central Zone; Becker, Morris and Rosemount</b>							
		Date	1999-2001	2000-2001	2001	Protein	Oil
MN0301	Minn. AES	9-13	90	91	88	95	106
Proto	Minn. AES	9-13	—	89	88	107	93
Danatto	N.D. AES	9-14	—	76	79	98	98
Norpro	N.D. AES	9-14	—	—	92	99	104
Minnatto	Minn. AES	9-16	78	83	89	100	98
Lambert	Minn. AES	9-19	103	107	103	97	105
Kato	Minn. AES	9-21	111	110	111	104	96
Surge	Minn. & S.D. AES	9-21	120	123	129	100	103
Toyopro	Minn. AES	9-22	93	93	90	108	92
MN0901	Minn. AES	9-23	107	110	104	96	104
Parker	Minn. AES	9-27	119	119	127	97	102
Mean			43.2 bu/acre	42.2 bu/acre	40.8 bu/acre	35.8%	18.4%
LSD 20%			2	5	6		
<b>Southern Zone, 1998-2000; Lamberton and Waseca</b>							
		Date	1998-2000	1999-2000	2000	Protein	Oil
Parker	Minn. AES	9-17	111	113	111	95	109
IA1009	Iowa AES	9-18	—	117	113	95	103
IA1006	Iowa AES	9-19	118	119	118	95	103
IA1005	Iowa AES	9-19	115	115	111	98	103
IA1007	Iowa AES	9-19	104	99	97	98	103
IA1008	Iowa AES	9-20	—	122	113	98	103
IA2017	Iowa AES	9-22	100	97	109	101	103
IA2041	Iowa AES	9-22	—	106	105	106	97
IA2012	Iowa AES	9-22	106	101	103	98	103
IA2011	Iowa AES	9-22	106	97	101	98	103
IA2042	Iowa AES	9-22	—	101	101	101	97
IA2016	Iowa AES	9-22	100	99	97	103	97
Vinton 81	Iowa AES	9-22	95	95	93	103	97
IA2033	Iowa AES	9-23	98	99	99	101	97
IA2032	Iowa AES	9-23	100	95	97	101	103
IA2027	Iowa AES	9-23	95	92	97	98	103
IA2024	Iowa AES	9-23	82	83	85	103	97
IA2034	Iowa AES	9-24	113	106	103	103	97
IA2020	Iowa AES	9-24	100	95	97	101	97
IA2030	Iowa AES	9-24	98	95	95	101	97
IA2028	Iowa AES	9-24	100	95	93	98	103
IA2035	Iowa AES	9-24	84	83	87	103	97
IA2029	Iowa AES	9-24	91	90	87	101	97
IA2040	Iowa AES	9-25	—	108	109	101	103
IA2025	Iowa AES	9-25	98	92	95	103	97
IA2023	Iowa AES	9-25	86	86	87	103	91
Mean			45.1 bu/acre	44.4 bu/acre	48.5 bu/acre	36.8%	16.5%
LSD 20%			2	4	6		



**Characteristics of special-use soybean varieties, 2001.**

Variety	Releasing Institution	Maturity Rating	Special Characteristics	Hilum Color	Phytophthora Gene	Chlorosis Score	Seeds/Pound
<b>Northern Zone; Crookston, Moorhead and Shelly</b>							
Jim	N.D. AES	00.8	General Purpose	Yellow	S	4.9	2,910
MN0201	Minn. AES	0.2	Higher Protein	Yellow	Rps1	3.3	3,305
MN0302	Minn. AES	0.3	General Purpose	Buff	Rps1k	4.2	3,492
Agassiz	Minn. AES	0.0	General Purpose	Buff	Rps1	4.2	3,439
Norpro	N.D. AES	0.4	Tofu	Yellow	S	3.5	3,027
UM3	Minn. AES	00.9	Small Seed	Yellow	Rps1	3.9	7,695
Danatto	N.D. AES	0.4	Small Seed	Yellow	S	3.7	5,747
<b>Central Zone; Becker, Morris and Rosemount</b>							
MN0301	Minn. AES	0.3	General Purpose	Yellow	Rps1	4.3	3,088
Proto	Minn. AES	0.5	High Protein	Yellow	S	4.7	2,594
Danatto	N.D. AES	0.4	Small Seed	Yellow	S	3.7	4,586
Norpro	N.D. AES	0.4	Tofu	Yellow	S	3.5	2,702
Minnatto	Minn. AES	0.9	Small Seed	Yellow	Rps1	4.8	4,729
Lambert	Minn. AES	0.7	General Purpose	Buff	Rps1	4.3	3,363
Kato	Minn. AES	1.3	Large Seed, Higher Protein	Black	Rps1	4.0	2,152
Surge	Minn. & S.D. AES	0.9	Higher Protein	Yellow	Rps1	4.2	2,236
Toyopro	Minn. AES	0.9	High Protein	Yellow	S	4.5	3,027
MN0901	Minn. AES	0.9	General Purpose	Black	Rps1	4.8	3,007
Parker	Minn. AES	1.5	General Purpose	Buff	Rps1	4.5	2,536
<b>Southern Zone; 2000, Lambertson and Waseca</b>							
Parker	Minn. AES	1.6	General Purpose	Buff	Rps1	4.5	2,365
IA1009	Iowa AES	1.9	General Purpose	Yellow	S	4.5	3,152
IA1006	Iowa AES	1.6	General Purpose	Black	S	4.5	2,580
IA1005	Iowa AES	1.9	Large Seed, High Protein	Yellow	S	4.0	2,281
IA1007	Iowa AES	1.9	Large Seed	Yellow	S	4.5	1,713
IA1008	Iowa AES	2.0	General Purpose	Yellow	S	4.9	2,316
IA2017	Iowa AES	2.2	Large Seed, High Protein	Yellow	S	4.5	2,162
IA2041	Iowa AES	2.1	Large Seed, High Protein	Yellow	S	4.5	2,162
IA2012	Iowa AES	2.2	Large Seed	Yellow	S	4.5	1,773
IA2011	Iowa AES	2.2	Lacks Lipoxygenase 2	Yellow	S	4.5	2,248
IA2042	Iowa AES	2.1	Large Seed, High Protein	Yellow	S	4.5	2,027
IA2016	Iowa AES	2.2	Large Seed, High Protein	Yellow	S	5.0	1,957
Vinton 81	Iowa AES	2.0	Large Seed, High Protein	Yellow	Rps1c	4.7	1,892
IA2033	Iowa AES	2.4	Lipoxygenase Free	Yellow	S	5.0	1,948
IA2032	Iowa AES	2.5	Lipoxygenase Free	Yellow	S	4.5	1,838
IA2027	Iowa AES	2.4	Lipoxygenase Free	Yellow	S	4.5	1,983
IA2024	Iowa AES	2.5	Small Seed	Yellow	S	4.0	6,306
IA2034	Iowa AES	2.5	Large Seed, High Protein	Yellow	S	4.0	2,112
IA2020	Iowa AES	2.3	Large Seed, High Protein	Yellow	S	4.5	1,924
IA2030	Iowa AES	2.3	Lipoxygenase Free	Yellow	S	4.5	2,000
IA2028	Iowa AES	2.4	Lipoxygenase Free	Yellow	S	4.5	1,991
IA2035	Iowa AES	2.4	Small Seed	Yellow	S	4.5	6,053
IA2029	Iowa AES	2.4	Lipoxygenase Free	Yellow	S	4.5	2,131
IA2040	Iowa AES	2.4	Large Seed, High Protein	Yellow	S	4.5	1,571
IA2025	Iowa AES	2.4	Lipoxygenase Free	Yellow	S	4.5	2,064
IA2023	Iowa AES	2.4	Small Seed	Yellow	S	5.0	5,821

**Characteristics of publicly developed soybean varieties entered in 2001 tests.**

Variety	Releasing Institution	Maturity Rating	Phytophthora Gene	BSR Reaction	SCN Reaction	Chlorosis Score
Jim	N.D. AES	00.7	S	S	S	3.4
McCall	Minn. AES	00.7	S	S	S	3.7
Glacier	Minn. AES	00.8	Rps6	S	S	3.3
Walsh	N.D. AES	00.9	Rps6	S	S	3.7
Agassiz	Minn. AES	0.0	Rps1	S	S	3.3
Traill	N.D. AES	0.0	S	S	S	2.9
Barnes	N.D. AES	0.2	Rps6	S	S	3.5
MN0201	Minn. AES	0.2	Rps1	R	S	2.9
MN0301	Minn. AES	0.3	Rps1	S	S	3.3
MN0302	Minn. AES	0.3	Rps1k	S	S	3.1
Council	N.D. AES	0.5	Rps1	S	S	3.6
Lambert	Minn. AES	0.7	Rps1	S	S	3.4
Sargent	N.D. AES	0.8	Rps6	S	S	3.4
MN0901	Minn. AES	0.9	Rps1	S	S	4.0
MN0902CN	Minn. AES	0.9	Rps1	R	R	3.4
Surge	S.D. + Minn. AES	0.9	Rps1	S	S	3.4
MN1301	Minn. AES	1.3	Rps1c	S	S	3.2
Kato	Minn. AES	1.3	Rps1	S	S	3.2
MN1302	Minn. AES	1.3	Rps1k	R	S	3.0
MN1401	Minn. AES	1.4	Rps1	S	S	3.2
Parker	Minn. AES	1.5	Rps1	S	S	3.7
Freeborn	Minn. AES	1.6	Rps1	R	R	3.3
IA1006	Iowa AES	1.6	S	R	S	3.8
MN1801	Minn. AES	1.8	Rps1c	S	S	3.8
Sturdy	Minn. AES	2.0	Rps1	S	S	3.7
IA1008	Iowa AES	2.0	S	S	R	4.0
IA2008R	Iowa AES	2.1	Rps1k	R	S	3.4
IA2021	Iowa AES	2.1	Rps1k	S	S	4.2
IA2036	Iowa AES	2.1	S	S	R	4.5
IA2050	Iowa AES	2.1	S	S	S	3.8
Turner	S.D. AES	2.2	S	S	R	4.0
IA2052	Iowa AES	2.3	S	R	S	4.0