



Soybean Maturity Zones.

Minnesota Agricultural Experiment Station scientists conduct performance tests of adapted public and private soybean varieties annually. Companies are charged a fee for each variety they enter and these fees are used to partially cover the costs of conducting these tests. A stipulation 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 74 to 91 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. All tests were planted between May 1 and May 25 at planting rates of 160,000 plants/acre. Preplant and postemergence herbicides were used as necessary for good weed control. Row spacings were 30 inches at Becker and Fairmont and 10 inches at all other sites. Plot combines were used to harvest the yield from all plots

Tables on pages 79 to 85 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 the labeled rates of Roundup®.

Tables on pages 85-86 provides results from the special performance tests of soybean cyst-nematode-resistant varieties in “infested” field sites near Lam-

berton, Waseca, Fairmont and Waltham and “noninfested” field sites near Fairmont, Lamberton, and Waseca. Planting techniques were the same as the regular performance tests.

Tables on pages 86-89 provide results from variety tests conducted in white-mold-infested field sites near

Olivia and Lewisville. Tables on page 79 provide results of the very early (northern Minnesota) and special southeastern Minnesota public variety tests. These locations were added to the program to provide data for environments not represented by the other location tests.

The table on pages 89-91 provides results from special-use soybean variety tests at several locations. These tests were added to provide reliable data for growers interested in producing these types of soybeans, typically grown under contract.

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

Relative Maturity and Calendar Dates of Maturity

Soybeans respond to changing day length, so the actual calendar date of maturity is affected by latitude. Each soybean 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. Maturity date is determined visually by noting the actual date when 95 percent of the pods show their genetically programmed mature color. These dates for 2000 are provided in the tables. Maturity dates in 2000 after September 25 are estimates because widespread frost occurred. Harvest dates are typically 7 to 14 days later, depending upon drying conditions.

Relative maturity ratings for each variety are provided in the tables. 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 to 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. Hendricks, 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, provided by their owners, 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 2000 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.

LSD values associated with the data in these tables are measures of variability within the trials. 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 2000. Comparing chlorosis scores of varieties permits 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.

Chlorosis symptoms for all varieties in the 2000 tests were much more severe than in previous years. Specific scores and evaluation dates from the 2000 test at both locations are provided on the web at producer.mnsoybean.org.

Some universities and companies use word descriptions rather than numerical scores 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 on mature seed using near infrared reflectance analysis equipment. The table values are for the 2000 season only, absolute values of protein and oil can vary from year to year. 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:
 $\frac{\text{* price of meal } \$/\text{ton}}{2,000} = \text{\$/pound}$

Phytophthora

Phytophthora root rot can cause significant yield reductions if susceptible varieties are planted in poorly drained, in-

festated 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. Data tables in this report indicate which Phytophthora gene or genes is/are present in each variety. The "Genes for resistance" chart below shows which 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. Several races of this pest are known to occur in Minnesota and both the area of infestation and numbers of nematodes per unit of soil appear to be increasing. 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, and resistant varieties planted in infested and non-infested fields in southern Minnesota are provided on pages 85-86.

Additional information on procedures for testing your fields for SCN can be obtained from your county extension office or the Soybean Nematology Laboratory 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.mnsoybean.org.

White Mold

White mold, also known as Sclerotinia stem rot, has developed with increasing frequency in Minnesota soybean fields. Planting less-susceptible varieties and planting in wider row spacings and 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 dependent on 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 plant varieties that consistently show less white mold in several years of testing.

In 2000, adapted soybean varieties were evaluated under field conditions in the three soybean maturity zones in Minnesota; southern, central, and northern. Disease development was promoted by irrigation, inoculation of fields with sclerotia, and rotation with a crop susceptible to white mold. Significant white mold developed at four of the seven locations.

Tests were conducted by J. E. Kurle, Department of Plant Pathology, University of Minnesota. Data collected consisted of ratings of white mold incidence (percentage of plants infected), lodging severity, and yield. Varieties were ranked in order of increasing susceptibility to white mold; the data are presented in tables on pages 86 to 89.

Additional white mold management information is available from Minnesota Soybean Research and Promotion Council, 360 Pierce Avenue, Suite 110, North Mankato, MN 56003, 1-888-896-9678, www.mnsoybean.org.

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	
Rps1	■	■																										
Rps1b	■																					■	■					
Rps1c	■	■	■																									
Rps1k	■	■	■	■																								
Rps3	■	■	■	■	■																							
Rps4	■	■	■	■	■	■																						
Rps6	■	■	■	■	■	■	■																					

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, LO292, 1174WM and L1309CN 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:

Interest in producing soybeans with special characteristics important to specialty food product manufacturers is increasing. While in the past soybean scientists developed some of these special-use varieties as general releases, more recently some of them have been released under exclusive contracts to specific companies who will contract with growers for their production.

Tables on pages 89 to 91 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

Information about the publicly developed varieties entered in 2000 tests is presented in tables on page 91.

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

Sources of privately developed varieties entered in 2000 tests.

- Agri-Tel Grain**, (Agri-Tel), Box 808, Beausejour, Manitoba, R0E0C0, Canada
AgriPro Seeds (AgriPro), P.O. Box 250, Brookings, SD 57006-0250
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
CroPlan Genetics (CroPlan), P.O. Box 64406 MS7455, St. Paul, MN 55164
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- 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), 3570 Highway H, P.O. Box 958, West Bend, WI 53095
Dennis Ewing Farm Seed (Yield King), 6131 North Fork Road, Ames, IA 50010
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- Farm Advantage**, (Farm Advantage), 1275 Hwy 69, Belmond, IA 50421
Garst Seed Co. (Garst), 2369 330th Street, Box 500, Slater, IA 50244
Gold Country Seed, Inc. (Gold Country), 16506 Hwy. 15 N, Hutchinson, MN 55350
Golden Harvest Seeds (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), Division of W.G. Thompson & Sons, LTD., P.O. Box 130, 145 Marlborough St., Blenheim, Ontario N0P1A0, Canada
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- Hy-Vigor Seeds**, (Hy-Vigor), R.R.1, Paullina, IA 51046
Jung Seed Genetics (Jung), 341 S. High St., Randolph, WI 53956
Kaltenberg Seeds (Kaltenberg), 5506 State Hwy 19, Waunakee, WI 53597
Kruger Seed Company (Kruger), Highway 20 East, Box A, Dike, IA 50624
KSC/Challenger (KSC/Challenger), Box A, Dike, IA 50624
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- 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
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- Monsanto Global Seed Group**, (Dekalb, Asgrow), 3100 Sycamore Road, DeKalb, IL 60115
Mycogen Seeds, (Mycogen, Mycogen/Atlas), 9330 Zionsville Rd, Indianapolis, IN 46268
Mustang Seed, (Mustang), Box 466, Madison, SD 57042
NorthStar Genetics (Northstar), Box 40, Wanamingo, MN 55983
Novartis Seeds (NK), 7500 Olson Memorial Hwy, Golden Valley, MN
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- Pioneer Hi-Bred International, Inc.** (Pioneer), 130 SE Willmar Ave., Willmar, MN 56201
Prairie Brand Research (PBR), 15 X Ave., Story City, IA 50248
Prairie Brand Seed Company (Prairie Brand), 15 X Ave., Story City, IA 50248
Profiseed, Inc. (Profiseed), 1691 Highway 65, Hampton, IA 50441
Ramy International, Ltd. (Ramy), 1329 N. Riverfront Drive, Mankato, MN
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- Renk Seed Co.**, (Renk) 6800 Wilburn Rd., Sun Prairie, WI 53590
Sand Seed Service, Inc. (Sands), 4765 Highway 143, Marcus, IA 51035
Sansgaard Seed Farms, Inc. (Sansgaard), 15 X Avenue, Story City, IA 50248
Stine Seed Co., (Stine), 2225 Laredo Trail, Adel, IA 50003
Stine Seed Farm, (Stine), 2225 Laredo Trail, Adel, IA 50003
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- Terning Seeds**, (Terning), 15365 60th St. SW, Cokato, MN 55321
Thompson Agronomics, Inc. (Thompson), 40321 130th Avenue, Leland, IA 50453
Thompson Seeds, Inc. (Thompson), 40321 130th Ave., Leland, IA 50453
Top Farm Hybrids (Top Farm), P.O. Box 850, Cokato, MN 55321
Trelay Seeds (Trelay, High Cycle), 11623 State Road 80, Livingston, WI 53544
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- UAP Seeds** (UAP), Box 55, Kasota, MN 56050
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

**Performance and characteristics of public and private soybean varieties, northern zone;
Crookston, Moorhead and Shelly, 1998-2000.**

Variety	Brand or Originator	Mature Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1997-99	1998-99	1999	Protein	Oil			
Jim	N.D. AES	9-7	39	38	30	34	18	00.7	S	4.0
90A07	Pioneer	9-7	—	—	28	33	19	00.7	S	4.0
Daksoy	N.D. AES	9-7	32	32	26	33	18	00.6	S	4.5
McCall	Minn. AES	9-7	30	29	23	33	19	00.7	S	4.0
Accord	Agri-Tel	9-9	—	—	34	33	19	00.7	S	5.0
Glacier	Minn. AES	9-10	38	45	36	34	18	00.8	Rps6	4.0
5007	Mycogen	9-11	—	41	33	32	19	00.6	S	4.0
S34	Mycogen	9-13	—	—	35	32	18	00.9	S	4.0
R0725CH	Ramy	9-13	—	—	35	32	19	00.7	S	4.0
Agassiz	Minn. AES	9-14	31	36	29	33	18	0.0	Rps1	4.0
R0800	Ramy	9-15	—	—	43	32	18	00.8	S	5.0
0005	Northstar	9-15	—	—	42	32	18	0.1	S	5.0
0002	Northstar	9-15	—	—	35	32	18	00	S	4.0
Traill	N.D. AES	9-15	40	44	33	35	17	0.0	Rps1	3.5
L0292	CroPlan	9-17	—	53	49	32	19	0.2	Rps1k	4.5
013	Mycogen	9-17	36	42	41	33	18	0.1	Rps1	4.5
MN0301	Minn. AES	9-17	39	44	41	32	18	0.3	Rps1	4.0
W3030	Wensman	9-18	—	—	45	32	18	0.3	S	4.5
90B43	Pioneer	9-18	42	49	43	32	18	0.4	Rps1	4.0
0136-0	Stine	9-18	—	—	41	33	18	0.1	S	4.5
040	Mycogen	9-19	—	—	47	31	18	0.4	S	5.0
0280	Stine	9-19	—	—	47	32	18	0.2	S	4.5
Ex0300-3	Stine	9-19	—	—	47	32	18	0.5	Rps1c	4.5
6038	Topfarm	9-19	—	—	43	32	18	0.3	S	4.5
M-0700	Mustang	9-20	39	43	41	32	18	0.7	Rps1	5.0
Council	N.D. AES	9-20	40	47	41	33	18	0.5	Rps1	4.0
DSR-065	Dairyland	9-23	—	—	46	31	19	0.7	S	4.5
Lambert	Minn. AES	9-24	41	46	42	34	18	0.7	Rps1	4.5
W3070	Wensman	9-24	—	—	41	33	18	0.7	S	5.0
DSR-090	Dairyland	9-26	39	46	45	34	17	0.9	S	4.0
M-0970	Mustang	9-27	41	45	46	32	18	0.9	Rps1c	4.5
PB-087	Prairie Brand	9-28	—	41	48	33	17	0.8	S	4.5
M-0958	Mustang	9-28	38	42	46	34	17	0.9	S	4.5
PB-098	Prairie Brand	9-29	38	42	45	34	17	0.9	S	4.0
LSD 20%			1	1	2					

**Performance and characteristics of public and private soybean varieties, central zone;
Becker, Morris and Rosemount, 1998-2000.**

Variety	Brand or Originator	Mature Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1997-99	1998-99	1999	Protein	Oil			
Ex9117	Thompson	9-8	—	—	43	34	18	1.4	S	4.0
90B43	Pioneer	9-9	—	56	49	34	18	0.4	Rps1c	3.5
Barnes	N.D. AES	9-9	—	—	49	35	18	0.2	Rps6	4.5
525	Northstar	9-10	—	—	53	36	17	0.5	S	4.0
MN0301	Minn. AES	9-10	52	50	50	34	18	0.3	Rps1	4.0
9071	Pioneer	9-12	59	57	54	33	18	0.7	Rps1c	4.0
91B01	Pioneer	9-13	60	59	56	34	18	1.0	Rps1k	4.5
MN0901	Minn. AES	9-13	60	59	56	34	18	0.9	Rps1	4.5
Exp21175	Ziller	9-13	61	58	55	36	17	1.1	S	4.5
MN0902CN	Minn. AES	9-13	—	54	51	36	17	0.9	S	4.0
R1100	Ramy	9-14	—	65	61	33	18	1.1	S	3.5
Surge	Minn. & S.D. AES	9-14	62	60	57	36	17	0.9	Rps1	4.0

Variety	Brand or Originator	Mature Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1997-99	1998-99	1999	Protein	Oil			
Lambert	Minn. AES	9-14	57	57	55	35	18	0.7	Rps1	4.5
W3100	Wensman	9-15	—	—	62	36	17	1.0	S	4.0
933	Northstar	9-15	—	62	61	36	17	0.9	S	4.0
L0983	CroPlan	9-15	—	—	60	36	17	0.9	S	4.5
6077	Topfarm	9-15	—	60	59	33	18	0.7	Rps1c	4.0
K-0999A	Yield King	9-15	—	—	59	35	18	0.8	S	4.0
K-0999+	KSC/Challenger	9-15	64	62	58	36	17	1.2	S	4.0
910	Mallard	9-15	—	61	58	34	18	1.0	S	4.0
9082	Dahlco	9-15	—	—	53	35	17	0.8	Rps1k	4.0
KB090	Kaltenberg	9-16	—	65	62	36	17	0.9	S	4.0
USS120	US Seeds	9-16	—	—	59	35	17	1.2	S	4.0
PB-1221	Prairie Brand	9-16	—	—	58	35	17	1.2	S	4.0
KB111	Kaltenberg	9-16	—	—	57	36	17	1.1	S	4.0
G0906	Midwest Seed	9-16	—	—	57	36	17	0.9	S	4.0
K-0808	Yield King	9-16	—	—	57	34	18	0.7	S	4.0
RS099S	Renk	9-16	—	57	54	35	18	0.9	S	4.0
K-1415	Yield King	9-17	—	63	62	35	17	1.4	Rps1	4.0
SOI 111	Sands	9-17	—	—	61	35	17	1.1	Rps1k	4.0
DKB13-81	Dekalb	9-17	—	—	60	36	17	1.3	S	4.0
5121	Mycogen	9-17	64	63	60	35	17	1.2	S	4.0
E1011	Topfarm	9-17	—	—	60	33	18	1.1	Rps1c	3.5
Kato	Minn. AES	9-17	57	56	57	38	16	1.3	Rps1	4.0
MN1401	Minn. AES	9-17	58	57	57	36	17	1.4	Rps1	4.0
9122	Dahlco	9-17	—	—	55	36	17	1.2	Rps1k	4.0
140 Brand	Latham	9-18	—	67	64	36	17	1.4	S	4.0
91B53	Pioneer	9-18	—	65	61	36	17	1.5	S	4.0
5155	Mycogen	9-18	—	—	59	35	17	1.5	S	4.0
SOI144	Sands	9-19	—	63	65	35	17	1.4	S	4.0
W3148	Wensman	9-19	70	67	65	36	17	1.4	S	4.0
1142	Jung	9-19	—	65	63	36	17	1.4	S	4.0
C9148	LG Seeds	9-19	—	65	63	36	17	1.4	S	4.0
X1014	Mallard	9-19	—	—	63	36	17	1.4	S	4.0
M-1172	Mustang	9-19	—	—	63	36	17	1.7	S	4.5
PB-146	Prairie Brand	9-19	69	66	63	36	17	1.4	S	4.5
Ex8137	Thompson	9-19	—	64	63	36	17	1.3	S	4.5
K-1777+	Kruger	9-19	—	—	62	35	17	1.6	S	4.5
Exp1499	Sands	9-19	—	—	62	35	17	1.7	Rps1	4.0
1386-6	Stine	9-19	68	66	62	36	17	1.3	S	4.0
TS2171	Terning	9-19	—	—	61	35	17	1.5	Rps1c	4.5
PB-1421	Prairie Brand	9-19	—	—	60	35	17	1.4	Rps1	4.0
X016	NK Brand	9-19	—	—	54	34	18	1.5	S	4.5
MN1301	Minn. AES	9-19	59	58	54	36	17	1.3	Rps1c	4.0
1700-6	Stine	9-20	—	—	69	35	17	1.6	S	4.0
T-3144	Thompson	9-20	—	—	66	36	17	1.4	S	4.0
DST-1324	Dairyland	9-20	—	—	64	33	18	1.8	S	5.0
M-1138	Mustang	9-20	68	66	64	36	17	1.3	S	4.0
PS16	Profiseed	9-20	—	—	64	36	17	1.5	S	4.5
KB170	Kaltenberg	9-20	—	—	63	35	17	1.7	S	4.5
K-1333	Kruger	9-20	67	66	62	36	17	1.3	S	4.0
PBR-15X	PBR	9-20	—	—	62	35	17	1.5	S	4.5
PBR-174	PBR	9-20	—	—	62	36	17	1.7	S	4.5

**Performance and characteristics of public and private soybean varieties, central zone;
Becker, Morris and Rosemount, 1998-2000 (continued).**

Variety	Brand or Originator	Mature Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1997-99	1998-99	1999	Protein	Oil			
USS159	US Seeds	9-20	—	—	62	36	17	1.5	S	4.0
D155	Garst	9-20	—	—	61	35	17	1.4	Rps1k	4.5
PB-184	Prairie Brand	9-20	—	—	59	36	17	1.8	Rps1k	4.5
K-1707	Kruger	9-21	—	—	69	35	17	1.5	S	4.5
K-1919	Kruger	9-21	—	—	66	35	17	1.7	S	4.5
K-1991	KSC/Challenger	9-21	—	—	66	35	17	1.9	S	4.5
DSR-180/STS	Dairyland	9-21	67	65	65	36	17	1.8	S	4.5
2500-7	Stine	9-21	—	—	64	36	17	1.5	S	5.0
RS1498	Renk	9-21	—	68	63	36	17	1.4	S	4.5
9152	Dahlco	9-21	—	—	61	36	17	1.5	S	4.0
Parker	Minn. AES	9-21	63	64	61	35	17	1.5	Rps1	4.5
A1923	Asgrow	9-21	—	—	60	35	17	1.9	Rps1k	4.5
L1505	CroPlan	9-21	—	—	60	36	17	1.5	S	4.5
Freeborn	Minn. AES	9-21	59	58	56	37	17	1.6	Rps1	4.0
PBR-180	PBR	9-22	—	—	62	36	17	1.8	S	5.0
PBR-18X	PBR	9-22	—	—	60	36	17	1.8	Rps1k	4.5
CX166	Dekalb	9-22	—	—	58	35	17	1.6	S	4.5
K-2125	KSC/Challenger	9-23	67	69	65	35	17	1.8	S	4.5
TS2110	Terning	9-23	—	—	53	37	16	1.1	Rps1c	4.5
K-1943+	Yield King	9-24	71	69	68	36	17	1.8	S	4.5
K-1777	KSC/Challenger	9-24	71	69	65	34	18	1.7	S	4.5
LSD 20%			1	1	2					

**Performance and characteristics of public and private soybean varieties, southern zone;
Waseca, Lamberton and Fairmont, 1998-2000.**

Variety	Brand or Originator	Mature Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1997-99	1998-99	1999	Protein	Oil			
TS2210	Terning	9-13	—	—	51	33	18	2.1	Rps1k	3.5
Kato	Minn. AES	9-13	47	44	45	37	17	1.3	Rps1	4.0
DKB13-81	Dekalb	9-13	—	—	43	36	18	1.3	S	4.0
MN1401	Minn. AES	9-15	50	46	48	36	17	1.4	Rps1	4.0
MN1301	Minn. AES	9-15	49	47	46	36	17	1.3	Rps1c	3.5
K-1707	KSC/Challenger	9-17	—	—	52	34	18	1.6	S	4.5
Parker	Minn. AES	9-17	51	50	51	35	18	1.5	Rps1	4.5
USS159	US Seeds	9-18	—	—	56	35	18	1.5	S	4.0
5191	Mycogen	9-18	—	—	56	34	18	1.9	Rps1k	4.0
K-1919	Kruger	9-18	—	—	53	35	18	1.7	S	4.0
E1021	Topfarm	9-18	—	—	53	35	18	1.7	Rps1c	4.5
Ex7217	Thompson	9-18	—	—	52	34	18	1.8	S	5.0
9152	Dahlco	9-18	—	—	52	35	18	1.5	S	4.0
FA1545	Farm Advantage	9-18	—	—	51	35	18	1.5	S	4.0
K-1991	KSC/Challenger	9-18	—	—	51	35	18	1.7	S	4.5
91B53	Pioneer	9-18	—	54	51	35	18	1.5	S	4.0
K-2012	KSC/Challenger	9-18	—	—	51	35	17	1.8	S	4.5
X1017	Mallard	9-18	—	—	49	35	18	1.7	S	4.5
170	Trelay	9-18	—	—	49	35	18	1.7	S	4.5
1175	Jung	9-18	—	—	49	35	18	1.7	S	4.5
92B23	Pioneer	9-18	54	50	49	34	18	2.2	Rps1k	4.5
X9919A25	Garst	9-18	—	—	49	34	18	1.9	S	4.0
X5117	Gold Country	9-18	—	—	49	35	18	1.7	Rps1c	4.5

Variety	Brand or Originator	Mature Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1997-99	1998-99	1999	Protein	Oil			
GI1777	Great Lakes	9-18	—	—	49	35	18	1.7	S	4.5
FA1734	Farm Advantage	9-18	—	—	48	35	18	1.7	S	4.0
M-1182	Mustang	9-18	—	—	46	36	17	1.8	Rps1k	4.5
Freeborn	Minn. AES	9-18	49	46	42	36	17	1.6	Rps1	4.0
IA2050	Iowa AES	9-19	—	—	55	34	18	2.1	S	4.5
AP1995	AgriPro	9-19	—	—	53	33	18	1.9	Rps1c	4.0
AP1755	AgriPro	9-19	54	51	52	35	17	1.7	Rps1c	4.5
1771	Viking	9-19	—	—	52	35	18	1.7	S	4.5
Exp2092	Sands	9-19	—	—	52	34	18	2.0	S	5.0
MN1801	Minn. AES	9-19	54	52	52	36	17	1.8	Rps1c	4.5
RS1896	Renk	9-19	—	—	52	35	17	1.8	S	5.0
E1621	Topfarm	9-19	—	—	51	36	17	1.5	Rps1k	4.5
K-1777+	Kruger	9-19	—	—	51	35	18	1.6	S	4.5
IA1006	Iowa AES	9-19	53	50	51	35	18	1.6	Rps1c	4.5
PB-194	Prairie Brand	9-19	55	52	51	35	18	1.9	S	4.5
1700-6	Stine	9-19	—	—	51	35	18	1.6	S	4.0
W3170	Wensman	9-19	—	—	50	35	18	1.7	S	4.5
A1923	Asgrow	9-19	—	—	50	34	18	1.9	Rps1k	4.5
Ex-290	Latham	9-19	—	—	49	35	17	1.7	S	4.5
PSX18	Profiseed	9-19	—	—	49	35	17	1.8	Rps1k	4.5
X9919P93	Garst	9-19	—	—	49	35	18	1.9	Rps1k	4.0
FA2065	Farm Advantage	9-19	—	—	48	35	18	1.9	S	4.5
Hardin 91	Iowa AES	9-19	53	50	47	35	17	2.0	Rps1k	5.0
CX166	Dekalb	9-19	—	51	47	35	18	1.6	S	4.5
1198A	Jung	9-19	—	—	47	35	17	1.9	S	4.5
Ex9242	Thompson	9-20	—	—	54	34	18	2.0	S	5.0
PBR-180	PBR	9-20	—	—	53	35	17	1.8	S	4.5
1070	Mallard	9-20	—	52	53	35	17	1.9	S	4.5
Ex8148	Thompson	9-20	—	—	52	34	18	1.9	S	4.0
KB208	Kaltenberg	9-20	—	—	52	35	18	2.0	S	4.5
Exp40815	Ziller	9-20	—	—	52	35	17	1.9	S	4.5
PS2209	Profiseed	9-20	—	54	51	34	18	2.2	S	4.5
2199	Viking	9-20	—	53	51	35	18	2.1	S	4.5
6197	Top Farm	9-20	—	—	50	35	17	1.9	S	4.5
R1805	Ramy	9-20	—	—	50	35	17	1.8	S	4.5
DSR-243	Dairyland	9-20	—	—	48	34	17	2.4	S	4.5
9193	Dahico	9-21	—	—	55	35	18	1.9	S	4.5
2002	Northstar	9-21	59	54	55	35	17	2.0	S	4.5
392Brand	Latham	9-21	—	—	54	35	17	1.9	S	4.5
PBR-202	PBR	9-21	59	55	54	35	17	2.0	S	4.5
G1885	Midwest Seed	9-21	—	—	54	35	18	1.8	S	4.5
SOI 169	Sands	9-21	58	54	53	35	18	2.0	S	4.0
S-220X	Sansgaard	9-21	—	—	53	35	17	2.2	S	4.5
R2198	Ramy	9-21	—	54	52	35	17	2.1	S	4.5
L2195	CroPlan	9-21	—	—	52	34	18	2.1	S	4.5
S-191X	Sansgaard	9-21	—	—	52	35	17	1.9	S	4.0
A2247	Asgrow	9-21	55	50	52	35	17	2.2	Rps1k	4.5
T-3226	Thompson	9-21	—	—	52	35	18	2.2	S	4.5
M-2238	Mustang	9-21	—	—	52	34	18	2.3	S	5.0
PB-217	Prairie Brand	9-21	—	53	50	34	18	2.1	S	4.5
USS199	US Seeds	9-21	—	—	50	35	17	1.9	S	4.5
9233	Pioneer	9-21	57	53	50	35	17	2.3	S	4.5
K-2425	Yield King	9-21	58	52	50	35	17	2.2	S	4.5

**Performance and characteristics of public and private soybean varieties, southern zone;
Waseca, Lamberton and Fairmont, 1998-2000 (continued).**

Variety	Brand or Originator	Mature Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1997-99	1998-99	1999	Protein	Oil			
K-2343	KSC/Challenger	9-21	58	52	50	35	17	2.1	S	4.5
Exp2391	Sands	9-21	—	—	49	35	17	2.2	S	4.0
PBR-218	PBR	9-21	56	53	49	34	18	2.2	S	4.5
DSR-218	Dairyland	9-21	—	50	49	35	18	2.2	S	4.5
3823	Gold Country	9-21	—	—	46	34	18	2.3	S	4.0
IA2021	Iowa AES	9-21	53	49	46	33	18	2.1	Rps1k	4.5
S20-F8	NK Brand	9-21	—	—	45	34	18	2.0	S	4.0
Sturdy	Minn. AES	9-21	50	46	45	35	17	2.0	Rps1	4.0
Ex-570	Latham	9-22	—	—	56	34	18	2.2	S	4.5
Clements	Gold Country	9-22	—	—	55	35	17	2.1	S	4.5
K-2325+	Kruger	9-22	—	—	55	34	18	2.2	S	4.5
T-3232	Thompson	9-22	—	—	54	35	17	2.3	S	4.5
PB-230	Prairie Brand	9-22	—	—	54	34	18	2.3	Rps1	4.5
H-1214	Golden Harvest	9-22	—	—	54	34	18	2.1	S	4.5
M-2218	Mustang	9-22	57	53	53	35	17	2.1	S	4.5
T-3222	Thompson	9-22	59	54	53	35	17	2.2	S	4.5
M-2251	Mustang	9-22	56	52	52	34	18	2.4	S	4.5
207	Trelay	9-22	56	52	51	35	17	2.0	S	4.5
SOI 236	Sands	9-22	—	—	51	34	18	2.3	S	4.5
FA2177	Farm Advantage	9-22	—	—	51	35	17	2.1	S	4.5
S-237	Sansgaard	9-22	—	48	50	34	18	2.3	S	4.5
C9202	LG Seeds	9-22	—	51	49	34	18	2.0	Rps1c	4.0
S-228	Sansgaard	9-22	—	—	48	35	17	2.2	S	4.0
RS2498	Renk	9-22	—	50	48	36	17	2.4	S	4.5
KB240	Kaltenberg	9-23	—	—	56	34	18	2.4	S	4.5
L2126	CroPlan	9-23	—	—	53	35	17	2.1	S	4.5
S21-P3	NK Brand	9-23	—	—	53	35	17	2.1	S	4.5
H-2411	Golden Harvest	9-23	—	—	53	35	17	2.4	S	4.5
Ex7332	Thompson	9-23	—	—	53	35	17	2.4	S	4.5
S24-K4	NK Brand	9-23	—	—	52	34	18	2.4	Rps1	4.5
PBR-216	PBR	9-23	58	52	52	34	17	2.1	S	4.5
2202	Hy-Vigor	9-23	—	—	51	35	17	2.2	Rps1k	4.5
IA2008R	Iowa AES	9-23	55	51	51	34	17	2.1	Rps1k	4.0
IA2052	Iowa AES	9-23	—	—	51	35	17	2.3	S	4.5
530 Brand	Latham	9-23	—	—	50	35	17	2.1	S	4.0
K-2515	Yield King	9-23	—	—	49	35	17	2.3	S	5.0
L2495	CroPlan	9-23	—	49	49	34	18	2.4	S	4.5
L1969	CroPlan	9-23	—	—	47	35	17	1.9	Rps1c	4.0
PB-256	Prairie Brand	9-24	—	—	54	34	18	2.5	S	4.5
USS219	US Seeds	9-24	—	—	53	35	17	2.1	S	4.5
K-2555	Kruger	9-24	—	51	52	35	17	2.4	S	4.5
R2498	Ramy	9-24	—	—	51	36	17	2.4	S	4.0
G2215	Midwest Seed	9-24	—	—	51	36	17	2.2	S	4.5
T-3243	Thompson	9-24	—	—	50	36	17	2.4	S	4.0
DKB23-95	Dekalb	9-24	—	—	50	36	17	2.3	S	4.5
C24007	Crow's	9-24	—	—	50	36	17	2.4	S	4.5
PS2500	Profiseed	9-24	—	—	50	35	17	2.4	S	5.0
K-2555+	Yield King	9-25	—	—	49	35	17	2.3	S	5.0
K-2505	Yield King	9-25	—	—	49	34	17	2.3	S	4.5
X2013	Mallard	9-25	—	—	48	36	17	2.3	S	4.5
LSD 20%			1	1	2					

Performance and characteristics of very early maturing soybean varieties, 1996-2000.

Variety	Maturity Rating	Yield, Bushels/Acre			Average	Percent		Phytophthora Gene	Chlorosis Score
		Grand Rapids	Roseau	Kennedy		Protein	Oil		
Daksoy	00.6	24	23	38	26	36	17	S	4.5
McCall	00.7	21	22	31	26	36	17	S	4.0
Jim	00.7	24	25	34	26	37	17	S	4.0
Agassiz	0.0	22	22	29	24	37	17	Rps1	4.5
Traill	0.0	18	21	31	21	37	17	S	3.5
LSD 20%		1	2	3	2				

Performance and characteristics of public soybean varieties, southeastern Minn., 1996-2000.

Variety	Maturity Rating	Yield, Bushels/Acre	Percent		Phytophthora Gene	Chlorosis Score
			Protein	Oil		
Lambert	0.8	38	36	18	Rps1	4.5
MN1301	1.3	40	36	17	Rps1c	4.0
Kato	1.3	41	38	16	Rps1	4.5
Parker	1.5	43	36	17	Rps1	4.5
Freeborn	1.6	41	37	17	Rps1	4.0
IA1006	1.6	45	36	17	S	4.5
Sturdy	2.0	44	37	16	Rps1	4.0
IA2021	2.1	44	36	17	Rps1k	4.5
LSD 20%		1				

Performance and characteristics of Roundup Ready soybean varieties, northern zone; Crookston and Shelly 1999-2000.

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre		Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2000	2000	Protein	Oil			
S00-N7	NK Brand	9-16	–	34	34	18	0.1	Rps1c	4.0
DKB03-51	Dekalb	9-17	–	38	34	18	0.3	Rps1	4.0
0314RR	Northstar	9-17	–	37	34	18	0.3	S	4.0
0205RR	Northstar	9-18	–	40	34	18	0.2	S	4.0
RR Rugged	Hyland	9-18	44	38	32	19	0.3	S	4.0
6020RR	Top Farm	9-19	–	43	33	18	0.2	S	4.5
W2039RR	Wensman	9-19	44	39	32	19	0.3	S	4.5
R200RR	Ramy	9-19	–	39	32	18	0.2	S	4.0
90B31	Pioneer	9-19	38	38	33	18	0.3	S	4.0
PBR-0303RR	PBR	9-19	43	36	33	18	0.3	S	4.0
W2050RR	Wensman	9-20	–	40	34	18	0.5	Rps1k	4.5
903RR	Dahlman	9-20	42	39	34	18	0.3	S	4.0
S04-E1	NK Brand	9-20	–	34	33	18	0.4	Rps1c	4.0
9031RR	Dahlco	9-21	–	41	32	19	0.3	S	4.0
6059RR	Top Farm	9-21	44	39	32	18	0.5	S	4.5
S04-E1	NK Brand	9-21	–	33	31	19	0.4	Rps1c	4.0
H-0537RR	Golden Harvest	9-22	–	44	33	18	0.5	S	4.0
AG0801	Asgrow	9-23	–	42	31	18	0.8	Rps1k	3.5

**Performance and characteristics of Roundup Ready soybean varieties, northern zone;
Crookston and Shelly 1999-2000 (continued).**

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1999-2000	2000		Protein	Oil			
0700-4	Stine	9-23	—	41		35	17	0.6	S	4.0
DKB06-51	Dekalb	9-23	—	40		32	19	0.6	Rps1k	4.0
PBR-0550RR	PBR	9-23	—	39		32	19	0.5	Rps1k	4.0
RT0313	CroPlan	9-23	—	38		33	19	0.3	S	3.5
0200-4	Stine	9-23	—	36		36	16	0.4	S	4.0
K-077RR	Kruger	9-24	—	40		34	18	0.5	S	4.0
K-077+RR	Kruger	9-24	—	40		35	17	0.5	Rps1k	4.0
W2075RR	Wensman	9-24	—	36		34	18	0.7	Rps1k	4.5
M-079RR	Mustang	9-25	42	43		33	17	0.7	S	4.0
K-088RR	Kruger	9-25	—	41		33	18	0.6	Rps1k	4.0
PB-0330RR	Prairie Brand	9-25	—	37		35	17	0.3	S	4.0
K-070RR	Kruger	9-26	—	44		32	18	0.5	Rps1k	4.0
DSR-075/RR	Dairyland	9-27	—	44		32	18	0.7	S	4.0
PB-1030RR	Prairie Brand	9-27	40	41		33	18	0.9	Rps1c	4.0
PB-0810RR	Prairie Brand	9-27	—	40		33	18	0.8	S	4.0
PBR-0920RR	PBR	9-27	40	38		35	17	0.9	S	4.0
PB-0730RR	Prairie Brand	9-27	39	35		31	18	0.7	Rps1k	4.0
M-082RR	Mustang	9-27	—	35		34	17	0.8	Rps1k	4.0
W2070RR	Wensman	9-27	—	35		32	18	0.7	Rps1k	4.5
RT0874	CroPlan	9-28	—	41		33	18	0.3	Rps1k	4.0
PBR-0990+RR	PBR	9-28	—	39		36	16	0.9	S	4.0
DSR091/RR	Dairyland	9-29	40	37		33	18	0.9	S	4.0
0990-4	Stine	9-30	37	37		33	18	0.9	S	4.5
M-091RR	Mustang	9-30	41	37		34	17	0.9	S	4.0
LSD 20%			2	3						

**Performance and characteristics of Roundup Ready soybean varieties, central zone
Rosemount and Morris 1998-2000.**

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1998-2000	1999-2000	2000	Protein	Oil			
RR Rugged	Hyland	9-12	—	—	45	34	18	0.3	S	4.5
DKB10-51	Dekalb	9-15	—	—	53	35	17	1.0	Rps1c	4.5
DKB06-51	Dekalb	9-15	—	—	51	34	18	0.6	Rps1k	5.0
BT7101R	Ziller	9-15	—	—	50	35	18	1.0	S	4.5
RR Rally	Hyland	9-15	—	—	48	36	17	0.7	S	3.5
S09-Y9	NK Brand	9-16	—	—	57	36	17	0.9	Rps1c	4.5
8097ARR	Jung	9-16	—	—	56	36	17	0.9	S	5.0
W2100RR	Wensman	9-16	—	—	56	35	17	1.0	Rps1c	4.5
AG0801	Asgrow	9-16	—	52	54	34	18	1.8	Rps1k	4.5
H-0979RR	Golden Harvest	9-16	—	51	53	35	18	0.9	S	4.5
KB100RR	Kaltenberg	9-16	—	—	53	35	17	1.0	Rps1c	4.5
91B02	Pioneer	9-16	53	51	51	35	17	1.0	Rps1c	5.0
K-099+RR	Kruger	9-16	—	53	51	35	18	0.8	S	5.0
0705RR	Northstar	9-16	—	—	51	37	17	0.7	S	3.5
RT0744	CroPlan	9-16	—	—	51	34	18	0.7	Rps1k	4.5
90B93	Pioneer	9-16	53	51	51	35	17	0.9	Rps1c	4.5
808RR	Dahlman	9-16	—	50	50	34	18	0.8	S	4.5
90B72	Pioneer	9-16	49	47	45	35	17	0.7	Rps1	4.0
AG1301	Asgrow	9-17	—	59	60	34	18	1.3	Rps1	4.5
RRX1011	Mallard	9-17	—	—	59	35	17	1.0	Rps1c	4.5

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1998-2000	1999-2000	2000	Protein	Oil			
3138RR	UAP Midwest	9-17	—	—	54	33	17	1.3	S	4.5
2101RR	High Cycle	9-17	—	55	54	35	17	1.0	S	4.5
BT7106R	Ziller	9-17	-	-	53	35	17	1.0	Rps1c	5.0
PBR-0920RR	PBR	9-17	—	55	53	37	17	0.9	S	4.5
2008RR	Dahlman	9-17	—	—	51	35	18	0.8	Rps1k	4.5
W2098RR	Wensman	9-17	—	—	51	35	17	0.9	S	4.5
1114RR	Northstar	9-17	—	—	48	36	17	1.1	S	4.0
AP11551R	Agripro	9-17	—	—	45	36	17	1.1	Rps1k	4.0
M-152RR	Mustang	9-18	—	—	60	37	16	1.5	S	4.0
M-091RR	Mustang	9-18	—	56	59	35	17	0.9	S	5.0
DSR-130/RR	Dairyland	9-18	—	—	58	35	17	1.3	S	5.0
K-099A	KSC/Challenger	9-18	—	56	57	35	17	0.9	S	4.5
G0945R	Midwest Seed	9-18	—	—	57	36	17	0.9	S	4.5
6149RR	Top Farm	9-18	—	—	54	35	17	1.4	Rps1k	4.0
RS099RR	Renk	9-18	—	52	52	33	18	0.9	Rps1k	4.5
USS0909RR	US Seeds	9-18	—	—	51	35	18	0.9	S	4.5
S115RR	Mycogen/Atlas	9-18	—	—	51	35	17	1.1	S	4.5
9101RR	Dahlco	9-18	—	—	47	36	17	1.0	S	4.0
BT7150R	Ziller	9-19	—	66	67	32	18	1.5	Rps1c	4.5
K-141	KSC/Challenger	9-19	—	60	62	32	18	1.2	S	4.5
L1432RR	LG Seeds	9-19	—	—	62	34	18	1.4	Rps1k	4.5
1015RR	Northstar	9-19	—	—	62	35	17	1.0	S	4.5
SOI 1200RR	Sands	9-19	—	—	61	34	18	1.2	Rps1k	4.5
AG1602	Asgrow	9-19	—	—	60	33	18	1.6	Rps1k	4.5
M-142RR	Mustang	9-19	—	—	59	34	18	1.4	Rps1k	4.5
9145RR	Dahlco	9-19	—	—	55	34	18	1.4	S	4.0
3123RR	UAP Midwest	9-19	—	—	53	33	18	1.2	Rps1k	4.5
6090RR	Top Farm	9-19	—	50	50	36	17	0.9	S	4.0
RS159RR	Renk	9-20	—	64	68	33	17	1.5	Rps1c	4.5
2152RR	High Cycle	9-20	—	—	67	33	18	1.5	Rps1c	4.0
PBR-1620RR	PBR	9-20	—	60	66	33	18	1.6	Rps1c	4.5
K-133RR	KSC/Challenger	9-20	—	—	65	36	17	1.2	S	5.0
RRX1511	Mallard	9-20	—	—	64	36	17	1.5	S	4.0
6150RR	Top Farm	9-20	—	59	64	32	18	1.5	Rps1c	4.5
KB161RR	Kaltenberg	9-20	—	60	63	33	18	1.6	Rps1c	4.5
K-166RR	Kruger	9-20	—	—	62	32	18	1.5	Rps1c	4.5
914RR	Dahlman	9-20	—	—	62	34	18	1.4	Rps1k	4.0
H-1565RR	Golden Harvest	9-20	—	—	62	33	18	1.5	Rps1c	4.5
PB-1402RR	Prairie Brand	9-20	—	—	60	34	18	1.4	Rps1k	4.5
TS5170RR	Terning	9-20	—	—	60	33	18	1.5	Rps1k	5.0
K-177RR	Kruger	9-20	—	—	59	35	17	1.8	S	4.5
EX-137RR	Latham	9-20	—	—	58	36	17	1.3	S	4.5
TS5141RR	Terning	9-20	—	—	58	34	17	1.4	Rps1k	4.0
3149	UAP Midwest	9-20	—	—	58	33	18	1.4	Rps1k	4.5
PB-1202RR	Prairie Brand	9-20	—	—	58	35	17	1.2	Rps1k	4.5
M-151RR	Mustang	9-21	—	62	66	35	17	1.5	Rps1c	4.0
RT1399	CroPlan	9-21	—	—	64	32	18	1.3	Rps1c	4.5
W2160RR	Wensman	9-21	—	—	60	32	18	1.6	Rps1c	4.5
R900RR	Ramy	9-21	—	—	59	35	17	0.9	Rps1k	4.5
DKB16-51	Dekalb	9-21	—	—	58	36	17	1.6	S	4.5
91B52	Pioneer	9-21	46	38	55	35	18	1.5	Rps1k	4.5
3158	UAP Midwest	9-21	—	—	53	36	17	1.5	S	4.5
K-199RR/STS	KSC/Challenger	9-22	—	—	64	34	18	1.7	S	4.5

**Performance and characteristics of Roundup Ready soybean varieties, central zone
Rosemount and Morris 1998-2000 (continued).**

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1998-2000	1999-2000	2000	Protein	Oil			
8137RR	Jung	9-22	—	—	63	36	17	1.3	S	4.5
DSR-185/RR	Dairyland	9-22	—	—	61	36	17	1.8	S	4.5
W2140RR	Wensman	9-22	—	—	60	36	17	1.4	S	4.5
KB150RR	Kaltenberg	9-22	—	—	60	36	17	1.5	S	4.5
917RR	Dahlman	9-22	—	—	60	35	18	1.7	S	4.5
SOI 1515RR	Sands	9-22	—	—	59	36	17	1.5	S	4.5
Ex0741RR	Thompson	9-22	—	—	59	36	17	1.4	S	4.0
DKB19-51	Dekalb	9-22	—	—	59	34	18	1.9	Rps1k	4.0
R1490RR	Ramy	9-22	—	—	58	36	17	1.5	S	4.5
Exp 1414RR	Sands	9-22	—	57	58	36	17	1.4	S	4.5
K-155+RR	Yield King	9-22	—	—	58	36	17	1.4	S	4.0
K-188RR	Yield King	9-23	—	—	61	35	18	1.7	S	5.0
PB-1246RR	Prairie Brand	9-23	—	—	60	37	17	1.3	S	4.5
PB-1540RR	Prairie Brand	9-23	—	—	60	35	17	1.5	S	4.0
K-202+RR	Yield King	9-23	—	58	59	35	18	1.8	S	4.5
S-160XRR	Sansgaard	9-23	—	—	59	35	17	1.6	S	5.0
PS4150	Profiseed	9-23	—	—	58	36	17	1.5	S	4.5
1506-4	Stine	9-23	—	—	57	36	17	1.4	S	4.5
K-199+RR	Yield King	9-24	—	—	61	34	18	1.8	S	5.0
PBR-1901RR	PBR	9-24	—	—	59	34	18	1.9	Rps1k	5.0
AG1801	Asgrow	9-24	—	—	58	36	17	1.8	Rps1	4.5
PBR-1930RR	PBR	9-24	—	—	58	34	17	1.9	Rps1k	4.5
Ex0751RR	Thompson	9-24	—	—	55	34	18	1.5	S	4.5
K-233+RR	Kruger	9-26	—	—	59	34	18	1.8	S	4.5
LSD 20%			1	2	3					

**Performance and characteristics of Roundup Ready soybean varieties, southern zone;
Lamberton and Waseca, 1998-2000.**

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1998-2000	1999-2000	2000	Protein	Oil			
2014RR	Dahlman	9-18	—	—	54	34	18	1.4	Rps1k	4.5
H-1565RR	Golden Harvest	9-19	—	52	57	33	18	1.5	Rps1c	4.0
91B91	Pioneer	9-19	54	50	53	35	17	1.7	S	4.5
AP1702	AgriPro	9-20	—	54	57	33	18	1.7	Rps1c	4.5
6016RR	Gold Country	9-20	—	—	55	33	18	1.6	Rps1c	4.5
9201RR	Dahlco	9-20	—	—	50	35	18	2.0	S	4.5
1506-4	Stine	9-20	—	—	49	36	18	1.4	S	4.0
G1710R	Midwest Seed	9-21	—	—	61	33	18	1.6	Rps1c	4.5
BT7150R	Ziller	9-21	—	—	57	33	18	1.5	Rps1c	4.0
9160RR	Dahlco	9-21	—	—	55	33	18	1.6	Rps1c	4.5
92B05	Pioneer	9-21	57	53	54	33	18	1.9	Rps1k	4.5
91B64	Pioneer	9-21	55	52	51	33	19	1.6	Rps1c	4.5
PS418	Profiseed	9-21	—	—	50	34	18	1.8	Rps1k	4.5
W2160RR	Wensman	9-22	—	—	64	33	18	1.6	Rps1c	4.5
K-166RR	Kruger	9-22	—	—	55	32	18	1.5	Rps1c	4.0
GL1501RR	Great Lakes	9-22	—	51	52	35	18	2.1	S	5.0
Ex187RR	Latham	9-22	—	—	52	35	18	1.5	S	4.5
FA7184	Farm Advantage	9-22	—	—	52	33	18	1.8	Rps1k	4.5
5173RR	Mycogen	9-22	—	52	52	35	18	1.7	S	4.5
Ex407RR	Latham	9-22	—	—	51	34	18	1.9	Rps1k	5.0

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1998-2000	1999-2000	2000	Protein	Oil			
PBR-1930RR	PBR	9-22	—	—	51	34	18	1.9	Rps1k	4.5
FA7153	Farm Advantage	9-22	—	—	50	36	17	1.5	S	4.5
TS5172RR	Terning	9-22	—	—	50	35	18	1.7	S	4.5
RT1948	CroPlan	9-22	—	—	50	34	18	1.9	Rps1k	4.5
C9190RR	LG Seeds	9-22	—	50	50	35	17	1.9	S	5.0
T-3180RR	Thompson	9-22	—	—	49	35	18	1.8	S	4.5
E3193RR	Top Farm	9-23	—	—	58	34	18	1.8	Rps1k	5.0
914RR	Dahlman	9-23	—	—	56	34	18	1.4	Rps1k	4.0
2004RR	Northstar	9-23	—	54	56	35	18	2.0	S	4.5
1822RR	Anderson	9-23	—	—	56	34	18	1.8	Rps1k	4.5
Ex217RR	Latham	9-23	—	—	56	34	18	1.8	Rps1k	4.0
SOI 1800RR	Sands	9-23	—	—	56	35	18	1.8	Rps1k	4.0
RS199RR	Renk	9-23	—	—	56	33	19	1.9	Rps1k	5.0
BT7191R	Ziller	9-23	—	—	54	36	18	1.9	S	4.5
E1971RR	Top Farm	9-23	—	—	54	35	18	1.9	S	4.0
KB182RR	Kaltenberg	9-23	—	—	54	34	18	1.8	Rps1k	4.5
K-177RR	Kruger	9-23	—	—	53	35	18	1.5	S	4.5
3193RR	UAP Midwest	9-23	—	—	53	34	18	1.9	Rps1k	5.0
6190RR	Top Farm	9-23	—	—	52	35	18	1.9	S	4.5
1120RR	Gold Country	9-23	—	—	52	35	18	2.0	S	4.5
9194RR	Dahlco	9-23	—	—	52	35	18	1.9	S	4.5
RRX1912	Mallard	9-23	—	—	50	34	18	1.9	Rps1k	4.5
DSR-215/RR	Dairyland	9-23	54	50	49	35	18	2.0	S	5.0
S-22XRR	Sansgaard	9-23	—	—	43	34	18	2.2	S	5.0
TS5191RR	Terning	9-24	—	—	58	35	18	1.9	S	4.5
92B36	Pioneer	9-24	—	—	58	34	18	2.3	S	4.5
USS2009RR	US Seeds	9-24	—	—	58	35	18	2.0	S	4.5
8192RR	Jung	9-24	—	55	57	35	18	1.9	S	4.5
BT7211R	Ziller	9-24	—	—	57	36	17	2.1	S	4.5
2000RR	Viking	9-24	—	55	57	35	17	2.0	S	5.0
S-2117RR	Sansgaard	9-24	—	—	55	35	18	2.1	S	4.5
Ex467RR	Latham	9-24	—	—	55	35	17	2.1	S	4.0
AG2001	Asgrow	9-24	—	51	55	35	18	2.0	Rps1k	4.5
1122RR	Gold Country	9-24	—	—	55	35	18	2.2	S	4.5
1991-4	Stine	9-24	57	53	54	35	17	2.1	S	4.5
CX198RR	Dekalb	9-24	—	53	54	36	17	1.9	S	4.5
S20-25	NK Brand	9-24	—	—	54	34	18	2.0	Rps1	4.5
AG2103	Asgrow	9-24	—	—	54	34	18	2.1	Rps1k	4.5
M-179RR	Mustang	9-24	—	—	54	35	18	1.7	S	4.5
K-221RR	KSC/Challenger	9-24	—	—	53	35	18	2.0	S	5.0
K-222RR	KSC/Challenger	9-24	—	—	53	35	17	2.0	S	4.5
2016-4	Stine	9-24	—	—	53	35	17	2.0	S	4.5
437RR Brand	Latham	9-24	—	—	52	35	17	2.1	S	4.5
T-3200RR	Thompson	9-24	—	—	52	35	18	2.0	S	4.5
AG1801	Asgrow	9-24	—	—	52	36	17	1.8	Rps1k	5.0
M-199RR	Mustang	9-24	—	53	52	35	18	1.9	S	4.5
8226RR	Jung	9-24	—	—	51	35	18	2.2	S	4.5
819-ARR	Dahlman	9-24	—	—	51	35	18	1.9	S	4.5
2063RR	Anderson	9-24	—	50	51	35	18	2.0	S	4.5
2192RR	High Cycle	9-24	—	50	51	35	18	1.9	S	4.5
337RR Brand	Latham	9-24	—	—	51	35	18	1.9	S	4.5
H-1911RR	Golden Harvest	9-24	—	—	51	35	18	1.9	S	4.5
3206RR	UAP Midwest	9-24	—	48	50	36	17	2.0	S	4.5

**Performance and characteristics of Roundup Ready soybean varieties, southern zone;
Lamberton and Waseca, 1998-2000 (continued).**

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1998-2000	1999-2000	2000	Protein	Oil			
R1980RR	Ramy	9-24	—	51	50	35	18	1.9	Rps1k	4.5
917RR	Dahlman	9-24	—	51	49	35	18	1.7	Rps1k	4.5
RT1921	CroPlan	9-24	—	—	49	35	18	1.9	S	4.5
S24-K4	NK Brand	9-25	—	—	61	34	18	2.4	Rps1	4.5
AG2302	Asgrow	9-25	—	—	60	35	18	2.3	Rps1k	4.5
K-256RR	Yield King	9-25	—	—	59	35	17	2.3	S	4.5
AP2002	Agripro	9-25	—	51	56	34	17	2.0	Rps1c	4.0
PBR-2290RR	PBR	9-25	—	—	56	35	18	2.2	S	4.5
RS240RR	Renk	9-25	—	—	55	35	17	2.4	Rps1k	4.5
2416-4	Stine	9-25	—	—	54	35	17	2.4	Rps1k	4.5
XR0024A47	Garst	9-25	—	—	54	34	18	2.3	S	4.5
RRX2212	Mallard	9-25	—	—	53	35	18	2.2	Rps1k	4.5
T-3230RR	Thompson	9-25	—	—	53	36	17	2.3	Rps1k	4.5
K-202+RR	Kruger	9-25	—	52	53	34	17	1.8	S	4.5
AG-2501	Asgrow	9-25	—	—	52	35	18	2.5	Rps1	4.5
XR0023A96	Garst	9-25	—	—	52	36	18	2.0	S	4.5
SOI 244RR	Sands	9-25	—	50	51	35	18	2.4	Rps1k	4.5
FA7242	Farm Advantage	9-25	—	—	51	36	17	2.4	Rps1k	4.5
222RR	Hy-Vigor	9-25	—	—	51	35	18	2.2	S	4.5
2271RR	Viking	9-25	—	—	50	35	17	2.2	Rps1k	4.5
S-2297RR	Sansgaard	9-25	—	49	49	35	18	2.2	S	5.0
M-239RR	Mustang	9-25	—	50	49	35	17	2.3	Rps1k	4.5
Ex507RR	Latham	9-25	—	—	49	35	18	2.1	S	4.5
T-3238RR	Thompson	9-25	—	—	48	36	18	2.3	S	4.5
S23-Q3	NK Brand	9-25	—	—	48	36	17	2.3	Rps1c	4.5
PB-2121RR	Prairie Brand	9-26	—	—	61	35	17	2.1	S	4.5
DSR-228/RR	Dairyland	9-26	—	—	60	35	17	2.2	S	4.5
M-222RR	Mustang	9-26	—	—	59	34	18	2.2	S	4.5
PS4199	Profiseed	9-26	—	—	58	34	18	1.9	Rps1	4.5
Exp2459RR	Sands	9-26	—	—	58	36	17	2.4	S	4.5
W2198RR	Wensman	9-26	—	58	57	36	17	1.9	S	4.5
PB-2101RR	Prairie Brand	9-26	—	—	56	34	17	2.1	Rps1	4.5
S240RR	Mycogen	9-26	—	—	56	35	18	2.4	S	4.5
3212RR	UAP Midwest	9-26	—	—	56	35	17	2.1	S	4.0
K-223+RR	Kruger	9-26	—	—	56	35	18	1.8	S	4.5
K-199+RR	Yield King	9-26	—	—	54	34	18	1.8	S	5.0
KB210RR	Kaltenberg	9-26	—	—	54	35	18	2.1	S	4.5
DSR-241/RR	Dairyland	9-26	57	53	53	34	18	2.3	Rps1k	5.0
PS4206	Profiseed	9-26	—	—	52	34	18	2.1	S	5.0
C24009RN	Crow's	9-26	—	—	52	35	17	2.2	S	4.0
S-2299XRR	Sansgaard	9-26	—	—	52	35	18	2.2	Rps1	4.5
K-266+RR	KSC/Challenger	9-26	—	—	51	35	17	2.2	Rps1k	4.0
T-3242RR	Thompson	9-26	—	—	51	35	17	2.4	Rps1k	4.5
KB242RR	Kaltenberg	9-26	—	50	51	34	18	2.4	Rps1k	4.5
DKB23-51	Dekalb	9-26	—	—	51	35	18	2.3	Rps1	4.5
2472RR	Hy-Vigor	9-26	—	—	48	35	18	2.4	Rps1k	4.5
SOI226RR	Sands	9-27	—	—	60	34	18	2.2	S	5.0
FA7227	Farm Advantage	9-27	—	—	59	34	18	2.2	S	5.0
K-250RR	Yield King	9-27	—	—	59	34	18	2.4	S	4.5
PBR-2404RR	PBR	9-27	—	—	58	36	17	2.4	S	4.5
T-3213RR	Thompson	9-27	—	—	57	34	18	2.1	S	4.5

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre			Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score
			1998-2000	1999-2000	2000	Protein	Oil			
3238RR	UAP Midwest	9-27	–	52	56	35	17	2.4	Rps1k	4.5
X92304RR	Golden Harvest	9-27	–	–	55	35	18	2.3	S	5.0
PB-2430RR	Prairie Brand	9-27	–	51	54	35	17	2.4	Rps1k	4.5
PB-2397RR	Prairie Brand	9-27	–	51	54	35	18	2.3	S	4.5
K-244RR	KSC/Challenger	9-27	–	–	52	34	18	2.1	Rps1k	4.5
PSX42	Profiseed	9-27	–	–	51	34	18	2.2	Rps1	4.5
R2220RR	Ramy	9-27	–	–	50	35	17	2.1	S	4.5
K-255RR	Yield King	9-27	–	–	50	36	17	2.3	S	4.5
G2245R	Midwest Seed	9-28	–	–	56	33	18	2.2	S	4.5
PBR-2510RR	PBR	9-28	–	–	55	34	18	2.5	Rps1	4.5
USS2409RR	US Seeds	9-28	–	–	49	35	17	2.4	Rps1k	4.5
LSD 20%			1	2	3					

Performance and characteristics of soybeans in soybean-cyst-nematode-infested (Lamberton, Waseca, Fairmont and Waltham) and non-infested (Fairmont, Lamberton and Waseca) sites, 1998-2000.

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre						Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score	SCN Rating
			Infested Sites			Non-Infested Sites			Protein	Oil				
			98-00	99-00	2000	98-00	99-00	2000						
L1309CN	CroPlan	9-11	–	–	47	–	–	55	34	18	1.4	S	4.0	S
US E131	US Seeds	9-11	–	–	43	–	–	54	35	17	1.8	Rps1c	4.0	S
AP1512RR/N	AgriPro	9-12	–	–	43	–	–	53	35	17	1.5	Rps1	4.5	S
D151RR/N	Garst	9-13	–	–	44	–	–	53	35	18	1.5	Rps1	5.0	S
1202-4	Stine	9-13	–	–	39	–	–	50	34	18	1.3	Rps1	5.0	S
D177N	Garst	9-15	–	–	46	–	–	56	36	17	1.7	Rps1k	4.5	MR
DSR-150	Dairyland	9-15	–	44	47	–	51	52	35	18	1.5	Rps1	4.0	MR
R1605CN	Ramy	9-16	–	–	47	–	–	55	35	18	1.8	S	4.0	R
EX1202-2	Stine	9-16	–	–	44	–	–	49	36	17	1.3	S	4.5	S
C1818N	LG Seeds	9-18	–	–	49	–	–	54	35	17	1.8	S	4.5	MR
Exp2300N	Sands	9-19	–	–	47	–	–	58	34	18	2.3	Rps1k	4.5	S
1892-2	Stine	9-19	–	–	53	–	–	56	33	18	1.8	S	4.5	MR
USS189	US Seeds	9-19	–	–	43	–	–	56	34	18	2.2	S	4.5	S
Parker	Minn. AES	9-19	42	40	41	53	54	56	34	18	1.5	Rps1	5.0	S
EX1802-4	Stine	9-19	–	–	41	–	–	51	35	17	1.8	S	4.5	MR
X018R	NKBrand	9-19	–	–	36	–	–	38	36	17	1.8	Rps1c	4.5	–
PB-210N	Prairie Brand	9-20	–	–	53	–	–	60	34	17	2.1	Rps1	4.5	MR
K-2220+SCN	Kruger	9-20	–	–	54	–	–	58	34	17	2.0	S	4.5	S
K-1919+SCN	KSC/Challenger	9-20	–	–	46	–	–	56	35	17	1.8	S	4.5	S
K-2414SCN	KSC/Challenger	9-20	–	–	49	–	–	56	35	17	2.2	S	4.5	MR
9185Cyst	Dahlco	9-20	–	–	52	–	–	56	34	18	1.8	S	4.5	MR
5212N	Mycogen	9-20	–	46	48	–	52	54	34	18	2.1	S	4.5	R
EX2608	Thompson	9-20	–	–	48	–	–	54	35	17	2.1	S	4.5	MR
YK-191RR/SCN	Yield King	9-20	–	–	42	–	–	53	35	17	1.8	S	4.5	MR
92B35	Pioneer	9-20	–	48	52	–	51	53	35	17	2.3	Rps1	4.5	MR
Freeborn	Minn. AES	9-20	47	44	45	51	50	52	36	17	1.6	Rps1	4.5	MR
PS419RR	Profiseed	9-20	–	–	39	–	–	52	35	17	1.9	S	4.5	R
PBR-234CN	PBR	9-21	–	48	49	–	57	59	35	17	2.3	S	5.0	R
1882-1	Stine	9-21	50	46	49	58	56	59	34	18	1.9		4.5	S
2181CN	Viking	9-21	–	–	48	–	–	59	35	17	2.1	S	5.0	MR
EX-632CN	Latham	9-21	–	–	48	–	–	58	35	17	2.3	S	5.0	MR
IA1008	Iowa AES	9-21	–	42	43	–	53	57	35	17	1.9	S	4.5	MR
R2200CN	Ramy	9-21	–	–	48	–	–	57	34	18	2.2	Rps1k	4.5	R
T-3236CN	Thompson	9-21	52	50	51	55	53	56	34	17	2.3	S	4.5	S
IA2021	Iowa AES	9-21	42	38	37	55	53	56	33	18	2.1	Rps1k	4.5	S

Performance and characteristics of soybeans in soybean-cyst-nematode-infested (Lamberton, Waseca, Fairmont and Waltham) and non-infested (Fairmont, Lamberton and Waseca) sites, 1998-2000 (continued).

Variety	Brand or Originator	Maturity Date	Yield, Bushels/Acre						Percent		Maturity Rating	Phytophthora Gene	Chlorosis Score	SCN Rating
			Infested Sites			Non-Infested Sites			Protein	Oil				
			98-00	99-00	2000	98-00	99-00	2000						
1902-4	Stine	9-21	—	—	45	—	—	56	35	18	2.2	S	5.0	MR
9234	Pioneer	9-21	48	45	49	53	52	55	35	17	2.2	Rps1	4.0	R
352CN Brand	Latham	9-21	50	48	51	54	51	54	34	17	1.9	S	4.5	MR
AP2101N	AgriPro	9-21	—	—	46	—	—	51	35	17	2.1	Rps1k	4.5	MR
K-2220SCN	KSC/Challenger	9-22	49	48	48	58	59	61	33	18	2.1	Rps1k	4.5	S
T-3219CN	Thompson	9-22	48	44	45	58	58	60	35	17	2.1	S	4.5	S
K-2020SCN	Kruger	9-22	—	48	51	—	57	59	33	17	1.9	Rps1	4.5	MR
IA2036	Iowa AES	9-22	47	44	47	53	52	58	34	17	2.1	S	4.5	S
Turner	Albert Lee	9-22	—	46	47	—	51	56	34	18	2.2	S	4.5	MR
K-252RR/SCN	Kruger	9-22	—	—	47	—	—	56	35	17	2.4	S	4.5	MR
PB-222CN	Prairie Brand	9-22	—	44	46	—	54	55	36	17	2.2	Rps1	5.0	MR
YK-254RR/SCN	Yield King	9-22	—	—	45	—	—	54	34	18	2.4	S	4.0	S
2234CRR	Northstar	9-22	—	—	48	—	—	52	35	17	2.2	S	4.0	MR
DSR-232/RR	Dairyland	9-23	—	—	48	—	—	59	35	17	2.3	S	5.0	S
YK-2313SCN	Yield King	9-23	—	—	48	—	—	57	36	17	2.2	S	4.0	S
K-233RR/SCN	Kruger	9-23	—	—	48	—	—	56	35	17	2.2	S	5.0	S
Exp2120NRR	Sands	9-23	—	—	46	—	—	55	34	18	2.1	Rps1k	5.0	S
C9241NRR	LG Seeds	9-23	—	45	47	—	50	53	35	17	2.2	S	4.5	MR
PB-2309NRR	Prairie Brand	9-24	—	42	46	—	52	54	35	17	2.3	S	4.5	S
AP2212RR/N	Agripro	9-24	—	—	48	—	—	54	35	17	2.2	S	4.5	S
YK-232RRSCN	Yield King	9-24	—	—	44	—	—	53	34	18	2.1	S	4.5	S
2231RR/SCN	High Cycle	9-24	—	—	46	—	—	50	35	18	2.3	S	4.5	S
H-2348RR	Golden Harvest	9-25	—	—	49	—	—	54	35	17	2.3	S	4.0	S
D221RR/N	Garst	9-25	—	—	45	—	—	52	35	17	2.2	S	4.5	S
K-263RRSCN	KSC/Challenger	9-26	—	—	47	—	—	51	35	17	2.4	S	4.5	-
LSD 20%			1	1	2	1	1	2						

Performance of public and private soybean varieties in order of susceptibility to white mold infection, Rosemount, 2000.

Variety	Brand or Originator	Maturity Rating	White Mold Incidence (%)	Yield, Bu/Acre	Lodging, 1-5 Scale	Performance Rank, High to Low
1207-4	Stine	1.2	0.3	58.4	1.3	1.0
H-1411 RR	Golden Harvest	1.4	0.5	58.7	2.0	2.0
MN1301	Minn. AES	1.3	1.5	59.0	2.0	3.0
91B64 RR	Pioneer	1.6	1.8	63.9	1.5	4.0
91B53	Pioneer	1.5	2.0	65.9	1.8	5.0
AG1301	Asgrow	1.3	2.3	44.5	1.3	6.0
Toyopro	Minn. AES	0.6	2.5	48.5	1.0	7.0
EXP 1191	Sands	1.1	2.8	53.1	2.0	8.0
9163	Pioneer	1.6	3.0	58.6	3.3	10.5
AG0801	Asgrow	0.8	3.0	58.3	2.0	10.5
CX166	Dekalb	1.6	3.0	50.0	1.5	10.5
Surge	S.D. and Minn. AES	0.9	3.0	58.3	2.3	10.5
1506-4	Stine	1.4	3.3	56.6	1.5	14.5
Kato	Minn. AES	1.3	3.3	48.6	2.3	14.5
MN 0901	Minn. AES	0.9	3.3	55.7	3.3	14.5
S09-Y9	NK Brand	0.9	3.3	53.8	1.3	14.5
AG2102	Asgrow	2.1	3.5	60.1	1.5	17.5
Minnatto	Minn. AES	0.9	3.5	47.3	2.0	17.5

Variety	Brand or Originator	Maturity Rating	White Mold Incidence (%)	Yield, Bu/Acre	Lodging, 1-5 Scale	Performance Rank, High to Low
EXP 9111	Thompson	1.4	5.5	53.1	2.0	19.0
1386-6	Stine	1.3	5.8	56.1	1.5	20.0
Parker	Minn. AES	1.5	6.3	49.1	3.5	21.0
AP1394	AgriPro	1.3	6.5	56.6	2.0	22.5
DKB10-51	Dekalb	1.0	6.5	66.6	1.3	22.5
PB-1246 RR	Prairie Brand	1.3	6.8	66.3	2.0	24.0
1150	Hy-Vigor	1.0	8.5	50.9	3.0	25.0
Lambert	Minn. AES	0.7	8.8	54.4	2.5	26.0
Danatto	North Dakota AES	0.4	9.0	46.6	2.3	27.5
MN 0301	Minn. AES	0.3	9.0	45.8	3.3	27.5
MN 0902 CN	Minn. AES	0.9	9.3	56.5	2.3	29.0
DKB16-51	Dekalb	1.6	10.3	61.3	2.8	30.0
91B52 RR	Pioneer	1.5	11.0	63.9	1.8	31.0
DKB13-81	Dekalb	1.3	11.8	65.8	1.8	32.0
Freeborn	Minn. AES	1.6	13.3	41.3	5.0	33.0
1101-6	Stine	1.1	13.8	59.1	1.8	34.0
PB-1221	Prairie Brand	1.2	17.0	60.6	1.0	35.0
LSD 5%			11.4	13.4	1.0	

Performance of public and private soybean varieties in order of susceptibility to white mold infection, Morris, 2000.

Variety	Brand or Originator	Maturity Rating	White Mold Incidence (%)	Yield, Bu/Acre	Lodging, 1-5 Scale	Performance Rank, High to Low
S09-Y9	NK Brand	0.9	18.3	71.5	1.7	1.0
91B64 RR	Pioneer	1.6	21.7	74.6	2.7	2.0
AG1301	Asgrow	1.3	23.7	74.0	1.7	3.0
EXP 1191	Sands	1.1	26.7	75.8	3.7	4.0
91B53	Pioneer	1.5	30.0	77.4	2.0	5.5
Toyopro	Minn. AES	0.9	30.0	55.4	2.3	5.5
CX166	Dekalb	1.6	31.7	69.4	2.3	7.0
AG0801	Asgrow	0.8	33.3	68.1	3.0	8.0
9163	Pioneer	1.6	35.0	64.6	3.0	9.0
91B52 RR	Pioneer	1.5	36.7	56.7	2.3	11.0
AG2102	Asgrow	2.1	36.7	56.8	2.0	11.0
AP1394	AgriPro	1.3	36.7	55.4	2.7	11.0
DKB10-51	Dekalb	1.0	38.3	65.9	2.3	13.0
1207-4	Stine	1.2	40.0	64.6	1.7	14.0
H-1411 RR	Golden Harvest	1.4	43.3	55.4	3.0	15.5
MN1301	Minn. AES	1.3	43.3	57.3	3.3	15.5
DKB16-51	Dekalb	1.6	46.7	67.0	1.7	17.0
1101-6	Stine	1.1	48.3	64.5	2.7	18.0
DKB13-81	Dekalb	1.3	48.7	69.9	2.0	19.0
1150	Hy-Vigor	1.0	50.0	64.1	2.7	20.5
MN 0301	Minn. AES	0.3	50.0	63.1	3.7	20.5
MN 0902 CN	Minn. AES	0.9	51.7	60.1	3.7	22.0
Kato	Minn. AES	1.3	53.3	51.6	3.7	23.0
1506-4	Stine	1.4	55.0	57.9	1.7	24.0
1386-6	Stine	1.3	60.0	67.9	3.3	25.5
PB-1246 RR	Prairie Brand	1.3	60.0	57.8	2.0	25.5
PB-1221	Prairie Brand	1.2	61.7	59.2	2.0	27.0
Danatto	North Dakota AES	0.4	65.0	48.2	4.3	28.5
EXP 9111	Thompson	1.4	65.0	65.4	3.7	28.5

Performance of public and private soybean varieties in order of susceptibility to white mold infection, Morris, 2000 (continued).

Variety	Brand or Originator	Maturity Rating	White Mold Incidence (%)	Yield, Bu/Acre	Lodging, 1-5 Scale	Performance Rank, High to Low
Surge	S.D. and Minn. AES	0.9	68.3	61.1	4.7	30.0
Minnatto	Minn. AES	0.9	70.0	40.9	4.0	31.0
Parker	Minn. AES	1.5	71.7	44.8	4.7	32.0
Lambert	Minn. AES	0.7	76.7	62.8	4.3	33.5
MN 0901	Minn. AES	0.9	76.7	64.3	5.0	33.5
Freeborn	Minn. AES	1.6	93.3	46.7	5.0	35.0
LSD 5%			29.9	12.2	1.2	

Performance of public and private soybean varieties in order of susceptibility to white mold infection, Waseca, 2000.

Variety	Brand or Originator	Relative Maturity	White Mold Incidence (%)	Yield, Bu/Acre	Lodging, 1-5 Scale	Performance Rank, High to Low
MN 1301	Minn. AES	1.3	4.5	45.7	1.0	1.0
91B52 RR	Pioneer	1.5	4.8	47.6	1.0	2.0
S19-90	NK Brand	1.9	5.5	45.7	1.0	3.0
EX-290	Latham	1.7	10.5	39.7	1.5	4.0
H-1184	Golden Harvest	1.8	12.3	44.4	1.8	5.0
91B53	Pioneer	1.5	13.3	48.3	1.5	6.0
US E1901 RR	US Seeds	1.9	14.5	44.5	1.3	7.0
AP1394	AgriPro	1.3	15.3	43.9	1.5	8.0
IA 2021	Iowa AES	2.1	16.3	41.6	1.8	9.0
DKB19-51	Dekalb	1.9	16.5	41.6	1.8	10.5
H-2348 RR	Golden Harvest	2.3	16.5	33.9	1.3	10.5
IA 1006	Iowa AES	1.6	17.3	43.3	1.8	12.0
207	Trelay	2.0	18.3	41.2	2.0	13.5
9163	Pioneer	1.6	18.3	39.7	1.8	13.5
US E1501 RR	US Seeds	1.5	19.8	43.0	1.3	15.0
EX-187 RR	Latham	1.5	20.0	43.7	1.0	16.0
AG2501	Asgrow	2.5	22.8	38.1	1.8	17.0
MN1801	Minn. AES	1.8	23.0	45.4	2.0	18.0
Viking 1771	Albert Lea	1.7	23.8	43.5	1.8	19.0
AG2001	Asgrow	2.0	24.3	43.6	1.5	20.5
EX-407 RR	Latham	1.9	24.3	37.5	1.3	20.5
SOI 260	Sands	2.0	25.3	41.1	1.5	22.0
PB-184	Prairie Brand	1.8	26.3	40.7	1.5	23.0
US S199	US Seeds	1.9	26.8	42.9	2.0	24.0
Sturdy	Minn. AES	2.0	27.0	40.2	1.8	25.0
S20-Z5	NK Brand	2.0	28.5	39.0	1.8	26.0
DSR-218	Dairyland	2.2	30.0	37.5	2.0	27.0
EXP 1799 RR	Sands	1.7	30.5	47.2	1.8	28.0
91B64 RR	Pioneer	1.6	31.8	40.7	1.5	29.0
2500-7	Stine	1.5	34.0	42.1	2.3	30.0
DKB23-95	Dekalb	2.3	35.3	39.3	1.5	31.0
AG1923	Asgrow	1.9	35.5	39.7	1.8	32.0
T-3203	Thompson	2.0	36.0	39.8	2.0	33.0
AG2102	Asgrow	2.1	37.5	34.2	1.3	34.0
IA2036	Iowa AES	2.1	42.3	43.7	3.3	35.0
T-3184	Thompson	1.8	43.0	39.7	2.8	36.0
AG1801	Asgrow	1.8	43.5	33.1	1.5	37.0
PB-2121 RR	Prairie Brand	2.1	43.8	35.0	2.3	38.0

Variety	Brand or Originator	Relative Maturity	White Mold Incidence (%)	Yield, Bu/Acre	Lodging 1-5 Scale	Performance Rank, High to Low
1700-4	Stine	1.6	45.0	36.6	1.3	39.0
EXP 2111 RR	Sands	2.1	46.5	36.5	1.8	40.0
LSD 5%			26.6	7.3	1.0	

Performance of public and private soybean varieties in order of susceptibility to white mold infection, Staples, 2000.

Variety	Brand or Originator	Relative Maturity	White Mold Incidence (%)	Yield, Bu/Acre	Lodging 1-5 Scale	Performance Rank High to Low
504-E1	NK Brand	0.3	0.0	47.5	1.0	4.0
90A07	Pioneer	00.7	0.0	56.9	1.0	4.0
Jim	Minn. AES	00.7	0.0	58.1	1.3	4.0
Minn. Exp 1	Minn. AES	0.3	0.0	53.9	1.0	4.0
PB-810 RR	Prairie Brand	0.8	0.0	51.0	1.3	4.0
PBR-0303 RR	PBR	0.3	0.0	47.2	1.0	4.0
UM3	Minn. AES	0.3	0.0	47.6	1.0	4.0
MN 0301	Minn. AES	0.3	1.3	54.6	1.0	8.5
Trail	N. D. AES	0.0	1.3	51.8	1.3	8.5
DKB03-51	Dekalb	0.3	2.5	55.9	1.5	10.0
Agassiz	Minn. AES	0.0	3.8	54.0	1.5	11.5
McCall	Minn. AES	0.7	3.8	54.7	2.0	11.5
LSD 5%			3.5	8.5	0.7	

Performance of special-use soybean varieties, 1998-2000.

Variety	Releasing Institution	Maturity Date	Yield, Bushels/Acre			Percent	
			1998-2000	1999-2000	2000	Protein	Oil
Northern Zone, 1999, 2000; Crookston, Moorhead and Shelly							
Jim	N.D. AES	9-7	—	26	22	32	18
Agassiz	Minn. AES	9-13	33	28	22	34	18
UM3	Minn. AES	9-16	33	31	25	34	18
Danatto	N.D. AES	9-22	27	30	28	32	18
Minnatto	Minn. AES	9-25	30	28	26	35	17
Central Zone, 2000; Becker, Morris and Rosemount							
MN0301	Minn. AES	9-11	41	41	42	34	18
Danatto	N.D. AES	9-12	—	—	32	34	17
Lambert	Minn. AES	9-14	47	47	50	35	17
Proto	Minn. AES	9-14	—	—	37	38	15
MN0901	Minn. AES	9-15	49	49	52	34	18
Surge	Minn. & S.D. AES	9-15	50	51	50	36	17
Toyopro	Minn. AES	9-15	42	43	44	39	15
Minnatto	Minn. AES	9-15	30	32	33	36	16
Kato	Minn. AES	9-17	49	50	49	38	16
Parker	Minn. AES	9-18	—	51	47	35	17
Southern Zone, Lamberton and Waseca							
Parker	Minn. AES	9-17	50	50	54	35	18
IA1009	Iowa AES	9-18	—	52	55	35	17
IA1006	Iowa AES	9-19	53	53	57	35	17
IA1005	Iowa AES	9-19	52	51	54	36	17
IA1007	Iowa AES	9-19	47	44	47	36	17
IA1008	Iowa AES	9-20	—	54	55	36	17
IA2017	Iowa AES	9-22	45	43	53	37	17
IA2041	Iowa AES	9-22	—	47	51	39	16
IA2012	Iowa AES	9-22	48	45	50	36	17
IA2011	Iowa AES	9-22	48	43	49	36	17

Performance of special-use soybean varieties, 1998-2000 (continued).

Variety	Releasing Institution	Maturity Date	Yield, Bushels/Acre			Percent	
			1998-2000	1999-2000	2000	Protein	Oil
Southern Zone, Lambertson and Waseca (continued)							
A2042	Iowa AES	9-22	—	45	49	37	16
IA2016	Iowa AES	9-22	45	44	47	38	16
Vinton 81	Iowa AES	9-22	43	42	45	38	16
IA2033	Iowa AES	9-23	44	44	48	37	16
IA2032	Iowa AES	9-23	45	42	47	37	17
IA2027	Iowa AES	9-23	43	41	47	36	17
IA2024	Iowa AES	9-23	37	37	41	38	16
IA2034	Iowa AES	9-24	51	47	50	38	16
IA2020	Iowa AES	9-24	45	42	47	37	16
IA2030	Iowa AES	9-24	44	42	46	37	16
IA2028	Iowa AES	9-24	45	42	45	36	17
IA2035	Iowa AES	9-24	38	37	42	38	16
IA2029	Iowa AES	9-24	41	40	42	37	16
IA2040	Iowa AES	9-25	—	48	53	37	17
IA2025	Iowa AES	9-25	44	41	46	38	16
IA2023	Iowa AES	9-25	39	38	42	38	15
LSD 20%			1	2	3		

Characteristics of special-use soybean varieties, 2000.

Variety	Releasing Institution	Maturity Rating	Special Characteristics	Hilum Color	Phytophthora Gene	Chlorosis Score	Seeds/Pound
Northern Zone, 1999,2000; Crookston, Moorhead and Shelly							
Jim	N.D. AES	00.0	General Purpose	Yellow	S	4.0	2,820
Agassiz	Minn. AES	0.0	General Purpose	Buff	Rps1	4.5	3,047
UM3	Minn. AES	0.3	Small Seed	Yellow	Rps1	4.5	6,219
Danatto	N.D. AES	0.4	Small Seed	Yellow	S	4.5	5,537
Minnatto	Minn. AES	0.7	Small Seed	Yellow	Rps1	4.5	5,341
Central Zone, 2000; Becker, Morris and Rosemount							
MN0301	Minn. AES	0.3	General Purpose	Yellow	Rps1	4.0	2,752
Danatto	N.D. AES	0.4	Small Seed	Yellow	S	4.5	4,633
Lambert	Minn. AES	0.7	General Purpose	Buff	Rps1	4.5	2,671
Proto	Minn. AES	0.5	High Protein	Yellow	S	4.5	2,402
MN0901	Minn. AES	0.9	General Purpose	Black	Rps1	4.5	2,838
Surge	Minn. & S.D. AES	0.9	Higher Protein	Yellow	Rps1	4.0	2,204
Toyopro	Minn. AES	0.9	High Protein	Yellow	S	4.0	2,892
Minnatto	Minn. AES	0.9	Small Seed	Yellow	Rps1	4.5	4,633
Kato	Minn. AES	1.3	Large Seed, Higher Protein	Black	Rps1	4.0	2,073
Parker	Minn. AES	1.5	General Purpose	Buff	Rps1	4.5	2,580
Southern Zone, Lambertson and Waseca							
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	5.0	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 Lipoygenase 2	Yellow	S	4.5	2,248
IA2042	Iowa AES	2.1	Large Seed, High Protein	Yellow	S	4.5	2,027

Variety	Releasing Institution	Maturity Rating	Special Characteristics	Hilum Color	Phytophthora Gene	Chlorosis Score	Seeds/Pound
Southern Zone, Lambertson and Waseca (continued)							
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	4.5	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

Publicly developed soybean varieties entered in 2000 tests.

Variety	Releasing Institution	Maturity Rating	Phytophthora Gene	BSR Reaction	SCN Reaction	Chlorosis Score
Daksoy	N.D. AES	00.6	S	S	S	4.5
Jim	N.D. AES	00.7	S	S	S	4.0
McCall	Minn. AES	00.7	S	S	S	4.0
Glacier	Minn. AES	00.8	Rps6	S	S	4.0
Agassiz	Minn. AES	0.0	Rps1	S	S	4.0
Traill	N.D. AES	0.0	S	S	S	3.5
Barnes	N.D. AES	0.2	Rps6	S	S	4.5
MNO301	Minn. AES	0.3	Rps1	S	S	4.0
Council	N.D. AES	0.5	Rps1	S	S	4.0
Lambert	Minn. AES	0.7	Rps1	S	S	4.5
Hendricks	Minn. + S.D. AES	0.9	Rps1	S	S	4.0
MNO901	Minn. AES	0.9	Rps1	S	S	4.5
MNO902CN	Minn. AES	0.9	Rps1	R	R	4.0
Surge	S.D. + Minn. AES	0.9	Rps1	S	S	4.0
MN1301	Minn. AES	1.3	Rps1c	S	S	3.5
Kato	Minn. AES	1.3	Rps1	S	S	4.0
MN1401	Minn. AES	1.4	Rps1	S	S	4.0
Parker	Minn. AES	1.5	Rps1	S	S	4.5
Freeborn	Minn. AES	1.6	Rps1	R	R	4.0
IA1006	Iowa AES	1.6	S	R	S	4.5
MN1801	Minn. AES	1.8	Rps1c	S	S	4.5
IA1009	Iowa AES	1.9	S	S	R	4.5
Hardin 91	Iowa AES	2.0	Rps1k	S	S	5.0
Sturdy	Minn. AES	2.0	Rps1	S	S	4.0
IA1008	Iowa AES	2.0	S	S	R	5.0
IA2008R	Iowa AES	2.1	Rps1k	R	S	4.0
IA2021	Iowa AES	2.1	Rps1k	S	S	4.0
IA2036	Iowa AES	2.1	S	S	R	5.0
IA2050	Iowa AES	2.1	S	S	S	4.5
Turner	S.D. AES	2.2	S	S	R	4.5
IA2052	Iowa AES	2.3	S	R	S	4.5