PR-487

UK AGRICULTURAL EXPERIMENT STATION
UNIVERSITY OF KENTUCKY — COLLEGE OF AGRICULTURE

2003 Kentucky Soybean Performance Tests

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Tables

Web Site Features:

- Selection key to create subsets of Summary Table 4. Description on page 4.
- Nomination form, cover letter, and instructions for 2004 tests entries.

The Kentucky Soybean Performance Tests are conducted to provide an unbiased, objective estimate of the relative performance of soybean varieties in Kentucky. This information may be used by growers and seed producers to aid in selecting varieties that will give the highest total production in a specific situation.

Five soybean tests were planted in 2003 in Kentucky. The test locations are shown below. Soil types, planting dates, and other information are shown in Table 1.

Methods

All tests were planted in a randomized complete block design by maturity group. The tests (Tables 5-9) had two replications (plots) of each variety. The individual plots were 20 feet long and 6 rows wide with 16 inches between rows (seeding rate: five to six viable seeds per foot of row). All plots were treated with herbicides and maintained as weed-free as possible. All plots were chemically end-trimmed to 16 feet approximately one month after planting.

Harvesting was done with a small plot combine according to maturity; thus, several harvests were made at each location. Sixteen feet of the center rows were harvested from the plots. No allowances were made for soybeans that may have been lost because of combining or shattering.

Yield—Yield is reported in bushels per acre adjusted to 13% moisture.

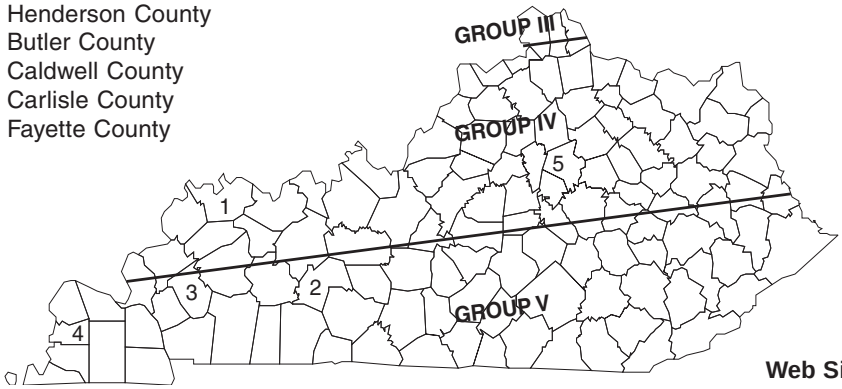
Lodging—Lodging is rated on a scale of 1 to 5, where 1 = almost all plants erect; 2 = all plants over slightly or a few down; 3 = all plants over moderately or 25% down; 4 = all plants over considerably or 50% to 80% down; 5 = all plants over badly.

Maturity date —A variety is considered mature when 95% of the pods have turned their normal mature color. One to two weeks of good drying weather will be needed beyond the date given before the beans will be ready to combine. Maturity dates were recorded at the Fayette County location.

Plant height —Plant height was measured in inches from the soil surface to the tip of the main stem. Plant height was recorded at the Fayette County location.

Location of the 2003 Kentucky Soybean Tests

1. Henderson County
2. Butler County
3. Caldwell County
4. Carlisle County
5. Fayette County



Web Site:
http://www.uky.edu/Ag/GrainCrops/varietytesting.htm

TABLE 1. LOCATION, PLANTING, AND CLIMATIC DATA FOR THE 2003 SOYBEAN PERFORMANCE TESTS

Test	Farmer	Extension Agent	Soil Type	Date of Planting	Soil Test	Fertilizer Applied[1]	50% Chance of Killing Frost[2]
Caldwell County *Full Season*	Princeton Exp. Station		Crider Silt Loam	6/04	P 139 K 477 pH 6.7	2 tons lime	10/19
Carlisle County *Full Season*	Jeff and Roger Davis	Jason Hodge	Lauren Silt Loam	5/29	P 146 K 224 pH 6.9	None	10/19
Fayette County *Full Season*	Lexington Exp. Station		Woolper Silt Loam	5/14	P 369 K 261 pH 5.6	2 tons lime	10/26
Butler County *Full Season*	Patrick Daugherty	Greg Drake	Newark Silt Loam	6/09	P 132 K 192 pH 7.0	None	10/23
Henderson County *Full Season*	Lindsey Embry	Mike Smith	Loring-Grenada Silt Loam	5/31	P 137 K 418 pH 5.8	200 lb 0-0-20	10/25

1 Amount per acre.
2 Based on 30-year average.

Summary Table 4 is the recommended table.

Interpretation

An important step in profitable soybean production is selecting good quality seed of the best varieties for your management system. The Kentucky Soybean Performance Tests are conducted to provide information useful in making this selection.

Performance of soybean varieties is affected by many factors, including year, location, soil type, and time of planting. A particular soybean variety is adapted for full season growth in a band approximately 100 miles wide from north to south (see map, page 1). Thus, the best variety in Northern Kentucky may not be the best in Southern areas. For this reason, the Kentucky Soybean Performance Tests are conducted at several locations in the major soybean-producing areas of the state. The yields as reported in this publication should be used for relative comparisons; actual yields on a grower's farm may be different.

Performance of the soybean varieties will vary from year to year and location to location, depending on adaptability, weather conditions, and management. The performance data presented in the Table 4 summary have been averaged across years and locations. **Performance of a variety across a period of years and at several locations in the state is the best indicator of its production potential.** (See *Agronomy Notes*, Volume 21, No. 3, "Using Performance Test Results in Soybean Variety Selection in Kentucky.")

Small differences in yield are usually of little importance. The yield of two varieties at a single location can differ because of chance factors (difference in soil characteristics, fertility, or availability of moisture), although the inherent yielding ability is the same. To decide if an observed yield difference is real, use the least significant difference (LSD) values cited at the bottom of each maturity group. The significance level used in the tables is 0.10. If the difference in yield between two varieties is greater than the LSD value, you can be reasonably certain that the varieties actually do differ in yielding ability. Shaded yields in the tables represent top yielding varieties that are not significantly different from the top yielding variety (bold data) of the maturity group and year in which the bold data are located.

Yield is only one factor to consider in selecting a variety for your production system. Maturity, lodging resistance, disease resistance, and time and equipment availability are other factors that need to be considered. The economic management and control of weeds are additional factors to consider with the advent of Roundup Ready soybeans.

The data provided have been divided into maturity groups. Due to weather patterns at a location, maturity alone can affect yield; this impact will be reflected by large differences in the maturity group averages. Selecting varieties from several maturity groups can reduce the impact of these maturity group fluctuations. (See *Agronomy Notes*, Volume 25, No. 3, "Growing Soybean Varieties from Multiple Maturity Groups Can Reduce Yearly Yield Volatility.")

The date of a 50% chance of a fall killing frost is important in determining which variety you select to plant. The dates presented in Table 1 are average dates over a long term. Actual dates will vary from year to year. For the date of a one-year-out-of-10 chance of a fall killing frost, subtract 13 to 18 days from the dates in Table 1. For maximum yield, a variety must mature before the first killing frost in the fall. The relative maturity for each variety is found in Table 3.

If you have soybean cyst nematode problems, a resistant variety (indicated by a "*" or "**" suffix) should be used in your production system with a recommended crop rotation program. (See Kentucky Cooperative Extension Service pub-

lication *Soybean Cyst Nematode* (PPA-3), available at your county Extension office.) The level of SCN infestation as well as the SCN race can be determined through the SCN laboratory at Princeton. **Test your fields**. Contact your county Extension office for more information on collecting and submitting samples. The importance of resistant varieties has increased as the number of acres affected by SCN has increased. SCN occurs in 32 Western Kentucky counties, representing 90% of the state's soybean acreage. Low levels of SCN show few visible symptoms but can cause yield losses of up to 25%.

Soybean mosaic virus (SMV) may cause yield loss if soybean plants are infected prior to flowering. Due to the timing of insect populations that transmit the disease, double-cropped soybeans are more likely to be affected in Kentucky. Planting SMV-resistant varieties will avoid this possible yield loss. However, only a few varieties have been evaluated for SMV resistance. Check Table 3, "Company Disease-Resistance Specifications" for SMV resistance ratings.

Table 4, consisting of a summary of the five full season tests, is recommended for selecting varieties for maximum yield in double crop systems. Better yielding full season varieties are also the better yielding double crop varieties (Todd Pfeiffer 1987. Applied Agricultural Research Vol. 2, No. 3, pp.141-145). The full season environment that maximizes gain is a better indicator of performance than late planted soybeans that have reduced yields. The data from five full season tests, analyzed across years and locations, predict performance of a variety more accurately than a single test, full season or double crop.

Twenty novel soybean varieties (indicated by a "NS" prefix) are being tested. These are just a few of the many that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of a much broader market value. Novel soybeans generally yield less, so testing them will enable soybean producers to determine whether premiums for a given trait offset possible yield lag/drag. Examples are triple null soybeans, designed for edible soy products (this variety lacks three enzymes that produce off-flavors); natto soybeans, a small-seeded soybean used for food and export; and tofu, a big-seed/high-protein soybean also used for food and export. Other big-seed/high-protein types are used for animal food, which potentially has a large U.S. market. Oil and protein data are provided in Table 10.

Growing Conditions and Special Circumstances

Kentucky experienced favorable weather during the 2003 soybean production year. While parts of the Purchase area received below-normal rainfall, the majority of the soybean production region of Kentucky received 4 to 8 inches above-normal rainfall during the growing season. Statewide, Kentucky experienced its second-wettest April through September, with above-average precipitation recorded in every month. Except for August, monthly average temperatures were below-normal for the state during the growing season.

Soybean Production Information

The Kentucky Cooperative Extension Service has a series of publications, *Soybean Production in Kentucky*, that contains a more detailed discussion of soybean production practices: Part 1: *Status, Uses, and Planning* (AGR-128); Part II: *Seed Selection, Variety Selection, and Fertilization* (AGR-129); Part III: *Planting Practices and Double Cropping* (AGR-130); Part IV: *Weed, Disease, and Insect Control* (AGR-131); Part V: *A Soybean Planting Rate Guide*. The planting guide from this series is reproduced below for your convenience (Table 2).

Kentucky State Seed Law

The Kentucky State Seed Law requires all seed exposed, offered for sale, or sold in Kentucky to be labeled as to kind and variety for each agricultural seed component present in excess of 5% of the whole and the percentage by weight of each component. All soybean seed blends should be labeled as to the percentage of each variety that makes up the mixture. The term "variety unknown" may no longer be used in place of a variety designation for soybeans, as all soybean seed must be labeled by variety name.

Acknowledgments

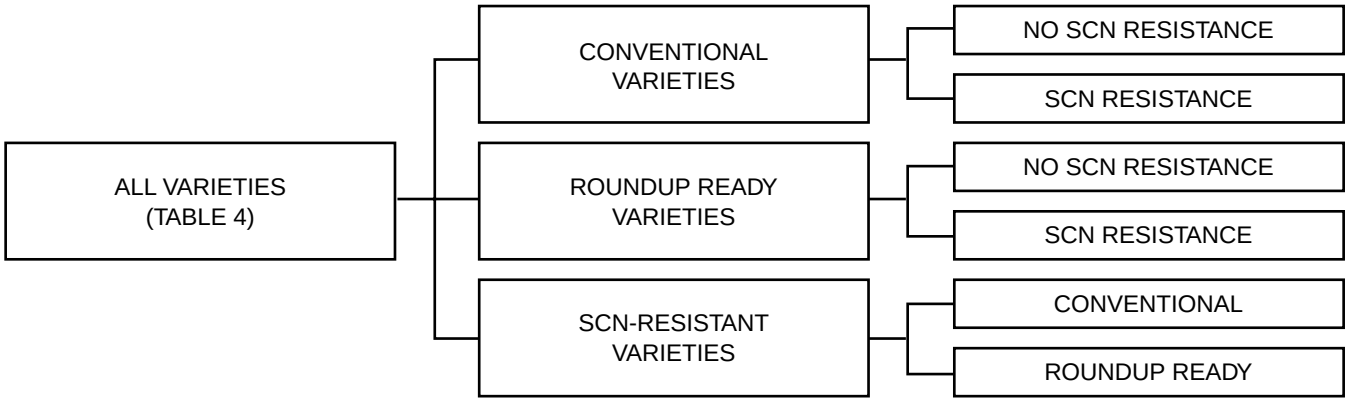
In addition to the county agents and farm cooperators mentioned in Table 1, Roger Rhodes, David Pilcher, David Shahan, Thomas Kelsay, Michael Akhwale, Praveen Pallikonda, and Benjamin Borth have contributed greatly to the production of this publication. Don Hershman, Extension Plant Pathologist at the University of Kentucky Research and Education Center in Princeton, also provided excellent information. The New Crop Opportunity Grain Group is supporting the testing of novel soybean varieties.

TABLE 2. SOYBEAN PLANTING GUIDE

	Row Spacing (Inches)				
	7	15	20	30	36
	Seeding Rate (Seeds Per Ft of Row)				
Viable Seeds	2-3	5-6	6-8	8-10	9-11
Per Pound	Pounds of Seed per Acre				
2,000	80-110	85-105	78-104	70-87	65-80
2,200	73-100	77-95	71-95	64-79	59-72
2,400	66-93	71-88	65-87	58-73	54-66
2,600	61-86	65-81	60-80	54-67	50-61
2,800	57-80	61-75	56-75	50-62	46-56
3,000	53-75	57-70	52-70	46-58	43-53
3,200	50-70	53-66	49-65	44-54	41-49
3,400	47-66	50-62	46-61	41-51	38-46
3,600	44-62	47-58	44-58	39-48	36-44
3,800	42-59	45-55	41-55	37-46	34-42
4,000	40-56	43-53	39-52	35-44	33-40

Selection Key: http://www.uky.edu/Ag/GrainCrops/varietytesting.htm

This feature of the 2003 Kentucky Soybean Performance Tests web site allows subsets of Table 4, "Summary: Variety Test Tables 5-9." Sorting of the data in Table 4 provides alternative views of the data to show those varieties that are selected by basic questions a soybean producer might ask. For example, a soybean producer interested in Roundup Ready SCN-resistant varieties would click the "Roundup Ready" box connected to the SCN variety box.



Sources of Seeds

The seed planted in the 2003 Soybean Performance Tests was acquired from the following sources:

Beck's Superior Hybrids
6767 East 276th Street
Atlanta, IN 46031
BECK 437NRR
BECK 476NRR

Bio Gene Seeds
5491 Tri-county Hwy.
Sardinia, OH 45171
BIO GENE BG 4200NRRST

Caverndale Farms, Inc.
1921 Bluegrass Road
Danville, KY 40422
CAVERNDALE CF 461
CAVERNDALE CF 492

Crow's Hybrid Corn Company
14575 University Avenue
Waukee, IA 50263
CROW'S C3915R
CROW'S C4417R
CROW'S C4815R

Delta King Seed Company
P.O. Box 970
McCrory, AR 72101
DELTA KING 3961 RR
DELTA KING 3968 RR
DELTA KING 4461 RR
DELTA KING 4763 RR
DELTA KING 4868 RR
DELTA KING 4967 RR
DELTA KING 5366 RR
DELTA KING 5465 RR

Ebberts Field Seed, Inc.
6840 North Street, Route 48
Covington, Ohio 45318
EBBERTS 1394NRR
EBBERTS 1443NRR

Excel Brand
257 East Hail
Bushnell, IL 61422
Excel Brand 8392RR
Excel Brand 8411NRR
Excel Brand 8416NRR
Excel Brand 8448NRR
Excel Brand 8499NRR

Garst Seed Company
7728 State Road
Hickory, KY 42051
GARST SEED 3824RR/N
GARST SEED 3906N
GARST SEED D445N
GARST SEED XR46Y02

Gateway Seed Company
5517 Van Buren Road
Nashville, IL 62263
GATEWAY 471
GATEWAY 4R485
GATEWAY 4RS463
GATEWAY 5R500
GATEWAY 5R531

Golden Harvest
RR 3 Box 257
Clinton, IL 61727
GOLDEN HARVEST H3921RR
GOLDEN HARVEST H3945RR
GOLDEN HARVEST H4151
GOLDEN HARVEST H4368RR
GOLDEN HARVEST H4772RR
GOLDEN HARVEST H5183RR

Great Lakes Hybrids, Inc.
9915 W M-21
Ovid, MI 48866
GREAT LAKES GL 4009 RR
GREAT LAKES GL 4409 RR
GREAT LAKES GL 5319 RR

Hoosier Pride Genetics, Inc.
R. 3 Box 53
Washington, IN 47501
HOOSIER PRIDE 4022CRR
HOOSIER PRIDE 4642CRR

Hornbeck Seed Co., Inc.
PO Box 472, 210 Drier Road
DeWitt, AR 72042-0472
HORNBECK HBK 4944CX
HORNBECK HBK R4820

Kentucky Foundation Seed Project
P.O. Box 11950
Lexington, KY 40497
ANAND
CAVINESS
DELSOY 5500
HOLLADAY
HUTCHESON

LG Seeds
1320 S. 20th Street
Lafayette, IN 47905
LG SEEDS C4112NRR
LG SEEDS C4840NRR
LG SEEDS C5115NRR
LG SEEDS C5225NRR

Miles Seed
P.O. Box 22879
Owensboro, KY 42304
- SOUTHERN CROSS AARON 4.5N, STS
- SOUTHERN CROSS ABNER 5.2 N, RR
- SOUTHERN CROSS ABRAHAM 3.9 N, RR
- SOUTHERN CROSS JONAH 4.8 N, RR
- SOUTHERN CROSS MICHAEL 4.2N, RR
- SOUTHERN CROSS STEPHEN 3.9 N, RR
- SOUTHERN CROSS TITUS 4.8N, RR

Monsanto
3100 Sycamore Road
Dekalb, IL 60115
- ASGROW AG3703
- ASGROW AG3903
- ASGROW AG3905
- ASGROW AG4201
- ASGROW AG4403
- ASGROW AG4502
- ASGROW AG4902
- ASGROW AG5301
- ASGROW AG5501
- ASGROW AG5605
- DEKALB DKB46-51
- DEKALB DKB37-51
- DEKALB DKB38-52

Pioneer Hi-Bred Int'l., Inc.
6767 Old Madison Pike, Suite 110
Huntsville, AL 35806
- PIONEER VARIETY 93B67
- PIONEER VARIETY 93B68
- PIONEER VARIETY 93M90
- PIONEER VARIETY 94B13
- PIONEER VARIETY 94B73
- PIONEER VARIETY 94B74
- PIONEER VARIETY 94M41
- PIONEER VARIETY 94M70
- PIONEER VARIETY 95B32
- PIONEER VARIETY 95B42

Royster-Clark, Inc.
717 Robinson Road
Washington Courthouse, OH 43160
- VIGORO V382NRR
- VIGORO V42N3RR
- VIGORO V47N3RR
- VIGORO V49N3RR
- VIGORO V503RR
- VIGORO V52N3RR

Schillinger Seed, Inc.
50 Glen Drive
White Heath, IL 61884
- SCHILLINGER 393.RCP

Seed Consultants, Inc.
PO Box 370, 648 Miami Trace Rd SW
Washington Courthouse, OH 43160
- SEED CONSULTANTS SC 9391 RR
- SEED CONSULTANTS SC 9394 RR
- SEED CONSULTANTS SC 9404 RR
- SEED CONSULTANTS SC 9442 RR

Southern States Cooperative
PO Box 26234
Richmond, VA 23260
- SOUTHERN STATES 381-STS
- SOUTHERN STATES 439
- SOUTHERN STATES RT 3799N
- SOUTHERN STATES RT 3802N
- SOUTHERN STATES RT 3975
- SOUTHERN STATES RT 4098
- SOUTHERN STATES RT 4230N
- SOUTHERN STATES RT 446N
- SOUTHERN STATES RT 4502N
- SOUTHERN STATES RT 4810N
- SOUTHERN STATES RT 4930N
- SOUTHERN STATES RT 4980
- SOUTHERN STATES RT 5001N
- SOUTHERN STATES RT 5302N
- SOUTHERN STATES RT 5602N

Steyer Seeds
6154 North County Road 33
Tiffin, OH 44883
- STEYER 4410 RR SCN
- STEYER 4700 RR STS SCN

Stine Seed Company
2225 Laredo Trail
Adel, IA 50003-8240
- STINE S4442-4
- STINE S4542-4
- STINE S5142-4

Syngenta Seeds
535 Pennyrile Drive
Madisonville, KY 42431
- NK BRAND S37-N4
- NK BRAND S39-Q4
- NK BRAND S40-R9
- NK BRAND S43-B1
- NK BRAND S49-Q9
- NK BRAND S52-U3

UAP Mid South
544 Pridgen Pond Road
Kingston, AL 36453
- DYNAGRO 33B52
- DYNAGRO 3443
- DYNAGRO 3481
- DYNAGRO 3562

Unisouth Genetics, Inc.
2640-C Nolensville Road
Nashville, TN 37211
- UNISOUTH GENETICS USG 5002T
- UNISOUTH GENETICS USG 510nRR
- UNISOUTH GENETICS USG 5601T
- UNISOUTH GENETICS USG 7401nRR
- UNISOUTH GENETICS USG 7440nRR
- UNISOUTH GENETICS USG 7482nRR
- UNISOUTH GENETICS USG 7489RR

Novel Soybean Varieties

Excel Brand
Dr. Ronald Secrist
116 East State Street
Camp Point, IL 62320
- DAIRYLAND DST 4203 (large-seeded food type)

Gateway Seed Company
5517 Van Buren Road
Nashville, IL 62263
- GATEWAY Gx98-0609
- GATEWAY Gx98-2033

Iowa State University Research Foundation
Julie Gustafson
310 Lab of Mechanics
Ames, IA 50011-2131
515-294-9442
- IA 3001 (high protein)
- IA3006LF (lipoxygenase free, large seed)
- IA3011 (large seed, high protein)
- IA3012LF (triple-null lipoxygenase)
- IA4002 (small seed)

Kansas State University
Bill Schapaugh
Agronomy Department
2004 Throckmorton Plant Sciences Center
Manhattan, KS 66506-5501
785-532-7242
- KS4103sp (high protein)
- KS4402sp (high protein variety)
- KS4702sp (large seed)
- KS5202sp (high protein variety)

Ohio Foundation Seeds
Jack Debolt
11491 Foundation Road, Box 6
Croton, OH 43013
- FG 1 (tofu type)
- FG 3 (tofu type)

Pioneer Hi-Bred International
Supply Logistics Research/Samples Group
7204 NW 70th Avenue
Johnston, IA 50131
- PIONEER VARIETY P9305 (tofu type)

Schillinger Seed, Inc.
50 Glen Drive
White Heath, IL 61884
- SCHILLINGER SSX 41082Y (high protein)
- SCHILLINGER SSX 42193Y (high protein)
- SCHILLINGER SSX 42262Y (high protein)
- SCHILLINGER SSX 44252P (high protein)

University of Missouri-Delta Center
Grover Shannon
P.O. Box 150, 147 State Highway T
Portageville, MO 63873
573-379-5431
- S99-3181 (natto type)

TABLE 3. COMPANY DISEASE RESISTANCE SPECIFICATIONS FOR ENTRIES IN THE 2003 KENTUCKY SOYBEAN PERFORMANCE TESTS[A]

	Variety / Brand	Relative Maturity Group	Soybean Cyst Nematode Resistance	Phytophthora sojae[B] Resistance Gene Rps	Phytophthora sojae[B] Field Tolerance[C]	Sudden Death Syndrome[C]	Carlisle Co. SDS Ratings[D]	Soybean Mosaic Virus[C]	Stem Canker[C]	Other Reported Resistance
P	ANAND	5.7	3, 5, 14				XX		MR	
~	ASGROW AG3703	3.7	3, 14		MT	MR	27			
~	ASGROW AG3903	3.9	3	1c	MT	MR	23			
~	ASGROW AG3905	3.9	3	1c	MT		36		S	
~	ASGROW AG4201	4.2	3, 14		MT	MR	17		R	
~	ASGROW AG4403	4.4	3	1a	MT	MR	20		R	
~	ASGROW AG4502	4.5	3	7	MT	MR	17		MR	
~	ASGROW AG4902	4.9	3, 14		MT	MR	14		R	
~	ASGROW AG5301	5.3	3, 14	3a	T	MR	19		R	
~	ASGROW AG5501	5.5	3, 14		MT	MR	3		R	
~	ASGROW AG5605	5.6	3		MT	MR	3			
~	BECK 437NRR	4.3	3, 4, 14	1a	MT	MR	9	S	S	
~	BECK 476NRR	4.7	3, 4, 14		MT	MR	3	S	MR	
~	BIO GENE BG 4200NRRST	4.2	3, 14		MS	MR	33			T-FROGEYE LEAF SPOT
	CAVERNDALE CF 461	4.6		7			10			
	CAVERNDALE CF 492	4.9					10	R	R	
P	CAVINESS	5.7	3, 14		MT	MR	7		R	
~	CROW'S C3915R	3.9	3, 14	1c	MT	MS	14	MR	S	
~	CROW'S C4417R	4.4	3, 14	1a	MT	MR	29	MR	MR	MR-FROGEYE LEAF SPOT
~	CROW'S C4815R	4.8	3, 14		T	MR	14	MR	MR	MR-FROGEYE LEAF SPOT
NS	DAIRYLAND DST4203 (large-seed food type)	4.5			S	R	14			
~	DEKALB DK 46-51	4.6	3, 14			MR	49		MR	
~	DEKALB DKB37-51	3.7	3	1c	MT	MS	2			
~	DEKALB DKB38-52	3.8	1, 3	1c	MT	MR	8			
P	DELSOY 5500	5.5	3, 14				6			
~	DELTA KING 3961 RR	3.9	5		S	MR	14		R	
~	DELTA KING 3968 RR	3.9	3	1c		MS	XX		R	
~	DELTA KING 4461 RR	4.6	5	1a		MR	26		S	
~	DELTA KING 4763 RR	4.7	3		MT	MS	18		S	
~	DELTA KING 4868 RR	4.8	5	1a		MR	36		MR	MR-FROGEYE LEAF SPOT
~	DELTA KING 4967 RR	4.9	3			MR	14		R	
~	DELTA KING 5366 RR	5.3	6	1c		MR	1		MR	
~	DELTA KING 5465 RR	5.4	3	1k		MR	4		MR	
~	DYNAGRO 33B52	5.2					35			
~	DYNAGRO 3443	4.4	3, 14	1a	MT	MR	12		MR	
~	DYNAGRO 3481	4.8	3, 14				20			
~	DYNAGRO 3562	5.6	3, 14			R	1			
~	EBBERTS 1394NRR	3.9	3, 14		T	MR	40	MR	MR	
~	EBBERTS 1443NRR	4.4	3, 14	1a	MT	MR	49	MR	MR	
~	Excel Brand 8392RR	3.9		1k			4			
~	Excel Brand 8411NRR	4.1	3				18			
~	Excel Brand 8416NRR	4.0	3				45			
~	Excel Brand 8448NRR	4.4	3				45			
~	Excel Brand 8499NRR	4.9	3				32			
NS	FG 1 (tofu type)	3.0					XX			
NS	FG 3 (tofu type)	2.9		1k, 1a			XX			
~	GARST SEED 3824RR/N	3.8	3				XX			
	GARST SEED 3906N	3.9	3	1c		MR	16			
	GARST SEED D445N	4.4	3, 14	1c			12			
~	GARST SEED XR46Y02	4.6	3, 14			MR	1		MR	
	GATEWAY 471	4.7	3, 14			MR	21			
~	GATEWAY 4R485	4.8	3, 14		MT	MR	25		S	
~	GATEWAY 4RS463	4.6	3, 14		MT	R	30			STS
~	GATEWAY 5R500	5.0				MR	33			
~	GATEWAY 5R531	5.3	3, 14		MT	MR	4			R-ROOT KNOT NEMATODE
NS	GATEWAY Gx98-0609	4.1					5			
NS	GATEWAY Gx98-2033	5.0					2			
~	GOLDEN HARVEST H3921RR	3.9	3	1k	MT	MR	29			
~	GOLDEN HARVEST H3945RR	3.9	3, 14	1c	MT	MR	1			
	GOLDEN HARVEST H4151	4.1	3, MR-14		MT	MR	4			
~	GOLDEN HARVEST H4368RR	4.3	3, 14		MS	MR	38			
~	GOLDEN HARVEST H4772RR	4.7	3, 14		MT	MS	17			
~	GOLDEN HARVEST H5183RR	5.1	3		MT	MR	47		R	
~	GREAT LAKES GL 4009 RR	4.0	3, 14		MS	MS	22	S	S	
~	GREAT LAKES GL 4409 RR	4.4	3, 14	1a	MT	MR	16	MR	MR	
~	GREAT LAKES GL 5319 RR	5.3	3, 14	1c	MT	MR	19	MR	R	
P	HOLLADAY	5.5					8		MR	

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TABLE 3. COMPANY DISEASE RESISTANCE SPECIFICATIONS FOR ENTRIES IN THE 2003 KENTUCKY SOYBEAN PERFORMANCE TESTS[A]

	Variety / Brand	Relative Maturity Group	Soybean Cyst Nematode Resistance	Phytophthora sojae[B] Resistance Gene Rps	Phytophthora sojae[B] Field Tolerance[C]	Sudden Death Syndrome[C]	Carlisle Co. SDS Ratings[D]	Soybean Mosaic Virus[C]	Stem Canker[C]	Other Reported Resistance
~	HOOSIER PRIDE 4022CRR	4.6	3, 14		MT	MR	54			
~	HOOSIER PRIDE 4642CRR	4.0	3, 14		MT	MR	11			
~	HORNBECK HBK R4820	4.8			T	MR	2	S	S	
	HORNBECK HBK R4944CX	4.8	1, 3, 4, 5, 9, 14	1k	T	MR	11	R	R	CYSTX TYPE SCN RESISTANCE
P	HUTCHESON	5.8					30	R	R	R-PEANUT STUNT VIRUS
NS	IA 3001 (high protein)	3.4					XX			
NS	IA3006LF (lipoxygenase free, large seed & high protein)	3.0					XX			
NS	IA3011 (large seed, high protein)	2.9					XX			
NS	IA3012LF (triple-null lipoxygenase)	3.4					XX			
NS	IA4002 (small seed)	4.1					25			
NS	KS4103sp (high protein)	4.1					49			
NS	KS4402sp (high protein variety)	4.4					8			
NS	KS4702sp (large seeded variety)	4.7					9			
NS	KS5202sp (high protein variety)	5.2					33			
~	LG SEEDS C4112NRR	4.1	3, 14		MT	MR	31		R	R-FROGEYE LEAF SPOT
~	LG SEEDS C4840NRR	4.8	3, 14	1c	MT	MR	15		R	R-FROGEYE LEAF SPOT
~	LG SEEDS C5115NRR	5.1	3, 14	1c	MT	MR	6		R	R-FROGEYE LEAF SPOT
~	LG SEEDS C5225NRR	5.2	3		MT		2			R-FROGEYE
~	NK BRAND S37-N4	3.7	3, 14	1c	MT	MR	24		S	LEAF SPOT
~	NK BRAND S39-Q4	3.9		1c	MS	MS	22	S	R	
~	NK BRAND S40-R9	4.0	3, 14		T	MR	20		S	
~	NK BRAND S43-B1	4.3	3, 14	1c	MT	MR	23		R	
~	NK BRAND S49-Q9	4.9	3, 14	1c	MT	MR	19		MR	
~	NK BRAND S52-U3	5.2	3, 9, 14		MT	MS	25		R	
~	PIONEER VARIETY 93B67	3.6	3, 5, 14	1c	MT	MR	XX			
~	PIONEER VARIETY 93B68	3.6		1k	MT	R	4			
~	PIONEER VARIETY 93M90	3.9	3, 14		MT	MR	XX			
~	PIONEER VARIETY 94B13	4.1	3, 14		MT	MR	14			
~	PIONEER VARIETY 94B73	4.7		1k	MS	MR	24			
~	PIONEER VARIETY 94B74	4.7	MR-2, 3, 14	1k	MT	MR	22			
~	PIONEER VARIETY 94M41	4.4	3	1k	MT	MR	54			MR-FROGEYE LEAF SPOT
~	PIONEER VARIETY 94M70	4.7	3	1k	MT	MR	22			
~	PIONEER VARIETY 95B32	5.3	3, 14		MT	MR	6		MR	
~	PIONEER VARIETY 95B42	5.4	3		MT	MR	1		MR	
NS	PIONEER VARIETY P9305 (tofu type)	3.0					XX			
NS	S99-3181 (natto type)	5.6	1, 2, 3, 5, 14		MT	MR	1			
~	SCHILLINGER 393.RCP	3.9	3, 14	1a	T		5			
NS	SCHILLINGER SSX 41082Y (high protein)	4.1					27			
NS	SCHILLINGER SSX 42193Y (high protein)	4.2					2			
NS	SCHILLINGER SSX 42262Y (high protein)	4.2					12			
NS	SCHILLINGER SSX 44252P (high protein)	4.4					4			
~	SEED CONSULTANTS SC 9391 RR	3.9		1a	MT	MR	4			
~	SEED CONSULTANTS SC 9394 RR	3.9		Ik	MT		35			
~	SEED CONSULTANTS SC 9404 RR	4.0	3		MT		13			
~	SEED CONSULTANTS SC 9442 RR	4.4	3, 14	1a	MT	MR	14			
	SOUTHERN CROSS AARON 4.5N, STS	4.5	3, 14		S	MR	37			STS
~	SOUTHERN CROSS ABNER 5.2 N, RR	5.2	3, 14				12			
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	3.9	3, 14		MT	MR	40			
~	SOUTHERN CROSS JONAH 4.8 N, RR	4.8	3, 14			MR	27			
~	SOUTHERN CROSS MICHAEL 4.2N, RR	4.2	3, 14			R	15			MR-BROWN STEM ROT
~	SOUTHERN CROSS STEPHEN 3.9 N, RR	3.9	3	1c	MT	MR	5		MR	
~	SOUTHERN CROSS TITUS 4.8 N, RR	4.8	3, 14		S	MR	18			
	SOUTHERN STATES 381-STS	3.8			T		XX			
	SOUTHERN STATES 439	4.3			T	R	32			
~	SOUTHERN STATES RT 3799N	3.8	3, 14		T	MR	30			
~	SOUTHERN STATES RT 3802N	3.8	3, 14		T	MR	8			
~	SOUTHERN STATES RT 3975	3.9			T	MS	1			
~	SOUTHERN STATES RT 4098	4.0			T	MR	67			
~	SOUTHERN STATES RT 4230N	4.2	3, 14		T	MR	11		R	
~	SOUTHERN STATES RT 446N	4.4	3		T	MS	22			
~	SOUTHERN STATES RT 4502N	4.5	3, 14		T	MR	9		R	
~	SOUTHERN STATES RT 4810N	4.8	3, 14		T	MR	10			
~	SOUTHERN STATES RT 4930N	4.9	3, 14		T	MR	6		R	
~	SOUTHERN STATES RT 4980	4.9			T	MR	6			
~	SOUTHERN STATES RT 5001N	5.1	3, 14		T	MR	12		R	

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TABLE 3. COMPANY DISEASE RESISTANCE SPECIFICATIONS FOR ENTRIES IN THE 2003 KENTUCKY SOYBEAN PERFORMANCE TESTS[A]

Variety / Brand	Relative Maturity Group	Soybean Cyst Nematode Resistance	Phytophthora sojae[B] Resistance Gene Rps	Phytophthora sojae[B] Field Tolerance[C]	Sudden Death Syndrome[C]	Carlisle Co. SDS Ratings[D]	Soybean Mosaic Virus[C]	Stem Canker[C]	Other Reported Resistance
~ SOUTHERN STATES RT 5302N	5.3	3, 14		T	R	3		R	
~ SOUTHERN STATES RT 5602N	5.6	3, 14		T	MR	9		R	
~ STEYER 4410 RR SCN	4.4	3, 14		MT	MR	16	MR	MR	
~ STEYER 4700 RR STS SCN	4.7	3, 14		MT	MR	8	MR	MR	
~ STINE S4442-4	4.2	3, 14				40			STS
~ STINE S4542-4	4.5	3, 14				20			
~ STINE S5142-4	5.0	3, 14				13			
UNISOUTH GENETICS USG 5002T	5.0					9		R	R-FROGEYE LEAF SPOT
~ UNISOUTH GENETICS USG 510nRR	5.1	MR-3, MR-14			R	2		R	R-ROOT KNOT, MR-FROGEYE
UNISOUTH GENETICS USG 5601T	5.6					11	R	R	R-ROOT KNOT,
~ UNISOUTH GENETICS USG 7401nRR	4.0	MR-3	1k		R	21			MR-FROGEYE
~ UNISOUTH GENETICS USG 7440nRR	4.4	3, MR-14	1a			33			MR-FROGEYE, MR-WHITE MOLD
~ UNISOUTH GENETICS USG 7482nRR	4.8	3, MR-14			MR	20			MR-FROGEYE LEAF SPOT
~ UNISOUTH GENETICS USG 7489RR	4.8				MR	10			
~ VIGORO V382NRR	3.8	3		MT	MS	XX			R-FROGEYE LEAF SPOT
~ VIGORO V42N3RS	4.2	3, 14		MT	MR	13			R-FROGEYE LEAF SPOT
~ VIGORO V47N3RR	4.7	3, 14		MT	MR	8	MR		MR-FROGEYE LEAF SPOT
~ VIGORO V49N3RR	4.9	3, 14		MS	MR	13	MR		MR-FROGEYE LEAF SPOT
~ VIGORO V503RR	5.0			MS	MR	6		MR	MR-FROGEYE, R-ROOT KNOT
~ VIGORO V52N3RR	5.2	3, 14			MR	6			MR-FROGEYE LEAF SPOT

~ Roundup Ready variety.

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

A This information is provided by the companies and has not been checked by the soybean variety test project.

B All races of Phytophthora sojae so far identified in Kentucky can be controlled with varieties with Rps 1c or 1k. Race-specific resistance is highly effective, but a proper match between pathogen race and variety is essential. Field tolerance is a lower level of protection to the fungus that will provide good, (not excellent) control against all races. Seed and young seedlings of tolerant varieties must be protected with an appropriate fungicide since field tolerance develops after the early seedling growth stage.

C Blank spaces=no data provided by seed company or data unknown.
S=susceptible, MS=moderately susceptible, MR=moderately resistant, R=resistant, T=tolerant, MT=moderately tolerant.

D The 2003 Carlisle County test showed widespread symptoms of sudden death syndrome. A "0" rating implies no detectable leaf symptoms and a rating of "100" implies all plants dead before normal defoliation due to senescence. A "XX" rating implies that the variety was not scorable.
Evaulation for resitance involves a score for disease incidence (DI=percent of plants with symptoms) and disease severity (DS=degree of leaf scorch).
SDS ratings = DI x DS / 9.

TABLE 4. 2003 SUMMARY: VARIETY TEST TABLES 5-9

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	EARLY (GROUP III)						
~	EBBERTS 1394NRR**	**63.9**			1.2		
~	GOLDEN HARVEST H3921RR*	63.9			1.8		
~	PIONEER VARIETY 93M90**	63.3			1.6		
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	62.4			1.3		
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	62.1			2.0		
~	DELTA KING 3968 RR*	61.9	54.1	**55.3**	1.7	1.6	1.5
~	Excel Brand 8392RR	61.7			1.8		
~	GARST SEED 3824RR/N*	61.6			1.4		
~	GOLDEN HARVEST H3945RR**	61.4	**56.2**		1.5	1.5	
~	SEED CONSULTANTS SC 9391 RR	61.1	53.2		1.6	1.5	
~	NK BRAND S37-N4**	60.8	52.3		1.8	2.0	
~	CROW'S C3915R	60.4			1.5		
	GARST SEED 3906N*	60.3			1.6		
~	NK BRAND S39-Q4	60.0	52.1	53.9	1.5	1.5	1.6
~	ASGROW AG3905*	59.7			1.6		
~	DEKALB DKB38-52*	59.6	51.6	53.3	1.7	1.7	1.7
~	ASGROW AG3703**	59.1	50.4		1.6	1.5	
~	SEED CONSULTANTS SC 9394 RR	58.8			2.0		
~	ASGROW AG3903*	58.5	50.8	53.4	1.8	1.9	2.0
~	PIONEER VARIETY 93B68	58.1	48.4		1.8	1.8	
~	DEKALB DKB37-51*	57.9			1.9		
~	SCHILLINGER 393.RCP**	57.5			2.0		
~	VIGORO V382NRR*	57.2	49.6		1.8	1.8	
~	PIONEER VARIETY 93B67**	57.0	50.4	51.5	1.6	1.6	1.7
	SOUTHERN STATES 381-STS	55.6			2.3		
~	DELTA KING 3961 RR	54.9	48.6	50.6	1.7	1.8	1.8
~	SOUTHERN STATES RT 3799N**	54.8	49.0	50.7	1.6	1.6	1.6
~	SOUTHERN STATES RT 3802N**	53.1	45.8		2.0	1.9	
~	SOUTHERN STATES RT 3975	53.1	46.9	48.2	1.8	1.9	2.0
NS	IA3012LF (triple-null lipoxygenase)	49.3			2.7		
NS	PIONEER VARIETY P9305 (tofu type)	48.2	38.6	42.2	1.6	1.6	1.7
NS	FG 1 (tofu type)	48.0	38.9	42.2	1.7	1.9	2.1
NS	FG 3 (tofu type)	47.8	34.1		1.6	1.8	
NS	IA3011 (large seed, high protein)	44.0	35.2	38.4	1.8	1.9	1.7
NS	IA3006LF (lipoxygenase free, large seed)	41.9			1.5		
NS	IA 3001 (high protein)	41.8			2.5		
	GROUP III AVERAGE	56.7	47.7	49.1	1.7	1.7	1.8
	LSD (0.10)	3.3	2.2	1.7	0.2	0.2	0.1
	MID-SEASON (GROUP IV)						
~	DELTA KING 4967 RR*	**68.4**			2.6		
~	HOOSIER PRIDE 4642CRR**	68.3			2.5		
~	GATEWAY 4RS463**	67.4			2.8		
~	DELTA KING 4763 RR*	67.3	**57.6**	**59.2**	2.2	2.1	2.3
~	STINE S4442-4**	66.9	57.0		1.3	1.3	
~	DELTA KING 4868 RR	66.8	55.3	56.3	1.9	1.8	2.1
~	BIO GENE BG 4200NRRST**	66.6			1.3		
~	VIGORO V42N3RR**	66.3	57.0		1.4	1.5	
~	DELTA KING 4461 RR	66.1	53.2	55.1	2.0	1.8	1.9
~	ASGROW AG4502*	65.9			1.9		
~	SOUTHERN STATES RT 4230N**	65.8			2.1		
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	65.7	56.8		1.4	1.6	
~	UNISOUTH GENETICS USG 7401nRR*	65.6			1.6		
~	BECK 437NRR**	65.3	55.4		2.0	1.9	
	GATEWAY 471**	65.3			3.0		
~	PIONEER VARIETY 94M70*	65.2			2.4		
~	SEED CONSULTANTS SC 9442 RR**	64.6	54.6	56.0	1.8	1.8	1.9
~	GARST SEED XR46Y02**	64.6			2.6		
~	DYNAGRO 3443**	64.5	52.5		1.9	1.8	
~	HOOSIER PRIDE 4022CRR**	64.5			1.3		
~	ASGROW AG4201**	64.4	54.5		2.1	2.1	
~	GATEWAY 4R485**	64.4			2.5		
~	CROW'S C4815R**	64.3	52.9		2.4	2.1	
~	STEYER 4410 RR SCN**	64.3	53.8		1.8	1.8	
~	Excel Brand 8448NRR*	64.2			1.6		
~	STINE S4542-4**	64.0			2.7		
~	CROW'S C4417R**	63.8	52.7	55.0	1.8	1.7	1.9

RECOMMENDED TABLE

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TABLE 4. 2003 SUMMARY: VARIETY TEST TABLES 5-9

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
~	BECK 476NRR**	63.7	51.9		2.7	2.3	
~	NK BRAND S43-B1**	63.7			2.1		
	HORNBECK HBK 4944CX**	63.5	52.7		2.8	2.7	
~	HORNBECK HBK R4820	63.5	52.7	54.6	1.7	1.7	1.9
~	LG SEEDS C4112NRR**	63.4	55.1		1.3	1.4	
~	NK BRAND S49-Q9**	63.3	54.6		2.3	2.2	
~	PIONEER VARIETY 94B73	63.3	52.7	54.1	2.4	2.1	2.4
~	VIGORO V47N3RR**	63.3	55.4		2.2	2.0	
~	DYNAGRO 3481**	63.3			2.5		
~	PIONEER VARIETY 94B13**	63.2	51.7		2.1	1.8	
~	PIONEER VARIETY 94B74**	63.2	54.7		2.8	2.5	
~	DEKALB DKB46-51**	63.0			2.2		
~	Excel Brand 8416NRR*	62.9			1.3		
~	GREAT LAKES GL 4409 RR**	62.7	52.5		1.9	1.7	
~	Excel Brand 8499NRR*	62.4			2.2		
~	EBBERTS 1443NRR**	62.2			1.9		
~	SOUTHERN CROSS JONAH 4.8 N, RR**	62.2			2.5		
~	GREAT LAKES GL 4009 RR**	62.0			1.2		
~	UNISOUTH GENETICS USG 7489RR	61.7			2.7		
~	VIGORO V49N3RR**	61.6	53.4		2.2	2.2	
~	UNISOUTH GENETICS USG 7440nRR**	61.4	51.8		2.1	1.9	
~	LG SEEDS C4840NRR**	61.1			3.0		
~	NK BRAND S40-R9**	61.0	51.8		2.2	2.1	
NS	GATEWAY Gx98-0609	60.9			2.6		
~	UNISOUTH GENETICS USG 7482nRR**	60.8			2.4		
	CAVERNDALE CF 492	60.7	49.7	51.6	1.7	1.4	1.8
~	PIONEER VARIETY 94M41*	60.7			2.4		
~	SOUTHERN CROSS TITUS 4.8N, RR**	60.6	51.2	52.0	2.4	2.3	2.4
~	SEED CONSULTANTS SC 9404 RR*	60.6			1.3		
~	SOUTHERN STATES RT 4980	60.5	49.8	51.4	2.6	2.3	2.5
~	STEYER 4700 RR STS SCN**	60.5	49.6		2.2	2.2	
~	GOLDEN HARVEST H4368RR**	60.4	51.5		1.2	1.3	
~	ASGROW AG4403*	60.3	51.0	53.2	2.0	1.9	2.1
NS	DAIRYLAND DST4203 (large-seeded food type)	60.3	51.1	53.4	2.0	1.9	2.0
~	SOUTHERN STATES RT 4930N**	60.3			2.9		
~	ASGROW AG4902**	60.1	50.7	52.3	2.2	2.1	2.2
~	SOUTHERN STATES RT 4810N**	60.0	49.6		2.2	2.1	
	GOLDEN HARVEST H4151**	60.0			2.3		
~	SOUTHERN STATES RT 4098	59.6	49.3	49.7	1.8	1.9	2.2
~	GOLDEN HARVEST H4772RR**	59.5	51.4		2.2	2.0	
	GARST SEED D445N**	58.5			1.6		
	SOUTHERN CROSS AARON 4.5N, STS**	58.0	48.6	49.3	1.8	1.9	2.3
~	SOUTHERN STATES RT 446N*	57.6	49.0	50.0	2.0	1.9	2.0
NS	KS4402sp (high protein variety)	57.4	47.8	46.4	1.6	1.6	1.6
~	SOUTHERN STATES RT 4502N**	57.4	47.6		2.1	2.0	
NS	SCHILLINGER SSX 41082Y (high protein)	57.3			1.4		
	SOUTHERN STATES 439	57.2	46.1	47.3	2.0	1.9	2.2
	CAVERNDALE CF 461	56.3	46.7	48.5	2.4	2.2	2.6
NS	SCHILLINGER SSX 42262Y (high protein)	56.2			2.4		
NS	SCHILLINGER SSX 42193Y (high protein)	56.1			1.7		
~	Excel Brand 8411NRR*	56.0			1.9		
NS	SCHILLINGER SSX 44252P (high protein)	54.2			1.8		
NS	KS4103sp (high protein)	52.3			2.7		
NS	KS4702sp (large seed)	49.7			3.8		
NS	IA4002 (small seed)	47.3	38.0		3.2	3.0	
	GROUP IV AVERAGE	61.8	51.9	52.4	2.1	2.0	2.1
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1

RECOMMENDED TABLE

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TABLE 4. 2003 SUMMARY: VARIETY TEST TABLES 5-9

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	LATE (GROUP V)						
~	ASGROW AG5605*	**70.0**			2.9		
	UNISOUTH GENETICS USG 5002T	65.2			3.2		
~	STINE S5142-4**	65.2			3.1		
~	DELTA KING 5465 RR*	64.9	**52.9**	**53.0**	2.7	2.4	2.5
~	UNISOUTH GENETICS USG 510nRR**	62.9	51.9	52.6	2.6	2.4	2.4
P	ANAND**	62.8	51.0	50.1	2.6	2.3	2.3
	UNISOUTH GENETICS USG 5601T	62.4	52.4		3.2	2.7	
~	GREAT LAKES GL 5319 RR**	62.1	50.2	51.3	2.0	2.1	2.2
~	SOUTHERN STATES RT 5602N**	62.0	50.4		3.7	3.0	
~	SOUTHERN CROSS ABNER 5.2 N, RR**	61.8			3.3		
P	CAVINESS**	61.5	49.6	50.7	3.6	3.2	3.5
~	DYNAGRO 33B52	61.2			3.7		
~	ASGROW AG5301**	60.8	50.7		3.0	2.6	
~	ASGROW AG5501**	60.4	50.1	51.4	2.4	2.2	2.3
~	VIGORO V52N3RR**	60.4			3.1		
P	HOLLADAY	60.2	48.5	51.4	3.3	2.7	3.0
~	LG SEEDS C5225NRR*	59.6			3.0		
~	SOUTHERN STATES RT 5302N**	59.4	49.1		2.6	2.3	
~	DYNAGRO 3562**	59.1			3.2		
~	NK BRAND S52-U3**	58.0	49.5	51.8	3.8	3.2	3.3
~	VIGORO V503RR	57.8			2.5		
~	DELTA KING 5366 RR	57.7	48.9	48.9	3.4	3.2	3.3
~	GATEWAY 5R531**	57.6			2.5		
NS	GATEWAY Gx98-2033	57.6			3.9		
~	PIONEER VARIETY 95B42*	57.4	47.3		3.1	2.7	
P	HUTCHESON	57.3	47.6	49.5	3.1	2.6	2.9
~	LG SEEDS C5115NRR**	57.1			2.7		
P	DELSOY 5500**	56.6	48.8	50.9	2.9	2.5	2.6
~	GOLDEN HARVEST H5183RR*	56.5			3.5		
NS	KS5202sp (high protein variety)	56.1	46.6	49.6	3.0	2.4	2.6
~	GATEWAY 5R500	56.0	47.4		3.2	2.5	
~	PIONEER VARIETY 95B32**	55.4	47.9	49.5	2.6	2.3	2.5
NS	S99-3181 (natto type)**	54.8			3.4		
~	SOUTHERN STATES RT 5001N**	52.2	45.5	45.8	3.1	2.7	2.8
	GROUP V AVERAGE	59.7	49.3	50.5	3.1	2.6	2.7
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	60.1	50.3	50.9	2.2	2.1	2.2

~ Roundup Ready variety.
P Entries with a P prefix are public varieties.
NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.
* Resistant to the soybean cyst nematode (Race 3).
** Resistant to the soybean cyst nematode (Race 3 and Race 14).
A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

RECOMMENDED TABLE

TABLE 5. 2003 BUTLER CO. FULL SEASON VARIETY TEST[A]

		YIELD (BU/AC)[B]			LODGING		
	BRAND -- VARIETY	2003	02-03	01-03	2003	02-03	01-03
	EARLY (GROUP III)						
~	SEED CONSULTANTS SC 9391 RR	**78.7**	**75.7**		2.8	2.6	
~	DELTA KING 3968 RR*	76.2	69.8	**65.0**	2.5	2.5	2.3
~	PIONEER VARIETY 93M90**	74.8			2.8		
~	EBBERTS 1394NRR**	74.2			2.0		
~	CROW'S C3915R	74.1			2.5		
	GARST SEED 3906N*	73.9			2.8		
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	73.7			2.0		
~	GARST SEED 3824RR/N*	73.4			2.3		
~	NK BRAND S39-Q4	73.2	68.6	64.1	2.8	2.9	2.8
~	GOLDEN HARVEST H3945RR**	72.8	70.7		2.3	2.6	
~	GOLDEN HARVEST H3921RR*	72.5			2.8		
~	PIONEER VARIETY 93B67**	71.0	66.9	61.3	2.3	2.5	2.4
~	Excel Brand 8392RR	69.9			3.0		
~	DEKALB DKB38-52*	68.4	64.7	61.5	2.8	2.6	2.4
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	67.3			3.3		
~	SEED CONSULTANTS SC 9394 RR	67.3			3.5		
~	DEKALB DKB37-51*	67.0			2.8		
~	SOUTHERN STATES RT 3975	66.6	59.8	55.8	2.8	3.4	3.3
~	SCHILLINGER 393.RCP**	66.5			3.3		
~	NK BRAND S37-N4**	66.0	60.1		2.8	3.5	
~	ASGROW AG3903*	65.7	64.6	61.7	2.8	3.5	3.2
	SOUTHERN STATES 381-STS	65.5			3.3		
~	ASGROW AG3703**	65.2	61.2		2.3	2.5	
~	ASGROW AG3905*	65.2			2.8		
~	VIGORO V382NRR*	64.4	61.8		3.0	3.3	
~	DELTA KING 3961 RR	63.3	62.3	59.4	2.8	3.0	2.7
~	SOUTHERN STATES RT 3799N**	62.5	62.5	59.1	2.5	2.8	2.5
NS	FG 1 (tofu type)	61.3	52.1	50.3	3.5	3.8	3.8
~	SOUTHERN STATES RT 3802N**	61.3	58.1		3.0	3.1	
NS	FG 3 (tofu type)	61.0	41.4		2.5	3.3	
NS	IA3012LF (triple-null lipoxygenase)	60.7			4.3		
~	PIONEER VARIETY 93B68	59.7	57.7		3.5	3.8	
NS	PIONEER VARIETY P9305 (tofu type)	59.0	50.4	49.9	2.5	2.9	2.7
NS	IA3006LF (lipoxygenase free, large seed)	58.9			3.5		
NS	IA3011 (large seed, high protein)	52.2	39.6	41.6	4.0	4.3	3.6
NS	IA 3001 (high protein)	43.7			4.8		
	GROUP III AVERAGE	66.6	60.4	57.2	2.9	3.1	2.9
	LSD (0.10)	6.3	4.4	3.4	0.4	0.4	0.3
	MID-SEASON (GROUP IV)						
~	PIONEER VARIETY 94B13**	**81.5**	71.6		3.3	3.0	
~	STINE S4442-4**	80.7	72.4		2.3	2.3	
~	HOOSIER PRIDE 4022CRR**	80.1			2.3		
~	Excel Brand 8416NRR*	80.0			2.0		
~	UNISOUTH GENETICS USG 7401nRR*	79.1			3.3		
~	DELTA KING 4967 RR*	78.5			3.5		
~	HOOSIER PRIDE 4642CRR**	78.2			4.0		
~	DELTA KING 4868 RR	78.0	71.0	65.9	3.0	3.1	2.8
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	77.7	70.7		2.5	2.9	
NS	SCHILLINGER SSX 42193Y (high protein)	77.5			2.3		
~	GREAT LAKES GL 4009 RR**	77.2			2.0		
~	BECK 437NRR**	76.7	71.7		3.0	3.5	
~	SOUTHERN STATES RT 4098	76.6	67.0	61.6	3.3	3.8	3.2
~	LG SEEDS C4112NRR**	76.5	72.5		2.5	2.4	
~	BIO GENE BG 4200NRRST**	76.5			2.5		
~	NK BRAND S43-B1**	76.3			4.0		
~	VIGORO V42N3RR**	76.0	**72.7**		2.5	2.6	
~	SEED CONSULTANTS SC 9404 RR*	75.8			2.3		
~	Excel Brand 8499NRR*	75.8			3.3		
~	NK BRAND S40-R9**	75.6	63.5		3.3	3.6	
~	Excel Brand 8448NRR*	75.6			2.8		
~	STEYER 4410 RR SCN**	74.9	71.2		2.5	3.3	
~	DELTA KING 4763 RR*	74.8	68.1	61.6	3.0	3.1	2.9
~	GREAT LAKES GL 4409 RR**	74.8	66.5		2.8	2.8	
~	DEKALB DKB46-51**	74.8			3.3		
~	DELTA KING 4461 RR	74.0	67.1	64.2	2.8	3.1	2.7
~	CROW'S C4417R**	73.5	68.3	63.6	2.5	2.8	2.7
~	GARST SEED XR46Y02**	73.5			4.0		
~	CROW'S C4815R**	73.4	63.5		3.5	3.3	
~	UNISOUTH GENETICS USG 7440nRR**	73.4	67.5		2.8	2.9	

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TABLE 5. 2003 BUTLER CO. FULL SEASON VARIETY TEST[A]

	BRAND -- VARIETY	YIELD (BU/AC)[B] 2003	02-03	01-03	LODGING 2003	02-03	01-03
~	VIGORO V47N3RR**	73.4	66.9		3.0	3.0	
~	STINE S4542-4**	73.4			4.0		
~	EBBERTS 1443NRR**	72.8			3.0		
~	SEED CONSULTANTS SC 9442 RR**	72.7	66.4	66.3	2.8	3.1	2.8
~	DYNAGRO 3481**	72.5			4.0		
~	GATEWAY 4R485**	72.4			3.5		
~	GOLDEN HARVEST H4368RR**	72.3	65.4		2.0	2.1	
NS	DAIRYLAND DST4203 (large-seeded food type)	72.2	66.8	63.1	3.0	3.4	3
~	NK BRAND S49-Q9**	72.0	66.9		4.0	3.8	
~	UNISOUTH GENETICS USG 7482nRR**	71.9			3.3		
~	ASGROW AG4502*	71.8			3.0		
~	PIONEER VARIETY 94B73	71.5	70.0	**67.9**	3.8	3.9	3.4
~	SOUTHERN CROSS JONAH 4.8 N, RR**	71.4			3.3		
~	DYNAGRO 3443**	71.3	67.2		2.5	2.9	
~	SOUTHERN STATES RT 446N*	71.3	62.1	57.2	2.8	3.0	2.8
~	PIONEER VARIETY 94M70*	71.0			3.0		
NS	SCHILLINGER SSX 41082Y (high protein)	70.9			2.8		
	GATEWAY 471**	70.8			4.0		
~	ASGROW AG4201**	70.6	63.5		3.0	3.3	
NS	SCHILLINGER SSX 42262Y (high protein)	70.1			3.3		
~	STEYER 4700 RR STS SCN**	70.0	59.3		3.0	3.1	
~	GOLDEN HARVEST H4772RR**	69.3	65.8		2.8	3.1	
	SOUTHERN STATES 439	69.0	64.6	61.8	2.8	3.0	2.8
	GOLDEN HARVEST H4151**	69.0			3.5		
~	ASGROW AG4902**	68.9	63.0	59.2	3.0	3.4	3
~	PIONEER VARIETY 94B74**	68.2	67.4		3.8	3.8	
	SOUTHERN CROSS AARON 4.5N, STS**	68.1	62.3	58.1	2.8	3.4	3.3
~	GATEWAY 4RS463**	68.1			4.3		
	GARST SEED D445N**	67.7			2.5		
~	HORNBECK HBK R4820	67.4	63.4	61.4	2.8	3.1	2.8
~	SOUTHERN CROSS TITUS 4.8N, RR**	67.4	60.1	56.8	3.3	3.6	3.3
~	Excel Brand 8411NRR*	67.3			3.3		
~	SOUTHERN STATES RT 4230N**	66.8			3.3		
~	ASGROW AG4403*	66.3	64.2	62.5	2.8	3.3	3
	CAVERNDALE CF 461	66.0	63.0	59.1	3.3	3.4	3.3
~	BECK 476NRR**	65.6	62.0		3.5	3.3	
~	UNISOUTH GENETICS USG 7489RR	64.5			3.8		
~	SOUTHERN STATES RT 4980	64.2	58.7	55.7	3.8	3.9	3.5
~	VIGORO V49N3RR**	63.8	61.2		3.0	3.3	
~	SOUTHERN STATES RT 4810N**	63.2	55.7		2.8	2.9	
~	SOUTHERN STATES RT 4930N**	63.2			3.8		
~	PIONEER VARIETY 94M41*	63.0			3.5		
	CAVERNDALE CF 492	62.8	56.1	54.2	2.8	2.1	2.3
NS	KS4402sp (high protein variety)	62.2	60.6	56.7	2.8	2.9	2.4
NS	KS4103sp (high protein)	62.2			4.3		
~	SOUTHERN STATES RT 4502N**	62.1	56.3		3.5	3.8	
	HORNBECK HBK 4944CX**	61.3	58.8		4.0	4.3	
NS	GATEWAY Gx98-0609	59.6			3.8		
NS	SCHILLINGER SSX 44252P (high protein)	58.9			3.3		
NS	IA4002 (small seed)	53.2	46.0		5.0	4.9	
~	LG SEEDS C4840NRR**	53.1			4.3		
NS	KS4702sp (large seed)	49.1			5.0		
	GROUP IV AVERAGE	70.5	64.8	60.9	3.2	3.2	2.9
	LSD (0.10)	7.2	4.5	3.5	0.5	0.4	0.3

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TABLE 5. 2003 BUTLER CO. FULL SEASON VARIETY TEST[A]

	BRAND -- VARIETY	YIELD (BU/AC)[B] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	LATE (GROUP V)						
~	ASGROW AG5605*	**78.8**			3.3		
	UNISOUTH GENETICS USG 5002T	73.0			3.8		
~	GREAT LAKES GL 5319 RR**	70.4	57.1	57.0	2.5	3.0	2.7
~	DYNAGRO 33B52	67.7			4.3		
P	HUTCHESON	67.6	58.0	56.5	3.8	3.6	3.7
~	GOLDEN HARVEST H5183RR*	67.3			3.8		
~	DYNAGRO 3562**	67.3			3.0		
~	STINE S5142-4**	67.2			4.3		
~	UNISOUTH GENETICS USG 510nRR**	66.8	**58.3**	**58.1**	3.5	3.4	3.2
	UNISOUTH GENETICS USG 5601T	66.2	58.1		4.3	3.8	
~	ASGROW AG5501**	66.1	56.8	57.3	3.3	3.3	3.1
~	NK BRAND S52-U3**	65.9	53.7	53.2	4.3	4.3	4.2
~	DELTA KING 5465 RR*	65.6	57.6	56.7	3.5	3.5	3.3
~	VIGORO V52N3RR**	65.6			3.5		
~	ASGROW AG5301**	65.5	58.1		4.0	3.6	
~	LG SEEDS C5225NRR*	65.0			3.8		
P	HOLLADAY	64.8	55.1	53.1	4.3	4.3	4.3
~	GATEWAY 5R500	64.4	57.6		3.8	3.3	
~	DELTA KING 5366 RR	63.2	54.9	51.5	4.0	4.0	4.0
NS	KS5202sp (high protein variety)	63.1	57.1	56.2	4.0	3.6	3.6
~	SOUTHERN STATES RT 5302N**	63.0	56.1		3.5	3.4	
P	DELSOY 5500**	62.6	53.4	55.1	3.8	3.6	3.3
~	SOUTHERN CROSS ABNER 5.2 N, RR**	62.5			3.8		
P	CAVINESS**	62.4	47.9	50.7	4.0	4.0	4.2
~	GATEWAY 5R531**	62.2			3.0		
~	VIGORO V503RR	61.9			3.5		
P	ANAND**	61.3	48.8	47.2	3.8	3.9	3.8
NS	GATEWAY Gx98-2033	58.8			4.3		
~	SOUTHERN STATES RT 5602N**	58.7	50.0		4.0	4.0	
NS	S99-3181 (natto type)**	57.1			4.0		
~	LG SEEDS C5115NRR**	56.9			3.3		
~	SOUTHERN STATES RT 5001N**	56.6	50.1	50.0	4.3	3.9	3.9
~	PIONEER VARIETY 95B32**	54.9	50.8	51.9	2.5	2.8	3.0
~	PIONEER VARIETY 95B42*	54.4	49.7		4.0	3.8	
	GROUP V AVERAGE	64.0	54.5	53.9	3.7	3.7	3.6
	LSD (0.10)	7.1	4.7	3.8	0.5	0.4	0.3
	GRAND MEAN	68.1	61.3	57.8	3.2	3.3	3.1

~ Roundup Ready variety.
P Entries with a P prefix are public varieties.
NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.
* Resistant to the soybean cyst nematode (Race 3).
** Resistant to the soybean cyst nematode (Race 3 and Race 14).
A 2001 data are from Logan County, and the 2002 and 2003 data are from Butler County.
B Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 6. 2003 CALDWELL CO. FULL SEASON VARIETY TEST

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	EARLY (GROUP III)						
~	EBBERTS 1394NRR**	**61.9**			1.0		
~	SEED CONSULTANTS SC 9394 RR	57.7			1.3		
~	GARST SEED 3824RR/N*	57.0			1.0		
~	Excel Brand 8392RR	56.7			1.0		
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	56.5			1.0		
~	NK BRAND S39-Q4	56.3	44.3	**50.4**	1.0	1.0	1.2
~	NK BRAND S37-N4**	55.9	44.6		1.5	1.5	
~	DEKALB DKB38-52*	55.6	42.7	47.6	1.8	1.4	1.3
~	PIONEER VARIETY 93B68	55.0	38.7		1.3	1.1	
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	55.0			1.0		
~	PIONEER VARIETY 93M90**	54.4			1.3		
~	ASGROW AG3905*	54.2			1.0		
~	SEED CONSULTANTS SC 9391 RR	53.8	42.0		1.3	1.1	
~	GOLDEN HARVEST H3921RR*	53.4			1.0		
~	CROW'S C3915R	51.6			1.0		
	SOUTHERN STATES 381-STS	50.4			1.8		
~	DELTA KING 3968 RR*	50.1	43.3	49.9	1.5	1.3	1.3
~	ASGROW AG3703**	49.5	39.9		1.3	1.1	
~	SCHILLINGER 393.RCP**	49.5			1.3		
~	SOUTHERN STATES RT 3802N**	49.0	37.3		1.3	1.3	
~	DELTA KING 3961 RR	48.7	39.7	46.1	1.0	1.4	1.5
~	GOLDEN HARVEST H3945RR**	48.6	**46.0**		1.3	1.1	
~	VIGORO V382NRR*	47.7	40.4		1.0	1.0	
~	SOUTHERN STATES RT 3799N**	47.5	39.6	45.2	1.0	1.1	1.3
~	PIONEER VARIETY 93B67**	46.8	35.6	40.6	1.0	1.0	1.3
	GARST SEED 3906N*	46.5			1.0		
NS	IA3012LF (triple-null lipoxygenase)	45.5			3.8		
~	SOUTHERN STATES RT 3975	45.0	37.2	41.8	1.3	1.1	1.3
~	ASGROW AG3903*	44.5	36.1	43.6	1.3	1.1	1.3
NS	IA3011 (large seed, high protein)	44.5	36.8	39.5	1.3	1.1	1.1
~	DEKALB DKB37-51*	42.8			1.3		
NS	PIONEER VARIETY P9305 (tofu type)	40.8	31.9	39.0	1.5	1.3	1.2
NS	FG 3 (tofu type)	40.1	30.3		1.0	1.0	
NS	FG 1 (tofu type)	39.5	29.0	36.9	1.3	1.1	1.3
NS	IA 3001 (high protein)	35.2			1.8		
NS	IA3006LF (lipoxygenase free, large seed)	29.7			1.0		
	GROUP III AVERAGE	49.4	38.7	43.7	1.3	1.2	1.3
	LSD (0.10)	7.5	4.5	3.5	0.4	0.2	0.2
	MID-SEASON (GROUP IV)						
~	BIO GENE BG 4200NRRST**	**71.1**			1.0		
~	Excel Brand 8499NRR*	70.4			2.0		
~	STINE S4442-4**	69.6	**52.9**		1.0	1.0	
~	VIGORO V42N3RR**	68.0	51.4		1.3	1.1	
~	HOOSIER PRIDE 4642CRR**	67.3			2.0		
~	BECK 437NRR**	66.3	49.3		1.8	1.4	
NS	DAIRYLAND DST4203 (large-seeded food type)	66.3	47.7	52.6	2.0	1.5	1.7
~	DEKALB DKB46-51**	65.5			2.3		
~	GATEWAY 4R485**	65.3			2.3		
~	GATEWAY 4RS463**	64.7			2.5		
~	DELTA KING 4763 RR*	64.6	50.7	**58.1**	2.0	1.5	1.7
~	PIONEER VARIETY 94B73	64.6	50.6	52.5	2.3	1.6	2.2
~	PIONEER VARIETY 94M70*	64.3			2.0		
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	63.8	46.2		1.3	1.1	
~	ASGROW AG4502*	63.0			1.5		
	GATEWAY 471**	62.7			2.3		
~	STEYER 4410 RR SCN**	62.6	47.3		1.8	1.4	
~	DELTA KING 4967 RR*	62.6			2.3		
~	STINE S4542-4**	62.6			2.3		
~	DYNAGRO 3443**	62.5	46.6		1.8	1.4	
~	GOLDEN HARVEST H4368RR**	62.5	45.1		1.0	1.0	
~	Excel Brand 8448NRR*	62.5			1.3		
~	SOUTHERN STATES RT 4930N**	62.4			3.3		
	CAVERNDALE CF 492	62.2	47.8	53.1	1.0	1.0	1.3
~	Excel Brand 8416NRR*	62.2			1.3		
~	UNISOUTH GENETICS USG 7489RR	62.2			2.5		
~	HORNBECK HBK R4820	61.8	48.1	53.3	1.5	1.3	1.5
~	PIONEER VARIETY 94B13**	61.8	45.4		1.5	1.3	
~	ASGROW AG4201**	61.6	46.6		1.8	1.4	
~	DELTA KING 4461 RR	61.5	46.7	53.6	1.8	1.4	1.5

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TABLE 6. 2003 CALDWELL CO. FULL SEASON VARIETY TEST

		YIELD (BU/AC)[A]			LODGING		
	BRAND -- VARIETY	2003	02-03	01-03	2003	02-03	01-03
~	EBBERTS 1443NRR**	61.5			2.0		
NS	KS4402sp (high protein variety)	61.4	45.9	47.7	1.5	1.3	1.4
~	DELTA KING 4868 RR	61.1	49.0	55.1	1.8	1.4	1.7
~	SOUTHERN CROSS JONAH 4.8 N, RR**	61.0			2.0		
~	LG SEEDS C4112NRR**	60.9	45.0		1.0	1.0	
~	NK BRAND S49-Q9**	60.8	50.3		2.3	1.6	
~	UNISOUTH GENETICS USG 7440nRR**	60.6	47.9		1.8	1.4	
~	VIGORO V49N3RR**	60.5	47.0		1.8	1.5	
~	SOUTHERN STATES RT 4230N**	60.3			1.5		
~	SOUTHERN STATES RT 4502N**	60.0	43.1		1.8	1.4	
~	GARST SEED XR46Y02**	60.0			2.0		
~	SOUTHERN CROSS TITUS 4.8N, RR**	59.6	46.0	49.5	2.0	1.5	1.8
~	DYNAGRO 3481**	59.6			2.0		
~	BECK 476NRR**	59.2	43.9		2.3	1.6	
~	ASGROW AG4902**	59.1	47.0	51.8	1.8	1.4	1.6
~	NK BRAND S43-B1**	59.1			1.5		
~	UNISOUTH GENETICS USG 7401nRR*	59.1			1.0		
~	CROW'S C4815R**	59.0	45.0		2.0	1.5	
NS	GATEWAY Gx98-0609	58.8			2.0		
~	GREAT LAKES GL 4409 RR**	57.9	48.6		1.8	1.4	
~	PIONEER VARIETY 94B74**	57.9	43.7		2.3	1.6	
~	NK BRAND S40-R9**	57.7	44.9		2.0	1.5	
~	Excel Brand 8411NRR*	57.7			1.5		
~	SOUTHERN STATES RT 4980	57.4	45.1	51.7	2.3	1.6	2.0
~	HOOSIER PRIDE 4022CRR**	57.4			1.0		
NS	SCHILLINGER SSX 42262Y (high protein)	57.4			2.3		
~	CROW'S C4417R**	57.0	45.0	51.2	1.5	1.3	1.5
~	SEED CONSULTANTS SC 9442 RR**	57.0	47.7	51.8	1.5	1.3	1.3
~	VIGORO V47N3RR**	57.0	47.8		2.0	1.5	
~	GOLDEN HARVEST H4772RR**	56.3	44.0		2.0	1.6	
	HORNBECK HBK 4944CX**	56.2	45.6		2.0	1.6	
~	SOUTHERN STATES RT 4098	56.1	42.0	44.0	1.3	1.1	1.7
~	SOUTHERN STATES RT 4810N**	55.9	44.2		1.8	1.5	
	GARST SEED D445N**	55.9			1.5		
~	GREAT LAKES GL 4009 RR**	55.9			1.0		
	SOUTHERN CROSS AARON 4.5N, STS**	55.8	40.9	42.7	1.3	1.3	1.6
~	ASGROW AG4403*	55.7	42.6	48.7	1.5	1.3	1.4
~	SEED CONSULTANTS SC 9404 RR*	55.6			1.0		
NS	SCHILLINGER SSX 41082Y (high protein)	55.5			1.0		
	CAVERNDALE CF 461	55.3	42.0	45.5	2.3	1.6	1.9
	SOUTHERN STATES 439	55.2	39.1	42.0	1.8	1.4	1.8
~	PIONEER VARIETY 94M41*	55.0			1.8		
~	LG SEEDS C4840NRR**	55.0			2.3		
NS	SCHILLINGER SSX 42193Y (high protein)	54.9			1.5		
~	SOUTHERN STATES RT 446N*	53.8	40.4	45.5	1.8	1.4	1.6
~	UNISOUTH GENETICS USG 7482nRR**	52.7			2.0		
	GOLDEN HARVEST H4151**	51.6			1.8		
NS	KS4103sp (high protein)	51.0			2.3		
~	STEYER 4700 RR STS SCN**	50.1	37.7		1.8	1.4	
NS	SCHILLINGER SSX 44252P (high protein)	49.8			1.3		
NS	KS4702sp (large seed)	44.3			3.3		
NS	IA4002 (small seed)	40.3	31.7		2.5	2.0	
	GROUP IV AVERAGE	59.4	45.6	50.0	1.8	1.4	1.6
	LSD (0.10)	5.0	3.5	3.4	0.5	0.3	0.2

continued on next page

TABLE 6. 2003 CALDWELL CO. FULL SEASON VARIETY TEST

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	LATE (GROUP V)						
~	ASGROW AG5605*	**76.6**			2.0		
	UNISOUTH GENETICS USG 5601T	70.6	**50.4**		2.3	1.9	
~	DELTA KING 5465 RR*	70.2	47.7	52.3	2.0	1.8	2.0
	UNISOUTH GENETICS USG 5002T	68.9			2.5		
~	DYNAGRO 33B52	68.6			2.8		
~	SOUTHERN CROSS ABNER 5.2 N, RR**	67.7			2.5		
P	ANAND**	66.0	48.4	48.1	1.8	1.5	1.7
P	HOLLADAY	65.9	48.4	**56.3**	2.5	2.1	2.3
~	PIONEER VARIETY 95B42*	64.9	47.8		2.5	2.1	
~	STINE S5142-4**	64.8			2.3		
~	SOUTHERN STATES RT 5602N**	64.7	46.3		3.0	2.3	
~	DYNAGRO 3562**	64.1			2.3		
~	VIGORO V52N3RR**	63.6			2.0		
~	ASGROW AG5301**	63.5	45.5		2.0	1.9	
NS	KS5202sp (high protein variety)	63.2	46.4	53.4	2.5	1.9	1.9
~	UNISOUTH GENETICS USG 510nRR**	63.2	47.4	54.4	1.8	1.6	1.8
~	PIONEER VARIETY 95B32**	62.7	47.2	51.5	2.3	1.9	1.9
~	ASGROW AG5501**	62.6	45.7	50.3	1.8	1.5	1.9
~	GATEWAY 5R531**	62.3			2.0		
~	GATEWAY 5R500	61.8	46.1		2.5	1.9	
~	SOUTHERN STATES RT 5302N**	61.7	44.3		2.0	1.8	
P	HUTCHESON	61.2	46.0	49.7	2.3	2.0	2.3
~	LG SEEDS C5115NRR**	61.2			2.0		
~	VIGORO V503RR	60.2			1.8		
~	GREAT LAKES GL 5319 RR**	59.9	42.9	46.9	1.5	1.4	1.7
NS	GATEWAY Gx98-2033	59.8			2.3		
~	LG SEEDS C5225NRR*	59.7			2.0		
~	SOUTHERN STATES RT 5001N**	58.9	42.9	47.7	2.3	1.9	2.1
~	NK BRAND S52-U3**	58.7	46.0	51.5	3.3	2.8	2.8
P	DELSOY 5500**	58.4	45.0	49.8	2.0	1.6	2.0
NS	S99-3181 (natto type)**	58.1			3.0		
P	CAVINESS**	57.4	42.4	49.1	3.3	2.3	2.6
~	DELTA KING 5366 RR	57.3	42.1	47.1	2.8	2.6	2.8
~	GOLDEN HARVEST H5183RR*	56.0			3.3		
	GROUP V AVERAGE	63.1	45.9	50.6	2.3	1.9	2.1
	LSD (0.10)	7.1	4.1	3.5	0.6	0.4	0.3
	GRAND MEAN	57.9	44.1	48.6	1.8	1.5	1.7

~ Roundup Ready variety.
P Entries with a P prefix are public varieties.
NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.
* Resistant to the soybean cyst nematode (Race 3).
** Resistant to the soybean cyst nematode (Race 3 and Race 14).
A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 7. 2003 CARLISLE CO. FULL SEASON VARIETY TEST[B]

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	EARLY (GROUP III)						
~	ASGROW AG3703**	**58.9**	50.5		2.5	1.8	
~	GOLDEN HARVEST H3921RR*	55.5			2.3		
~	GOLDEN HARVEST H3945RR**	55.4	**51.3**		1.8	1.5	
~	DEKALB DKB37-51*	51.4			2.8		
~	ASGROW AG3903*	51.3	47.5	**50.3**	2.0	2.0	2.1
	GARST SEED 3906N*	51.3			1.8		
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	50.0			1.0		
~	NK BRAND S37-N4**	47.8	47.3		2.0	2.1	
~	ASGROW AG3905*	47.5			1.5		
~	PIONEER VARIETY 93M90**	46.7			1.5		
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	45.9			2.0		
~	DELTA KING 3968 RR*	45.3	46.9	**50.3**	2.0	1.9	1.7
~	SOUTHERN STATES RT 3799N**	44.6	43.9	46.1	1.5	1.4	1.4
~	GARST SEED 3824RR/N*	44.0			1.3		
~	PIONEER VARIETY 93B68	43.9	42.9		1.8	1.6	
~	EBBERTS 1394NRR**	43.7			1.0		
~	SOUTHERN STATES RT 3975	43.1	43.2	45.2	2.3	2.3	2.2
~	CROW'S C3915R	43.1			1.5		
~	PIONEER VARIETY 93B67**	42.4	44.6	47.3	2.3	1.9	1.8
~	DEKALB DKB38-52*	41.4	45.6	48.3	1.5	2.0	1.8
~	SEED CONSULTANTS SC 9391 RR	40.9	41.2		1.3	1.1	
~	DELTA KING 3961 RR	40.3	43.5	45.6	2.0	1.9	1.8
~	Excel Brand 8392RR	40.0			1.8		
~	VIGORO V382NRR*	37.8	41.3		1.8	1.8	
~	SCHILLINGER 393.RCP**	37.2			2.0		
NS	IA 3001 (high protein)	36.1			2.8		
~	SOUTHERN STATES RT 3802N**	35.7	39.2		2.0	1.9	
~	SEED CONSULTANTS SC 9394 RR	35.7			2.0		
	SOUTHERN STATES 381-STS	32.0			2.3		
~	NK BRAND S39-Q4	30.8	34.8	41.0	1.3	1.1	1.3
NS	FG 3 (tofu type)	30.6	26.2		1.8	1.8	
NS	PIONEER VARIETY P9305 (tofu type)	29.4	32.8	35.7	1.3	1.3	1.5
NS	IA3011 (large seed, high protein)	29.3	28.6	34.6	1.5	1.6	1.5
NS	IA3012LF (triple-null lipoxygenase)	27.5			2.0		
NS	FG 1 (tofu type)	26.8	29.3	34.9	1.3	2.0	2.0
NS	IA3006LF (lipoxygenase free, large seed)	22.2			1.0		
	GROUP III AVERAGE	41.3	41.1	43.6	1.8	1.7	1.7
	LSD (0.10)	9.1	4.9	3.9	0.5	0.4	0.3
	MID-SEASON (GROUP IV)						
	HORNBECK HBK 4944CX**	**68.7**	**51.0**		2.5	2.6	
~	SOUTHERN STATES RT 4230N**	63.4			2.3		
~	SOUTHERN STATES RT 4930N**	60.1			2.5		
~	DELTA KING 4967 RR*	59.8			2.3		
~	LG SEEDS C4840NRR**	59.7			2.8		
~	STEYER 4700 RR STS SCN**	58.4	47.4		2.0	2.4	
~	HOOSIER PRIDE 4642CRR**	58.1			2.5		
~	VIGORO V49N3RR**	57.0	49.4		1.5	2.0	
	GATEWAY 471**	56.7			3.0		
~	SEED CONSULTANTS SC 9442 RR**	55.0	47.9	49.3	1.8	1.6	1.8
~	PIONEER VARIETY 94M70*	55.0			2.5		
NS	GATEWAY Gx98-0609	54.5			3.0		
~	BECK 476NRR**	53.5	43.4		2.8	2.5	
~	PIONEER VARIETY 94B74**	52.5	47.3		2.8	2.5	
~	DELTA KING 4763 RR*	52.2	47.9	**53.3**	2.0	2.1	2.7
~	ASGROW AG4502*	52.0			1.5		
~	GATEWAY 4R485**	52.0			2.0		
~	GATEWAY 4RS463**	52.0			2.0		
~	UNISOUTH GENETICS USG 7482nRR**	51.9			1.8		
~	DYNAGRO 3481**	51.6			1.8		
~	STEYER 4410 RR SCN**	51.4	45.3		1.5	1.3	
~	SOUTHERN STATES RT 4810N**	51.2	43.9		2.0	2.1	
~	PIONEER VARIETY 94M41*	51.1			2.0		
~	CROW'S C4815R**	51.0	45.4		2.3	2.0	
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	50.6	49.6		1.0	1.4	
~	ASGROW AG4201**	49.8	49.7		1.8	2.1	
~	NK BRAND S43-B1**	49.7			1.3		
~	DELTA KING 4461 RR	49.4	42.1	45.3	1.5	1.4	1.7
~	DELTA KING 4868 RR	49.0	44.1	48.2	1.0	1.4	1.9
~	GARST SEED XR46Y02**	48.6			2.0		

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TABLE 7. 2003 CARLISLE CO. FULL SEASON VARIETY TEST[B]

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
~	DYNAGRO 3443**	48.5	42.8		2.0	1.8	
~	SOUTHERN CROSS TITUS 4.8N, RR**	48.3	44.4	46.1	2.0	2.0	2.3
~	Excel Brand 8448NRR*	48.0			1.5		
~	LG SEEDS C4112NRR**	47.7	46.2		1.0	1.0	
~	UNISOUTH GENETICS USG 7401nRR*	47.6			1.3		
~	UNISOUTH GENETICS USG 7489RR	47.6			2.3		
~	GREAT LAKES GL 4009 RR**	47.6			1.0		
~	SOUTHERN STATES RT 4502N**	47.4	42.7		1.8	1.6	
	GOLDEN HARVEST H4151**	47.3			2.3		
~	VIGORO V47N3RR**	47.2	45.5		2.0	1.9	
~	SOUTHERN CROSS JONAH 4.8 N, RR**	47.0			2.0		
~	STINE S4542-4**	46.9			2.8		
~	VIGORO V42N3RR**	46.3	44.4		1.0	1.1	
	CAVERNDALE CF 492	46.1	44.8	48.1	1.0	1.0	2.1
~	ASGROW AG4902**	45.9	41.1	44.6	2.0	2.1	2.4
~	HOOSIER PRIDE 4022CRR**	45.9			1.0		
NS	SCHILLINGER SSX 44252P (high protein)	45.8			1.8		
~	GREAT LAKES GL 4409 RR**	45.7	42.8		1.5	1.5	
~	ASGROW AG4403*	45.4	42.6	47.3	2.0	1.8	1.9
~	NK BRAND S49-Q9**	45.2	43.3		1.3	2.0	
~	SOUTHERN STATES RT 4980	45.0	40.8	44.4	2.0	2.3	2.4
~	HORNBECK HBK R4820	44.8	42.5	47.0	1.0	1.3	1.7
~	BIO GENE BG 4200NRRST**	44.8			1.0		
~	GOLDEN HARVEST H4772RR**	44.6	42.0		2.0	1.6	
NS	KS4402sp (high protein variety)	44.4	38.2	37.7	1.0	1.0	1.2
~	PIONEER VARIETY 94B13**	43.9	40.8		1.8	1.6	
~	BECK 437NRR**	43.0	43.8		1.5	1.3	
~	CROW'S C4417R**	42.5	41.3	48.0	1.5	1.3	1.7
~	SEED CONSULTANTS SC 9404 RR*	42.4			1.3		
~	NK BRAND S40-R9**	42.0	41.9		1.5	1.9	
~	STINE S4442-4**	41.8	42.0		1.0	1.0	
NS	IA4002 (small seed)	41.7	34.4		3.3	3.4	
~	EBBERTS 1443NRR**	40.5			1.3		
~	UNISOUTH GENETICS USG 7440nRR**	40.1	39.5		1.8	1.8	
NS	KS4702sp (large seed)	40.1			4.8		
~	DEKALB DKB46-51**	39.4			1.3		
	GARST SEED D445N**	38.3			1.5		
~	Excel Brand 8416NRR*	37.4			1.0		
NS	KS4103sp (high protein)	35.9			2.0		
~	PIONEER VARIETY 94B73	35.5	33.8	40.6	1.8	1.5	1.8
	CAVERNDALE CF 461	34.5	33.8	39.3	2.0	2.0	2.6
~	SOUTHERN STATES RT 4098	33.5	36.6	42.5	1.5	1.6	2.1
~	GOLDEN HARVEST H4368RR**	32.7	38.0		1.0	1.3	
~	SOUTHERN STATES RT 446N*	31.8	35.4	40.8	1.8	1.6	1.9
~	Excel Brand 8411NRR*	31.6			1.5		
	SOUTHERN STATES 439	31.5	32.0	35.8	1.8	1.6	2.0
~	Excel Brand 8499NRR*	30.7			1.5		
	SOUTHERN CROSS AARON 4.5N, STS**	30.4	34.4	41.3	1.3	1.4	2.2
NS	DAIRYLAND DST4203 (large-seeded food type)	29.7	33.9	41.4	1.3	1.3	1.7
NS	SCHILLINGER SSX 41082Y (high protein)	27.2			1.0		
NS	SCHILLINGER SSX 42262Y (high protein)	26.9			1.5		
NS	SCHILLINGER SSX 42193Y (high protein)	16.6			1.5		
	GROUP IV AVERAGE	45.7	42.3	44.3	1.8	1.7	2.0
	LSD (0.10)	8.2	5.1	4.0	0.5	0.4	0.4

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TABLE 7. 2003 CARLISLE CO. FULL SEASON VARIETY TEST[B]

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	LATE (GROUP V)						
~	ASGROW AG5605*	**68.6**			2.8		
P	ANAND**	67.1	**56.1**	**53.2**	1.5	1.4	1.3
~	UNISOUTH GENETICS USG 510nRR**	65.0	51.8	48.9	2.0	2.0	2.1
~	SOUTHERN STATES RT 5602N**	64.9	52.0		4.0	3.0	
~	DELTA KING 5465 RR*	63.1	52.7	51.0	2.5	2.4	2.6
P	CAVINESS**	61.8	50.4	48.9	3.5	3.3	3.5
~	ASGROW AG5501**	60.4	50.2	49.8	2.0	1.9	2.1
~	VIGORO V52N3RR**	59.3			3.5		
~	SOUTHERN STATES RT 5302N**	59.2	47.2		2.3	2.0	
~	DELTA KING 5366 RR	59.0	50.7	49.5	2.8	3.0	3.2
~	LG SEEDS C5225NRR*	58.8			2.8		
~	STINE S5142-4**	58.3			3.5		
~	GREAT LAKES GL 5319 RR**	57.1	48.5	48.8	2.5	2.3	2.3
NS	S99-3181 (natto type)**	56.9			2.3		
~	SOUTHERN CROSS ABNER 5.2 N, RR**	56.7			3.5		
	UNISOUTH GENETICS USG 5002T	56.5			2.8		
~	ASGROW AG5301**	55.9	48.1		2.8	2.4	
~	GATEWAY 5R531**	55.7			2.0		
~	LG SEEDS C5115NRR**	55.5			2.3		
~	DYNAGRO 3562**	55.3			3.3		
NS	GATEWAY Gx98-2033	53.7			4.8		
P	DELSOY 5500**	51.2	47.4	48.8	3.3	2.6	2.7
	UNISOUTH GENETICS USG 5601T	49.9	47.0		2.0	2.1	
P	HOLLADAY	49.2	43.7	47.1	2.5	2.0	2.8
~	PIONEER VARIETY 95B32**	47.9	46.0	46.4	2.5	2.3	2.4
~	VIGORO V503RR	47.5			2.3		
~	PIONEER VARIETY 95B42*	47.3	41.7		2.8	2.3	
~	SOUTHERN STATES RT 5001N**	46.6	44.6	42.1	2.5	2.3	2.5
P	HUTCHESON	45.3	40.6	46.1	3.3	2.5	3.0
~	NK BRAND S52-U3**	45.0	43.3	46.9	4.3	3.3	3.2
NS	KS5202sp (high protein variety)	42.8	38.2	42.3	2.0	1.5	2.3
~	DYNAGRO 33B52	41.4			4.0		
~	GATEWAY 5R500	37.5	39.3		3.5	2.9	
~	GOLDEN HARVEST H5183RR*	34.8			3.8		
	GROUP V AVERAGE	54.0	47.0	47.8	2.9	2.4	2.6
	LSD (0.10)	6.0	3.4	3.2	0.7	0.5	0.5
	GRAND MEAN	46.5	43.1	45.2	2.0	1.9	2.1

~ Roundup Ready variety.
P Entries with a P prefix are public varieties.
NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.
* Resistant to the soybean cyst nematode (Race 3).
** Resistant to the soybean cyst nematode (Race 3 and Race 14).
A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.
B The Carlisle County test showed widespread symptoms of sudden death syndrome. See Table 3 for ratings.

TABLE 8. 2003 FAYETTE CO. FULL SEASON VARIETY TEST

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	LODGING 2003	PLANT HEIGHT (IN) 2003	MATURITY DATE[B] 2003
	EARLY (GROUP III)				
~	DELTA KING 3968 RR*	**77.9**	1.3	37	9/28
~	GOLDEN HARVEST H3921RR*	77.4	2.0	35	10/2
~	SCHILLINGER 393.RCP**	76.9	2.3	41	9/30
~	EBBERTS 1394NRR**	75.7	1.0	33	10/1
~	PIONEER VARIETY 93B68	74.7	1.5	32	9/29
~	Excel Brand 8392RR	74.6	1.8	38	9/29
~	NK BRAND S39-Q4	74.4	1.3	35	10/5
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	73.5	1.3	32	9/29
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	73.4	1.8	35	9/30
~	CROW'S C3915R	73.1	1.3	36	9/29
~	PIONEER VARIETY 93M90**	73.0	1.3	37	9/30
	GARST SEED 3906N*	72.7	1.3	40	9/29
~	SEED CONSULTANTS SC 9391 RR	72.1	1.3	34	9/29
~	NK BRAND S37-N4**	72.1	1.3	38	9/29
~	DEKALB DKB37-51*	71.5	1.5	37	9/27
~	GARST SEED 3824RR/N*	71.1	1.0	33	9/28
~	VIGORO V382NRR*	70.8	2.0	41	9/30
~	GOLDEN HARVEST H3945RR**	70.6	1.0	34	9/28
~	DEKALB DKB38-52*	70.3	1.3	36	9/29
~	ASGROW AG3903*	69.6	1.5	37	9/30
~	SEED CONSULTANTS SC 9394 RR	69.4	1.8	39	9/30
~	ASGROW AG3905*	69.3	1.5	37	9/30
	SOUTHERN STATES 381-STS	68.6	2.3	43	10/6
~	PIONEER VARIETY 93B67**	67.2	1.3	35	9/25
~	DELTA KING 3961 RR	66.4	1.5	42	9/28
~	ASGROW AG3703**	64.3	1.0	38	9/29
NS	FG 1 (tofu type)	63.7	1.0	32	9/24
~	SOUTHERN STATES RT 3799N**	61.7	1.5	36	10/1
~	SOUTHERN STATES RT 3975	61.4	1.8	42	10/6
NS	PIONEER VARIETY P9305 (tofu type)	60.4	1.0	27	9/24
NS	IA3012LF (triple-null lipoxygenase)	59.0	1.0	25	9/25
NS	FG 3 (tofu type)	58.5	1.5	32	9/30
~	SOUTHERN STATES RT 3802N**	58.4	2.0	43	10/3
NS	IA3006LF (lipoxygenase free, large seed)	57.5	1.0	27	9/22
NS	IA 3001 (high protein)	53.1	1.5	33	9/21
NS	IA3011 (large seed, high protein)	49.1	1.0	28	9/28
	GROUP III AVERAGE	68.2	1.4	36	9/28
	LSD (0.10)	4.8	0.3	2	
	MID-SEASON (GROUP IV)				
~	DELTA KING 4868 RR	**78.0**	2.0	46	10/6
~	HOOSIER PRIDE 4022CRR**	77.8	1.0	35	10/1
~	HORNBECK HBK R4820	77.5	2.0	45	10/6
~	ASGROW AG4502*	77.4	2.0	40	10/6
~	STINE S4442-4**	76.8	1.3	35	10/5
~	PIONEER VARIETY 94B73	76.6	2.0	42	10/6
~	GATEWAY 4RS463**	76.2	2.5	44	10/6
~	DELTA KING 4763 RR*	76.2	2.3	45	10/6
~	GOLDEN HARVEST H4368RR**	76.0	1.0	35	10/4
~	UNISOUTH GENETICS USG 7401nRR*	75.7	1.5	35	10/3
~	VIGORO V47N3RR**	75.3	2.0	40	10/6
~	BECK 476NRR**	75.3	3.0	47	10/6
~	DEKALB DKB46-51**	74.3	2.5	44	10/6
~	CROW'S C4417R**	73.9	2.0	40	10/6
~	LG SEEDS C4840NRR**	73.8	3.5	48	10/6
~	ASGROW AG4201**	73.8	2.3	42	10/6
~	Excel Brand 8416NRR*	73.3	1.0	34	10/2
~	DELTA KING 4461 RR	72.8	2.0	41	10/6
~	GARST SEED XR46Y02**	72.7	2.5	42	10/6
~	BIO GENE BG 4200NRRST**	72.6	1.0	35	10/5
~	STINE S4542-4**	72.1	2.3	45	10/6
~	BECK 437NRR**	72.1	1.8	40	10/4
~	HOOSIER PRIDE 4642CRR**	71.7	2.0	39	10/6
~	SOUTHERN STATES RT 4980	71.5	2.8	43	10/6
~	EBBERTS 1443NRR**	71.3	1.8	42	10/6
~	PIONEER VARIETY 94M41*	71.2	2.5	47	10/6
	CAVERNDALE CF 492	71.2	2.3	34	Frost Killed
~	SOUTHERN STATES RT 446N*	71.1	2.0	46	10/6

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TABLE 8. 2003 FAYETTE CO. FULL SEASON VARIETY TEST

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	LODGING 2003	PLANT HEIGHT (IN) 2003	MATURITY DATE[B] 2003
~	NK BRAND S49-Q9**	71.0	2.0	46	Frost Killed
~	SOUTHERN STATES RT 4230N**	70.8	1.3	38	10/6
~	LG SEEDS C4112NRR**	70.8	1.0	34	10/2
~	DELTA KING 4967 RR*	70.8	2.8	44	10/6
~	CROW'S C4815R**	70.8	2.0	44	10/6
~	DYNAGRO 3443**	70.5	1.8	41	10/6
~	GREAT LAKES GL 4409 RR**	70.4	1.8	40	10/6
~	Excel Brand 8499NRR*	70.1	2.3	45	Frost Killed
~	NK BRAND S43-B1**	70.0	2.3	41	10/1
~	Excel Brand 8448NRR*	69.9	1.3	34	10/4
~	SOUTHERN STATES RT 4098	69.8	1.8	41	10/5
~	PIONEER VARIETY 94B74**	69.7	3.3	45	10/6
~	PIONEER VARIETY 94M70*	69.6	2.3	42	10/6
~	SOUTHERN STATES RT 4810N**	69.5	2.3	47	10/6
	SOUTHERN CROSS AARON 4.5N, STS**	69.5	2.0	41	10/6
NS	SCHILLINGER SSX 41082Y (high protein)	69.5	1.3	40	10/5
NS	SCHILLINGER SSX 42193Y (high protein)	69.4	1.5	41	10/6
~	GREAT LAKES GL 4009 RR**	69.1	1.0	35	9/30
	GATEWAY 471**	68.9	2.8	47	5/21
~	SEED CONSULTANTS SC 9442 RR**	68.7	1.5	41	10/4
NS	GATEWAY Gx98-0609	68.5	2.0	40	10/1
	GARST SEED D445N**	68.4	1.3	40	10/2
~	Excel Brand 8411NRR*	68.3	2.0	43	10/4
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	68.2	1.3	35	10/3
~	SOUTHERN CROSS JONAH 4.8 N, RR**	68.2	2.5	42	10/6
	GOLDEN HARVEST H4151**	68.1	2.0	42	9/30
~	SEED CONSULTANTS SC 9404 RR*	67.8	1.0	35	10/1
~	STEYER 4410 RR SCN**	67.6	1.8	42	10/5
~	SOUTHERN CROSS TITUS 4.8N, RR**	67.6	2.8	48	10/6
~	VIGORO V42N3RR**	67.4	1.0	36	10/5
~	GATEWAY 4R485**	67.2	2.5	42	10/6
NS	DAIRYLAND DST4203 (large-seeded food type)	67.1	1.8	41	10/6
~	ASGROW AG4403*	67.0	2.0	42	10/6
~	NK BRAND S40-R9**	66.2	2.0	43	10/4
~	VIGORO V49N3RR**	66.1	2.3	42	10/6
NS	SCHILLINGER SSX 42262Y (high protein)	66.1	2.5	44	10/6
~	GOLDEN HARVEST H4772RR**	66.0	2.3	43	10/6
~	PIONEER VARIETY 94B13**	65.8	2.0	40	10/5
~	UNISOUTH GENETICS USG 7440nRR**	65.4	2.0	43	10/6
~	UNISOUTH GENETICS USG 7489RR	65.3	2.5	44	10/6
~	ASGROW AG4902**	65.1	2.3	44	10/6
	HORNBECK HBK 4944CX**	64.8	2.8	49	10/6
	SOUTHERN STATES 439	64.7	2.0	52	10/6
~	UNISOUTH GENETICS USG 7482nRR**	64.2	2.3	42	10/6
~	DYNAGRO 3481**	64.1	2.0	41	10/6
NS	SCHILLINGER SSX 44252P (high protein)	63.8	1.5	43	10/2
	CAVERNDALE CF 461	63.4	2.3	48	10/6
~	STEYER 4700 RR STS SCN**	63.1	2.5	42	10/6
NS	KS4702sp (large seed)	62.7	2.8	34	10/6
~	SOUTHERN STATES RT 4502N**	62.6	2.0	47	10/6
NS	KS4402sp (high protein variety)	58.8	1.5	38	10/6
~	SOUTHERN STATES RT 4930N**	58.3	3.0	48	Frost Killed
NS	KS4103sp (high protein)	55.6	2.8	43	10/5
NS	IA4002 (small seed)	49.4	3.3	38	9/28
	GROUP IV AVERAGE	69.3	2.0	42	10/3
	LSD (0.10)	5.6	0.3	3	

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TABLE 8. 2003 FAYETTE CO. FULL SEASON VARIETY TEST

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	LODGING 2003	PLANT HEIGHT (IN) 2003	MATURITY DATE[B] 2003
	LATE (GROUP V)				
~	STINE S5142-4**	**68.6**	3.0	40	10/6
~	GREAT LAKES GL 5319 RR**	67.6	2.3	45	10/1
~	DYNAGRO 33B52	62.8	4.5	41	Frost Killed
~	VIGORO V503RR	61.4	2.5	44	10/6
~	GOLDEN HARVEST H5183RR*	61.1	4.0	45	Frost Killed
	UNISOUTH GENETICS USG 5002T	60.9	4.0	36	Frost Killed
P	ANAND**	60.9	3.5	40	Frost Killed
	UNISOUTH GENETICS USG 5601T	59.9	4.0	42	Frost Killed
P	HOLLADAY	59.9	4.3	34	Frost Killed
~	SOUTHERN CROSS ABNER 5.2 N, RR**	59.4	4.0	44	Frost Killed
~	ASGROW AG5605*	59.3	4.0	42	Frost Killed
~	PIONEER VARIETY 95B42*	58.4	3.8	44	Frost Killed
NS	GATEWAY Gx98-2033	57.6	4.3	40	Frost Killed
~	SOUTHERN STATES RT 5602N**	57.5	4.5	40	Frost Killed
~	DELTA KING 5465 RR*	57.3	3.3	43	Frost Killed
~	LG SEEDS C5225NRR*	56.7	4.0	40	Frost Killed
~	GATEWAY 5R500	56.7	4.0	38	Frost Killed
P	CAVINESS**	56.2	4.3	44	Frost Killed
~	ASGROW AG5301**	55.9	4.0	44	Frost Killed
~	NK BRAND S52-U3**	55.4	4.3	39	Frost Killed
NS	KS5202sp (high protein variety)	54.4	3.5	37	Frost Killed
P	DELSOY 5500**	54.1	3.0	41	Frost Killed
~	VIGORO V52N3RR**	53.7	4.0	40	Frost Killed
~	SOUTHERN STATES RT 5302N**	53.4	3.0	46	Frost Killed
~	LG SEEDS C5115NRR**	53.3	3.5	45	Frost Killed
~	UNISOUTH GENETICS USG 510nRR**	53.2	3.5	46	Frost Killed
P	HUTCHESON	52.2	3.8	40	Frost Killed
~	ASGROW AG5501**	51.3	2.8	42	Frost Killed
~	GATEWAY 5R531**	50.6	3.5	44	Frost Killed
~	PIONEER VARIETY 95B32**	50.1	3.5	42	Frost Killed
~	DELTA KING 5366 RR	49.9	4.3	43	Frost Killed
~	DYNAGRO 3562**	49.6	4.0	38	Frost Killed
~	SOUTHERN STATES RT 5001N**	49.2	3.8	41	Frost Killed
NS	S99-3181 (natto type)**	45.9	4.0	50	Frost Killed
	GROUP V AVERAGE	56.3	3.7	42	
	LSD (0.10)	6.0	0.5	6	
	GRAND MEAN	66.1	2.3	40	

~ Roundup Ready variety.
P Entries with a P prefix are public varieties.
NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.
* Resistant to the soybean cyst nematode (Race 3).
** Resistant to the soybean cyst nematode (Race 3 and Race 14).
A Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group. 2002 data for Fayette County were not available due to the 2002 Central Kentucky drought.
B Killing frost occurred 10/6/03.

TABLE 9. 2003 HENDERSON CO. FULL SEASON VARIETY TEST[A]

		YIELD (BU/AC)[B]			LODGING		
	BRAND -- VARIETY	2003	02-03	01-03	2003	02-03	01-03
	EARLY (GROUP III)						
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	**68.8**			1.5		
~	Excel Brand 8392RR	67.6			1.5		
~	PIONEER VARIETY 93M90**	67.5			1.5		
~	VIGORO V382NRR*	65.5	48.2		1.0	1.0	
~	NK BRAND S39-Q4	65.3	**53.7**	**55.5**	1.0	1.0	1.3
~	EBBERTS 1394NRR**	64.4			1.0		
~	SEED CONSULTANTS SC 9394 RR	64.1			1.5		
~	GARST SEED 3824RR/N*	62.7			1.0		
~	NK BRAND S37-N4**	62.6	51.8		1.0	1.0	
~	DEKALB DKB38-52*	62.5	48.0	52.2	1.0	1.0	1.3
~	ASGROW AG3905*	62.4			1.0		
	SOUTHERN STATES 381-STS	61.4			2.0		
~	ASGROW AG3903*	61.3	49.6	54.5	1.5	1.3	1.7
~	SOUTHERN STATES RT 3802N**	61.2	45.8		1.5	1.3	
~	GOLDEN HARVEST H3921RR*	60.8			1.0		
~	CROW'S C3915R	60.4			1.0		
~	DELTA KING 3968 RR*	60.1	48.5	50.8	1.0	1.0	1.0
~	SEED CONSULTANTS SC 9391 RR	60.0	48.4		1.0	1.0	
~	GOLDEN HARVEST H3945RR**	59.7	52.3		1.0	1.0	
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	58.4			1.0		
~	SOUTHERN STATES RT 3799N**	57.9	46.8	50.1	1.0	1.0	1.3
~	PIONEER VARIETY 93B67**	57.8	49.7	53.4	1.5	1.3	1.6
~	ASGROW AG3703**	57.6	47.6		1.0	1.0	
~	SCHILLINGER 393.RCP**	57.5			1.0		
~	PIONEER VARIETY 93B68	57.3	45.8		1.0	1.0	
	GARST SEED 3906N*	57.1			1.0		
~	DEKALB DKB37-51*	56.7			1.0		
~	DELTA KING 3961 RR	55.9	43.3	47.7	1.5	1.3	1.4
NS	IA3012LF (triple-null lipoxygenase)	53.9			1.5		
NS	PIONEER VARIETY P9305 (tofu type)	51.4	33.5	40.2	1.0	1.0	1.3
~	SOUTHERN STATES RT 3975	49.3	43.4	47.5	1.0	1.0	1.3
NS	FG 3 (tofu type)	49.0	33.1		1.5	1.3	
NS	FG 1 (tofu type)	48.7	37.5	41.3	1.5	1.3	1.6
NS	IA3011 (large seed, high protein)	44.8	33.2	36.2	1.0	1.0	1.0
NS	IA3006LF (lipoxygenase free, large seed)	41.5			1.0		
NS	IA 3001 (high protein)	41.2			2.0		
	GROUP III AVERAGE	58.2	45.3	48.1	1.2	1.1	1.3
	LSD (0.10)	7.1	5.0	3.8	0.4	0.3	0.3
	MID-SEASON (GROUP IV)						
~	GATEWAY 4RS463**	**76.0**			2.5		
~	VIGORO V42N3RR**	73.7	59.0		1.3	1.3	
~	DELTA KING 4461 RR	72.7	53.7	54.9	1.8	1.4	1.7
~	CROW'S C4417R**	71.9	51.2	53.7	1.5	1.3	1.7
~	DELTA KING 4967 RR*	70.6			2.3		
~	SEED CONSULTANTS SC 9442 RR**	69.7	54.7	55.1	1.3	1.3	1.7
~	DYNAGRO 3443**	69.5	50.4		1.5	1.3	
~	UNISOUTH GENETICS USG 7489RR	69.2			2.3		
~	DELTA KING 4763 RR*	69.1	59.3	**60.9**	1.8	1.6	1.9
~	DYNAGRO 3481**	68.5			2.5		
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	68.4	**59.7**		1.0	1.0	
~	DELTA KING 4868 RR	68.3	51.6	52.3	1.8	1.4	1.8
~	PIONEER VARIETY 94B73	68.3	49.8	50.9	2.0	1.6	2.3
~	BECK 437NRR**	68.2	53.5		1.8	1.5	
~	GARST SEED XR46Y02**	68.2			2.3		
~	SOUTHERN STATES RT 4230N**	68.0			2.0		
~	NK BRAND S49-Q9**	67.9	54.3		1.8	1.4	
~	BIO GENE BG 4200NRRST**	67.9			1.0		
~	PIONEER VARIETY 94B74**	67.8	57.2		2.0	1.9	
~	UNISOUTH GENETICS USG 7440nRR**	67.7	50.5		2.0	1.5	
~	CROW'S C4815R**	67.6	54.6		2.3	1.8	
	GATEWAY 471**	67.4			2.8		
~	ASGROW AG4403*	67.0	51.2	52.1	1.8	1.5	2.0
~	UNISOUTH GENETICS USG 7401nRR*	66.8			1.0		
	HORNBECK HBK 4944CX**	66.5	54.8		2.8	2.3	
~	HOOSIER PRIDE 4642CRR**	66.5			2.0		
	SOUTHERN CROSS AARON 4.5N, STS**	66.2	50.8	51.2	1.8	1.6	2.3
~	ASGROW AG4201**	66.1	53.6		1.8	1.6	
NS	DAIRYLAND DST4203 (large-seeded food type)	66.1	52.8	54.3	1.8	1.5	1.8
~	PIONEER VARIETY 94M70*	65.9			2.3		

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TABLE 9. 2003 HENDERSON CO. FULL SEASON VARIETY TEST[A]

		YIELD (BU/AC)[B]			LODGING		
	BRAND -- VARIETY	2003	02-03	01-03	2003	02-03	01-03
~	HORNBECK HBK R4820	65.8	49.9	52.2	1.3	1.1	1.4
	SOUTHERN STATES 439	65.7	45.1	47.0	1.8	1.6	2.3
~	STINE S4442-4**	65.6	55.8		1.0	1.0	
~	ASGROW AG4502*	65.4			1.5		
~	Excel Brand 8448NRR*	65.3			1.0		
~	STINE S4542-4**	65.2			2.3		
~	STEYER 4410 RR SCN**	65.1	49.8		1.5	1.4	
~	GATEWAY 4R485**	64.9			2.3		
~	BECK 476NRR**	64.8	52.7		2.0	1.8	
~	SOUTHERN STATES RT 4980	64.8	49.1	50.2	2.0	1.5	2.1
~	EBBERTS 1443NRR**	64.8			1.5		
~	Excel Brand 8499NRR*	64.8			2.0		
~	GREAT LAKES GL 4409 RR**	64.6	48.4		1.5	1.4	
	GOLDEN HARVEST H4151**	64.2			1.8		
~	LG SEEDS C4840NRR**	64.0			2.3		
~	VIGORO V47N3RR**	63.8	55.5		1.8	1.5	
~	SOUTHERN CROSS JONAH 4.8 N, RR**	63.7			2.5		
~	NK BRAND S40-R9**	63.6	54.2		2.0	1.6	
~	NK BRAND S43-B1**	63.6			1.3		
~	UNISOUTH GENETICS USG 7482nRR**	63.3			2.5		
NS	GATEWAY Gx98-0609	63.3			2.3		
NS	SCHILLINGER SSX 41082Y (high protein)	63.3			1.0		
~	PIONEER VARIETY 94M41*	63.2			2.0		
~	PIONEER VARIETY 94B13**	63.1	47.7		2.0	1.5	
NS	SCHILLINGER SSX 42193Y (high protein)	62.5			1.8		
	CAVERNDALE CF 461	62.4	44.5	47.5	2.0	2.0	2.6
	GARST SEED D445N**	62.2			1.3		
~	SOUTHERN STATES RT 4098	62.0	46.4	47.4	1.3	1.3	1.9
~	Excel Brand 8416NRR*	61.8			1.0		
~	ASGROW AG4902**	61.5	49.4	52.0	1.8	1.4	1.8
	CAVERNDALE CF 492	61.4	45.1	47.7	1.3	1.1	1.5
~	GOLDEN HARVEST H4772RR**	61.4	50.6		2.0	1.6	
~	HOOSIER PRIDE 4022CRR**	61.4			1.0		
~	SEED CONSULTANTS SC 9404 RR*	61.3			1.0		
~	DEKALB DKB46-51**	61.2			1.5		
~	LG SEEDS C4112NRR**	61.1	53.0		1.0	1.3	
~	STEYER 4700 RR STS SCN**	61.1	52.7		1.8	1.6	
~	VIGORO V49N3RR**	60.7	53.7		2.5	1.9	
NS	KS4402sp (high protein variety)	60.4	45.8	43.1	1.3	1.1	1.4
~	SOUTHERN CROSS TITUS 4.8N, RR**	60.4	51.0	53.3	2.0	1.9	2.3
~	SOUTHERN STATES RT 4810N**	60.4	49.8		2.0	1.8	
NS	SCHILLINGER SSX 42262Y (high protein)	60.4			2.3		
~	GREAT LAKES GL 4009 RR**	60.3			1.0		
~	SOUTHERN STATES RT 446N*	60.0	51.6	51.9	1.8	1.5	1.8
~	GOLDEN HARVEST H4368RR**	58.8	50.0		1.0	1.0	
~	SOUTHERN STATES RT 4930N**	57.7			2.0		
NS	KS4103sp (high protein)	57.0			2.3		
~	SOUTHERN STATES RT 4502N**	55.2	45.5		1.5	1.3	
~	Excel Brand 8411NRR*	55.2			1.3		
NS	SCHILLINGER SSX 44252P (high protein)	52.9			1.0		
NS	KS4702sp (large seed)	52.4			3.3		
NS	IA4002 (small seed)	51.9	38.8		2.0	1.9	
	GROUP IV AVERAGE	64.3	51.3	51.5	1.8	1.5	1.9
	LSD (0.10)	4.4	3.8	3.0	0.4	0.3	0.3

continued on next page

TABLE 9. 2003 HENDERSON CO. FULL SEASON VARIETY TEST[A]

	BRAND -- VARIETY	YIELD (BU/AC)[B] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	LATE (GROUP V)						
~	DELTA KING 5465 RR*	**68.3**	57.6	54.8	2.0	1.8	2.1
~	STINE S5142-4**	67.3			2.3		
~	UNISOUTH GENETICS USG 510nRR**	66.7	54.9	52.1	2.0	2.0	2.3
~	ASGROW AG5605*	66.6			2.3		
	UNISOUTH GENETICS USG 5002T	66.6			3.0		
	UNISOUTH GENETICS USG 5601T	65.7	55.4		3.3	2.6	
~	DYNAGRO 33B52	65.7			2.8		
~	NK BRAND S52-U3**	65.2	56.2	**56.5**	3.0	2.5	2.9
~	SOUTHERN STATES RT 5602N**	64.5	55.6		2.8	2.5	
P	CAVINESS**	64.3	**57.9**	54.0	3.0	3.1	3.6
~	GOLDEN HARVEST H5183RR*	63.4			2.8		
~	ASGROW AG5301**	63.1	53.6		2.3	2.1	
~	SOUTHERN CROSS ABNER 5.2 N, RR**	63.0			2.8		
~	PIONEER VARIETY 95B42*	62.2	49.7		2.5	2.3	
~	ASGROW AG5501**	61.9	52.2	51.1	2.0	1.9	2.2
~	PIONEER VARIETY 95B32**	61.5	50.5	50.0	2.0	1.9	2.2
P	HOLLADAY	61.3	46.9	49.1	2.8	1.9	2.4
P	HUTCHESON	60.4	48.4	47.5	2.5	1.9	2.3
~	VIGORO V52N3RR**	59.9			2.5		
~	SOUTHERN STATES RT 5302N**	59.8	51.6		2.0	2.0	
~	GATEWAY 5R500	59.6	46.1		2.3	1.8	
~	DYNAGRO 3562**	59.5			3.5		
~	DELTA KING 5366 RR	59.3	51.8	50.0	3.0	2.8	3.2
P	ANAND**	58.8	52.0	52.5	2.3	1.9	2.1
~	LG SEEDS C5115NRR**	58.7			2.3		
NS	GATEWAY Gx98-2033	58.3			3.8		
~	VIGORO V503RR	58.3			2.5		
~	LG SEEDS C5225NRR*	57.7			2.5		
~	GATEWAY 5R531**	57.2			2.0		
NS	KS5202sp (high protein variety)	57.0	45.7	47.2	2.8	2.1	2.4
P	DELSOY 5500**	56.5	50.8	50.6	2.5	2.1	2.3
NS	S99-3181 (natto type)**	56.1			3.8		
~	GREAT LAKES GL 5319 RR**	55.4	49.6	50.7	1.3	1.6	1.9
~	SOUTHERN STATES RT 5001N**	49.8	45.8	44.5	2.5	2.3	2.4
	GROUP V AVERAGE	61.2	51.6	50.8	2.6	2.2	2.5
	LSD (0.10)	5.2	3.8	2.8	0.6	0.4	0.3
	GRAND MEAN	62.1	50.0	50.4	1.8	1.6	1.9

~ Roundup Ready variety.
P Entries with a P prefix are public varieties.
NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.
* Resistant to the soybean cyst nematode (Race 3).
** Resistant to the soybean cyst nematode (Race 3 and Race 14).
A 2001 and 2002 data are from Union County, and the 2003 data are from Henderson County.
B Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 10. 2003 KENTUCKY SOYBEAN PERFORMANCE TEST PROTEIN AND OIL COMPOSITION[A]

	VARIETY/BRAND	PROTEIN%	OIL%		VARIETY/BRAND	PROTEIN%	OIL%
P	ANAND**	36.0	17.6	~	GOLDEN HARVEST H3921RR*	35.8	20.0
~	ASGROW AG3703**	37.5	18.3	~	GOLDEN HARVEST H3945RR**	34.4	19.6
~	ASGROW AG3903*	36.1	19.1		GOLDEN HARVEST H4151**	35.8	19.2
~	ASGROW AG3905*	35.5	19.5	~	GOLDEN HARVEST H4368RR**	37.4	19.2
~	ASGROW AG4201**	37.5	19.1	~	GOLDEN HARVEST H4772RR**	38.0	18.3
~	ASGROW AG4403*	35.4	19.1	~	GOLDEN HARVEST H5183RR*	37.4	17.6
~	ASGROW AG4502*	38.3	18.2	~	GREAT LAKES GL 4009 RR**	36.7	19.6
~	ASGROW AG4902**	38.7	17.5	~	GREAT LAKES GL 4409 RR**	34.8	19.4
~	ASGROW AG5301**	35.8	17.5	~	GREAT LAKES GL 5319 RR**	38.4	18.2
~	ASGROW AG5501**	37.9	16.4	P	HOLLADAY	34.7	18.6
~	ASGROW AG5605*	37.3	17.4	~	HOOSIER PRIDE 4022CRR**	37.0	19.2
~	BECK 437NRR**	35.1	19.5	~	HOOSIER PRIDE 4642CRR**	36.9	19.2
~	BECK 476NRR**	37.3	18.1		HORNBECK HBK 4944CX**	34.7	19.5
~	BIO GENE BG 4200NRRST**	35.1	19.4	~	HORNBECK HBK R4820	35.7	18.8
	CAVERNDALE CF 461	38.1	18.6	P	HUTCHESON	36.6	17.5
	CAVERNDALE CF 492	35.6	18.7	NS	IA 3001 (high protein)	39.3	18.8
P	CAVINESS**	36.9	17.4	NS	IA3006LF (lipoxygenase free, large seed)	40.2	18.0
~	CROW'S C3915R	34.4	19.7	NS	IA3011 (large seed, high protein)	39.0	18.8
~	CROW'S C4417R**	35.6	19.6	NS	IA3012LF (triple-null lipoxygenase)	35.7	19.4
~	CROW'S C4815R**	37.4	18.5	NS	IA4002 (small seed)	38.7	15.7
NS	DAIRYLAND DST4203 (large-seeded food type)	36.3	19.5	NS	KS4103sp (high protein)	44.3	15.9
				NS	KS4402sp (high protein variety)	39.9	18.3
~	DEKALB DKB37-51*	36.1	18.8	NS	KS4702sp (large seed)	36.6	19.1
~	DEKALB DKB38-52*	34.8	19.6	NS	KS5202sp (high protein variety)	38.4	17.7
~	DEKALB DKB46-51**	37.7	18.2	~	LG SEEDS C4112NRR**	36.8	19.7
P	DELSOY 5500**	37.2	17.3	~	LG SEEDS C4840NRR**	35.7	19.1
~	DELTA KING 3961 RR	39.3	18.6	~	LG SEEDS C5115NRR**	36.5	16.4
~	DELTA KING 3968 RR*	36.2	19.0	~	LG SEEDS C5225NRR*	36.3	17.5
~	DELTA KING 4461 RR	36.6	18.7	P	MAVERICK**	38.1	18.5
~	DELTA KING 4763 RR*	39.5	17.6	~	NK BRAND S37-N4**	36.3	18.6
~	DELTA KING 4868 RR	36.8	19.0	~	NK BRAND S39-Q4	35.6	18.7
~	DELTA KING 4967 RR*	39.2	17.8	~	NK BRAND S40-R9**	36.2	18.9
~	DELTA KING 5366 RR	36.5	16.3	~	NK BRAND S43-B1**	35.6	18.8
~	DELTA KING 5465 RR*	36.6	17.9	~	NK BRAND S49-Q9**	36.1	17.8
~	DYNAGRO 33B52	36.2	17.7	~	NK BRAND S52-U3**	35.9	17.5
~	DYNAGRO 3443**	35.4	19.2	~	PIONEER VARIETY 93B67**	35.7	19.9
~	DYNAGRO 3481**	38.1	19.3	~	PIONEER VARIETY 93B68	37.3	20.4
~	DYNAGRO 3562**	37.2	16.0	~	PIONEER VARIETY 93M90**	35.9	18.9
~	EBBERTS 1394NRR**	36.3	19.9	~	PIONEER VARIETY 94B13**	35.4	18.9
~	EBBERTS 1443NRR**	35.0	19.3	~	PIONEER VARIETY 94B73	38.2	19.0
~	Excel Brand 8392RR	36.9	19.9	~	PIONEER VARIETY 94B74**	37.0	18.7
~	Excel Brand 8411NRR*	35.2	19.4	~	PIONEER VARIETY 94M41*	37.8	19.0
~	Excel Brand 8416NRR*	36.8	19.7	~	PIONEER VARIETY 94M70*	37.2	19.0
~	Excel Brand 8448NRR*	34.8	19.9	~	PIONEER VARIETY 95B32**	35.7	17.9
~	Excel Brand 8499NRR*	36.0	19.8	~	PIONEER VARIETY 95B42*	36.4	17.2
NS	FG 1 (tofu type)	38.0	19.0	NS	PIONEER VARIETY P9305 (tofu type)	37.2	19.2
NS	FG 3 (tofu type)	39.4	17.9	NS	S99-3181 (natto type)**	36.7	16.7
~	GARST SEED 3824RR/N*	34.1	19.7	~	SCHILLINGER 393.RCP**	35.5	20.3
	GARST SEED 3906N*	36.0	19.4	NS	SCHILLINGER SSX 41082Y (high protein)	38.0	18.7
	GARST SEED D445N**	36.9	18.7	NS	SCHILLINGER SSX 42193Y (high protein)	35.8	19.8
~	GARST SEED XR46Y02**	38.0	18.1	NS	SCHILLINGER SSX 42262Y (high protein)	36.7	19.6
	GATEWAY 471**	34.9	19.3	NS	SCHILLINGER SSX 44252P (high protein)	42.4	17.1
~	GATEWAY 4R485**	39.6	17.8	~	SEED CONSULTANTS SC 9391 RR	35.1	18.9
~	GATEWAY 4RS463**	36.8	19.0	~	SEED CONSULTANTS SC 9394 RR	35.8	20.0
~	GATEWAY 5R500	36.5	18.5	~	SEED CONSULTANTS SC 9404 RR*	36.6	19.7
~	GATEWAY 5R531**	36.9	17.0	~	SEED CONSULTANTS SC 9442 RR**	35.5	19.5
NS	GATEWAY Gx98-0609	36.0	19.3		SOUTHERN CROSS AARON 4.5N, STS**	36.6	18.9
NS	GATEWAY Gx98-2033	36.9	18.7	~	SOUTHERN CROSS ABNER 5.2 N, RR**	37.6	18.3

continued on next page

TABLE 10. 2003 KENTUCKY SOYBEAN PERFORMANCE TEST PROTEIN AND OIL COMPOSITION[A]

VARIETY/BRAND	PROTEIN%	OIL%	VARIETY/BRAND	PROTEIN%	OIL%
~ SOUTHERN CROSS ABRAHAM 3.9 N, RR	36.6	19.7	~ SOUTHERN STATES RT 5602N**	35.6	17.9
~ SOUTHERN CROSS JONAH 4.8 N, RR**	38.6	19.5	~ STEYER 4410 RR SCN**	34.6	19.6
~ SOUTHERN CROSS MICHAEL 4.2N, RR**	35.8	19.6	~ STEYER 4700 RR STS SCN**	38.2	17.7
~ SOUTHERN CROSS STEPHEN 3.9 N, RR*	35.5	20.2	~ STINE S4442-4**	35.3	19.4
~ SOUTHERN CROSS TITUS 4.8N, RR**	36.2	18.2	~ STINE S4542-4**	34.8	19.9
SOUTHERN STATES 381-STS	36.6	18.5	~ STINE S5142-4**	37.8	18.2
SOUTHERN STATES 439	36.3	19.2	UNISOUTH GENETICS USG 5002T	36.9	17.5
~ SOUTHERN STATES RT 3799N**	34.1	20.4	~ UNISOUTH GENETICS USG 510nRR**	36.6	16.8
~ SOUTHERN STATES RT 3802N**	36.6	18.8	UNISOUTH GENETICS USG 5601T	37.2	17.1
~ SOUTHERN STATES RT 3975	37.7	18.1	~ UNISOUTH GENETICS USG 7401nRR*	35.8	19.8
~ SOUTHERN STATES RT 4098	36.6	19.7	~ UNISOUTH GENETICS USG 7440nRR**	34.8	19.3
~ SOUTHERN STATES RT 4230N**	36.1	19.2	~ UNISOUTH GENETICS USG 7482nRR**	38.1	18.2
~ SOUTHERN STATES RT 446N*	38.6	18.3	~ UNISOUTH GENETICS USG 7489RR	36.3	18.8
~ SOUTHERN STATES RT 4502N**	36.7	19.6	~ VIGORO V382NRR*	35.4	18.7
~ SOUTHERN STATES RT 4810N**	37.1	18.1	~ VIGORO V42N3RR**	35.8	19.6
~ SOUTHERN STATES RT 4930N**	37.8	15.6	~ VIGORO V47N3RR**	38.6	18.5
~ SOUTHERN STATES RT 4980	35.8	19.5	~ VIGORO V49N3RR**	37.5	19.1
~ SOUTHERN STATES RT 5001N**	37.2	16.7	~ VIGORO V503RR	35.8	19.2
~ SOUTHERN STATES RT 5302N**	36.6	16.2	~ VIGORO V52N3RR**	36.2	17.6

A Variety protein and oil concentration was determined at the Fayette Co. location (all test locations for NS entries) and expressed on the basis of 13% moisture.
The mean protein concentration was 37.3%, and the mean oil concentration was 18.5%.
These data were provided by the Iowa State University Grain Quality Analysis Services using near-infrared (NIR) analysis.
~ Roundup Ready variety.
* Resistant to the soybean cyst nematode (Race 3).
** Resistant to the soybean cyst nematode (Race 3 and Race 14).
P Entries with a P prefix are public varieties.
NS Entries with a NS prefix are novel soybean varieties.

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The following pages are not part of the printed PR-487 publication.

The selection key and tables "4A-4I" are a web site feature.

The nomination form, cover letter and instructions are for seed companies and others interested in entering varieties in the KY 2004 Soybean Performance Tests.

Questions or comments?

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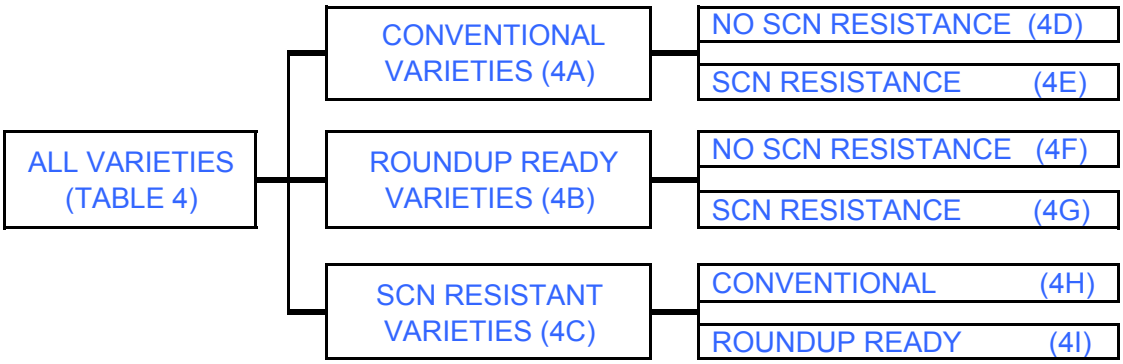
SELECTION KEY TO CREATE SUBSETS OF TABLE 4
(2003 SUMMARY 0F THE FULL SEASON TESTS: TABLES 5-9)



Selected varieties found by using this key should also be found in the summary table containing all varieties (table 4) to observe potential yield loss by the chosen key restraints. The selected variety can be easily located in table 4 by finding it's 2003 yield in the appropriate maturity group.

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This page and the following pages are not part of the printed PR-451 publication. The selection key and tables "4A-4I" are a web site feature which provides alternate views of the Summary Table 4.

TABLE 4. 2003 SUMMARY: VARIETY TEST TABLES 5-9

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	EARLY (GROUP III)						
~	EBBERTS 1394NRR**	**63.9**			1.2		
~	GOLDEN HARVEST H3921RR*	63.9			1.8		
~	PIONEER VARIETY 93M90**	63.3			1.6		
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	62.4			1.3		
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	62.1			2.0		
~	DELTA KING 3968 RR*	61.9	54.1	**55.3**	1.7	1.6	1.5
~	Excel Brand 8392RR	61.7			1.8		
~	GARST SEED 3824RR/N*	61.6			1.4		
~	GOLDEN HARVEST H3945RR**	61.4	**56.2**		1.5	1.5	
~	SEED CONSULTANTS SC 9391 RR	61.1	53.2		1.6	1.5	
~	NK BRAND S37-N4**	60.8	52.3		1.8	2.0	
~	CROW'S C3915R	60.4			1.5		
	GARST SEED 3906N*	60.3			1.6		
~	NK BRAND S39-Q4	60.0	52.1	53.9	1.5	1.5	1.6
~	ASGROW AG3905*	59.7			1.6		
~	DEKALB DKB38-52*	59.6	51.6	53.3	1.7	1.7	1.7
~	ASGROW AG3703**	59.1	50.4		1.6	1.5	
~	SEED CONSULTANTS SC 9394 RR	58.8			2.0		
~	ASGROW AG3903*	58.5	50.8	53.4	1.8	1.9	2.0
~	PIONEER VARIETY 93B68	58.1	48.4		1.8	1.8	
~	DEKALB DKB37-51*	57.9			1.9		
~	SCHILLINGER 393.RCP**	57.5			2.0		
~	VIGORO V382NRR*	57.2	49.6		1.8	1.8	
~	PIONEER VARIETY 93B67**	57.0	50.4	51.5	1.6	1.6	1.7
	SOUTHERN STATES 381-STS	55.6			2.3		
~	DELTA KING 3961 RR	54.9	48.6	50.6	1.7	1.8	1.8
~	SOUTHERN STATES RT 3799N**	54.8	49.0	50.7	1.6	1.6	1.6
~	SOUTHERN STATES RT 3802N**	53.1	45.8		2.0	1.9	
~	SOUTHERN STATES RT 3975	53.1	46.9	48.2	1.8	1.9	2.0
NS	IA3012LF (triple-null lipoxygenase)	49.3			2.7		
NS	PIONEER VARIETY P9305 (tofu type)	48.2	38.6	42.2	1.6	1.6	1.7
NS	FG 1 (tofu type)	48.0	38.9	42.2	1.7	1.9	2.1
NS	FG 3 (tofu type)	47.8	34.1		1.6	1.8	
NS	IA3011 (large seed, high protein)	44.0	35.2	38.4	1.8	1.9	1.7
NS	IA3006LF (lipoxygenase free, large seed)	41.9			1.5		
NS	IA 3001 (high protein)	41.8			2.5		
	GROUP III AVERAGE	56.7	47.7	49.1	1.7	1.7	1.8
	LSD (0.10)	3.3	2.2	1.7	0.2	0.2	0.1
	MID-SEASON (GROUP IV)						
~	DELTA KING 4967 RR*	**68.4**			2.6		
~	HOOSIER PRIDE 4642CRR**	68.3			2.5		
~	GATEWAY 4RS463**	67.4			2.8		
~	DELTA KING 4763 RR*	67.3	**57.6**	**59.2**	2.2	2.1	2.3
~	STINE S4442-4**	66.9	57.0		1.3	1.3	
~	DELTA KING 4868 RR	66.8	55.3	56.3	1.9	1.8	2.1
~	BIO GENE BG 4200NRRST**	66.6			1.3		
~	VIGORO V42N3RR**	66.3	57.0		1.4	1.5	
~	DELTA KING 4461 RR	66.1	53.2	55.1	2.0	1.8	1.9
~	ASGROW AG4502*	65.9			1.9		
~	SOUTHERN STATES RT 4230N**	65.8			2.1		
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	65.7	56.8		1.4	1.6	
~	UNISOUTH GENETICS USG 7401nRR*	65.6			1.6		
~	BECK 437NRR**	65.3	55.4		2.0	1.9	
	GATEWAY 471**	65.3			3.0		
~	PIONEER VARIETY 94M70*	65.2			2.4		
~	SEED CONSULTANTS SC 9442 RR**	64.6	54.6	56.0	1.8	1.8	1.9
~	GARST SEED XR46Y02**	64.6			2.6		

TABLE 4. 2003 SUMMARY: VARIETY TEST TABLES 5-9

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	MID-SEASON (GROUP IV) continued						
~	DYNAGRO 3443**	64.5	52.5		1.9	1.8	
~	HOOSIER PRIDE 4022CRR**	64.5			1.3		
~	ASGROW AG4201**	64.4	54.5		2.1	2.1	
~	GATEWAY 4R485**	64.4			2.5		
~	CROW'S C4815R**	64.3	52.9		2.4	2.1	
~	STEYER 4410 RR SCN**	64.3	53.8		1.8	1.8	
~	Excel Brand 8448NRR*	64.2			1.6		
~	STINE S4542-4**	64.0			2.7		
~	CROW'S C4417R**	63.8	52.7	55.0	1.8	1.7	1.9
~	BECK 476NRR**	63.7	51.9		2.7	2.3	
~	NK BRAND S43-B1**	63.7			2.1		
	HORNBECK HBK 4944CX**	63.5	52.7		2.8	2.7	
~	HORNBECK HBK R4820	63.5	52.7	54.6	1.7	1.7	1.9
~	LG SEEDS C4112NRR**	63.4	55.1		1.3	1.4	
~	NK BRAND S49-Q9**	63.3	54.6		2.3	2.2	
~	PIONEER VARIETY 94B73	63.3	52.7	54.1	2.4	2.1	2.4
~	VIGORO V47N3RR**	63.3	55.4		2.2	2.0	
~	DYNAGRO 3481**	63.3			2.5		
~	PIONEER VARIETY 94B13**	63.2	51.7		2.1	1.8	
~	PIONEER VARIETY 94B74**	63.2	54.7		2.8	2.5	
~	DEKALB DKB46-51**	63.0			2.2		
~	Excel Brand 8416NRR*	62.9			1.3		
~	GREAT LAKES GL 4409 RR**	62.7	52.5		1.9	1.7	
~	Excel Brand 8499NRR*	62.4			2.2		
~	EBBERTS 1443NRR**	62.2			1.9		
~	SOUTHERN CROSS JONAH 4.8 N, RR**	62.2			2.5		
~	GREAT LAKES GL 4009 RR**	62.0			1.2		
~	UNISOUTH GENETICS USG 7489RR	61.7			2.7		
~	VIGORO V49N3RR**	61.6	53.4		2.2	2.2	
~	UNISOUTH GENETICS USG 7440nRR**	61.4	51.8		2.1	1.9	
~	LG SEEDS C4840NRR**	61.1			3.0		
~	NK BRAND S40-R9**	61.0	51.8		2.2	2.1	
NS	GATEWAY Gx98-0609	60.9			2.6		
~	UNISOUTH GENETICS USG 7482nRR**	60.8			2.4		
	CAVERNDALE CF 492	60.7	49.7	51.6	1.7	1.4	1.8
~	PIONEER VARIETY 94M41*	60.7			2.4		
~	SOUTHERN CROSS TITUS 4.8N, RR**	60.6	51.2	52.0	2.4	2.3	2.4
~	SEED CONSULTANTS SC 9404 RR*	60.6			1.3		
~	SOUTHERN STATES RT 4980	60.5	49.8	51.4	2.6	2.3	2.5
~	STEYER 4700 RR STS SCN**	60.5	49.6		2.2	2.2	
~	GOLDEN HARVEST H4368RR**	60.4	51.5		1.2	1.3	
~	ASGROW AG4403*	60.3	51.0	53.2	2.0	1.9	2.1
NS	DAIRYLAND DST4203 (large-seeded food type)	60.3	51.1	53.4	2.0	1.9	2.0
~	SOUTHERN STATES RT 4930N**	60.3			2.9		
~	ASGROW AG4902**	60.1	50.7	52.3	2.2	2.1	2.2
~	SOUTHERN STATES RT 4810N**	60.0	49.6		2.2	2.1	
	GOLDEN HARVEST H4151**	60.0			2.3		
~	SOUTHERN STATES RT 4098	59.6	49.3	49.7	1.8	1.9	2.2
~	GOLDEN HARVEST H4772RR**	59.5	51.4		2.2	2.0	
	GARST SEED D445N**	58.5			1.6		
	SOUTHERN CROSS AARON 4.5N, STS**	58.0	48.6	49.3	1.8	1.9	2.3
~	SOUTHERN STATES RT 446N*	57.6	49.0	50.0	2.0	1.9	2.0
NS	KS4402sp (high protein variety)	57.4	47.8	46.4	1.6	1.6	1.6
~	SOUTHERN STATES RT 4502N**	57.4	47.6		2.1	2.0	
NS	SCHILLINGER SSX 41082Y (high protein)	57.3			1.4		
	SOUTHERN STATES 439	57.2	46.1	47.3	2.0	1.9	2.2
	CAVERNDALE CF 461	56.3	46.7	48.5	2.4	2.2	2.6
NS	SCHILLINGER SSX 42262Y (high protein)	56.2			2.4		
NS	SCHILLINGER SSX 42193Y (high protein)	56.1			1.7		

TABLE 4. 2003 SUMMARY: VARIETY TEST TABLES 5-9

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
	MID-SEASON (GROUP IV) continued						
~	Excel Brand 8411NRR*	56.0			1.9		
NS	SCHILLINGER SSX 44252P (high protein)	54.2			1.8		
NS	KS4103sp (high protein)	52.3			2.7		
NS	KS4702SP (large seed)	49.7			3.8		
NS	IA4002 (small seed)	47.3	38.0		3.2	3.0	
	GROUP IV AVERAGE	61.8	51.9	52.4	2.1	2.0	2.1
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1
	LATE (GROUP V)						
~	ASGROW AG5605*	**70.0**			2.9		
	UNISOUTH GENETICS USG 5002T	65.2			3.2		
~	STINE S5142-4**	65.2			3.1		
~	DELTA KING 5465 RR*	64.9	**52.9**	**53.0**	2.7	2.4	2.5
~	UNISOUTH GENETICS USG 510nRR**	62.9	51.9	52.6	2.6	2.4	2.4
P	ANAND**	62.8	51.0	50.1	2.6	2.3	2.3
	UNISOUTH GENETICS USG 5601T	62.4	52.4		3.2	2.7	
~	GREAT LAKES GL 5319 RR**	62.1	50.2	51.3	2.0	2.1	2.2
~	SOUTHERN STATES RT 5602N**	62.0	50.4		3.7	3.0	
~	SOUTHERN CROSS ABNER 5.2 N, RR**	61.8			3.3		
P	CAVINESS**	61.5	49.6	50.7	3.6	3.2	3.5
~	DYNAGRO 33B52	61.2			3.7		
~	ASGROW AG5301**	60.8	50.7		3.0	2.6	
~	ASGROW AG5501**	60.4	50.1	51.4	2.4	2.2	2.3
~	VIGORO V52N3RR**	60.4			3.1		
P	HOLLADAY	60.2	48.5	51.4	3.3	2.7	3.0
~	LG SEEDS C5225NRR*	59.6			3.0		
~	SOUTHERN STATES RT 5302N**	59.4	49.1		2.6	2.3	
~	DYNAGRO 3562**	59.1			3.2		
~	NK BRAND S52-U3**	58.0	49.5	51.8	3.8	3.2	3.3
~	VIGORO V503RR	57.8			2.5		
~	DELTA KING 5366 RR	57.7	48.9	48.9	3.4	3.2	3.3
~	GATEWAY 5R531**	57.6			2.5		
NS	GATEWAY Gx98-2033	57.6			3.9		
~	PIONEER VARIETY 95B42*	57.4	47.3		3.1	2.7	
P	HUTCHESON	57.3	47.6	49.5	3.1	2.6	2.9
~	LG SEEDS C5115NRR**	57.1			2.7		
P	DELSOY 5500**	56.6	48.8	50.9	2.9	2.5	2.6
~	GOLDEN HARVEST H5183RR*	56.5			3.5		
NS	KS5202sp (high protein variety)	56.1	46.6	49.6	3.0	2.4	2.6
~	GATEWAY 5R500	56.0	47.4		3.2	2.5	
~	PIONEER VARIETY 95B32**	55.4	47.9	49.5	2.6	2.3	2.5
NS	S99-3181 (natto type)**	54.8			3.4		
~	SOUTHERN STATES RT 5001N**	52.2	45.5	45.8	3.1	2.7	2.8
	GROUP V AVERAGE	59.7	49.3	50.5	3.1	2.6	2.7
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	60.1	50.3	50.9	2.2	2.1	2.2

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 4A. Conventional varieties - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	EARLY (GROUP III)						
	GARST SEED 3906N*	**60.3**			1.6		
	SOUTHERN STATES 381-STS	55.6			2.3		
NS	IA3012LF (triple-null lipoxygenase)	49.3			2.7		
NS	PIONEER VARIETY P9305 (tofu type)	48.2	38.6	**42.2**	1.6	1.6	1.7
NS	FG 1 (tofu type)	48.0	**38.9**	**42.2**	1.7	1.9	2.1
NS	FG 3 (tofu type)	47.8	34.1		1.6	1.8	
NS	IA3011 (large seed, high protein)	44.0	35.2	38.4	1.8	1.9	1.7
NS	IA3006LF (lipoxygenase free, large seed)	41.9			1.5		
NS	IA 3001 (high protein)	41.8			2.5		
	GROUP III AVERAGE	48.5	36.7	40.9	1.9	1.8	1.8
	LSD (0.10)	3.3	2.2	1.7	0.2	0.2	0.1
	MID-SEASON (GROUP IV)						
	GATEWAY 471**	**65.3**			3.0		
	HORNBECK HBK 4944CX**	**63.5**	**52.7**		2.8	2.7	
NS	GATEWAY Gx98-0609	60.9			2.6		
	CAVERNDALE CF 492	60.7	49.7	51.6	1.7	1.4	1.8
NS	DAIRYLAND DST4203 (large-seeded food type)	60.3	51.1	**53.4**	2.0	1.9	2.0
	GOLDEN HARVEST H4151**	60.0			2.3		
	GARST SEED D445N**	58.5			1.6		
	SOUTHERN CROSS AARON 4.5N, STS**	58.0	48.6	49.3	1.8	1.9	2.3
NS	KS4402sp (high protein variety)	57.4	47.8	46.4	1.6	1.6	1.6
NS	SCHILLINGER SSX 41082Y (high protein)	57.3			1.4		
	SOUTHERN STATES 439	57.2	46.1	47.3	2.0	1.9	2.2
	CAVERNDALE CF 461	56.3	46.7	48.5	2.4	2.2	2.6
NS	SCHILLINGER SSX 42262Y (high protein)	56.2			2.4		
NS	SCHILLINGER SSX 42193Y (high protein)	56.1			1.7		
NS	SCHILLINGER SSX 44252P (high protein)	54.2			1.8		
NS	KS4103sp (high protein)	52.3			2.7		
NS	KS4702SP (large seed)	49.7			3.8		
NS	IA4002 (small seed)	47.3	38.0		3.2	3.0	
	GROUP IV AVERAGE	57.3	47.6	49.4	2.3	2.1	2.1
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1
	LATE (GROUP V)						
	UNISOUTH GENETICS USG 5002T	**65.2**			3.2		
P	ANAND**	62.8	51.0	50.1	2.6	2.3	2.3
	UNISOUTH GENETICS USG 5601T	62.4	**52.4**		3.2	2.7	
P	CAVINESS**	61.5	49.6	50.7	3.6	3.2	3.5
P	HOLLADAY	60.2	48.5	**51.4**	3.3	2.7	3.0
NS	GATEWAY Gx98-2033	57.6			3.9		
P	HUTCHESON	57.3	47.6	49.5	3.1	2.6	2.9
P	DELSOY 5500**	56.6	48.8	50.9	2.9	2.5	2.6
NS	KS5202sp (high protein variety)	56.1	46.6	49.6	3.0	2.4	2.6
NS	S99-3181 (natto type)**	54.8			3.4		
	GROUP V AVERAGE	59.5	49.2	50.4	3.2	2.6	2.8
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	55.7	45.9	48.1	2.4	2.2	2.3

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 4B. Roundup Ready varieties - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	EARLY (GROUP III)						
~	EBBERTS 1394NRR**	**63.9**			1.2		
~	GOLDEN HARVEST H3921RR*	63.9			1.8		
~	PIONEER VARIETY 93M90**	63.3			1.6		
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	62.4			1.3		
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	62.1			2.0		
~	DELTA KING 3968 RR*	61.9	54.1	**55.3**	1.7	1.6	1.5
~	Excel Brand 8392RR	61.7			1.8		
~	GARST SEED 3824RR/N*	61.6			1.4		
~	GOLDEN HARVEST H3945RR**	61.4	**56.2**		1.5	1.5	
~	SEED CONSULTANTS SC 9391 RR	61.1	53.2		1.6	1.5	
~	NK BRAND S37-N4**	60.8	52.3		1.8	2.0	
~	CROW'S C3915R	60.4			1.5		
~	NK BRAND S39-Q4	60.0	52.1	53.9	1.5	1.5	1.6
~	ASGROW AG3905*	59.7			1.6		
~	DEKALB DKB38-52*	59.6	51.6	53.3	1.7	1.7	1.7
~	ASGROW AG3703**	59.1	50.4		1.6	1.5	
~	SEED CONSULTANTS SC 9394 RR	58.8			2.0		
~	ASGROW AG3903*	58.5	50.8	53.4	1.8	1.9	2.0
~	PIONEER VARIETY 93B68	58.1	48.4		1.8	1.8	
~	DEKALB DKB37-51*	57.9			1.9		
~	SCHILLINGER 393.RCP**	57.5			2.0		
~	VIGORO V382NRR*	57.2	49.6		1.8	1.8	
~	PIONEER VARIETY 93B67**	57.0	50.4	51.5	1.6	1.6	1.7
~	DELTA KING 3961 RR	54.9	48.6	50.6	1.7	1.8	1.8
~	SOUTHERN STATES RT 3799N**	54.8	49.0	50.7	1.6	1.6	1.6
~	SOUTHERN STATES RT 3802N**	53.1	45.8		2.0	1.9	
~	SOUTHERN STATES RT 3975	53.1	46.9	48.2	1.8	1.9	2.0
	GROUP III AVERAGE	59.4	50.6	52.1	1.7	1.7	1.7
	LSD (0.10)	3.3	2.2	1.7	0.2	0.2	0.1
	MID-SEASON (GROUP IV)						
~	DELTA KING 4967 RR*	**68.4**			2.6		
~	HOOSIER PRIDE 4642CRR**	68.3			2.5		
~	GATEWAY 4RS463**	67.4			2.8		
~	DELTA KING 4763 RR*	67.3	**57.6**	**59.2**	2.2	2.1	2.3
~	STINE S4442-4**	66.9	57.0		1.3	1.3	
~	DELTA KING 4868 RR	66.8	55.3	56.3	1.9	1.8	2.1
~	BIO GENE BG 4200NRRST**	66.6			1.3		
~	VIGORO V42N3RR**	66.3	57.0		1.4	1.5	
~	DELTA KING 4461 RR	66.1	53.2	55.1	2.0	1.8	1.9
~	ASGROW AG4502*	65.9			1.9		
~	SOUTHERN STATES RT 4230N**	65.8			2.1		
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	65.7	56.8		1.4	1.6	
~	UNISOUTH GENETICS USG 7401nRR*	65.6			1.6		
~	BECK 437NRR**	65.3	55.4		2.0	1.9	
~	PIONEER VARIETY 94M70*	65.2			2.4		
~	SEED CONSULTANTS SC 9442 RR**	64.6	54.6	56.0	1.8	1.8	1.9
~	GARST SEED XR46Y02**	64.6			2.6		
~	DYNAGRO 3443**	64.5	52.5		1.9	1.8	
~	HOOSIER PRIDE 4022CRR**	64.5			1.3		
~	ASGROW AG4201**	64.4	54.5		2.1	2.1	
~	GATEWAY 4R485**	64.4			2.5		
~	CROW'S C4815R**	64.3	52.9		2.4	2.1	
~	STEYER 4410 RR SCN**	64.3	53.8		1.8	1.8	
~	Excel Brand 8448NRR*	64.2			1.6		
~	STINE S4542-4**	64.0			2.7		

TABLE 4B. Roundup Ready varieties - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
~	CROW'S C4417R**	63.8	52.7	55.0	1.8	1.7	1.9
~	BECK 476NRR**	63.7	51.9		2.7	2.3	
~	NK BRAND S43-B1**	63.7			2.1		
~	HORNBECK HBK R4820	63.5	52.7	54.6	1.7	1.7	1.9
~	LG SEEDS C4112NRR**	63.4	55.1		1.3	1.4	
~	NK BRAND S49-Q9**	63.3	54.6		2.3	2.2	
~	PIONEER VARIETY 94B73	63.3	52.7	54.1	2.4	2.1	2.4
~	VIGORO V47N3RR**	63.3	55.4		2.2	2.0	
~	DYNAGRO 3481**	63.3			2.5		
~	PIONEER VARIETY 94B13**	63.2	51.7		2.1	1.8	
~	PIONEER VARIETY 94B74**	63.2	54.7		2.8	2.5	
~	DEKALB DKB46-51**	63.0			2.2		
~	Excel Brand 8416NRR*	62.9			1.3		
~	GREAT LAKES GL 4409 RR**	62.7	52.5		1.9	1.7	
~	Excel Brand 8499NRR*	62.4			2.2		
~	EBBERTS 1443NRR**	62.2			1.9		
~	SOUTHERN CROSS JONAH 4.8 N, RR**	62.2			2.5		
~	GREAT LAKES GL 4009 RR**	62.0			1.2		
~	UNISOUTH GENETICS USG 7489RR	61.7			2.7		
~	VIGORO V49N3RR**	61.6	53.4		2.2	2.2	
~	UNISOUTH GENETICS USG 7440nRR**	61.4	51.8		2.1	1.9	
~	LG SEEDS C4840NRR**	61.1			3.0		
~	NK BRAND S40-R9**	61.0	51.8		2.2	2.1	
~	UNISOUTH GENETICS USG 7482nRR**	60.8			2.4		
~	PIONEER VARIETY 94M41*	60.7			2.4		
~	SOUTHERN CROSS TITUS 4.8N, RR**	60.6	51.2	52.0	2.4	2.3	2.4
~	SEED CONSULTANTS SC 9404 RR*	60.6			1.3		
~	SOUTHERN STATES RT 4980	60.5	49.8	51.4	2.6	2.3	2.5
~	STEYER 4700 RR STS SCN**	60.5	49.6		2.2	2.2	
~	GOLDEN HARVEST H4368RR**	60.4	51.5		1.2	1.3	
~	ASGROW AG4403*	60.3	51.0	53.2	2.0	1.9	2.1
~	SOUTHERN STATES RT 4930N**	60.3			2.9		
~	ASGROW AG4902**	60.1	50.7	52.3	2.2	2.1	2.2
~	SOUTHERN STATES RT 4810N**	60.0	49.6		2.2	2.1	
~	SOUTHERN STATES RT 4098	59.6	49.3	49.7	1.8	1.9	2.2
~	GOLDEN HARVEST H4772RR**	59.5	51.4		2.2	2.0	
~	SOUTHERN STATES RT 446N*	57.6	49.0	50.0	2.0	1.9	2.0
~	SOUTHERN STATES RT 4502N**	57.4	47.6		2.1	2.0	
~	Excel Brand 8411NRR*	56.0			1.9		
	GROUP IV AVERAGE	63.1	52.8	53.8	2.1	1.9	2.1
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1

TABLE 4B. Roundup Ready varieties - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
	LATE (GROUP V)						
~	ASGROW AG5605*	**70.0**			2.9		
~	STINE S5142-4**	65.2			3.1		
~	DELTA KING 5465 RR*	64.9	**52.9**	**53.0**	2.7	2.4	2.5
~	UNISOUTH GENETICS USG 510nRR**	62.9	51.9	52.6	2.6	2.4	2.4
~	GREAT LAKES GL 5319 RR**	62.1	50.2	51.3	2.0	2.1	2.2
~	SOUTHERN STATES RT 5602N**	62.0	50.4		3.7	3.0	
~	SOUTHERN CROSS ABNER 5.2 N, RR**	61.8			3.3		
~	DYNAGRO 33B52	61.2			3.7		
~	ASGROW AG5301**	60.8	50.7		3.0	2.6	
~	ASGROW AG5501**	60.4	50.1	51.4	2.4	2.2	2.3
~	VIGORO V52N3RR**	60.4			3.1		
~	LG SEEDS C5225NRR*	59.6			3.0		
~	SOUTHERN STATES RT 5302N**	59.4	49.1		2.6	2.3	
~	DYNAGRO 3562**	59.1			3.2		
~	NK BRAND S52-U3**	58.0	49.5	51.8	3.8	3.2	3.3
~	VIGORO V503RR	57.8			2.5		
~	DELTA KING 5366 RR	57.7	48.9	48.9	3.4	3.2	3.3
~	GATEWAY 5R531**	57.6			2.5		
~	PIONEER VARIETY 95B42*	57.4	47.3		3.1	2.7	
~	LG SEEDS C5115NRR**	57.1			2.7		
~	GOLDEN HARVEST H5183RR*	56.5			3.5		
~	GATEWAY 5R500	56.0	47.4		3.2	2.5	
~	PIONEER VARIETY 95B32**	55.4	47.9	49.5	2.6	2.3	2.5
~	SOUTHERN STATES RT 5001N**	52.2	45.5	45.8	3.1	2.7	2.8
	GROUP V AVERAGE	59.8	49.4	50.5	3.0	2.6	2.7
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	61.5	47.9	52.4	2.2	1.9	2.2

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 4C. SCN resistant varieties - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	EARLY (GROUP III)						
~	EBBERTS 1394NRR**	**63.9**			1.2		
~	GOLDEN HARVEST H3921RR*	63.9			1.8		
~	PIONEER VARIETY 93M90**	63.3			1.6		
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	62.1			2.0		
~	DELTA KING 3968 RR*	61.9	54.1	**55.3**	1.7	1.6	1.5
~	GARST SEED 3824RR/N*	61.6			1.4		
~	GOLDEN HARVEST H3945RR**	61.4	**56.2**		1.5	1.5	
~	NK BRAND S37-N4**	60.8	52.3		1.8	2.0	
	GARST SEED 3906N*	60.3			1.6		
~	ASGROW AG3905*	59.7			1.6		
~	DEKALB DKB38-52*	59.6	51.6	53.3	1.7	1.7	1.7
~	ASGROW AG3703**	59.1	50.4		1.6	1.5	
~	ASGROW AG3903*	58.5	50.8	53.4	1.8	1.9	2.0
~	DEKALB DKB37-51*	57.9			1.9		
~	SCHILLINGER 393.RCP**	57.5			2.0		
~	VIGORO V382NRR*	57.2	49.6		1.8	1.8	
~	PIONEER VARIETY 93B67**	57.0	50.4	51.5	1.6	1.6	1.7
~	SOUTHERN STATES RT 3799N**	54.8	49.0	50.7	1.6	1.6	1.6
~	SOUTHERN STATES RT 3802N**	53.1	45.8		2.0	1.9	
	GROUP III AVERAGE	59.7	51.0	52.8	1.7	1.7	1.7
	LSD (0.10)	3.3	2.2	1.7	0.2	0.2	0.1
	MID-SEASON (GROUP IV)						
~	DELTA KING 4967 RR*	**68.4**			2.6		
~	HOOSIER PRIDE 4642CRR**	68.3			2.5		
~	GATEWAY 4RS463**	67.4			2.8		
~	DELTA KING 4763 RR*	67.3	**57.6**	**59.2**	2.2	2.1	2.3
~	STINE S4442-4**	66.9	57.0		1.3	1.3	
~	BIO GENE BG 4200NRRST**	66.6			1.3		
~	VIGORO V42N3RR**	66.3	57.0		1.4	1.5	
~	ASGROW AG4502*	65.9			1.9		
~	SOUTHERN STATES RT 4230N**	65.8			2.1		
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	65.7	56.8		1.4	1.6	
~	UNISOUTH GENETICS USG 7401nRR*	65.6			1.6		
~	BECK 437NRR**	65.3	55.4		2.0	1.9	
	GATEWAY 471**	65.3			3.0		
~	PIONEER VARIETY 94M70*	65.2			2.4		
~	SEED CONSULTANTS SC 9442 RR**	64.6	54.6	56.0	1.8	1.8	1.9
~	GARST SEED XR46Y02**	64.6			2.6		
~	DYNAGRO 3443**	64.5	52.5		1.9	1.8	
~	HOOSIER PRIDE 4022CRR**	64.5			1.3		
~	ASGROW AG4201**	64.4	54.5		2.1	2.1	
~	GATEWAY 4R485**	64.4			2.5		
~	CROW'S C4815R**	64.3	52.9		2.4	2.1	
~	STEYER 4410 RR SCN**	64.3	53.8		1.8	1.8	
~	Excel Brand 8448NRR*	64.2			1.6		
~	STINE S4542-4**	64.0			2.7		
~	CROW'S C4417R**	63.8	52.7	55.0	1.8	1.7	1.9
~	BECK 476NRR**	63.7	51.9		2.7	2.3	
~	NK BRAND S43-B1**	63.7			2.1		
	HORNBECK HBK 4944CX**	63.5	52.7		2.8	2.7	
~	LG SEEDS C4112NRR**	63.4	55.1		1.3	1.4	
~	NK BRAND S49-Q9**	63.3	54.6		2.3	2.2	
~	VIGORO V47N3RR**	63.3	55.4		2.2	2.0	
~	DYNAGRO 3481**	63.3			2.5		

TABLE 4C. SCN resistant varieties - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A]			LODGING		
		2003	02-03	01-03	2003	02-03	01-03
~	PIONEER VARIETY 94B13**	63.2	51.7		2.1	1.8	
~	PIONEER VARIETY 94B74**	63.2	54.7		2.8	2.5	
~	DEKALB DKB46-51**	63.0			2.2		
~	Excel Brand 8416NRR*	62.9			1.3		
~	GREAT LAKES GL 4409 RR**	62.7	52.5		1.9	1.7	
~	Excel Brand 8499NRR*	62.4			2.2		
~	EBBERTS 1443NRR**	62.2			1.9		
~	SOUTHERN CROSS JONAH 4.8 N, RR**	62.2			2.5		
~	GREAT LAKES GL 4009 RR**	62.0			1.2		
~	VIGORO V49N3RR**	61.6	53.4		2.2	2.2	
~	UNISOUTH GENETICS USG 7440nRR**	61.4	51.8		2.1	1.9	
~	LG SEEDS C4840NRR**	61.1			3.0		
~	NK BRAND S40-R9**	61.0	51.8		2.2	2.1	
~	UNISOUTH GENETICS USG 7482nRR**	60.8			2.4		
~	PIONEER VARIETY 94M41*	60.7			2.4		
~	SOUTHERN CROSS TITUS 4.8N, RR**	60.6	51.2	52.0	2.4	2.3	2.4
~	SEED CONSULTANTS SC 9404 RR*	60.6			1.3		
~	STEYER 4700 RR STS SCN**	60.5	49.6		2.2	2.2	
~	GOLDEN HARVEST H4368RR**	60.4	51.5		1.2	1.3	
~	ASGROW AG4403*	60.3	51.0	53.2	2.0	1.9	2.1
~	SOUTHERN STATES RT 4930N**	60.3			2.9		
~	ASGROW AG4902**	60.1	50.7	52.3	2.2	2.1	2.2
~	SOUTHERN STATES RT 4810N**	60.0	49.6		2.2	2.1	
	GOLDEN HARVEST H4151**	60.0			2.3		
~	GOLDEN HARVEST H4772RR**	59.5	51.4		2.2	2.0	
	GARST SEED D445N**	58.5			1.6		
	SOUTHERN CROSS AARON 4.5N, STS**	58.0	48.6	49.3	1.8	1.9	2.3
~	SOUTHERN STATES RT 446N*	57.6	49.0	50.0	2.0	1.9	2.0
~	SOUTHERN STATES RT 4502N**	57.4	47.6		2.1	2.0	
~	Excel Brand 8411NRR*	56.0			1.9		
	GROUP IV AVERAGE	62.9	52.8	53.4	2.1	1.9	2.1
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1

TABLE 4C. SCN resistant varieties - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
	LATE (GROUP V)						
~	ASGROW AG5605*	**70.0**			2.9		
~	STINE S5142-4**	65.2			3.1		
~	DELTA KING 5465 RR*	64.9	**52.9**	**53.0**	2.7	2.4	2.5
~	UNISOUTH GENETICS USG 510nRR**	62.9	51.9	52.6	2.6	2.4	2.4
P	ANAND**	62.8	51.0	50.1	2.6	2.3	2.3
~	GREAT LAKES GL 5319 RR**	62.1	50.2	51.3	2.0	2.1	2.2
~	SOUTHERN STATES RT 5602N**	62.0	50.4		3.7	3.0	
~	SOUTHERN CROSS ABNER 5.2 N, RR**	61.8			3.3		
P	CAVINESS**	61.5	49.6	50.7	3.6	3.2	3.5
~	ASGROW AG5301**	60.8	50.7		3.0	2.6	
~	ASGROW AG5501**	60.4	50.1	51.4	2.4	2.2	2.3
~	VIGORO V52N3RR**	60.4			3.1		
~	LG SEEDS C5225NRR*	59.6			3.0		
~	SOUTHERN STATES RT 5302N**	59.4	49.1		2.6	2.3	
~	DYNAGRO 3562**	59.1			3.2		
~	NK BRAND S52-U3**	58.0	49.5	51.8	3.8	3.2	3.3
~	GATEWAY 5R531**	57.6			2.5		
~	PIONEER VARIETY 95B42*	57.4	47.3		3.1	2.7	
~	LG SEEDS C5115NRR**	57.1			2.7		
P	DELSOY 5500**	56.6	48.8	50.9	2.9	2.5	2.6
~	GOLDEN HARVEST H5183RR*	56.5			3.5		
~	PIONEER VARIETY 95B32**	55.4	47.9	49.5	2.6	2.3	2.5
NS	S99-3181 (natto type)**	54.8			3.4		
~	SOUTHERN STATES RT 5001N**	52.2	45.5	45.8	3.1	2.7	2.8
	GROUP V AVERAGE	59.9	49.6	50.7	3.0	2.6	2.6
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	61.7	51.7	52.1	2.2	2.1	2.3

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 4D. Conventional varieties with no SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
	EARLY (GROUP III)						
	SOUTHERN STATES 381-STS	**55.6**			2.3		
NS	IA3012LF (triple-null lipoxygenase)	49.3			2.7		
NS	PIONEER VARIETY P9305 (tofu type)	48.2	38.6	**42.2**	1.6	1.6	1.7
NS	FG 1 (tofu type)	48.0	**38.9**	**42.2**	1.7	1.9	2.1
NS	FG 3 (tofu type)	47.8	34.1		1.6	1.8	
NS	IA3011 (large seed, high protein)	44.0	35.2	38.4	1.8	1.9	1.7
NS	IA3006LF (lipoxygenase free, large seed)	41.9			1.5		
NS	IA 3001 (high protein)	41.8			2.5		
	GROUP III AVERAGE	47.1	36.7	40.9	2.0	1.8	1.8
	LSD (0.10)	3.3	2.2	1.7	0.2	0.2	0.1
	MID-SEASON (GROUP IV)						
NS	GATEWAY Gx98-0609	**60.9**			2.6		
	CAVERNDALE CF 492	60.7	49.7	51.6	1.7	1.4	1.8
NS	DAIRYLAND DST4203 (large-seeded food type)	60.3	**51.1**	**53.4**	2.0	1.9	2.0
NS	KS4402sp (high protein variety)	57.4	47.8	46.4	1.6	1.6	1.6
NS	SCHILLINGER SSX 41082Y (high protein)	57.3			1.4		
	SOUTHERN STATES 439	57.2	46.1	47.3	2.0	1.9	2.2
	CAVERNDALE CF 461	56.3	46.7	48.5	2.4	2.2	2.6
NS	SCHILLINGER SSX 42262Y (high protein)	56.2			2.4		
NS	SCHILLINGER SSX 42193Y (high protein)	56.1			1.7		
NS	SCHILLINGER SSX 44252P (high protein)	54.2			1.8		
NS	KS4103sp (high protein)	52.3			2.7		
NS	KS4702SP (large seed)	49.7			3.8		
NS	IA4002 (small seed)	47.3	38.0		3.2	3.0	
	GROUP IV AVERAGE	55.8	46.6	49.4	2.3	2.0	2.0
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1
	LATE (GROUP V)						
	UNISOUTH GENETICS USG 5002T	**65.2**			3.2		
	UNISOUTH GENETICS USG 5601T	62.4	**52.4**		3.2	2.7	
P	HOLLADAY	60.2	48.5	**51.4**	3.3	2.7	3.0
NS	GATEWAY Gx98-2033	57.6			3.9		
P	HUTCHESON	57.3	47.6	49.5	3.1	2.6	2.9
NS	KS5202sp (high protein variety)	56.1	46.6	49.6	3.0	2.4	2.6
	GROUP V AVERAGE	59.8	48.8	50.2	3.3	2.6	2.8
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	54.1	47.8	47.3	2.4	2.3	2.2

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 4E. Conventional varieties with SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
	EARLY (GROUP III)						
	GARST SEED 3906N*	60.3			1.6		
	GROUP III AVERAGE	60.3			1.6		
	LSD (0.10)	3.3			0.2		
	MID-SEASON (GROUP IV)						
	GATEWAY 471**	**65.3**			3.0		
	HORNBECK HBK 4944CX**	**63.5**	**52.7**		2.8	2.7	
	GOLDEN HARVEST H4151**	60.0			2.3		
	GARST SEED D445N**	58.5			1.6		
	SOUTHERN CROSS AARON 4.5N, STS**	58.0	48.6	49.3	1.8	1.9	2.3
	GROUP IV AVERAGE	61.1	50.7	49.3	2.3	2.3	2.3
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1
	LATE (GROUP V)						
P	ANAND**	**62.8**	**51.0**	50.1	2.6	2.3	2.3
P	CAVINESS**	61.5	49.6	50.7	3.6	3.2	3.5
P	DELSOY 5500**	56.6	48.8	**50.9**	2.9	2.5	2.6
NS	S99-3181 (natto type)**	54.8			3.4		
	GROUP V AVERAGE	58.9	49.8	50.6	3.1	2.7	2.8
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	60.1	50.1	50.3	2.6	2.5	2.7

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 4F. Roundup Ready varieties with no SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
	EARLY (GROUP III)						
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	**62.4**			1.3		
~	Excel Brand 8392RR	61.7			1.8		
~	SEED CONSULTANTS SC 9391 RR	61.1	**53.2**		1.6	1.5	
~	CROW'S C3915R	60.4			1.5		
~	NK BRAND S39-Q4	60.0	52.1	**53.9**	1.5	1.5	1.6
~	SEED CONSULTANTS SC 9394 RR	58.8			2.0		
~	PIONEER VARIETY 93B68	58.1	48.4		1.8	1.8	
~	DELTA KING 3961 RR	54.9	48.6	50.6	1.7	1.8	1.8
~	SOUTHERN STATES RT 3975	53.1	46.9	48.2	1.8	1.9	2.0
	GROUP III AVERAGE	58.9	49.8	50.9	1.7	1.7	1.8
	LSD (0.10)	3.3	2.2	1.7	0.2	0.2	0.1
	MID-SEASON (GROUP IV)						
~	DELTA KING 4868 RR	**66.8**	**55.3**	**56.3**	1.9	1.8	2.1
~	DELTA KING 4461 RR	66.1	53.2	55.1	2.0	1.8	1.9
~	HORNBECK HBK R4820	63.5	52.7	54.6	1.7	1.7	1.9
~	PIONEER VARIETY 94B73	63.3	52.7	54.1	2.4	2.1	2.4
~	UNISOUTH GENETICS USG 7489RR	61.7			2.7		
~	SOUTHERN STATES RT 4980	60.5	49.8	51.4	2.6	2.3	2.5
~	SOUTHERN STATES RT 4098	59.6	49.3	49.7	1.8	1.9	2.2
	GROUP IV AVERAGE	63.1	52.2	53.5	2.2	1.9	2.2
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1
	LATE (GROUP V)						
~	DYNAGRO 33B52	**61.2**			3.7		
~	VIGORO V503RR	57.8			2.5		
~	DELTA KING 5366 RR	57.7	**48.9**	48.9	3.4	3.2	3.3
~	GATEWAY 5R500	56.0	47.4		3.2	2.5	
	GROUP V AVERAGE	58.2	48.2		3.2	2.9	
	LSD (0.10)	2.7	1.9		0.3	0.2	
	GRAND MEAN	60.2	50.7	52.3	2.1	2.0	2.2

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 4G. Roundup Ready varieties with SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
	EARLY (GROUP III)						
~	EBBERTS 1394NRR**	**63.9**			1.2		
~	GOLDEN HARVEST H3921RR*	63.9			1.8		
~	PIONEER VARIETY 93M90**	63.3			1.6		
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	62.1			2.0		
~	DELTA KING 3968 RR*	61.9	54.1	**55.3**	1.7	1.6	1.5
~	GARST SEED 3824RR/N*	61.6			1.4		
~	GOLDEN HARVEST H3945RR**	61.4	**56.2**		1.5	1.5	
~	NK BRAND S37-N4**	60.8	52.3		1.8	2.0	
~	ASGROW AG3905*	59.7			1.6		
~	DEKALB DKB38-52*	59.6	51.6	53.3	1.7	1.7	1.7
~	ASGROW AG3703**	59.1	50.4		1.6	1.5	
~	ASGROW AG3903*	58.5	50.8	53.4	1.8	1.9	2.0
~	DEKALB DKB37-51*	57.9			1.9		
~	SCHILLINGER 393.RCP**	57.5			2.0		
~	VIGORO V382NRR*	57.2	49.6		1.8	1.8	
~	PIONEER VARIETY 93B67**	57.0	50.4	51.5	1.6	1.6	1.7
~	SOUTHERN STATES RT 3799N**	54.8	49.0	50.7	1.6	1.6	1.6
~	SOUTHERN STATES RT 3802N**	53.1	45.8		2.0	1.9	
	GROUP III AVERAGE	59.6	51.0	52.8	1.7	1.7	1.7
	LSD (0.10)	3.3	2.2	1.7	0.2	0.2	0.1
	MID-SEASON (GROUP IV)						
~	DELTA KING 4967 RR*	**68.4**			2.6		
~	HOOSIER PRIDE 4642CRR**	68.3			2.5		
~	GATEWAY 4RS463**	67.4			2.8		
~	DELTA KING 4763 RR*	67.3	**57.6**	**59.2**	2.2	2.1	2.3
~	STINE S4442-4**	66.9	57.0		1.3	1.3	
~	BIO GENE BG 4200NRRST**	66.6			1.3		
~	VIGORO V42N3RR**	66.3	57.0		1.4	1.5	
~	ASGROW AG4502*	65.9			1.9		
~	SOUTHERN STATES RT 4230N**	65.8			2.1		
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	65.7	56.8		1.4	1.6	
~	UNISOUTH GENETICS USG 7401nRR*	65.6			1.6		
~	BECK 437NRR**	65.3	55.4		2.0	1.9	
~	PIONEER VARIETY 94M70*	65.2			2.4		
~	SEED CONSULTANTS SC 9442 RR**	64.6	54.6	56.0	1.8	1.8	1.9
~	GARST SEED XR46Y02**	64.6			2.6		
~	DYNAGRO 3443**	64.5	52.5		1.9	1.8	
~	HOOSIER PRIDE 4022CRR**	64.5			1.3		
~	ASGROW AG4201**	64.4	54.5		2.1	2.1	
~	GATEWAY 4R485**	64.4			2.5		
~	CROW'S C4815R**	64.3	52.9		2.4	2.1	
~	STEYER 4410 RR SCN**	64.3	53.8		1.8	1.8	
~	Excel Brand 8448NRR*	64.2			1.6		
~	STINE S4542-4**	64.0			2.7		
~	CROW'S C4417R**	63.8	52.7	55.0	1.8	1.7	1.9

TABLE 4G. Roundup Ready varieties with SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
~	BECK 476NRR**	63.7	51.9		2.7	2.3	
~	NK BRAND S43-B1**	63.7			2.1		
~	LG SEEDS C4112NRR**	63.4	55.1		1.3	1.4	
~	NK BRAND S49-Q9**	63.3	54.6		2.3	2.2	
~	VIGORO V47N3RR**	63.3	55.4		2.2	2.0	
~	DYNAGRO 3481**	63.3			2.5		
~	PIONEER VARIETY 94B13**	63.2	51.7		2.1	1.8	
~	PIONEER VARIETY 94B74**	63.2	54.7		2.8	2.5	
~	DEKALB DKB46-51**	63.0			2.2		
~	Excel Brand 8416NRR*	62.9			1.3		
~	GREAT LAKES GL 4409 RR**	62.7	52.5		1.9	1.7	
~	Excel Brand 8499NRR*	62.4			2.2		
~	EBBERTS 1443NRR**	62.2			1.9		
~	SOUTHERN CROSS JONAH 4.8 N, RR**	62.2			2.5		
~	GREAT LAKES GL 4009 RR**	62.0			1.2		
~	VIGORO V49N3RR**	61.6	53.4		2.2	2.2	
~	UNISOUTH GENETICS USG 7440nRR**	61.4	51.8		2.1	1.9	
~	LG SEEDS C4840NRR**	61.1			3.0		
~	NK BRAND S40-R9**	61.0	51.8		2.2	2.1	
~	UNISOUTH GENETICS USG 7482nRR**	60.8			2.4		
~	PIONEER VARIETY 94M41*	60.7			2.4		
~	SOUTHERN CROSS TITUS 4.8N, RR**	60.6	51.2	52.0	2.4	2.3	2.4
~	SEED CONSULTANTS SC 9404 RR*	60.6			1.3		
~	STEYER 4700 RR STS SCN**	60.5	49.6		2.2	2.2	
~	GOLDEN HARVEST H4368RR**	60.4	51.5		1.2	1.3	
~	ASGROW AG4403*	60.3	51.0	53.2	2.0	1.9	2.1
~	SOUTHERN STATES RT 4930N**	60.3			2.9		
~	ASGROW AG4902**	60.1	50.7	52.3	2.2	2.1	2.2
~	SOUTHERN STATES RT 4810N**	60.0	49.6		2.2	2.1	
~	GOLDEN HARVEST H4772RR**	59.5	51.4		2.2	2.0	
~	SOUTHERN STATES RT 446N*	57.6	49.0	50.0	2.0	1.9	2.0
~	SOUTHERN STATES RT 4502N**	57.4	47.6		2.1	2.0	
~	Excel Brand 8411NRR*	56.0			1.9		
	GROUP IV AVERAGE	63.1	53.0	54.0	2.1	1.9	2.1
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1

TABLE 4G. Roundup Ready varieties with SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
	LATE (GROUP V)						
~	ASGROW AG5605*	**70.0**			2.9		
~	STINE S5142-4**	65.2			3.1		
~	DELTA KING 5465 RR*	64.9	**52.9**	**53.0**	2.7	2.4	2.5
~	UNISOUTH GENETICS USG 510nRR**	62.9	51.9	52.6	2.6	2.4	2.4
~	GREAT LAKES GL 5319 RR**	62.1	50.2	51.3	2.0	2.1	2.2
~	SOUTHERN STATES RT 5602N**	62.0	50.4		3.7	3.0	
~	SOUTHERN CROSS ABNER 5.2 N, RR**	61.8			3.3		
~	ASGROW AG5301**	60.8	50.7		3.0	2.6	
~	ASGROW AG5501**	60.4	50.1	51.4	2.4	2.2	2.3
~	VIGORO V52N3RR**	60.4			3.1		
~	LG SEEDS C5225NRR*	59.6			3.0		
~	SOUTHERN STATES RT 5302N**	59.4	49.1		2.6	2.3	
~	DYNAGRO 3562**	59.1			3.2		
~	NK BRAND S52-U3**	58.0	49.5	51.8	3.8	3.2	3.3
~	GATEWAY 5R531**	57.6			2.5		
~	PIONEER VARIETY 95B42*	57.4	47.3		3.1	2.7	
~	LG SEEDS C5115NRR**	57.1			2.7		
~	GOLDEN HARVEST H5183RR*	56.5			3.5		
~	PIONEER VARIETY 95B32**	55.4	47.9	49.5	2.6	2.3	2.5
~	SOUTHERN STATES RT 5001N**	52.2	45.5	45.8	3.1	2.7	2.8
	GROUP V AVERAGE	60.1	49.6	50.8	2.9	2.5	2.6
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	61.8	51.9	52.5	2.2	2.0	2.2

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 4H. Conventional varieties with SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	EARLY (GROUP III)						
	GARST SEED 3906N*	60.3			1.6		
	GROUP III AVERAGE	60.3			1.6		
	LSD (0.10)	3.3			0.2		
	MID-SEASON (GROUP IV)						
	GATEWAY 471**	**65.3**			3.0		
	HORNBECK HBK 4944CX**	**63.5**	**52.7**		2.8	2.7	
	GOLDEN HARVEST H4151**	60.0			2.3		
	GARST SEED D445N**	58.5			1.6		
	SOUTHERN CROSS AARON 4.5N, STS**	58.0	48.6	49.3	1.8	1.9	2.3
	GROUP IV AVERAGE	61.1	50.7	49.3	2.3	2.3	2.3
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1
	LATE (GROUP V)						
P	ANAND**	**62.8**	**51.0**	50.1	2.6	2.3	2.3
P	CAVINESS**	61.5	49.6	50.7	3.6	3.2	3.5
P	DELSOY 5500**	56.6	48.8	**50.9**	2.9	2.5	2.6
NS	S99-3181 (natto type)**	54.8			3.4		
	GROUP V AVERAGE	58.9	49.8	50.6	3.1	2.7	2.8
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	60.1	50.1	50.3	2.6	2.5	2.7

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

TABLE 4l. Roundup Ready varieties with SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	02-03	01-03	LODGING 2003	02-03	01-03
	EARLY (GROUP III)						
~	EBBERTS 1394NRR**	**63.9**			1.2		
~	GOLDEN HARVEST H3921RR*	63.9			1.8		
~	PIONEER VARIETY 93M90**	63.3			1.6		
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	62.1			2.0		
~	DELTA KING 3968 RR*	61.9	54.1	**55.3**	1.7	1.6	1.5
~	GARST SEED 3824RR/N*	61.6			1.4		
~	GOLDEN HARVEST H3945RR**	61.4	**56.2**		1.5	1.5	
~	NK BRAND S37-N4**	60.8	52.3		1.8	2.0	
~	ASGROW AG3905*	59.7			1.6		
~	DEKALB DKB38-52*	59.6	51.6	53.3	1.7	1.7	1.7
~	ASGROW AG3703**	59.1	50.4		1.6	1.5	
~	ASGROW AG3903*	58.5	50.8	53.4	1.8	1.9	2.0
~	DEKALB DKB37-51*	57.9			1.9		
~	SCHILLINGER 393.RCP**	57.5			2.0		
~	VIGORO V382NRR*	57.2	49.6		1.8	1.8	
~	PIONEER VARIETY 93B67**	57.0	50.4	51.5	1.6	1.6	1.7
~	SOUTHERN STATES RT 3799N**	54.8	49.0	50.7	1.6	1.6	1.6
~	SOUTHERN STATES RT 3802N**	53.1	45.8		2.0	1.9	
	GROUP III AVERAGE	59.6	51.0	52.8	1.7	1.7	1.7
	LSD (0.10)	3.3	2.2	1.7	0.2	0.2	0.1
	MID-SEASON (GROUP IV)						
~	DELTA KING 4967 RR*	**68.4**			2.6		
~	HOOSIER PRIDE 4642CRR**	68.3			2.5		
~	GATEWAY 4RS463**	67.4			2.8		
~	DELTA KING 4763 RR*	67.3	**57.6**	**59.2**	2.2	2.1	2.3
~	STINE S4442-4**	66.9	57.0		1.3	1.3	
~	BIO GENE BG 4200NRRST**	66.6			1.3		
~	VIGORO V42N3RR**	66.3	57.0		1.4	1.5	
~	ASGROW AG4502*	65.9			1.9		
~	SOUTHERN STATES RT 4230N**	65.8			2.1		
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	65.7	56.8		1.4	1.6	
~	UNISOUTH GENETICS USG 7401nRR*	65.6			1.6		
~	BECK 437NRR**	65.3	55.4		2.0	1.9	
~	PIONEER VARIETY 94M70*	65.2			2.4		
~	SEED CONSULTANTS SC 9442 RR**	64.6	54.6	56.0	1.8	1.8	1.9
~	GARST SEED XR46Y02**	64.6			2.6		
~	DYNAGRO 3443**	64.5	52.5		1.9	1.8	
~	HOOSIER PRIDE 4022CRR**	64.5			1.3		
~	ASGROW AG4201**	64.4	54.5		2.1	2.1	
~	GATEWAY 4R485**	64.4			2.5		
~	CROW'S C4815R**	64.3	52.9		2.4	2.1	
~	STEYER 4410 RR SCN**	64.3	53.8		1.8	1.8	
~	Excel Brand 8448NRR*	64.2			1.6		
~	STINE S4542-4**	64.0			2.7		
~	CROW'S C4417R**	63.8	52.7	55.0	1.8	1.7	1.9

TABLE 4l. Roundup Ready varieties with SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A]			LODGING		
		2003	02-03	01-03	2003	02-03	01-03
~	BECK 476NRR**	63.7	51.9		2.7	2.3	
~	NK BRAND S43-B1**	63.7			2.1		
~	LG SEEDS C4112NRR**	63.4	55.1		1.3	1.4	
~	NK BRAND S49-Q9**	63.3	54.6		2.3	2.2	
~	VIGORO V47N3RR**	63.3	55.4		2.2	2.0	
~	DYNAGRO 3481**	63.3			2.5		
~	PIONEER VARIETY 94B13**	63.2	51.7		2.1	1.8	
~	PIONEER VARIETY 94B74**	63.2	54.7		2.8	2.5	
~	DEKALB DKB46-51**	63.0			2.2		
~	Excel Brand 8416NRR*	62.9			1.3		
~	GREAT LAKES GL 4409 RR**	62.7	52.5		1.9	1.7	
~	Excel Brand 8499NRR*	62.4			2.2		
~	EBBERTS 1443NRR**	62.2			1.9		
~	SOUTHERN CROSS JONAH 4.8 N, RR**	62.2			2.5		
~	GREAT LAKES GL 4009 RR**	62.0			1.2		
~	VIGORO V49N3RR**	61.6	53.4		2.2	2.2	
~	UNISOUTH GENETICS USG 7440nRR**	61.4	51.8		2.1	1.9	
~	LG SEEDS C4840NRR**	61.1			3.0		
~	NK BRAND S40-R9**	61.0	51.8		2.2	2.1	
~	UNISOUTH GENETICS USG 7482nRR**	60.8			2.4		
~	PIONEER VARIETY 94M41*	60.7			2.4		
~	SOUTHERN CROSS TITUS 4.8N, RR**	60.6	51.2	52.0	2.4	2.3	2.4
~	SEED CONSULTANTS SC 9404 RR*	60.6			1.3		
~	STEYER 4700 RR STS SCN**	60.5	49.6		2.2	2.2	
~	GOLDEN HARVEST H4368RR**	60.4	51.5		1.2	1.3	
~	ASGROW AG4403*	60.3	51.0	53.2	2.0	1.9	2.1
~	SOUTHERN STATES RT 4930N**	60.3			2.9		
~	ASGROW AG4902**	60.1	50.7	52.3	2.2	2.1	2.2
~	SOUTHERN STATES RT 4810N**	60.0	49.6		2.2	2.1	
~	GOLDEN HARVEST H4772RR**	59.5	51.4		2.2	2.0	
~	SOUTHERN STATES RT 446N*	57.6	49.0	50.0	2.0	1.9	2.0
~	SOUTHERN STATES RT 4502N**	57.4	47.6		2.1	2.0	
~	Excel Brand 8411NRR*	56.0			1.9		
	GROUP IV AVERAGE	63.1	53.0	54.0	2.1	1.9	2.1
	LSD (0.10)	2.8	2.0	1.7	0.2	0.2	0.1

TABLE 4l. Roundup Ready varieties with SCN resistance - subset of the 2003 Summary Table 4

BACK TO SELECTION KEY

	BRAND -- VARIETY	YIELD (BU/AC)[A] 2003	YIELD (BU/AC)[A] 02-03	YIELD (BU/AC)[A] 01-03	LODGING 2003	LODGING 02-03	LODGING 01-03
	LATE (GROUP V)						
~	ASGROW AG5605*	**70.0**			2.9		
~	STINE S5142-4**	65.2			3.1		
~	DELTA KING 5465 RR*	64.9	**52.9**	**53.0**	2.7	2.4	2.5
~	UNISOUTH GENETICS USG 510nRR**	62.9	51.9	52.6	2.6	2.4	2.4
~	GREAT LAKES GL 5319 RR**	62.1	50.2	51.3	2.0	2.1	2.2
~	SOUTHERN STATES RT 5602N**	62.0	50.4		3.7	3.0	
~	SOUTHERN CROSS ABNER 5.2 N, RR**	61.8			3.3		
~	ASGROW AG5301**	60.8	50.7		3.0	2.6	
~	ASGROW AG5501**	60.4	50.1	51.4	2.4	2.2	2.3
~	VIGORO V52N3RR**	60.4			3.1		
~	LG SEEDS C5225NRR*	59.6			3.0		
~	SOUTHERN STATES RT 5302N**	59.4	49.1		2.6	2.3	
~	DYNAGRO 3562**	59.1			3.2		
~	NK BRAND S52-U3**	58.0	49.5	51.8	3.8	3.2	3.3
~	GATEWAY 5R531**	57.6			2.5		
~	PIONEER VARIETY 95B42*	57.4	47.3		3.1	2.7	
~	LG SEEDS C5115NRR**	57.1			2.7		
~	GOLDEN HARVEST H5183RR*	56.5			3.5		
~	PIONEER VARIETY 95B32**	55.4	47.9	49.5	2.6	2.3	2.5
~	SOUTHERN STATES RT 5001N**	52.2	45.5	45.8	3.1	2.7	2.8
	GROUP V AVERAGE	60.1	49.6	50.8	2.9	2.5	2.6
	LSD (0.10)	2.7	1.9	1.6	0.3	0.2	0.2
	GRAND MEAN	61.8	51.9	52.5	2.2	2.0	2.2

~ Roundup Ready variety

P Entries with a P prefix are public varieties.

NS Entries with a NS prefix are novel soybean varieties that are emerging from both the public and private sectors. Some of these value-added soybean types will supply relatively small market niches, while others may be of much broader market value. Testing novel soybeans will enable producers to assess whether premiums for a given trait offset possible yield lag/drag.

* Resistant to the soybean cyst nematode (Race 3)

** Resistant to the soybean cyst nematode (Race 3 and Race 14)

[A] Within a maturity group, shaded yields are not significantly different (0.10 level) from the highest yielding cultivar (bold data) of that maturity group and year column.

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Memorandum

Date: November, 2003

TO: Soybean Seed Producers

FROM: Eugene Lacefield, Research Specialist

SUBJECT: 2004 Kentucky Soybean Performance Tests

The Kentucky Soybean Performance Tests are conducted to provide an unbiased, objective estimate of the relative performance of soybean varieties in Kentucky. If you have soybean varieties for sale in Kentucky and would like to enter them in the state trials, please read the following pages carefully. Fill out the nomination form completely (typing prevents errors) and note that it is due back by February 20. You will be notified in early March which entries are accepted for testing (usually all entries). Instructions will then be sent for shipping seed. After all tests have been planted, a statement of fees will be sent along with instructions for remittance of fees.

DO NOT SEND CHECK FOR FEE UNTIL YOU HAVE BEEN BILLED.

This year's publication web sit is http://www.uky.edu/Ag/GrainCrops/varietytesting.htm Pages 1–28 are the printed publication. 5000 copies are distributed across Kentucky annually in December or late November. Pages after page 28 comprise web site additions which feature a selection key that will sort the summary table by basic questions a soybean producer might ask (description on page 4 of the publication), this cover memo, a nomination form, and instructions for entering soybean varieties in the 2004 tests. The publication web site which was activated December 1, 1999, was accessed over 2500 times through November 2000 (2000 publication), more than 4000 times for the 2001 publication and over 7000 times for the 2002 publication.

If, due to rapid changes in the agriculture industry, this memorandum has not reached the correct contact person please forward or e-mail me the correct information. Thank you for participating in the Soybean Variety Test Program and for being interested in marketing tested varieties in Kentucky. Your involvement helps all the soybean producers of Kentucky.

If you have any questions or would like additional information, call, write, or e-mail:

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KENTUCKY SOYBEAN PERFORMANCE TESTS

Purpose

The soybean performance tests are conducted annually by the Kentucky Agricultural Experiment Station and are designed as a direct service and benefit to agriculture in the state of Kentucky. Results of these tests are published to provide information to producers and seedsmen on the relative performance of soybean varieties offered for sale in the state of Kentucky.

Eligibility for variety nomination

Seed companies and producers of soybean seed to be sold or offered for sale in Kentucky and the Kentucky Agricultural Experiment Station may nominate varieties for the soybean testing program. Exceptions will be made for novel soybeans and experimental entries.

Requirements for nomination and testing

1. Named soybean varieties within maturity groups III, IV and V will be tested.

2. Named varieties offered for sale or sold in the state of Kentucky during the test year or following year are eligible for nomination for testing as indicated by specifying the market outlet in Kentucky. Some experimental lines will be tested but the data will not be published. The experimental data will be given to the nominating company after the state publication is finished and will enable 2 and 3 year data to be provided for new named varieties offered for sale in Kentucky the following year.

3. Entries must meet the standards for a variety as defined by the U S Federal Seed Act and the Plant Variety Protection Act if it is a protected variety.

4. Entries must comply with the Kentucky State Seed Law.

   All entries (except experimental and novel soybeans) in the Kentucky soybean performance test must be identified by the name(s) required to be on the seed tag or label by the Kentucky Seed Law, i.e., listed in the manner by which the seed will be sold or offered for sale in Kentucky. The law requires the variety designation whether name, or number, or combination of both. Use of a brand name or trademark is not acceptable unless it is clearly identified as being other than a part of the variety designation. A brand name or trademark can never be used instead of the variety.

   Examples of proper identification of entries on the nomination form are:

   A. Without a brand name - Bountiful (Soybean)

   B. With a brand name - Ajax Brand Bountiful (Soybean)

   This complete designation, brand and variety name will be published in the performance bulletin. Experimentals (not published) will have an EXP prefix – example: EXP Ajax Brand etc. Novel entries will have a NS prefix.

5. Brands representing a single variety are not eligible for testing if the variety in question is already represented.

6. Nomination forms must be completely filled out.

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Requirements for nomination and testing (continued)

7. All nominations accepted for testing will be placed in the conventional full season tests and evaluated at five locations.
8. A fee of $420 per entry will be required for each entry accepted for testing. Selected novel soybeans such as high protein, high oil, natto, tofu, and other value-added types will be tested for free (please provide a description on a separate sheet of paper).
9. The nominating organization will supply 10 pounds of seed of entries accepted for testing by March 15 (shipping address at bottom of page).
10. Nominated entries that are dropped by the nominating company after March 15 will be charged the full entry fee for non-used space in the test. A replacement variety may be provided after March 15 by special request.

Selection Procedure

1. The size of the conventional tests will be approximately 180 entries. Approximately 20 test slots will be used for standard public varieties, experimentals, and new public releases, 20 test slots will be used for novel soybean varieties, and 140 test slots for private entries.
2. Organizations will nominate entries. List the entries on the nomination form in order of priority with the highest priority first and the lowest priority last. Experimental entries will have the lowest priority and should have a "EXP" prefix – example: EXP AJAX BRAND ZTQ 445RR.
3. Nominations of equal priority from each organization will be entered in the test until all test slots are filled. If more eligible nominations are received than the size limit of the test, a random drawing of equal priority nominations may be used to select the entries to fill the test slots. In the past all nominations have been accepted except experimental and novel soybeans.
4. Standard public varieties and new publicly released varieties will be entered by the Kentucky Agricultural Experiment Station.
5. To assure that the needs of agriculture in the state of Kentucky are met, the Kentucky Agricultural Experiment Station may revise the list of entries to compensate for obvious deficiencies of varieties of soybeans being grown by farmers in Kentucky.

Important dates

Nominating forms and instructions (available at publication web site-see below: **Pub. of results**) will be mailed in mid-January. The nomination forms must be returned by February 20. Notification of nominations accepted for testing and instructions for seed shipment will be mailed the first week of March. Ten pounds of seed of nominations accepted for testing must be sent to the University of Kentucky by March 15. The Kentucky Agricultural Experiment Station reserves the right to sample seed for testing from marketing outlets in Kentucky. Failure to meet the stated deadlines may eliminate a nomination from the test. Instructions for the remittance of fees and a statement of fees will be sent in early July after all tests have been planted. Payment will be due ten days after receipt of the billing. Mail forms and ship seed to:

Eugene Lacefield
Department of Agronomy
N-222C Ag. Science Center North
University of Kentucky
Lexington, KY 40546-0091

Phone: (859) 257-2993
Fax: (859) 323-1952
E-mail: elace0@uky.edu

Testing methods

The tests will sample a range of environments of the soybean producing areas of the state of Kentucky. The number of tests, type, and specific locations may vary from year to year. In 2004 there will be five full season conventional tests. Entries will be replicated 2 times in each test.

Six row plots will be 20 feet long with a row spacing of 16 inches. All entries will be planted at a seeding rate of 5-6 viable seeds per foot of row unless specific requests are attached to the nominating form. Correction for germination will be made provided the percent germination is listed on the nomination form. If no germination percentage is listed, it will be assumed to be 100%.

Cultural practices recommended by the University of Kentucky will be used. Procedures used for planting, weed control and harvesting will be similar to those used in actual commercial production of conventional soybeans. Plots will be end-trimmed to 16 feet. A small combine will be used for harvesting the center 4 rows from the 6-row plots.

Data to be collected at all tests will be grain yield and lodging score. Maturity date and plant height will be taken at the Fayette County (Lexington) location. Other observations (such as seed shattering scores, hail damage, pest information, etc.) may be taken if warranted.

For detailed information see the University of Kentucky progress report 487, "Kentucky Soybean Performance Tests - 2003".

Publication of results

Data for all entries in the Kentucky Soybean Performance Test will be published according to the policies established by the Kentucky Agricultural Experiment Station. If for any reason the results of the tests are judged to be unreliable or possibly misleading the results will not be published. Results will be published annually in the University of Kentucky progress report "Kentucky Soybean Performance Tests - 200x". The bulletin will be made available in limited quantities to all interested concerns at no charge. It can also be found at the Web site shown below.

http://www.uky.edu/Ag/GrainCrop/varietytesting.htm

Disclaimer

Every possible effort will be made to plant, harvest and tabulate results for each entry accepted for testing. Certain conditions such as weather, floods, hail damage, herbicide carry-over and drift, insect and disease problems, plot availability, etc. may make this impossible. Therefore, the Kentucky Agricultural Experiment Station assumes absolutely no responsibility for any damages resulting from these tests. If for any reason the tests cannot be completed, test fees will not be refunded. Trade names of products mentioned or similar products not named is neither intended as an endorsement nor criticism of such products by the Kentucky Agricultural Experiment Station.

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RESET ENTRIES

RESET FORM

KENTUCKY SOYBEAN PERFORMANCE TEST NOMINATION FORM

PLEASE TYPE - FORM MUST BE FILLED IN COMPLETELY- PRINT AND MAIL

RETURN TO LIST OF TABLES

Organization name ______________________________

Nominators name ______________________________

Address ______________________________

____

Phone ______________________________

Email ______________________________

Marketing Outlet in Kentucky

Name ______________________________

Address ______________________________

____

Phone ______________________________

Return form by February 20 to:
Eugene Lacefield
Agronomy Department, N-222C ASCN
University of Kentucky
Lexington, KY 40546-0091
Phone: (859) 257-2993
Fax: (859) 323-1952
E-mail: elace0@uky.edu

List nominations with top priority for testing first. Any number of nominations may be made but we cannot guarantee that all will be tested. Information listed below may be used in the performance bulletin publication. Experimental entries should have a "EXP" prefix. Novel soybeans should have a "NS" prefix. **PLEASE TYPE**

Entry: type name exactly as it will appear in the publication	New this year[1] ✔	Maturity Group example 4.7	Roundup Ready ✔	Percent Germ[2]	Race (s) of Soybean Cyst Nematode Resistance	Check the appropriate race & resistance [3] Phytophtora sojae: Resistance Gene Rps	Phytophtora sojae: Field tolerance	Sudden Death Syndrome	Sybean Mosaic Virus	Stem Canker	Other
					1 3 4 5 9 14	1a 1b 1c 1d 1k 3a 6 7	S MS MT T	S MS MR R	S MR R	S MR R	
					1 3 4 5 9 14	1a 1b 1c 1d 1k 3a 6 7	S MS MT T	S MS MR R	S MR R	S MR R	
					1 3 4 5 9 14	1a 1b 1c 1d 1k 3a 6 7	S MS MT T	S MS MR R	S MR R	S MR R	
					1 3 4 5 9 14	1a 1b 1c 1d 1k 3a 6 7	S MS MT T	S MS MR R	S MR R	S MR R	
					1 3 4 5 9 14	1a 1b 1c 1d 1k 3a 6 7	S MS MT T	S MS MR R	S MR R	S MR R	
					1 3 4 5 9 14	1a 1b 1c 1d 1k 3a 6 7	S MS MT T	S MS MR R	S MR R	S MR R	
					1 3 4 5 9 14	1a 1b 1c 1d 1k 3a 6 7	S MS MT T	S MS MR R	S MR R	S MR R	

[1] Check if the entry was not in the KY test in 2003. If entry was in last years test as an experimental or the name has been changed please add a note to this effect.

[2] If not specified, 100% will be assumed.

[3] Use provided choices: S=susceptible, MS=moderately susceptible, MR=moderately resistant, R=resistant, T=tolerant MT=moderately tolerant

DO NOT SEND MONEY WITH THIS FORM. You will be notified at a later date which nominations have been accepted for testing and procedures for remittance of all fees.

I affirm that I have carefully studied the plans, rules, and procedures for the Kentucky Soybean Performance Tests and I will comply with all rules and procedures. Remittance of the fees will be made within 10 days after receiving the statement of fees from the Kentucky Agricultural Experiment Station.

Signature ______________________________ Date ____________________ Title ______________________________