2004 Kentucky Soybean Performance Tests

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Tables

1. Location, Planting, and Climatic Data for the	
2004 Soybean Performance Tests	2
2. Soybean Planting Guide	3
3. Company Disease Resistance Specifications	6
4. Summary: Variety Test Tables 5-9	9
5. Butler County Full-Season Variety Test	12
6. Caldwell County Full-Season Variety Test	15
7. Fayette County Full-Season Variety Test	18
8. Henderson County Full-Season Variety Test	21
9. Marshall County Full-Season Variety Test	24

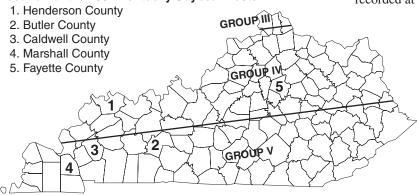
Web Site Features:

- Selection key to create subsets of Summary Table 4. Description on page 4.
- Nomination form, cover letter, and instructions for 2005 tests entries.

The Kentucky Soybean Performance Tests are conducted 1 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 2004 in Kentucky. The test locations are shown below. Soil types, planting dates, and other information are shown in Table 1.

Location of the 2004 Kentucky Soybean Tests



Kentucky Grain Crops Web Site:

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

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 six 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.

Test	Farmer	Extension	SoilTyma	Date of Planting	Soil Test	Fertilizer Applied ¹	50% Chance of Killing Frost ²
		Agent	Soil Type				
Caldwell County	Princeton		Crider Silt	5/20	P 187	3 tons lime	10/21
Full-Season	Exp. Station		Loam		K 460		
					pH 6.9		
Butler County	Patrick	Greg Drake	Newark Silt	6/09	P 109	None	10/22
Full-Season	Daugherty	•	Loam		K 129		
	,				pH 6.6		
Fayette County	Lexington		Maury Silt	5/10	P 370	3 tons lime	10/25
Full-Season	Exp. Station		Loam		K 247		
	•				pH 6.4		
Marshall County	Dale	Lincoln Martin	Waverly Silt	5/21	P 52	None	10/19
Full-Season	Smothers		Loam		K 168		
					pH 5.7		
Henderson County	Lynsey	Mike Smith	Loring-Grenada	5/12	P 113	None	10/22
Full-Season	Embrey		Silt Loam		K 290		
	,				pH 5.8		

¹ Amount per acre.

Summary Table 4 is the recommended table for variety performance.

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 soybean varieties will vary from year to year and location to location, depending on adaptability, weather conditions, and management. The data presented in the Table 4 summary have been averaged across years and locations, and it is recommended as the table to use for evaluating variety performance. **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.

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 publication PPA-42: *Soybean Cyst Nematode*, available at both your county Extension office, and on the Grain Crops website.) The level of SCN infestation as well as the SCN race can be determined through the SCN laboratory at Princeton. **Test your fields.**

² Based on 30-year average.

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 and for full-season 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-six 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 4.

Growing Conditions and Special Circumstances

Kentucky experienced a favorable soybean production season in 2004. "Kentucky soybean production was forecast at a record high 54.2 million bushels; yield was estimated at 42 bu/a" (http://www.nass.usda.gov/ky/Pressrel/novcrop.pdf). Kentucky had the third wettest May and the 11th coolest June through August in 110 years. Rainfall was above average for every month during the growing season, April through October. Soybean planting and the subsequent development of the crop proceeded normally, but harvest was delayed by a wet October (http://wwwagwx.ca.uky.edu/sdfwcrsdf.shtml).

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:

- AGR-128: Status, Uses, and Planning (Part I);
- AGR-129: Seed Selection, Variety Selection, and Fertilization (Part II);
- AGR-130: Planting Practices and Double Cropping (Part III);
- AGR-131: Weed, Disease, and Insect Control (Part IV);
- AGR-132: Harvesting, Drying, Storage, and Marketing (Part V).

These publications are available online at the Grain Crops Web site (URL on bottom of first page). 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

We would like to take this opportunity to recognize and thank an employee of the UK Soybean Program, David Pilcher, who will be retiring later this year, after more than 25 years of service. His tireless, dedicated, and award-winning service will be missed.

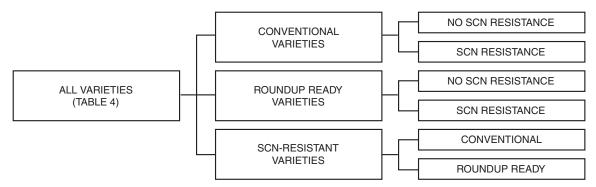
The New Crop Opportunity Grain Group is supporting the testing of novel soybean varieties.

TABLE 2. SOYBEAN PLANTING GUIDE.

	Row Spacing (Inches) 7 15 20 30 36												
	7	15	20	30	36								
Viable		Seeding Ra	te (Seeds Pe	r Ft of Row)								
Seeds	2-3	5-6	6-8	8-10	9-11								
Per Pound		Pound	s of Seed pe	er 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 2004 Kentucky Soybean Performance Tests web site provides 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 2004 Soybean Performance Tests was acquired from the following sources:

Beck's Superior Hybrids

6767 East 276th Street Atlanta, IN 46031 BECK 434NRR

Bio Gene Seeds

5491 Tri-county Highway Sardinia, OH 45171 BIO GENE BG 4200NRRST BIO GENE BG 4205NRR

Caverndale Farms, Inc.

1921 Bluegrass Road Danville, KY 40422 CAVERNDALE CF 461 CAVERNDALE CF 492

Croplan Genetics

P.O. Box 568

Morganfield, KY 42437

CROPLAN GENETICS RC3964RR

CROPLAN GENETICS RC4013RR

CROPLAN GENETICS RC4464RR

CROPLAN GENETICS RC4842RR

CROPLAN GENETICS RC5003RR

CROPLAN GENETICS RC5222RR

Crow's Hybrid Corn Company

14575 University Avenue Waukee, IA 50263 CROW'S C4418R CROW'S C4815R

Delta Grow Seed

P.O. Box 219 220NW2nd England, AR 72046 DELTAGROW 4340 RR DELTAGROW 4630 RR DELTAGROW 4840 RR DELTAGROW 4860 RR DELTAGROW 4960 RR DELTAGROW 5260 RR DELTAGROW 5460 RR

Delta King Seed Company

P.O. Box 970
McCrory, AR 72101
DELTA KING DK 3964 RR
DELTA KING DK 3968 RR
DELTA KING DK 4461 RR
DELTA KING DK 4468 RR
DELTA KING DK 4868 RR
DELTA KING DK 4967 RR
DELTA KING DK 5161 RR
DELTA KING DK 5366 RR
DELTA KING DK 5465 RR
DELTA KING DK 5465 RR
DELTA KING DK 5465 RR

Delta and Pine Land Co. 103 Seaboard Avenue

Piedmont, AL 36272

DELTA AND PINE LAND DP 3861 RR
DELTA AND PINE LAND DP 4331 RR
DELTA AND PINE LAND DP 4546 RR
DELTA AND PINE LAND DP 5110 S
DELTA AND PINE LAND DP 4748 S
DELTA AND PINE LAND DPX3950RR
DELTA AND PINE LAND DPX4891RR

Ebberts Field Seed, Inc.

6840 North Street, Route 48 Covington, Ohio 45318 EBBERTS 1385RR EBBERTS 1365RR

Excel Brand

116 East State
Camp Point, IL 62320
EXCEL BRAND 8412NRR
EXCEL BRAND 8448NRR
EXCEL BRAND 8492NRR
EXCEL BRAND 8509NRR
EXCEL BRAND 8520NRR

Garst Seed Company

7728 State Road Hickory, KY 42051 GARST SEED 3824RR/N GARST SEED 4112RR/N GARST SEED 4512RR/N

Golden Harvest

RR 3 Box 257 Clinton, IL 61727 GOLDEN HARVEST H3921RR GOLDEN HARVEST H3945RR GOLDEN HARVEST H4273RR GOLDEN HARVEST H5053RR GOLDEN HARVEST H5470RR

Great Lakes Hybrids, Inc.

Ovid, MI 48866 GREAT LAKES GL 3710 RR GREAT LAKES GL 4009 RR GREAT LAKES GL 4409 RR GREAT LAKES GL 4409 RR

Helena Chemical

11711 North Pennsylvania Suite 270, Carmel, IN 46032 HELLENA BRAND SEED 4375 HELLENA BRAND SEED 4875

Hornbeck Seed Co., Inc.

PO Box 472, 210 Drier Road DeWitt, AR 72042-0472 HORNBECK HBK R4023 HORNBECK HBK R4623 HORNBECK HBK R4820 HORNBECK HBK R4924 HORNBECK HBK R4945CX

Kentucky Foundation Seed Project

P.O. Box 11950 Lexington, KY 40497 ANAND CAVINESS DELSOY 5500 HUTCHESON IA 3023 TEEJAY

LG Seeds

1122 East 169th Street Westfield, IN 46074 LG SEEDS C3999NRR LG SEEDS C4343NRR LG SEEDS C4910NRR

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

4312 Carol Avenue

Cortland, IL 60112

ASGROW AG3905

ASGROW AG4102

ASGROW AG4201

ASGROW AG4403

ASGROW AG4603

ASGROW AG4801

ASGROW AG5301

ASGROW AG5605

DEKALB DKB36-52

DEKALB DKB38-52

DEKALB DKB46-51

Pioneer Hi-Bred Int'l., Inc.

6767 Old Madison Pike, Suite 110

Huntsville, AL 35806

PIONEER VARIETY 93B67

PIONEER VARIETY 93M50

PIONEER VARIETY 93M90

PIONEER VARIETY 94B13

PIONEER VARIETY 94B73

PIONEER VARIETY 94B74

PIONEER VARIETY 94M70

PIONEER VARIETY 94M90

PIONEER VARIETY 95B32

PIONEER VARIETY 95B42

Prairie Stream Farms

2175 East Kelly Road

Frankford, IN 46041

PRAIRIE STREAM FARMS PSF 3405RR

PRAIRIE STREAM FARMS PSF 355N

PRAIRIE STREAM FARMS PSF 371N

PRAIRIE STREAM FARMS PSF 3903NRR

PRAIRIE STREAM FARMS PSF 4004NRR PRAIRIE STREAM FARMS PSF 4102NRR

Royster-Clark, Inc.

717 Robinson Road

Washington Courthouse, OH 43160

VIGORO V38N5RS

VIGORO V39N4RR

VIGORO V42N3RR

VIGORO V47N3RR

VIGORO V48N5RR

VIGORO V50N5RR

VIGORO V55N5RR

Seed Consultants, Inc.

PO Box 370, 648 Miami Trace Road SW Washington Courthouse, OH 43160 SEED CONSULTANTS SC 9415 RR SEED CONSULTANTS SC 9442 RR

Southern States Cooperative

PO Box 26234

Richmond, VA 23260

SOUTHERN STATES RT 3802N

SOUTHERN STATES RT 3850N

SOUTHERN STATES RT 3975

SOUTHERN STATES RT 4098

SOUTHERN STATES RT 4230N

SOUTHERN STATES RT 4440N

SOUTHERN STATES RT 4502N SOUTHERN STATES RT 4810N

SOUTHERN STATES RT 4980

SOUTHERN STATES RT 5001N

SOUTHERN STATES RT 5130N

SOUTHERN STATES RT 5302N

SOUTHERN STATES RT 5450N

SOUTHERN STATES RT 5540N

SOUTHERN STATES RT 5602N

Steyer Seeds

6154 North County Road 33

Tiffin, OH 44883

STEYER 4700 RR SCN

STEYER 4900 RR SCN

STEYER 5300 RR SCN

Stine Seed Company

2225 Laredo Trail

Adel, IA 50003-8240

STINE S4542-4

STINE S4842-4

STINE S5142-4

Syngenta Seeds

535 Pennyrile Drive

Madisonville, KY 42431

NK BRAND S35-F9

NK BRAND S37-N4

NK BRAND S39-Q4

NK BRAND S43-B1 NK BRAND S49-Q9

NK BRAND S50-N3

Trisler Seed Farms, Inc.

3274 East 800 North Road

Fairmount, IL 61841

TRISOY 4697RR(CN)

TRISOY 4838RR(CN)

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 7482nRR

UNISOUTH GENETICS USG 7484nRR

UNISOUTH GENETICS USG 7494nRR UNISOUTH GENETICS USG 7499nRR

UNISOUTH GENETICS USG 7514nRR

UNISOUTH GENETICS USG 7523nRR

United Agri Products

544 Pridgen Pond Road

Kingston, AL 36453

DYNAGRO 33A37 DYNAGRO 33B52

DYNAGRO 3443

Novel Soybean Varieties

Gateway Seed Company

John Meece

5517 Van Buren Road

Nashville, IL 62263

GATEWAY GX97-1418 (high protein)

GATEWAY GX98-0609 (high oil)

GATEWAY GX98-1006 (high protein)

GATEWAY GX98-1809 (high protein)

GATEWAY GX98-2033 (high protein)

GATEWAY GX99-0111 (high oil)

GATEWAY GX99-0112 (clear hilum)

GATEWAY LS94-3207 (high protein)

Iowa State University Research Foundation

Julie Gustafson

Ames, IA 50011-2131

515-294-9442

IA3008LF (lipoxygenase free)

IA3012LF (lipoxygenase free)

IA3021 (large seed, high-protein)

IA3022 (large seed, high-protein)

Bill Schapaugh

Manhattan, KS 66506-5501

785-532-7242

KS4103sp (high protein variety)

KS5003sp (small seeded variety)

7204 NW 70th Avenue

Johnston, IA 50131

PIONEER VARIETY P9305 (tofu type)

Southern States Cooperative

Richmond, VA 23260

MOONCAKE (edible)

University of Missouri-Delta Center

Grover Shannon

P.O. Box 160, 147 State Highway T

573-379-5431

S02-7955 (natto) S02-7998 (natto)

S02-8136 (natto)

S02-8984 (natto) S02-9134 (natto)

310 Lab of Mechanics

IA4002 (small seed)

Kansas State University

Agronomy Department

2004 Throckmorton Plant Sciences Center

KS1614sp (large seeded variety)

KS4303sp (small seeded variety)

KS5202sp (high protein variety)

Pioneer Hi-Bred International Supply Logistics Research/Samples Group

Howard Tabor

PO Box 26234

TARA (forage)

Portageville, MO 63873

	Relative	Soybean Cyst	Phytopht	nora sojae ^B	Sudden	Soybean	· <u></u>	
	Maturity	Nematode	Resistance	Field	Death	Mosaic	Stem	
Variety / Brand	Group	Resistance	Gene Rps	Tolerance ^c	Syndrome ^c	Virus ^c	Canker	Other Reported Resistance
P ANAND	5.7	3, 5, 14					MR	
~ ASGROW AG3905	3.9	3	1c	MT			S	
~ ASGROW AG4102	4.1	3, MR-14	1c	MS	MS		R	
~ ASGROW AG4201	4.2	3, 14		MT	MR		R	
~ ASGROW AG4403	4.4	3	1a	MT	MR		R	
~ ASGROW AG4603	4.6				MR		MR	
~ ASGROW AG4801	4.8	3		MS	MR		MS	
~ ASGROW AG5301	5.3	3, 14	3a	T	MR		R	
 ASGROW AG5605 	5.6	3		MT	MR			
~ BECK 434NRR	4.3	3, 14		MT	MR	S	S	
BIO GENE BG 4200NRRST	4.2	3, 14		MS	MR			T-FROGEYE LEAF SPOT
BIO GENE BG 4205NRR	4.2							
CAVERNDALE CF 461	4.6		7					
CAVERNDALE CF 492	4.9					R	R	
 CROPLAN GENETICS RC3964RR 	3.9	3, 14	1k, 6	T	MR	S	R	
CROPLAN GENETICS RC4013RR	4.0	3, 14	1k	MT	R	S	S	
CROPLAN GENETICS RC4464RR	4.4	3	1a	T	R	S	R	
CROPLAN GENETICS RC4842RR	4.8	3, 14		MT	R	S	S	
CROPLAN GENETICS RC5003RR	5.0	3, 14	3a	Т	R	S	R	
CROPLAN GENETICS RC5222RR	5.2	3, 14	1c	MT	R	S	R	
CROW'S C4418R	4.4	3, 14	1k	MT	MR			MR-FROGEYE LEAF SPOT
CROW'S C4815R	4.8	3, 14	1c	T	MR	MR	MR	MR-FROGEYE LEAF SPOT
DEKALB DK 46-51	4.6	3, 14		•	MR		MR	
DEKALB DKB36-52	3.6	3	1c	MS	MR			
DEKALB DKB38-52	3.8	1, 3	1c	MT	MR			
P DELSOY 5500	5.5	3, 14	10	IVII	IVIIX			
DELTA AND PINE LAND DP 3861 RR	3.8	3	1c	MT	MR		R	
		3		T	MR	S	S	
DELTA AND PINE LAND DP 4546 PR	4.3	3	1a			3	S R	
DELTA AND PINE LAND DP 5110 C	4.5			MT	MR	MAD		CTC
DELTA AND PINE LAND DP 5110 S	5.1		41	MT	R	MR	R	STS
DELTA AND PINE LAND DP4748 S	4.7	2.44	1k	MT	MR	MR	R	STS
DELTA AND PINE LAND DPX3950RR	3.9	3, 14		MT	MR		R	
DELTA AND PINE LAND DPX4891RR	4.8	3, 14			MR		R	
DELTA KING DK3964 RR	3.9	3		MS	MR		_	
DELTA KING DK3968 RR	3.9	3	1c		MS		R	
DELTA KING DK4461 RR	4.6	5	1a		MR		S	
DELTA KING DK4763 RR	4.7			Т	MS		S	
DELTA KING DK4868 RR	4.8	5	1a		MR			
DELTA KING DK4967 RR	4.9	3		Т	MR		MR	
DELTA KING DK5161 RR	5.1	3, 14		T	MR		MR	
DELTA KING DK5366 RR	5.3		1c		MR		MS	
DELTA KING DK5465 RR	5.4	3	1k	T	MR		R	
DELTA KING DK55T6 RR	5.5	MR-3, MR-14		Т	MR		R	
DELTAGROW 4340 RR	4.3	3, 14	1a	MT	MR	MR	MR	
DELTAGROW 4630 RR	4.6	3, 14		MS	MS	MR	MR	
DELTAGROW 4840 RR	4.8	3		MT	MR	MR	MR	
DELTAGROW 4860 RR	4.8	3, 14		MS	MR	MR	MR	
DELTAGROW 4960 RR	4.9	3, 14		MT	MR	MR	MR	
DELTAGROW 5260 RR	5.2	3, 14	1c	MT	MR	MR	MR	
DELTAGROW 5460 RR	5.4	3, 14		MT	MS	MR	MR	
DYNAGRO 33A37	3.7	•						
DYNAGRO 33B52	5.2		7		MR		MR	
DYNAGRO 3443	4.4	3, 14	, 1a	MT	MR			
EBBERTS 1365NRR	3.6	3, 14	1c	T	MR			
EBBERTS 1385NRR	3.8	-,	1k	T	MR			
Excel Brand 8412NRR	4.1	3	110	•				
Excel Brand 8448NRR	4.4	3						
Excel Brand 8492NRR	4.4	3						
Excel Brand 8509NRR	5.0	3						
Excel Brand 8520NRR	5.3	3	4		140			
GARST SEED 3824RR/N	3.8	3	1c		MR			
GARST SEED 4112RR/N	4.1	3	1a		MR			
GARST SEED 4512RR/N	4.5		1a		MR			
GATEWAY 98-0609 (high oil)	4.1							
GATEWAY GX97-1418 (high protein)	4.7							
S GATEWAY GX98-1006 (high protein)	4.3							

Table 3. Company Disease Resistance Specifications for Entries in the 2004 Kentucky Soybean Performance Tests^A

	Relativ	e Soybean Cyst	Phytopht	hora sojae ^B	Sudden	Soybean		
	Maturit	*	Resistance	Field	Death	Mosaic	Stem	
Variety / Brand	Group	Resistance	Gene Rps	Tolerance ^c	Syndrome ^c	Virus ^c	Canker	Other Reported Resistance
NS GATEWAY GX98-1809 (h	igh protein) 5.0							
NS GATEWAY GX98-2033 (h								
NS GATEWAY GX99-0111 (h	J ,							
NS GATEWAY GX99-0112 (c	3 ,							
NS GATEWAY LS94-3207 (hi								
~ GOLDEN HARVEST H392		3	1k	MT	MR			
~ GOLDEN HARVEST H394		3	1c	MT	MR			
~ GOLDEN HARVEST H42		3, 14	ic	MT	MR			
~ GOLDEN HARVEST H505		3		MT	MR			
~ GOLDEN HARVEST H543		3		1411	R		MR	MR-FROGEYE LEAF SPOT
~ GREAT LAKES GL 3710 R		J	1k	Т	MR	MR	MR	MIN-I ROGETE LEAF SFOT
~ GREAT LAKES GL 4009 R		3, 14	I K	S	MR	S	S	
~ GREAT LAKES GL 4409 R		3, 14	1a	MS	MR	MR	MR	
~ GREAT LAKES GL 4809 R		3, 14	Ia	MS	MR	S	MR	
~ HELENA BRAND SEED 4.		3, 14	1a	MT	MR	3	IVII	R-FROGEYE LEAF SPOT
~ HELENA BRAND SEED 4		3	Id	1711	R			K-FROGETE LEAF 3FOT
				т		D	D	
HORNBECK HBK R4023HORNBECK HBK R4623	4.1 4.5	3,9		Т	MR	R R	R R	
		3, 14		т	MD	S S	S S	
HORNBECK HBK R4820HORNBECK HBK R4924	4.8 5.1	3, 14		T T	MR MR	S	S R	
						3		
~ HORNBECK HBK R49450		1, 3, 4, 5, 9, 14		MT	R	D	R	D DEANI IT CTUNIT VIDUC
P HUTCHESON	5.8					R	R	R-PEANUT STUNT VIRUS
NS IA 3008 (small seed)	late 3							
NS IA3008LF (lipoxygenase	,							
IS IA3012LF (lipoxygenase								
IS IA3021(large seed, high								
IS IA3022 (large seed, high								
IS IA4002 (small seed)	4.1	_						
NS KS1614sp (large seeded								
NS KS4103sp (high protein								
NS KS4303sp (small seeded	, ,							
NS KS4702sp (large seeded	•							
NS KS5003sp (small seeded								
NS KS5202sp (high protein								
~ LG SEEDS C3999NRR	3.9	3, 14	1k	MT	MR			
~ LG SEEDS C4343NRR	4.3	3, 14	1k	MT	MS			
~ LG SEEDS C4910NRR	4.9	3		MS	MS		MR	
NS MOONCAKE (edible)	5.0						MR	
~ NK BRAND S35-F9	3.5		1c	MT	MR			
~ NK BRAND S37-N4	3.7	3, 14	1c	MT	MR		S	
~ NK BRAND S39-Q4	3.9		1c	MT	MS	S	R	
~ NK BRAND S43-B1	4.3	3, 14	1c	MT	MR		R	
~ NK BRAND S49-Q9	4.9	1, 3, 9, 14	1c	MT			MR	
~ NK BRAND S50-N3	5.0	1, 3, 9, 14	1c	MT	MR		MR	
~ PIONEER VARIETY 93B6	3.6	3	1c	MT	MR			
~ PIONEER VARIETY 93M5	0 3.5	3	1k	MT	MR			
~ PIONEER VARIETY 93M9	0 3.9	3	1c	MT	MR			
~ PIONEER VARIETY 94B13	3 4.1	3		MT	MR			
~ PIONEER VARIETY 94B73	3 4.7		1k		MR		MR	
~ PIONEER VARIETY 94B74	4.7	3, 14	1k	MT	MR		S	
~ PIONEER VARIETY 94M7	0 4.7	3	1k	MT		MR		
~ PIONEER VARIETY 94M9		3		MT	MR		S	
~ PIONEER VARIETY 95B32		3, 14		MT	MR		MR	
~ PIONEER VARIETY 95B42		3		MT	MR		MR	
IS PIONEER VARIETY P9305								
~ PRAIRIE STREAM FARMS			1k		R			R-BROWN STEM ROT
PRAIRIE STREAM FARMS		3, 4						
PRAIRIE STREAM FARMS		3, 14	1k		MR			R-BROWN STEM ROT
~ PRAIRIE STREAM FARMS		2,	•••	Т	MR			
~ PRAIRIE STREAM FARMS		3, 4		T				
~ PRAIRIE STREAM FARMS		3, 14			MR			
NS S02-7955 (natto)	4.9	5, 17		Т	.7111			
NS S02-7933 (natto)	4.9			T				
				T				
NS S02-8136 (natto)	5.2	1 2 5 0 14						
NS S02-8984 (natto) NS S02-9134 (natto)	5.7	1, 3, 5, 9, 14		T				
	5.3			T				

		Relative	Soybean Cyst	Phytophth	nora sojae ^B	Sudden	Soybean		
		Maturity	Nematode	Resistance	Field	Death	Mosaic	Stem	
	Variety / Brand	Group	Resistance	Gene Rps		Syndrome ^c	Virus ^c		Other Reported Resistance
	variety / Brana	Стоир	nesistance	Gene nps	Toterunce	Syllaronic	VII US	Cullikei	Other Reported Resistance
~	SEED CONSULTANTS SC 9415 RR	4.1	3, 14		MT	MR			
~	SEED CONSULTANTS SC 9442 RR	4.4	3, 14	1a	MT	MR			
	SOUTHERN CROSS AARON 4.5N, STS	4.5	3, 14	14	S	MR			STS
	· ·	5.2		1.0	MT	MR		MR	313
~	SOUTHERN CROSS ABNER 5.2 N, RR		3, 14	1c				IVIK	
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR	3.9	3, 14		MT	MR			
~	SOUTHERN CROSS JONAH 4.8 N, RR	4.8	3, 14			MR			AAD DDOUAN STELA DOT
~	SOUTHERN CROSS MICHAEL 4.2N, RR	4.2	3, 14	4.1		MR			MR-BROWN STEM ROT
~	SOUTHERN CROSS STEPHEN 3.9 N, RR	3.9	3	1k	_	MR			
~	SOUTHERN CROSS TITUS 4.8 N, RR	4.8	3, 14		S	MR			
~	SOUTHERN STATES RT 3802N	3.9	3, 14		T	MR			
~	SOUTHERN STATES RT 3850N	3.8	MR-3, MR-14	1k, 6	MT				R-CHARCOAL ROT
~	SOUTHERN STATES RT 3940N	3.9	3, 14		T	MR			
~	SOUTHERN STATES RT 3975	3.9			T	MS			
~	SOUTHERN STATES RT 4098	4.0			T	MR			
~	SOUTHERN STATES RT 4230N	4.2	3, 14		T	MR		R	
~	SOUTHERN STATES RT 4440N	4.4	3, 14		T	MR			
~	SOUTHERN STATES RT 4502N	4.5	3, 14		T	MR		R	
~	SOUTHERN STATES RT 4810N	4.8	3, 14		Т	MR			
~	SOUTHERN STATES RT 4980	4.9			Т	MR			
~	SOUTHERN STATES RT 5001N	5.1	3, 14		Т	MR		R	
~	SOUTHERN STATES RT 5130N	5.1	3, 14		Т	R			
~	SOUTHERN STATES RT 5302N	5.3	3, 14		Т	R		R	
~	SOUTHERN STATES RT 5450N	5.4	3, MR-14	1c	MT				R-FROGEYE LEAF SPOT
~	SOUTHERN STATES RT 5540N	5.5	3, 14		T	MR			
~	SOUTHERN STATES RT 5602N	5.6	3, 14		T T	MR		R	
~	STEYER 4700 RR SCN	4.7	3, 14		T.	MR	MR	MR	
~	STEYER 4900 RR SCN	4.9	3, 14		MT	MR	MR		
	STEYER 5300 RR SCN	5.3	3, 14		MT	MR	MR	MR	
~	STINE S4542-4	4.5	3, 14		T	IVIII	IVIII	IVIII	
~	STINE S4842-4	4.8	3, 14		T				STS
~	STINE S5142-4	5.0	3, 14	1k	T				313
S	TARA (forage)	5.5	3, 14	TK.				MR	
	TEEJAY	5.3					R	R	
г			2 14		A AT	MD	MR		
~	Trisoy 4697RR(CN)	4.6	3, 14 3		MT MT	MR		MR	
~	Trisoy 4838RR(CN)	4.8	3		IVII	MR	MR	MR	D DOOT KNIGT D FDOCEVE
~	UNISOUTH GENETICS USG 5002T	5.0	MD 2 MD 44			MR		R	R-ROOT KNOT, R-FROGEYE
~	UNISOUTH GENETICS USG 510nRR	5.1	MR-3, MR-14			R		R	R-ROOT KNOT, MR-FROGEYE
~	UNISOUTH GENETICS USG 5601T	5.6	2.45.44			MR	R		R-FROGEYE LEAF SPOT
~	UNISOUTH GENETICS USG 7482nRR	4.8	3, MR-14			MR			MR-FROGEYE LEAF SPOT
~	UNISOUTH GENETICS USG 7484nRR	4.8	3, 14			MR			MR-FROGEYE LEAF SPOT
	UNISOUTH GENETICS USG 7494nRR	4.9	3, 14			MR			
	UNISOUTH GENETICS USG 7499nRR	4.9	3, MR-14					R	R-CERCOSPORA
~	UNISOUTH GENETICS USG 7514nRR	5.1	3, MR-14	1c		MR			MR-FROGEYE & CERCOSPOR
~	UNISOUTH GENETICS USG 7523nRR	5.2	MR-3, MR-14	1c		MR		R	R-ROOT KNOT, R-FROGEYE
~	VIGORO V38N5RS	3.8	3, 14	1c	MT	MR		MR	
~	VIGORO V39N4RR	3.9	3, 14	1k	MT	MR			
~	VIGORO V42N3RS	4.2	3, 14		MT	MR			MR-FROGEYE LEAF SPOT
~	VIGORO V47N3RR	4.7	3, 14		MT	MR	MR		
~	VIGORO V48N5RR	4.8	3		MT	MR			MR-FROGEYE LEAF SPOT
~	VIGORO V50N5RR	5.0	3, 14		MT	MR			MR-ROOT KNOT, MR-FROGE
		5.5	3, 14			R	MR	MR	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.

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

TABLE 4	2004 CHRARA	DV. VADIETY T	FST TARI FS 5-9

	YIELD (BU/AC) ^A			LODGING			PROTEIN ^B	OILB
BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04	%	%
EARLY (GROUP III)								
EBBERTS 1365RR**	74.2			2.3			39.7	17.2
GREAT LAKES GL 3710 RR	73.7			2.0			36.4	19.6
GOLDEN HARVEST H3921RR*	73.2	68.6		2.0	1.9		37.0	19.8
· EBBERTS 1385RR · NK BRAND S39-O4	73.0 72.3	66.1	58.9	2.5 1.6	1.5	1.5	37.9 37.5	19.7 18.4
PIONEER VARIETY 93M90*	72.3 72.1	67.7	56.9	1.0	1.5	1.5	37.3 37.3	18.4
SOUTHERN CROSS ABRAHAM 3.9 N, RR**	71.7	67.1		1.1	1.7		37.3 37.8	19.7
VIGORO V38N5RS**	71.6	3771		1.4			35.5	18.8
NK BRAND S35-F9	70.9			1.8			36.3	19.5
DELTA KING DK 3968 RR*	70.4	66.2	59.5	1.8	1.7	1.7	35.9	19.0
PRAIRIE STREAM FARMS PSF 371N**	70.3			2.5			37.5	18.5
GARST SEED 3824RR/N*	70.2	65.9		1.5	1.4		36.1	19.2
ASGROW AG3905*	70.1	64.9		1.9	1.7		37.0	18.9
 SOUTHERN CROSS STEPHEN 3.9 N, RR* DELTA AND PINE LAND DPX3950RR** 	70.1 69.3	66.1		1.9 1.9	1.9		36.6 38.0	20.0 18.9
VIGORO V39N4RR**	69.2			1.7			38.0	19.6
NK BRAND S37-N4**	68.8	64.8	57.8	2.5	2.1	2.2	38.9	18.5
PIONEER VARIETY 93B67*	68.8	62.9	56.5	1.8	1.7	1.6	38.2	17.6
PRAIRIE STREAM FARMS PSF 3405RR	68.7			1.9			38.3	19.7
GOLDEN HARVEST H3945RR**	68.6	65.0	60.3	1.6	1.6	1.6	36.0	18.9
DELTA AND PINE LAND DP 3861 RR*	68.2			2.1			37.5	17.9
PRAIRIE STREAM FARMS PSF 355N*	67.8			2.4			37.2	18.9
 DEKALB DKB36-52* PRAIRIE STREAM FARMS PSF 3903NRR 	67.6			1.7			40.6	16.8
PRAIRIE STREAM FARMS PSF 3903NRR DEKALB DKB38-52*	67.5 67.3	63.5	56.8	2.1 1.4	1.5	1.6	37.1 35.8	18.5 19.2
DELTA KING DK 3964 RR*	66.7	05.5	53.0	2.9	1.5	2.6	38.8	18.6
LG SEEDS C3999NRR**	66.7		33.0	2.0		2.0	36.9	19.8
PIONEER VARIETY 93M50*	66.6			1.8			37.7	18.6
DYNAGRO 33A37	65.6			1.8			38.8	18.2
SOUTHERN STATES RT 3802N**	65.4	59.3	52.3	2.4	2.2	2.0	38.8	18.8
SOUTHERN STATES RT 3850N**	64.7			1.7			36.2	19.5
CROPLAN GENETICS RC3964RR**	64.6	F0 0	F2.0	1.7	2.2	2.2	36.5	19.3
SOUTHERN STATES RT 3975 IA 3023	64.6 63.1	58.8	52.8	2.7 1.5	2.3	2.2	40.0 35.5	18.6 19.2
5 PIONEER VARIETY P9305 (tofu type)	57.0	52.6	44.8	1.5	1.6	1.6	36.5	19.2
SOUTHERN STATES RT 3940N**	56.9	32.0	11.0	1.7	1.0	1.0	37.7	19.3
IA3022 (large seed, high-protein)	55.8			2.4			40.5	17.2
IA3021 (large seed, high-protein)	54.6			1.3			40.7	17.9
IA3012LF (lipoxygenase free)	54.2	51.7		2.0	2.3		33.5	20.1
6 IA3008LF (lipoxygenase free)	50.7			3.3			35.5	17.7
GROUP III AVERAGE	66.8	62.9	55.3	1.9	1.8	1.9	37.4	18.8
LSD (0.10)	2.8	2.2	1.8	0.3	0.2	0.1		
MID-SEASON (GROUP IV)								
HELLENA BRAND SEED 4375*	79.2			2.1			36.3	19.8
VIGORO V42N3RR**	77.7	72.0	63.9	1.7	1.5	1.5	36.1	19.8
DELTA KING DK 4461 RR	77.0	71.5	61.1	2.4	2.2	2.0	36.1	19.9
HORNBECK HBK R4820	76.4	69.9	60.6	2.4	2.1	2.0	36.3	19.5
· DELTAGROW 4340 RR** · DELTA KING DK 4868 RR	75.7 75.1	71.0	61.9	2.2 2.3	2.1	2.0	36.6 36.7	20.0 19.5
UNISOUTH GENETICS USG 7494nRR**	75.1 75.1	71.0	01.9	3.2	2.1	2.0	36.8	19.0
SEED CONSULTANTS SC 9442 RR**	74.6	69.6	61.3	2.4	2.1	2.0	38.1	18.3
PIONEER VARIETY 94M70*	74.5	69.8	05	3.1	2.7	2.0	36.9	19.4
DELTA AND PINE LAND DP 4331 RR*	74.3			2.3			36.3	20.0
CROPLAN GENETICS RC4464RR*	74.1			1.9			36.8	19.9
STEYER 4900 RR SCN**	73.9			2.8		_	37.4	19.3
STEYER 4700 RR SCN**	73.7	67.1	57.6	2.1	2.2	2.1	36.1	20.1
LG SEEDS C4910NRR*	73.6	60.5	62.2	3.2	1 5	1 6	36.8	19.0
· SOUTHERN CROSS MICHAEL 4.2N, RR** · GARST SEED 4512RR/N	73.3 73.0	69.5	62.3	1.6 2.2	1.5	1.6	36.4 36.4	19.7 19.9
BIO GENE BG 4200NRRST**	73.0 72.8	69.7		2.2 1.4	1.4		36.4 36.2	19.5
UNISOUTH GENETICS USG 7484nRR**	72.6 72.7	09.7		3.5	1.4		36.2 36.4	18.9
PIONEER VARIETY 94B73	72.6	67.9	59.3	2.9	2.6	2.4	38.2	19.8
DELTA KING DK 4967 RR*	72.5	70.5		2.5	2.6	• •	37.1	19.2
ASGROW AG4403*	71.9	66.1	58.0	2.2	2.1	2.0	36.3	19.6
HELLENA BRAND SEED 4875*	71.9			3.6			36.9	18.7
PIONEER VARIETY 94B74**	71.9	67.6	60.5	3.2	3.0	2.7	37.0	18.9
DELTA KING DK 4763 RR	71.8	69.6	62.3	2.8	2.5	2.3	38.8	17.9

C O \mathbf{M} M E N D E D T A B L E

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TABLE 4. 2004 SUMMARY: VARIETY TEST TABLES 5-9.

	ALL 4. 2004 JOHNMANT. VANIETT TEST TAL		IELD (BU/A	C) ^A		LODGING		PROTEIN ^B	OILB
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04	%	%
	CEED CONCLUTANTS SC 0445 PD**	71.0			1 4			27 5	10.6
~	SEED CONSULTANTS SC 9415 RR** DELTA AND PINE LAND DP 4748 S	71.8 71.6			1.4 3.4			37.5 37.7	19.6 19.0
~	DYNAGRO 3443**	71.6	68.0	58.9	2.3	2.1	2.0	35.5	20.0
~	TRISOY 4838RR(CN)*	71.6	33.3	50.5	2.6		2.0	36.9	18.9
~	UNISOUTH GENETICS USG 7482nRR**	71.6	66.2		2.6	2.5		38.0	19.4
~	DELTA AND PINE LAND DPX4891RR**	71.5			3.4			37.0	19.1
~	DELTAGROW 4860 RR**	71.4			2.6			37.3	19.1
~	DEKALB DKB46-51**	71.3 71.2	67.2		2.7 2.9	2.4		37.8 36.5	17.7 19.5
~	VIGORO V48N5RR* GREAT LAKES GL 4409 RR**	70.9	66.8	58.6	2.9	2.0	1.9	35.5	20.0
~	ASGROW AG4603	70.7	00.0	30.0	2.2	2.0	1.5	35.7	19.0
~	SOUTHERN CROSS TITUS 4.8N, RR**	70.7	65.7	57.7	3.0	2.7	2.5	36.8	18.8
~	DELTAGROW 4840 RR**	70.6			3.3			36.4	19.1
~	EXCEL BRAND 8448NRR*	70.6	67.4		1.6	1.6		35.6	20.3
~	SOUTHERN CROSS JONAH 4.8 N, RR**	70.5	66.4	50.7	2.6	2.5	2.2	37.8	18.7
~	CROW'S C4815R**	70.3	67.3	58.7	2.6	2.5 2.3	2.3 2.2	38.6 38.1	19.0
~	SOUTHERN CROSS AARON 4.5N, STS** ASGROW AG4201**	70.2 70.1	64.1 67.2	55.8 59.7	2.8 2.5	2.3	2.2	38.1 37.6	18.6 18.8
~	CROPLAN GENETICS RC4842RR**	70.1	07.2	33.7	2.6	2.5	2.2	37.4	19.3
	GATEWAY GX98-0609 (high oil)	70.1	65.5		3.6	3.1		36.4	19.1
	CAVERNDALE CF 461	69.9	63.1	54.4	3.3	2.8	2.6	36.7	19.0
~	GOLDEN HARVEST H4273RR**	69.9			2.4			36.3	19.4
~	STINE S4842-4**	69.9			3.1			37.1	18.7
~	HORNBECK HBK R4623**	69.6			3.3			37.5	19.3
~	DELTAGROW 4630 RR*	69.5			2.9			38.9	18.9
~	PRAIRIE STREAM FARMS PSF 4004NRR* SOUTHERN STATES RT 4980	69.4 69.3	64.9	56.3	1.5 3.0	2.8	2.6	36.6 36.4	19.9 19.9
~	VIGORO V47N3RR**	69.3	66.3	60.1	2.1	2.0	2.0	38.3	18.0
~	ASGROW AG4801*	69.1	00.5	00.1	1.8	2	2.0	37.0	19.6
~	NK BRAND S43-B1**	69.1	66.4		2.2	2.1		36.9	18.7
~	TRISOY 4697RR(CN)**	68.8			2.5			36.4	19.5
~	PIONEER VARIETY 94B13*	68.7	66.0	57.4	2.4	2.2	2.0	36.8	18.9
~	STINE S4542-4**	68.7	66.4		3.1	2.9		35.3	20.5
~	GREAT LAKES GL 4009 RR** BIO GENE BG 4205NRR	68.5 68.4	65.3		1.4 2.6	1.3		38.2 37.4	19.3 18.6
~	NK BRAND S49-Q9**	68.3	65.8	59.2	2.7	2.5	2.3	37.4 35.5	18.6
~	SOUTHERN STATES RT 4230N**	68.3	67.1	37.2	2.5	2.3	2.5	37.0	19.4
~	GREAT LAKES GL 4809 RR**	67.7			3.5			37.1	18.8
	CAVERNDALE CF 492	67.6	64.2	55.7	1.7	1.7	1.5	36.7	18.8
~	EXCEL BRAND 8412NRR*	67.3			2.4			37.5	18.1
~	PIONEER VARIETY 94M90*	67.2			3.1			35.7	19.1
~	CROPLAN GENETICS RC4013RR**	67.1			2.8			37.6	19.7
~	BECK 434NRR** GARST SEED 4112RR/N*	66.9 66.9			2.1 1.5			36.8 37.7	19.7 19.7
~	CROW'S C4418R**	66.8			2.1			37.7 37.0	19.7
~	UNISOUTH GENETICS USG 7499nRR**	66.7			2.7			37.0	19.0
~	EXCEL BRAND 8492NRR*	66.4			3.3			35.7	19.7
~	LG SEEDS C4343NRR**	66.3			2.1			36.7	19.7
~	PRAIRIE STREAM FARMS PSF 4102NRR**	66.0			2.2			37.7	18.4
~	SOUTHERN STATES RT 4810N**	65.8	62.9	55.0	2.6	2.4	2.3	36.9	18.8
	GATEWAY GX98-1006 (high protein)	65.7			2.3			37.7	17.5
~	HORNBECK HBK R4945CX** SOUTHERN STATES RT 4502N**	65.0 65.0	61.2	53.4	3.0 2.6	2.4	2.2	36.0 37.0	19.6 19.6
~	SOUTHERN STATES RT 4302N	63.8	61.7	54.1	2.4	2.4	2.2	36.3	19.0
~	ASGROW AG4102**	63.6	01.7	3	2.2	2	2.1	37.4	19.1
~	DELTAGROW 4960 RR**	62.8			3.5			37.4	18.0
NS	GATEWAY GX99-0112 (clear hilum)	61.9			3.6			35.7	19.5
	GATEWAY GX99-0111 (high oil)	61.2			3.2			36.4	19.6
	S02-7955 (natto)	60.7			2.1			37.7	17.2
	GATEWAY GX97-1418 (high protein)	60.4			3.0			37.4	18.1
	GATEWAY LS94-3207 (high protein) S02-7998 (natto)	59.8 59.5			3.2 3.6			35.3 35.4	19.0 18.0
	DELTA AND PINE LAND DP 4546 RR	59.5 59.0			3.5			35.4 38.3	19.2
~	HORNBECK HBK R4023*	58.3			3.7			38.3	19.2
~	SOUTHERN STATES RT 4440N**	58.3			2.4			35.0	20.2
	KS4103sp (high protein variety)	55.3			3.7			43.9	16.2
	KS4303sp (small seeded variety)	53.0			2.2		_	36.9	18.1
NS	IA4002 (small seed)	49.1	48.2	41.7	3.3	3.2	3.1	39.2	15.9
	GROUP IV AVERAGE	68.7	66.5	59 A	2.6	2.3	2.2	37.0	19.1
	LSD (0.10)	68.7 4.9	2.8	58.0 2.2	2.6 0.4	0.2	0.2	37.0	17.1
	202 (0.10)		2.0		5.7	٥.2	0.2		

R E C O M M E E D B L E

TABLE 4. 2004 SUMMARY: VARIETY TEST TABLES 5-9.

		YIELD (BU/AC) ^A			LODGING			PROTEIN ^B	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04	%	%
	LATE (CROUPY)								
	LATE (GROUP V)								
~	GOLDEN HARVEST H5053RR*	72.8			2.7			38.1	18.7
	UNISOUTH GENETICS USG 5601T	70.6	66.5	58.4	2.9	3.0	2.8	37.1	18.4
~	HORNBECK HBK R4924**	70.5			2.8			35.8	19.5
	DELTA AND PINE LAND DP 5110 S	69.2			3.0			36.7	19.0
~	VIGORO V50N5RR**	68.4			2.9			37.2	19.2
~	STINE S5142-4**	67.5	66.4		2.9	3.0		37.3	18.4
~	NK BRAND S50-N3**	66.9			2.7			35.0	18.9
Р	TEEJAY	64.4			2.7			35.7	18.7
	UNISOUTH GENETICS USG 5002T	64.3	64.7		3.8	3.5		35.0	19.5
~	UNISOUTH GENETICS USG 510nRR**	63.2	63.1	55.7	2.9	2.7	2.5	36.6	17.8
~	EXCEL BRAND 8509NRR*	63.1			2.9			37.8	18.6
NS	KS5202sp (high protein variety)	62.5	59.3	51.9	2.8	2.9	2.5	37.8	17.8
~	PIONEER VARIETY 95B42*	62.2	59.8	52.3	3.0	3.1	2.8	35.9	18.9
~	STEYER 5300 RR SCN**	62.0			2.2			35.1	18.3
~	DELTAGROW 5460 RR**	61.9			3.1			36.3	18.4
~	SOUTHERN STATES RT 5540N**	61.9			3.0			37.5	18.4
~	UNISOUTH GENETICS USG 7514nRR**	61.2			3.6			36.6	18.0
~	ASGROW AG5605*	60.9	65.4		3.2	3.0		36.4	18.2
NS	GATEWAY GX98-1809 (high protein)	60.9			2.5			37.6	18.3
~	PIONEER VARIETY 95B32**	60.8	58.1	52.3	3.0	2.8	2.5	34.7	18.7
~	CROPLAN GENETICS RC5222RR**	60.6			3.8			36.7	18.2
~	VIGORO V55N5RR**	60.6			3.0			38.1	17.8
Ρ	DELSOY 5500**	60.5	58.5	52.7	3.1	3.0	2.7	37.4	18.3
NS	KS1614sp (large seeded variety)	60.5			3.0			38.8	17.9
~	SOUTHERN STATES RT 5450N**	60.3			2.9			38.1	17.0
~	CROPLAN GENETICS RC5003RR**	60.2			3.2			37.7	18.0
~	DELTA KING DK 5161 RR**	60.1	60.7		3.9	3.7		35.3	19.1
~	SOUTHERN CROSS ABNER 5.2 N, RR**	60.1	61.0		3.5	3.4		37.2	18.3
~	DELTA KING DK 5465 RR*	59.9	62.4	55.3	3.1	2.9	2.7	35.8	18.5
~	DELTAGROW 5260 RR**	59.9			3.4			37.2	18.3
~	DYNAGRO 33B52**	59.9	60.6		4.0	3.8		35.3	19.0
~	SOUTHERN STATES RT 5602N**	59.8	60.9	53.5	2.7	3.2	2.9	35.6	18.7
~	GOLDEN HARVEST H5470RR*	59.6			3.1			38.3	17.6
Р	ANAND**	59.3	61.1	53.8	2.2	2.4	2.2	35.7	19.0
~	ASGROW AG5301**	58.9	59.8	53.5	2.9	3.0	2.7	35.6	18.8
~	EXCEL BRAND 8520NRR*	57.9	32.0	55.5	2.6	3.0		37.0	18.0
NS	GATEWAY GX98-2033 (high protein)	57.5	57.6		3.1	3.5		36.9	19.4
	HUTCHESON	57.5	57.4	50.9	3.2	3.1	2.8	35.9	18.8
	TARA (forage)	56.6	37.1	30.5	2.8	5.1	2.0	37.2	18.0
~	SOUTHERN STATES RT 5130N**	56.4			3.2			38.2	17.3
~	UNISOUTH GENETICS USG 7523nRR**	56.3			3.1			36.8	17.4
~	SOUTHERN STATES RT 5302N**	56.1	57.8	51.4	2.6	2.6	2.4	36.5	17.7
~	SOUTHERN STATES RT 5001N**	54.8	53.5	48.6	3.1	3.1	2.4	37.1	17.7
~	DELTA KING DK 55T6**	53.3	55.5	-10.0	3.4	٥.١	2.0	36.2	17.3
~	DELTA KING DK 5316 DELTA KING DK 5366 RR	52.8	55.2	50.2	4.0	3.7	3.5	37.8	17.7
	MOONCAKE (edible)	51.2	ے.در	JU.2	3.3	٥./	ر.ر	38.7	18.0
	S02-8984 (natto)**	49.0			4.1			36.4	17.3
	KS5003sp (small seeded variety)	48.8			2.3			35.5	17.3
	S02-9134 (natto)	45.5			4.0			35.5	17.4
	S02-9134 (natto) S02-8136 (natto)	44.0			4.7			35.2	18.0
	GROUP V AVERAGE	59.9	60.5	52.9	3.1	3.1	2.7	36.7	18.3
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2	50.7	10.5
	GRAND MEAN	65.9	64.1	56.1	2.6	2.4	2.2	37.0	18.8

[~] 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. Data are from five environments in 2004, ten environments in 03-04, and 14 environments in 02-04.

B 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. These data were provided by the lowa State University Grain Quality Analysis Services using near-infrared (NIR) analysis.

TABLE 5. 2004 BUTLER CO. FULL-SEASON VARIETY TEST.

		YIELD (BU/AC	.) ^A		LODGING	
BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
EARLY (GROUP III)						
VIGORO V38N5RS**	70.4			1.5		
EBBERTS 1365RR**	68.1			2.5		
EBBERTS 1385RR	67.1			2.3		
GOLDEN HARVEST H3945RR**	66.8	69.8	69.4	2.0	2.1	2.4
GREAT LAKES GL 3710 RR GOLDEN HARVEST H3921RR*	66.3	69.0		2.5 2.3	2.5	
PRAIRIE STREAM FARMS PSF 355N*	65.5 65.3	69.0		2.3 2.8	2.5	
DELTA KING DK 3968 RR*	65.2	70.7	68.2	2.3	2.4	2.4
PIONEER VARIETY 93B67*	65.1	68.0	66.3	2.0	2.1	2.3
PIONEER VARIETY 93M90*	64.8	69.8		2.0	2.4	
DELTA AND PINE LAND DPX3950RR**	64.2			2.3		
DYNAGRO 33A37	64.2	60.0		2.5	1.5	
SOUTHERN CROSS ABRAHAM 3.9 N, RR** NK BRAND S39-Q4	63.8 63.0	68.8 68.1	66.7	1.0 1.8	1.5 2.3	2.5
NK BRAND S35-Q4	63.0	06.1	00.7	2.0	2.3	2.5
ASGROW AG3905*	62.2	63.7		2.0	2.4	
PRAIRIE STREAM FARMS PSF 3903NRR	62.0			2.0		
PRAIRIE STREAM FARMS PSF 3405RR	61.9			2.0		
DEKALB DKB36-52*	61.6			2.3		_
DEKALB DKB38-52*	61.5	64.9	63.6	2.0	2.4	2.4
PRAIRIE STREAM FARMS PSF 371N** GARST SEED 3824RR/N*	61.3 61.0	67.2		2.5 2.0	2.1	
SOUTHERN CROSS STEPHEN 3.9 N, RR*	60.5	67.2 63.9		2.0	2.1	
VIGORO V39N4RR**	60.3	03.7		2.0	2.0	
IA 3023	60.1			1.8		
DELTA KING DK 3964 RR*	59.6		55.5	2.5		2.9
LG SEEDS C3999NRR**	59.5			2.0		
SOUTHERN STATES RT 3975	58.1	62.4	59.3	2.5	2.6	3.1
CROPLAN GENETICS RC3964RR**	57.3			1.5		
PIONEER VARIETY 93M50* NK BRAND S37-N4**	56.4 56.3	61.1	58.8	2.0 2.5	2.6	3.2
PIONEER VARIETY P9305 (tofu type)	56.1	57.5	52.3	2.5	2.5	2.8
SOUTHERN STATES RT 3802N**	55.6	58.4	57.3	2.3	2.6	2.8
DELTA AND PINE LAND DP 3861 RR*	54.4			2.5		
SOUTHERN STATES RT 3850N**	54.1			1.3		
IA3022 (large seed, high-protein)	52.2			2.8		
SOUTHERN STATES RT 3940N**	47.0	55.6		2.0	2.4	
IA3012LF (lipoxygenase free)	50.5	55.6		2.5	3.4	
IA3021 (large seed, high-protein) IA3008LF (lipoxygenase free)	46.4 45.5			1.5 3.8		
GROUP III AVERAGE	60.1	64.7	61.7	2.2	2.5	2.7
LSD (0.10)	5.7	4.2	3.5	0.4	0.3	0.3
MID-SEASON (GROUP IV)						
STEYER 4700 RR SCN** VIGORO V42N3RR**	70.2	70.1 73.0	63.0	2.0	2.5 2.1	2.8
PRAIRIE STREAM FARMS PSF 4004NRR*	70.0 69.1	75.0	71.8	1.8 1.5	2.1	2.3
HELLENA BRAND SEED 4375*	68.1			1.5		
HORNBECK HBK R4820	67.7	67.5	64.8	2.3	2.5	2.8
TRISOY 4838RR(CN)*	66.8			2.3		
BIO GENE BG 4200NRRST**	65.7	71.1		1.5	2.0	
DELTAGROW 4340 RR**	65.7			2.0		
CROPLAN GENETICS RC4464RR* VIGORO V48N5RR*	65.1 64.9			1.8 2.3		
GARST SEED 4512RR/N	64.6			2.5		
DELTAGROW 4630 RR*	64.5			2.3		
ASGROW AG4603	64.5			2.0		
STINE S4542-4**	64.3	68.8		2.8	3.4	
DELTAGROW 4860 RR**	63.9			2.0		
HORNBECK HBK R4623**	63.5	65.0	66 1	2.5	2.0	2.2
PIONEER VARIETY 94B74** ASGROW AG4403*	63.4 63.3	65.8 64.8	66.1 63.9	2.3 2.0	3.0 2.4	3.3 2.8
	63.2	04.0	03.9	2.0	2.4	۷.0
DELTA AND PINE LAND DP 4331 RR*				2.0		
DELTA AND PINE LAND DP 4331 RR* PIONEER VARIETY 94M70*		67.1		2.5	2.8	
	63.1 62.9	67.1 70.3	68.1	2.5 2.0	2.8 2.3	2.6

TABLE 5. 2004 BUTLER CO. FULL-SEASON VARIETY TEST.

			YIELD (BU/AC			LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
~	UNISOUTH GENETICS USG 7484nRR**	62.5			3.0		
~	EXCEL BRAND 8492NRR*	62.5			2.5		
J	DELTA AND PINE LAND DPX4891RR**	62.0			2.8		
J	DELTAGROW 4840 RR**	62.0			2.8		
	PIONEER VARIETY 94M90*	61.7			2.3		
J	EXCEL BRAND 8448NRR*	61.7	68.6		1.8	2.3	
~	STINE S4842-4**	61.6			2.8		
~	SEED CONSULTANTS SC 9415 RR**	61.4			1.3		
~	DELTA KING DK 4868 RR	61.3	69.6	67.7	2.3	2.6	2.8
~	LG SEEDS C4343NRR**	61.3			1.8		
~	UNISOUTH GENETICS USG 7494nRR**	61.2			3.0		
~	CROW'S C4815R**	61.1	67.3	62.7	2.0	2.8	2.8
	DELTA AND PINE LAND DP 4748 S	60.9			4.3		
-	GOLDEN HARVEST H4273RR**	60.7			2.5		
	SOUTHERN CROSS TITUS 4.8N, RR**	60.6	64.0	60.3	2.8	3.0	3.3
	DEKALB DKB46-51**	60.4	67.6		2.0	2.6	
-	ASGROW AG4801*	60.3			1.5		
	GREAT LAKES GL 4009 RR**	60.3	68.7		1.3	1.6	
-	NK BRAND S43-B1**	60.2	68.2		2.5	3.3	
	ASGROW AG4201**	60.1	65.3	62.3	2.5	2.8	3.0
-	PIONEER VARIETY 94B13*	60.0	70.7	67.8	2.3	2.8	2.8
,	SOUTHERN STATES RT 4980	60.0	62.1	59.1	2.3	3.0	3.3
,	UNISOUTH GENETICS USG 7482nRR**	59.9	65.9		2.0	2.6	
,	SEED CONSULTANTS SC 9442 RR**	59.8	66.2	64.2	2.3	2.5	2.8
	SOUTHERN STATES RT 4230N**	59.4	63.1		2.5	2.9	
-	BECK 434NRR**	59.4			2.0		
-	CROW'S C4418R**	59.4			2.0		
~	BIO GENE BG 4205NRR	59.3			2.3		
-	HORNBECK HBK R4945CX**	59.2			2.3		
,	DELTA KING DK 4763 RR	58.9	66.8	65.0	2.3	2.6	2.8
	CROPLAN GENETICS RC4013RR**	58.3			2.8		
,	GREAT LAKES GL 4809 RR**	58.2			3.5		
-	NK BRAND S49-Q9**	58.1	65.0	63.9	2.3	3.1	3.3
5	S02-7955 (natto)	58.1			2.3		
5	GATEWAY GX98-0609 (high oil)	57.9	58.8		4.3	4.0	
~	CROPLAN GENETICS RC4842RR**	57.9			2.0		
	SOUTHERN CROSS AARON 4.5N, STS**	57.8	62.9	60.8	2.3	2.5	3.0
,	EXCEL BRAND 8412NRR*	57.8			2.0		
~	HELLENA BRAND SEED 4875*	57.7			3.0		
~	GARST SEED 4112RR/N*	57.6			1.3		
~	SOUTHERN CROSS JONAH 4.8 N, RR**	57.2	64.3		2.0	2.6	
J	DYNAGRO 3443**	57.0	64.1	63.8	2.0	2.3	2.6
,	LG SEEDS C4910NRR*	56.8			2.5		
,	PIONEER VARIETY 94B73	56.8	64.1	65.6	3.0	3.4	3.6
,	SOUTHERN STATES RT 4502N**	56.6	59.3	56.4	2.3	2.9	3.3
,	HORNBECK HBK R4023*	56.1			3.5		
,	TRISOY 4697RR(CN)**	56.0			2.3		
	SOUTHERN STATES RT 4098	55.9	66.2	63.3	2.8	3.0	3.4
,	ASGROW AG4102**	55.8			2.5		
	CAVERNDALE CF 492	54.8	58.8	55.6	2.0	2.4	2.1
	GREAT LAKES GL 4409 RR**	54.4	64.6	62.5	2.0	2.4	2.5
	CAVERNDALE CF 461	54.2	60.1	60.1	2.8	3.0	3.2
,	STEYER 4900 RR SCN**	54.1			2.8		
,	DELTA KING DK 4967 RR*	53.9	66.2		2.0	2.8	
	DELTAGROW 4960 RR**	53.6			4.0		
	UNISOUTH GENETICS USG 7499nRR**	53.2			2.3		
	VIGORO V47N3RR**	52.7	63.0	62.2	1.8	2.4	2.6
	GATEWAY GX98-1006 (high protein)	52.7			2.3	-	
	DELTA AND PINE LAND DP 4546 RR	52.1			2.8		
•		51.9	57.6	54.4	2.5	2.6	2.8
	SOUTHERN STATES RT 4810N**				3.0		
_	SOUTHERN STATES RT 4810N** GATEWAY GX99-0111 (high oil)						
S	GATEWAY GX99-0111 (high oil)	51.7					
S	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR**	51.7 51.0			2.3		
5	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto)	51.7 51.0 50.9			2.3 3.8		
5	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto) SOUTHERN STATES RT 4440N**	51.7 51.0 50.9 49.0			2.3 3.8 2.3		
5	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto) SOUTHERN STATES RT 4440N** KS4103sp (high protein variety)	51.7 51.0 50.9 49.0 47.9			2.3 3.8 2.3 2.5		
	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto) SOUTHERN STATES RT 4440N** KS4103sp (high protein variety) GATEWAY GX99-0112 (clear hilum)	51.7 51.0 50.9 49.0 47.9 47.3	<i>A</i> Q 1	45.0	2.3 3.8 2.3 2.5 4.5	<i>A A</i>	ΔΕ
	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto) SOUTHERN STATES RT 4440N** KS4103sp (high protein variety) GATEWAY GX99-0112 (clear hilum) IA4002 (small seed)	51.7 51.0 50.9 49.0 47.9 47.3 43.0	48.1	45.0	2.3 3.8 2.3 2.5 4.5 3.8	4.4	4.5
	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto) SOUTHERN STATES RT 4440N** KS4103sp (high protein variety) GATEWAY GX99-0112 (clear hilum) IA4002 (small seed) GATEWAY LS94-3207 (high protein)	51.7 51.0 50.9 49.0 47.9 47.3 43.0 42.5	48.1	45.0	2.3 3.8 2.3 2.5 4.5 3.8 4.5	4.4	4.5
S S S S S S S S S S S S S S S S S S S	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto) SOUTHERN STATES RT 4440N** KS4103sp (high protein variety) GATEWAY GX99-0112 (clear hilum) IA4002 (small seed) GATEWAY LS94-3207 (high protein) GATEWAY GX97-1418 (high protein)	51.7 51.0 50.9 49.0 47.9 47.3 43.0 42.5 40.3	48.1	45.0	2.3 3.8 2.3 2.5 4.5 3.8 4.5 3.5	4.4	4.5
	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto) SOUTHERN STATES RT 4440N** KS4103sp (high protein variety) GATEWAY GX99-0112 (clear hilum) IA4002 (small seed) GATEWAY LS94-3207 (high protein)	51.7 51.0 50.9 49.0 47.9 47.3 43.0 42.5	48.1	45.0	2.3 3.8 2.3 2.5 4.5 3.8 4.5	4.4	4.5
S S S S S S S S S S S S S S S S S S S	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto) SOUTHERN STATES RT 4440N** KS4103sp (high protein variety) GATEWAY GX99-0112 (clear hilum) IA4002 (small seed) GATEWAY LS94-3207 (high protein) GATEWAY GX97-1418 (high protein) KS4303sp (small seeded variety)	51.7 51.0 50.9 49.0 47.9 47.3 43.0 42.5 40.3 37.3			2.3 3.8 2.3 2.5 4.5 3.8 4.5 3.5 3.8		
~ S ~ S S S S S S	GATEWAY GX99-0111 (high oil) PRAIRIE STREAM FARMS PSF 4102NRR** S02-7998 (natto) SOUTHERN STATES RT 4440N** KS4103sp (high protein variety) GATEWAY GX99-0112 (clear hilum) IA4002 (small seed) GATEWAY LS94-3207 (high protein) GATEWAY GX97-1418 (high protein)	51.7 51.0 50.9 49.0 47.9 47.3 43.0 42.5 40.3	48.1 65.2 4.9	45.0 62.4 3.7	2.3 3.8 2.3 2.5 4.5 3.8 4.5 3.5	4.4 2.7 0.4	4.5 3.0 0.3

TABLE 5. 2004 BUTLER CO. FULL-SEASON VARIETY TEST.

.,,,,,	LE 5. 2004 BUTLER CO. FULL-SEASON VAR		IELD (BU/AC) ^A		LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
	LATE (GROUP V)						
	GOLDEN HARVEST H5053RR*	67.0			2.8		
~	DELTAGROW 5460 RR**	64.0			2.8		
	UNISOUTH GENETICS USG 5601T	63.1	64.6	59.7	3.0	3.6	3.5
	KS5202sp (high protein variety)	62.9	63.0	59.0	2.8	3.4	3.3
	STINE S5142-4**	61.8	64.5		2.8	3.5	
	NK BRAND S50-N3**	61.2			2.3		
	VIGORO V50N5RR** HORNBECK HBK R4924**	60.8			3.3		
	SOUTHERN STATES RT 5450N**	60.6 58.8			2.5 2.3		
	UNISOUTH GENETICS USG 7514nRR**	58.6			3.8		
~	GOLDEN HARVEST H5470RR*	58.5			2.8		
~	CROPLAN GENETICS RC5222RR**	58.3			4.0		
	PIONEER VARIETY 95B32**	57.8	56.3	53.1	2.8	2.6	2.8
	EXCEL BRAND 8509NRR*	57.4			3.3		
	DELTA AND PINE LAND DP 5110 S	57.2			3.5		
NS	KS1614sp (large seeded variety)	57.2			4.0		
NS	TARA (forage)	57.0			2.8		
~	SOUTHERN CROSS ABNER 5.2 N, RR**	56.8	59.6		3.8	3.8	
~	SOUTHERN STATES RT 5540N**	56.3			3.5		
~	DYNAGRO 33B52**	56.1	61.9		4.8	4.5	
~	PIONEER VARIETY 95B42*	55.9	55.1	51.8	3.3	3.6	3.6
	UNISOUTH GENETICS USG 510nRR**	55.6	61.2	57.4	2.5	3.0	3.1
	ASGROW AG5605*	55.6	67.2		3.3	3.3	
	CROPLAN GENETICS RC5003RR**	54.2			4.3		
	VIGORO V55N5RR**	54.1	=0.4		3.3		
	ASGROW AG5301**	53.7	59.6	56.6	3.0	3.5	3.4
~	UNISOUTH GENETICS USG 7523nRR**	52.6	56.0	40.0	3.0	2.0	2.2
	ANAND** TEEJAY	52.2	56.8	49.9	2.3 2.8	3.0	3.3
	DELSOY 5500**	52.2 51.3	57.0	52.7	3.0	3.4	3.4
	DELTA KING DK 5465 RR*	51.3	58.5	55.5	3.3	3.4	3.4
~	SOUTHERN STATES RT 5130N**	51.0	50.5	33.3	3.3	3.4	3.4
~	STEYER 5300 RR SCN**	50.7			1.5		
~	DELTA KING DK 5366 RR	50.5	56.8	53.4	4.8	4.4	4.3
~	SOUTHERN STATES RT 5302N**	50.5	56.8	54.3	2.8	3.1	3.2
~	DELTA KING DK 5161 RR**	50.4	58.6		3.8	4.0	
~	DELTA KING DK 55T6**	50.3			3.3		
~	EXCEL BRAND 8520NRR*	50.3			2.5		
NS	GATEWAY GX98-1809 (high protein)	49.7			4.5		
	DELTAGROW 5260 RR**	49.7			3.5		
	HUTCHESON	49.1	58.3	55.0	3.0	3.4	3.4
	SOUTHERN STATES RT 5602N**	48.4	53.5	49.5	2.5	3.3	3.5
	KS5003sp (small seeded variety)	48.3			2.0		
	SOUTHERN STATES RT 5001N**	47.5	52.0	49.2	3.5	3.9	3.8
	S02-8136 (natto)	46.1			5.0		
	S02-9134 (natto)	46.0			5.0		
NS	S02-8984 (natto)**	45.7	E1 7		4.8	2.0	
IN2	GATEWAY GX98-2033 (high protein)	44.7	51.7		3.0	3.6	
NIC	UNISOUTH GENETICS USG 5002T	42.0	57.5		4.8	4.3	
INS	MOONCAKE (edible)	39.5			2.8		
	GROUP V AVERAGE	53.8	58.6	54.1	3.3	3.5	3.4
	LSD (0.10)	10.2	5.1	4.0	0.9	0.5	0.4
	50441044544		45 -				
	GRAND MEAN	57.6	63.3	60.0	2.6	2.9	3.0

Roundup Ready variety.
 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 (Nace 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 6. 2004 CALDWELL CO. FULL-SEASON VARIETY TEST.

			YIELD (BU/AC	:) ^A		LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
	EARLY (GROUP III)						
~	NK BRAND S37-N4**	76.2	66.1	55.1	1.3	1.4	1.4
~	GOLDEN HARVEST H3921RR*	75.7	64.5		1.0	1.0	
~	EBBERTS 1365RR**	75.2			1.5		
~	EBBERTS 1385RR DELTA AND PINE LAND DPX3950RR**	75.1 73.7			1.5 1.0		
	PRAIRIE STREAM FARMS PSF 371N**	72.7			1.3		
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	72.2	63.6		1.0	1.0	
	PIONEER VARIETY 93M90*	71.9	63.1		1.0	1.1	
	ASGROW AG3905*	71.9	63.0		1.0	1.0	
~	VIGORO V38N5RS** GARST SEED 3824RR/N*	71.7 71.6	64.3		1.0 1.0	1.0	
~	VIGORO V39N4RR**	70.8	04.5		1.0	1.0	
~	GREAT LAKES GL 3710 RR	70.5			1.0		
	PRAIRIE STREAM FARMS PSF 355N*	70.4			1.3		
	NK BRAND S35-F9	70.1			1.0		
~	PRAIRIE STREAM FARMS PSF 3903NRR SOUTHERN STATES RT 3850N**	70.0 69.8			1.3 1.0		
~	DEKALB DKB36-52*	69.8			1.0		
	SOUTHERN STATES RT 3975	69.7	57.3	48.0	1.8	1.5	1.3
~	NK BRAND S39-Q4	69.4	62.8	52.7	1.0	1.0	1.0
~	GOLDEN HARVEST H3945RR**	69.1	58.8	53.7	1.0	1.1	1.1
~	PRAIRIE STREAM FARMS PSF 3405RR SOUTHERN STATES RT 3802N**	68.7	E0 0	47.7	1.0	1.4	1.3
~ ~	DELTA AND PINE LAND DP 3861 RR*	68.6 68.6	58.8	47.7	1.5 1.3	1.4	1.5
~	DELTA KING DK 3968 RR*	68.3	59.2	51.6	1.0	1.3	1.2
~	CROPLAN GENETICS RC3964RR**	68.1		2 7.0	1.0		
~	PIONEER VARIETY 93M50*	67.0			1.0		
~	DELTA KING DK 3964 RR*	65.9		50.2	2.0		1.2
~	DEKALB DKB38-52* DYNAGRO 33A37	65.6 64.8	60.6	50.3	1.0 1.0	1.4	1.3
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR**	64.4	60.4		1.0	1.0	
~	PIONEER VARIETY 93B67*	64.2	55.5	45.1	1.0	1.0	1.0
Р	IA 3023	63.4			1.0		
	IA3022 (large seed, high protein)	62.4			1.8		
	SOUTHERN STATES RT 3940N**	59.0	F2 1		1.5	2.6	
	IA3012LF (lipoxygenase free) LG SEEDS C3999NRR**	58.7 57.9	52.1		1.5 1.0	2.6	
	PIONEER VARIETY P9305 (tofu type)	57.9 57.4	49.1	40.4	1.0	1.3	1.2
	IA3021 (large seed, high protein)	52.8			1.0		
NS	IA3008LF (lipoxygenase free)	50.5			2.5		
	GROUP III AVERAGE	67.6	59.9	49.4	1.2	1.3	1.2
	LSD (0.10)	5.2	4.5	3.5	0.3	0.3	0.2
	MID-SEASON (GROUP IV)						
~	VIGORO V42N3RR**	74.9	71.4	59.2	1.0	1.1	1.1
	DELTA KING DK 4868 RR	74.3	67.7	57.5	1.3	1.5	1.3
	SOUTHERN CROSS MICHAEL 4.2N, RR**	74.1	69.0	55.5	1.0	1.1	1.1
	SOUTHERN CROSS JONAH 4.8 N, RR** BIO GENE BG 4200NRRST**	74.1	67.5		1.8	1.9	
	STEYER 4900 RR SCN**	74.0 73.9	72.6		1.0 2.3	1.0	
	STINE \$4542-4**	73.0	67.8		2.0	2.1	
	CROPLAN GENETICS RC4464RR*	73.0			1.0		
	DELTAGROW 4840 RR**	72.8			2.8		
	DELTA KING DK 4763 RR	72.8	68.7	58.0	2.0	2.0	1.7
	SEED CONSULTANTS SC 9442 RR** PIONEER VARIETY 94B73	72.7	64.8	56.0	2.0	1.8	1.5
	UNISOUTH GENETICS USG 7484nRR**	72.6 72.4	68.6	58.0	1.5 2.5	1.9	1.6
	UNISOUTH GENETICS USG 7494nRR**	72.4			2.0		
~	HELLENA BRAND SEED 4375*	72.1			1.0		
	SOUTHERN STATES RT 4980	72.0	64.7	54.0	2.0	2.1	1.8
	DELTA AND PINE LAND DP 4331 RR*	71.9			1.5		
~ ~	HELLENA BRAND SEED 4875* CROW'S C4815R**	71.8 71.8	65.4	53.9	2.8 2.0	2.0	1.7
	DELTA KING DK 4461 RR	71.7	66.6	55.0	1.5	1.6	1.7
	ASGROW AG4403*	71.6	63.6	52.3	1.3	1.4	1.3
~	UNISOUTH GENETICS USG 7482nRR**	71.4	62.1		1.5	1.8	
	DELTAGROW 4630 RR*	71.3			1.5		
	DELTAGROW 4340 RR** GARST SEED 4512RR/N	70.9 70.6			1.0 1.0		
	PIONEER VARIETY 94B74**	70.6 70.6	64.3	52.7	2.3	2.3	1.8
	CAVERNDALE CF 492	70.5	66.4	55.3	1.0	1.0	1.0
	S EIIII DALE SI TAZ	70.5	- 00.4	55.5	1.0	1.0	1.0

TABLE 6. 2004 CALDWELL CO. FULL-SEASON VARIETY TEST.

			YIELD (BU/AC) ^A		LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
~	PIONEER VARIETY 94B13*	70.5	66.2	53.8	1.3	1.4	1.3
~	TRISOY 4838RR(CN)*	70.5			1.5		
~	LG SEEDS C4343NRR**	70.5			1.5		
~	BECK 434NRR**	70.4			1.3		
~	LG SEEDS C4910NRR*	70.3			2.3		
~	GREAT LAKES GL 4409 RR**	70.2	64.0	55.8	1.5	1.6	1.4
~	PIONEER VARIETY 94M70*	70.2	67.2		2.0	2.0	
~	DEKALB DKB46-51**	70.0	67.8		2.0	2.1	
~	NK BRAND S43-B1** DYNAGRO 3443**	69.7 69.5	64.4 66.0	54.2	1.0 1.5	1.3 1.6	1.4
	SOUTHERN CROSS AARON 4.5N, STS**	69.2	62.5	50.4	2.0	1.6	1.5
~	VIGORO V48N5RR*	69.2	02.5	30.4	1.8	1.0	1.5
	STEYER 4700 RR SCN**	69.2	59.6	48.2	1.5	1.6	1.4
	GATEWAY GX98-0609 (high oil)	69.2	64.0		2.3	2.1	
~	CROW'S C4418R**	69.1			1.3		
~	GOLDEN HARVEST H4273RR**	69.1			1.0		
	EXCEL BRAND 8448NRR*	68.8	65.6		1.0	1.1	
~	VIGORO V47N3RR**	68.6	62.8	54.7	1.5	1.8	1.5
~	HORNBECK HBK R4820	68.5	65.2	54.9	1.3	1.4	1.3
~	CROPLAN GENETICS RC4013RR**	68.3	65.4		1.0	2.0	
~	DELTA KING DK 4967 RR*	68.3	65.4	50.7	1.8	2.0	1.0
	CAVERNDALE CF 461 PRAIRIE STREAM FARMS PSF 4102NRR**	68.1 68.1	61.7	50.7	2.3 1.0	2.3	1.8
~	DELTAGROW 4860 RR**	67.7			2.0		
~	NK BRAND S49-Q9**	67.3	64.0	56.0	1.8	2.0	1.7
~	DELTA AND PINE LAND DPX4891RR**	67.3	04.0	30.0	2.8	2.0	1.7
~	GREAT LAKES GL 4809 RR**	66.9			2.5		
~	STINE S4842-4**	66.7			2.3		
~	CROPLAN GENETICS RC4842RR**	66.4			1.3		
~	SOUTHERN CROSS TITUS 4.8N, RR**	66.3	63.0	52.8	2.3	2.1	1.8
~	PIONEER VARIETY 94M90*	66.2			2.5		
	DELTA AND PINE LAND DP 4748 S	66.0			2.3		
~	ASGROW AG4603	65.7			1.3		
~	SOUTHERN STATES RT 4810N**	65.7	60.8	51.4	1.8	1.8	1.6
~	UNISOUTH GENETICS USG 7499nRR**	65.6	62.0		2.0	1.3	
~	SOUTHERN STATES RT 4230N**	65.5	62.9	E2 0	1.0	1.3 1.4	1.3
~	ASGROW AG4201** BIO GENE BG 4205NRR	65.1 65.1	63.4	52.8	1.0 1.8	1.4	1.5
	HORNBECK HBK R4623**	64.8			2.3		
	GATEWAY GX99-0112 (clear hilum)	64.7			2.8		
	EXCEL BRAND 8412NRR*	64.0			1.5		
	GATEWAY GX98-1006 (high protein)	63.7			1.3		
	SOUTHERN STATES RT 4502N**	63.3	61.6	49.8	1.5	1.6	1.4
~	ASGROW AG4102**	63.3			1.0		
~	TRISOY 4697RR(CN)**	62.5			1.0		
NS	GATEWAY LS94-3207 (high protein)	62.1			3.0		
~	GREAT LAKES GL 4009 RR**	61.9	58.9		1.0	1.0	
~	SOUTHERN STATES RT 4098	61.8	58.9	48.6	1.0	1.1	1.1
~	ASGROW AG4801*	61.5			1.0		
	HORNBECK HBK R4023*	60.9			2.3		
	SEED CONSULTANTS SC 9415 RR**	60.5			1.0		
	HORNBECK HBK R4945CX** EXCEL BRAND 8492NRR*	60.3 60.3			2.0 2.5		
	KS4303sp (small seeded variety)	60.3			2.0		
	GARST SEED 4112RR/N*	60.2			1.0		
	GATEWAY GX97-1418 (high protein)	60.0			3.0		
	GATEWAY GX99-0111 (high oil)	59.9			2.5		
	PRAIRIE STREAM FARMS PSF 4004NRR*	59.6			1.0		
	DELTAGROW 4960 RR**	59.1			3.3		
	KS4103sp (high protein variety)	58.3			2.3		
~	DELTA AND PINE LAND DP 4546 RR	57.8			3.0		
	S02-7998 (natto)	56.4			3.5		
	SOUTHERN STATES RT 4440N**	56.1	_		1.8		_
	IA4002 (small seed)	54.8	47.5	39.4	2.3	2.4	2.1
NS	S02-7955 (natto)	54.2			1.3		
	GPOLID IV AVEDAGE	671	615	E2 4	1 7	17	1 5
	GROUP IV AVERAGE LSD (0.10)	67.1 5.4	64.5 3.7	53.4	1.7 0.5	1.7 0.3	1.5 0.2
	LJD (0.10)	٦.4	5./	3.0	0.5	0.5	0.2

TABLE 6. 2004 CALDWELL CO. FULL-SEASON VARIETY TEST.

		Υ	IELD (BU/AC	() ^A		LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
	LATE (GROUP V)						
~	GOLDEN HARVEST H5053RR*	75.3			1.8		
	DELTA AND PINE LAND DP 5110 S	74.2			2.3		
~	HORNBECK HBK R4924**	72.5			1.8		
~	VIGORO V50N5RR**	71.2			1.8		
	UNISOUTH GENETICS USG 5601T	71.0	70.8	57.2	2.8	2.5	2.2
~	STINE S5142-4**	69.9	67.3		2.0	2.1	
~	NK BRAND S50-N3** SOUTHERN STATES RT 5602N**	69.6 67.5	66.1	E2 2	2.0 2.8	2.9	2.4
~	UNISOUTH GENETICS USG 510nRR**	66.7	64.9	53.3 53.8	2.5	2.9	1.9
	KS5202sp (high protein variety)	66.2	64.7	53.0	1.8	2.1	1.8
	STEYER 5300 RR SCN**	65.3	04.7	33.0	2.3	2.1	1.0
	TEEJAY	65.2			2.3		
·	UNISOUTH GENETICS USG 5002T	64.6	66.8		2.8	2.6	
~	PIONEER VARIETY 95B42*	64.2	64.5	53.2	2.5	2.5	2.3
NS	KS1614sp (large seeded variety)	64.1			2.5		
~	PIONEER VARIETY 95B32**	64.0	63.4	52.8	2.3	2.3	2.0
~	EXCEL BRAND 8509NRR*	63.4			1.8		
	GATEWAY GX98-2033 (high protein)	63.2	61.5		2.8	2.5	
	ASGROW AG5605*	63.0	69.8		2.8	2.4	
	SOUTHERN STATES RT 5450N**	62.7			3.3		
	GATEWAY GX98-1809 (high protein)	62.6			2.0		
Р	ANAND**	62.4	64.2	53.0	1.8	1.8	1.6
~	DYNAGRO 33B52**	62.4	65.5		3.8	3.3	
~	EXCEL BRAND 8520NRR*	62.0			2.3		
~	SOUTHERN STATES RT 5130N** VIGORO V55N5RR**	61.5 60.9			3.0 3.0		
	ASGROW AG5301**	60.8	62.1	50.6	2.8	2.4	2.2
~	DELTA KING DK 5161 RR**	60.8	62.8	50.0	4.0	3.4	2.2
	HUTCHESON	60.6	60.9	50.9	2.5	2.4	2.2
	DELSOY 5500**	60.4	59.4	50.1	2.0	2.0	1.8
~	DELTAGROW 5460 RR**	60.2			3.0		
~	CROPLAN GENETICS RC5222RR**	59.4			4.0		
~	UNISOUTH GENETICS USG 7514nRR**	59.3			3.5		
~	SOUTHERN STATES RT 5001N**	59.2	59.0	48.4	3.0	2.6	2.3
~	DELTA KING DK 5465 RR*	59.1	64.6	51.5	3.3	2.6	2.3
~	CROPLAN GENETICS RC5003RR**	58.9			2.8		
~	2227.01.01.32001	58.2			3.5		
	KS5003sp (small seeded variety)	57.9			1.5		
~	UNISOUTH GENETICS USG 7523nRR**	57.3	50.0	40.5	2.8	2.2	2.0
~	SOUTHERN STATES RT 5302N**	56.8	59.2	48.5	2.5	2.3	2.0
~ NC	SOUTHERN CROSS ABNER 5.2 N, RR**	56.7	62.2		3.5	3.0	
	TARA (forage)	56.3			2.3		
IND	MOONCAKE (edible) SOUTHERN STATES RT 5540N**	56.2 55.8			2.3 2.8		
~	DELTA KING DK 55T6**	55.6 55.6			2.o 3.5		
~	GOLDEN HARVEST H5470RR*	53.6			3.5		
	DELTA KING DK 5366 RR	50.9	54.1	45.0	3.5	3.1	2.9
	S02-8984 (natto)**	46.6	J	.5.0	4.0		
	S02-9134 (natto)	44.3			4.0		
	S02-8136 (natto)	34.2			4.8		
	GROUP V AVERAGE	61.1	63.5	51.5	2.7	2.5	2.1
	LSD (0.10)	4.9	4.3	3.2	0.4	0.4	0.3
	GRAND MEAN	65.6	63.3	51.1	1.9	1.8	1.6

Roundup Ready variety.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).

*** 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.

### EARLY (GROUP III) ***SOUTHERN CROSS ABRAHAM 3.9 N, RR**		YIELD (BU/AC)A	LODG	GING	PLANT HEIGHT (IN)	MATURITY DATE
	BRAND — VARIETY	2004	03-04	2004	03-04		2004
GREAT LAKES GL 3710 RR 85.0 1.5 31 VIGORO VS9NARR** 83.9 2.3 37 EBBERTS 1365RR** 83.9 2.3 36 DELTA AND PINE LAND DPX3950RR** 83.7 2.0 36 ASGROW AG3905* 83.3 76.3 2.0 1.8 39 N KBRAND S39-Q4 82.8 78.6 1.0 1.1 34 PRAIRIE STREAM FARKS PSF 3405RR 81.1 1.5 36 1.5 36 DELTA AND PINE LAND DP 3861 RR* 81.1 2.0 34 34 1.5 36 DELTA AND PINE LAND DP 3867 RR* 81.1 2.0 34 34 1.5 2.0 34 PIONEER YABIET 9 3MOR 81.0 77.0 2.0 1.6 38 38 VIGORO V3BNSR*** 79.7 78.3 1.5 1.4 35 36 VIGORO V3BNSR*** 79.7 78.7 78.3 1.5 1.4 35 36 VIGORO V3BNSR*** 79.7 78.7 78	EARLY (GROUP III)						
GREAT LAKES GL 3710 RR 85.0 1.5 31 ✓ VIGGOR OVSPANARR** 83.9 2.3 37 ✓ EBBERTS 1365RR** 83.9 2.3 36 ✓ EBBERTS 1365RR** 83.7 2.0 36 ✓ EBBERTS 1365RR 83.7 2.0 36 ✓ ASGROW AG905** 83.3 76.3 2.0 1.8 39 N KBRAND S39-Q4 82.8 78.6 1.0 1.1 34 ✓ PRAIRE STREAM FARMS PSF 3405RR 81.1 1.5 36 1.5 36 ✓ DEKALE DKB S65-52** 80.1 77.0 2.0 1.6 38 ✓ LOS EGDS CS S990RR** 799.7 1.3 33 37 ✓ LOS EGDS CS S990RR** 799.7 78.3 1.5 1.4 38 ✓ PALMIC STREAM FARMS PSF 371N** 79.6 78.7 78.3 1.5 1.4 38 ✓ PALMIC STREAM FARMS PSF 390 RR* 79.7 78.3 1.5 1.4 38 ✓ SOUTHERN HARVEST H390 LR* 78.6 78.0 1.	~ SOUTHERN CROSS ABRAHAM 3.9 N. RR**	86.3	79.9	1.0	1.1	35	9/27
### EBBERTS 136SRR*							9/21
EBBERTS 1385RR DELTA AND PINE LAND D PX3950RR** A SGROW AG3905* A SGROW AG3905* R SB.3.3 R FA.6.3 DELTA AND PINE LAND D PS 360 RR* R SB.3.3 R FA.6.10 1.1 34 PRAIRIE STREAM FARMS PSF 3405RR PIONEER VARIETY 93M90* 81.0 PIONEER VARIETY 93M90* R SP.6							9/30
DELTA AND PINE LAND DPX3950RR** ASGROW AG3905* B1.0 DELTA AND PINE LAND DP 3861 RR* B1.1 D.0 DEATA AND PINE LAND DP 3861 RR* B1.1 D.0 DEATA AND PINE LAND DP 3861 RR* B1.1 D.0 DEATA AND PINE LAND DP 3861 RR* B1.1 D.0 DEATA AND PINE LAND DP 3861 RR* B1.1 D.0 DEATA AND PINE LAND DP 3861 RR* B1.1 D.0 DEATA AND PINE LAND DP 3861 RR* B1.1 D.0 DEATA AND PINE LAND DP 3861 RR* B1.1 D.0 DEATA AND PINE LAND DP 3861 RR* B1.1 DEATA AND PINE LAND							9/26
- ASGROW AG3905* - NK BRAND S39-Q4 - PRAIRIE STREAM FARMS PSF 3405RR - PRAIRIE STREAM FARMS PSF 3405RR - PRAIRIE STREAM FARMS PSF 3405RR - PICHAR ND PINE LAND DP 3861 RR* - PICHAER VARIETTY 93M90* - 81.0 - PICHAER VARIETTY 93M90* - 81.0 - PICHAER ND PINE LAND DP 3861 RR* - 81.1 - PICHAER VARIETTY 93M90* - 81.0 - PICHAER ND PINE LAND DP 3861 RR* - 80.1 - PICHAER ND PINE LAND DP 3861 RR* - 79.9 - 20 37 - LIG SEEDS C3999MRR** - 79.9 - 20 37 - VIGORO VABNISS** - PRAIRIE STREAM FARMS PSF 371N** - 79.6 - 28 - 38 - 38 - 78.7 - 78							9/23
NI BRAND S39-Q4 PRAIRE STREAM FARMS PSF 3405RR 81.1 □ DELTA AND PINE LAND OP 3861 RR* 81.1 □ DELTA AND PINE LAND OP 3861 RR* 81.1 □ DELTA AND PINE LAND OP 3861 RR* 81.1 □ DELTA AND PINE LAND OP 3861 RR* 81.1 □ DELTA KING BAS6-52* 80.1 □ CLOS ESDS CASSASON SER			76.2		1 0		10/1 9/26
Depta And Depta Cando Depta Sel RR* Depta And Depta Cando Depta Sel RR* PIONEER VARIETY 93M90* B10 77.0 2.0 1.6 38 DEKALB DOKAGS-52* B0.1 2.0 37 LG SEEDS C3999NRR* 79.9 2.0 37 LG SEEDS C3999NRR* 79.7 133 33 PRAIRIE STREAM FARMS PSF 371N** PRONEER VARIETY 93M50* T7.0 73.7 1.5 1.6 34 T8.7 78.3 1.5 1.6 34 T8.7 78.4 74.7 1.5 1.3 32 T8.7 1.5 1.6 34 T8.7 78.4 74.7 1.5 1.3 32 DELTA KING BARMS PSF 371N** PRAIRIE STREAM FARMS PSF 371N* PRAIRIE STREAM FARMS PSF 371N* T8.7 78.4 74.7 1.5 1.3 32 PRAIRIE STREAM FARMS PSF 371N* T8.7 78.6 1.5 1.3 34 T8.7 78.7 1.5 1.4 34 PRAIRIE STREAM FARMS PSF 371N* PRAIRIE STREAM FARMS PSF 3903NRR PRAIRIE STREAM							9/20
PIONEER VARIETY 93M90° PERVARIETY 93M90° PERVARIETY 93M90° VIGORO V38NSRS** 79.7 LIS SEEDS C3999NRR* 79.9 VIGORO V38NSRS** 79.7 PRAIRIE STREAM FARMS PSF 371N** PARIRIE STREAM FARMS PSF 371N** PRAIRIE STREAM FARMS PSF 371N** PRAIRIE STREAM FARMS PSF 371N** 79.6 DELTA KING DX 3996 RR* 78.7 NK BRAND S35-F9 78.7 RA 78.1 1.0 31 32 ROUTHERN CROSS STEPHEN 3.9 N, RR* 78.4 78.5 SOUTHERN CROSS STEPHEN 3.9 N, RR* 78.4 78.4 78.5 SOUTHERN CROSS STEPHEN 3.9 N, RR* 78.4 78.4 78.5 SOUTHERN CROSS STEPHEN 3.9 N, RR* 78.4 78.6 GARST SEED 832ARRN* 77.1 1.8 33 33 DEKALED DRS36-52° 77.0 73.7 1.5 1.4 34 70 PRONEER VARIETY 93B60° 77.0 78.6 78.7 PRONEER VARIETY 93B67* 78.7 PRONEER WARLETY 93B67* 79.4 DELTA KING DX 3964 RR* 72.8 DVNAGRO 33337 PRAIRIE STREAM FARMS PSF 3903NRR 72.8 PRAIRIE STREAM FARMS PSF 3903NRR 72.8 DELTA KING DX 3964 RR* 70.4 PRAIRIE STREAM FARMS PSF 3903NRR 72.8 SOUTHERN STATES RT 3802N** PRAIRIE STREAM FARMS PSF 3903NRR 72.8 SOUTHERN STATES RT 3805N** PRAIRIE STREAM FARMS PSF 3903NRR 72.8 SOUTHERN STATES RT 3805N** PRAIRIE STREAM FARMS PSF 3903NRR 72.8 SOUTHERN STATES RT 3805N** PRONEER WARLETY P930S (tofu type) SOUTHERN STATES RT 3800** PRONEER WARLETY P930S (tofu type) SOUTHERN STATES RT 3800** PRONEER WARLETY P930S (tofu type)			7 0.0		•••		9/19
DEKALB DK836-52*	~ DELTA AND PINE LAND DP 3861 RR*	81.1		2.0		34	9/22
~ LG SEEDS C3999NRR**			77.0		1.6		9/26
~ VIGORO V38NSRS** PRAIRE STREAM FARMS PSF 371N** PRAIRE STRE							9/28
PRAIRIE STREAM FARMS PSF 371N** PETAL RING DCK 3968 R8* PETAL RING DCK 3968 R8* PETAL RING DCK 3968 R8* PETAL RING DCK 3968 R9* PETAL RING DCK 3968 R9							9/23 9/24
DELTA KING DK 3968 RR* NK BRAND S35-F9 78.7 NK BRAND S35-F9 78.7 ROLLON HARVEST H3921RR* ROLLON HARVEST H3921RR* ROLLON HARVEST H3921RR* ROLLON HARVEST H3940RR** PIONEER VARIETY 93M50* PIONEER VARIETY 93B57* ROLLON HARVEST H3945RR* R							9/24
~ NK BRAND S35-F9 GOLDEN HARVEST H3921RR* 78.6 78.0			78 3		14		9/25
~ GOLDEN HARVEST H3921RR*			70.5				9/17
~ GARST SEED 3824RR/N* 78.4 74.7 1.5 1.3 32 ~ CROPLAN GENETICS RC3964RR** 77.1 1.8 3 33 ~ DEKALB DK838-52* 77.0 73.7 1.5 1.4 34 ~ PIONEER VARIETY 93M50* 77.0 1.5 1.5 1.3 34 ~ NK BRAND S37-N4** 76.6 7.7 3.6 1.5 1.3 34 ~ NK BRAND S37-N4** 76.6 74.3 2.5 1.9 37 ~ PIONEER VARIETY 93B67* 76.4 71.8 2.0 1.6 37 ~ SOUTHERN STATES RT 3850N** 76.4 1.8 34 ~ SOUTHERN STATES RT 3850N** 76.4 1.8 34 ~ SOUTHERN STATES RT 3955 76.3 68.8 2.8 2.3 38 ~ DYNAGRO 33.A37 PRAIRIE STREAM FARMS PSF 355N* 74.4 2.5 34 ~ PERAIRIE STREAM FARMS PSF 3903NRR 72.4 2.5 33 ~ DELTA KING DK 3964 RR* 72.8 3.0 40 ~ PRAIRIE STREAM FARMS PSF 3903NRR 72.4 2.5 35 ~ SOUTHERN STATES RT 3802N*** 77.8 1.0 2.8 ~ SOUTHERN STATES RT 3940N** 77.8 1.0 2.9 NS IA3022 (large seed, high-protein) 68.8 1.0 2.9 NS IA3022 (large seed, high-protein) 66.7 2.5 32 ~ SOUTHERN STATES RT 3940N** 64.7 2.0 3.7 NS IA3021Lf (lipoxygenase free) 61.2 3.0 2.9 NS IA302BLf (lipoxygenase free) 61.2 3.0 2.9 NS PIONEER VARIETY P9305 (tofu type) 57.8 59.1 1.0 1.0 27 GROUP III AVERAGE 76.5 72.4 1.8 1.6 41 ~ STEVER 4700 RR SCN** 88.5 2.8 ~ DELTA KING DK 461 RR 87.1 80.0 2.5 2.3 41 ~ STEVER 4900 RR SCN** 88.5 2.8 ~ DELTAGROW 4340 RR** 86.5 2.3 3.9 ~ DELTAGROW 4340 RR** 86.5 2.3 3.9 ~ DELTAGROW 4300 RR** 88.5 2.8 ~ STEVER 4700 RR SCN** 88.5 2.8 ~ DELTAGROW 4300 RR** 88.5 2.3 3.0 3.0 ~ DELTAGROW 4300 RR** 88.5 2.3 3.0 ~ DELTAGROW 4300 RR** 88.5 2.3 3.0 ~ DELTAGROW 4300 RR** 88.5 2.3 3.0 ~ DELTAGROW 4300 RR** 88.5 3.0 ~ DELTAGROW 4340 RR** 88.5 3.0 ~ DELTAGROW 4300 RR** 88.5 3.0 ~ DELTAG	~ GOLDEN HARVEST H3921RR*	78.6	78.0	1.3	1.6	35	9/26
CROPLAN GENETICS RC3964RR** CDEXALB DK838-52* 77.0 73.7 DEXALB DK838-52* 77.0 73.7 T.5 A 34 PIONEER VARIETY 93M50* 77.0 A 1.5 B 39 GOLDEN HARVEST H3945RR** 76.6 77.0 A 1.5 PIONEER VARIETY 93M50* PRAIRE STRES RT 3850N** PRAIRE STRES RT 3850N** PRAIRE STRES RT 3850N** PRAIRE STRES RT 3850N** PRAIRE STREAM FARMS PSF 355N* PRAIRE STREAM FARMS PSF 355N* PRAIRE STREAM FARMS PSF 355N* PRAIRE STREAM FARMS PSF 3903NRR PRAIRE STREAM FARMS PSF							9/24
~ DEKALR DKB38-52*	The state of the s		74.7		1.3		9/26
~ PIONEER VARIETY 93M50* GOLDEN HARVEST H3945RR** 76.7 GOLDEN HARVEST H3945RR** 76.6 77.3 77.0			72.7				9/21
~ GOLDEN HARVEST H3945RR**			/3./		1.4		9/22 9/22
~ NK BRAND S37-M4**			73.6		1 3		9/22
~ PIONEER VARIETY 93B67*							9/26
~ SOUTHERN STATES RT 3975							9/25
~ DYNAGRO 33A37	 SOUTHERN STATES RT 3850N** 	76.4		1.8		34	9/21
PRAIRIE STREAM FARMS PSF 355N*			68.8		2.3		9/24
~ DELTA KING DK 3964 RR*							9/22
~ PRAIRIE STREAM FARMS PSF 3903NRR 72.4 2.5 35 35							9/20
P IA 3023							9/26 9/22
~ SOUTHERN STATES RT 3802N** NS IA3021 (large seed, high-protein) 68.8 NS IA3021 (large seed, high-protein) 66.7 ~ SOUTHERN STATES RT 3940N** NS IA3022 (large seed, high-protein) 66.7 ~ SOUTHERN STATES RT 3940N** NS IA3032LF (lipoxygenase free) 63.9 NS IA303LF (lipoxygenase free) 61.2 NS IO404 No.2 NS IO404 N							9/20
NS IA3022 (large seed, high-protein) 66.7 2.5 32 32			64.4		2.1		9/22
~ SOUTHERN STATES RT 3940N** NS IA3012LF (lipoxygenase free) 63.9 61.4 2.0 1.5 24 NS IA3008LF (lipoxygenase free) 61.2 3.0 29 NS PIONEER VARIETY P9305 (tofu type) 57.8 59.1 1.0 1.0 27 GROUP III AVERAGE LSD (0.10) 6.6 4.0 4.0 4.0 4.0 4.0 4.0 4.0	NS IA3021 (large seed, high-protein)	68.8		1.0		29	9/22
NS IA3012LF (lipoxygenase free) 63.9 61.4 2.0 1.5 24 NS IA3008LF (lipoxygenase free) 61.2 3.0 29 NS PIONEER VARIETY P9305 (tofu type) 57.8 59.1 1.0 1.0 27 GROUP III AVERAGE 76.5 72.4 1.8 1.6 35 LSD (0.10) 6.6 4.0 0.4 0.3 2.4 MID-SEASON (GROUP IV) ***HELLENA BRAND SEED 4375*** **SEED CONSULTANTS SC 9442 RR**** **SEED CONSULTANTS SC 9442 RR*** **SEED CONSULTANTS SC 9442 RR*** **B8.5 2.8 37 2.2 3 40 2.5 2.3 41 2.5 2.3 41 2.5 2.3 2.4 40 2.5 2.3 41 2.5 2.5 2.3 41 2.5 2.5 2.3 41 2.5 2.5 2.3 2.4 40 2.5 2.3 2.4 40 2.5 2.3 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5							9/25
NS IA3008LF (lipoxygenase free) NS PIONEER VARIETY P9305 (tofu type) S7.8 59.1 1.0 1.0 27 GROUP III AVERAGE LSD (0.10) 6.6 4.0 0.4 0.3 2.4 MID-SEASON (GROUP IV) HELLENA BRAND SEED 4375* SEED CONSULTANTS SC 9442 RR** SEED CONSULTANTS SC 9442 RR** DELTA KING DK 4461 RR STEYER 4900 RR SCN** DELTAGROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 4630 RR* HORNBECK HBK R4820 UNISOUTH GENETICS USG 7484nRR** NOUTH GENETICS USG 7484nRR** CROPLAN GENETICS USG 7494nRR** SOUTHERN CROSS TITUS 4.8N, RR** SOUTHERN CROSS AARON 4.5N, STS** SOUTHERN VARIETY 94M70* SITURD AND ACT AND A			64.4		4.5		9/26
NS PIONEER VÄRIETY P9305 (tofu type) GROUP III AVERAGE LSD (0.10) AMID-SEASON (GROUP IV) HELLENA BRAND SEED 4375* SEED CONSULTANTS SC 9442 RR** STEYER 4900 RR SCN** DELTA KING DK 4461 RR STEYER 4700 RR SCN** DELTA GROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 4630 RR* HORNBECK HBK R4820 UNISOUTH GENETICS USG 7484nRR** NOUTHERN CROSS TITUS 4.8N, RR** SOUTHERN CROSS TITUS 4.8N, RR** CROPLAN GENETICS USG 7494nRR** SOUTHERN CROSS AARON 4.5N, STS** SOUTHERN CROSS AARON 4.5N, STS** SOUTHERN CROSS AARON 4.5N, STS** SOUTHERN STATES RT 4230N** NOUTHERN STATES RT 4230N** SOUTHERN CROSS AARON 4.5N, STS** SOUTHERN CROSS AARON 4.5N, STS** SOUTHERN STATES RT 4230N** NOUTHERN STATES RT 4230N** SOUTHERN STATES RT 4230N** SOUT			61.4		1.5		9/12
GROUP III AVERAGE LSD (0.10) 6.6 4.0 0.4 0.3 2.4 MID-SEASON (GROUP IV) **HELLENA BRAND SEED 4375** SEED CONSULTANTS SC 9442 RR** STEYER 4900 RR SCN** DELTA KING DK 4461 RR STEYER 4700 RR SCN** DELTAGROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 450 RR* HORNBECK HBK R4820 UNISOUTH GENETICS USG 7484nRR** SOUTHERN CROSS TITUS 4.8N, RR** CROPLAN GENETICS USG 7494nRR** SOUTHERN CROSS TITUS 4.8N, RR** SOUTHERN CROSS TITUS 4.8N, RR** SOUTHERN CROSS ARON 4.5N, STS** SOUTHERN STATES RT 4230N** SOUTH SOUTH STATES RT 4230N** SOUTH SOUTH STATES RT 4230N** SOUTH S			50 1		1.0		9/14 9/13
MID-SEASON (GROUP IV)	No Frontier Viller Front (told type)	37.0	33.1	1.0	1.0	27	5/15
MID-SEASON (GROUP IV) HELLENA BRAND SEED 4375* SEED CONSULTANTS SC 9442 RR** STEYER 4900 RR SCN** DELTA KING DK 4461 RR STEYER 4700 RR SCN** DELTA KING DK 4461 RR STEYER 4700 RR SCN** B6.7 DELTAGROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 4340 RR** HORNBECK HBK R4820 UNISOUTH GENETICS USG 7484nRR** NOUTHERN CROSS TITUS 4.8N, RR** CROPLAN GENETICS RC4464RR* DUNISOUTH GENETICS USG 7494nRR** S2.3 UNISOUTH GENETICS USG 7494nRR** S2.1 SOUTHERN CROSS ARON 4.5N, STS** SUIN GORO V42N3RR** S2.1 SOUTHERN CROSS ARON 4.5N, STS** SOUTHERN STATES TA 4230N** STREET STREET STATES TA 4230N** STREET ST							9/23
 ← HELLENA BRAND SEED 4375* ← SEED CONSULTANTS SC 9442 RR** ← STEYER 4900 RR SCN** ← B8.5 ← DELTA KING DK 4461 RR ← STEYER 4700 RR SCN** ← DELTAGROW 4340 RR** ← DELTAGROW 4340 RR** ← DELTAGROW 4630 RR* ← HORNBECK HBK R4820 ← UNISOUTH GENETICS USG 7484nRR** ← B2.3 ← PIONEER VARIETY 94B73 ← CROPLAN GENETICS C4464RR* ← CROPLAN GENETICS USG 7494nRR** ← CROPLAN GENETICS USG 7494nRR** ← UNISOUTH GENETICS USG 7494nRR** ← CROPLAN GENETICS USG 7494nRR** ← UNISOUTH GENETICS C4464RR* ← CROPLAN GENETICS USG 7494nRR** ← CROPLAN GENETICS USG 7494nRR** ← UNISOUTH GENETICS USG 7494nRR** ← B2.3 ← UNISOUTH GENETICS USG 7494nRR** ← B2.1 ← CROPLAN GENETICS USG 7494nRR** ← B2.1 ← UNISOUTH GENETICS USG 7494nRR** ← B2.1 ← B2.1 ← CROPLAN GENETICS USG 7494nRR** ← B2.1 ← CROPLAN GENETICS USG 7494nRR** ← B2.1 ← B2.1 ← B2.1 ← B2.1 ← CROPLAN GENETICS USG 7494nRR** ← B2.1 ← CROPLAN GENETICS USG 7494nRR** ← B2.3 ← UNISOUTH GENETICS USG 7494nRR** ← B2.3 ← CROPLAN GENETICS USG 7494nRR** ← B2.1 ← B2.1		0.0	4.0	0.4	0.5	2.7	
~ SEED CONSULTANTS SC 9442 RR** STEYER 4900 RR SCN** DELTA KING DK 4461 RR STEYER 4700 RR SCN** DELTA KING DK 4461 RR STEYER 4700 RR SCN** DELTAGROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 4630 RR* DELTAGROW 4630 RR* HORNBECK HBK R4820 WINISOUTH GENETICS USG 7484nRR** SOUTHERN CROSS TITUS 4.8N, RR** CROPLAN GENETICS USG 7494nRR** UNISOUTH GENETICS USG 7494nRR** CROPLAN GENETICS USG 7494nRR** UNISOUTH GENETICS USG 7494nRR** SOUTHERN CROSS AARON 4.5N, STS** SOUTHERN CROSS AARON 4.5N, STS** SOUTHERN STATES RT 4230N** PIONEER VARIETY 94M70* SOUTHERN STATES RT 4230N**	MID-SEASON (GROUP IV)						
~ STEYER 4900 RR SCN** DELTA KING DK 4461 RR STEYER 4700 RR SCN** DELTA GROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 4630 RR* HORNBECK HBK R4820 UNISOUTH GENETICS USG 7484nRR** PIONEER VARIETY 94B73 SOUTHERN CROSS TITUS 4.8N, RR** CROPLAN GENETICS CSG 7494nRR** UNISOUTH GENETICS USG 7494nRR** CROPLAN GENETICS USG 7494nRR** UNISOUTH GENETICS CSG 7494nRR** SOUTHERN CROSS TITUS 4.8N, RR** SOUTHERN CROSS ARRON 4.5N, STS** SOUTHERN STATES RT 4230N** PIONEER VARIETY 94M70* SOUTHERN STATES RT 4230N** PIONEER VARIETY 94B74** SOUTHERN STATES RT 4230N** SOUTHERN STATES RT 4230N** PIONEER VARIETY 94B74** SOUTHERN STATES RT 4230N** SOUTHERN STATES							9/26
~ DELTA KING DK 4461 RR 87.1 80.0 2.5 2.3 41 ~ STEYER 4700 RR SCN** 86.7 74.9 2.3 2.4 40 ~ DELTAGROW 4340 RR** 86.5 2.3 39 ~ DELTAGROW 4630 RR* 84.1 2.5 42 ~ HORNBECK HBK R4820 84.1 80.8 2.3 2.1 40 ~ UNISOUTH GENETICS USG 7484nRR** 83.6 3.5 36 36 ~ PIONEER VARIETY 94B73 82.7 79.7 2.3 2.1 37 ~ SOUTHERN CROSS TITUS 4.8N, RR** 82.3 74.9 2.8 2.8 44 ~ CROPLAN GENETICS CRC4464RR* 82.3 2.0 39 39 ~ UNISOUTH GENETICS USG 7494nRR** 82.1 3.0 37 ~ LG SEEDS C4910NRR* 82.1 3.3 36 SOUTHERN CROSS AARON 4.5N, STS** 82.0 75.8 2.8 2.4 37 ~ VIGORO V42N3RR** 81.9 74.6 1.3 1.1 34 34 ~ TRISOY 4697RR(CN)** 81.9 2.3 40 40 40 ~ PIONEER VARIE			78.9		1.6		9/27
~ STEYER 4700 RR SCN** DELTAGROW 4340 RR** DELTAGROW 4340 RR** DELTAGROW 4630 RR* HORNBECK HBK R4820 UNISOUTH GENETICS USG 7484nRR** SOUTHERN CROSS TITUS 4.8N, RR** CROPLAN GENETICS RC4464RR* UNISOUTH GENETICS SCG 7494nRR** CROPLAN GENETICS RC4464RR* SOUTHERN CROSS TITUS 4.8N, RR** CROPLAN GENETICS RC4464RR* SOUTHERN CROSS ARON 4.5N, STS** VIGORO V42N3RR** TRISOY 4697RR(CN)** PIONEER VARIETY 94M70* SOUTHERN STATES RT 4230N** PIONEER VARIETY 94B74** SOUTHERN STATES RT 4230N** PIONEER VARIETY 94B74** SOUTHERN STATES RT 4230N** PIONEER VARIETY 94B74** SOUTHERN STATES RT 4230N** REAL STATES RT 4230N** REAL STATES RT 4230N** SOUTHERN STATES RT 4230N** PIONEER VARIETY 94B74** SOUTHERN STATES RT 4230N** REAL STATES RT 4230N** SOUTHERN STATES RT 4230N** REAL STATES RT 4230N** SOUTHERN STATES RT 4230N** REAL			80.0		2.3		9/28 9/28
~ DELTAGROW 4340 RR** 86.5 2.3 39 ~ DELTAGROW 4630 RR* 84.1 2.5 42 ~ HORNBECK HBK R4820 84.1 80.8 2.3 2.1 40 ~ UNISOUTH GENETICS USG 7484nRR** 83.6 3.5 36 ~ PIONEER VARIETY 94B73 82.7 79.7 2.3 2.1 37 ~ SOUTHERN CROSS TITUS 4.8N, RR** 82.3 2.0 39 ~ UNISOUTH GENETICS RC4464RR* 82.3 2.0 39 ~ UNISOUTH GENETICS USG 7494nRR** 82.1 3.0 37 ~ LG SEEDS C4910NRR* 82.1 3.0 37 ~ UIGSEDTS C4910NRR* 82.1 3.3 36 SOUTHERN CROSS AARON 4.5N, STS** 82.0 75.8 2.8 2.4 37 ~ VIGORO V42N3RR** 81.9 74.6 1.3 1.1 34 ~ TRISOY 4697RR(CN)** 81.9 2.3 40 ~ PIONEER VARIETY 94M70* 81.8 75.7 3.3 2.8 40 ~ SOUTHERN STATES RT 4230N** 81.8 75.7 3.5 3.4 44 ~ CROW'S C4815R**							9/28
~ DELTAGROW 4630 RR* 84.1 2.5 42 ~ HORNBECK HBK R4820 84.1 80.8 2.3 2.1 40 ~ UNISOUTH GENETICS USG 7484nRR** 83.6 3.5 36 ~ PIONEER VARIETY 94B73 82.7 79.7 2.3 2.1 37 ~ SOUTHERN CROSS TITUS 4.8N, RR** 82.3 74.9 2.8 2.8 44 ~ CROPLAN GENETICS CC4464RR* 82.3 2.0 39 9 ~ UNISOUTH GENETICS USG 7494nRR** 82.1 3.0 37 ~ LG SEEDS C4910NRR* 82.1 3.3 36 SOUTHERN CROSS AARON 4.5N, STS** 82.0 75.8 2.8 2.4 37 ~ VIGORO V42N3RR** 81.9 74.6 1.3 1.1 34 34 ~ TRISOY 4697RR(CN)** 81.9 2.3 40 40 ~ PIONEER VARIETY 94M70* 81.8 75.7 3.3 2.8 40 ~ PIONEER VARIETY 94B74** 81.7 75.7 3.5 3.4 44 ~ CROW'S C4815R** 81.3 76.0 2.8 2.4 42 ~ ASGROW AG420			,				9/25
~ UNISOUTH GENETICS USG 7484nRR** 83.6 ~ PIONEER VARIETY 94B73 82.7 79.7 2.3 2.1 37 ~ SOUTHERN CROSS TITUS 4.8N, RR** 82.3 74.9 2.8 2.8 44 ~ CROPLAN GENETICS RC4464RR* 82.3 2.0 39 ~ UNISOUTH GENETICS USG 7494nRR** 82.1 3.0 37 ~ LG SEEDS C4910NRR* 82.1 3.3 36 ~ SOUTHERN CROSS AARON 4.5N, STS** 82.0 75.8 2.8 2.4 37 ~ VIGORO V42N3RR** 81.9 74.6 1.3 1.1 34 ~ TRISOY 4697RR(CN)** 81.9 2.3 40 ~ PIONEER VARIETY 94M70* 81.8 75.7 3.3 2.8 40 ~ SOUTHERN STATES RT 4230N** 81.8 76.3 2.0 1.6 35 ~ PIONEER VARIETY 94B74** 81.7 75.7 3.5 3.4 44 ~ CROW'S C4815R** 81.3 76.0 2.8 2.4 42 ~ ASGROW AG4201** 81.2 77.5 2.5 2.4 36							10/2
 PIONEER VARIETY 94B73 SOUTHERN CROSS TITUS 4.8N, RR** CROPLAN GENETICS RC4464RR* B2.3 UNISOUTH GENETICS USG 7494nRR** B2.1 SOUTHERN CROSS AARON 4.5N, STS** VIGORO V42N3RR** TRISOY 4697RR(CN)** PIONEER VARIETY 94M70* SOUTHERN STATES RT 4230N** PIONEER VARIETY 94B74** PIONEER VARIETY 94B74** PIONEER VARIETY 94B74** T7.7 <li< td=""><td>~ HORNBECK HBK R4820</td><td>84.1</td><td>80.8</td><td></td><td>2.1</td><td>40</td><td>9/27</td></li<>	~ HORNBECK HBK R4820	84.1	80.8		2.1	40	9/27
~ SOUTHERN CROSS TITUS 4.8N, RR** 82.3 74.9 2.8 2.8 44 ~ CROPLAN GENETICS RC4464RR* 82.3 2.0 39 ~ UNISOUTH GENETICS USG 7494nRR** 82.1 3.0 37 ~ LG SEEDS C4910NRR* 82.1 3.3 36 SOUTHERN CROSS AARON 4.5N, STS** 82.0 75.8 2.8 2.4 37 ~ VIGORO V42N3RR** 81.9 74.6 1.3 1.1 34 ~ TRISOY 4697RR(CN)** 81.9 2.3 40 ~ PIONEER VARIETY 94M70* 81.8 75.7 3.3 2.8 40 ~ SOUTHERN STATES RT 4230N** 81.8 76.3 2.0 1.6 35 ~ PIONEER VARIETY 94B74** 81.7 75.7 3.5 3.4 44 ~ CROW'S C4815R** 81.3 76.0 2.8 2.4 42 ~ ASGROW AG4201** 81.2 77.5 2.5 2.4 36							9/27
~ CROPLAN GENETICS RC4464RR* 82.3 2.0 39 ~ UNISOUTH GENETICS USG 7494nRR** 82.1 3.0 37 ~ LG SEEDS C4910NRR* 82.1 3.3 36 SOUTHERN CROSS AARON 4.5N, STS** 82.0 75.8 2.8 2.4 37 ~ VIGORO V42N3RR** 81.9 74.6 1.3 1.1 34 ~ TRISOY 4697RR(CN)** 81.9 2.3 40 ~ PIONEER VARIETY 94M70* 81.8 75.7 3.3 2.8 40 ~ SOUTHERN STATES RT 4230N** 81.8 76.3 2.0 1.6 35 ~ PIONEER VARIETY 94B74** 81.7 75.7 3.5 3.4 44 ~ CROW'S C4815R** 81.3 76.0 2.8 2.4 42 ~ ASGROW AG4201** 81.2 77.5 2.5 2.4 36							9/29
~ UNISOUTH GENETICS USG 7494nRR** 82.1 3.0 37 ~ LG SEEDS C4910NRR* 82.1 3.3 36 SOUTHERN CROSS AARON 4.5N, STS** 82.0 75.8 2.8 2.4 37 ~ VIGORO V42N3RR** 81.9 74.6 1.3 1.1 34 ~ TRISOY 4697RR(CN)** 81.9 2.3 40 ~ PIONEER VARIETY 94M70* 81.8 75.7 3.3 2.8 40 ~ SOUTHERN STATES RT 4230N** 81.8 76.3 2.0 1.6 35 ~ PIONEER VARIETY 94B74** 81.7 75.7 3.5 3.4 44 ~ CROW'S C4815R** 81.3 76.0 2.8 2.4 42 ~ ASGROW AG4201** 81.2 77.5 2.5 2.4 36	,		74.9		2.8		10/3
~ LG SEEDS C4910NRR* 82.1 3.3 36 SOUTHERN CROSS AARON 4.5N, STS** 82.0 75.8 2.8 2.4 37 SOUTHERN CROSS AARON 4.5N, STS** 81.9 74.6 1.3 1.1 34 TRISOY 4697RR(CN)** 81.9 2.3 40 SOUTHERN STATES RT 4230N** 81.8 75.7 3.3 2.8 40 SOUTHERN STATES RT 4230N** 81.8 76.3 2.0 1.6 35 SOUTHERN STATES RT 4230N** 81.8 75.7 3.5 3.4 44 CROW'S C4815R** 81.3 76.0 2.8 2.4 42 ASGROW AG4201** 81.2 77.5 2.5 2.4 36							9/27 9/28
SOUTHERN CROSS AARON 4.5N, STS** **VIGORO V42N3RR** **TRISOY 4697RR(CN)** **PIONEER VARIETY 94M70* **SOUTHERN STATES RT 4230N** **PIONEER VARIETY 94B74** **PIONEER VARIETY 94B74** **SOUTHERN STATES RT 4230N**							9/28
~ VIGORO V42N3RR** 81.9 74.6 1.3 1.1 34 ~ TRISOY 4697RR(CN)** 81.9 2.3 40 9 ~ PIONEER VARIETY 94M70* 81.8 75.7 3.3 2.8 40 9 ~ SOUTHERN STATES RT 4230N** 81.8 76.3 2.0 1.6 35 9 ~ PIONEER VARIETY 94B74** 81.7 75.7 3.5 3.4 44			75.8		2.4		9/28
 PIONEER VARIETY 94M70* SOUTHERN STATES RT 4230N** PIONEER VARIETY 94B74** 81.8 76.3 1.6 35 PIONEER VARIETY 94B74** 75.7 3.5 44 CROW'S C4815R** ASGROW AG4201** 81.2 77.5 2.5 33 40 35 44 42 42 42 43 44 42 43 44 44 45 46 47 47 42 43 44 44 45 46 47 47 40 40<!--</td--><td>~ VIGORO V42N3RR**</td><td>81.9</td><td></td><td>1.3</td><td></td><td>34</td><td>9/25</td>	~ VIGORO V42N3RR**	81.9		1.3		34	9/25
~ SOUTHERN STATES RT 4230N** 81.8 76.3 2.0 1.6 35 ~ PIONEER VARIETY 94B74** 81.7 75.7 3.5 3.4 44 ~ CROW'S C4815R** 81.3 76.0 2.8 2.4 42 ~ ASGROW AG4201** 81.2 77.5 2.5 2.4 36	` ,						9/27
~ PIONEER VARIETY 94B74** 81.7 75.7 3.5 3.4 44 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9							9/28
~ CROW'S C4815R** 81.3 76.0 2.8 2.4 42 ~ ASGROW AG4201** 81.2 77.5 2.5 2.4 36							9/24
~ ASGROW AG4201** 81.2 77.5 2.5 2.4 36							9/27 10/3
							9/29
31114E 3 10 1E T	CTIVE CARACTER AND	81.0		3.3		37	9/26
							9/24

TABLE 7. 2004 FAYETTE CO. FULL-SEASON VARIETY TEST.

		YIELD (I	BU/AC)A	LOD	GING	PLANT HEIGHT (IN)	MATURITY DATE
	BRAND — VARIETY	2004	03-04	2004	03-04	2004	2004
~	VIGORO V47N3RR**	80.8	78.0	2.0	2.0	39	10/3
~	HELLENA BRAND SEED 4875*	80.7		3.5		37	9/28
~	GREAT LAKES GL 4409 RR**	80.7	75.5	2.0	1.9	39	9/24
~	GOLDEN HARVEST H4273RR**	80.6		2.5		47	9/22
~	UNISOUTH GENETICS USG 7499nRR**	80.3		2.5		43	9/30
~	VIGORO V48N5RR*	80.1		3.5		40	10/3
~	GARST SEED 4512RR/N	80.1		2.3		40	9/24
~	ASGROW AG4801* EXCEL BRAND 8492NRR*	80.0 80.0		1.8 3.8		36 43	10/3 10/5
~	ASGROW AG4603	79.8		2.3		41	9/27
~	ASGROW AG4403*	79.7	73.3	2.0	2.0	41	9/27
~	DELTA KING DK 4967 RR*	79.5	75.1	2.8	2.8	37	10/4
~	DELTAGROW 4860 RR**	79.3		2.5		40	9/28
~	DELTA KING DK 4763 RR	79.2	77.7	2.8	2.5	39	10/3
~	SOUTHERN STATES RT 4810N**	79.2	74.3	2.5	2.4	43	10/1
~	DEKALB DKB46-51**	79.1	76.7	2.8	2.6	43	10/1
~	DELTAGROW 4840 RR**	78.8		3.0		36	9/27
~	PRAIRIE STREAM FARMS PSF 4004NRR* DELTA KING DK 4868 RR	78.7 78.3	78.1	1.0 2.0	2.0	31 40	9/21 9/29
~	TRISOY 4838RR(CN)*	78.2	70.1	2.5	2.0	34	10/3
~	BIO GENE BG 4205NRR	78.0		2.5		42	9/22
~	DELTA AND PINE LAND DPX4891RR**	77.9		3.0		38	9/28
~	SOUTHERN STATES RT 4980	77.9	74.7	3.0	2.9	41	9/28
~	BIO GENE BG 4200NRRST**	77.8	75.2	1.0	1.0	32	9/23
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	77.5	72.8	1.0	1.1	35	9/27
~	LG SEEDS C4343NRR**	77.5		2.3		40	9/25
~	NK BRAND S43-B1**	77.5	73.7	2.3	2.3	37	9/24
~	SEED CONSULTANTS SC 9415 RR** SOUTHERN STATES RT 4502N**	77.5 77.4	70.0	1.0 2.8	2.4	30 39	9/23 9/26
	GATEWAY GX98-0609 (high oil)	77. 4 76.9	70.0	2.8	2.4	39	9/24
~	CROPLAN GENETICS RC4013RR**	76.8	7 2.7	2.5	2.7	33	9/26
~	PIONEER VARIETY 94B13*	76.4	71.1	2.5	2.3	39	9/24
~	GARST SEED 4112RR/N*	76.3		1.0		32	9/21
~	STINE S4542-4**	76.1	74.1	3.0	2.6	41	9/28
~	UNISOUTH GENETICS USG 7482nRR**	76.1	70.1	2.5	2.4	38	10/1
~	NK BRAND S49-Q9**	76.0	73.5	2.8	2.4	39	10/3
~	PRAIRIE STREAM FARMS PSF 4102NRR**	75.9	60 F	1.5	2.5	39	9/26
	CAVERNDALE CF 461 CROPLAN GENETICS RC4842RR**	75.7 75.7	69.5	2.8 2.8	2.5	41 38	9/29 10/2
~	EXCEL BRAND 8412NRR*	75.7 75.7		2.8		41	9/22
~	CROW'S C4418R**	75.6		2.0		40	9/26
NS	GATEWAY GX99-0112 (clear hilum)	75.5		3.0		46	9/26
~	HORNBECK HBK R4623**	75.3		3.8		43	10/1
~	SOUTHERN CROSS JONAH 4.8 N, RR**	75.3	71.7	2.8	2.6	37	10/2
~	BECK 434NRR**	74.5		2.0		40	9/23
~	GREAT LAKES GL 4009 RR**	74.4	71.7	1.0	1.0	32	9/23
	CAVERNDALE CF 492	74.4	72.8	2.8	2.5	30	10/4
~	DYNAGRO 3443** DELTA AND PINE LAND DP 4748 S	74.3 74.1	72.4	2.5 3.0	2.1	40 45	9/26 9/29
~	HORNBECK HBK R4945CX**	72.2		3.0		41	9/26
~	GREAT LAKES GL 4809 RR**	72.1		3.3		44	9/26
NS	GATEWAY GX98-1006 (high protein)	72.0		2.0		39	9/26
~	SOUTHERN STATES RT 4440N**	71.8		2.5		41	9/28
~	ASGROW AG4102**	71.7		2.0		39	9/23
~	EXCEL BRAND 8448NRR*	71.1	70.5	1.0	1.1	35	9/26
~	PIONEER VARIETY 94M90*	71.1	60.0	3.0	1.0	40	9/30
~ ~	SOUTHERN STATES RT 4098 DELTAGROW 4960 RR**	69.9 68.5	69.8	2.0 3.3	1.9	38 48	9/22 10/24
	KS4303sp (small seeded variety)	67.5		2.8		29	9/27
	GATEWAY GX99-0111 (high oil)	67.1		3.0		45	9/28
	GATEWAY GX97-1418 (high protein)	67.0		3.5		36	10/4
	GATEWAY LS94-3207 (high protein)	66.2		3.3		32	10/5
NS	KS4103sp (high protein variety)	65.4		4.0		43	9/27
~	HORNBECK HBK R4023*	64.4		4.3		34	9/26
~	DELTA AND PINE LAND DP 4546 RR	63.2		4.0		40	9/30
	\$02-7998 (natto)	61.4	F2 2	3.3	2.1	42	10/17
	IA4002 (small seed) S02-7955 (natto)	57.1	53.2	3.0	3.1	41 35	9/20 10/17
INO	302 / 333 (Hattu)	55.9		2.5		33	10/17
	GROUP IV AVERAGE	77.0	74.1	2.5	2.2	39	9/28
	LSD (0.10)	5.6	4.0	0.4	0.3	3.0	-

TABLE 7. 2004 FAYETTE CO. FULL-SEASON VARIETY TEST.

		YIELD (I	BU/AC)A	LOD	GING	PLANT HEIGHT (IN)	MATURITY DATE
	BRAND — VARIETY	2004	03-04	2004	03-04	2004	2004
	LATE (GROUP V)						
	DELTA AND PINE LAND DP 5110 S	83.8		3.0		48	10/5
~	GOLDEN HARVEST H5053RR*	78.8		3.0		39	9/27
~	VIGORO V50N5RR**	78.4		3.0		37	9/27
~	HORNBECK HBK R4924** EXCEL BRAND 8509NRR*	78.1 78.0		3.0 2.5		48 45	10/5 10/8
~	SOUTHERN STATES RT 5602N**	73.9	65.7	3.3	3.9	37	10/15
~	PIONEER VARIETY 95B42*	73.2	65.8	3.3	3.5	49	10/18
~	DELTAGROW 5260 RR**	72.0		3.5		45	10/22
Р	DELSOY 5500**	72.0	63.0	3.3	3.1	40	10/22
~	STINE S5142-4**	72.0	70.3	3.0	3.0	39	9/27
~	ASGROW AG5301**	70.6	63.2	3.3	3.6	44	10/17
~	STEYER 5300 RR SCN**	70.3 69.9		2.8		39 42	10/22 10/25
~ D	CROPLAN GENETICS RC5003RR** TEEJAY	69.9 69.8		3.5 2.8		42 38	10/25
~	CROPLAN GENETICS RC5222RR**	69.2		4.0		46	10/24
~	UNISOUTH GENETICS USG 7514nRR**	69.1		4.0		44	10/24
	UNISOUTH GENETICS USG 5601T	68.8	64.3	3.0	3.5	41	10/24
~	NK BRAND S50-N3**	68.7		3.3		42	10/10
~	PIONEER VARIETY 95B32**	68.4	59.3	3.5	3.5	39	10/19
~	SOUTHERN CROSS ABNER 5.2 N, RR**	67.4	63.4	4.0	4.0	45	10/20
~	SOUTHERN STATES RT 5540N** ASGROW AG5605*	67.2	62.2	3.3	4.0	51 40	10/21
~ NS	GATEWAY GX98-1809 (high protein)	67.1 66.6	63.2	4.0 2.3	4.0	40	10/25 10/13
~	SOUTHERN STATES RT 5001N**	66.5	57.8	3.0	3.4	52	10/15
NS	TARA (forage)	66.4		3.3		62	10/1
NS	KS5202sp (high protein variety)	66.1	60.2	3.8	3.6	37	10/19
~	SOUTHERN STATES RT 5130N**	65.6		3.8		47	10/24
	UNISOUTH GENETICS USG 5002T	65.2	63.1	4.0	4.0	39	10/12
~ NC	DELTA KING DK 5161 RR**	64.8	62.4	4.0	4.0	42	10/22
~	KS1614sp (large seeded variety) SOUTHERN STATES RT 5450N**	64.5 64.5		3.0 3.5		32 50	10/11 10/23
~	DYNAGRO 33B52**	64.4	63.6	3.3 4.3	4.4	40	10/23
~	SOUTHERN STATES RT 5302N**	64.2	58.8	3.0	3.0	44	10/20
~	VIGORO V55N5RR**	64.0		3.0		52	10/25
~	UNISOUTH GENETICS USG 510nRR**	63.5	58.3	3.5	3.5	47	10/24
~	DELTAGROW 5460 RR**	63.0		4.0		41	10/25
~		61.6	50.0	3.5	4.4	54	10/24
	GATEWAY GX98-2033 (high protein)	60.0	58.8	4.0	4.1	37	10/6
~ P	EXCEL BRAND 8520NRR* ANAND**	59.3 58.6	59.7	3.8 2.8	3.1	39 36	10/20 10/18
~	UNISOUTH GENETICS USG 7523nRR**	58.3	39.7	3.3	٦.١	49	10/18
~	DELTA KING DK 5465 RR*	57.4	57.3	3.5	3.4	38	10/25
NS	MOONCAKE (edible)	55.8		4.0		57	10/7
	KS5003sp (small seeded variety)	55.5		4.8		31	10/4
	S02-8984 (natto)**	54.8		4.0		40	10/25
	S02-8136 (natto)	54.5	F2.2	4.5	2.0	38	10/17
	HUTCHESON S02-9134 (natto)	54.4 52.0	53.3	3.8	3.8	40	10/26
NS ~		53.9 51.8		3.5 3.5		40 44	10/25 10/25
~	DELTA KING DK 5316 DELTA KING DK 5366 RR	42.3	46.1	4.3	4.3	52	10/25
							,
	GROUP V AVERAGE	65.5	60.8	3.5	3.7	43	10/17
	LSD (0.10)	6.1	4.2	0.5	0.3	5	
	CDAND MEAN	72.4	70.0	3.6	2.5	20.0	
	GRAND MEAN	73.4	70.0	2.6	2.5	38.9	

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 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. 2002 data for Fayette County were not available due to the 2002 central Kentucky drought.

TABLE 8. 2004 HENDERSON CO. FULL-SEASON VARIETY TEST.^A

		_	YIELD (BU/AC			LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
	EARLY (GROUP III)						
	GREAT LAKES GL 3710 RR	79.8			2.3		
	EBBERTS 1365RR**	78.6			2.5		
	NK BRAND S35-F9	77.5	60.0		2.3	1.0	
	GOLDEN HARVEST H3921RR*	76.8	68.8	61.3	2.5	1.8	1 /
	NK BRAND S39-Q4 PIONEER VARIETY 93M90*	76.4 74.6	70.8 71.0	61.2	2.3 2.0	1.6 1.8	1.4
	SOUTHERN STATES RT 3802N**	74.0	67.7	55.3	2.0	2.1	1.8
	SOUTHERN CROSS ABRAHAM 3.9 N, RR**	73.8	66.1	55.5	1.0	1.0	1.0
	SOUTHERN CROSS STEPHEN 3.9 N, RR*	73.4	71.1		2.5	2.0	
	DELTA KING DK 3964 RR*	73.0			2.8		
	PIONEER VARIETY 93M50*	72.3			2.0		
	EBBERTS 1385RR	72.0			3.3		
	PRAIRIE STREAM FARMS PSF 371N**	72.0	667	FO 1	2.5	1.6	1.4
	NK BRAND S37-N4**	70.9	66.7	58.1	2.3	1.6	1.4
	DELTA AND PINE LAND DP 3861 RR* PRAIRIE STREAM FARMS PSF 3405RR	70.9 70.1			2.3 1.8		
	PRAIRIE STREAM FARMS PSF 3903NRR	69.6			2.5		
	GARST SEED 3824RR/N*	68.9	65.8		1.5	1.3	
	ASGROW AG3905*	68.9	65.6		2.5	1.8	
	LG SEEDS C3999NRR**	68.4			2.0		
,	GOLDEN HARVEST H3945RR**	68.2	63.9	57.6	2.0	1.5	1.3
	VIGORO V39N4RR**	67.8			1.5		
	DELTA KING DK 3968 RR*	67.7	63.9	54.9	2.5	1.8	1.5
	DEKALB DKB38-52*	67.6	65.0	54.5	1.3	1.1	1.1
	DYNAGRO 33A37 PRAIRIE STREAM FARMS PSF 355N*	67.5 66.4			2.3 2.5		
	VIGORO V38N5RS**	65.7			1.8		
	DEKALB DKB36-52*	65.4			1.0		
	PIONEER VARIETY 93B67*	65.4	61.6	54.9	2.0	1.8	1.5
	SOUTHERN STATES RT 3850N**	65.4			2.5		
,	SOUTHERN STATES RT 3975	65.2	57.2	50.6	3.3	2.1	1.8
,	DELTA AND PINE LAND DPX3950RR**	63.3			1.5		
	CROPLAN GENETICS RC3964RR**	62.2			2.3		
	IA 3023	59.6			2.0		
	SOUTHERN STATES RT 3940N**	58.9			3.0		
	IA3008LF (lipoxygenase free)	55.3	F2.6	40.2	3.5	1.0	1.0
	PIONEER VARIETY P9305 (tofu type) IA3021 (large seed, high-protein)	53.9 53.8	52.6	40.3	1.0 1.0	1.0	1.0
	IA3012LF (lipoxygenase free)	53.3	53.6		2.0	1.8	
	IA3022 (large seed, high-protein)	49.3	33.0		1.5	1.0	
	GROUP III AVERAGE	67.6	64.4	54.2	2.1	1.7	1.4
	LSD (0.10)	7.4	5.1	4.1	0.7	0.5	0.3
	MID-SEASON (GROUP IV)						
	DELTA KING DK 4868 RR	86.9	77.6	63.4	2.8	2.3	1.8
	HELLENA BRAND SEED 4375*	86.4			2.8		
	HORNBECK HBK R4820	85.9	75.9	61.9	3.0	2.1	1.8
	DELTA KING DK 4967 RR* CAVERNDALE CF 461	85.1	77.8	F7.0	3.0	2.6	2.7
	DELTA KING DK 4461 RR	84.4 84.4	73.4 78.5	57.8 63.9	4.0 3.0	3.0 2.4	2.7 1.9
	UNISOUTH GENETICS USG 7494nRR**	84.3	76.3	03.9	3.8	2.4	1.9
	VIGORO V42N3RR**	84.0	78.8	67.3	2.8	2.0	1.8
	LG SEEDS C4910NRR*	83.6			3.5		
,	SEED CONSULTANTS SC 9415 RR**	82.7			2.0		
	STEYER 4900 RR SCN**	82.0			3.3		
	TRISOY 4838RR(CN)*	81.7			3.3		
	PIONEER VARIETY 94M70*	81.3	73.6		3.8	3.0	
,		80.3	74.9	60.4	2.8	2.1	1.8
	DYNAGRO 3443**	80.3	72.0	62.7	2.8	2.4	2.0
	GARST SEED 4512RR/N			63.7	3.0	2.4	2.0
	GARST SEED 4512RR/N VIGORO V47N3RR**	80.2	72.0		4 h		
	GARST SEED 4512RR/N VIGORO V47N3RR** DELTAGROW 4860 RR**	80.2 80.2	72.0		3.5 2.8		
	GARST SEED 4512RR/N VIGORO V47N3RR** DELTAGROW 4860 RR** DELTAGROW 4340 RR**	80.2	71.4		2.8	3.3	
	GARST SEED 4512RR/N VIGORO V47N3RR** DELTAGROW 4860 RR**	80.2 80.2 79.7				3.3	
,	GARST SEED 4512RR/N VIGORO V47N3RR** DELTAGROW 4860 RR** DELTAGROW 4340 RR** GATEWAY GX98-0609 (high oil)	80.2 80.2 79.7 79.6		58.7	2.8 4.3	3.3 2.3	1.9
	GARST SEED 4512RR/N VIGORO V47N3RR** DELTAGROW 4860 RR** DELTAGROW 4340 RR** GATEWAY GX98-0609 (high oil) CROPLAN GENETICS RC4842RR** GREAT LAKES GL 4409 RR** STINE S4842-4**	80.2 80.2 79.7 79.6 79.5	71.4	58.7	2.8 4.3 3.8 3.0 3.5		1.9
	GARST SEED 4512RR/N VIGORO V47N3RR** DELTAGROW 4860 RR** DELTAGROW 4340 RR** GATEWAY GX98-0609 (high oil) CROPLAN GENETICS RC4842RR** GREAT LAKES GL 4409 RR** STINE S4842-4** DELTA AND PINE LAND DP 4331 RR*	80.2 80.2 79.7 79.6 79.5 79.3 78.8 78.6	71.4	58.7	2.8 4.3 3.8 3.0 3.5 2.8		1.9
	GARST SEED 4512RR/N VIGORO V47N3RR** DELTAGROW 4860 RR** DELTAGROW 4340 RR** GATEWAY GX98-0609 (high oil) CROPLAN GENETICS RC4842RR** GREAT LAKES GL 4409 RR** STINE S4842-4** DELTA AND PINE LAND DP 4331 RR* HORNBECK HBK R4623**	80.2 80.2 79.7 79.6 79.5 79.3 78.8 78.6 78.3	71.4 71.9		2.8 4.3 3.8 3.0 3.5 2.8 3.8	2.3	
	GARST SEED 4512RR/N VIGORO V47N3RR** DELTAGROW 4860 RR** DELTAGROW 4340 RR** GATEWAY GX98-0609 (high oil) CROPLAN GENETICS RC4842RR** GREAT LAKES GL 4409 RR** STINE S4842-4** DELTA AND PINE LAND DP 4331 RR*	80.2 80.2 79.7 79.6 79.5 79.3 78.8 78.6	71.4	58.7 59.2	2.8 4.3 3.8 3.0 3.5 2.8		1.9 2.4

TABLE 8. 2004 HENDERSON CO. FULL-SEASON VARIETY TEST.^A

		Y	IELD (BU/AC	E)B		LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
	DELTA AND PINE LAND DP 4748 S	77.2			3.8		
~	ASGROW AG4403*	77.2 77.1	72.0	59.8	2.8	2.3	1.9
	STEYER 4700 RR SCN**	76.9	69.0	60.8	2.5	2.1	1.9
	HORNBECK HBK R4945CX**	76.6			3.5		
~	ASGROW AG4801*	76.5			3.0		
	SOUTHERN CROSS MICHAEL 4.2N, RR**	76.2	72.3	65.2	2.3	1.6	1.4
	GREAT LAKES GL 4809 RR**	76.2			4.0		
	SOUTHERN CROSS JONAH 4.8 N, RR**	76.1	69.9	640	3.5	3.0	2.4
	DELTA KING DK 4763 RR	76.0	72.5	64.9	3.0	2.4	2.1
	BIO GENE BG 4200NRRST** SOUTHERN STATES RT 4980	75.9 74.9	71.9 69.8	57.7	2.3 3.5	1.6 2.8	2.2
	SEED CONSULTANTS SC 9442 RR**	74.7	72.2	61.3	3.0	2.0	1.8
	DELTA AND PINE LAND DPX4891RR**	74.5	, 2.2	01.5	4.0	2	1.0
	PRAIRIE STREAM FARMS PSF 4004NRR*	74.0			2.8		
~	SOUTHERN CROSS TITUS 4.8N, RR**	73.9	67.1	58.7	3.5	2.8	2.4
	PIONEER VARIETY 94B74**	73.5	70.7	62.7	4.0	3.0	2.6
	TRISOY 4697RR(CN)**	73.5			4.3		
	UNISOUTH GENETICS USG 7482nRR**	73.4	68.3		4.0	3.3	
	EXCEL BRAND 8448NRR*	73.2	69.2		2.0	1.5	
	\$02-7955 (natto)	72.9			2.3		
~	HELLENA BRAND SEED 4875* SOUTHERN CROSS AARON 4.5N, STS**	72.8 72.7	69.5	58.1	4.3 3.8	2.8	2.3
~	PRAIRIE STREAM FARMS PSF 4102NRR**	72.7	09.5	30.1	3.8	2.0	2.3
	NK BRAND S43-B1**	72.4	68.0		3.0	2.1	
	DEKALB DKB46-51**	72.3	66.7		2.8	2.1	
	GREAT LAKES GL 4009 RR**	72.1	66.2		2.0	1.5	
~	DELTAGROW 4840 RR**	71.5			4.0		
	UNISOUTH GENETICS USG 7484nRR**	71.5			3.8		
	ASGROW AG4201**	71.4	68.7	59.5	3.5	2.6	2.3
	ASGROW AG4603	70.7			3.5		
	EXCEL BRAND 8412NRR* NK BRAND S49-Q9**	70.4	60.0	59.6	3.0	2.4	1.9
	GARST SEED 4112RR/N*	70.2 70.1	69.0	39.0	3.0 2.5	2.4	1.9
	SOUTHERN STATES RT 4230N**	69.9	68.9		4.0	3.0	
	CROW'S C4418R**	69.5	00.5		3.0	3.0	
	BIO GENE BG 4205NRR	69.4			3.3		
~	GOLDEN HARVEST H4273RR**	69.2			3.0		
	SOUTHERN STATES RT 4502N**	68.9	62.0	53.3	3.3	2.4	1.9
	DELTAGROW 4960 RR**	68.9		===	3.0		
	CROW'S C4815R**	68.8	68.2	59.3	3.0	2.6	2.2
	SOUTHERN STATES RT 4098 PIONEER VARIETY 94B13*	68.8 68.6	65.4 65.8	53.9 54.6	3.8 3.5	2.5 2.8	2.1 2.2
	LG SEEDS C4343NRR**	68.6	03.8	34.0	2.8	2.0	2.2
	PIONEER VARIETY 94M90*	68.5			3.5		
NS	GATEWAY GX98-1006 (high protein)	68.5			3.5		
	S02-7998 (NATTO)	68.4			3.8		
NS	GATEWAY GX97-1418 (high protein)	68.1			2.3		
	GATEWAY LS94-3207 (high protein)	67.8			2.5		
	GATEWAY GX99-0111 (high oil)	67.7			3.3		
	UNISOUTH GENETICS USG 7499nRR**	67.5			4.0		
	ASGROW AG4102**	67.1	62.6		3.3	2.0	2.2
	SOUTHERN STATES RT 4810N**	66.9	63.6	55.5	3.5	2.8	2.3
	EXCEL BRAND 8492NRR* DELTAGROW 4630 RR*	66.9 66.0			3.8 4.0		
	GATEWAY GX99-0112 (clear hilum)	65.8			3.8		
	DELTA AND PINE LAND DP 4546 RR	65.7			3.8		
	CAVERNDALE CF 492	65.7	63.5	52.0	1.5	1.4	1.3
~	BECK 434NRR**	65.2			3.0		
	STINE S4542-4**	60.2	62.7		3.8	3.0	
	KS4103sp (high protein variety)	59.7			4.8		
	CROPLAN GENETICS RC4013RR**	57.5			4.3		
	SOUTHERN STATES RT 4440N**	57.3			3.3		
	HORNBECK HBK R4023*	56.7	F2 2	42.2	4.0	2.0	2.5
	IA4002 (small seed) KS4303sp (small seeded variety)	52.5 50.7	52.2	43.3	3.8 1.3	2.9	2.5
LV	אבטבדבאן (sinali seeded vallety)	30./			1.3		
	GROUP IV AVERAGE	73.1	69.9	59.1	3.3	2.5	2.0
	LSD (0.10)	8.7	4.9	3.9	0.5	0.3	0.3
	(30)	5.7		2.2	0.5	0.5	0.5

TABLE 8. 2004 HENDERSON CO. FULL-SEASON VARIETY TEST.^A

		Y	TELD (BU/AC	C) ^B		LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
	LATE (GROUP V)						
	UNISOUTH GENETICS USG 5002T	80.3	73.5		3.3	3.1	
~	VIGORO V50N5RR**	79.3			3.0		
~	HORNBECK HBK R4924**	78.8			3.0		
	UNISOUTH GENETICS USG 5601T	77.7	71.7	62.8	2.8	3.0	2.7
~	GOLDEN HARVEST H5053RR*	77.1			3.0		
~	NK BRAND S50-N3**	74.6			2.8		
~	STINE S5142-4**	74.2	70.7		3.0	2.6	
~	DELTA KING DK 5465 RR*	73.5	70.9	62.9	2.3	2.1	1.9
~	SOUTHERN STATES RT 5540N**	73.1			2.8		
~	GOLDEN HARVEST H5470RR*	73.1			2.8		
~	CROPLAN GENETICS RC5003RR**	72.4			2.8		
Р	HUTCHESON	72.1	66.3	56.3	3.0	2.8	2.3
	VIGORO V55N5RR**	71.2			3.0		
~	SOUTHERN CROSS ABNER 5.2 N, RR**	69.9	66.4		3.3	3.0	
_	DELTA AND PINE LAND DP 5110 S	69.9			3.5		
	ANAND**	69.0	63.9	57.6	3.0	2.6	2.3
Р	TEEJAY	67.9			2.8		
~	STEYER 5300 RR SCN**	67.6			2.8		
	GATEWAY GX98-1809 (high protein)	67.2			2.3		
~	CROPLAN GENETICS RC5222RR**	67.1		=0.0	3.3		
~	UNISOUTH GENETICS USG 510nRR**	66.6	66.6	58.8	2.8	2.4	2.3
~	EXCEL BRAND 8520NRR*	66.1			2.8		
~	EXCEL BRAND 8509NRR*	65.3			4.0		
	KS1614sp (large seeded variety)	64.8	62.0	F.C. 1	1.8	2.4	2.0
~	DEED CHAING DICESSOOTH	64.7	62.0	56.1	3.3	3.1	2.9
	ASGROW AG5605*	64.7	65.6		3.0	2.6	
~	DELTAGROW 5260 RR**	64.4	61.0		3.0	2.2	
	GATEWAY GX98-2033 (high protein)	63.8	61.0		2.8	3.3	
	SOUTHERN STATES RT 5450N**	63.3	62.4	F4.0	3.0	2.0	2.5
~	PIONEER VARIETY 95B42*	62.7 62.5	62.4	54.0	3.0	2.8	2.5
~ NIC	DYNAGRO 33B52** KS5202sp (high protein variety)	62.3	64.1 59.7	51.3	3.5 3.3	3.1 3.0	2.5
	DELSOY 5500**	62.3	59.7 59.4	51.5 54.6	3.3 4.0	3.3	2.5
~	DELTA KING DK 5161 RR**	62.2	65.7	34.0	3.8	3.5	2.0
~	DELTA KING DK 3101 KK DELTAGROW 5460 RR**	62.1	03.7		2.8	3.3	
~	SOUTHERN STATES RT 5302N**	61.8	60.8	55.0	2.8	2.4	2.3
~	SOUTHERN STATES RT 5502N**	60.3	62.4	57.2	3.0	2.9	2.7
~	UNISOUTH GENETICS USG 7514nRR**	59.6	02.4	37.2	3.3	2.9	2.7
~	ASGROW AG5301**	59.5	61.3	55.6	2.8	2.5	2.3
~	PIONEER VARIETY 95B32**	58.9	60.2	53.3	3.0	2.5	2.3
~	UNISOUTH GENETICS USG 7523nRR**	58.1	00.2	33.3	2.8	2.3	2.5
~	SOUTHERN STATES RT 5130N**	57.9			3.0		
~	SOUTHERN STATES RT 5001N**	57.6	53.7	49.7	2.8	2.6	2.4
~	DELTA KING DK 55T6**	56.7	33.7	13.7	3.0	2.0	
	TARA (forage)	56.7			3.0		
	MOONCAKE (edible)	55.5			3.5		
	S02-8984 (natto)**	52.7			3.5		
	S02-8136 (natto)	48.9			4.8		
	KS5003sp (small seeded variety)	43.7			2.3		
	S02-9134 (natto)	43.3			3.5		
	GROUP V AVERAGE	64.9	64.2	56.1	3.0	2.8	2.4
	LSD (0.10)	8.2	7.3	7.5	12.3	1.3	1.2
	GRAND MEAN	69.6	67.2	56.3	3.0	2.4	2.0

Roundup Ready variety.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 2002 data are from Union County, and the 2003 and 2004 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 9. 2004 MARSHALL CO. FULL-SEASON VARIETY TEST.^A

		YIELD (BU/AC			LODGING	
BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
EARLY (GROUP III)						
PIONEER VARIETY 93B67*	72.8	57.6	54.0	1.8	2.0	1.8
DELTA KING DK 3968 RR*	72.2	58.8	55.3	1.5	1.8	1.8
GARST SEED 3824RR/N*	71.2	57.6		1.5	1.4	
VIGORO V38N5RS**	70.6			1.5		
SOUTHERN CROSS ABRAHAM 3.9 N, RR**	70.5	60.3		1.5	1.3	
NK BRAND S39-Q4	70.1	50.5	46.5	1.8	1.5	1.3
GOLDEN HARVEST H3921RR*	69.6	62.5		2.8	2.5	
PIONEER VARIETY 93M90*	68.4	57.6		2.3	1.9	
LG SEEDS C3999NRR**	67.9			2.8		
EBBERTS 1385RR	67.1			3.3		
GREAT LAKES GL 3710 RR	66.7			2.5		
SOUTHERN CROSS STEPHEN 3.9 N, RR*	66.3	56.1		2.5	2.3	
DELTA AND PINE LAND DP 3861 RR*	66.1			2.5		
PRAIRIE STREAM FARMS PSF 371N**	65.9			3.3		
NK BRAND S35-F9	65.5			2.8		
EBBERTS 1365RR** DEKALB DKB38-52*	65.5	E2 2	F2.0	2.5	1.4	1.0
	65.0	53.2	52.0	1.3	1.4	1.8
ASGROW AG3905*	64.1	55.8	F2.0	2.0	1.8	2.7
NK BRAND S37-N4** PRAIRIE STREAM FARMS PSF 3903NRR	64.0 63.7	55.9	52.9	3.8 2.3	2.9	2.7
VIGORO V39N4RR**	63.7			2.5		
PRAIRIE STREAM FARMS PSF 355N*	62.5			2.5 3.0		
DELTA KING DK 3964 RR*	62.3			4.0		
GOLDEN HARVEST H3945RR**	62.2	58.8	54.9	1.5	1.6	1.5
DELTA AND PINE LAND DPX3950RR**	61.6	50.0	J-1.7	2.8	1.0	1.5
PRAIRIE STREAM FARMS PSF 3405RR	61.4			3.0		
DEKALB DKB36-52*	61.0			2.3		
PIONEER VARIETY 93M50*	60.7			2.5		
IA 3023	60.5			1.8		
PIONEER VARIETY P9305 (tofu type)	60.0	44.7	41.8	2.0	1.6	1.5
SOUTHERN STATES RT 3802N**	58.5	47.1	45.6	3.0	2.5	2.3
CROPLAN GENETICS RC3964RR**	58.5			1.8		
SOUTHERN STATES RT 3850N**	58.0			2.0		
DYNAGRO 33A37	56.2			1.5		
SOUTHERN STATES RT 3940N**	55.0			2.0		
SOUTHERN STATES RT 3975	53.7	48.4	46.7	3.3	2.8	2.6
IA3021 (large seed, high-protein)	51.6			2.0		
IA3022 (large seed, high-protein)	48.5			3.3		
IA3012LF (lipoxygenase free)	44.6	36.0		2.0	2.0	
IA3008LF (lipoxygenase free)	41.1			3.8		
GROUP III AVERAGE LSD (0.10)	62.3 7.1	53.4 5.7	50.0 4.0	2.4 0.8	2.0 0.5	1.9 0.4
	7.1	3.7	4.0	0.0	0.5	0.4
MID-SEASON (GROUP IV)	70.0			2.5		
DELTA AND PINE LAND DP 4748 S	79.9			3.5 2.8		
HELLENA BRAND SEED 4375* DELTA KING DK 4461 RR	79.4 79.2	64.3	54.4	2.8	2.1	1.8
EXCEL BRAND 8448NRR*	78.4	63.2	34.4	2.0	1.8	1.0
VIGORO V42N3RR**	77.7	62.0	55.5	1.5	1.3	1.3
SEED CONSULTANTS SC 9415 RR**	77.2	02.0	33.3	1.5	1.5	1.5
UNISOUTH GENETICS USG 7482nRR**	77.1	64.5		3.0	2.4	
DELTA AND PINE LAND DP 4331 RR*	77.0	- 110		2.8	_, .	
	76.9	62.7	54.2	2.5	2.3	2.0
DYNAGRO 3443**		65.8	57.5	2.8	2.3	2.0
DYNAGRO 3443** SEED CONSULTANTS SC 9442 RR**	76.7			4.3		
	76.7 76.4	33.0		4.5		
SEED CONSULTANTS SC 9442 RR**		65.6		4.5 3.8	3.1	
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONEER VARIETY 94M70* DELTA KING DK 4967 RR*	76.4 76.1 76.1	65.6 67.9		3.8 3.0	2.6	
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONEER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR**	76.4 76.1 76.1 76.1	65.6 67.9 63.3	58.4	3.8 3.0 1.5	2.6 1.3	
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONEER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR** HORNBECK HBK R4820	76.4 76.1 76.1 76.1 76.0	65.6 67.9	58.4 53.7	3.8 3.0 1.5 3.3	2.6	
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONEER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR** HORNBECK HBK R4820 DELTA AND PINE LAND DPX4891RR**	76.4 76.1 76.1 76.1 76.0 75.7	65.6 67.9 63.3		3.8 3.0 1.5 3.3 4.3	2.6 1.3	
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONEER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR** HORNBECK HBK R4820 DELTA AND PINE LAND DPX4891RR** DELTAGROW 4340 RR**	76.4 76.1 76.1 76.1 76.0 75.7 75.6	65.6 67.9 63.3		3.8 3.0 1.5 3.3 4.3 2.8	2.6 1.3	
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONEER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR** HORNBECK HBK R4820 DELTA AND PINE LAND DPX4891RR** DELTAGROW 4340 RR** UNISOUTH GENETICS USG 7494nRR**	76.4 76.1 76.1 76.1 76.0 75.7 75.6 75.5	65.6 67.9 63.3		3.8 3.0 1.5 3.3 4.3 2.8 4.0	2.6 1.3	
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONEER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR** HORNBECK HBK R4820 DELTA AND PINE LAND DPX4891RR** DELTAGROW 4340 RR** UNISOUTH GENETICS USG 7494nRR** LG SEEDS C4910NRR*	76.4 76.1 76.1 76.1 76.0 75.7 75.6 75.5 75.1	65.6 67.9 63.3 60.4		3.8 3.0 1.5 3.3 4.3 2.8 4.0 4.3	2.6 1.3 2.1	
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONEER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR** HORNBECK HBK R4820 DELTA AND PINE LAND DPX4891RR** DELTAGROW 4340 RR** UNISOUTH GENETICS USG 7494nRR** LG SEEDS C4910NRR* DEKALB DKB46-51**	76.4 76.1 76.1 76.0 75.7 75.6 75.5 75.1 74.9	65.6 67.9 63.3 60.4	53.7	3.8 3.0 1.5 3.3 4.3 2.8 4.0 4.3 3.8	2.6 1.3 2.1	1.9
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONBER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR** HORNBECK HBK R4820 DELTA AND PINE LAND DPX4891RR** DELTAGROW 4340 RR** UNISOUTH GENETICS USG 7494nRR** LG SEEDS C4910NRR* DEKALB DKB46-51** DELTA KING DK 4868 RR	76.4 76.1 76.1 76.1 76.0 75.7 75.6 75.5 75.1 74.9 74.7	65.6 67.9 63.3 60.4		3.8 3.0 1.5 3.3 4.3 2.8 4.0 4.3 3.8 3.3	2.6 1.3 2.1	1.9
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONEER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR** HORNBECK HBK R4820 DELTA AND PINE LAND DPX4891RR** DELTAGROW 4340 RR** UNISOUTH GENETICS USG 7494nRR** LG SEEDS C4910NRR* DEKALB DKB46-51** DELTA KING DK 4868 RR CROPLAN GENETICS RC4013RR**	76.4 76.1 76.1 76.1 76.0 75.7 75.6 75.5 75.1 74.9 74.7 74.6	65.6 67.9 63.3 60.4 57.1 61.8	53.7	3.8 3.0 1.5 3.3 4.3 2.8 4.0 4.3 3.8 3.3 3.5	2.6 1.3 2.1	1.9
SEED CONSULTANTS SC 9442 RR** HELLENA BRAND SEED 4875* PIONBER VARIETY 94M70* DELTA KING DK 4967 RR* SOUTHERN CROSS MICHAEL 4.2N, RR** HORNBECK HBK R4820 DELTA AND PINE LAND DPX4891RR** DELTAGROW 4340 RR** UNISOUTH GENETICS USG 7494nRR** LG SEEDS C4910NRR* DEKALB DKB46-51** DELTA KING DK 4868 RR	76.4 76.1 76.1 76.1 76.0 75.7 75.6 75.5 75.1 74.9 74.7	65.6 67.9 63.3 60.4	53.7	3.8 3.0 1.5 3.3 4.3 2.8 4.0 4.3 3.8 3.3	2.6 1.3 2.1	1.4 1.9

TABLE 9. 2004 MARSHALL CO. FULL-SEASON VARIETY TEST.^A

			YIELD (BU/AC	:)B		LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
~	ASGROW AG4201**	73.0	61.4	57.4	3.0	2.4	2.4
	CAVERNDALE CF 492	72.8	59.4	54.1	1.0	1.0	1.0
~	PIONEER VARIETY 94B73	72.7	54.1	46.8	3.5	2.6	2.2
~	DELTA KING DK 4763 RR	72.3	62.2	56.0	4.0	3.0	2.8
~	CROPLAN GENETICS RC4464RR*	72.2			2.3		
	GATEWAY GX98-1006 (high protein)	71.6			2.3		
	STEYER 4900 RR SCN**	71.0			3.0		
	CROPLAN GENETICS RC4842RR**	70.9			3.0		
	BIO GENE BG 4200NRRST**	70.8	57.8	F2 1	1.3	1.1	2.6
	SOUTHERN CROSS TITUS 4.8N, RR** PIONEER VARIETY 94B74**	70.6 70.6	59.5 61.5	53.1 55.1	3.8 3.8	2.9 3.3	2.6 2.9
	TRISOY 4697RR(CN)**	70.6	01.5	55.1	2.8	3.3	2.9
	GARST SEED 4112RR/N*	70.3			1.5		
	NK BRAND S49-Q9**	70.1	57.6	52.2	3.5	2.4	2.5
	BIO GENE BG 4205NRR	70.1	37.0	32.2	3.3	2	2.5
~	SOUTHERN CROSS JONAH 4.8 N, RR**	70.0	58.5		3.0	2.5	
~	STINE S4542-4**	70.0	58.5		4.0	3.4	
~	GOLDEN HARVEST H4273RR**	70.0			2.8		
~	GREAT LAKES GL 4409 RR**	69.8	57.8	51.8	2.3	1.9	1.8
~	GARST SEED 4512RR/N	69.5			2.8		
	SOUTHERN CROSS AARON 4.5N, STS**	69.4	49.9	46.1	3.0	2.1	1.9
~	CROW'S C4815R**	68.8	59.9	53.2	3.3	2.8	2.4
~	TIOTALEIT VIIIIETT SINVISO	68.8			4.0		
	EXCEL BRAND 8412NRR*	68.7	560	40.0	2.8	2.0	4.0
	PIONEER VARIETY 94B13*	68.2	56.0	49.9	2.3	2.0	1.8
~	ASGROW AG4403* DELTAGROW 4840 RR**	68.1	56.7	51.1	2.8	2.4	2.1
~	ASGROW AG4801*	68.1 67.4			3.8 1.8		
	CAVERNDALE CF 461	67.3	50.9	44.9	4.5	3.3	2.8
NS	GATEWAY GX98-0609 (high oil)	67.3	60.9	77.7	4.5	3.8	2.0
	UNISOUTH GENETICS USG 7499nRR**	66.9	00.5		2.8	3.0	
	GATEWAY GX97-1418 (high protein)	66.7			2.8		
	DELTAGROW 4860 RR**	66.1			3.0		
~	HORNBECK HBK R4623**	65.9			4.3		
~	SOUTHERN STATES RT 4810N**	65.7	58.4	51.1	2.8	2.4	2.3
	NK BRAND S43-B1**	65.7	57.7		2.3	1.8	
~	PRAIRIE STREAM FARMS PSF 4004NRR*	65.6			1.0		
~	STETER IT OF THE SERV	65.4	61.9	53.4	2.3	2.1	2.3
~	SOUTHERN STATES RT 4230N**	65.0	64.2		3.0	2.6	
~	GREAT LAKES GL 4809 RR** BECK 434NRR**	64.9 64.9			4.3 2.0		
~	VIGORO V47N3RR**	64.5	55.8	51.8	2.0	2.1	2.0
~	DELTAGROW 4960 RR**	64.2	0.00	0.10	3.8	2.1	2.0
~	VIGORO V48N5RR*	64.0			3.0		
~	PRAIRIE STREAM FARMS PSF 4102NRR**	62.7			2.5		
NS	S02-7955 (natto)	62.7			2.0		
~	SOUTHERN STATES RT 4098	62.6	48.0	45.3	2.5	2.0	1.9
~	EXCEL BRAND 8492NRR*	62.6			3.8		
~	SOUTHERN STATES RT 4980	61.8	53.4	47.8	4.0	3.0	2.9
~	DELTAGROW 4630 RR*	61.5			4.0		
~		61.3			3.5		
	TRISOY 4838RR(CN)*	60.8			3.3		
	CROW'S C4418R**	60.7			2.3		
	\$02-7998 (NATTO)	60.6			3.5		
	GATEWAY LS94-3207 (high protein)	60.5			2.8		
	ASGROW AG4102** GATEWAY GX99-0111 (high oil)	60.2 59.9			2.0 4.0		
	SOUTHERN STATES RT 4502N**	59.9	53.2	48.1	3.3	2.5	2.2
	SOUTHERN STATES RT 4440N**	57.4	33.2	40.1	2.0	2.5	2.2
	HORNBECK HBK R4945CX**	56.8			4.0		
	DELTA AND PINE LAND DP 4546 RR	56.1			3.8		
	GATEWAY GX99-0112 (clear hilum)	56.1			4.0		
	LG SEEDS C4343NRR**	53.9			2.0		
~	HORNBECK HBK R4023*	53.6			4.3		
	KS4303sp (small seeded variety)	49.2			1.0		
	KS4103sp (high protein variety)	45.1			5.0		
NS	IA4002 (small seed)	38.5	40.1	35.7	3.5	3.4	3.4
	CDOLID IV AVED : CE					2.2	
	GROUP IV AVERAGE	67.9	58.8	51.6	3.0	2.3	2.2
	LSD (0.10)	5.8	5.0	3.9	0.7	0.4	0.3

TABLE 9. 2004 MARSHALL CO. FULL-SEASON VARIETY TEST.^A

		Y	IELD (BU/AC	:) ^B		LODGING	
	BRAND — VARIETY	2004	03-04	02-04	2004	03-04	02-04
	LATE (GROUP V)						
	UNISOUTH GENETICS USG 5601T	72.3	61.1	55.4	3.0	2.5	2.4
	UNISOUTH GENETICS USG 5002T	69.2	62.8		4.0	3.4	
Р	TEEJAY	67.0			2.8		
~	GOLDEN HARVEST H5053RR*	66.1			2.8		
~	UNISOUTH GENETICS USG 510nRR**	63.6	64.3	55.7	3.0	2.5	2.3
~	HORNBECK HBK R4924**	62.7	540		3.8	2.0	
~	DELTA KING DK 5161 RR**	62.2	54.0		4.0	3.8	
	DELTA AND PINE LAND DP 5110 S	60.9			2.8		
	NK BRAND S50-N3**	60.6			3.3		
~	DELTAGROW 5460 RR** STINE S5142-4**	60.4 59.8	59.0		2.8 3.8	2.6	
~	UNISOUTH GENETICS USG 7514nRR**	59.8 59.3	39.0		3.5	3.6	
~	DELTA KING DK 5465 RR*	58.3	60.7	54.6	3.3	2.9	2.7
	GATEWAY GX98-1809 (high protein)	58.2	00.7	34.0	3.3 1.5	2.9	2.7
~	COLUMN CO	57.2			2.8		
Р	DELSOY 5500**	56.5	53.9	50.4	3.3	3.3	2.8
~	STEYER 5300 RR SCN**	56.3	33.7	50.4	1.8	5.5	2.0
งเร	GATEWAY GX98-2033 (high protein)	55.9	54.8		2.8	3.8	
~	DELTA MALC DIVERSE DO	55.6	57.3	52.3	4.0	3.4	3.3
	UNISOUTH GENETICS USG 7523nRR**	55.5	37.3	32.3	3.8	5.4	٥.5
~	PIONEER VARIETY 95B32**	55.2	51.6	49.0	3.3	2.9	2.6
~	DELTAGROW 5260 RR**	55.2	31.0	13.0	3.5	2.7	2.0
~	PIONEER VARIETY 95B42*	55.0	51.1	46.1	3.0	2.9	2.5
	KS5202sp (high protein variety)	54.9	48.9	43.7	2.3	2.1	1.8
	ANAND**	54.6	60.8	55.6	1.0	1.3	1.3
~	DYNAGRO 33B52**	54.2	47.8	33.0	3.5	3.8	
~	ASGROW AG5605*	54.1	61.3		3.0	2.9	
~	VIGORO V55N5RR**	53.0			2.8		
~	VIGORO V50N5RR**	52.7			3.5		
~	SOUTHERN STATES RT 5450N**	52.2			2.5		
~	DELTA KING DK 55T6**	52.0			3.5		
۱S	KS1614sp (large seeded variety)	51.9			3.5		
~	EVER DEALID SECONDO	51.7			1.8		
Ρ	HUTCHESON	51.5	48.4	44.2	3.5	3.4	2.8
~	GOLDEN HARVEST H5470RR*	51.5			3.0		
~	EXCEL BRAND 8509NRR*	51.3			3.0		
~	SOUTHERN CROSS ABNER 5.2 N, RR**	50.0	53.3		3.0	3.3	
~	ASGROW AG5301**	49.9	52.9	48.7	2.8	2.8	2.5
۱S	MOONCAKE (edible)	48.9			4.0		
~	CROPLAN GENETICS RC5222RR**	48.9			3.8		
~	SOUTHERN STATES RT 5602N**	48.7	56.8	50.9	2.0	3.0	2.7
~		47.3	53.3	47.3	2.0	2.1	2.0
۱S	TARA (forage)	46.7			2.8		
~	SOUTHERN STATES RT 5130N**	46.1			2.8		
~	CROPLAN GENETICS RC5003RR**	45.9			2.8		
۱S	S02-8984 (natto)**	45.1			4.0		
	SOUTHERN STATES RT 5001N**	43.1	44.9	44.1	3.0	2.8	2.5
	S02-9134 (natto)	40.1			4.0		
	KS5003sp (small seeded variety)	38.6			1.0		
۱S	S02-8136 (natto)	36.5			4.5		
	GROUP V AVERAGE	54.1	55.2	49.9	3.0	3.0	2.4
	LSD (0.10)	5.5	4.0	2.9	0.7	0.5	0.4
	GRAND MEAN	62.9	56.7	49.8	2.9	2.4	2.2

Roundup Ready variety.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

market value. lesting 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 2002 and 2003 data are from Carlisle County, and the 2004 data are from Marshall 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.

Notes



Mention or display of a trademark, proprietary product, or firm in text or figures does not constitute an endorsement and does not imply approval to the exclusion of other suitable products or firms.

The following pages are not part of the printed PR-505 publication.

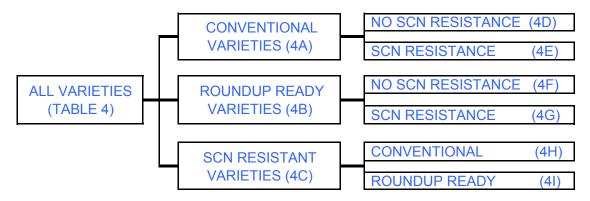
The selection key and tables "4A-4I" are a web site feature.

The nomination form, cover letter and instructions are for seed companies and others interested in entering varieties in the KY 2005 Soybean Performance Tests.

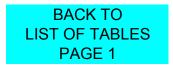
Questions or comments?

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SELECTION KEY TO CREATE SUBSETS OF TABLE 4 (2004 SUMMARY OF 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 2004 yield in the appropriate maturity group.



This page and the following pages are not part of the printed PR-505 publication. The selection key and tables "4A-4I" are a web site feature which provides alternate views of the Summary Table 4.

TABLE 4. 2004 SUMMARY: VARIETY TEST TABLES 5-9

		ΥIF	AC) ^A	ı	ODGINO	BACK TO SELECTION		
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04	KEY
F	ARLY (GROUP III)							
	. ,	740			0.0			Destate and all date
	BBERTS 1365RR** REAT LAKES GL 3710 RR	74.2 73.7			2.3 2.0			Protein and oil data is available on
	OLDEN HARVEST H3921RR*	73.2	68.6		2.0	1.9		is available on
	BBERTS 1385RR	73.0	00.0		2.5	1.5		pages 9, 10, and 1
	K BRAND S39-Q4	72.3	66.1	58.9	1.6	1.5	1.5	pages o, ro, and r
	IONEER VARIETY 93M90*	72.1	67.7		1.9	1.7		
- S	OUTHERN CROSS ABRAHAM 3.9 N, RR**	71.7	67.1		1.1	1.2		
	IGORO V38N5RS**	71.6			1.4			
N	K BRAND S35-F9	70.9			1.8			
- D	ELTA KING DK 3968 RR*	70.4	66.2	59.5	1.8	1.7	1.7	
PI	RAIRIE STREAM FARMS PSF 371N**	70.3			2.5			
G	ARST SEED 3824RR/N*	70.2	65.9		1.5	1.4		
S	OUTHERN CROSS STEPHEN 3.9 N, RR*	70.1	66.1		1.9	1.9		
	SGROW AG3905*	70.1	64.9		1.9	1.7		
	ELTA AND PINE LAND DPX3950RR**	69.3			1.9			
	IGORO V39N4RR**	69.2			1.7			
	K BRAND S37-N4**	68.8	64.8	57.8	2.5	2.1	2.2	
	IONEER VARIETY 93B67*	68.8	62.9	56.5	1.8	1.7	1.6	
	RAIRIE STREAM FARMS PSF 3405RR	68.7	65.0	60.0	1.9	1.0	1.0	
	OLDEN HARVEST H3945RR**	68.6	65.0	60.3	1.6	1.6	1.6	
	ELTA AND PINE LAND DP 3861 RR* RAIRIE STREAM FARMS PSF 355N*	68.2 67.8			2.1 2.4			
	EKALB DKB36-52*	67.6			1.7			
	RAIRIE STREAM FARMS PSF 3903NRR	67.5			2.1			
	EKALB DKB38-52*	67.3	63.5	56.8	1.4	1.5	1.6	
	ELTA KING DK 3964 RR*	66.7	00.0	53.0	2.9	1.0	2.6	
	G SEEDS C3999NRR**	66.7		00.0	2.0		2.0	
	IONEER VARIETY 93M50*	66.6			1.8			
, D,	YNAGRO 33A37	65.6			1.8			
	OUTHERN STATES RT 3802N**	65.4	59.3	52.3	2.4	2.2	2.0	
- S	OUTHERN STATES RT 3850N**	64.7			1.7			
C	ROPLAN GENETICS RC3964RR**	64.6			1.7			
- S	OUTHERN STATES RT 3975	64.6	58.8	52.8	2.7	2.3	2.2	
P IA	3023	63.1			1.5			
S PI	IONEER VARIETY P9305 (tofu type)	57.0	52.6	44.8	1.5	1.6	1.6	
S	OUTHERN STATES RT 3940N**	56.9			1.7			
	3022 (large seed, high-protein)	55.8			2.4			
	3021 (large seed, high-protein)	54.6			1.3			
	3012LF (lipoxygenase free)	54.2 51	.7		2.0 2.	3		
SIA	3008LF (lipoxygenase free)	50.7			3.3			
	GROUP III AVERAGE	66.8	62.9	55.3	1.9	1.8	1.9	
	LSD (0.10)	2.8	2.2	1.8	0.3	0.2	0.1	
М	ID-SEASON (GROUP IV)							
		70.2			2.1			Protoin and oil date
	ELLENA BRAND SEED 4375* IGORO V42N3RR**	79.2 77.7	72.0	63.9	2.1 1.7	1.5	1.5	Protein and oil data are available on
	ELTA KING DK 4461 RR	77.0	71.5	61.1	1.7 2.4	2.2	2.0	are available off
	ORNBECK HBK R4820	76.4	69.9	60.6	2.4	2.2		pages 9, 10, and 1
	ELTAGROW 4340 RR**	75.7	03.5	00.0	2.4	4.1	2.0	pages o, 10, and 1
	NISOUTH GENETICS USG 7494nRR**	75.1			3.2			
	ELTA KING DK 4868 RR	75.1	71.0	61.9	2.3	2.1	2.0	
	EED CONSULTANTS SC 9442 RR**	74.6	69.6	61.3	2.4	2.1	2.0	
	IONEER VARIETY 94M70*	74.5	69.8	,	3.1	2.7		
	ELTA AND PINE LAND DP 4331 RR*	74.3			2.3			
	ROPLAN GENETICS RC4464RR*	74.1			1.9			
	TEYER 4900 RR SCN**	73.9			2.8			
	TEYER 4700 RR SCN**	73.7	67.1	57.6	2.1	2.2	2.1	
	G SEEDS C4910NRR*	73.6		-	3.2			
L	OUTHERN CROSS MICHAEL 4.2N, RR**	73.3	69.5	62.3	1.6	1.5	1.6	
	ARST SEED 4512RR/N	73.0	,	,_,,	2.2			
S			69.7		1.4	1.4		
G.		72 8						
G Bl	IO GENE BG 4200NRRST**	72.8 72.7						
G. BI	IO GENE BG 4200NRRST** NISOUTH GENETICS USG 7484nRR**	72.7		59.3	3.5	26	24	
G. BI	IO GENE BG 4200NRRST** NISOUTH GENETICS USG 7484nRR** IONEER VARIETY 94B73	72.7 72.6	67.9	59.3	3.5 2.9	2.6	2.4	
G BI UI PI	IO GENE BG 4200NRRST** NISOUTH GENETICS USG 7484nRR** IONEER VARIETY 94B73 ELTA KING DK 4967 RR*	72.7 72.6 72.5	67.9 70.5		3.5 2.9 2.5	2.6		
G BI UI PI	IO GENE BG 4200NRRST** NISOUTH GENETICS USG 7484nRR** IONEER VARIETY 94B73	72.7 72.6	67.9	59.3 60.5 58.0	3.5 2.9		2.4 2.7 2.0	

_		YIF	LD (BU/A	AC) ^A		ODGINO		SELECTION
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04	KEY
_								
	MID-SEASON (GROUP IV) continued							
	SEED CONSULTANTS SC 9415 RR**	71.8			1.4			
~	DELTA KING DK 4763 RR	71.8	69.6	62.3	2.8	2.5	2.3	
~	DELTA AND PINE LAND DP 4748 S DYNAGRO 3443**	71.6 71.6	68.0	58.9	3.4 2.3	2.1	2.0	
	TRISOY 4838RR(CN)*	71.6	00.0	30.9	2.6	2.1	2.0	
	UNISOUTH GENETICS USG 7482nRR**	71.6	66.2		2.6	2.5		
~	DELTA AND PINE LAND DPX4891RR**	71.5			3.4			
	DELTAGROW 4860 RR**	71.4			2.6			
	DEKALB DKB46-51** VIGORO V48N5RR*	71.3 71.2	67.2		2.7 2.9	2.4		
	GREAT LAKES GL 4409 RR**	70.9	66.8	58.6	2.9	2.0	1.9	
	SOUTHERN CROSS TITUS 4.8N, RR**	70.7	65.7	57.7	3.0	2.7	2.5	
~	ASGROW AG4603	70.7			2.2			
	DELTAGROW 4840 RR**	70.6			3.3			
	EXCEL BRAND 8448NRR*	70.6	67.4		1.6	1.6		
	SOUTHERN CROSS JONAH 4.8 N, RR** CROW'S C4815R**	70.5 70.3	66.4 67.3	58.7	2.6 2.6	2.5 2.5	2.3	
	SOUTHERN CROSS AARON 4.5N, STS**	70.2	64.1	55.8	2.8	2.3	2.2	
NS	GATEWAY GX98-0609 (high oil)	70.1	65.5		3.6	3.1		
~	ASGROW AG4201**	70.1	67.2	59.7	2.5	2.3	2.2	
~	CROPLAN GENETICS RC4842RR**	70.1			2.6			
	CAVERNDALE CF 461	69.9	63.1	54.4	3.3 2.4	2.8	2.6	
	GOLDEN HARVEST H4273RR** STINE S4842-4**	69.9 69.9			3.1			
	HORNBECK HBK R4623**	69.6			3.3			
	DELTAGROW 4630 RR*	69.5			2.9			
~	PRAIRIE STREAM FARMS PSF 4004NRR*	69.4			1.5			
	VIGORO V47N3RR**	69.3	66.3	60.1	2.1	2.1	2.0	
	SOUTHERN STATES RT 4980	69.3	64.9	56.3	3.0	2.8	2.6	
	ASGROW AG4801* NK BRAND S43-B1**	69.1 69.1	66.4		1.8 2.2	2.1		
	TRISOY 4697RR(CN)**	68.8	00.4		2.5	2.1		
	PIONEER VARIETY 94B13*	68.7	66.0	57.4	2.4	2.2	2.0	
~	STINE S4542-4**	68.7	66.4		3.1	2.9		
	GREAT LAKES GL 4009 RR**	68.5	65.3		1.4	1.3		
	BIO GENE BG 4205NRR	68.4	05.0	50.0	2.6	0.5	0.0	
	NK BRAND S49-Q9** SOUTHERN STATES RT 4230N**	68.3 68.3	65.8 67.1	59.2	2.7 2.5	2.5 2.3	2.3	
	GREAT LAKES GL 4809 RR**	67.7	07.1		3.5	2.5		
	CAVERNDALE CF 492	67.6	64.2	55.7	1.7	1.7	1.5	
~	EXCEL BRAND 8412NRR*	67.3			2.4			
	PIONEER VARIETY 94M90*	67.2			3.1			
~	CROPLAN GENETICS RC4013RR**	67.1			2.8			
~	BECK 434NRR** GARST SEED 4112RR/N*	66.9 66.9			2.1 1.5			
~		66.8			2.1			
~	UNISOUTH GENETICS USG 7499nRR**	66.7			2.7			
~	EXCEL BRAND 8492NRR*	66.4			3.3			
	LG SEEDS C4343NRR**	66.3			2.1			
~	PRAIRIE STREAM FARMS PSF 4102NRR**	66.0	00.0	55.0	2.2	0.4	0.0	
~ NS	SOUTHERN STATES RT 4810N** GATEWAY GX98-1006 (high protein)	65.8 65.7	62.9	55.0	2.6 2.3	2.4	2.3	
	HORNBECK HBK R4945CX**	65.0			3.0			
	SOUTHERN STATES RT 4502N**	65.0	61.2	53.4	2.6	2.4	2.2	
~	SOUTHERN STATES RT 4098	63.8	61.7	54.1	2.4	2.1	2.1	
~	ASGROW AG4102**	63.6			2.2			
~		62.8			3.5			
	GATEWAY GX99-0112 (clear hilum)	61.9 61.2			3.6 3.2			
	GATEWAY GX99-0111 (high oil) S02-7955 (natto)	60.7			2.1			
	GATEWAY GX97-1418 (high protein)	60.4			3.0			
	GATEWAY LS94-3207 (high protein)	59.8			3.2			
NS	S02-7998 (natto)	59.5			3.6			
	DELTA AND PINE LAND DP 4546 RR	59.0			3.5			
	HORNBECK HBK R4023*	58.3			3.7			
	SOUTHERN STATES RT 4440N** KS4103sp (high protein variety)	58.3 55.3			2.4 3.7			
	KS4303sp (small seeded variety)	53.0			2.2			
	IA4002 (small seed)	49.1	48.2	41.7	3.3	3.2	3.1	
	GROUP IV AVERAGE	68.7	66.5	58.0	2.6	2.3	2.2	
	LSD (0.10)	4.9	2.8	2.2	0.4	0.2	0.2	
	· · · /							

TABLE 4. 2004 SUMMARY: VARIETY TEST TABLES 5-9

	TABLE 4. 2004 SUMMARY: VARIETY TEST TABLES 5-9							BACK TO
		YIE	LD (BU/A	AC) ^A	L	ODGING	3	SELECTION
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04	KEY
	LATE (GROUP V)							
		70.0			0.7			Destrict and all date
~	GOLDEN HARVEST H5053RR*	72.8	CC E	E0 4	2.7	2.0	2.0	Protein and oil data
_	UNISOUTH GENETICS USG 5601T HORNBECK HBK R4924**	70.6 70.5	66.5	58.4	2.9 2.8	3.0	2.8	are available on
~		69.2						noggo 0 10 and 11
	DELTA AND PINE LAND DP 5110 S VIGORO V50N5RR**	68.4			3.0 2.9			pages 9, 10, and 11.
	STINE S5142-4**	67.5	66.4		2.9	3.0		
	NK BRAND S50-N3**	66.9	00.4		2.9	3.0		
	TEEJAY	64.4			2.7			
'	UNISOUTH GENETICS USG 5002T	64.3	64.7		3.8	3.5		
~	UNISOUTH GENETICS USG 510nRR**	63.2	63.1	55.7	2.9	2.7	2.5	
	EXCEL BRAND 8509NRR*	63.1	03.1	55.7	2.9	2.1	2.5	
	KS5202sp (high protein variety)	62.5	59.3	51.9	2.8	2.9	2.5	
	PIONEER VARIETY 95B42*	62.2	59.8	52.3	3.0	3.1	2.8	
~	STEYER 5300 RR SCN**	62.0	33.0	32.3	2.2	3.1	2.0	
~	DELTAGROW 5460 RR**	61.9			3.1			
	SOUTHERN STATES RT 5540N**	61.9			3.0			
	UNISOUTH GENETICS USG 7514nRR**	61.2			3.6			
	ASGROW AG5605*	60.9	65.4		3.2	3.0		
		60.9	05.4		2.5	3.0		
	GATEWAY GX98-1809 (high protein) PIONEER VARIETY 95B32**	60.8	58.1	52.3	3.0	2.8	2.5	
			36.1	32.3		2.0	2.5	
	VIGORO V55N5RR**	60.6			3.0			
~	CROPLAN GENETICS RC5222RR**	60.6	50.5	50.7	3.8	0.0	0.7	
	DELSOY 5500**	60.5	58.5	52.7	3.1	3.0	2.7	
	KS1614sp (large seeded variety)	60.5			3.0			
	SOUTHERN STATES RT 5450N**	60.3			2.9			
	CROPLAN GENETICS RC5003RR**	60.2			3.2			
	SOUTHERN CROSS ABNER 5.2 N, RR**	60.1	61.0		3.5	3.4		
~	DELTA KING DK 5161 RR**	60.1	60.7		3.9	3.7		
~	DYNAGRO 33B52**	59.9	60.6		4.0	3.8		
~	DELTA KING DK 5465 RR*	59.9	62.4	55.3	3.1	2.9	2.7	
	DELTAGROW 5260 RR**	59.9			3.4			
~	SOUTHERN STATES RT 5602N**	59.8	60.9	53.5	2.7	3.2	2.9	
~	GOLDEN HARVEST H5470RR*	59.6			3.1			
Ρ	ANAND**	59.3	61.1	53.8	2.2	2.4	2.2	
~	ASGROW AG5301**	58.9	59.8	53.5	2.9	3.0	2.7	
~	EXCEL BRAND 8520NRR*	57.9			2.6			
Ρ	HUTCHESON	57.5	57.4	50.9	3.2	3.1	2.8	
NS	GATEWAY GX98-2033 (high protein)	57.5	57.6		3.1	3.5		
NS	TARA (forage)	56.6			2.8			
~	SOUTHERN STATES RT 5130N**	56.4			3.2			
~	UNISOUTH GENETICS USG 7523nRR**	56.3			3.1			
~	SOUTHERN STATES RT 5302N**	56.1	57.8	51.4	2.6	2.6	2.4	
~	SOUTHERN STATES RT 5001N**	54.8	53.5	48.6	3.1	3.1	2.8	
~	DELTA KING DK 55T6**	53.3			3.4			
~	DELTA KING DK 5366 RR	52.8	55.2	50.2	4.0	3.7	3.5	
NS	MOONCAKE (edible)	51.2			3.3			
	S02-8984 (natto)**	49.0			4.1			
	KS5003sp (small seeded variety)	48.8			2.3			
	S02-9134 (natto)	45.5			4.0			
	S02-8136 (natto)	44.0			4.7			
	, ,							
	GROUP V AVERAGE	59.9	60.5	52.9	3.1	3.1	2.7	
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2	
	CRAND MEAN	05.0	64.4	EG 4	0.0	2.4	2.0	
	GRAND MEAN	65.9	64.1	56.1	2.6	2.4	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.

 $^{^{\}star}$ 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 2004 Summary Table 4

BACK TO SELECTION

		YIE	LD (BU/A	AC) ^A	L	ODGING	3	SELEC
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04	KE
	EARLY (GROUP III)							
	PRAIRIE STREAM FARMS PSF 371N**	70.3			2.5			
	PRAIRIE STREAM FARMS PSF 355N*	67.8			2.4			
Р	IA 3023	63.1			1.5			
	PIONEER VARIETY P9305 (tofu type)	57.0	52.6	44.8	1.5	1.6	1.6	
NS	IA3022 (large seed, high-protein)	55.8			2.4			
NS	IA3021 (large seed, high-protein)	54.6			1.3			
NS	IA3012LF (triple-null lipoxygenase)	54.2	51.7		2.0	2.3		
NS	IA3008LF (lipoxygenase free)	50.7			3.3			
	GROUP III AVERAGE	59.2	52.2		2.1	1.9		
	LSD (0.10)	2.8	2.2		0.3	0.2		
	MID-SEASON (GROUP IV)							
	DELTA AND PINE LAND DP 4748 S	71.6			3.4			
	SOUTHERN CROSS AARON 4.5N, STS**	70.2	64.1	55.8	2.8	2.3	2.2	
NS	GATEWAY GX98-0609 (high oil)	70.1	65.5		3.6	3.1		
	CAVERNDALE CF 461	69.9	63.1	54.4	3.3	2.8	2.6	
	CAVERNDALE CF 492	67.6	64.2	55.7	1.7	1.7	1.5	
NS	GATEWAY GX98-1006 (high protein)	65.7			2.3			
NS	GATEWAY GX99-0112 (clear hilum)	61.9			3.6			
NS	GATEWAY GX99-0111 (high oil)	61.2			3.2			
NS	S02-7955 (natto)	60.7			2.1			
NS	GATEWAY GX97-1418 (high protein)	60.4			3.0			
NS	GATEWAY LS94-3207 (high protein)	59.8			3.2			
NS	S02-7998 (natto)	59.5			3.6			
NS	KS4103sp (high protein variety)	55.3			3.7			
NS	KS4303sp (small seeded variety)	53.0			2.2			
NS	IA4002 (small seed)	49.1	48.2	41.7	3.3	3.2	3.1	
	GROUP IV AVERAGE	62.4	61.0	51.9	3.0	2.6	2.3	
	LSD (0.10)	4.9	2.8	2.2	0.4	0.2	0.2	
	LATE (GROUP V)							
	UNISOUTH GENETICS USG 5601T	70.6	66.5	58.4	2.9	3.0	2.8	
	DELTA AND PINE LAND DP 5110 S	69.2			3.0			
Р	TEEJAY	64.4			2.7			
	UNISOUTH GENETICS USG 5002T	64.3	64.7		3.8	3.5		
NS	KS5202sp (high protein variety)	62.5	59.3	51.9	2.8	2.9	2.5	
NS	GATEWAY GX98-1809 (high protein)	60.9			2.5			
	DELSOY 5500**	60.5	58.5	52.7	3.1	3.0	2.7	
NS	KS1614sp (large seeded variety)	60.5			3.0			
Р	ANAND**	59.3	61.1	53.8	2.2	2.4	2.2	
Р	HUTCHESON	57.5	57.4	50.9	3.2	3.1	2.8	
NS	GATEWAY GX98-2033 (high protein)	57.5	57.6		3.1	3.5		
NS	TARA (forage)	56.6			2.8			
NS	MOONCAKE (edible)	51.2			3.3			
NS	S02-8984 (natto)**	49.0			4.1			
NS	KS5003sp (small seeded variety)	48.8			2.3			
NS	S02-9134 (natto)	45.5			4.0			
NS	S02-8136 (natto)	44.0			4.7			
	GROUP V AVERAGE	57.8	60.7	53.6	3.1	3.0	2.6	
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2	
	GRAND MEAN	59.8	59.6	52.0	2.9	2.7	2.4	
								li .

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 2004 Summary Table 4

BACK TO SELECTION KEY

		YIE	LD (BU/A	AC) ^A	L	ODGIN	3
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	EARLY (GROUP III)						
~	EBBERTS 1365RR**	74.2			2.3		
~	GREAT LAKES GL 3710 RR	73.7			2.0		
~	GOLDEN HARVEST H3921RR*	73.2	68.6		2.0	1.9	
~	EBBERTS 1385RR	73.0			2.5		
~	NK BRAND S39-Q4	72.3	66.1	58.9	1.6	1.5	1.5
~	PIONEER VARIETY 93M90*	72.1	67.7		1.9	1.7	
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR**	71.7	67.1		1.1	1.2	
~	VIGORO V38N5RS**	71.6			1.4		
~	NK BRAND S35-F9	70.9			1.8		
~	DELTA KING DK 3968 RR*	70.4	66.2	59.5	1.8	1.7	1.7
~	GARST SEED 3824RR/N*	70.2	65.9		1.5	1.4	
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	70.1	66.1		1.9	1.9	
~	ASGROW AG3905*	70.1	64.9		1.9	1.7	
~	DELTA AND PINE LAND DPX3950RR**	69.3			1.9		
~	VIGORO V39N4RR**	69.2			1.7		
~	NK BRAND S37-N4**	68.8	64.8	57.8	2.5	2.1	2.2
~	PIONEER VARIETY 93B67*	68.8	62.9	56.5	1.8	1.7	1.6
~	PRAIRIE STREAM FARMS PSF 3405RR	68.7	05.0	00.0	1.9	4.0	4.0
~	GOLDEN HARVEST H3945RR**	68.6	65.0	60.3	1.6	1.6	1.6
~	DELTA AND PINE LAND DP 3861 RR*	68.2			2.1		
~	DEKALB DKB36-52*	67.6			1.7		
~	PRAIRIE STREAM FARMS PSF 3903NRR	67.5	CO F	FC 0	2.1	4.5	4.0
~	DEKALB DKB38-52*	67.3	63.5	56.8	1.4	1.5	1.6
~	DELTA KING DK 3964 RR* LG SEEDS C3999NRR**	66.7 66.7		53.0	2.9 2.0		2.6
~	PIONEER VARIETY 93M50*	66.6			1.8		
~	DYNAGRO 33A37	65.6			1.8		
~	SOUTHERN STATES RT 3802N**	65.4	59.3	52.3	2.4	2.2	2.0
~	SOUTHERN STATES RT 3850N**	64.7	39.3	32.3	1.7	2.2	2.0
~	CROPLAN GENETICS RC3964RR**	64.6			1.7		
~	SOUTHERN STATES RT 3975	64.6	58.8	52.8	2.7	2.3	2.2
~	SOUTHERN STATES RT 3940N**	56.9	00.0	02.0	1.7	2.0	
	GROUP III AVERAGE	68.7	64.6	56.4	1.9	1.8	1.9
	LSD (0.10)	2.8	2.2	1.8	0.3	0.2	0.1
	MID-SEASON (GROUP IV)						
~	HELLENA BRAND SEED 4375*	79.2			2.1		
~	VIGORO V42N3RR**	77.7	72.0	63.9	1.7	1.5	1.5
~	DELTA KING DK 4461 RR	77.0	71.5	61.1	2.4	2.2	2.0
~	HORNBECK HBK R4820	76.4	69.9	60.6	2.4	2.1	2.0
~	DELTAGROW 4340 RR**	75.7			2.2		
~	UNISOUTH GENETICS USG 7494nRR**	75.1			3.2		
~	DELTA KING DK 4868 RR	75.1	71.0	61.9	2.3	2.1	2.0
~	SEED CONSULTANTS SC 9442 RR**	74.6	69.6	61.3	2.4	2.1	2.0
~	PIONEER VARIETY 94M70*	74.5	69.8		3.1	2.7	
~	DELTA AND PINE LAND DP 4331 RR*	74.3			2.3		
~	CROPLAN GENETICS RC4464RR*	74.1			1.9		
~	STEYER 4900 RR SCN**	73.9			2.8		
~	STEYER 4700 RR SCN**	73.7	67.1	57.6	2.1	2.2	2.1
~	LG SEEDS C4910NRR*	73.6			3.2		
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	73.3	69.5	62.3	1.6	1.5	1.6
~	GARST SEED 4512RR/N	73.0			2.2	-	-
~		72.8	69.7		1.4	1.4	
	UNISOUTH GENETICS USG 7484nRR**	72.7	- 5		3.5		
~		72.6	67.9	59.3	2.9	2.6	2.4
~		72.5	70.5	55.5	2.5	2.6	Δ. Τ
	PIONEER VARIETY 94B74**	72.5	67.6	60.5	3.2	3.0	2.7
	ASGROW AG4403*	71.9	66.1	58.0	2.2	2.1	2.0
~	HELLENA BRAND SEED 4875*	71.9	00.1	50.0	3.6	۵.۱	2.0
-	SEED CONSULTANTS SC 9415 RR**	71.9			1.4		
~			60.6	62.2		2 =	2.2
	DELTA KING DK 4763 RR	71.8	69.6	62.3	2.8	2.5	2.3
~	DYNAGRO 3443**	71.6	68.0	58.9	2.3	2.1	2.0

TABLE 4B. Roundup Ready varieties - subset of the 2004 Summary Table 4

BACK TO
SELECTION
KEY

		YIE	LD (BU/A	AC) ^A	L	ODGING	3
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	MID-SEASON (GROUP IV) continued						
~	TRISOY 4838RR(CN)*	71.6			2.6		
~	UNISOUTH GENETICS USG 7482nRR**	71.6	66.2		2.6	2.5	
	DELTA AND PINE LAND DPX4891RR**	71.5	00.2		3.4	2.0	
	DELTAGROW 4860 RR**	71.3			2.6		
	DEKALB DKB46-51**	71.3	67.2		2.7	2.4	
	VIGORO V48N5RR*	71.3	07.2		2.9	2.4	
	GREAT LAKES GL 4409 RR**	70.9	66.8	58.6	2.2	2.0	1.9
	SOUTHERN CROSS TITUS 4.8N, RR**	70.7	65.7	57.7	3.0	2.7	2.5
	ASGROW AG4603	70.7	00.7	07.7	2.2	,	2.0
	DELTAGROW 4840 RR**	70.6			3.3		
	EXCEL BRAND 8448NRR*	70.6	67.4		1.6	1.6	
	SOUTHERN CROSS JONAH 4.8 N, RR**	70.5	66.4		2.6	2.5	
~	CROW'S C4815R**	70.3	67.3	58.7	2.6	2.5	2.3
	ASGROW AG4201**	70.3	67.2	59.7	2.5	2.3	2.2
	CROPLAN GENETICS RC4842RR**	70.1	07.2	33.1	2.6	2.5	2.2
	GOLDEN HARVEST H4273RR**	69.9			2.4		
~	STINE S4842-4**	69.9			3.1		
~	HORNBECK HBK R4623**	69.6			3.3		
	DELTAGROW 4630 RR*	69.5			2.9		
	PRAIRIE STREAM FARMS PSF 4004NRR*	69.4			1.5		
	VIGORO V47N3RR**	69.3	66.3	60.1	2.1	2.1	2.0
	SOUTHERN STATES RT 4980	69.3	64.9	56.3	3.0	2.8	2.6
	ASGROW AG4801*	69.1	04.9	30.3	1.8	2.0	2.0
_	NK BRAND S43-B1**	69.1	66.4		2.2	2.1	
~		68.8	00.4		2.5	2.1	
~	TRISOY 4697RR(CN)** PIONEER VARIETY 94B13*	68.7	66.0	E7 4	2.5	2.2	2.0
~				57.4			2.0
~	STINE S4542-4**	68.7	66.4		3.1	2.9	
	GREAT LAKES GL 4009 RR**	68.5	65.3		1.4	1.3	
	BIO GENE BG 4205NRR NK BRAND S49-Q9**	68.4	GE O	59.2	2.6 2.7	2.5	2.3
~		68.3	65.8	59.2	2.7		2.3
~	SOUTHERN STATES RT 4230N**	68.3	67.1			2.3	
	GREAT LAKES GL 4809 RR**	67.7			3.5		
	EXCEL BRAND 8412NRR*	67.3			2.4		
	PIONEER VARIETY 94M90*	67.2 67.1			3.1		
~	CROPLAN GENETICS RC4013RR**	67.1			2.8		
~	BECK 434NRR** GARST SEED 4112RR/N*	66.9 66.9			2.1 1.5		
	CROW'S C4418R**				2.1		
~		66.8					
~	UNISOUTH GENETICS USG 7499nRR**	66.7 66.4			2.7 3.3		
~	EXCEL BRAND 8492NRR* LG SEEDS C4343NRR**						
~	PRAIRIE STREAM FARMS PSF 4102NRR**	66.3 66.0			2.1 2.2		
~			62.0	EE 0		2.4	2.2
~	SOUTHERN STATES RT 4810N**	65.8 65.0	62.9	55.0	2.6	2.4	2.3
	HORNBECK HBK R4945CX**	65.0 65.0	61.0	E2 4	3.0	2.4	2.0
~	SOUTHERN STATES RT 4502N**	65.0	61.2	53.4	2.6	2.4	2.2
~	SOUTHERN STATES RT 4098	63.8	61.7	54.1	2.4	2.1	2.1
	ASGROW AG4102**	63.6			2.2		
~	DELTAGROW 4960 RR**	62.8			3.5		
~	DELTA AND PINE LAND DP 4546 RR	59.0			3.5		
~	HORNBECK HBK R4023*	58.3			3.7		
~	SOUTHERN STATES RT 4440N**	58.3			2.4		
	GROUP IV AVERAGE	70.0	67.3	59.0	2.5	2.2	2.1
					2.0		

TABLE 4B. Roundup Ready varieties - subset of the 2004 Summary Table 4

BACK TO
SELECTION
KEY

		YIELD (BU/AC) ^A		L	.ODGIN	3	
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	LATE (GROUP V)						
~	GOLDEN HARVEST H5053RR*	72.8			2.7		
~	HORNBECK HBK R4924**	70.5			2.8		
~	VIGORO V50N5RR**	68.4			2.9		
~	STINE S5142-4**	67.5	66.4		2.9	3.0	
~	NK BRAND S50-N3**	66.9			2.7		
~	UNISOUTH GENETICS USG 510nRR**	63.2	63.1	55.7	2.9	2.7	2.5
~	EXCEL BRAND 8509NRR*	63.1			2.9		
~	PIONEER VARIETY 95B42*	62.2	59.8	52.3	3.0	3.1	2.8
~	STEYER 5300 RR SCN**	62.0			2.2		
~	DELTAGROW 5460 RR**	61.9			3.1		
~	SOUTHERN STATES RT 5540N**	61.9			3.0		
~	UNISOUTH GENETICS USG 7514nRR**	61.2			3.6		
~	ASGROW AG5605*	60.9	65.4		3.2	3.0	
~	PIONEER VARIETY 95B32**	60.8	58.1	52.3	3.0	2.8	2.5
~	VIGORO V55N5RR**	60.6			3.0		
~	CROPLAN GENETICS RC5222RR**	60.6			3.8		
~	SOUTHERN STATES RT 5450N**	60.3			2.9		
~	CROPLAN GENETICS RC5003RR**	60.2			3.2		
~	SOUTHERN CROSS ABNER 5.2 N, RR**	60.1	61.0		3.5	3.4	
~	DELTA KING DK 5161 RR**	60.1	60.7		3.9	3.7	
~	DYNAGRO 33B52**	59.9	60.6		4.0	3.8	
~	DELTA KING DK 5465 RR*	59.9	62.4	55.3	3.1	2.9	2.7
~	DELTAGROW 5260 RR**	59.9			3.4		
~	SOUTHERN STATES RT 5602N**	59.8	60.9	53.5	2.7	3.2	2.9
~	GOLDEN HARVEST H5470RR*	59.6			3.1		
~	ASGROW AG5301**	58.9	59.8	53.5	2.9	3.0	2.7
~	EXCEL BRAND 8520NRR*	57.9			2.6		
~	SOUTHERN STATES RT 5130N**	56.4			3.2		
~	UNISOUTH GENETICS USG 7523nRR**	56.3			3.1		
~	SOUTHERN STATES RT 5302N**	56.1	57.8	51.4	2.6	2.6	2.4
~	SOUTHERN STATES RT 5001N**	54.8	53.5	48.6	3.1	3.1	2.8
~	DELTA KING DK 55T6**	53.3	00.0		3.4	٠	
~	DELTA KING DK 5316 DELTA KING DK 5366 RR	52.8	55.2	50.2	4.0	3.7	3.5
	DEE BIT GOOD THE	32.0	00. <u>L</u>	00. <u>L</u>	-1.0	0.7	0.0
	GROUP V AVERAGE	60.9	60.3	52.5	3.1	3.1	2.8
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2
	GRAND MEAN	67.6	65.1	57.0	2.5	2.3	2.2

[~] Roundup Ready variety

^{*} 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 2004 Summary Table 4

	YIE	YIELD (BU/AC) ^A			LODGING		
BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04	
EARLY (GROUP III)							
~ EBBERTS 1365RR**	74.2			2.3			
~ GOLDEN HARVEST H3921RR*	73.2	68.6		2.0	1.9		
~ PIONEER VARIETY 93M90*	72.1	67.7		1.9	1.7		
~ SOUTHERN CROSS ABRAHAM 3.9 N, RR**	71.7	67.1		1.1	1.2		
~ VIGORO V38N5RS**	71.6			1.4			
~ DELTA KING DK 3968 RR*	70.4	66.2	59.5	1.8	1.7	1.7	
PRAIRIE STREAM FARMS PSF 371N**	70.3			2.5			
~ GARST SEED 3824RR/N*	70.2	65.9		1.5	1.4		
~ SOUTHERN CROSS STEPHEN 3.9 N, RR*	70.1	66.1		1.9	1.9		
~ ASGROW AG3905*	70.1	64.9		1.9	1.7		
~ DELTA AND PINE LAND DPX3950RR**	69.3			1.9			
~ VIGORO V39N4RR**	69.2			1.7			
~ NK BRAND S37-N4**	68.8	64.8	57.8	2.5	2.1	2.2	
~ PIONEER VARIETY 93B67*	68.8	62.9	56.5	1.8	1.7	1.6	
~ GOLDEN HARVEST H3945RR**	68.6	65.0	60.3	1.6	1.6	1.6	
~ DELTA AND PINE LAND DP 3861 RR*	68.2			2.1			
PRAIRIE STREAM FARMS PSF 355N*	67.8			2.4			
~ DEKALB DKB36-52*	67.6			1.7			
~ DEKALB DKB38-52*	67.3	63.5	56.8	1.4	1.5	1.6	
~ DELTA KING DK 3964 RR*	66.7		53.0	2.9		2.6	
~ LG SEEDS C3999NRR**	66.7			2.0			
~ PIONEER VARIETY 93M50*	66.6			1.8			
~ SOUTHERN STATES RT 3802N**	65.4	59.3	52.3	2.4	2.2	2.0	
~ SOUTHERN STATES RT 3850N**	64.7	00.0	02.0	1.7			
~ CROPLAN GENETICS RC3964RR**	64.6			1.7			
~ SOUTHERN STATES RT 3940N**	56.9			1.7			
GROUP III AVERAGE	68.5	65.0	56.6	1.9	1.8	1.9	
LSD (0.10)	2.8	2.2	1.8	0.3	0.2	0.1	
MID-SEASON (GROUP IV)							
~ HELLENA BRAND SEED 4375*	79.2			2.1			
~ VIGORO V42N3RR**	77.7	72.0	63.9	1.7	1.5	1.5	
~ DELTAGROW 4340 RR**	75.7		00.0	2.2			
~ UNISOUTH GENETICS USG 7494nRR**	75.1			3.2			
~ SEED CONSULTANTS SC 9442 RR**	74.6	69.6	61.3	2.4	2.1	2.0	
~ PIONEER VARIETY 94M70*	74.5	69.8	01.0	3.1	2.7		
~ DELTA AND PINE LAND DP 4331 RR*	74.3	00.0		2.3	,		
~ CROPLAN GENETICS RC4464RR*	74.1			1.9			
~ STEYER 4900 RR SCN**	73.9			2.8			
~ STEYER 4700 RR SCN**	73.9	67.1	E7 6	2.0	2.2	2.1	
		67.1	57.6		2.2	2.1	
~ LG SEEDS C4910NRR*	73.6	00.5	00.0	3.2			
~ SOUTHERN CROSS MICHAEL 4.2N, RR**	73.3	69.5	62.3	1.6	1.5	1.6	
~ BIO GENE BG 4200NRRST**	72.8	69.7		1.4	1.4		
 UNISOUTH GENETICS USG 7484nRR** 	72.7			3.5			
~ DELTA KING DK 4967 RR*	72.5	70.5		2.5	2.6		
~ PIONEER VARIETY 94B74**	71.9	67.6	60.5	3.2	3.0	2.7	
~ ASGROW AG4403*	71.9	66.1	58.0	2.2	2.1	2.0	
~ HELLENA BRAND SEED 4875*	71.9			3.6			
~ SEED CONSULTANTS SC 9415 RR**	71.8			1.4			

TABLE 4C. SCN resistant varieties - subset of the 2004 Summary Table 4

BACK TO	
SELECTION	
KEY	

		YIE	LD (BU/A	AC) ^A	L	ODGING	;
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	MID-SEASON (GROUP IV) continued						
~	DYNAGRO 3443**	71.6	68.0	58.9	2.3	2.1	2.0
~	TRISOY 4838RR(CN)*	71.6			2.6		
~	UNISOUTH GENETICS USG 7482nRR**	71.6	66.2		2.6	2.5	
~	DELTA AND PINE LAND DPX4891RR**	71.5			3.4		
~	DELTAGROW 4860 RR**	71.4			2.6		
~	DEKALB DKB46-51**	71.3	67.2		2.7	2.4	
~	VIGORO V48N5RR*	71.2	*		2.9		
~	GREAT LAKES GL 4409 RR**	70.9	66.8	58.6	2.2	2.0	1.9
~	SOUTHERN CROSS TITUS 4.8N, RR**	70.7	65.7	57.7	3.0	2.7	2.5
~	DELTAGROW 4840 RR**	70.6			3.3		
~	EXCEL BRAND 8448NRR*	70.6	67.4		1.6	1.6	
~	SOUTHERN CROSS JONAH 4.8 N, RR**	70.5	66.4		2.6	2.5	
~	CROW'S C4815R**	70.3	67.3	58.7	2.6	2.5	2.3
	SOUTHERN CROSS AARON 4.5N, STS**	70.2	64.1	55.8	2.8	2.3	2.2
~	ASGROW AG4201**	70.1	67.2	59.7	2.5	2.3	2.2
~	CROPLAN GENETICS RC4842RR**	70.1	*		2.6		
~	GOLDEN HARVEST H4273RR**	69.9			2.4		
~	STINE S4842-4**	69.9			3.1		
~	HORNBECK HBK R4623**	69.6			3.3		
~	DELTAGROW 4630 RR*	69.5			2.9		
~	PRAIRIE STREAM FARMS PSF 4004NRR*	69.4			1.5		
~	VIGORO V47N3RR**	69.3	66.3	60.1	2.1	2.1	2.0
~	ASGROW AG4801*	69.1	00.0	00.1	1.8		2.0
_	NK BRAND S43-B1**	69.1	66.4		2.2	2.1	
~	TRISOY 4697RR(CN)**	68.8	00.4		2.5	2.1	
~	PIONEER VARIETY 94B13*	68.7	66.0	57.4	2.4	2.2	2.0
~	STINE S4542-4**	68.7	66.4	57.4	3.1	2.9	2.0
_	GREAT LAKES GL 4009 RR**	68.5	65.3		1.4	1.3	
_	NK BRAND S49-Q9**	68.3	65.8	59.2	2.7	2.5	2.3
_	SOUTHERN STATES RT 4230N**	68.3	67.1	39.2	2.7	2.3	2.3
~	GREAT LAKES GL 4809 RR**	67.7	07.1		3.5	2.3	
~							
~	EXCEL BRAND 8412NRR*	67.3			2.4		
~	PIONEER VARIETY 94M90*	67.2			3.1		
~	CROPLAN GENETICS RC4013RR** BECK 434NRR**	67.1 66.9			2.8 2.1		
~							
~	GARST SEED 4112RR/N*	66.9			1.5		
~	CROW'S C4418R**	66.8			2.1		
~	UNISOUTH GENETICS USG 7499nRR**	66.7			2.7		
~	EXCEL BRAND 8492NRR*	66.4			3.3		
~	LG SEEDS C4343NRR**	66.3			2.1		
~	PRAIRIE STREAM FARMS PSF 4102NRR**	66.0	00.0	FF 0	2.2	0.4	0.0
~	SOUTHERN STATES RT 4810N**	65.8	62.9	55.0	2.6	2.4	2.3
~	HORNBECK HBK R4945CX**	65.0	04.0	50.4	3.0	0.4	0.0
~	SOUTHERN STATES RT 4502N**	65.0	61.2	53.4	2.6	2.4	2.2
~	ASGROW AG4102**	63.6			2.2		
~	DELTAGROW 4960 RR**	62.8			3.5		
~	HORNBECK HBK R4023*	58.3			3.7		
~	SOUTHERN STATES RT 4440N**	58.3			2.4		
	GROUP IV AVERAGE	69.9	67.0	58.7	2.5	2.2	2.1

TABLE 4C. SCN resistant varieties - subset of the 2004 Summary Table 4

		YIELD (BU/AC) ^A			L	ODGING	}
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	LATE (GROUP V)						
~	GOLDEN HARVEST H5053RR*	72.8			2.7		
~	HORNBECK HBK R4924**	70.5			2.8		
~	VIGORO V50N5RR**	68.4			2.9		
~	STINE S5142-4**	67.5	66.4		2.9	3.0	
~	NK BRAND S50-N3**	66.9			2.7		
~	UNISOUTH GENETICS USG 510nRR**	63.2	63.1	55.7	2.9	2.7	2.5
~	EXCEL BRAND 8509NRR*	63.1			2.9		
~	PIONEER VARIETY 95B42*	62.2	59.8	52.3	3.0	3.1	2.8
~	STEYER 5300 RR SCN**	62.0			2.2		
~	DELTAGROW 5460 RR**	61.9			3.1		
~	SOUTHERN STATES RT 5540N**	61.9			3.0		
~	UNISOUTH GENETICS USG 7514nRR**	61.2			3.6		
~	ASGROW AG5605*	60.9	65.4		3.2	3.0	
~	PIONEER VARIETY 95B32**	60.8	58.1	52.3	3.0	2.8	2.5
~	VIGORO V55N5RR**	60.6			3.0		
~	CROPLAN GENETICS RC5222RR**	60.6			3.8		
Р	DELSOY 5500**	60.5	58.5	52.7	3.1	3.0	2.7
~	SOUTHERN STATES RT 5450N**	60.3			2.9		
~	CROPLAN GENETICS RC5003RR**	60.2			3.2		
~	SOUTHERN CROSS ABNER 5.2 N, RR**	60.1	61.0		3.5	3.4	
~	DELTA KING DK 5161 RR**	60.1	60.7		3.9	3.7	
~	DYNAGRO 33B52**	59.9	60.6		4.0	3.8	
~	DELTA KING DK 5465 RR*	59.9	62.4	55.3	3.1	2.9	2.7
~	DELTAGROW 5260 RR**	59.9			3.4		
~	SOUTHERN STATES RT 5602N**	59.8	60.9	53.5	2.7	3.2	2.9
~	GOLDEN HARVEST H5470RR*	59.6			3.1		
Р	ANAND**	59.3	61.1	53.8	2.2	2.4	2.2
~	ASGROW AG5301**	58.9	59.8	53.5	2.9	3.0	2.7
~	EXCEL BRAND 8520NRR*	57.9			2.6		
~	SOUTHERN STATES RT 5130N**	56.4			3.2		
~	UNISOUTH GENETICS USG 7523nRR**	56.3			3.1		
~	SOUTHERN STATES RT 5302N**	56.1	57.8	51.4	2.6	2.6	2.4
~	SOUTHERN STATES RT 5001N**	54.8	53.5	48.6	3.1	3.1	2.8
~	DELTA KING DK 55T6**	53.3			3.4		
NS	S02-8984 (natto)**	49.0			4.1		
	GROUP V AVERAGE	60.8	60.6	52.9	3.1	3.0	2.6
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2
	GRAND MEAN	67.1	64.8	56.6	2.5	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.

^B 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.

These data were provided by the Iowa State University Grain Quality Analysis Services using near-infrared (NIR) analysis.

TABLE 4D. Conventional varieties with no SCN resistance - subset of the 2004 Summary Table 4

		YIELD (BU/AC) ^A		L	ODGING	3	
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	EARLY (GROUP III)						
Р	IA 3023	63.1			1.5		
	PIONEER VARIETY P9305 (tofu type)	57.0	52.6	44.8	1.5	1.6	1.6
	IA3022 (large seed, high-protein)	55.8	02.0		2.4		
	IA3021 (large seed, high-protein)	54.6			1.3		
	IA3012LF (triple-null lipoxygenase)	54.2	51.7		2.0	2.3	
	IA3008LF (lipoxygenase free)	50.7			3.3		
	GROUP III AVERAGE	55.9	52.2		2.0	1.9	
	LSD (0.10)	2.8	2.2		0.3	0.2	
	MID-SEASON (GROUP IV)						
	DELTA AND PINE LAND DP 4748 S	71.6			3.4		
NS	GATEWAY GX98-0609 (high oil)	70.1	65.5		3.6	3.1	
	CAVERNDALE CF 461	69.9	63.1	54.4	3.3	2.8	2.6
	CAVERNDALE CF 492	67.6	64.2	55.7	1.7	1.7	1.5
NS	GATEWAY GX98-1006 (high protein)	65.7			2.3		
	GATEWAY GX99-0112 (clear hilum)	61.9			3.6		
NS	GATEWAY GX99-0111 (high oil)	61.2			3.2		
NS	S02-7955 (natto)	60.7			2.1		
NS	GATEWAY GX97-1418 (high protein)	60.4			3.0		
NS	GATEWAY LS94-3207 (high protein)	59.8			3.2		
NS	S02-7998 (natto)	59.5			3.6		
NS	KS4103sp (high protein variety)	55.3			3.7		
NS	KS4303sp (small seeded variety)	53.0			2.2		
NS	IA4002 (small seed)	49.1	48.2	41.7	3.3	3.2	3.1
	GROUP IV AVERAGE	61.8	60.3	50.6	3.0	2.7	2.4
	LSD (0.10)	4.9	2.8	2.2	0.4	0.2	0.2
	LATE (GROUP V)						
	UNISOUTH GENETICS USG 5601T	70.6	66.5	58.4	2.9	3.0	2.8
	DELTA AND PINE LAND DP 5110 S	69.2			3.0		
Р	TEEJAY	64.4			2.7		
	UNISOUTH GENETICS USG 5002T	64.3	64.7		3.8	3.5	
NS	KS5202sp (high protein variety)	62.5	59.3	51.9	2.8	2.9	2.5
NS	GATEWAY GX98-1809 (high protein)	60.9			2.5		
NS	KS1614sp (large seeded variety)	60.5			3.0		
Р	HUTCHESON	57.5	57.4	50.9	3.2	3.1	2.8
NS	GATEWAY GX98-2033 (high protein)	57.5	57.6		3.1	3.5	
NS	TARA (forage)	56.6			2.8		
NS	MOONCAKE (edible)	51.2			3.3		
	KS5003sp (small seeded variety)	48.8			2.3		
	S02-9134 (natto)	45.5			4.0		
NS	S02-8136 (natto)	44.0			4.7		
	GROUP V AVERAGE	58.1	61.1	53.8	3.1	3.2	2.7
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2
	GRAND MEAN	59.2	59.2	51.1	2.9	2.8	2.4

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.

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 2004 Summary Table 4

		YIE	LD (BU/	AC) ^A	L	ODGING	3
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	EARLY (GROUP III)						
	PRAIRIE STREAM FARMS PSF 371N**	70.3			2.5		
	PRAIRIE STREAM FARMS PSF 355N*	67.8			2.4		
	GROUP III AVERAGE	69.0			2.4		
	LSD (0.10)	2.8			0.3		
	MID-SEASON (GROUP IV)						
	SOUTHERN CROSS AARON 4.5N, STS**	70.2	64.1	55.8	2.8	2.3	2.2
	GROUP IV AVERAGE						
	LSD (0.10)						
	LATE (GROUP V)						
Р	DELSOY 5500**	60.5	58.5	52.7	3.1	3.0	2.7
Р	ANAND**	59.3	61.1	53.8	2.2	2.4	2.2
NS	S02-8984 (natto)**	49.0			4.1		
	GROUP V AVERAGE	56.3	59.8	53.3	3.1	2.7	2.5
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2
	GRAND MEAN	62.8	61.2	54.1	2.8	2.6	2.4

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 explanar and presented (Rese 2)

^{*} Resistant to the soybean cyst nematode (Race 3)

 $^{^{\}star\star}$ 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 2004 Summary Table 4

BACK TO
SELECTION
KEY

		YIE	LD (BU/	AC) ^A	L	ODGING	3
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	EARLY (GROUP III)						
~	GREAT LAKES GL 3710 RR	73.7			2.0		
~	EBBERTS 1385RR	73.0			2.5		
~	NK BRAND S39-Q4	72.3	66.1	58.9	1.6	1.5	1.5
~	NK BRAND S35-F9	70.9			1.8		
~	PRAIRIE STREAM FARMS PSF 3405RR	68.7			1.9		
~	PRAIRIE STREAM FARMS PSF 3903NRR	67.5			2.1		
~	DYNAGRO 33A37	65.6			1.8		
~	SOUTHERN STATES RT 3975	64.6	58.8	52.8	2.7	2.3	2.2
	GROUP III AVERAGE	69.5	62.5	55.8	2.0	1.9	1.9
	LSD (0.10)	2.8	2.2	1.8	0.3	0.2	0.1
	MID-SEASON (GROUP IV)						
~	DELTA KING DK 4461 RR	77.0	71.5	61.1	2.4	2.2	2.0
~	HORNBECK HBK R4820	76.4	69.9	60.6	2.4	2.1	2.0
~	DELTA KING DK 4868 RR	75.1	71.0	61.9	2.3	2.1	2.0
~	GARST SEED 4512RR/N	73.0			2.2		
~	PIONEER VARIETY 94B73	72.6	67.9	59.3	2.9	2.6	2.4
~	DELTA KING DK 4763 RR	71.8	69.6	62.3	2.8	2.5	2.3
~	ASGROW AG4603	70.7			2.2		
~	SOUTHERN STATES RT 4980	69.3	64.9	56.3	3.0	2.8	2.6
~	BIO GENE BG 4205NRR	68.4			2.6		
~	SOUTHERN STATES RT 4098	63.8	61.7	54.1	2.4	2.1	2.1
~	DELTA AND PINE LAND DP 4546 RR	59.0			3.5		
	GROUP IV AVERAGE	70.6	68.1	59.4	2.6	2.3	2.2
	LSD (0.10)	4.9	2.8	2.2	0.4	0.2	0.2
	LATE (GROUP V)						
~	DELTA KING DK 5366 RR	52.8	55.2	50.2	4.0	3.7	3.5
	GROUP V AVERAGE						
	LSD (0.10)						
	GRAND MEAN	69.3	65.7	57.8	2.4	2.4	2.2

[~] Roundup Ready variety

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 2004 Summary Table 4

		YIE	YIELD (BU/AC) ^A		L	LODGING		
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04	
	EARLY (GROUP III)							
~	EBBERTS 1365RR**	74.2			2.3			
~	GOLDEN HARVEST H3921RR*	73.2	68.6		2.0	1.9		
~	PIONEER VARIETY 93M90*	72.1	67.7		1.9	1.7		
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR**	71.7	67.1		1.1	1.2		
~	VIGORO V38N5RS**	71.6			1.4			
~	DELTA KING DK 3968 RR*	70.4	66.2	59.5	1.8	1.7	1.7	
~	GARST SEED 3824RR/N*	70.2	65.9		1.5	1.4		
~	SOUTHERN CROSS STEPHEN 3.9 N, RR*	70.1	66.1		1.9	1.9		
~	ASGROW AG3905*	70.1	64.9		1.9	1.7		
~	DELTA AND PINE LAND DPX3950RR**	69.3			1.9			
~	VIGORO V39N4RR**	69.2			1.7			
~	NK BRAND S37-N4**	68.8	64.8	57.8	2.5	2.1	2.2	
~	PIONEER VARIETY 93B67*	68.8	62.9	56.5	1.8	1.7	1.6	
~	GOLDEN HARVEST H3945RR**	68.6	65.0	60.3	1.6	1.6	1.6	
~	DELTA AND PINE LAND DP 3861 RR*	68.2			2.1			
~	DEKALB DKB36-52*	67.6			1.7			
~	DEKALB DKB38-52*	67.3	63.5	56.8	1.4	1.5	1.6	
~	DELTA KING DK 3964 RR*	66.7		53.0	2.9		2.6	
~	LG SEEDS C3999NRR**	66.7			2.0			
~	PIONEER VARIETY 93M50*	66.6			1.8			
~	SOUTHERN STATES RT 3802N**	65.4	59.3	52.3	2.4	2.2	2.0	
~	SOUTHERN STATES RT 3850N**	64.7			1.7			
~	CROPLAN GENETICS RC3964RR**	64.6			1.7			
~	SOUTHERN STATES RT 3940N**	56.9			1.7			
	GROUP III AVERAGE	68.5	65.0	56.6	1.8	1.8	1.9	
	LSD (0.10)	2.8	2.2	1.8	0.3	0.2	0.1	
	MID-SEASON (GROUP IV)							
~	HELLENA BRAND SEED 4375*	79.2			2.1			
~	VIGORO V42N3RR**	77.7	72.0	63.9	1.7	1.5	1.5	
~	DELTAGROW 4340 RR**	75.7			2.2			
~	UNISOUTH GENETICS USG 7494nRR**	75.1			3.2			
~	SEED CONSULTANTS SC 9442 RR**	74.6	69.6	61.3	2.4	2.1	2.0	
~	PIONEER VARIETY 94M70*	74.5	69.8	01.0	3.1	2.7		
~	DELTA AND PINE LAND DP 4331 RR*	74.3			2.3			
~	CROPLAN GENETICS RC4464RR*	74.1			1.9			
~	STEYER 4900 RR SCN**	73.9			2.8			
~	STEYER 4700 RR SCN**	73.7	67.1	57.6	2.1	2.2	2.1	
~	LG SEEDS C4910NRR*	73.6	0	01.0	3.2			
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	73.3	69.5	62.3	1.6	1.5	1.6	
~	BIO GENE BG 4200NRRST**	73.3	69.7	02.5	1.4	1.4	1.0	
	UNISOUTH GENETICS USG 7484nRR**		03.1			1.4		
		72.7	70.5		3.5	0.0		
	DELTA KING DK 4967 RR*	72.5	70.5	co =	2.5	2.6	0.7	
~	PIONEER VARIETY 94B74**	71.9	67.6	60.5	3.2	3.0	2.7	
	ASGROW AG4403*	71.9	66.1	58.0	2.2	2.1	2.0	
	HELLENA BRAND SEED 4875*	71.9			3.6			
~	SEED CONSULTANTS SC 9415 RR**	71.8			1.4			
~	DYNAGRO 3443**	71.6	68.0	58.9	2.3	2.1	2.0	
~	TRISOY 4838RR(CN)*	71.6			2.6			
~	UNISOUTH GENETICS USG 7482nRR**	71.6	66.2		2.6	2.5		
~	DELTA AND PINE LAND DPX4891RR**	71.5			3.4			

TABLE 4G. Roundup Ready varieties with SCN resistance - subset of the 2004 Summary Table 4

		YIELD (BU/AC) ^A			ODGING	}	
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	MID-SEASON (GROUP IV) continued						
~	DELTAGROW 4860 RR**	71.4			2.6		
~	DEKALB DKB46-51**	71.3	67.2		2.7	2.4	
~	VIGORO V48N5RR*	71.2			2.9		
~	GREAT LAKES GL 4409 RR**	70.9	66.8	58.6	2.2	2.0	1.9
~	SOUTHERN CROSS TITUS 4.8N, RR**	70.7	65.7	57.7	3.0	2.7	2.5
~	DELTAGROW 4840 RR**	70.6			3.3		
~	EXCEL BRAND 8448NRR*	70.6	67.4		1.6	1.6	
~	SOUTHERN CROSS JONAH 4.8 N, RR**	70.5	66.4		2.6	2.5	
~	CROW'S C4815R**	70.3	67.3	58.7	2.6	2.5	2.3
~	ASGROW AG4201**	70.1	67.2	59.7	2.5	2.3	2.2
~	CROPLAN GENETICS RC4842RR**	70.1			2.6		
~	GOLDEN HARVEST H4273RR**	69.9			2.4		
~	STINE S4842-4**	69.9			3.1		
~	HORNBECK HBK R4623**	69.6			3.3		
~	DELTAGROW 4630 RR*	69.5			2.9		
~	PRAIRIE STREAM FARMS PSF 4004NRR*	69.4			1.5		
	VIGORO V47N3RR**	69.3	66.3	60.1	2.1	2.1	2.0
	ASGROW AG4801*	69.1	00.0	00	1.8		
~	NK BRAND S43-B1**	69.1	66.4		2.2	2.1	
~	TRISOY 4697RR(CN)**	68.8	00.1		2.5		
~	PIONEER VARIETY 94B13*	68.7	66.0	57.4	2.4	2.2	2.0
~	STINE S4542-4**	68.7	66.4	07.4	3.1	2.9	2.0
~	GREAT LAKES GL 4009 RR**	68.5	65.3		1.4	1.3	
~	NK BRAND S49-Q9**	68.3	65.8	59.2	2.7	2.5	2.3
~	SOUTHERN STATES RT 4230N**	68.3	67.1	55.2	2.5	2.3	2.0
	GREAT LAKES GL 4809 RR**	67.7	07.1		3.5	2.0	
~	EXCEL BRAND 8412NRR*	67.3			2.4		
~	PIONEER VARIETY 94M90*	67.2			3.1		
~	CROPLAN GENETICS RC4013RR**	67.1			2.8		
_	BECK 434NRR**	66.9			2.0		
_	GARST SEED 4112RR/N*	66.9			1.5		
~	CROW'S C4418R**	66.8			2.1		
	UNISOUTH GENETICS USG 7499nRR**	66.7			2.7		
~	EXCEL BRAND 8492NRR*	66.4			3.3		
	LG SEEDS C4343NRR** PRAIRIE STREAM FARMS PSF 4102NRR**	66.3 66.0			2.1 2.2		
			00.0	55.0		0.4	0.0
	SOUTHERN STATES RT 4810N**	65.8	62.9	55.0	2.6	2.4	2.3
~	HORNBECK HBK R4945CX**	65.0	04.0	50 4	3.0	0.4	0.0
~	SOUTHERN STATES RT 4502N**	65.0	61.2	53.4	2.6	2.4	2.2
~	ASGROW AG4102**	63.6			2.2		
~	DELTAGROW 4960 RR**	62.8			3.5		
~	HORNBECK HBK R4023*	58.3			3.7		
~	SOUTHERN STATES RT 4440N**	58.3			2.4		
	GROUP IV AVERAGE	69.9	67.1	58.9	2.5	2.2	2.1
	LSD (0.10)	4.9	2.8	2.2	0.4	0.2	0.2

TABLE 4G. Roundup Ready varieties with SCN resistance - subset of the 2004 Summary Table 4

BACK TO
SELECTION
KEY

		YIE	LD (BU/A	AC) ^A	LODGING		
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	LATE (GROUP V)						
~	GOLDEN HARVEST H5053RR*	72.8			2.7		
~	HORNBECK HBK R4924**	70.5			2.8		
~	VIGORO V50N5RR**	68.4			2.9		
~	STINE S5142-4**	67.5	66.4		2.9	3.0	
~	NK BRAND S50-N3**	66.9			2.7		
~	UNISOUTH GENETICS USG 510nRR**	63.2	63.1	55.7	2.9	2.7	2.5
~	EXCEL BRAND 8509NRR*	63.1			2.9		
~	PIONEER VARIETY 95B42*	62.2	59.8	52.3	3.0	3.1	2.8
~	STEYER 5300 RR SCN**	62.0			2.2		
~	DELTAGROW 5460 RR**	61.9			3.1		
~	SOUTHERN STATES RT 5540N**	61.9			3.0		
~	UNISOUTH GENETICS USG 7514nRR**	61.2			3.6		
~	ASGROW AG5605*	60.9	65.4		3.2	3.0	
~	PIONEER VARIETY 95B32**	60.8	58.1	52.3	3.0	2.8	2.5
~	VIGORO V55N5RR**	60.6			3.0		
~	CROPLAN GENETICS RC5222RR**	60.6			3.8		
~	SOUTHERN STATES RT 5450N**	60.3			2.9		
~	CROPLAN GENETICS RC5003RR**	60.2			3.2		
~	SOUTHERN CROSS ABNER 5.2 N, RR**	60.1	61.0		3.5	3.4	
~	DELTA KING DK 5161 RR**	60.1	60.7		3.9	3.7	
~	DYNAGRO 33B52**	59.9	60.6		4.0	3.8	
~	DELTA KING DK 5465 RR*	59.9	62.4	55.3	3.1	2.9	2.7
~	DELTAGROW 5260 RR**	59.9			3.4		
~	SOUTHERN STATES RT 5602N**	59.8	60.9	53.5	2.7	3.2	2.9
~	GOLDEN HARVEST H5470RR*	59.6			3.1		
~	ASGROW AG5301**	58.9	59.8	53.5	2.9	3.0	2.7
~	EXCEL BRAND 8520NRR*	57.9			2.6		
~	SOUTHERN STATES RT 5130N**	56.4			3.2		
~	UNISOUTH GENETICS USG 7523nRR**	56.3			3.1		
~	SOUTHERN STATES RT 5302N**	56.1	57.8	51.4	2.6	2.6	2.4
~	SOUTHERN STATES RT 5001N**	54.8	53.5	48.6	3.1	3.1	2.8
~	DELTA KING DK 55T6**	53.3	00.0		3.4	.	
	GROUP V AVERAGE	61.2	60.7	52.8	3.1	3.1	2.7
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2
	GRAND MEAN	67.3	65.0	56.8	2.5	2.3	2.2

[~] Roundup Ready variety

^{*} 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 2004 Summary Table 4

		YIE	LD (BU/	AC) ^A	LODGING			
	BRAND VARIETY	2004	03-04	02-04	2004		02-04	
	EARLY (GROUP III)							
	PRAIRIE STREAM FARMS PSF 371N** PRAIRIE STREAM FARMS PSF 355N*	70.3 67.8			2.5 2.4			
	GROUP III AVERAGE LSD (0.10)	69.0 2.8			2.4 0.3			
	MID-SEASON (GROUP IV)							
	SOUTHERN CROSS AARON 4.5N, STS**	70.2	64.1	55.8	2.8	2.3	2.2	
	GROUP IV AVERAGE LSD (0.10)							
	LATE (GROUP V)							
Р	DELSOY 5500**	60.5	58.5	52.7	3.1	3.0	2.7	
Р	ANAND**	59.3	61.1	53.8	2.2	2.4	2.2	
NS	S02-8984 (natto)**	49.0			4.1			
	GROUP V AVERAGE	56.3	59.8	53.3	3.1	2.7	2.5	
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2	
	GRAND MEAN	62.8	61.2	54.1	2.8	2.6	2.4	

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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.

lesting 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 4I. Roundup Ready varieties with SCN resistance - subset of the 2004 Summary Table 4

		VIE	LD (BU/	A C) ^A		ODGING	3
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	EARLY (GROUP III)						
~	EBBERTS 1365RR**	74.2			2.3		
~	GOLDEN HARVEST H3921RR*	73.2	68.6		2.0	1.9	
~	PIONEER VARIETY 93M90*	72.1	67.7		1.9	1.7	
~	SOUTHERN CROSS ABRAHAM 3.9 N, RR**	71.7	67.1		1.1	1.2	
~	VIGORO V38N5RS**	71.6			1.4		
~	DELTA KING DK 3968 RR*	70.4	66.2	59.5	1.8	1.7	1.7
~	GARST SEED 3824RR/N* SOUTHERN CROSS STEPHEN 3.9 N, RR*	70.2 70.1	65.9 66.1		1.5 1.9	1.4 1.9	
~	ASGROW AG3905*	70.1	64.9		1.9	1.7	
~	DELTA AND PINE LAND DPX3950RR**	69.3	04.5		1.9	1.7	
~	VIGORO V39N4RR**	69.2			1.7		
~	NK BRAND S37-N4**	68.8	64.8	57.8	2.5	2.1	2.2
~	PIONEER VARIETY 93B67*	68.8	62.9	56.5	1.8	1.7	1.6
~	GOLDEN HARVEST H3945RR**	68.6	65.0	60.3	1.6	1.6	1.6
~	DELTA AND PINE LAND DP 3861 RR*	68.2			2.1		
~	DEKALB DKB36-52* DEKALB DKB38-52*	67.6 67.3	63.5	EC 0	1.7 1.4	1.5	1.6
~	DELTA KING DK 3964 RR*	66.7	63.5	56.8 53.0	2.9	1.5	1.6 2.6
~	LG SEEDS C3999NRR**	66.7		00.0	2.0		2.0
~	PIONEER VARIETY 93M50*	66.6			1.8		
~	SOUTHERN STATES RT 3802N**	65.4	59.3	52.3	2.4	2.2	2.0
~	SOUTHERN STATES RT 3850N**	64.7			1.7		
~	CROPLAN GENETICS RC3964RR**	64.6			1.7		
~	SOUTHERN STATES RT 3940N**	56.9			1.7		
	GROUP III AVERAGE	68.5	65.0	56.6	1.8	1.8	1.9
	LSD (0.10)	2.8	2.2	1.8	0.3	0.2	0.1
	MID-SEASON (GROUP IV)						
~	HELLENA BRAND SEED 4375*	79.2	70.0	60.0	2.1	4.5	4.5
~	VIGORO V42N3RR** DELTAGROW 4340 RR**	77.7 75.7	72.0	63.9	1.7 2.2	1.5	1.5
~	UNISOUTH GENETICS USG 7494nRR**	75.7			3.2		
~	SEED CONSULTANTS SC 9442 RR**	74.6	69.6	61.3	2.4	2.1	2.0
~	PIONEER VARIETY 94M70*	74.5	69.8		3.1	2.7	
~	DELTA AND PINE LAND DP 4331 RR*	74.3			2.3		
~	CROPLAN GENETICS RC4464RR*	74.1			1.9		
~	STEYER 4900 RR SCN**	73.9			2.8		
~	STEYER 4700 RR SCN**	73.7	67.1	57.6	2.1	2.2	2.1
~	LG SEEDS C4910NRR*	73.6	00.5	00.0	3.2	4.5	4.0
~	SOUTHERN CROSS MICHAEL 4.2N, RR**	73.3	69.5	62.3	1.6	1.5	1.6
~	BIO GENE BG 4200NRRST** UNISOUTH GENETICS USG 7484nRR**	72.8 72.7	69.7		1.4 3.5	1.4	
~	DELTA KING DK 4967 RR*	72.7	70.5		2.5	2.6	
	PIONEER VARIETY 94B74**	71.9	67.6	60.5	3.2	3.0	2.7
~	ASGROW AG4403*	71.9	66.1	58.0	2.2	2.1	2.0
~	HELLENA BRAND SEED 4875*	71.9			3.6		
~	SEED CONSULTANTS SC 9415 RR**	71.8			1.4		
~	DYNAGRO 3443**	71.6	68.0	58.9	2.3	2.1	2.0
~	TRISOY 4838RR(CN)*	71.6			2.6		
~	UNISOUTH GENETICS USG 7482nRR**	71.6	66.2		2.6	2.5	
~	DELTA AND PINE LAND DPX4891RR**	71.5			3.4		
	DELTAGROW 4860 RR**	71.4			2.6		
	DEKALB DKB46-51**	71.3	67.2		2.7	2.4	
	VIGORO V48N5RR* CPEAT LAKES CL 4400 PP**	71.2	66.0	50 6	2.9 2.2	2.0	1.0
	GREAT LAKES GL 4409 RR** SOUTHERN CROSS TITUS 4.8N, RR**	70.9 70.7	66.8 65.7	58.6 57.7	3.0	2.0 2.7	1.9 2.5
	DELTAGROW 4840 RR**	70.7	03.1	51.1	3.3	۷.1	۵.5
	EXCEL BRAND 8448NRR*	70.6	67.4		1.6	1.6	
~	SOUTHERN CROSS JONAH 4.8 N, RR**	70.5	66.4		2.6	2.5	
~	CROW'S C4815R**	70.3	67.3	58.7	2.6	2.5	2.3
	ASGROW AG4201**	70.1	67.2	59.7	2.5	2.3	2.2
~	CROPLAN GENETICS RC4842RR**	70.1			2.6		
~	GOLDEN HARVEST H4273RR**	69.9			2.4		
~	STINE S4842-4**	69.9			3.1		



TABLE 4I. Roundup Ready varieties with SCN resistance - subset of the 2004 Summary Table 4

		YIE	LD (BU/A	LODGING			
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04
	MID-SEASON (GROUP IV) continued						
~	HORNBECK HBK R4623**	69.6			3.3		
~	DELTAGROW 4630 RR*	69.5			2.9		
~	PRAIRIE STREAM FARMS PSF 4004NRR*	69.4			1.5		
~	VIGORO V47N3RR**	69.3	66.3	60.1	2.1	2.1	2.0
~	ASGROW AG4801*	69.1			1.8		
~	NK BRAND S43-B1**	69.1	66.4		2.2	2.1	
~	TRISOY 4697RR(CN)**	68.8			2.5		
~	PIONEER VARIETY 94B13*	68.7	66.0	57.4	2.4	2.2	2.0
~	STINE S4542-4**	68.7	66.4		3.1	2.9	
~	GREAT LAKES GL 4009 RR**	68.5	65.3		1.4	1.3	
~	NK BRAND S49-Q9**	68.3	65.8	59.2	2.7	2.5	2.3
~	SOUTHERN STATES RT 4230N**	68.3	67.1		2.5	2.3	
~	GREAT LAKES GL 4809 RR**	67.7			3.5		
~	EXCEL BRAND 8412NRR*	67.3			2.4		
~	PIONEER VARIETY 94M90*	67.2			3.1		
~	CROPLAN GENETICS RC4013RR**	67.1			2.8		
~	BECK 434NRR**	66.9			2.1		
~	GARST SEED 4112RR/N*	66.9			1.5		
~	CROW'S C4418R**	66.8			2.1		
~	UNISOUTH GENETICS USG 7499nRR**	66.7			2.7		
~	EXCEL BRAND 8492NRR*	66.4			3.3		
~	LG SEEDS C4343NRR**	66.3			2.1		
~	PRAIRIE STREAM FARMS PSF 4102NRR**	66.0			2.2		
~	SOUTHERN STATES RT 4810N**	65.8	62.9	55.0	2.6	2.4	2.3
~	HORNBECK HBK R4945CX**	65.0			3.0		
~	SOUTHERN STATES RT 4502N**	65.0	61.2	53.4	2.6	2.4	2.2
~	ASGROW AG4102**	63.6			2.2		
~	DELTAGROW 4960 RR**	62.8			3.5		
~	HORNBECK HBK R4023*	58.3			3.7		
~	SOUTHERN STATES RT 4440N**	58.3			2.4		
	GROUP IV AVERAGE	69.9	67.1	58.9	2.5	2.2	2.1
	LSD (0.10)	4.9	2.8	2.2	0.4	0.2	0.2

TABLE 4I. Roundup Ready varieties with SCN resistance - subset of the 2004 Summary Table 4

BACK TO
SELECTION
KEY

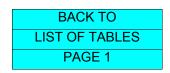
		YIE	LD (BU/A	AC) ^A	LODGING			
	BRAND VARIETY	2004	03-04	02-04	2004	03-04	02-04	
	LATE (GROUP V)							
~	GOLDEN HARVEST H5053RR*	72.8			2.7			
~	HORNBECK HBK R4924**	70.5			2.8			
~	VIGORO V50N5RR**	68.4			2.9			
~	STINE S5142-4**	67.5	66.4		2.9	3.0		
~	NK BRAND S50-N3**	66.9			2.7			
~	UNISOUTH GENETICS USG 510nRR**	63.2	63.1	55.7	2.9	2.7	2.5	
~	EXCEL BRAND 8509NRR*	63.1			2.9			
~	PIONEER VARIETY 95B42*	62.2	59.8	52.3	3.0	3.1	2.8	
~	STEYER 5300 RR SCN**	62.0			2.2			
~	DELTAGROW 5460 RR**	61.9			3.1			
~	SOUTHERN STATES RT 5540N**	61.9			3.0			
~	UNISOUTH GENETICS USG 7514nRR**	61.2			3.6			
~	ASGROW AG5605*	60.9	65.4		3.2	3.0		
~	PIONEER VARIETY 95B32**	60.8	58.1	52.3	3.0	2.8	2.5	
~	VIGORO V55N5RR**	60.6			3.0			
~	CROPLAN GENETICS RC5222RR**	60.6			3.8			
~	SOUTHERN STATES RT 5450N**	60.3			2.9			
~	CROPLAN GENETICS RC5003RR**	60.2			3.2			
~	SOUTHERN CROSS ABNER 5.2 N, RR**	60.1	61.0		3.5	3.4		
~	DELTA KING DK 5161 RR**	60.1	60.7		3.9	3.7		
~	DYNAGRO 33B52**	59.9	60.6		4.0	3.8		
~	DELTA KING DK 5465 RR*	59.9	62.4	55.3	3.1	2.9	2.7	
~	DELTAGROW 5260 RR**	59.9			3.4			
~	SOUTHERN STATES RT 5602N**	59.8	60.9	53.5	2.7	3.2	2.9	
~	GOLDEN HARVEST H5470RR*	59.6			3.1			
~	ASGROW AG5301**	58.9	59.8	53.5	2.9	3.0	2.7	
~	EXCEL BRAND 8520NRR*	57.9			2.6			
~	SOUTHERN STATES RT 5130N**	56.4			3.2			
~	UNISOUTH GENETICS USG 7523nRR**	56.3			3.1			
~	SOUTHERN STATES RT 5302N**	56.1	57.8	51.4	2.6	2.6	2.4	
~	SOUTHERN STATES RT 5001N**	54.8	53.5	48.6	3.1	3.1	2.8	
~	DELTA KING DK 55T6**	53.3	55.5	40.0	3.4	0.1	2.0	
	GROUP V AVERAGE	61.2	60.7	52.8	3.1	3.1	2.7	
	LSD (0.10)	4.6	2.7	2.0	0.4	0.2	0.2	
	GRAND MEAN	67.3	65.0	56.8	2.5	2.3	2.2	

[~] Roundup Ready variety

^{*} 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.



Memorandum

Date: November, 2004

TO: Soybean Seed Producers

FROM: Eugene Lacefield, Research Specialist

SUBJECT: 2005 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 2005 tests. The publication web site which was activated December 1, 1999, was accessed over 2,500 times through November 2000 (2000 publication), more than 4,000 times for the 2001 pub., over 7,000 times for the 2002 pub., and about 13,000 times for the 2003 pub..

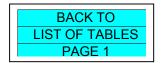
If, due to rapid changes in the agriculture industry, this memorandum has not reached the correct contact person please forward or e-mail me the correct information. Thank you for participating in the Soybean Variety Test Program and for being interested in marketing tested varieties in Kentucky. Your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

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

Eugene Lacefield Department of Agronomy University of Kentucky N-222C Ag. Science Center North Lexington, KY 40546-0991

Tel: 859-257-2993 Fax: 859-323-1952 E-mail elace0@uky.edu

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.

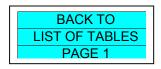
All entries (except experimental and novel soybeans) in the Kentucky soybean performance test must be identified by the name(s) required to be on the seed tag or label by the Kentucky Seed Law, i.e., listed in the manner by which the seed will be sold or offered for sale in Kentucky. The law requires 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.



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).
- 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:

Phone: (859) 257-2993

Fax: (859) 323-1952

E-mail: elace0@uky.edu

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

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 2005 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 505, "Kentucky Soybean Performance Tests - 2004".

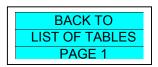
Publication of results

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.



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

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

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**

	New	Maturity	Roundup	Percent	Race (s) of	Cl	heck the a	ppropriate	race & resi	stance ³	
Entry: type name exactly as	this	Group	Ready	Germ ²	Soybean	Phytophtora s	sojae	G 11	G .	G :	
it will appear in the publication	year	example 4.7			Cyst Nematode Resistance		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 2004. If entry was in last years test as an experimental or the name has been changed please add a note to this effect.

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	
•			

² If not specified, 100% will be assumed.

³ Use provided choices: S=susceptible, MS=moderately susceptible, MR=moderately 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.