

2009 Kentucky Soybean Performance Tests

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

Twenty soybean tests were planted in 2009 in Kentucky at the five test locations shown below. Soil types, planting dates, and other information are shown in Table 1.

Tables

1. Location, Planting, and Climatic Data for the 2009 Soybean Performance Tests.....	1
2A. Full-Season Soybeans.....	3
2B. Double-Crop Soybeans.....	3
3. Company Disease Resistance Specifications.....	6
4. Seed Treatment.....	9
5. 2009 Summary: Variety Test Tables 6-10.....	10
6. Caldwell County Full-Season Variety Test.....	13
7. Calloway County (MSU) Full-Season Variety Test.....	16
8. Fayette County (UK) Full-Season Variety Test.....	19
9. McLean County Full-Season Variety Test.....	22
10. Warren County (WKU) Full-Season Variety Test.....	25

Seed Source Information on page 4.

Kentucky Grain Crops Web Site

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

Provides links to all Kentucky variety test publications and related resources. This includes a link to the new soybean variety tests Web site with the following features:

- 2009 Kentucky Soybean Performance Tests (this publication) and archived reports in PDF format.
- Archived Excel tables by year.
- Current year preliminary test results—posted as harvested.
- ListServ signup form to receive emails when the preliminary tables are posted.
- Nomination form, cover letter, and instructions for next season's test entries.

Location of the 2009 Kentucky Soybean Tests

1. Caldwell County—UK
2. Fayette County—UK
3. McLean County
4. Calloway County—MSU
5. Warren County—WKU

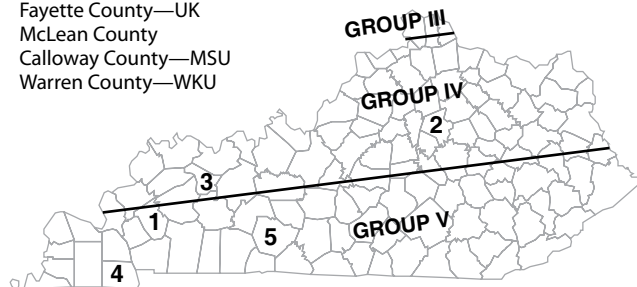


Table 1. Location, Planting, and Climatic Data for the 2009 Soybean Performance Tests

Test	Site	Extension Agent	Soil Type	Date of Planting	Soil Test	Fertilizer Applied ¹	50% Chance of Killing Frost ²
Caldwell County Full Season	Princeton Exp. Station University of Kentucky		Crider Silt Loam	5/19	P 113 K 397 pH 6.6	None	10/21
Warren County Full Season	Western Kentucky University		Pembroke Silt Loam	5/22	P 257 K 586 pH 7.2	None	10/21
Fayette County Full Season	Lexington Exp. Station University of Kentucky		Woolper Silt Loam	5/12	P 414 K 365 pH 5.5	None	10/25
Calloway County Full Season	Murray State University		Waverly Silt Loam	5/20	P 138 K 210 pH 6.5	1 ton lime	10/27
McLean County Full Season	Richard Smith Farm	Greg Henson	Melvin Silt Loam	5/21	P 104 K 238 pH 6.2	None	10/22

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

Methods

All tests were planted in a randomized complete block design by maturity group. The tests (Tables 6-10) 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. Companies could choose to treat their seed with fungicides and insecticides. Table 4 presents treatment data and code numbers for each treatment. The treatment code number for each variety is provided in column one of Tables 5-10.

Harvesting was done with a small plot combine according to maturity; thus, several harvests were made at each location. Sixteen feet of the four 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 (60 pounds) per acre adjusted to 13% moisture. An electronic moisture monitor located on the combine was used for moisture readings for each plot.

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 99% of the pods have turned their normal mature color. One to two weeks of good drying weather may 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.

Protein, Oil—Variety protein and oil concentration were determined at the McLean County location (all test locations for novel special-trait entries [NS]) and expressed on the basis of 13% moisture.

Summary Table 5 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 5 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 the University of Kentucky publication *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 availability of time and equipment are other factors that need to be considered. The economic management and control of weeds are additional factors to consider.

Varieties with oil and protein levels that are eligible for premium prices are available in some markets. Oil and protein levels are influenced by variety and weather (primarily temperature) during seed filling. (See UK's *Corn & Soybean Newsletter*, Volume 6, Issue 1, "Soybean Oil and Protein.") Our recommendation is that you create a list of varieties that meet your needs for agronomic characteristics: yield, maturity group, soybean cyst nematode resistance, etc. Then, using the protein and oil data from Table 5, remove from consideration those varieties with below-average oil percentages. Select from the remaining varieties those that have the highest average protein concentration. This approach should give a variety that has the best chance of producing acceptable yield and meeting the oil and protein standards.

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 UK's *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 (SCN) problems, a resistant variety (indicated by a "s" prefix) 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 Web site.) 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%.

The level of SCN infestation as well as the SCN race can be determined through the SCN laboratory at the UK Research and Education Center at Princeton. Test your fields, and contact your county Extension office for more information on collecting and submitting samples.

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 help eliminate 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 5, consisting of a summary of the five full-season tests, is recommended for selecting varieties for maximum yield in double-crop systems and in full-season systems. Better yielding full-season varieties are also the better-yielding double-crop varieties (Pfeiffer, Todd 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.

Eleven novel soybean varieties (indicated by an "NS" prefix) are being tested this year. These varieties 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; 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 and potentially have a large U.S. market. Oil and protein data are provided in Table 4. Low linolenic acid (18:3) varieties, which entered commercial production in 2006, are another example of a novel special-trait soybean of current interest. Labeling for trans fat as required by the U.S. Food and Drug Administration began Jan. 1, 2006. Trans fats, which are undesirable for human health, result from the hydrogenation of vegetable oils. Low linolenic acid (18:3) varieties do not require this process.

Growing Conditions and Special Circumstances

Wet conditions started back in March and continued through the spring, creating a slow-to-start planting and growing season. July 2009 was the fourth month straight with above-normal rainfall. August was a cool month, like much of the summer, but also drier. September and October were very wet months

with cool conditions. Of the past seven months, six have been above normal in rainfall (<http://www.wagwx.ca.uky.edu/annual.shtml>). As a result, growing conditions have been excellent for full-season beans, and double-crop beans have had moisture adequate to produce a good crop. Soybean production is forecast at 62.0 million bushels, up from the previous record production set in 2006, and 30 percent above 2008. Yield is forecast at 44 bushels per acre, equal to the record yield set in 2004 and 2006 (http://www.nass.usda.gov/Statistics_by_State/Kentucky/Publications/Agri-News/oct128.pdf).

Soybean Production Information

The Kentucky Cooperative Extension Service has a series of publications, *Soybean Production in Kentucky*, which 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, including PPA-42, Soybean Cyst Nematode, and the Corn & Soybean Newsletter are available online at the Grain Crops Web site (URL on first page). Tables 2A & 2B are updated planting guides for your convenience. For additional research on seeding rates, see the Corn & Soybean Newsletter, Volume 6, Issue 2, "Soybean Seeding Rates" and Volume 7, Issue 4, "Soybean Seed Rates." The most recent research suggests that a final stand of 100,000 plants per acre is more than adequate for maximum yields in full-season soybeans. Seeding rate should be based on standard germination rate as well as expected

Table 2A. Full-Season Soybeans

Target Stand plants/acre	Standard Germination	Assumed Stand Loss	Final Seeding Rate seeds/acre	Row Spacing (inches)		
				7.5	15	30
100,000	95%	5%	110,803	1.6	3.2	6.4
100,000	95%	10%	116,959	1.7	3.4	6.7
100,000	95%	20%	131,579	1.9	3.8	7.6
100,000	95%	30%	150,376	2.2	4.3	8.6
100,000	90%	5%	116,959	1.7	3.4	6.7
100,000	90%	10%	123,457	1.8	3.5	7.1
100,000	90%	20%	138,889	2.0	4.0	8.0
100,000	90%	30%	158,730	2.3	4.6	9.1
100,000	85%	5%	123,839	1.8	3.6	7.1
100,000	85%	10%	130,719	1.9	3.8	7.5
100,000	85%	20%	147,059	2.1	4.2	8.4
100,000	85%	30%	168,067	2.4	4.8	9.6

Table 2B. Double-Crop Soybeans

Target Stand plants/acre	Standard Germination	Assumed Stand Loss	Final Seeding Rate seeds/acre	Row Spacing (inches)		
				7.5	15	30
140,000	95%	5%	155,125	2.2	4.5	8.9
140,000	95%	10%	163,743	2.3	4.7	9.4
140,000	95%	20%	184,211	2.6	5.3	10.6
140,000	95%	30%	210,526	3.0	6.0	12.1
140,000	90%	5%	163,743	2.3	4.7	9.4
140,000	90%	10%	172,840	2.5	5.0	9.9
140,000	90%	20%	194,444	2.8	5.6	11.2
140,000	90%	30%	222,222	3.2	6.4	12.8
140,000	85%	5%	173,375	2.5	5.0	10.0
140,000	85%	10%	183,007	2.6	5.3	10.5
140,000	85%	20%	205,882	3.0	5.9	11.8
140,000	85%	30%	235,294	3.4	6.8	13.5

stand losses. Stand losses are typically more severe in damp, cool conditions with heavy residue or with soil crusting. Stand losses are typically less with warm conditions and adequate soil moisture.

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 a) kind and variety for each agricultural seed component present in excess of 5% of the whole and b) 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. All soybean seed must be labeled by variety name; the term "variety unknown" may no longer be used in place of a variety designation for soybeans.

Acknowledgments

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Sources of Seeds

The seed planted in the 2009 Soybean Performance Tests was acquired from the following sources:

Beck's Superior Hybrids

Doug Clouser800-937-2325
6767 East 276th St.
Atlanta, IN 46031
dougcl@beckshybrids.com
BECK 491NRTM*
BECK 400NR TM*
BECK 399NR
BECK 445NR
BECK 474NR
BECK 343N
BECK 414N

Caverndale Farms, Inc.

Barry Welty859-236-2150
1921 Bluegrass Road
Danville, KY 40422
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CAVERNDALE CF 388n
CAVERNDALE CF 410 RR/STSn
CAVERNDALE CF 439 LL
CAVERNDALE CF 447 RR/STSn
CAVERNDALE CF 470 RR/STSn

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Matthew Clinton515-597-5911
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CHANNEL 4551R
CHANNEL 4851R
CHANNEL 4852R
CHANNEL 5051R

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DYNA-GRO V42N9RS
DYNA-GRO 36C44
DYNA-GRO V47N9RS
DYNA-GRO 33G48
DYNA-GRO 39LL43

Cullum Seeds, LLC

Scottie Blanchard870-579-2286
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Fisher, AR 72429
scottieblanchard@cullumseeds.com
ARMOR ARX 938
ARMOR ARX 0431
ARMOR ARX 0432
ARMOR 47-R33
ARMOR ARX 0472
ARMOR 47-G10
ARMOR ARX0474
ARMOR 42-M1
ARMOR 44-K6
ARMOR 47-F8
ARMOR 48-J3
ARMOR 53-Z5
DELTA KING DKX 0461
DELTA KING DKR 4744s
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P.O. Box 958
West Bend, WI 53095
rsecrist@dairylandseed.com
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DAIRYLAND DST39-000
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EBBERTS 3369
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jthomas@hbksseed.com
HORNBECK HBK R3927
HORNBECK HBK R4727
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HALO 4:65
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L&M 843R
L&M 74 STS

Miles Seed

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Owensboro, KY 42304-2879
scojan@milesmore.com
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SOUTHERN CROSS LUCAS 3.8 N, RR
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SOUTHERN CROSS BENJAMIN 4.3 N
SOUTHERN CROSS CALEB 4.4 N, RR, STS
SOUTHERN CROSS ELI 4.7 N, RR, STS
SOUTHERN CROSS GALILEE 4.7 N, RR
SOUTHERN CROSS RUFUS 4.7 N, RR, STS
SOUTHERN CROSS DAMASCUS 5.0 N, RR, STS
SOUTHERN CROSS ENOS 4.3 N, LL
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SOUTHERN CROSS JOSHUA 4.8

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ASGROW AG4903
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ASGROW AG5301
ASGROW DKB42-51
AGEX350
AGEX370
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AGEX391
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AGEX440
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AGEX452

Pioneer Hi-Bred Int'l., Inc.

Michael R. Hughes.....800-331-2475
700 Blvd. S., Suite 302
Huntsville, AL 35802
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PIONEER VARIETY 93Y20
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PIONEER VARIETY 94Y60
PIONEER VARIETY 94Y70
PIONEER VARIETY 94Y90
PIONEER VARIETY 95Y40

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Progeny Ag Products

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PROGENY P4206RR
PROGENY P4508RR
PROGENY P4606RR
PROGENY P4706RR
PROGENY P4807RR
PROGENY P4906RR
PROGENY P4908RR
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SCHILLINGER SEED 435.TCS
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SCHILLINGER SEED 495.RC
SCHILLINGER SEED 4990.RC
SCHILLINGER SEED 5440.R
SCHILLINGER SEED 557.RC

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SOUTHERN STATES RT 4470N
SOUTHERN STATES RT 4777N
SOUTHERN STATES RT 4808N
SOUTHERN STATES RT 4996N
SOUTHERN STATES RT 5160N
SOUTHERN STATES LL 389N
SOUTHERN STATES LL 410N
SOUTHERN STATES LL 430N
SOUTHERN STATES LL 450N
SOUTHERN STATES LL 499N
SOUTHERN STATES LL 511N
SOUTHERN STATES 3820NR2

Steyer Seeds

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6154 North County Road 33
Tiffin, OH 44883
joesteyer@yahoo.com
STEYER 4210RR
STEYER 4430RR
STEYER 4620RR
STEYER 4710RR
STEYER 401
STEYER 410
STEYER 441sts

Stine Seed Company

Brian Hartman314-707-6826
22555 Laredo Trail
Adel, IA 50003-4570
brianhartman@charter.net
www.stinseed.com
STINE 4392-4
STINE 4782-4
STINE 4582-4
STINE 5022-4

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Kevin Scholl309-253-4307
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NK S43-N6 BRAND
NK S44-D5 BRAND
NK S47-D9 BRAND
NK S49-Q9 BRAND
NK XR3997
NK XR4090
NK XR4995

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3274 East 800 North Road
Fairmount, IL 61841
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TRISOY 4760RR(CN)
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UNISOUTH GENETICS USG 440nSTS
UNISOUTH GENETICS USG 5002T
UNISOUTH GENETICS USG 5601T
UNISOUTH GENETICS USG 74A76
UNISOUTH GENETICS USG 74C36
UNISOUTH GENETICS USG 74G78
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Novel Soybean Varieties

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BECK 359NRV (Vistive)

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IA3027 (lipoxigenase free)
IA3041 (1% linolenic)
IA3042 (1% linolenic)
IA4004 (food type)

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V01-1702 (3.5% linolenic)
V01-1693 (3.5% linolenic)

Table 3. Company Disease Resistance Specifications for Entries in the 2009 Kentucky Soybean Performance Tests^A

Type ^B	Variety / Brand	Relative Maturity Group	Soybean Cyst Nematode Resistance	Phytophthora sojae ^{C, D}		Sudden Death Syndrome ^D	Soybean Mosaic Virus ^D	Stem Canker ^D	Other Reported Resistance
				Resistance Gene Rps	Field Tolerance				
EXP-RR2Y	AGEX350	3.5							
EXP-RR2Y	AGEX370	3.7							
EXP-RR2Y	AGEX390	3.9							
EXP-RR2Y	AGEX391	3.9							
EXP-RR2Y	AGEX410	4.1							
EXP-RR2Y	AGEX411	4.1							
EXP-RR2Y	AGEX430	4.1							
EXP-RR2Y	AGEX431	4.3							
EXP-RR2Y	AGEX432	4.3							
EXP-RR2Y	AGEX440	4.4							
EXP-RR2Y	AGEX450	4.5							
EXP-RR2Y	AGEX451	4.5							
EXP-RR2Y	AGEX451	4.5							
RR	ARMOR 42-M1	4.2	3, 14		MT	MR		R	
RR	ARMOR 44-K6	4.4	3, 14		MT	MR		R	STS tolerant
RR	ARMOR 47-F8	4.7	3, 14		MT	MR		R	STS tolerant
RR	ARMOR 48-J3	4.8	3		MT	MR		R	EXP-RR name was DKXTJ847
RR	ARMOR 53-Z5	5.3	3, 14		MT	MR		R	STS tolerant
EXP-RR	ARMOR ARX 0431	4.3		1c	MT	MR		R	
EXP-RR	ARMOR ARX 0432	4.3		1c	MT	MR		R	
RR	ARMOR 47-R33	4.7			MT	MR		MR	
EXP-RR	ARMOR ARX 0472	4.7			MT	MR		MR	
RR	ARMOR 47-G10	4.7	3, 14	1c	MT	MR			
EXP-RR	ARMOR ARX 0474	4.7	3, 14	1c	MT	MR			
EXP-RR	ARMOR ARX938	3.8	3, 14	1c	MT	MS			
RR	ASGROW AG3705	3.7	3	1c	MT	MR		MR	
RR	ASGROW AG3803	3.8	3	1c	T	MR		R	
RR	ASGROW AG4005	4.0	3	1c	MT	MR		MR	
RR	ASGROW AG4303	4.3	3	1c	MT	MR			
RR	ASGROW AG4404	4.4	3	1a	MT	MR		MR	STS tolerant
RR	ASGROW AG4605	4.6	3		MT	MR		R	STS tolerant
RR	ASGROW AG4606	4.6	3	1c	MT	MR			STS tolerant
RR	ASGROW AG4703	4.7	3		MT	MR		MR	
RR	ASGROW AG4705	4.7	3	1a	MT	MR			
RR	ASGROW AG4903	4.9			MT	R		MR	STS tolerant
RR	ASGROW AG4907	4.9	3	1c	MT				
RR	ASGROW AG5301	5.3	MR3, 14	3a	MT	MR		R	
RR	ASGROW DK842-51	4.2	3	1c	MT	MR		R	
CONV	BECK 343N	3.4	3, 14		MT	MR	MR	MR	
RR-NS	BECK 359NRV (Vistive)	3.5	3, 14	1c	MT	MR	MR	MR	
RR	BECK 399NR	3.9	3, 14	1c	MT	MR	MR	MR	
RR	BECK 400NR	4.0	3	1k	MT	MR	MR	MR	
CONV	BECK 414N	4.1	3		MT	MR	MR	MR	
RR	BECK 445NR	4.4	3, 14		MT	MR	MR	R	
RR	BECK 474NR	4.7	3, 14		MT	MR	MR	MR	
RR	BECK 491NR	4.9	3		MT	MR	MR	MR	
CONV	CAVERNDALE CF 388n	3.8	3, 14	1a	MT	MR	MR	MR	
RR	CAVERNDALE CF 410 RR/STSn	4.1	3, 4, 14		T	MR		R	R-FROGEYE LEAF SPOT
LL	CAVERNDALE CF 439 LL	4.3	3, 14	1c	MT	MR	MR	MR	R-FROGEYE LEAF SPOT
RR	CAVERNDALE CF 447 RR/STSn	4.4	3, 14		MT	MR		R	R-FROGEYE LEAF SPOT
RR	CAVERNDALE CF 470 RR/STSn	4.7	3, 14		T	MR		R	R-FROGEYE LEAF SPOT
RR	CHANNEL 4551R	4.5	3, 14		MT	MR		MR	R-FROGEYE LEAF SPOT
RR	CHANNEL 4851R	4.8		1a	MT	MR	MR	MR	R-ST5, R-FROGEYE LEAF SPOT
RR	CHANNEL 4852R	4.8	3, 14	1c	MT	MR	MR	R	R-ST5, R-STEM CANCKER
RR	CHANNEL 5051R	5.0	3, 14		MT	MR		R	
RR2Y	DAIRYLAND DSR-3636/R2Y	3.6							
RR	DAIRYLAND DSR-4300/RR	4.3	3		MT				
RR	DAIRYLAND DSR-4500/RRSTS	4.5	3		MT				
CONV	DAIRYLAND DSR-4890	4.8	3	1c	MT				
RR	DAIRYLAND DSR-5200/RR	5.2							
RR	DAIRYLAND DSR-8474/RR	4.7	3		MT				
RR	DAIRYLAND DSR-8482/RR	4.7		1k	MT				
RR	DAIRYLAND DSR-8509/RR	5.0	3	1k	MT				
RR	DAIRYLAND DSR-8512/RR	5.1	3, 14	1k	MT				
CONV	DAIRYLAND DST39-000	3.9	3	1c	MT				
RR	DAIRYLAND DST48-000/RR	4.8	3		MT				
EXP-RR	DELTA KING DKX 0461	4.6		1c	MT	MR		MR	
RR	DELTA KING DKR 4744s	4.6		1c	MT	MR		MR	
RR	DELTA KING DK 5363	5.3	3		MT	MS		R	
RR	DELTAGROW 4150 RR	4.1	3	1a	MT	MR		MR	
RR	DELTAGROW 4470 RR/STS	4.4	3, 14		MT	MR		MR	R-FROGEYE LEAF SPOT
RR	DELTAGROW 4770 RR	4.7	3		MT	MR	MR	R	
RR	DELTAGROW 4780 RR	4.7	3, 14	1c	T	MR	MR	MR	
RR	DELTAGROW 4870 RR	4.8							
RR	DELTAGROW 4970 RR	4.9	3, 14		MT	MR	MR	R	MR-FROGEYE LEAF SPOT, SALT INCLUDER
RR	DELTAGROW 4975 RR	4.9			MT	MS	MR	S	
RR	DELTAGROW 5160 RR/STS	5.1	3, 14		MT	MR		MR	SALT INCLUDER
RR	DELTAGROW 5170 RR	5.1	3		MT	MR		MR	
RR	DELTAGROW 5280 RR	5.2	3, 14		MT	MR	MR		R-ROOT KNOT NEMATODE (RKI)
RR	DELTAGROW 5300 RR/STS	5.3	3, 5, 9, 14	1c	MT	MR	S	MR	MR-FROGEYE LEAF SPOT
RR	DELTAGROW 5450 RR	5.4	3, 4		MT	MR	MR	R	
RR	DELTAGROW 5555 RR	5.5	3, 5, 9		MT	MR	MR		
RR	DELTAGROW 5970 RR	5.9	3, 14		MT	MR	MR		
RR	DYNA-GRO 36C44	4.4	3, 14		T	MR			R-FROGEYE LEAF SPOT
RR	DYNA-GRO 37P37	3.7	3, 14	1c	MT	MR			MR-FROGEYE LEAF SPOT
LL	DYNA-GRO 39LL43	4.3	3, 14	1c	MT	MR			MS-FROGEYE LEAF SPOT
RR	DYNA-GRO 33G48	4.8	3	1k	MT	MS		R	MR-FROGEYE LEAF SPOT
RR	DYNA-GRO V42N9RS	4.2	3, 14		MT	MR			R-FROGEYE LEAF SPOT
RR	DYNA-GRO V47N9RS	4.7	3, 14	1c	MT	MR			MS-FROGEYE LEAF SPOT
RR	EBBERTS 1365RR	3.6	3, 14	1c	MT	MR			
RR	EBBERTS 1390RR	3.9			MT	MR			

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Type ^B	Variety / Brand	Relative Maturity Group	Soybean Cyst Nematode Resistance	Phytophthora sojae ^{C, D}		Sudden Death Syndrome ^D	Soybean Mosaic Virus ^D	Stem Canker ^D	Other Reported Resistance
				Resistance Gene Rps	Field Tolerance				
CONV	EBBERTS 3369	3.6			T	MR			
CONV	EBBERTS 3386	3.8	3, 14	1c	MT	MR		MR	
CONV-P	ESSEX (long term check-released 1974)	5.0							
CONV-P	GLENN	5.3			S	R	S	R	Last year EXP V98-2711
LL	HALO 4:65	4.6	3	1c					
LL	HALO 4:94	4.9	3	1k					
LL	HALO 5:25	5.2	3		T				
LL	HALO 5:65	5.6	3						
CONV	HORNBECK HBK C4929	4.9			MT			R	
CONV	HORNBECK HBK C5528	5.5	3	1c				R	
RR	HORNBECK HBK R3927	3.9			MT			R	
RR	HORNBECK HBK R4727	4.7		1c	MT	MR		MR	
RR	HORNBECK HBK R4729	4.7	3		MT			R	MR-ROOT KNOT NEMATODE
RR	HORNBECK HBK R4924	4.9	3, 14		MT	MR	R	R	
RR	HORNBECK HBK R5229	5.2	3		MS			R	
CONV-P-NS	IA2095 (low linolenic)	late 2							
CONV-P-NS	IA3027LF (lipoxygenase free)	early 3							
CONV-P-NS	IA3041 (1% linolenic)	early 3							
CONV-P-NS	IA3042 (1% linolenic)	early 3							
CONV-P-NS	IA4004 (food grade)	early 4							
CONV-P-NS	KS4607 (high protein)	late 4							
CONV-P	KS5004N	early 5	3 (HG type 0)						
CONV	L&M 74 STS	4.0							
RR	L&M 843R	4.3	3			MR			
RR	NK S37-P5 BRAND	3.7	3, 14		MT	MR			
RR	NK S39-A3 BRAND	3.9	3, 14		MS	R			
RR	NK S43-N6 BRAND	4.3	3, 14	1c	MT	MR		R	
RR	NK S44-D5 BRAND	4.4	3, 14	1c	MT	MR		R	
RR	NK S47-D9 BRAND	4.7	3, 14	1c	MT	MR		S	
RR	NK S48-C9 BRAND	4.8	3	1a	MT	MR		MR	Last year EXP-RR: XR4881
EXP-RR	NK XR3997	3.9	3	1c	MS	MS			
EXP-RR	NK XR4090	4.0	14	1k	MS	MS			
EXP-RR	NK XR4995	4.9	3, 14	1c	MT	R		R	
CONV-P	PENNYRILE (long term check-released 1987)	4.7							
RR	PIONEER VARIETY 93Y20	3.2	3	1k	MT	MR			
RR	PIONEER VARIETY 93Y92	3.9	3		MS	MR			
RR	PIONEER VARIETY 94Y01	4.0	3	1k	MT	MR			
RR	PIONEER VARIETY 94Y20	4.2	3	1k	MS	MR			
RR	PIONEER VARIETY 94Y60	4.6	3	1k	MT	R		MR	
RR	PIONEER VARIETY 94Y70	4.7	3		MT	MR		MR	
RR	PIONEER VARIETY 94Y90	4.9	3		MS	MR		R	
RR	PIONEER VARIETY 95Y40	5.4	3	1k	MT	MR		MR	
CONV	PORTER HYBRIDS PH 4419N	4.1	3	1c	T	MR			MR-FROGEYE LEAF SPOT
RR	PROGENY P3909RR	3.9				MR		R	
RR	PROGENY P4206RR	4.2	3					R	
RR	PROGENY P4508RR	4.5	3			MR			
RR	PROGENY P4606RR	4.6	3			MR		R	
RR	PROGENY P4706RR	4.7	3						
RR	PROGENY P4807RR	4.8	3			MR		MR	
RR	PROGENY P4906RR	4.9		1a				MR	
RR	PROGENY P4908RR	4.9				MR		MR	
RR	PROGENY P4949RR	4.9	3					R	
RR	PROGENY P5218RR	5.2	3			MR		R	
RR	PROGENY P5319RR	5.3	1, 3			MR		MR	
CONV	SCHILLINGER SEED 435.TCS	4.3	3		T	R	MR	R	STS
CONV	SCHILLINGER SEED 447.TCS	4.4	3		T	R	MR	R	STS
RR	SCHILLINGER SEED 4880.RC	4.8	3		MT	MS	MR	R	
RR	SCHILLINGER SEED 495.RC	4.9	3		T	MS	MR	R	
RR	SCHILLINGER SEED 4990.RC	4.9	3		MT	MR	MR	R	
RR	SCHILLINGER SEED 5440.R	5.4			MT	MR	MR	R	
RR	SCHILLINGER SEED 557.RC	5.5	3		T	MR	MR	R	
RR	SEED CONSULTANTS SCS 9370RR	3.7	3		MT	MR			MR-FROGEYE LEAF SPOT
RR	SEED CONSULTANTS SCS 9380RR	3.8	3	1c	MT	MS			MR-FROGEYE LEAF SPOT
RR	SEED CONSULTANTS SCS 9390RR	3.9	3	1k	MT	MR			
RR	SEED CONSULTANTS SCS 9398RR	3.9	3	1k	MT	MR			MR-FROGEYE LEAF SPOT
RR	SEED CONSULTANTS SCS 9409RR	4.1	3		MT	MR			MR-FROGEYE LEAF SPOT
RR	SEED CONSULTANTS SCS 9448RR	4.3	3	1k	MT	MR		MR	MR-FROGEYE LEAF SPOT
RR	SEED CONSULTANTS SCS 9450RR	4.5	3	1k	MS	MR		MR	
RR	SEED CONSULTANTS SCS 9479RR	4.7	3		MT	MR		MR	MR-FROGEYE LEAF SPOT
RR	SEED CONSULTANTS SCS 9480RR	4.8	3	1k	MS	MR		MR	
RR	SEED CONSULTANTS SCS 9530RR	5.3		1c					
RR	SOUTHERN CROSS BENJAMIN 4.3 N	4.3	3, 14	1c	T	R			
RR	SOUTHERN CROSS CALEB 4.4 N, RR, STS	4.4	3, 14	NG2.5	MT	MR			
RR	SOUTHERN CROSS DAMASCUS 5.0 N, RR, STS	5.0	3, 14	NG1.9	MT	MR		MR	
RR	SOUTHERN CROSS ELI 4.7 N, RR, STS	4.7	3, 14		MS	MR			
LL	SOUTHERN CROSS ENOS 4.3 N, LL	4.3	3, 14	1k	MT	MR			
RR	SOUTHERN CROSS GALILEE 4.7 N, RR	4.7	3	1c	MT	MR		R	
RR	SOUTHERN CROSS JERICHO 4.2 N, RR, STS	4.2	3, 14	NG2.2	MT	MR		R	
CONV	SOUTHERN CROSS JOSHUA 4.8	4.8			S	MR			
RR	SOUTHERN CROSS LOT 4.1 N, RR, STS	4.1			MT	MR		MR	
CONV	SOUTHERN CROSS LUCAS 3.8 N, RR	3.8	3, 14	1c	MT	MR			
RR2Y	SOUTHERN CROSS MALACHI 3.8 N, RR2Y	3.8	3, 14	NG2.5	MT	MR			
RR	SOUTHERN CROSS RUFUS 4.7 N, RR, STS	4.7	3, 14	1c	MT	MR		R	
LL	SOUTHERN CROSS SHILOH 4.9 N, LL	4.9	3	NG2.5	MT				
LL	SOUTHERN STATES LL 389N	3.8	3, 14	1k	MT	MR			
LL	SOUTHERN STATES LL 410N	4.1	3, 14		MT	MR			
LL	SOUTHERN STATES LL 430N	4.3	3, 14	1c	MT	MR			
LL	SOUTHERN STATES LL 450N	4.5	3, 14		MT	MR			
LL	SOUTHERN STATES LL 499N	4.9	3, 14	1k	MT	MR			
LL	SOUTHERN STATES LL 511N	5.1	3, 14		MT	MR			
RR2Y	SOUTHERN STATES RT 3820NR2	3.8	3, 14		MT	MR			
RR	SOUTHERN STATES RT 3871N	3.8	3, 14	1c	MT	MR			
RR	SOUTHERN STATES RT 3971N	3.9	3, 14	1c	T	MR			

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				Resistance Gene Rps	Field Tolerance				
RR	SOUTHERN STATES RT 4370N	4.3	3, 14	1c	MT	MR			
RR	SOUTHERN STATES RT 4451N	4.4	3, 14	1a	T	MR			
RR	SOUTHERN STATES RT 4470N	4.4	3, 14		MT	MR			
RR	SOUTHERN STATES RT 4777N	4.7	3, 14	1c	MT	MR			
RR	SOUTHERN STATES RT 4808N	4.8	3, 14	1a	T	R			
RR	SOUTHERN STATES RT 4996N	4.9	3, 14	1c	MT	MR			
RR	SOUTHERN STATES RT 5160N	5.1	3	1c	MT	MR		R	
CONV	STEYER 401	4.0	3	1c	MT	MR	MR	MR	
CONV	STEYER 410	4.1	3, 14		MT	MR	MR	MR	
RR	STEYER 4210RR	4.2	3, 14		MT	MR	MR	R	
CONV	STEYER 4415TS	4.4	3, 14	1k	MT	MR	MR	MR	
RR	STEYER 4430RR	4.4	3, 14		MT	MR	MR	MR	
RR	STEYER 4620RR	4.6	3, 14	1c	MT	MR	MR	R	
RR	STEYER 4710RR	4.7	3, 14	1c	MT	MR	MR	MR	
RR	STINE 4392-4	4.3	3, 14		MT	MR		R	R-FROGEYE LEAF SPOT, R-ROOT KNOT NEMATODE, MR-BROWN STEM ROT
RR	STINE 4782-4	4.7	3, 14		MT	MR		R	MR-FROGEYE LEAF SPOT, MR-ROOT KNOT NEMATODE
RR	STINE 4582-4	4.5	3, 14	1a	MT	MR		R	MR-FROGEYE LEAF SPOT
RR	STINE 5022-4	4.9	3, 14	1a	MT	MR			
CONV-P	TEEJAY	5.3					R	R	
CONV-P-NS	TN03-217	5.5							
CONV-P	TN04-124	4.9							
EXP-P-RR	TN06-140-RR	5.4							
RR	TRISOY 4184RR(CN)	4.1	3, 14		MT	MR		R	RR/STS, R-FROGEYE LEAF SPOT
RR	TRISOY 4586RR(CN)	4.5	3, 14		MT	MR		R	RR/STS, R-FROGEYE LEAF SPOT
RR	TRISOY 4760RR(CN)	4.7	3, 14		MT	MR		MR	RR/STS, R-FROGEYE LEAF SPOT
RR	TRISOY 4788RR(CN)	4.7	3	1c	MT	MR		R	RR/STS
CONV	UNISOUTH GENETICS USG 440nSTS	4.4	MR-3, 14						MR-FROGEYE LEAF SPOT
CONV	UNISOUTH GENETICS USG 5002T	5.0				MR		R	R-FROGEYE LEAF SPOT, R-ROOT KNOT NEMATODE
CONV	UNISOUTH GENETICS USG 5601T	5.6				MR	R		MR-FROGEYE LEAF SPOT
RR	UNISOUTH GENETICS USG 74A76	4.7	MR-3, 14			MR			
RR	UNISOUTH GENETICS USG 74C36	4.3	3, 14			MR	R	MR	
RR	UNISOUTH GENETICS USG 74G78	4.7	3, 14			MR		R	MR-FROGEYE LEAF SPOT
RR	UNISOUTH GENETICS USG 74T98	4.9	MR-3, 14			R			
CONV-P-NS	V01-1693 (3.5% linolenic)	5.0							
CONV-P-NS	V01-1702 (3.5% linolenic)	5.0							
CONV-P	Wooster	3.9							

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

^B RR Roundup Ready variety (RR1 first generation, original trait).

RR2Y Roundup Ready 2 Yield soybean variety.

LL Liberty Link (Ignite herbicide tolerant) soybean variety.

EXP Variety that is soon to be released or still being evaluated.

CONV Variety is a conventional entry, ie: not Roundup Ready or Liberty Link.

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.

^C 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.

^D 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

Seed Treatment

Research over five seasons of testing various seed applied insecticide treatments on soybean in Kentucky have not produced a single example of a statistically significant greater yield of treatments compared to the control. This is generally not related to the performance of the insecticide but rather to the fact that in Kentucky insect pressure is most commonly too low to warrant a control action (Doug Johnson, Ph. D., UK Extension Entomologist).

Most seed companies historically offer seed treatment as an optional treatment, relying heavily on dealers with treating equipment to treat seed as requested. One reason is to avoid any costly disposal issues with untreated seed at the end of the season, thus avoiding having large inventories at the end of the

season that cannot be dumped into the grain market at local elevators. Interestingly enough, almost all of the new traits introduced into the marketplace today require the inclusion of specified treatment products on all varieties containing the new traits. By requiring these treatment products the trait providers may increase their probability of achieving the yield increases the new traits might provide.

Currently, all LL soybeans, regardless of brand, include Trilex 6000 as a treatment as required by the trait provider, Bayer. All commercial RR2Y soybeans in 2009 include Acceleron as a treatment, as required by Monsanto. In 2010, Monsanto will require all RR2Y soybeans to be treated and soybean producers will have the choice between using Monsanto's Acceleron, Syngenta's Cruiser Maxx Pack, or Bayer's Trilex 6000 on their RR2Y soybean seed.

Table 4. Seed Treatment

Code	Name (Code)	Treatment	Chemical class/use	LD50 oral/dermA
1	Allegiance	Metalaxyl	systemic fungicide	2,900/2,000
2	Acceleron (1, 10, 11)	Metalaxyl, Imidacloprid, Pyraclostrobin	systemic & non-systemic fungicide, systemic insecticide	NA
3	Apron XL	Mefenoxam	systemic fungicide	862/2020
4	Apron Maxx (3, 12)	Mefenoxam, Fludioxonil	systemic & non-systemic fungicide	5,000/5,050
5	Cruiser	Thiamethoxam	systemic insecticide	5,000/5,050
6	Cruiser Maxx (3, 5, 12)	Mefenoxam, Thiamethoxam, Fludioxonil	systemic & non-systemic fungicide, systemic insecticide	5,000/5,000
7	Cruiser Extreme (6, 8)	Mefenoxam, Thiamethoxam, Fludioxonil, Aoxystrobin	systemic & non-systemic fungicide, systemic insecticide	5,000/5,050
8	Dynasty	Azoxystrobin	systemic fungicide	2,000/2,000
9	FaStart®	Thiamethoxam	systemic insecticide	5,000/5,050
10	Gaucho	Imidacloprid	systemic insecticide	643/2,000
11	Headline	Pyraclostrobin	strobilurin fungicide	200-500/4,000
12	Maxim 4FS	Fludioxonil	non-systemic fungicide	5,050/2,020
13	Molybdenum	Molybdenum	stimulant (nitrogen fixing)	NA
14	Soygard (1, 8)	Metalaxyl, Azoxystrobin	systemic fungicide	5,000/2,000
15	Sure GroTM (4, 16)	Mefenoxam, Fludioxonil, Thiram	systemic & non-systemic fungicide	NA
16	Thiram	Thiram	fungicide	3580/4000
17	Trilex	Trifloxystrobin	systemic fungicide	5,000/5,000
18	Trilex 6000 (1, 10, 17)	Metalaxyl, Imidacloprid, Trifloxystrobin	systemic fungicide & systemic insecticide	NA
19	Warden (3, 12)	Mefenoxam, Fludioxonil	systemic & non-systemic fungicide	5,000/200

A The LD50 is a standardized measure for expressing and comparing the toxicity of chemicals. It is expressed as mg of chemical per kg (2.2 lbs.) body weight of test animal. The LD50 is the dose that kills half (50%) of the animals tested (LD = "lethal dose"). The LD50 data is from MSDS (Material Safety Data Sheet) Web sites.

TABLE 5. 2009 SUMMARY: VARIETY TEST TABLES 6-10

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C			LOGGING 2009	% PROTEIN ^D			% OIL ^D		
			2009	08-09	07-09		2009	08-09	07-09	2009	08-09	07-09
MATURITY GROUP II-III (RELATIVE MG 2.7-3.9)												
6	EXP	* NK XR3997	78.7			2.2	33.9			20.3		
4, 5, 12	EXP-RR2Y	AGEX391	78.5			2.6	35.0			19.8		
3, 5, 12	RR	* PIONEER 93Y92	77.8			2.8	35.1			19.8		
2	RR2Y	DAIRYLAND DSR-3636/R2Y	76.9			2.5	34.3			19.9		
none	RR	* DYNA-GRO 37P37	76.8	60.8		2.4	35.1	35.7		19.2	18.6	
1, 17	RR	* EBBERTS 1365RR	76.2	59.8	54.2	3.0	37.7	38.5	39.0	18.3	17.6	17.2
4, 5, 12	EXP-RR2Y	AGEX390	75.3			3.0	34.2			20.0		
1, 17	RR	* EBBERTS 1390RR	75.1			2.4	34.4			20.3		
4, 5, 12	EXP-RR2Y	AGEX370	75.0			2.7	37.2			18.5		
1, 10, 11, 16	RR2Y	* SOUTHERN STATES 3820NR2	74.9			2.9	35.2			19.0		
6	RR	* NK S39-A3 BRAND	74.5	60.8	54.4	2.7	34.5	34.6	34.9	20.0	19.3	18.7
7	RR	* SEED CONSULTANTS SCS 9398RR	74.2	61.0		2.8	34.5	35.7		20.6	19.7	
3, 12	RR	PROGENY P3909RR	74.2			3.0	34.0			19.7		
1, 17	CONV	EBBERTS 3369	74.0			3.0	34.7			19.9		
1, 17	CONV	* EBBERTS 3386	73.5	59.8	52.6	2.8	35.8	36.3	36.8	20.5	19.5	18.8
7	RR	* SEED CONSULTANTS SCS 9380RR	73.0			2.5	35.3			19.3		
4, 5, 12	RR	* ASGROW AG3803	72.9	59.5	53.6	2.5	35.8	36.4	36.5	19.4	18.9	18.6
6	RR	* NK S37-P5 BRAND	72.6	59.4	52.8	2.8	35.1	35.4	35.6	19.8	19.0	18.8
4	EXP	* ARMOR ARX 938	72.2	59.9		2.5	34.4	35.0		19.9	19.0	
1, 10, 11, 16	RR2Y	* SOUTHERN CROSS MALACHI 3.8 N, RR2Y	71.9			2.6	35.5			19.2		
none	CONV	* CAVERDALE CF 388n	71.6			2.9	34.0			20.5		
1, 10, 17	LL	* SOUTHERN STATES LL 389N	71.4			2.8	36.2			20.1		
4, 5, 12	RR	* ASGROW AG3705	71.4	56.9	51.6	2.4	34.4	34.7	35.1	20.2	19.3	18.6
none	CONV-P-NS	IA3041 (low linolenic)	70.9	53.4		2.9	36.0	36.3		19.6	19.0	
7	RR	* SEED CONSULTANTS SCS 9370RR	70.8			2.5	34.0			20.5		
6	CONV	* DAIRYLAND DST39-000	70.6			3.2	35.0			19.5		
9, 15	RR	* BECK 399NR	70.0	57.2	51.4	2.6	35.6	36.3	36.7	19.6	18.8	17.9
4, 5, 12	EXP-RR2Y	AGEX350	69.7			2.2	35.9			19.4		
none	RR	* SOUTHERN CROSS LUCAS 3.8 N, RR	69.5	57.6	51.4	2.8	35.8	36.3	36.9	19.4	18.5	17.9
7	RR	* SEED CONSULTANTS SCS 9390RR	69.2			3.1	35.6			19.8		
1, 10, 17	RR	* SOUTHERN STATES RT 3971N	68.6	56.7	51.4	2.7	36.0	36.2	36.7	19.5	18.5	18.0
1, 17	RR	HORNBECK HBK R3927	67.5	56.2	50.2	3.7	36.6	37.5	38.2	20.1	19.6	19.1
3, 5, 12	RR	* PIONEER 93Y20	67.2	56.9		3.0	34.6	35.6		20.7	19.9	
1, 10, 17	RR	* SOUTHERN STATES RT 3871N	66.8	56.7	50.4	2.6	35.7	35.8	36.3	20.0	19.7	19.0
none	CONV-P	WOOSTER	66.3			2.7	35.7			20.0		
9, 15	CONV	* BECK 343N	65.9			2.7	35.2			20.4		
9, 15	RR-NS	* BECK 359NRV (Vistive)	64.2			3.0	34.8			20.8		
none	CONV-P-NS	IA3027LF (lipoxygenase free)	57.4			3.0	39.2			19.3		
none	CONV-P-NS	IA3042 (1% linolenic)	56.5			2.3	37.4			19.7		
none	CONV-P-NS	IA2095 (low saturate)	53.8			2.0	37.3			20.2		
GROUP III AVERAGE			70.9	58.3	52.2	2.7	35.4	36.0	36.6	19.8	19.0	18.4
LSD (0.10)			3.0	4.2	3.1	0.2						
MATURITY GROUP EARLY IV (RELATIVE MG 4.0-4.5)												
4, 5, 12	EXP-RR2Y	AGEX452	80.9			2.6	34.1			20.2		
4, 5, 12	EXP-RR2Y	AGEX450	80.6			2.6	35.3			20.6		
4, 5, 12	EXP-RR2Y	AGEX451	80.1			2.7	34.8			20.1		
4, 5, 12	EXP-RR2Y	AGEX440	80.0			2.6	34.8			20.6		
none	RR	* SOUTHERN CROSS CALEB 4.4 N, RR, STS	79.6	61.9	54.0	2.1	34.4	35.3	35.5	20.4	19.6	19.0
4	RR	* DELTA GROW 4470 RR/STS	78.9	62.0	54.3	1.9	34.9	34.9	35.4	20.3	19.8	19.2
1, 10, 17	RR	* SOUTHERN STATES RT 4470N	77.9	61.6	55.3	2.0	34.6	35.4	35.7	20.7	19.5	19.1
9, 15	RR	* BECK 445NR	77.6	61.0		2.2	35.1	35.3		20.4	19.6	
none	RR	* STEYER 4430RR	77.1	60.6	54.3	2.0	34.3	34.7	35.4	21.1	20.0	19.5
4, 5, 12	RR	* ASGROW AG4303	77.1	62.3		2.1	35.6	35.6		20.5	19.6	
none	RR	* CAVERDALE CF 447 RR/STSn	76.4	61.4	55.2	2.2	35.2	35.4	35.9	20.6	19.8	19.2
none	RR	* DYNA-GRO 36C44	76.4	61.3		2.0	34.5	35.4		20.6	19.5	
none	RR	* TRISOY 4586RR(CN)	76.4	60.7		2.2	34.9	35.2		20.7	19.8	
none	RR	* STINE 4392-4	76.2			2.3	34.2			21.0		
none	RR	* DYNA-GRO V42N9RS	75.8	60.5		2.3	34.3	34.8		20.4	19.4	
4, 5, 12	EXP-RR2Y	AGEX410	75.3			2.7	33.8			20.3		
none	RR	* STEYER 4210RR	74.8			2.4	33.6			21.2		
2, 4, 8	RR	* ASGROW DKB42-51	74.4	57.9	51.7	2.4	33.3	33.5	33.9	21.1	20.2	19.2
4, 5, 12	EXP-RR2Y	AGEX411	74.2			2.9	34.0			21.0		
6	RR	* DAIRYLAND DSR-4500/RRSTS	74.1	58.2		3.2	34.2	34.9		20.6	20.0	
4	RR	* ARMOR 44-K6	73.6	59.5		2.2	34.6	35.6		20.9	19.5	
4	RR	* ARMOR 42-M1	73.3	60.0		2.2	34.8	36.0		20.9	19.3	
6	RR	* NK S44-D5 BRAND	73.1	59.7	53.8	2.7	34.7	35.2	35.8	19.8	19.1	18.4
4, 5, 12	RR	* ASGROW AG4005	73.0	58.1		2.2	34.9	35.5		20.3	19.2	
19	RR	* CHANNEL 4551R	72.9			3.2	34.5			20.0		
none	RR	* SOUTHERN CROSS JERICO 4.2 N, RR	72.5	58.0		2.3	34.0	34.6		20.5	19.5	
3, 5, 12	RR	* PIONEER 94Y20	72.1	58.8		3.3	35.1	36.2		21.1	20.0	
none	RR	* STINE 4582-4	72.0			2.9	35.5			19.7		
3, 5, 12	RR	* PIONEER 94Y01	71.9	59.6		3.0	33.6	34.1		21.0	20.2	
4	EXP	ARMOR ARX 0431	71.6			2.7	35.1			20.6		
7	RR	* SEED CONSULTANTS SCS 9450RR	71.3			3.1	34.2			20.8		
4	RR	* DELTA GROW 4150 RR	71.2	58.2	51.5	2.8	34.5	35.4	36.4	20.1	19.2	18.4
3, 12	RR	* PROGENY P4206RR	71.2	58.4	53.1	2.4	34.4	35.4	35.8	20.6	19.7	19.2
4	EXP	ARMOR ARX 0432	71.2			2.7	35.1			20.5		
7	RR	* SEED CONSULTANTS SCS 9409RR	71.0	56.1		2.5	35.5	36.3		19.2	18.5	
9, 15	CONV	* BECK 414N	71.0			3.3	34.6			20.1		
6	RR	* NK S43-N6 BRAND	71.0	58.2		2.8	35.5	35.5		19.5	18.4	
4, 5, 12	RR	* ASGROW AG4404	70.9	56.1	49.7	2.8	34.8	35.9	36.2	20.0	19.3	18.4

continued on next page

TABLE 5. 2009 SUMMARY: VARIETY TEST TABLES 6-10

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C			LOGGING 2009	% PROTEIN ^D			% OIL ^D		
			2009	08-09	07-09		2009	08-09	07-09	2009	08-09	07-09
4, 5, 12	EXP-RR2Y	AGEX430	70.9			2.8	35.5			19.4		
none	RR	* TRISOY 4184RR(CN)	70.8	58.5		2.6	34.2	35.0		21.1	20.0	
4, 5, 12	EXP-RR2Y	AGEX431	70.5			3.1	34.8			19.5		
none	RR	* L&M 843R	70.5	55.9		3.0	34.9	35.2		20.4	20.0	
9, 15	RR	* BECK 400NR	69.9			3.0	35.2			20.3		
1, 10, 17	LL	* SOUTHERN STATES LL 450N	69.8			3.5	34.4			21.0		
none	RR	* CAVERNDALE CF 410 RR/STS _n	69.4	57.9	52.2	2.6	34.0	35.4	36.3	20.8	19.3	18.2
1, 10, 17	LL	* SOUTHERN STATES LL 430N	69.3			3.0	35.1			20.1		
3, 12	RR	* PROGENY P4508RR	69.3	56.5		2.8	34.2	34.4		21.1	20.3	
7	RR	* SEED CONSULTANTS SCS 9448RR	69.2	57.0		3.1	34.4	35.2		19.9	19.2	
6	RR	* DAIRYLAND DSR-4300/RR	69.1	56.1		3.3	35.1	35.1		20.7	20.1	
1, 10, 11, 16	LL	* SOUTHERN CROSS ENOS 4.3 N, LL	69.1			2.9	35.4			20.3		
none	RR	* SOUTHERN CROSS LOT 4.1 N, RR, STS	69.0	57.1		2.6	34.4	35.6		21.1	19.8	
1, 10, 17	RR	* SOUTHERN STATES RT 4370N	68.7	56.0	48.9	3.1	35.2	35.5	35.8	20.3	20.0	19.2
4, 5, 12	EXP-RR2Y	AGEX432	68.7			3.0	35.1			20.1		
none	CONV	* STEYER 401	68.6			3.0	35.3			20.4		
1, 17	CONV	* PORTER HYBRIDS PH 4419N	68.0	57.2		3.2	33.8	34.7		20.3	19.1	
1, 10, 17	LL	* CAVERNDALE CF 439 LL	68.0			3.0	35.8			20.2		
1, 10, 17	LL	* DYNA-GRO 39LL43	67.6			2.9	35.2			19.8		
none	CONV	L&M 74 STS	67.4			3.0	34.8			20.8		
4	CONV	* SCHILLINGER SEED 435.TCS	67.4	52.7		2.7	35.3	36.2		20.1	19.2	
6	EXP	* NK XR4090	67.2			2.6	34.6			20.0		
none	CONV	* SOUTHERN CROSS BENJAMIN 4.3 N	66.8	57.4		2.6	34.8	34.7		20.7	19.9	
1, 10, 17	RR	* SOUTHERN STATES RT 4451N	66.6	54.6	49.4	3.0	34.3	35.5	35.8	20.2	19.1	18.5
none	CONV	* STEYER 410	66.5	53.1		3.5	34.9	35.6		20.4	19.3	
1, 10, 17	LL	* SOUTHERN STATES LL 410N	64.1			2.4	36.4			20.1		
6	RR	* UNISOUTH GENETICS USG 74C36	63.8	51.2		3.3	34.9	36.1		20.4	18.9	
6	CONV	* UNISOUTH GENETICS USG 440nSTS	63.7			2.8	36.0			20.4		
none	CONV-P-NS	IA4004 (food type)	62.0			3.9	33.6			23.7		
none	CONV	* STEYER 441STS	61.0			2.8	35.5			20.3		
EARLY GROUP IV AVERAGE			71.6	58.2	52.6	2.7	34.7	35.3	35.7	20.5	19.5	18.9
LSD (0.10)			2.7	4.1	3.1	0.2						

MATURITY GROUP LATE IV (RELATIVE MG 4.6-4.9)

4	EXP-RR	DELTA KING DKX 0461	81.7			3.3	36.3			20.7		
4	EXP	ARMOR ARX 0472	80.0			2.9	35.1			20.9		
4	RR	DELTA KING DKR 4744s	78.8			3.0	34.7			21.5		
3, 5, 12	RR	* PIONEER 94Y70	78.6	62.6		3.0	34.7	34.8		21.1	20.3	
4	RR	ARMOR 47-R33	78.0			2.9	35.0			20.8		
7	RR	* SEED CONSULTANTS SCS 9480RR	77.1			2.8	36.8			20.0		
6	EXP	* NK XR4995	77.1			3.4	34.9			20.7		
6	RR	DAIRYLAND DSR-8482/RR	76.9	60.7	53.6	3.2	34.8	35.3	36.4	20.1	19.5	18.9
4, 5, 12	RR	ASGROW AG4903	76.2	60.9	53.7	2.8	35.0	35.9	36.4	20.8	20.1	19.4
6	RR	* UNISOUTH GENETICS USG 74G78	75.7	60.3		2.3	34.1	34.0		21.2	20.4	
6	RR	* DAIRYLAND DSR48-000/RR	75.5			3.1	36.0			20.0		
4, 5, 12	RR	* ASGROW AG4907	75.5	59.7		2.7	34.6	35.0		20.6	19.7	
1, 17	RR	* HORNBECK HBK R4727	75.3	59.3	52.3	3.2	35.7	35.4	35.8	20.5	19.8	19.0
6	RR	* NK S48-C9 BRAND	75.2	60.0		2.7	35.5	35.1		19.9	19.3	
4	RR	* SCHILLINGER SEED 495.RC	75.1	59.4	53.0	3.3	36.5	36.6	37.6	19.9	19.1	18.3
none	RR	* STINE 4782-4	75.1	59.2	53.0	2.1	34.7	34.1	35.4	21.5	20.7	20.1
none	RR	* STEYER 4710RR	75.1			3.0	35.1			20.5		
3, 5, 12	RR	* PIONEER 94Y60	75.0	58.5		2.5	37.0	37.9		20.4	19.0	
none	RR	* TRISOY 4760RR(CN)	74.9	58.1	51.0	2.2	34.1	33.3	34.1	21.3	21.4	20.6
3, 5, 12	RR	* PIONEER 94Y90	74.9	58.7		3.3	34.2	35.3		20.8	20.1	
none	RR	* STINE 5022-4	74.6			3.4	36.3			19.3		
1, 17	CONV	HORNBECK HBK C4929	74.6			3.2	36.9			19.7		
1, 10, 17	LL	* SOUTHERN STATES LL 499N	74.5			2.9	34.9			20.3		
3, 12	RR	PROGENY P4908RR	74.5	60.4		3.1	34.3	34.8		20.3	19.6	
4, 5, 12	RR	* ASGROW AG4605	74.1	58.4	50.8	2.7	34.5	34.5	35.6	20.8	19.9	19.3
4	RR	* SCHILLINGER SEED 4990.RC	74.0			2.8	36.6			20.0		
4	RR	* ARMOR 47-F8	74.0	58.7	53.0	2.2	33.6	33.8	35.0	21.2	20.3	19.5
4	RR	* ARMOR 47-G10	73.8			3.4	36.0			19.6		
none	RR	* SOUTHERN CROSS ELI 4.7 N, RR, STS	73.8	57.8	52.4	2.3	33.8	33.9	34.6	21.4	20.6	20.3
1, 10, 17	RR	* SOUTHERN STATES RT 4996N	73.7	57.7	51.2	3.6	35.6	35.8	36.8	21.1	20.4	19.3
none	RR	* TRISOY 4788RR(CN)	73.5			2.7	35.5			21.6		
4	RR	* DELTA GROW 4780 RR	73.4	57.5	50.4	3.2	35.2	35.1	35.6	20.4	20.0	19.4
none	RR	CHANNEL 4851R	73.3			3.5	34.6			19.8		
3, 12	RR	* PROGENY P4807RR	73.2	57.6	50.2	3.1	35.3	35.0	35.7	20.6	19.9	19.0
4	EXP	* ARMOR ARX 0474	73.2			3.4	35.9			19.6		
none	RR	* CAVERNDALE CF 470 RR/STS _n	73.0	58.1	52.6	2.3	33.7	34.1	34.9	21.0	20.4	19.7
6	RR	* UNISOUTH GENETICS USG 74A76	72.9	59.2	52.8	3.6	33.9	34.5	36.1	20.8	20.1	18.9
3, 12	RR	* PROGENY P4949RR	72.8	56.7	51.2	3.2	36.2	35.8	37.1	20.9	20.4	19.0
3, 12	RR	* PROGENY P4706RR	72.7	57.2	51.2	3.7	35.1	35.3	36.3	20.6	19.9	19.0
4, 5, 12	RR	* ASGROW AG4606	72.7	59.6		2.7	34.4	34.6		21.7	21.4	
none	RR	* DAIRYLAND DSR-8474/RR	72.6			3.1	35.3			20.1		
3, 12	RR	* PROGENY P4606RR	72.5	58.4	53.0	2.4	33.7	33.7	35.0	21.5	20.6	19.5
none	RR	* SOUTHERN CROSS GALILEE 4.7 N, RR	72.5	56.2	50.5	3.3	35.8	35.6	36.0	20.7	20.0	19.5
1, 10, 17	LL	* SOUTHERN CROSS SHILOH 4.9 N, LL	72.4			3.0	35.4			19.7		
1, 10, 17	RR	* SOUTHERN STATES RT 4808N	71.9	58.2	53.2	3.1	33.9	34.8	36.0	20.0	19.5	18.4
3, 12	RR	PROGENY P4906RR	71.9	57.5	50.3	3.0	34.4	34.8	36.1	20.9	19.8	18.9
none	RR	* STEYER 4620RR	71.8	57.5		2.7	35.2	35.4		21.5	20.6	
4	RR	* SCHILLINGER SEED 4880.RC	71.8			3.6	37.2			19.3		
4	CONV	* SCHILLINGER SEED 477.TCS	71.7	55.1		3.4	36.9	37.4		20.0	19.0	
1, 17	RR	* HORNBECK HBK R4924	71.7	57.9	53.0	3.6	35.3	35.6	36.6	20.2	19.7	18.7

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RECOMMENDED TABLE

TABLE 5. 2009 SUMMARY: VARIETY TEST TABLES 6-10

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C			LOGGING 2009	% PROTEIN ^D			% OIL ^D		
			2009	08-09	07-09		2009	08-09	07-09	2009	08-09	07-09
1, 17	LL	HALO 4:94	71.6			2.8	35.1			20.4		
4	RR	* ARMOR 48-J3	71.4	58.8	53.9	3.2	36.7	37.1	38.0	20.3	19.5	18.8
4, 5, 12	RR	* ASGROW AG4703	71.3	57.2	51.6	2.8	35.8	36.6	37.2	20.2	19.1	18.2
1, 10, 17	RR	* SOUTHERN STATES RT 4777N	71.1	56.2	52.1	3.7	34.7	34.9	35.7	21.6	20.4	19.5
6	RR	* NK S47-D9 BRAND	70.9	57.3	53.8	2.4	35.0	34.6	35.5	20.1	19.9	19.1
4	RR	DELTA GROW 4975 RR	70.9	57.0	50.8	3.0	34.9	35.4	36.4	20.6	19.7	18.6
4	RR	DELTA GROW 4870 RR	70.8	57.9		3.1	34.8	36.0		19.6	18.7	
1, 17	RR	* HORNBECK HBK R4729	70.8			3.6	37.8			20.0		
7	RR	* SEED CONSULTANTS SCS 9479RR	70.7	57.8		3.5	34.6	34.9		20.3	19.8	
none	RR	* DYNA-GRO V47N9RS	70.5	57.9		2.8	33.9	34.8		21.4	20.5	
4	RR	* DELTA GROW 4770 RR	70.5	56.3	51.1	3.8	34.7	35.0	36.5	21.5	20.3	19.2
4	RR	* DELTA GROW 4970 RR	70.2	58.1	50.5	3.6	35.0	35.7	37.0	20.1	19.5	18.6
9, 15	RR	* BECK 491NR	69.8			2.5	36.9			20.2		
none	RR	* CHANNEL 4852R	69.3	57.2		2.6	34.2	35.1		21.7	20.6	
none	RR	* DYNA-GRO 33G48	69.2			3.5	37.8			19.9		
none	CONV	SOUTHER CROSS JOSHUA 4.8	69.1			4.0	34.3			20.7		
9, 15	RR	* BECK 474NR	68.8	57.2		3.1	35.8	36.4		20.8	19.3	
none	RR	* SOUTHERN CROSS RUFUS 4.7 N, RR, STS	68.4	56.5		2.9	34.2	34.9		21.6	20.7	
1, 17	LL	HALO 4:65	68.2			3.2	35.7			20.7		
none	CONV-P	TN04-124	68.0			3.4	35.9			19.4		
6	CONV	* DAIRYLAND DSR-4890	67.7			3.4	35.5			20.3		
4, 5, 12	RR	* ASGROW AG4705	67.6	55.7		3.6	36.3	36.0		21.1	20.7	
6	RR	* UNISOUTH GENETICS USG 74T98	66.6	53.3		4.2	34.0	35.1		20.8	19.6	
none	CONV-NS	KS4607 (high protein)	66.0	51.1	45.5	3.0	39.6	39.5	39.5	20.0	19.2	18.4
none	CONV-P	PENNYRILE (long term check-released 1987)	60.3	49.3	44.0	3.1	36.9	37.0	37.6	20.8	20.0	19.3
LATE GROUP IV AVERAGE			72.7	57.7	51.5	3.0	35.3	35.3	36.2	20.6	20.0	19.2
LSD (0.10)			2.9	4.1	3.3	0.2						
MATURITY GROUP V												
1, 10, 17	LL	* SOUTHERN STATES LL 511N	78.1			3.4	35.6			20.3		
6	CONV	UNISOUTH GENETICS USG 5601T	76.9	59.8	53.0	3.4	36.2	36.8	37.7	19.0	18.7	18.1
4	RR	* SCHILLINGER SEED 557.RC	75.6	57.7		3.6	36.5	36.9		19.0	18.4	
4	RR	* DELTA GROW 5450 RR	75.0	55.6		3.3	35.7	36.7		18.8	18.1	
4	RR	SCHILLINGER SEED 5440.R	74.6			3.4	35.6			19.5		
none	RR	* SOUTHERN CROSS DAMASCUS 5.0 N, RR, STS	74.5	56.7	48.3	3.3	35.6	36.0	37.4	20.9	20.3	19.4
4	RR	* DELTA GROW 5300 RR/STS	74.4	56.6	48.8	3.5	34.2	35.8	37.0	19.5	18.5	17.5
1, 17	LL	HALO 5:25	73.7			3.3	35.4			20.0		
1, 17	LL	HALO 5:65	73.6			3.0	35.5			18.8		
4	RR	DELTA KING DK 5363	73.6			3.7	34.6			20.0		
7	RR	SEED CONSULTANTS SCS 9530RR	73.5			3.9	35.6			19.0		
3, 5, 12	RR	* PIONEER 95Y40	73.3			3.5	35.6			19.5		
none	CONV-P	* KS5004N	73.1	59.5		3.6	34.7	35.3		20.5	19.8	
1, 10, 17	RR	* SOUTHERN STATES RT 5160N	73.0	55.0	48.5	3.7	34.4	35.9	36.8	19.6	18.5	18.0
6	CONV	UNISOUTH GENETICS USG 5002T	72.9	58.7	51.3	3.3	34.9	35.5	36.6	20.1	19.4	18.7
4	RR	* DELTA GROW 5160 RR/STS	72.4	55.9	48.8	3.4	36.8	36.6	37.9	20.2	20.2	19.3
4	RR	* ARMOR 53-Z5	72.2	56.5		3.2	33.8	35.5		19.6	18.8	
6	RR	DAIRYLAND DSR-5200/RR	72.0			3.1	36.5			19.1		
none	CONV-P	GLENN	71.7	55.8		3.4	35.9	37.1		19.1	18.6	
6	RR	* DAIRYLAND DSR-8512/RR	70.7	53.8		3.3	36.0	36.9		19.6	19.1	
6	RR	* DAIRYLAND DSR-8509/RR	70.6	56.5	48.9	3.5	36.1	36.4	37.2	19.7	19.5	18.7
4	RR	* DELTA GROW 5555 RR	70.5			4.2	34.9			19.1		
4	RR	* DELTA GROW 5970 RR	70.5			3.5	36.3			19.0		
1, 4	RR	* ASGROW AG5301	70.2			3.2	34.6			20.0		
3, 12	RR	* PROGENY P5319RR	69.7			4.1	34.5			19.2		
4	RR	* DELTA GROW 5170 RR	69.0	55.4		2.4	34.7	34.9		21.0	20.1	
4	RR	* DELTA GROW 5280 RR	68.8			4.0	35.1			19.8		
none	RR	* CHANNEL 5051R	68.0			3.2	36.2			19.8		
1, 17	RR	* HORNBECK HBK R5229	67.5			3.4	35.6			19.5		
none	EXP-P-RR	TN06-140-RR	67.5			3.7	33.2			19.5		
3, 12	RR	* PROGENY P5218RR	67.1	52.8		3.9	35.8	36.3		19.7	19.1	
1, 17	CONV	HORNBECK HBK C5528	66.8			3.7	36.0			19.0		
none	CONV-P-NS	V01-1702 (3.5% linolenic)	65.4	51.6		3.4	36.1	36.4		19.7	19.6	
none	CONV-P-NS	V01-1693 (3.5% linolenic)	65.0	51.2		4.0	35.9	36.3		19.5	19.1	
none	CONV-P	ESSEX (long term check-released 1974)	63.5	50.5	44.6	3.0	37.1	37.7	38.9	19.2	18.6	18.0
none	CONV-P-NS	TN03-217 (natto soyfood type)	63.3			3.4	37.2			17.8		
GROUP V AVERAGE			71.1	55.5	49.0	3.4	35.5	36.3	37.4	19.5	19.1	18.5
LSD (0.10)			3.1	4.0	3.3	0.2						
GRAND MEAN			71.8	57.6	51.5	2.9	35.2	35.5	36.3	20.2	19.6	18.9

A See Table 4 for seed treatment code names.

B * Resistant to soybean cyst nematode. See Table 3, Company Disease Resistance Specifications, for details.

P Public varieties.

NS Novel soybeans are special trait varieties 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.

EXP Experimental entries are varieties that are still under development or soon to be released.

LL LibertyLink variety (Ignite herbicide tolerant).

RR Roundup Ready variety (RR1 first generation, original trait).

RR2Y Roundup Ready 2 Yield variety.

CONV Conventional variety.

C 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.

D Variety protein and oil concentration were determined at the McLean Co. location in 2009 and at the Hancock County location in 2007 & 2008 (all test locations for NS entries). Data are expressed on the basis of 13% moisture. These data were provided by the University of Kentucky using near-infrared (NIR) analysis.

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TABLE 6. 2009 CALDWELL CO. FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C			LODGING 2009
			2009	08-09	07-09	
MATURITY GROUP II-III (RELATIVE MG 2.7-3.9)						
4, 5, 12	EXP-RR2Y	AGEX391	83.7			3.0
4, 5, 12	EXP-RR2Y	AGEX390	82.7			3.8
3, 12	RR	PROGENY P3909RR	82.1			3.5
4, 5, 12	RR	* ASGROW AG3803	81.6	68.3	55.3	3.0
1, 17	CONV	EBBERTS 3369	80.1			3.3
7	RR	* SEED CONSULTANTS SCS 9398RR	79.5	66.3		3.0
1, 17	RR	* EBBERTS 1390RR	79.2			3.0
2	RR2Y	DAIRYLAND DSR-3636/R2Y	78.6			2.8
6	EXP	* NK XR3997	78.0			2.5
1, 10, 11, 16	RR2Y	* SOUTHERN STATES 3820NR2	78.0			3.3
1, 17	RR	* EBBERTS 1365RR	77.1	64.7	51.0	3.0
1, 10, 11, 16	RR2Y	* SOUTHERN CROSS MALACHI 3.8 N, RR2Y	76.5			3.0
6	RR	* NK S39-A3 BRAND	76.3	67.3	53.0	3.0
4	EXP	* ARMOR ARX 938	76.3	69.5		3.0
none	RR	* DYNA-GRO 37P37	76.0	66.6		3.0
4, 5, 12	RR	* ASGROW AG3705	75.9	64.6	51.7	2.8
7	RR	* SEED CONSULTANTS SCS 9370RR	75.8			2.8
7	RR	* SEED CONSULTANTS SCS 9380RR	75.7			3.0
4, 5, 12	EXP-RR2Y	AGEX370	75.6			3.0
3, 5, 12	RR	* PIONEER 93Y92	75.4			3.0
1, 10, 17	LL	* SOUTHERN STATES LL 389N	74.4			3.0
1, 17	CONV	* EBBERTS 3386	73.9	66.1	51.6	3.0
none	RR	* SOUTHERN CROSS LUCAS 3.8 N, RR	73.7	64.2	51.1	3.0
1, 10, 17	RR	* SOUTHERN STATES RT 3971N	73.4	66.0	54.2	3.3
7	RR	* SEED CONSULTANTS SCS 9390RR	72.5			3.5
9, 15	CONV	* BECK 343N	72.2			3.8
none	CONV	* CAVERDALE CF 388n	71.7			3.0
9, 15	RR	* BECK 399NR	71.5	64.1	52.9	3.3
9, 15	RR-NS	* BECK 359NRV (Vistive)	71.3			3.8
1, 10, 17	RR	* SOUTHERN STATES RT 3871N	70.5	63.1	50.9	3.0
none	CONV-P-NS	IA3041 (low linolenic)	70.2	57.2		3.3
4, 5, 12	EXP-RR2Y	AGEX350	69.7			2.8
3, 5, 12	RR	* PIONEER 93Y20	69.6	64.9		3.3
6	CONV	* DAIRYLAND DST39-000	69.4			4.0
6	RR	* NK S37-P5 BRAND	68.8	65.7	52.5	3.0
none	CONV-P-NS	IA3042 (1% linolenic)	67.6			3.3
1, 17	RR	HORNBECK HBK R3927	67.3	61.1	48.8	4.3
none	CONV-P	WOOSTER	66.8			2.8
none	CONV-P-NS	IA2095 (low saturate)	60.5			3.0
none	CONV-P-NS	IA3027LF (lipoxigenase free)	58.2			3.5
GROUP III AVERAGE			73.9	65.0	52.1	3.2
LSD (0.10)			5.7	3.8	2.8	0.4
MATURITY GROUP EARLY IV (RELATIVE MG 4.0-4.5)						
4	RR	* DELTA GROW 4470 RR/STS	85.4	71.8	55.2	2.8
none	RR	* DYNA-GRO 36C44	84.1	72.4		3.0
4, 5, 12	EXP-RR2Y	AGEX452	84.1			3.3
none	RR	* STEYER 4430RR	83.6	73.4	61.0	2.8
1, 10, 17	RR	* SOUTHERN STATES RT 4470N	81.9	69.9	57.0	2.8
none	RR	* DYNA-GRO V42N9RS	81.8	71.7		2.8
4, 5, 12	EXP-RR2Y	AGEX450	81.5			3.0
4, 5, 12	EXP-RR2Y	AGEX411	81.1			3.5
4, 5, 12	EXP-RR2Y	AGEX440	80.3			3.0
6	RR	* DAIRYLAND DSR-4500/RRSTS	79.8	67.3		4.0
none	CONV	* STEYER 401	79.3			3.5
none	RR	* SOUTHERN CROSS CALEB 4.4 N, RR, STS	79.2	68.3	53.3	2.8
4, 5, 12	RR	* ASGROW AG4303	79.1	71.4		2.8
none	RR	* STEYER 4210RR	78.9			3.0
none	RR	* CAVERNDAL CF 410 RR/STSn	78.5	70.1	58.3	3.3
4, 5, 12	EXP-RR2Y	AGEX410	78.5			3.3
19	RR	* CHANNEL 4551R	77.7			3.5
4, 5, 12	EXP-RR2Y	AGEX451	77.4			3.0
7	RR	* SEED CONSULTANTS SCS 9409RR	77.3	67.2		3.0
4, 5, 12	RR	* ASGROW AG4005	76.5	67.9		3.0
9, 15	RR	* BECK 445NR	76.3	68.1		3.0
9, 15	CONV	* BECK 414N	76.0			4.0
none	RR	SOUTHERN CROSS LOT 4.1 N, RR, STS	75.9	67.6		3.0
none	CONV	* SOUTHERN CROSS BENJAMIN 4.3 N	75.9	68.5		3.3
3, 5, 12	RR	* PIONEER 94Y01	75.6	67.7		3.0
none	RR	* SOUTHERN CROSS JERICHO 4.2 N, RR	75.1	66.4		2.8
9, 15	RR	* BECK 400NR	75.0			3.0
none	RR	* TRISOY 4586RR(CN)	74.9	69.5		3.0
none	RR	* L&M 843R	74.6	64.4		3.8
2, 4, 8	RR	* ASGROW DKB42-51	74.6	65.3	54.5	2.5
3, 5, 12	RR	* PIONEER 94Y20	74.4	66.8		3.8
1, 17	CONV	* PORTER HYBRIDS PH 4419N	74.2	70.8		4.0
4, 5, 12	EXP-RR2Y	AGEX431	74.1			3.5
3, 12	RR	* PROGENY P4206RR	74.0	67.3	55.8	3.0
none	RR	* CAVERNDAL CF 447 RR/STSn	73.9	68.8	58.2	2.8
none	RR	* STINE 4392-4	73.5			2.8
4, 5, 12	RR	* ASGROW AG4404	73.4	64.3	52.6	3.3
4	RR	* DELTA GROW 4150 RR	73.3	66.0	52.2	2.8

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TABLE 6. 2009 CALDWELL CO. FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C			LODGING 2009
			2009	08-09	07-09	
3, 12	RR	* PROGENY P4508RR	73.3	63.5		3.5
4, 5, 12	EXP-RR2Y	AGEX432	73.2			3.0
none	RR	* TRISOY 4184RR(CN)	73.2	67.3		3.0
6	RR	* NK 543-N6 BRAND	73.1	67.8		3.8
4, 5, 12	EXP-RR2Y	AGEX430	72.4			3.0
none	RR	* STINE 4582-4	72.2			3.3
1, 10, 11, 16	LL	* SOUTHERN CROSS ENOS 4.3 N, LL	71.7			3.3
6	RR	* NK 544-D5 BRAND	71.7	64.6	54.7	2.8
6	RR	* UNISOUTH GENETICS USG 74C36	71.6	61.6		3.3
4	RR	* ARMOR 42-M1	71.6	64.6		2.8
4	EXP	ARMOR ARX 0432	71.2			3.0
4	RR	* ARMOR 44-K6	71.1	66.5		3.0
4	CONV	* SCHILLINGER SEED 435.TCS	70.9	64.4		3.3
1, 10, 17	LL	* CAVERNDALE CF 439 LL	70.6			3.3
1, 10, 17	LL	* SOUTHERN STATES LL 430N	70.5			3.5
1, 10, 17	RR	* SOUTHERN STATES RT 4451N	70.1	62.5	51.1	3.5
none	CONV-P-NS	IA4004 (food type)	69.3			4.5
1, 10, 17	LL	* DYNA-GRO 39LL43	69.1			3.5
1, 10, 17	RR	* SOUTHERN STATES RT 4370N	68.9	60.9	48.8	3.8
1, 10, 17	LL	* SOUTHERN STATES LL 410N	68.7			2.8
6	EXP	* NK XR4090	68.6			3.3
1, 10, 17	LL	* SOUTHERN STATES LL 450N	68.4			4.0
none	CONV	* STEYER 410	67.5	61.3		3.5
none	CONV	L&M 74 STS	67.4			3.0
4	EXP	ARMOR ARX 0431	67.1			2.8
6	RR	* DAIRYLAND DSR-4300/RR	66.9	62.3		3.5
6	CONV	* UNISOUTH GENETICS USG 440hSTS	66.6			3.0
7	RR	* SEED CONSULTANTS SCS 9448RR	65.9	62.5		3.5
7	RR	* SEED CONSULTANTS SCS 9450RR	65.8			3.5
none	CONV	* STEYER 441STS	62.7			3.0
EARLY GROUP IV AVERAGE			74.1	66.9	54.8	3.2
LSD (0.10)			6.2	4.2	3.7	0.5
MATURITY GROUP LATE IV (RELATIVE MG 4.6-4.9)						
4, 5, 12	RR	ASGROW AG4903	81.7	66.0	56.3	3.3
4	RR	* DELTA GROW 4780 RR	80.9	68.8	53.1	3.8
1, 10, 17	RR	* SOUTHERN STATES RT 4996N	79.9	63.1	50.6	4.0
4, 5, 12	RR	* ASGROW AG4605	79.8	67.6	53.3	3.0
4	EXP-RR	DELTA KING DKX 0461	79.2			3.8
4	EXP	ARMOR ARX 0472	79.2			2.8
3, 12	RR	* PROGENY P4606RR	78.9	66.3	54.3	2.5
6	RR	* DAIRYLAND DSR48-000/RR	78.8			3.8
4	RR	ARMOR 47-R33	78.7			3.3
3, 12	RR	PROGENY P4908RR	78.1	68.1		3.3
4, 5, 12	RR	* ASGROW AG4907	78.1	63.9		3.0
6	RR	* NK 548-C9 BRAND	78.0	68.1		3.3
4	RR	* SCHILLINGER SEED 4990.RC	78.0			3.3
1, 17	RR	* HORNBECK HBK R4924	77.4	64.0	54.9	4.0
3, 5, 12	RR	* PIONEER 94Y70	77.4	67.6		3.3
4	RR	* ARMOR 47-F8	77.4	65.5	55.0	2.8
1, 17	RR	* HORNBECK HBK R4727	77.1	66.3	53.6	3.8
none	RR	* TRISOY 4760RR(CN)	77.0	64.4	53.5	2.5
6	RR	DAIRYLAND DSR-8482/RR	76.5	64.4	54.3	3.5
4	RR	* SCHILLINGER SEED 4880.RC	76.5			3.8
6	RR	* UNISOUTH GENETICS USG 74A76	76.3	67.7	54.6	3.8
none	RR	* STINE 5022-4	76.1			3.5
none	RR	* STINE 4782-4	76.0	65.6	54.8	2.8
1, 17	RR	* HORNBECK HBK R4729	75.9			4.0
6	RR	* UNISOUTH GENETICS USG 74G78	75.8	66.8		2.5
3, 5, 12	RR	* PIONEER 94Y60	75.8	65.2		2.5
7	RR	* SEED CONSULTANTS SCS 9480RR	75.7			3.0
1, 10, 17	RR	* SOUTHERN STATES RT 4777N	75.2	63.7	54.5	4.0
3, 12	RR	* PROGENY P4706RR	75.0	65.3	53.5	3.8
none	RR	* CAVERNDALE CF 470 RR/STS _n	74.4	65.6	54.1	2.5
4	RR	DELTA KING DKR 4744s	74.4			3.5
6	RR	* NK 547-D9 BRAND	74.3	65.4	55.7	2.8
9, 15	RR	* BECK 491NR	74.3			3.0
3, 12	RR	* PROGENY P4807RR	74.1	65.0	51.3	3.5
4	EXP	* ARMOR ARX 0474	73.8			3.3
4	RR	* ARMOR 47-G10	73.7			3.5
none	RR	* STEYER 4710RR	73.4			3.3
6	EXP	* NK XR4995	73.4			3.8
none	RR	* CHANNEL 4852R	72.7	65.8		3.0
none	RR	* SOUTHERN CROSS ELI 4.7 N, RR, STS	72.7	64.6	53.5	2.5
3, 12	RR	* PROGENY P4949RR	72.7	63.2	50.4	3.8
7	RR	* SEED CONSULTANTS SCS 9479RR	72.7	62.8		3.8
4	CONV	* SCHILLINGER SEED 477.TCS	72.6	62.8		3.5
1, 10, 17	LL	* SOUTHERN CROSS SHILOH 4.9 N, LL	72.6			3.0
1, 10, 17	LL	* SOUTHERN STATES LL 499N	72.4			2.8
4, 5, 12	RR	* ASGROW AG4606	72.3	65.1		3.3
1, 17	CONV	HORNBECK HBK C4929	72.3			3.5
1, 17	LL	HALO 4:65	72.2			3.5
none	RR	CHANNEL 4851R	72.0			4.0
9, 15	RR	* BECK 474NR	71.8	66.9		3.3

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TABLE 6. 2009 CALDWELL CO. FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C			LODGING 2009
			2009	08-09	07-09	
3, 5, 12	RR	* PIONEER 94Y90	71.0	64.1		4.0
4	RR	* ARMOR 48-J3	70.7	61.1	52.9	3.5
none	RR	* DAIRYLAND DSR-8474/RR	70.7			3.5
none	RR	* TRISOY 4788RR(CN)	70.5			3.3
4	RR	* SCHILLINGER SEED 495.RC	70.4	61.4	50.3	3.8
4	RR	* DELTA GROW 4970 RR	70.4	60.6	48.8	3.8
4, 5, 12	RR	* ASGROW AG4705	69.7	60.4		4.0
4	RR	* DELTA GROW 4770 RR	69.6	61.8	51.5	4.0
none	RR	* STEYER 4620RR	69.5	62.1		3.3
none	CONV	SOUTHER CROSS JOSHUA 4.8	69.3			4.5
4, 5, 12	RR	* ASGROW AG4703	69.1	62.5	52.2	3.0
none	RR	* DYNA-GRO 33G48	68.7			3.5
none	RR	* SOUTHERN CROSS GALILEE 4.7 N, RR	68.5	61.0	49.4	3.8
none	RR	* DYNA-GRO V47N9RS	68.4	61.8		3.0
1, 17	LL	HALO 4:94	68.4			2.5
none	RR	* SOUTHERN CROSS RUFUS 4.7 N, RR, STS	68.2	63.6		3.3
3, 12	RR	PROGENY P4906RR	67.7	56.8	47.1	3.3
6	CONV	* DAIRYLAND DSR-4890	67.3			4.0
4	RR	DELTA GROW 4975 RR	67.0	58.7	49.9	3.3
1, 10, 17	RR	* SOUTHERN STATES RT 4808N	66.5	60.6	51.6	3.5
none	CONV-NS	KS4607 (high protein)	66.0	57.0	47.9	3.5
6	RR	* UNISOUTH GENETICS USG 74T98	65.0	54.7		4.5
none	CONV-P	TN04-124	62.2			3.8
4	RR	DELTA GROW 4870 RR	61.5	58.8		3.5
none	CONV-P	PENNYRILE (long term check-released 1987)	59.4	51.8	43.8	3.5
LATE GROUP IV AVERAGE			73.1	63.4	52.2	3.4
LSD (0.10)			5.8	4.0	3.4	0.4
MATURITY GROUP V						
4	RR	* DELTA GROW 5160 RR/STS	84.3	66.3	51.2	4.0
4	RR	* SCHILLINGER SEED 557.RC	80.7	60.7		4.0
1, 10, 17	LL	* SOUTHERN STATES LL 511N	79.4			3.8
6	RR	DAIRYLAND DSR-5200/RR	78.1			3.5
6	CONV	UNISOUTH GENETICS USG 5601T	78.1	62.9	57.5	3.8
4	RR	SCHILLINGER SEED 5440.R	78.0			4.0
none	RR	* SOUTHERN CROSS DAMASCUS 5.0 N, RR, STS	77.2	61.9	47.2	3.5
6	RR	* DAIRYLAND DSR-8512/RR	76.9	55.7		3.8
6	CONV	UNISOUTH GENETICS USG 5002T	76.7	64.5	55.1	3.3
4	RR	* DELTA GROW 5450 RR	76.7	56.6		3.3
none	CONV-P	* KS5004N	76.5	65.9		4.0
7	RR	SEED CONSULTANTS SCS 9530RR	75.7			4.3
4	RR	* DELTA GROW 5555 RR	74.5			4.5
6	RR	* DAIRYLAND DSR-8509/RR	74.2	59.3	49.1	4.0
4	RR	* ARMOR 53-Z5	73.9	60.3		3.5
3, 5, 12	RR	* PIONEER 95Y40	73.8			4.0
none	CONV-P	GLENN	73.1	58.6		4.3
4	RR	* DELTA GROW 5300 RR/STS	72.8	59.3	52.0	3.8
none	CONV-P-NS	V01-1702 (3.5% linolenic)	72.8	57.9		3.3
1, 17	LL	HALO 5:25	72.2			3.8
4	RR	* DELTA GROW 5170 RR	71.8	61.3		2.8
1, 10, 17	RR	* SOUTHERN STATES RT 5160N	71.5	55.2	50.3	3.8
1, 4	RR	* ASGROW AG5301	71.3			3.8
none	CONV-P-NS	TN03-217 (natto soyfood type)	71.3			4.0
1, 17	RR	* HORNBECK HBK R5229	70.6			3.8
4	RR	DELTA KING DK 5363	70.4			3.5
none	CONV-P-NS	V01-1693 (3.5% linolenic)	68.9	55.2		4.0
4	RR	* DELTA GROW 5970 RR	68.5			4.0
1, 17	LL	HALO 5:65	68.0			3.8
none	RR	* CHANNEL 5051R	67.5			3.8
4	RR	* DELTA GROW 5280 RR	66.4			4.0
none	CONV-P	ESSEX (long term check-released 1974)	65.8	53.7	46.4	3.3
3, 12	RR	* PROGENY P5319RR	64.5			4.5
3, 12	RR	* PROGENY P5218RR	64.1	53.8		4.0
none	EXP-P-RR	TN06-140-RR	63.6			3.8
1, 17	CONV	HORNBECK HBK C5528	56.9			4.0
GROUP V AVERAGE			72.4	59.4	51.1	3.8
LSD (0.10)			6.2	4.2	3.0	0.3
GRAND MEAN			73.4	64.1	52.6	3.4

A See Table 4 for seed treatment code names.

B * Resistant to soybean cyst nematode. See Table 3 for details.

P Public varieties.

NS Novel soybeans are special trait varieties 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.

EXP Experimental entries are varieties that are still under development or soon to be released.

LL LibertyLink variety (Igmite herbicide tolerant).

RR Roundup Ready variety (RR1 first generation, original trait).

RR2Y Roundup Ready 2 Yield variety.

CONV Conventional variety.

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

TABLE 7. 2009 CALLOWAY COUNTY (MSU) FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C		LOGGING 2009
			2009	08-09	
MATURITY GROUP II-III (RELATIVE MG 2.7-3.9)					
3, 5, 12	RR	* PIONEER 93Y92	68.9		1.8
1, 17	CONV	EBBERTS 3369	68.7		2.0
6	EXP	* NK XR3997	68.1		1.8
4, 5, 12	EXP-RR2Y	AGEX391	67.9		2.0
1, 10, 11, 16	RR2Y	* SOUTHERN STATES 3820NR2	67.3		1.8
2	RR2Y	DAIRYLAND DSR-3636/R2Y	67.0		1.8
1, 17	RR	* EBBERTS 1390RR	66.7		1.8
none	RR	* DYNA-GRO 37P37	66.3	51.7	1.8
none	CONV-P	WOOSTER	65.4		2.0
9, 15	CONV	* BECK 343N	65.3		2.0
1, 10, 11, 16	RR2Y	* SOUTHERN CROSS MALACHI 3.8 N, RR2Y	64.8		1.5
1, 17	RR	* EBBERTS 1365RR	64.6	51.9	2.8
none	RR	* SOUTHERN CROSS LUCAS 3.8 N, RR	64.4	53.1	1.5
6	RR	* NK 539-A3 BRAND	64.4	53.5	2.3
9, 15	RR	* BECK 399NR	64.2	51.3	2.0
6	RR	* NK 537-P5 BRAND	64.1	51.3	2.0
4, 5, 12	EXP-RR2Y	AGEX350	63.9		1.5
1, 17	CONV	* EBBERTS 3386	63.8	51.3	2.3
4, 5, 12	RR	* ASGROW AG3803	63.7	53.3	1.8
4, 5, 12	EXP-RR2Y	AGEX390	63.6		2.0
6	CONV	* DAIRYLAND DST39-000	63.5		2.3
3, 5, 12	RR	* PIONEER 93Y20	63.4	51.4	2.0
7	RR	* SEED CONSULTANTS SCS 9390RR	63.2		2.0
7	RR	* SEED CONSULTANTS SCS 9370RR	63.1		1.8
1, 10, 17	RR	* SOUTHERN STATES RT 3971N	63.1	49.7	2.0
1, 10, 17	LL	* SOUTHERN STATES LL 389N	63.1		2.3
none	CONV	* CAVERDALE CF 388n	62.8		1.8
4, 5, 12	RR	* ASGROW AG3705	62.7	49.5	1.8
4, 5, 12	EXP-RR2Y	AGEX370	62.6		2.0
3, 12	RR	PROGENY P3909RR	62.5		2.3
4	EXP	* ARMOR ARX 938	62.4	53.4	2.0
7	RR	* SEED CONSULTANTS SCS 9380RR	61.7		1.8
1, 17	RR	HORNBECK HBK R3927	61.3	52.1	3.3
7	RR	* SEED CONSULTANTS SCS 9398RR	60.9	55.2	2.0
1, 10, 17	RR	* SOUTHERN STATES RT 3871N	60.4	50.7	1.8
none	CONV-P-NS	IA3041 (low linolenic)	58.6	45.5	2.3
9, 15	RR-NS	* BECK 359NRV (Vistive)	52.2		2.8
none	CONV-P-NS	IA3027LF (lipoxygenase free)	48.4		2.0
none	CONV-P-NS	IA3042 (1% linolenic)	45.8		1.0
none	CONV-P-NS	IA2095 (low saturate)	43.7		1.0
GROUP III AVERAGE			62.4	51.6	1.9
LSD (0.10)			6.5	3.9	0.5
MATURITY GROUP EARLY IV (RELATIVE MG 4.0-4.5)					
4, 5, 12	EXP-RR2Y	AGEX440	73.0		2.0
4, 5, 12	EXP-RR2Y	AGEX450	73.0		1.8
4, 5, 12	EXP-RR2Y	AGEX451	72.9		1.8
none	RR	* DYNA-GRO V42N9RS	72.8	57.1	1.5
4, 5, 12	RR	* ASGROW AG4303	70.3	56.1	1.3
none	RR	* SOUTHERN CROSS CALEB 4.4 N, RR, STS	69.9	52.8	1.3
none	RR	* TRISOY 4586RR(CN)	69.8	56.3	1.8
none	RR	* STINE 4392-4	69.6		2.0
1, 10, 17	RR	* SOUTHERN STATES RT 4470N	69.6	54.7	1.8
4	RR	* ARMOR 44-K6	69.4	54.6	1.5
4, 5, 12	EXP-RR2Y	AGEX452	69.0		1.8
4, 5, 12	EXP-RR2Y	AGEX431	68.9		3.0
9, 15	CONV	* BECK 414N	68.9		2.5
none	RR	* CAVERDALE CF 447 RR/STSn	68.7	54.6	1.5
4	EXP	ARMOR ARX 0432	68.4		1.5
4, 5, 12	EXP-RR2Y	AGEX410	68.3		2.3
3, 5, 12	RR	* PIONEER 94Y01	67.5	54.6	2.5
4, 5, 12	EXP-RR2Y	AGEX411	67.3		1.5
6	RR	* NK 543-N6 BRAND	67.0	54.4	2.8
1, 10, 17	RR	* SOUTHERN STATES RT 4370N	67.0	54.0	2.5
none	RR	* STEYER 4210RR	67.0		1.8
6	RR	* NK 544-D5 BRAND	66.8	55.2	2.3
none	RR	SOUTHERN CROSS LOT 4.1 N, RR, STS	66.7	52.9	2.0
2, 4, 8	RR	* ASGROW DKB42-51	66.7	50.3	1.5
4, 5, 12	EXP-RR2Y	AGEX430	66.5		2.3
6	RR	* DAIRYLAND DSR-4500/RRSTS	66.4	53.9	2.3
4, 5, 12	RR	* ASGROW AG4005	66.4	50.9	1.5
1, 10, 11, 16	LL	* SOUTHERN CROSS ENOS 4.3 N, LL	66.4		2.3
none	RR	* SOUTHERN CROSS JERICO 4.2 N, RR	66.2	52.2	1.8
4, 5, 12	EXP-RR2Y	AGEX432	66.1		2.3
4	RR	* DELTA GROW 4470 RR/STS	65.9	54.5	1.3
3, 5, 12	RR	* PIONEER 94Y20	65.8	56.2	3.0
9, 15	RR	* BECK 445NR	65.6	54.1	1.5
1, 17	CONV	* PORTER HYBRIDS PH 4419N	65.3	51.3	2.8
4	EXP	ARMOR ARX 0431	65.2		2.0
4	RR	* ARMOR 42-M1	64.8	57.0	1.0
none	RR	* STEYER 4430RR	64.7	51.3	1.5
7	RR	* SEED CONSULTANTS SCS 9409RR	64.6	50.7	1.8

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TABLE 7. 2009 CALLOWAY COUNTY (MSU) FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C		LOGGING 2009
			2009	08-09	
6	EXP	* NK XR4090	64.4		2.0
none	CONV	* STEYER 401	64.4		2.0
3, 12	RR	* PROGENY P4206RR	64.3	50.9	1.0
4, 5, 12	RR	* ASGROW AG4404	64.0	47.2	2.0
none	RR	* TRISOY 4184RR(CN)	63.9	54.3	2.0
1, 10, 17	RR	* SOUTHERN STATES RT 4451N	63.9	51.5	2.3
1, 10, 17	LL	* SOUTHERN STATES LL 430N	63.8		2.8
7	RR	* SEED CONSULTANTS SCS 9448RR	63.7	54.7	2.5
6	RR	* DAIRYLAND DSR-4300/RR	63.5	54.2	3.0
none	CONV	L&M 74 STS	63.5		2.0
none	RR	* DYNA-GRO 36C44	63.3	51.2	1.3
1, 10, 17	LL	* SOUTHERN STATES LL 450N	63.2		3.5
4	RR	* DELTA GROW 4150 RR	63.2	52.9	2.3
none	CONV	* STEYER 410	63.1	48.6	3.5
1, 10, 17	LL	* SOUTHERN STATES LL 410N	62.7		1.5
9, 15	RR	* BECK 400NR	62.1		2.5
none	RR	* CAVERNDALE CF 410 RR/STSn	62.0	52.5	2.0
1, 10, 17	LL	* DYNA-GRO 39LL43	61.9		2.0
none	CONV	* STEYER 441STS	61.3		2.0
4	CONV	* SCHILLINGER SEED 435.TCS	61.1	43.8	2.5
1, 10, 17	LL	* CAVERNDALE CF 439 LL	60.7		2.8
none	CONV-P-NS	IA4004 (food type)	60.3		3.3
7	RR	* SEED CONSULTANTS SCS 9450RR	60.0		2.3
none	RR	* STINE 4582-4	59.4		2.8
19	RR	* CHANNEL 4551R	58.7		3.0
none	RR	* L&M 843R	58.6	49.2	2.5
3, 12	RR	* PROGENY P4508RR	57.0	53.5	2.3
6	CONV	* UNISOUTH GENETICS USG 440nSTS	56.4		2.0
none	CONV	* SOUTHERN CROSS BENJAMIN 4.3 N	56.2	55.7	2.3
6	RR	* UNISOUTH GENETICS USG 74C36	54.8	45.3	3.3
EARLY GROUP IV AVERAGE			65.0	52.8	2.1
LSD (0.10)			5.1	3.8	0.5
MATURITY GROUP LATE IV (RELATIVE MG 4.6-4.9)					
1, 10, 17	LL	* SOUTHERN CROSS SHILOH 4.9 N, LL	79.3		2.3
1, 10, 17	LL	* SOUTHERN STATES LL 499N	77.7		1.8
1, 17	LL	HALO 4:94	75.9		1.8
1, 17	CONV	HORNBECK HBK C4929	74.1		2.5
4	RR	DELTA KING DKR 4744s	73.7		2.5
none	RR	* DYNA-GRO V47N9RS	71.1	56.1	2.3
4	RR	* SCHILLINGER SEED 4990.RC	70.6		2.8
4	EXP-RR	DELTA KING DKX 0461	70.6		2.5
none	RR	* STINE 5022-4	70.2		2.5
4	RR	ARMOR 47-R33	69.8		2.0
4	RR	* ARMOR 47-G10	69.8		3.0
4	EXP	ARMOR ARX 0472	69.2		2.0
none	RR	* SOUTHERN CROSS GALILEE 4.7 N, RR	68.8	53.4	3.0
none	RR	* STEYER 4710RR	68.8		2.5
6	RR	* UNISOUTH GENETICS USG 74A76	68.5	57.4	3.0
none	RR	* TRISOY 4788RR(CN)	68.4		2.3
4	RR	* ARMOR 47-F8	68.3	56.9	1.8
none	RR	* CHANNEL 4852R	68.0	56.6	1.8
1, 17	RR	* HORNBECK HBK R4924	67.8	59.2	3.0
4	RR	* SCHILLINGER SEED 495.RC	67.8	54.3	2.8
3, 5, 12	RR	* PIONEER 94Y60	67.8	52.3	1.3
4, 5, 12	RR	ASGROW AG4903	67.6	57.9	2.3
4	RR	* DELTA GROW 4970 RR	67.6	57.8	2.8
4	EXP	* ARMOR ARX 0474	67.2		2.8
none	RR	* SOUTHERN CROSS RUFUS 4.7 N, RR, STS	67.0	54.9	2.0
1, 17	RR	* HORNBECK HBK R4727	66.8	56.8	2.5
6	EXP	* NK XR4995	66.8		2.5
6	RR	* NK S48-C9 BRAND	66.7	54.6	2.0
1, 10, 17	RR	* SOUTHERN STATES RT 4996N	66.6	55.7	3.0
6	CONV	* DAIRYLAND DSR-4890	66.6		2.8
6	RR	* UNISOUTH GENETICS USG 74T98	66.4	56.7	3.0
none	RR	* STINE 4782-4	66.4	55.8	1.8
4	RR	DELTA GROW 4975 RR	66.3	53.8	2.3
9, 15	RR	* BECK 491NR	66.2		2.0
3, 5, 12	RR	* PIONEER 94Y90	66.2	54.9	2.5
6	RR	* NK S47-D9 BRAND	66.2	53.2	2.3
6	RR	DAIRYLAND DSR-8482/RR	66.0	55.8	2.5
9, 15	RR	* BECK 474NR	65.4	54.2	2.3
3, 12	RR	* PROGENY P4706RR	65.2	52.9	3.5
1, 17	LL	HALO 4:65	65.2		2.5
4	RR	DELTA GROW 4870 RR	65.2	56.4	2.5
4, 5, 12	RR	* ASGROW AG4705	65.1	56.5	3.3
none	RR	* STEYER 4620RR	64.9	54.4	2.0
4	RR	* DELTA GROW 4770 RR	64.9	54.2	3.3
none	RR	* SOUTHERN CROSS ELI 4.7 N, RR, STS	64.9	53.9	1.8
3, 5, 12	RR	* PIONEER 94Y70	64.8	55.9	2.5
none	RR	* DYNA-GRO 33G48	64.8		2.8
4	RR	* SCHILLINGER SEED 4880.RC	64.6		3.3
4, 5, 12	RR	* ASGROW AG4606	64.5	54.4	2.0
1, 10, 17	RR	* SOUTHERN STATES RT 4777N	64.4	51.3	3.0

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TABLE 7. 2009 CALLOWAY COUNTY (MSU) FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C		LODGING 2009
			2009	08-09	
3, 12	RR	* PROGENY P4606RR	64.4	55.4	2.0
7	RR	* SEED CONSULTANTS SCS 9479RR	64.3	55.9	3.3
none	RR	* DAIRYLAND DSR-8474/RR	64.1		2.5
4	RR	* ARMOR 48-J3	64.1	56.3	2.8
3, 12	RR	PROGENY P4906RR	63.9	54.7	2.5
none	CONV	SOUTHER CROSS JOSHUA 4.8	63.7		3.5
4	RR	* DELTA GROW 4780 RR	63.5	52.7	2.8
3, 12	RR	* PROGENY P4807RR	63.4	53.2	2.5
none	RR	* CAVERNDALE CF 470 RR/STS _n	63.3	52.2	2.0
6	RR	* DAIRYLAND DSR48-000/RR	63.3		3.0
7	RR	* SEED CONSULTANTS SCS 9480RR	63.3		2.0
none	RR	CHANNEL 4851R	63.2		2.8
3, 12	RR	* PROGENY P4949RR	63.0	51.1	2.5
none	RR	* TRISOY 4760RR(CN)	62.8	53.8	1.3
4, 5, 12	RR	* ASGROW AG4605	62.6	49.4	2.0
4, 5, 12	RR	* ASGROW AG4907	62.5	52.5	2.3
1, 10, 17	RR	* SOUTHERN STATES RT 4808N	62.4	54.0	2.3
1, 17	RR	* HORNBECK HBK R4729	62.3		3.3
none	CONV-P	TN04-124	62.2		2.5
4, 5, 12	RR	* ASGROW AG4703	61.6	52.3	2.0
6	RR	* UNISOUTH GENETICS USG 74G78	60.1	53.9	1.8
4	CONV	* SCHILLINGER SEED 477.TCS	60.0	45.9	2.5
3, 12	RR	PROGENY P4908RR	59.9	53.6	2.0
none	CONV-NS	KS4607 (high protein)	59.8	47.2	2.3
none	CONV-P	PENNYRILE (long term check-released 1987)	57.4	46.9	3.0
LATE GROUP IV AVERAGE			66.1	54.1	2.4
LSD (0.10)			4.8	3.8	0.5
MATURITY GROUP V					
4	RR	DELTA KING DK 5363	81.7		3.0
4	RR	* DELTA GROW 5450 RR	80.7	62.0	2.3
3, 12	RR	* PROGENY P5319RR	78.2		3.5
4	RR	* SCHILLINGER SEED 557.RC	78.0	63.5	2.8
4	RR	SCHILLINGER SEED 5440.R	77.4		2.5
6	CONV	UNISOUTH GENETICS USG 5601T	75.9	62.3	2.5
1, 10, 17	LL	* SOUTHERN STATES LL 511N	75.2		2.5
7	RR	SEED CONSULTANTS SCS 9530RR	74.2		3.0
4	RR	* DELTA GROW 5555 RR	73.7		3.8
1, 17	LL	HALO 5:25	72.9		2.5
1, 17	RR	* HORNBECK HBK R5229	71.7		3.0
6	CONV	UNISOUTH GENETICS USG 5002T	71.6	60.8	2.3
1, 10, 17	RR	* SOUTHERN STATES RT 5160N	71.6	57.2	2.8
4	RR	* DELTA GROW 5280 RR	71.5		3.5
4	RR	* DELTA GROW 5300 RR/STS	71.2	58.5	3.0
4	RR	* DELTA GROW 5970 RR	71.0		2.8
3, 5, 12	RR	* PIONEER 95Y40	70.8		3.5
1, 17	LL	HALO 5:65	70.8		2.3
1, 17	CONV	HORNBECK HBK C5528	70.2		3.5
none	EXP-P-RR	TN06-140-RR	69.8		2.8
3, 12	RR	* PROGENY P5218RR	69.4	56.9	3.0
1, 4	RR	* ASGROW AG5301	68.4		2.5
none	CONV-P	* KS5004N	68.1	57.9	3.0
6	RR	* DAIRYLAND DSR-8512/RR	66.9	55.2	2.5
6	RR	DAIRYLAND DSR-5200/RR	66.3		2.5
none	CONV-P	GLENN	65.3	55.2	3.5
4	RR	* ARMOR 53-Z5	64.4	56.0	2.5
none	CONV-P-NS	V01-1702 (3.5% linolenic)	63.1	54.0	2.5
none	CONV-P-NS	V01-1693 (3.5% linolenic)	62.5	52.8	3.0
none	RR	* SOUTHERN CROSS DAMASCUS 5.0 N, RR, STS	61.8	52.3	2.5
none	CONV-P-NS	TN03-217 (natto soyfood type)	61.3		2.3
6	RR	* DAIRYLAND DSR-8509/RR	59.7	50.7	3.5
4	RR	* DELTA GROW 5160 RR/STS	59.4	50.6	3.3
none	CONV-P	ESSEX (long term check-released 1974)	58.5	51.3	2.5
none	RR	* CHANNEL 5051R	58.5		3.0
4	RR	* DELTA GROW 5170 RR	55.8	49.7	2.0
GROUP V AVERAGE			69.1	55.9	2.8
LSD (0.10)			6.1	3.5	0.5
GRAND MEAN			65.6	53.6	2.3

A See Table 4 for seed treatment code names.

B * Resistant to soybean cyst nematode. See Table 3 for details.

P Public varieties.

NS Novel soybeans are special trait varieties 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.

EXP Experimental entries are varieties that are still under development or soon to be released.

LL LibertyLink variety (Igmite herbicide tolerant).

RR Roundup Ready variety (RR1 first generation, original trait).

RR2Y Roundup Ready 2 Yield variety.

CONV Conventional variety.

C 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 8. 2009 FAYETTE COUNTY (UK) FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C			LODGING 2009	PLANT HEIGHT (INCHES) 2009	MATURITY DATE 2009
			2009	08-09	07-09			
MATURITY GROUP II-III (RELATIVE MG 2.7-3.9)								
4, 5, 12	EXP-RR2Y	AGEX370	87.6			2.0	39	9/27
1, 17	CONV	* EBBERTS 3386	84.3	67.0	64.8	2.0	44	10/2
6	EXP	* NK XR3997	83.7			1.8	37	9/28
1, 10, 17	LL	* SOUTHERN STATES LL 389N	83.7			2.0	42	10/4
6	RR	* NK 537-P5 BRAND	83.2	61.5	60.9	1.8	37	9/23
2	RR2Y	DAIRYLAND DSR-3636/R2Y	82.9			1.8	36	9/26
none	CONV-P-NS	IA3041 (low linolenic)	82.7	58.1		2.0	37	9/18
6	CONV	* DAIRYLAND DST39-000	82.5			2.0	42	9/27
1, 17	RR	* EBBERTS 1365RR	82.1	61.8	63.0	2.0	38	9/25
3, 5, 12	RR	* PIONEER 93Y92	81.5			2.0	42	9/25
4, 5, 12	RR	* ASGROW AG3803	81.0	62.8	63.2	2.0	39	9/28
7	RR	* SEED CONSULTANTS SCS 9398RR	80.1	65.0		2.3	44	10/3
7	RR	* SEED CONSULTANTS SCS 9370RR	79.2			1.8	43	9/22
7	RR	* SEED CONSULTANTS SCS 9380RR	79.0			2.0	47	10/4
3, 12	RR	PROGENY P3909RR	78.9			2.0	40	10/3
none	CONV	* CAVERDALE CF 388n	78.5			1.8	37	9/26
6	RR	* NK 539-A3 BRAND	77.7	60.0	62.2	1.5	37	9/26
1, 17	CONV	EBBERTS 3369	77.0			2.3	36	9/20
1, 10, 11, 16	RR2Y	* SOUTHERN STATES 3820NR2	77.0			2.3	41	9/28
1, 17	RR	* HORNBECK HBK R3927	76.7	60.0	61.5	2.5	45	10/4
none	RR	* DYNA-GRO 37P37	76.2	57.3		1.3	37	9/23
none	CONV-P	WOOSTER	76.0			2.0	39	9/20
9, 15	RR	* BECK 399NR	75.5	58.4	58.9	2.0	41	10/2
1, 10, 17	RR	* SOUTHERN STATES RT 3871N	74.6	59.4	59.9	2.0	44	10/5
4, 5, 12	EXP-RR2Y	AGEX390	74.0			2.0	39	10/2
4, 5, 12	EXP-RR2Y	AGEX391	73.6			1.3	34	9/28
4	EXP	* ARMOR ARX 938	73.1	58.7		1.5	36	9/25
1, 10, 11, 16	RR2Y	* SOUTHERN CROSS MALACHI 3.8 N, RR2Y	72.9			2.0	40	9/28
none	RR	* SOUTHERN CROSS LUCAS 3.8 N, RR	72.7	59.4	59.6	2.0	41	9/23
4, 5, 12	EXP-RR2Y	AGEX350	71.3			1.0	34	9/17
4, 5, 12	RR	* ASGROW AG3705	70.6	54.2	56.0	1.5	36	9/21
3, 5, 12	RR	* PIONEER 93Y20	70.5	58.8		2.0	39	9/18
9, 15	RR-NS	* BECK 359NRV (Vistive)	70.0			1.8	39	9/19
1, 10, 17	RR	* SOUTHERN STATES RT 3971N	69.6	57.8	59.2	2.0	38	10/2
1, 17	RR	* EBBERTS 1390RR	69.2			1.3	38	9/27
7	RR	* SEED CONSULTANTS SCS 9390RR	69.0			2.3	46	9/30
none	CONV-P-NS	IA3027LF (lipoxygenase free)	67.4			2.3	30	9/21
9, 15	CONV	* BECK 343N	66.7			1.8	34	9/21
none	CONV-P-NS	IA2095 (low saturate)	60.5			1.0	27	9/15
none	CONV-P-NS	IA3042 (1% linolenic)	53.9			1.0	27	9/14
GROUP III AVERAGE			75.6	60.0	60.8	1.8	38	9/26
LSD (0.10)			6.1	3.9	3.2	0.3	2	
MATURITY GROUP EARLY IV (RELATIVE MG 4.0-4.5)								
4, 5, 12	EXP-RR2Y	AGEX450	86.1			2.0	44	10/5
4, 5, 12	EXP-RR2Y	AGEX451	84.9			2.0	40	10/3
4, 5, 12	EXP-RR2Y	AGEX452	84.9			2.0	41	10/5
9, 15	CONV	* BECK 414N	84.4			2.3	42	9/28
6	RR	* NK S44-D5 BRAND	81.9	61.7	63.1	2.0	40	10/4
2, 4, 8	RR	* ASGROW DKB42-51	81.2	60.4	61.5	1.8	44	10/3
none	RR	* SOUTHERN CROSS CALEB 4.4 N, RR, STS	80.9	60.3	61.7	1.3	36	10/2
4, 5, 12	EXP-RR2Y	AGEX440	80.9			2.0	40	10/5
4	EXP	ARMOR ARX 0431	80.4			2.0	41	10/3
6	CONV	* UNISOUTH GENETICS USG 440nSTS	80.4			2.0	46	10/5
4	EXP	ARMOR ARX 0432	80.3			2.0	42	10/4
4, 5, 12	RR	* ASGROW AG4303	80.2	64.1		1.0	36	10/1
1, 10, 17	LL	* DYNA-GRO 39LL43	80.0			2.0	43	10/5
6	RR	* DAIRYLAND DSR-4300/RR	79.9	56.2		2.3	42	10/7
9, 15	RR	* BECK 445NR	79.7	58.2		1.0	37	9/29
none	RR	* CAVERDALE CF 447 RR/STSn	79.1	58.9	60.5	1.3	36	10/5
4	RR	* ARMOR 42-M1	78.5	58.8		1.3	37	10/1
1, 10, 11, 16	LL	* SOUTHERN CROSS ENOS 4.3 N, LL	77.8			2.0	46	10/4
none	RR	* STINE 4582-4	77.6			2.0	45	10/5
none	RR	* TRISOY 4184RR(CN)	77.5	58.8		1.8	37	9/30
3, 5, 12	RR	* PIONEER 94Y01	77.1	58.9		2.3	42	10/4
none	RR	* STEYER 4430RR	76.7	56.7	59.6	1.0	36	10/5
1, 10, 17	LL	* CAVERDALE CF 439 LL	76.4			2.3	46	10/5
none	RR	* STINE 4392-4	75.9			1.3	34	10/2
4, 5, 12	RR	* ASGROW AG4005	75.6	59.4		1.3	41	9/30
1, 10, 17	LL	* SOUTHERN STATES LL 450N	75.5			3.0	53	10/11
none	RR	* TRISOY 4586RR(CN)	75.3	59.0		1.3	35	10/2
4, 5, 12	EXP-RR2Y	AGEX430	75.3			2.3	49	10/7
none	RR	SOUTHERN CROSS LOT 4.1 N, RR, STS	75.2	58.5		1.5	38	9/27
7	RR	* SEED CONSULTANTS SCS 9450RR	75.0			2.3	49	10/6
none	RR	* DYNA-GRO 36C44	74.7	59.3		1.0	34	9/30
none	RR	* SOUTHERN CROSS JERICHO 4.2 N, RR	74.7	56.3		1.5	37	9/28
4, 5, 12	EXP-RR2Y	AGEX411	74.5			2.0	35	9/27
9, 15	RR	* BECK 400NR	74.2			2.0	43	10/3
none	CONV	* STEYER 401	74.1			2.0	43	9/29
3, 12	RR	* PROGENY P4508RR	74.1	54.8		2.0	45	10/5
6	RR	* NK S43-N6 BRAND	74.0	56.7		1.8	40	10/4

continued on next page

TABLE 8. 2009 FAYETTE COUNTY (UK) FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C			LODGING 2009	PLANT HEIGHT (INCHES) 2009	MATURITY DATE 2009
			2009	08-09	07-09			
1, 10, 17	RR	* SOUTHERN STATES RT 4370N	73.8	56.6	56.5	2.0	46	10/4
19	RR	* CHANNEL 4551R	73.6			2.3	47	10/5
4, 5, 12	EXP-RR2Y	AGEX431	73.5			2.3	45	10/5
none	RR	* DYNA-GRO V42N9RS	73.4	59.1		1.5	38	10/2
4, 5, 12	EXP-RR2Y	AGEX410	73.3			2.0	43	10/3
4	RR	* ARMOR 44-K6	73.2	56.8		1.0	35	9/29
4	RR	* DELTA GROW 4150 RR	72.8	56.6	58.4	2.3	45	10/5
4	RR	* DELTA GROW 4470 RR/STS	72.6	58.3	61.5	1.0	35	10/2
none	RR	* L&M 843R	72.5	55.6		2.0	44	10/5
4, 5, 12	RR	* ASGROW AG4404	72.5	56.1	57.4	2.0	43	10/5
1, 10, 17	LL	* SOUTHERN STATES LL 430N	72.3			1.8	44	10/4
none	CONV	L&M 74 STS	72.2			2.0	39	10/3
1, 17	CONV	* PORTER HYBRIDS PH 4419N	72.1	58.9		1.8	38	9/27
3, 5, 12	RR	* PIONEER 94Y20	72.1	55.6		2.3	46	10/11
none	RR	* STEYER 4210RR	72.1			1.3	35	10/1
7	RR	* SEED CONSULTANTS SCS 9448RR	71.3	55.5		2.3	44	10/12
1, 10, 17	RR	* SOUTHERN STATES RT 4470N	71.2	56.6	61.1	1.0	34	10/5
6	RR	* DAIRYLAND DSR-4500/RRSTS	71.2	53.2		2.3	40	10/4
7	RR	* SEED CONSULTANTS SCS 9409RR	70.7	52.8		2.3	44	10/3
none	CONV-P-NS	IA4004 (food type)	70.5			2.8	36	9/19
none	RR	* CAVERNDALE CF 410 RR/STS _n	69.9	56.0	57.5	1.5	37	9/29
3, 12	RR	* PROGENY P4206RR	69.5	57.7	60.1	1.3	37	9/29
4, 5, 12	EXP-RR2Y	AGEX432	69.1			2.0	44	10/7
1, 10, 17	LL	* SOUTHERN STATES LL 410N	68.6			1.5	43	10/5
6	EXP	* NK XR4090	68.2			2.0	36	9/30
none	CONV	* STEYER 410	68.1	51.6		2.3	39	9/28
1, 10, 17	RR	* SOUTHERN STATES RT 4451N	67.8	55.1	57.0	2.0	46	10/6
none	CONV	* SOUTHERN CROSS BENJAMIN 4.3 N	66.5	53.7		1.8	40	10/5
4	CONV	* SCHILLINGER SEED 435.TCS	65.7	50.0		1.8	37	10/2
6	RR	* UNISOUTH GENETICS USG 74C36	65.3	50.4		2.5	45	10/9
none	CONV	* STEYER 441STS	62.2			2.0	43	10/3
EARLY GROUP IV AVERAGE			74.7	56.9	59.7	1.8	41	10/3
LSD (0.10)			5.3	3.4	3.3	0.3	2	

MATURITY GROUP LATE IV (RELATIVE MG 4.6-4.9)

3, 5, 12	RR	* PIONEER 94Y70	91.4	66.1		2.3	50	10/11
7	RR	* SEED CONSULTANTS SCS 9480RR	91.4			2.5	50	10/12
6	RR	* UNISOUTH GENETICS USG 74G78	90.7	64.3		1.3	40	10/5
none	RR	* TRISOY 4788RR(CN)	90.6			1.8	41	10/9
4, 5, 12	RR	* ASGROW AG4605	89.5	64.4	63.5	1.8	39	10/4
4	EXP	ARMOR ARX 0472	89.3			2.3	41	10/5
4	EXP-RR	DELTA KING DKX 0461	89.3			2.3	42	10/6
none	RR	* SOUTHERN CROSS ELI 4.7 N, RR, STS	88.0	61.4	63.5	1.3	37	10/5
1, 17	LL	HALO 4-65	87.2			2.0	47	10/5
4	EXP	* ARMOR ARX 0474	87.0			2.5	43	10/8
3, 5, 12	RR	* PIONEER 94Y60	85.7	61.9		2.0	42	10/8
6	RR	* NK S48-C9 BRAND	85.3	62.6		2.0	43	10/14
4	RR	ARMOR 47-R33	84.3			2.3	39	10/5
4	RR	DELTA KING DKR 4744s	84.2			2.0	41	10/6
1, 10, 17	RR	* SOUTHERN STATES RT 4808N	83.7	63.1	65.5	2.3	46	10/6
6	RR	DAIRYLAND DSR-8482/RR	83.6	62.5	62.7	2.5	47	10/11
3, 5, 12	RR	* PIONEER 94Y90	83.1	59.3		2.5	57	10/12
none	RR	* CAVERNDALE CF 470 RR/STS _n	83.0	60.3	62.7	1.3	37	10/5
4	RR	* ARMOR 47-G10	82.3			2.0	44	10/6
4	RR	* SCHILLINGER SEED 495.RC	82.1	59.8	59.9	2.3	51	10/16
none	RR	* TRISOY 4760RR(CN)	81.1	58.8	59.3	1.5	38	10/5
3, 12	RR	* PROGENY P4807RR	81.0	57.8	58.5	2.3	47	10/9
4, 5, 12	RR	* ASGROW AG4907	80.3	61.3		2.0	51	10/7
3, 12	RR	* PROGENY P4949RR	80.2	58.2	61.2	2.5	46	10/15
none	RR	* CHANNEL 4852R	79.8	59.8		2.0	43	10/6
none	RR	* STEYER 4710RR	79.8			2.0	47	10/9
4, 5, 12	RR	* ASGROW AG4703	79.8	59.1	60.6	2.0	43	10/9
6	EXP	* NK XR4995	79.8			2.8	52	10/9
none	CONV-NS	KS4607 (high protein)	79.5	57.1	57.8	2.0	40	10/7
4	CONV	* SCHILLINGER SEED 477.TCS	79.1	58.4		2.5	42	10/7
4, 5, 12	RR	* ASGROW AG4606	79.0	60.0		2.0	45	10/6
none	RR	* DAIRYLAND DSR-8474/RR	78.8			2.0	41	10/5
none	RR	* STEYER 4620RR	78.7	59.4		2.3	43	10/9
4	RR	* SCHILLINGER SEED 4880.RC	78.7			2.5	49	10/14
7	RR	* SEED CONSULTANTS SCS 9479RR	78.6	58.8		2.8	48	10/10
none	RR	* SOUTHERN CROSS RUFUS 4.7 N, RR, STS	78.5	57.6		2.0	43	10/6
none	RR	* SOUTHERN CROSS GALILEE 4.7 N, RR	78.2	56.9	59.3	2.3	48	10/8
3, 12	RR	* PROGENY P4606RR	78.2	57.9	61.6	1.3	39	10/5
4	RR	DELTA GROW 4870 RR	78.0	59.1		2.0	47	10/8
1, 10, 17	RR	* SOUTHERN STATES RT 4777N	77.6	57.9	61.0	2.3	51	10/15
3, 12	RR	PROGENY P4908RR	77.2	57.6		2.5	45	10/12
4	RR	* DELTA GROW 4970 RR	77.0	59.0	56.8	3.8	50	frost killed
none	RR	* STINE 4782-4	76.9	55.8	59.1	1.0	38	10/6
4	RR	* DELTA GROW 4770 RR	76.6	56.5	59.3	3.3	50	10/5
1, 17	RR	* HORNBECK HBK R4924	76.6	56.7	58.7	3.0	54	10/16
9, 15	RR	* BECK 474NR	76.4	57.5		2.0	45	10/7
6	RR	* UNISOUTH GENETICS USG 74A76	76.2	57.4	59.9	2.8	52	10/8
4, 5, 12	RR	ASGROW AG4903	76.2	60.0	59.1	2.0	48	10/12
4	RR	DELTA GROW 4975 RR	75.9	56.8	57.7	2.3	45	frost killed

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TABLE 8. 2009 FAYETTE COUNTY (UK) FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C			LODGING 2009	PLANT HEIGHT (INCHES) 2009	MATURITY DATE 2009
			2009	08-09	07-09			
none	RR	* DYNA-GRO V47N9RS	75.5	58.1		2.0	42	10/5
6	RR	* NK S47-D9 BRAND	75.3	56.7	60.4	1.5	46	10/10
3, 12	RR	PROGENY P4906RR	74.9	57.9	56.7	2.3	44	10/6
6	RR	* DAIRYLAND DSR48-000/RR	74.9			2.3	48	10/7
4	RR	* ARMOR 47-F8	74.8	55.6	58.6	1.3	38	10/6
1, 17	RR	* HORNBECK HBK R4727	74.7	53.9	57.9	2.5	49	10/9
none	RR	* STINE 5022-4	74.7			2.5	46	10/7
4	RR	* DELTA GROW 4780 RR	74.6	56.8	58.9	2.0	48	10/7
none	CONV	SOUTHERN CROSS JOSHUA 4.8	74.6			3.3	48	10/8
1, 17	RR	* HORNBECK HBK R4729	74.4			2.5	44	10/13
1, 10, 17	RR	* SOUTHERN STATES RT 4996N	74.1	53.6	56.0	2.8	47	10/15
none	RR	* DYNA-GRO 33G48	73.7			2.8	46	10/9
3, 12	RR	* PROGENY P4706RR	72.3	53.4	55.2	3.0	51	10/5
none	RR	CHANNEL 4851R	71.7			2.8	50	10/6
4	RR	* ARMOR 48-J3	71.4	56.4	59.7	2.0	46	10/12
6	CONV	* DAIRYLAND DSR-4890	71.1			2.5	51	10/15
4, 5, 12	RR	* ASGROW AG4705	68.4	54.7		2.8	48	10/13
4	RR	* SCHILLINGER SEED 4990.RC	67.8			2.0	47	10/12
none	CONV-P	PENNYRILE (long term check-released 1987)	66.0	50.6	51.0	2.5	50	10/11
9, 15	RR	* BECK 491NR	66.0			1.5	41	10/6
1, 17	LL	HALO 4:94	64.2			2.5	52	frost killed
none	CONV-P	TN04-124	63.5			3.5	48	frost killed
6	RR	* UNISOUTH GENETICS USG 74T98	63.4	46.9		4.5	43	frost killed
1, 17	CONV	HORNBECK HBK C4929	61.5			3.3	61	frost killed
1, 10, 17	LL	* SOUTHERN CROSS SHILOH 4.9 N, LL	61.4			2.8	53	frost killed
1, 10, 17	LL	* SOUTHERN STATES LL 499N	59.5			3.0	53	frost killed
LATE GROUP IV AVERAGE			77.7	58.2	59.4	2.3	45.7	10/9
LSD (0.10)			7.6	4.3	4.0	0.4	3	
MATURITY GROUP V								
4	RR	* DELTA GROW 5170 RR	77.2	56.9		2.0	39	10/7
1, 17	LL	HALO 5:25	75.2			2.5	37	frost killed
none	RR	* SOUTHERN CROSS DAMASCUS 5.0 N, RR, STS	74.6	51.3	49.6	2.5	42	frost killed
6	RR	* DAIRYLAND DSR-8509/RR	72.3	55.0	51.8	2.5	50	10/17
1, 10, 17	LL	* SOUTHERN STATES LL 511N	72.0			2.8	37	frost killed
none	RR	* CHANNEL 5051R	71.4			2.3	50	10/12
6	RR	* DAIRYLAND DSR-8512/RR	70.7	51.8		2.8	51	frost killed
4	RR	* DELTA GROW 5160 RR/STS	69.8	49.2	51.5	2.5	48	10/16
6	CONV	UNISOUTH GENETICS USG 5601T	69.4	51.9	48.4	3.8	45	frost killed
3, 5, 12	RR	* PIONEER 95Y40	66.0			3.5	45	frost killed
4	RR	* DELTA GROW 5280 RR	64.9			4.0	42	frost killed
none	CONV-P	* K55004N	63.9	49.9		3.3	44	frost killed
4	RR	* ARMOR 53-Z5	63.6	47.1		3.3	41	frost killed
1, 10, 17	RR	* SOUTHERN STATES RT 5160N	63.3	45.6	43.3	3.8	45	frost killed
3, 12	RR	* PROGENY P5218RR	63.2	46.6		4.0	46	frost killed
6	RR	DAIRYLAND DSR-5200/RR	61.7			2.8	50	frost killed
4	RR	* SCHILLINGER SEED 557.RC	60.8	44.0		3.8	46	frost killed
4	RR	* DELTA GROW 5300 RR/STS	60.2	44.3	41.6	3.3	45	frost killed
4	RR	SCHILLINGER SEED 5440.R	59.9			3.5	41	frost killed
none	CONV-P	GLENN	59.7	45.0		3.0	38	frost killed
1, 4	RR	* ASGROW AG5301	59.3			3.5	43	frost killed
1, 17	LL	HALO 5:65	59.2			2.8	44	frost killed
7	RR	SEED CONSULTANTS SCS 9530RR	59.1			4.3	47	frost killed
none	CONV-P-NS	V01-1702 (3.5% linolenic)	58.9	44.0		3.8	42	frost killed
6	CONV	UNISOUTH GENETICS USG 5002T	58.8	48.4	48.6	3.8	40	frost killed
1, 17	RR	* HORNBECK HBK R5229	57.2			3.3	47	frost killed
none	CONV-P	ESSEX (long term check-released 1974)	56.0	44.2	43.3	2.3	36	frost killed
4	RR	* DELTA GROW 5450 RR	56.0	42.1		3.5	47	frost killed
none	EXP-P-RR	TN06-140-RR	55.8			3.8	42	frost killed
4	RR	* DELTA GROW 5555 RR	55.2			4.3	46	frost killed
4	RR	DELTA KING DK 5363	53.1			4.0	44	frost killed
3, 12	RR	* PROGENY P5319RR	52.1			4.3	42	frost killed
none	CONV-P-NS	V01-1693 (3.5% linolenic)	51.9	39.4		4.0	45	frost killed
4	RR	* DELTA GROW 5970 RR	51.1			3.3	46	frost killed
1, 17	CONV	HORNBECK HBK C5528	50.6			4.0	47	frost killed
none	CONV-P-NS	TN03-217 (natto soyfood type)	48.8			3.3	37	frost killed
GROUP V AVERAGE			61.7	47.6	47.3	3.3	44	
LSD (0.10)			6.5	3.7	3.5	0.5	3	
GRAND MEAN			73.8	56.5	58.1	2.2	42	

A See Table 4 for seed treatment code names.

B * Resistant to soybean cyst nematode. See Table 3 for details.

P Public varieties.

NS Novel soybeans are special trait varieties 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.

EXP Experimental entries are varieties that are still under development or soon to be released.

LL LibertyLink variety (Ignite herbicide tolerant).

RR Roundup Ready variety (RR1 first generation, original trait).

RR2Y Roundup Ready 2 yield variety.

CONV Conventional variety.

C 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. 2009 MCLEAN COUNTY FULL-SEASON VARIETY TEST^A

SEED TREATMENT CODE ^B	TYPE ^C	BRAND—VARIETY	YIELD (BU/AC) ^D			LODGING 2009
			2009	08-09	07-09	
MATURITY GROUP II-III (RELATIVE MG 2.7-3.9)						
4, 5, 12	EXP-RR2Y	AGEX391	79.1			2.3
3, 5, 12	RR	* PIONEER 93Y92	76.8			3.0
6	EXP	* NK XR3997	76.2			2.0
7	RR	* SEED CONSULTANTS SCS 9398RR	75.9	58.2		2.5
none	RR	* DYNA-GRO 37P37	75.9	57.4		2.3
6	RR	* NK 539-A3 BRAND	74.2	56.0	48.3	2.3
1, 10, 11, 16	RR2Y	* SOUTHERN CROSS MALACHI 3.8 N, RR2Y	74.2			2.5
1, 17	RR	* EBBERTS 1390RR	74.1			2.0
4, 5, 12	EXP-RR2Y	AGEX390	73.4			2.5
1, 10, 11, 16	RR2Y	* SOUTHERN STATES 3820NR2	73.0			3.0
6	CONV	* DAIRYLAND DST39-000	73.0			2.8
1, 17	CONV	* EBBERTS 3386	72.6	55.4	47.3	2.8
2	RR2Y	DAIRYLAND DSR-3636/R2Y	72.4			2.3
7	RR	* SEED CONSULTANTS SCS 9390RR	72.3			3.0
1, 17	RR	* EBBERTS 1365RR	71.9	55.5	50.4	2.8
4, 5, 12	EXP-RR2Y	AGEX370	71.8			2.8
4	EXP	* ARMOR ARX 938	70.3	53.4		2.5
4, 5, 12	RR	* ASGROW AG3705	69.6	54.5	48.7	2.0
3, 5, 12	RR	* PIONEER 93Y20	69.6	54.9		3.0
6	RR	* NK 537-P5 BRAND	69.5	56.2	48.5	2.5
1, 17	CONV	EBBERTS 3369	69.1			2.8
3, 12	RR	PROGENY P3909RR	69.0			3.0
none	CONV	* CAVERDALE CF 388n	69.0			3.0
none	RR	* SOUTHERN CROSS LUCAS 3.8 N, RR	66.7	50.8	44.7	2.8
7	RR	* SEED CONSULTANTS SCS 9370RR	66.6			2.3
7	RR	* SEED CONSULTANTS SCS 9380RR	65.7			2.0
9, 15	RR-NS	* BECK 359NRV (Vistive)	62.9			2.5
9, 15	RR	* BECK 399NR	62.6	49.0	42.4	2.3
1, 10, 17	LL	* SOUTHERN STATES LL 389N	62.5			2.5
1, 10, 17	RR	* SOUTHERN STATES RT 3971N	62.1	48.3	41.9	2.3
none	CONV-P-NS	IA3041 (low linolenic)	61.6	48.4		2.8
4, 5, 12	EXP-RR2Y	AGEX350	61.1			2.0
9, 15	CONV	* BECK 343N	60.4			2.3
1, 17	RR	HORNBECK HBK R3927	59.4	46.0	39.3	4.0
4, 5, 12	RR	* ASGROW AG3803	59.0	48.3	42.9	2.5
none	CONV-P	WOOSTER	58.4			2.3
none	CONV-P-NS	IA3027LF (lipoxigenase free)	58.2			2.3
none	CONV-P-NS	IA3042 (1% linolenic)	57.0			1.8
1, 10, 17	RR	* SOUTHERN STATES RT 3871N	53.8	44.2	38.2	2.3
none	CONV-P-NS	IA2095 (low saturate)	48.1			1.8
GROUP III AVERAGE			67.4	52.3	44.8	2.5
LSD (0.10)			6.8	4.1	2.9	0.4
MATURITY GROUP EARLY IV (RELATIVE MG 4.0-4.5)						
none	RR	* TRISOY 4586RR(CN)	83.3	60.5		2.0
none	RR	* CAVERDALE CF 447 RR/STSn	82.1	61.9	50.6	2.0
4, 5, 12	EXP-RR2Y	AGEX440	81.8			2.3
7	RR	* SEED CONSULTANTS SCS 9450RR	81.8			3.0
9, 15	RR	* BECK 445NR	80.9	58.9		1.8
none	RR	* STINE 4582-4	80.6			2.5
4, 5, 12	RR	* ASGROW AG4303	80.5	60.2		2.0
none	RR	* SOUTHERN CROSS CALEB 4.4 N, RR, STS	80.3	59.3	48.5	2.0
none	RR	* STEYER 4210RR	80.2			2.0
4, 5, 12	EXP-RR2Y	AGEX410	80.2			2.5
none	RR	* STEYER 4430RR	80.1	59.6	47.7	1.5
4, 5, 12	EXP-RR2Y	AGEX450	79.7			2.0
4, 5, 12	EXP-RR2Y	AGEX452	79.5			2.0
4	RR	* DELTA GROW 4470 RR/STS	79.5	57.4	47.3	1.8
3, 5, 12	RR	* PIONEER 94Y20	78.8	58.9		2.8
4, 5, 12	EXP-RR2Y	AGEX451	78.3			2.5
1, 10, 17	RR	* SOUTHERN STATES RT 4470N	78.1	60.4	49.3	1.8
none	RR	* STINE 4392-4	77.2			2.0
19	RR	* CHANNEL 4551R	76.8			3.0
6	RR	* DAIRYLAND DSR-4500/RRSTS	76.8	55.8		3.0
4	RR	* ARMOR 42-M1	76.7	55.1		2.3
none	RR	* SOUTHERN CROSS JERICHO 4.2 N, RR	76.5	57.7		2.0
none	RR	* DYNA-GRO 36C44	76.2	58.3		1.8
4, 5, 12	EXP-RR2Y	AGEX430	75.2			2.5
4	RR	* ARMOR 44-K6	75.2	55.5		2.0
7	RR	* SEED CONSULTANTS SCS 9448RR	75.1	57.2		2.8
2, 4, 8	RR	* ASGROW DKB42-51	75.0	54.8	43.5	2.0
none	RR	* L&M 843R	74.3	52.8		2.5
4	RR	* DELTA GROW 4150 RR	74.0	56.1	46.6	2.3
4, 5, 12	RR	* ASGROW AG4404	74.0	54.6	43.6	2.8
3, 5, 12	RR	* PIONEER 94Y01	73.0	59.3		3.0
4, 5, 12	RR	* ASGROW AG4005	72.8	55.8		2.3
9, 15	RR	* BECK 400NR	72.2			3.0
4, 5, 12	EXP-RR2Y	AGEX411	72.2			2.8
1, 10, 17	LL	* SOUTHERN STATES LL 430N	71.9			2.5
4, 5, 12	EXP-RR2Y	AGEX431	71.6			3.0
9, 15	CONV	* BECK 414N	71.4			3.0
none	CONV	L&M 74 STS	71.3			3.5
1, 17	CONV	* PORTER HYBRIDS PH 4419N	71.2	55.4		2.8

continued on next page

TABLE 9. 2009 MCLEAN COUNTY FULL-SEASON VARIETY TEST^A

SEED TREATMENT CODE ^B	TYPE ^C	BRAND—VARIETY	YIELD (BU/AC) ^D			LODGING 2009
			2009	08-09	07-09	
none	RR	* DYNA-GRO V42N9RS	71.0	53.7		2.0
none	CONV	* STEYER 410	70.8	52.7		3.3
4	EXP	ARMOR ARX 0431	70.7			2.5
4, 5, 12	EXP-RR2Y	AGEX432	70.5			3.0
3, 12	RR	* PROGENY P4206RR	70.1	53.8	45.8	2.5
6	RR	* NK S44-D5 BRAND	69.9	55.5	45.4	2.3
1, 10, 17	RR	* SOUTHERN STATES RT 4451N	69.9	51.5	43.6	2.8
3, 12	RR	* PROGENY P4508RR	69.7	52.8		2.3
4	EXP	ARMOR ARX 0432	69.7			2.5
none	RR	* TRISOY 4184RR(CN)	69.6	56.0		2.3
4	CONV	* SCHILLINGER SEED 435.TCS	69.4	50.0		2.3
6	RR	* UNISOUTH GENETICS USG 74C36	68.7	48.9		3.0
7	RR	* SEED CONSULTANTS SCS 9409RR	68.6	51.8		2.3
1, 10, 17	LL	* DYNA-GRO 39LL43	68.0			2.5
6	RR	* DAIRYLAND DSR-4300/RR	67.6	50.3		3.0
none	CONV	* SOUTHERN CROSS BENJAMIN 4.3 N	67.2	52.4		2.5
1, 10, 17	LL	* CAVERNDALE CF 439 LL	66.0			2.5
none	CONV	* STEYER 401	65.8			2.8
1, 10, 11, 16	LL	* SOUTHERN CROSS ENOS 4.3 N, LL	65.6			2.5
6	EXP	* NK XR4090	65.3			2.3
none	RR	* CAVERNDALE CF 410 RR/STS _n	64.7	52.4	44.1	2.3
6	RR	* NK S43-N6 BRAND	64.7	50.9		2.0
none	RR	SOUTHERN CROSS LOT 4.1 N, RR, STS	63.1	50.2		2.5
1, 10, 17	RR	* SOUTHERN STATES RT 4370N	63.0	50.8	41.6	3.0
none	CONV-P-NS	IA4004 (food type)	61.9			4.0
none	CONV	* STEYER 441ST5	61.8			2.8
1, 10, 17	LL	* SOUTHERN STATES LL 450N	61.3			2.8
1, 10, 17	LL	* SOUTHERN STATES LL 410N	59.8			2.3
6	CONV	* UNISOUTH GENETICS USG 440nSTS	57.4			2.8
EARLY GROUP IV AVERAGE			72.5	55.2	45.9	2.5
LSD (0.10)			6.6	4.0	3.0	0.4

MATURITY GROUP LATE IV (RELATIVE MG 4.6-4.9)

4	EXP-RR	DELTA KING DKX 0461	81.3			4.0
6	EXP	* NK XR4995	80.5			4.0
none	RR	CHANNEL 4851R	79.5			3.8
4	RR	DELTA KING DKR 4744s	79.5			3.3
none	RR	* STINE 4782-4	78.7	57.2	45.9	2.0
6	RR	* UNISOUTH GENETICS USG 74G78	77.8	56.9		1.8
1, 10, 17	RR	* SOUTHERN STATES RT 4996N	77.5	58.8	48.7	4.0
7	RR	* SEED CONSULTANTS SCS 9480RR	77.4			2.8
3, 5, 12	RR	* PIONEER 94Y70	76.5	57.9		3.0
4	RR	ARMOR 47-R33	76.4			2.8
4, 5, 12	RR	* ASGROW AG4907	76.3	56.6		2.5
4	EXP	ARMOR ARX 0472	76.3			3.0
6	RR	DAIRYLAND DSR-8482/RR	76.1	55.1	43.9	3.3
4, 5, 12	RR	* ASGROW AG4606	76.1	60.6		2.8
6	RR	* DAIRYLAND DSR48-000/RR	75.6			2.8
1, 17	RR	* HORNBECK HBK R4727	75.2	56.4	44.5	3.3
none	RR	* TRISOY 4760RR(CN)	75.2	53.8	41.9	2.0
3, 12	RR	* PROGENY P4606RR	74.7	55.9	46.3	2.0
none	RR	* CAVERNDALE CF 470 RR/STS _n	74.7	55.7	45.9	1.8
4, 5, 12	RR	ASGROW AG4903	74.3	55.4	45.0	3.0
none	RR	* STEYER 4620RR	74.3	55.8		3.0
4	EXP	* ARMOR ARX 0474	74.3			4.0
4	RR	* ARMOR 47-G10	73.6			3.5
none	RR	* DAIRYLAND DSR-8474/RR	73.4			3.3
4	RR	DELTA GROW 4870 RR	73.3	54.0		3.5
4	RR	* ARMOR 48-J3	73.3	58.3	48.7	3.3
1, 17	CONV	HORNBECK HBK C4929	73.1			3.3
1, 10, 17	RR	* SOUTHERN STATES RT 4808N	73.0	53.7	44.5	3.3
none	RR	* STEYER 4710RR	73.0			2.8
none	RR	* STINE 5022-4	72.8			3.8
4	RR	* ARMOR 47-F8	72.8	53.7	44.5	2.0
1, 17	RR	* HORNBECK HBK R4924	72.6	53.4	45.6	4.0
3, 5, 12	RR	* PIONEER 94Y90	72.5	51.3		3.0
4	RR	* SCHILLINGER SEED 4990.RC	72.5			2.3
3, 12	RR	PROGENY P4908RR	72.4	54.5		3.0
4	CONV	* SCHILLINGER SEED 477.TCS	72.2	52.4		3.8
none	CONV-P	TN04-124	72.2			3.3
1, 10, 17	LL	* SOUTHERN STATES LL 499N	72.0			3.0
none	RR	* SOUTHERN CROSS ELI 4.7 N, RR, STS	70.7	51.1	42.6	2.0
3, 12	RR	* PROGENY P4706RR	70.6	54.3	45.9	4.0
none	RR	* TRISOY 4788RR(CN)	70.6			2.8
6	RR	* UNISOUTH GENETICS USG 74A76	70.6	56.0	46.2	4.3
3, 12	RR	PROGENY P4906RR	70.2	53.5	44.1	3.3
3, 12	RR	* PROGENY P4949RR	70.2	51.6	44.0	3.5
9, 15	RR	* BECK 491NR	70.2			2.8
6	RR	* UNISOUTH GENETICS USG 74T98	70.1	51.4		4.3
3, 5, 12	RR	* PIONEER 94Y60	70.0	53.2		2.5
none	RR	* SOUTHERN CROSS GALILEE 4.7 N, RR	69.9	52.3	43.8	3.5
4, 5, 12	RR	* ASGROW AG4705	69.6	54.2		4.0
4	RR	* DELTA GROW 4780 RR	69.4	50.9	41.8	3.3
none	RR	* DYNA-GRO 33G48	69.4			3.5
4, 5, 12	RR	* ASGROW AG4703	69.3	51.7	43.3	2.8

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TABLE 9. 2009 MCLEAN COUNTY FULL-SEASON VARIETY TEST^A

SEED TREATMENT CODE ^B	TYPE ^C	BRAND—VARIETY	YIELD (BU/AC) ^D			LODGING 2009
			2009	08-09	07-09	
none	RR	* DYNA-GRO V47N9RS	68.5	55.0		2.5
6	RR	* NK S48-C9 BRAND	68.3	52.3		2.3
3, 12	RR	* PROGENY P4807RR	67.8	50.8	41.3	3.3
4	RR	* DELTA GROW 4770 RR	67.7	51.2	42.9	4.0
4	RR	* DELTA GROW 4975 RR	67.5	54.3	43.8	3.0
4	RR	* SCHILLINGER SEED 495.RC	67.2	51.8	45.3	3.5
1, 10, 17	LL	* SOUTHERN CROSS SHILOH 4.9 N, LL	66.7			2.8
1, 17	RR	* HORNBECK HBK R4729	65.7			3.8
4, 5, 12	RR	* ASGROW AG4605	65.4	52.2	41.4	2.3
6	CONV	* DAIRYLAND DSR-4890	65.1			3.5
none	RR	* SOUTHERN CROSS RUFUS 4.7 N, RR, STS	64.8	51.5		3.3
7	RR	* SEED CONSULTANTS SCS 9479RR	64.3	51.1		4.0
1, 17	LL	HALO 4:94	63.5			3.0
none	CONV-NS	KS4607 (high protein)	63.2	45.7	35.2	2.8
none	RR	* CHANNEL 4852R	62.4	50.5		2.8
9, 15	RR	* BECK 474NR	61.9	48.2		3.3
6	RR	* NK S47-D9 BRAND	61.9	49.2	44.9	2.3
1, 17	LL	HALO 4:65	60.7			3.5
4	RR	* SCHILLINGER SEED 4880.RC	60.1			3.8
none	CONV	SOUTHER CROSS JOSHUA 4.8	59.1			4.0
4	RR	* DELTA GROW 4970 RR	58.9	48.6	41.8	3.5
1, 10, 17	RR	* SOUTHERN STATES RT 4777N	58.4	46.3	40.2	4.3
none	CONV-P	PENNYRILE (long term check-released 1987)	54.7	45.2	36.9	3.0
LATE GROUP IV AVERAGE			70.6	53.2	43.7	3.1
LSD (0.10)			5.1	3.3	3.0	0.4
MATURITY GROUP V						
4	RR	DELTA KING DK 5363	80.8			4.0
1, 17	LL	HALO 5:65	79.7			2.8
1, 10, 17	LL	* SOUTHERN STATES LL 511N	79.0			3.3
4	RR	* DELTA GROW 5970 RR	78.9			3.5
6	CONV	UNISOUTH GENETICS USG 5601T	78.7	54.5	46.2	3.5
none	CONV-P	* KS5004N	77.7	56.7		4.0
7	RR	SEED CONSULTANTS SCS 9530RR	77.7			3.5
none	RR	* SOUTHERN CROSS DAMASCUS 5.0 N, RR, STS	77.4	55.8	47.4	3.5
6	CONV	UNISOUTH GENETICS USG 5002T	75.9	51.8	42.4	3.8
1, 17	CONV	HORNBECK HBK C5528	75.7			3.3
4	RR	* DELTA GROW 5300 RR/STS	75.6	52.8	43.9	3.8
3, 5, 12	RR	* PIONEER 95Y40	74.9			3.0
4	RR	* DELTA GROW 5160 RR/STS	74.3	54.2	45.1	3.0
none	CONV-P	GLENN	73.4	51.6		3.0
none	RR	* CHANNEL 5051R	72.7			2.8
4	RR	* DELTA GROW 5555 RR	72.5			4.0
none	CONV-P-NS	V01-1693 (3.5% linolenic)	72.4	50.5		4.3
1, 10, 17	RR	* SOUTHERN STATES RT 5160N	72.2	50.6	43.0	4.0
1, 4	RR	* ASGROW AG5301	72.0			3.0
3, 12	RR	* PROGENY P5319RR	71.6			4.0
4	RR	* DELTA GROW 5170 RR	71.0	52.1		2.0
4	RR	* SCHILLINGER SEED 557.RC	70.8	52.5		3.8
4	RR	* ARMOR 53-Z5	70.4	50.5		2.8
6	RR	DAIRYLAND DSR-5200/RR	69.7			2.8
6	RR	* DAIRYLAND DSR-8512/RR	69.7	50.5		4.0
4	RR	SCHILLINGER SEED 5440.R	69.4			2.8
6	RR	* DAIRYLAND DSR-8509/RR	69.3	52.4	43.9	2.8
4	RR	* DELTA GROW 5450 RR	68.4	48.2		3.5
1, 17	LL	HALO 5:25	68.1			3.3
none	EXP-P-RR	TN06-140-RR	66.4			4.0
none	CONV-P	ESSEX (long term check-released 1974)	65.4	45.5	38.8	3.0
3, 12	RR	* PROGENY P5218RR	62.1	47.0		4.3
1, 17	RR	* HORNBECK HBK R5229	61.8			2.8
none	CONV-P-NS	TN03-217 (natto soyfood type)	61.5			3.5
4	RR	* DELTA GROW 5280 RR	61.1			4.3
none	CONV-P-NS	V01-1702 (3.5% linolenic)	60.7	45.0		3.0
GROUP V AVERAGE			71.6	51.2	43.8	3.4
LSD (0.10)			8.0	4.2	3.3	0.7
GRAND MEAN			70.8	53.4	44.4	2.9

A 2007 and 2008 data are from Hancock County, and the 2009 data are from McLean County.

B See Table 4 for seed treatment code names.

C * Resistant to soybean cyst nematode. See Table 3 for details.

P Public varieties.

NS Novel soybeans are special trait varieties 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.

EXP Experimental entries are varieties that are still under development or soon to be released.

LL LibertyLink variety (Ignite herbicide tolerant).

RR Roundup Ready variety (RR1 first generation, original trait).

RR2Y Roundup Ready 2 Yield variety.

CONV Conventional variety.

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

TABLE 10. 2009 WARREN COUNTY (WKU) FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C		LODGING 2009
			2009	08-09	
MATURITY GROUP II-III (RELATIVE MG 2.7-3.9)					
none	RR	* DYNA-GRO 37P37	89.7	70.9	3.5
4, 5, 12	EXP-RR2Y	AGEX391	88.3		4.3
6	EXP	* NK XR3997	87.6		3.0
3, 5, 12	RR	* PIONEER 93Y92	86.4		4.0
1, 17	RR	* EBBERTS 1390RR	86.2		4.0
1, 17	RR	* EBBERTS 1365RR	85.6	65.0	4.3
2	RR2Y	DAIRYLAND DSR-3636/R2Y	83.7		3.8
7	RR	* SEED CONSULTANTS SCS 9380RR	83.2		3.5
4, 5, 12	EXP-RR2Y	AGEX390	82.8		4.5
4, 5, 12	EXP-RR2Y	AGEX350	82.5		3.5
none	CONV-P-NS	IA3041 (low linolenic)	81.2	57.7	4.3
6	RR	* NK S39-A3 BRAND	80.1	67.5	4.5
1, 10, 11, 16	RR2Y	* SOUTHERN STATES 3820NR2	79.5		4.3
4, 5, 12	RR	* ASGROW AG3803	79.2	64.7	3.0
4	EXP	* ARMOR ARX 938	79.2	64.6	3.3
3, 12	RR	PROGENY P3909RR	78.4		4.3
4, 5, 12	RR	* ASGROW AG3705	78.1	61.8	4.0
6	RR	* NK S37-P5 BRAND	77.6	62.4	4.5
4, 5, 12	EXP-RR2Y	AGEX370	77.4		3.8
9, 15	RR	* BECK 399NR	76.2	63.1	3.5
none	CONV	* CAVERDALE CF 388n	76.0		4.8
1, 17	CONV	EBBERTS 3369	75.4		4.5
1, 10, 17	RR	* SOUTHERN STATES RT 3971N	74.9	62.0	4.0
7	RR	* SEED CONSULTANTS SCS 9398RR	74.8	60.2	4.3
1, 10, 17	RR	* SOUTHERN STATES RT 3871N	74.7	66.1	3.8
1, 10, 17	LL	* SOUTHERN STATES LL 389N	73.6		4.0
1, 17	CONV	* EBBERTS 3386	73.3	59.3	3.8
1, 17	RR	HORNBECK HBK R3927	73.1	61.8	4.5
1, 10, 11, 16	RR2Y	* SOUTHERN CROSS MALACHI 3.8 N, RR2Y	71.5		4.0
none	RR	* SOUTHERN CROSS LUCAS 3.8 N, RR	70.2	60.5	4.5
7	RR	* SEED CONSULTANTS SCS 9370RR	69.5		4.0
7	RR	* SEED CONSULTANTS SCS 9390RR	69.3		4.5
6	CONV	* DAIRYLAND DST39-000	64.9		4.8
9, 15	CONV	* BECK 343N	64.8		3.8
9, 15	RR-NS	* BECK 359NRV (Vistive)	64.8		4.0
none	CONV-P	WOOSTER	64.8		4.3
3, 5, 12	RR	* PIONEER 93Y20	63.2	54.7	4.8
none	CONV-P-NS	IA3042 (1% linolenic)	58.3		4.3
none	CONV-P-NS	IA2095 (low saturate)	56.5		3.3
none	CONV-P-NS	IA3027LF (lipoxygenase free)	54.8		5.0
GROUP III AVERAGE			75.3	62.6	4.1
LSD (0.10)			8.4	5.1	0.5
MATURITY GROUP EARLY IV (RELATIVE MG 4.0-4.5)					
4	RR	* DELTA GROW 4470 RR/STS	91.3	67.9	2.5
1, 10, 17	RR	* SOUTHERN STATES RT 4470N	89.0	66.3	2.8
none	RR	* SOUTHERN CROSS CALEB 4.4 N, RR, STS	87.6	68.8	3.0
4, 5, 12	EXP-RR2Y	AGEX451	87.3		4.0
4, 5, 12	EXP-RR2Y	AGEX452	87.2		3.8
9, 15	RR	* BECK 445NR	85.8	65.5	3.5
none	RR	* STINE 4392-4	84.7		3.3
none	RR	* DYNA-GRO 36C44	83.9	65.3	2.8
4, 5, 12	EXP-RR2Y	AGEX440	83.9		3.8
4, 5, 12	EXP-RR2Y	AGEX450	82.8		4.0
1, 10, 17	LL	* SOUTHERN STATES LL 450N	80.9		4.3
none	RR	* STEYER 4430RR	80.7	62.1	3.3
none	RR	* DYNA-GRO V42N9RS	80.0	61.0	3.8
4	RR	* ARMOR 44-K6	79.1	64.1	3.5
none	RR	* TRISOY 4586RR(CN)	78.8	58.4	3.0
none	RR	* CAVERDALE CF 447 RR/STS _n	78.4	63.0	3.5
3, 12	RR	* PROGENY P4206RR	78.3	62.4	4.0
19	RR	* CHANNEL 4551R	78.0		4.0
4, 5, 12	EXP-RR2Y	AGEX410	76.3		3.5
6	RR	* NK S43-N6 BRAND	76.3	61.2	3.8
6	RR	* DAIRYLAND DSR-4500/RRSTS	76.3	61.0	4.5
none	RR	* STEYER 4210RR	76.1		3.8
4, 5, 12	EXP-RR2Y	AGEX411	76.1		4.5
4, 5, 12	RR	* ASGROW AG4303	75.6	59.9	3.5
6	RR	* NK S44-D5 BRAND	75.3	61.6	4.0
4	RR	* ARMOR 42-M1	74.8	64.3	3.8
4	EXP	ARMOR ARX 0431	74.6		4.3
2, 4, 8	RR	* ASGROW DKB42-51	74.6	58.9	4.0
7	RR	* SEED CONSULTANTS SCS 9409RR	74.1	57.9	3.0
7	RR	* SEED CONSULTANTS SCS 9450RR	74.0		4.3
4, 5, 12	RR	* ASGROW AG4005	73.7	56.6	2.8
4	RR	* DELTA GROW 4150 RR	73.1	59.3	4.3
3, 12	RR	* PROGENY P4508RR	72.5	58.1	4.0
none	RR	* L&M 843R	72.4	57.8	4.0
none	RR	* CAVERDALE CF 410 RR/STS _n	72.0	58.5	3.8
1, 10, 17	RR	* SOUTHERN STATES RT 4370N	70.9	57.8	4.3
4, 5, 12	RR	* ASGROW AG4404	70.7	58.4	3.8
none	RR	* SOUTHERN CROSS JERICO 4.2 N, RR	70.2	57.4	3.5

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TABLE 10. 2009 WARREN COUNTY (WKU) FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C		LODGING 2009
			2009	08-09	
7	RR	* SEED CONSULTANTS SCS 9448RR	70.2	55.2	4.3
none	RR	* STINE 4582-4	70.1		3.8
4	CONV	* SCHILLINGER SEED 435.TCS	70.0	55.4	3.8
none	RR	* TRISOY 4184RR(CN)	69.8	56.3	3.8
3, 5, 12	RR	* PIONEER 94Y20	69.6	56.2	4.5
6	EXP	* NK XR4090	69.5		3.5
none	CONV	* SOUTHERN CROSS BENJAMIN 4.3 N	68.2	56.7	3.0
1, 10, 17	LL	* SOUTHERN STATES LL 430N	68.2		4.3
6	RR	* DAIRYLAND DSR-4300/RR	67.7	57.5	4.5
3, 5, 12	RR	* PIONEER 94Y01	66.6	57.4	4.3
9, 15	RR	* BECK 400NR	66.3		4.3
4	EXP	* ARMOR ARX 0432	66.3		4.3
1, 10, 17	LL	* CAVERNDALE CF 439 LL	66.1		4.0
4, 5, 12	EXP-RR2Y	* AGEX430	65.0		3.8
4, 5, 12	EXP-RR2Y	* AGEX431	64.6		3.8
4, 5, 12	EXP-RR2Y	* AGEX432	64.5		4.5
none	RR	* SOUTHERN CROSS LOT 4.1 N, RR, STS	64.0	56.2	4.0
1, 10, 11, 16	LL	* SOUTHERN CROSS ENOS 4.3 N, LL	63.9		4.5
none	CONV	* STEYER 410	62.9	51.2	4.8
none	CONV	* L&M 74 STS	62.8		4.5
1, 10, 17	RR	* SOUTHERN STATES RT 4451N	61.5	52.5	4.3
1, 10, 17	LL	* SOUTHERN STATES LL 410N	60.9		4.0
none	CONV	* STEYER 401	59.3		4.5
1, 10, 17	LL	* DYNA-GRO 39LL43	59.2		4.3
6	RR	* UNISOUTH GENETICS USG 74C36	58.7	50.0	4.5
6	CONV	* UNISOUTH GENETICS USG 440nSTS	57.5		4.3
1, 17	CONV	* PORTER HYBRIDS PH 4419N	57.4	49.9	4.5
none	CONV	* STEYER 441STS	57.0		4.0
9, 15	CONV	* BECK 414N	54.4		4.5
none	CONV-P-NS	* IA4004 (food type)	48.2		5.0
EARLY GROUP IV AVERAGE			71.9	59.1	3.9
LSD (0.10)			6.7	4.8	0.6

MATURITY GROUP LATE IV (RELATIVE MG 4.6-4.9)

1, 17	CONV	* HORNBECK HBK C4929	92.0		3.3
1, 10, 17	LL	* SOUTHERN STATES LL 499N	91.0		3.8
4	EXP-RR	* DELTA KING DKX 0461	88.3		4.0
4	RR	* SCHILLINGER SEED 495.RC	88.1	69.8	4.3
4	EXP	* ARMOR ARX 0472	86.3		4.3
1, 17	LL	* HALO 4:94	85.9		4.0
3, 12	RR	* PROGENY P4908RR	85.1	68.1	4.5
6	RR	* DAIRYLAND DSR48-000/RR	85.1		3.5
6	EXP	* NK XR4995	85.0		4.0
3, 12	RR	* PROGENY P4906RR	82.9	64.7	3.8
3, 5, 12	RR	* PIONEER 94Y70	82.8	65.5	4.0
1, 17	RR	* HORNBECK HBK R4727	82.7	63.1	4.0
6	RR	* DAIRYLAND DSR-8482/RR	82.6	65.4	4.0
4	RR	* DELTA KING DKR 4744s	82.3		3.8
1, 10, 17	LL	* SOUTHERN CROSS SHILOH 4.9 N, LL	82.1		4.0
3, 5, 12	RR	* PIONEER 94Y90	81.7	63.7	4.3
4, 5, 12	RR	* ASGROW AG4903	81.4	65.0	3.3
4	RR	* SCHILLINGER SEED 4990.RC	81.2		3.5
4	RR	* ARMOR 47-R33	81.1		4.3
none	RR	* STEYER 4710RR	80.5		4.3
4, 5, 12	RR	* ASGROW AG4907	80.5	64.2	3.5
3, 12	RR	* PROGENY P4706RR	80.4	60.2	4.3
none	RR	* CHANNEL 4851R	80.2		4.0
1, 10, 17	RR	* SOUTHERN STATES RT 4777N	80.2	62.1	5.0
3, 12	RR	* PROGENY P4807RR	80.0	61.1	4.0
none	CONV-P	* TN04-124	79.9		3.8
none	RR	* STINE 5022-4	79.5		4.8
none	CONV	* SOUTHERN CROSS JOSHUA 4.8	79.1		4.5
4	RR	* SCHILLINGER SEED 4880.RC	79.0		4.5
4	RR	* DELTA GROW 4780 RR	78.9	58.3	4.3
none	RR	* TRISOY 4760RR(CN)	78.6	59.6	3.5
3, 12	RR	* PROGENY P4949RR	78.1	59.6	3.8
6	RR	* NK S48-C9 BRAND	77.8	62.3	3.8
7	RR	* SEED CONSULTANTS SCS 9480RR	77.8		3.8
4	RR	* DELTA GROW 4975 RR	77.7	61.6	4.3
none	RR	* STINE 4782-4	77.6	61.6	3.0
4	RR	* DELTA GROW 4970 RR	77.4	64.4	4.0
4	RR	* ARMOR 48-J3	77.4	61.7	4.3
none	RR	* SOUTHERN CROSS GALILEE 4.7 N, RR	77.1	57.5	4.0
4, 5, 12	RR	* ASGROW AG4703	77.1	60.2	4.3
6	RR	* NK S47-D9 BRAND	76.8	62.2	3.0
4	RR	* ARMOR 47-F8	76.7	61.8	3.3
4	RR	* DELTA GROW 4870 RR	76.2	61.3	4.0
3, 5, 12	RR	* PIONEER 94Y60	75.9	60.0	4.0
none	RR	* DAIRYLAND DSR-8474/RR	75.9		4.0
1, 17	RR	* HORNBECK HBK R4729	75.8		4.3
4	CONV	* SCHILLINGER SEED 477.TCS	74.5	56.2	4.5
6	RR	* UNISOUTH GENETICS USG 74G78	74.2	59.6	4.0
1, 10, 17	RR	* SOUTHERN STATES RT 4808N	74.1	59.3	4.0
7	RR	* SEED CONSULTANTS SCS 9479RR	73.8	60.6	3.8
4, 5, 12	RR	* ASGROW AG4605	73.5	58.6	4.3

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TABLE 10. 2009 WARREN COUNTY (WKU) FULL-SEASON VARIETY TEST

SEED TREATMENT CODE ^A	TYPE ^B	BRAND—VARIETY	YIELD (BU/AC) ^C		LODGING 2009
			2009	08-09	
4	RR	* DELTA GROW 4770 RR	73.5	58.0	4.3
6	RR	* UNISOUTH GENETICS USG 74A76	73.3	57.4	4.0
none	RR	* SOUTHERN CROSS ELI 4.7 N, RR, STS	72.7	58.0	3.8
9, 15	RR	* BECK 491NR	72.4		3.3
none	RR	* STEYER 4620RR	71.8	55.8	3.0
4, 5, 12	RR	* ASGROW AG4606	71.7	57.8	3.3
1, 10, 17	RR	* SOUTHERN STATES RT 4996N	70.6	57.3	4.3
none	RR	* CAVERNDALE CF 470 RR/STS _n	69.7	56.8	3.8
4	RR	* ARMOR 47-G10	69.7		4.8
none	RR	* DYNA-GRO 33G48	69.6		4.8
none	RR	* DYNA-GRO V47N9RS	69.3	58.6	4.0
6	RR	* UNISOUTH GENETICS USG 74T98	68.4	56.9	4.5
6	CONV	* DAIRYLAND DSR-4890	68.4		4.0
9, 15	RR	* BECK 474NR	68.3	59.2	4.8
none	RR	* TRISOY 4788RR(CN)	67.6		3.3
3, 12	RR	* PROGENY P4606RR	66.5	56.7	4.0
4, 5, 12	RR	* ASGROW AG4705	65.0	52.6	3.8
none	CONV-P	PENNYRILE (long term check-released 1987)	64.2	52.0	3.3
1, 17	RR	* HORNBECK HBK R4924	64.0	56.0	4.0
none	RR	* CHANNEL 4852R	63.8	53.2	3.5
4	EXP	* ARMOR ARX 0474	63.7		4.5
none	RR	* SOUTHERN CROSS RUFUS 4.7 N, RR, STS	63.5	54.8	3.8
none	CONV-NS	KS4607 (high protein)	61.6	48.7	4.5
1, 17	LL	HALO 4:65	55.7		4.5
LATE GROUP IV AVERAGE			76.2	59.8	4.0
LSD (0.10)			8.3	4.9	0.5
MATURITY GROUP V					
4	RR	* DELTA GROW 5450 RR	93.2	68.9	4.0
4	RR	* DELTA GROW 5300 RR/STS	92.3	68.2	3.5
1, 17	LL	HALO 5:65	90.6		3.3
4	RR	* ARMOR 53-Z5	89.0	68.4	4.0
4	RR	SCHILLINGER SEED 5440.R	88.5		4.3
4	RR	* SCHILLINGER SEED 557.RC	87.8	67.7	3.8
none	CONV-P	GLENN	87.2	68.4	3.3
1, 10, 17	RR	* SOUTHERN STATES RT 5160N	86.6	66.3	4.3
1, 10, 17	LL	* SOUTHERN STATES LL 511N	85.3		4.5
6	RR	DAIRYLAND DSR-5200/RR	84.3		3.8
4	RR	* DELTA GROW 5970 RR	83.0		4.0
3, 12	RR	* PROGENY P5319RR	82.4		4.0
6	CONV	UNISOUTH GENETICS USG 5601T	82.2	67.5	3.5
4	RR	DELTA KING DK 5363	82.1		4.0
none	EXP-P-RR	TN06-140-RR	81.9		4.0
6	CONV	UNISOUTH GENETICS USG 5002T	81.8	68.3	3.3
none	RR	* SOUTHERN CROSS DAMASCUS 5.0 N, RR, STS	81.7	62.2	4.3
3, 5, 12	RR	* PIONEER 95Y40	81.0		3.5
1, 17	CONV	HORNBECK HBK C5528	80.8		3.5
7	RR	SEED CONSULTANTS SCS 9530RR	80.7		4.3
4	RR	* DELTA GROW 5280 RR	80.3		4.3
1, 17	LL	HALO 5:25	80.1		4.5
1, 4	RR	* ASGROW AG5301	80.1		3.3
none	CONV-P	* KS5004N	79.4	66.9	3.8
6	RR	* DAIRYLAND DSR-8509/RR	77.6	64.9	4.5
4	RR	* DELTA GROW 5555 RR	76.8		4.3
3, 12	RR	* PROGENY P5218RR	76.7	59.6	4.3
1, 17	RR	* HORNBECK HBK R5229	76.5		4.0
4	RR	* DELTA GROW 5160 RR/STS	74.1	59.2	4.0
none	CONV-P-NS	TN03-217 (matto soyfood type)	73.5		4.0
none	CONV-P-NS	V01-1702 (3.5% linolenic)	71.9	57.3	4.5
none	CONV-P	ESSEX (long term check-released 1974)	71.7	57.8	3.8
none	RR	* CHANNEL 5051R	69.9		4.0
none	CONV-P-NS	V01-1693 (3.5% linolenic)	69.5	57.9	4.5
4	RR	* DELTA GROW 5170 RR	69.4	57.2	3.0
6	RR	* DAIRYLAND DSR-8512/RR	69.4	55.8	3.5
GROUP V AVERAGE			80.5	63.5	3.9
LSD (0.10)			8.3	4.6	0.7
GRAND MEAN			75.4	60.5	4.0

^A See Table 4 for seed treatment code names.

^B * Resistant to soybean cyst nematode. See Table 3, Company Disease Resistance Specifications, for details.

P Public varieties.

NS Novel soybeans are special trait varieties 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.

EXP Experimental entries are varieties that are still under development or soon to be released.

LL LibertyLink variety (Iignite herbicide tolerant).

RR Roundup Ready variety (RR1 first generation, original trait).

RR2Y Roundup Ready 2 Yield variety.

CONV Conventional variety.

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

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