PR-672

# 2013 **Kentucky Soybean Variety Performance Tests**



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The Kentucky Soybean Variety Performance Tests are conducted to provide an unbiased and 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.

Thirty soybean tests were planted in 2013 in Kentucky at the six test locations shown below (see map). Planting dates and other information are shown in Table 1. Data for the maturity groups II and III at the Daviess County locations are not provided to avoid penalizing any variety. (Yield was reduced due to high weed pressure in the field where the two tests were planted.)

## Soybean Variety Performance **Tests Website**

The Kentucky Grain Crops website (http://www.uky.edu/Ag/GrainCrops/ varietytesting.htm) provides links to all Kentucky variety test publications and related resources. This site includes a link

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to the Soybean Variety Performance Tests website (http://www.ca.uky.edu/pss/ index.php?p=663), which provides the following features:

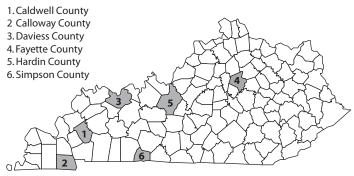
- ٠ 2013 Kentucky Soybean Variety Performance Tests (this publication) and archived reports in PDF format
- Archived tables by year in Excel format ٠
- Current year preliminary test results in Excel format
- ListServ signup form to receive emails when the preliminary tables are posted
- Nomination form, cover letter, and ٠ instructions for next season test entries.
- ٠ Locations of the 2013 Kentucky Soybean Variety Performance Tests

## Methods

All tests were planted in a randomized complete block design by maturity group with a specially built no-till planter. The tests (Tables 6 through 10) had three replications (plots) of each variety. The individual plots were 20 feet long and six rows wide with 15 inches between rows. The seeding rate was four to five viable seeds per foot of row, at a planting depth of 1.5 inch. All plots were treated with fertilizers and herbicides before planting and maintained as weed-free as possible during the growing season. All plots were chemically end-trimmed to 16 feet approximately one month after planting.

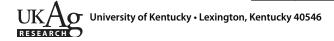
> MG IV Early: 10/20 MG IV Late and V: 10/21

### Location of the 2013 Kentucky Soybean Variety Performance Tests



Performa	ance Tests.			·
Test	Site	Collaborator	Planting Dates	Harvest Dates
Caldwell County	Princeton Experiment Station, University of Kentucky	Joe Williams, UK Farm Superintendent	MG II, III, IV Early: 5/15 MG IV Late, V: 5/16	MG II, III: 11/09 MG IV: 11/10 MG V: 11/11
Calloway County	Murray State University	Dr. Ferguson, UK Agronomy Faculty	5/24	MG II, III: 9/27 MG IV Early: 10/10 MG IV Late and V: 11/02
Daviess County	McCornick Farm	Clint Hardy, UK Extension County Agent	6/14	MG IV: 10/25 MG V: 10/26
Fayette County	Lexington Experiment Station, University of Kentucky	David Smith, UK Farm Superintendent	6/12	MG II, III: 11/04 MG IV Early: 11/05 MG IV Late: 11/15 MG V: 11/20
Hardin County	Wooden Farms	Matthews Adams, UK Extension County Agent	MG II, III, IV: 6/03 MG V: 6/04	MG II, III: 10/14 MG IV Early: 10/28 MG IV Late: 11/13 MG V: 11/14
Simpson County	Walnut Grove Farms	Jason Philips, UK Extension County Agent	MG II, III, IV Early: 5/25 MG IV Late, V: 5/26	MG II, III: 10/11 MG IV Early: 10/20

# Table 1. Locations, planting dates and harvest dates for the 2013 Kentucky Soybean Variety



Seed source information is located on page 4. Companies could choose to treat their seed with fungicides and insecticides (Table 3). The treatment codes are provided in Table 4.

- Harvesting was done with a small plot combine (Hege 160, HEGE Equipment Inc.–Wintersteiger, USA) according to maturity; thus, several harvests were made at each location. Sixteen feet of the four center rows were harvested from the plots.
- Yield is reported in bushels (60 pounds) per acre adjusted to 13 percent moisture. An electronic weight and moisture monitor (HarvestMaster 1000, Juniper Systems, Inc., USA) located on the combine was used for monitor weight and moisture readings for each plot. Data were collected with a field computer (Allegro MS, Juniper Systems, Inc., USA) connected to the monitor, and analyzed with Agrobase GEN II statistical software (Agronomix Software Inc., Canada).
- Lodging was 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 percent down; 4 = all plants over considerably or 50 to 80 percent down; 5 = all plants down. Lodging is reported at all locations.
- Maturity date—A variety was considered mature when 99 percent of the pods have turned their normal mature color. One to two weeks of good drying weather may have been needed beyond the date given before the beans were ready to combine. Maturity dates were recorded at the Fayette County location.
- **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 and oil concentrations are reported on the basis of 13 percent moisture. Samples were collected at the Calloway, Hardin, and Fayette County locations. Samples will be analyzed with a NIR spectrophotometer (DA 720, Perten Instruments, Sweden). The data will be analyzed with Agrobase GEN II statistical software (Agronomix Software Inc., Canada).

## Interpretation

An important step in profitable soybean production is selecting good quality seed of the best varieties for each management system. The Kentucky Soybean Variety 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. Thus, the best variety in northern Kentucky may not be the best in southern areas. For this reason, the Kentucky Soybean

Variety Performance Tests are conducted at several locations in the major soybeanproducing 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 from location to location depending on adaptability, weather conditions, and management. 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 UK's *Agronomy Notes*, Volume 21, No. 3, "Using Performance Test Results in Soybean Variety Selection in Kentucky"). The data presented in Table 5, State Summary, have been averaged across years and locations and are recommended for evaluating relative variety performances.

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, the least significant difference (LSD) values cited at the bottom of

Table 2. Planting guide for full-season and double-crop soybeans.

2A. FULL-SEA	SON							
			Final	Row Spacing (inches				
Target Stand	Standard	Assumed	Seeding Rate	7.5	15	30		
(plants/acre)	Germination	Stand Loss	(seeds/acre)	(s	eeds/foo	ot)		
100,000	95%	5%	110,803	1.6	3.2	6.4		
				10%	116,959	1.7	3.4	6.7
		20%	131,579	1.9	3.8	7.6		
		30%	150,376	2.2	4.3	8.6		
	90%	5%	116,959	1.8	3.4	6.7		
		10%	123,457	1.8	3.5	7.1		
		20%	138,889	2.0	4.0	8.0		
		30%	158,730	2.3	4.6	9.1		
	85%	5%	123,839	1.8	3.6	7.1		
		10%	130,719	1.9	3.8	7.5		
		20%	147,059	2.1	4.2	8.4		
		30%	168,067	2.4	4.8	9.6		
2B. DOUBLE-C	ROP							
				Row S	pacing (i	nches)		
Target Stand	Standard	Assumed	Final Seed- ing Rate	7.5	15	30		
(plants/acre)	Germination	Stand Loss	(seeds/acre)	(s	eeds/foo	ot)		
140,000	95%	5%	155,125	2.2	4.5	8.9		
		10%	163,743	2.3	4.7	9.4		
		20%	184,211	2.6	5.3	10.6		
		30%	210,526	3.0	6.0	12.1		
	90%	5%	163,743	2.3	4.7	9.4		
		10%	172,840	2.5	5.0	9.9		
		20%	194,444	2.8	5.6	11.2		
		30%	222,222	3.2	6.4	12.8		
	85%	5%	173,375	2.5	5.0	10.0		
		10%	183,007	2.6	5.3	10.5		
		20%	205,882	3.0	5.9	11.8		
		30%	235,294	3.4	6.8	13.5		

each maturity group should be used. The significance level in Tables 5 through 11 is 0.10. If the difference in yield between two varieties is greater than the LSD value, it is reasonable to assume that the varieties do differ in yielding ability.

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 need to be considered, as well as economic management and weed control costs.

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"). We recommend that growers create a list of varieties that meet their needs for agronomic characteristics: yield, maturity group, soybean cyst nematode resistance, etc. Then, using the protein and oil data from Table 5, they should remove from consideration the varieties with below-average oil and protein percentages from their list, and select from the remaining varieties those that have the highest average oil and protein concentrations. 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 based on the information provided by the seed sources. 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 percent chance of a fall killing frost is important in determining which variety should be planted. The dates presented along with Tables 6 through 11 are average dates over 30 years. Actual dates will vary from year to year. For the date of a 1-year-out-of-10 chance of a fall killing frost, subtract 13 to 18 days from the dates. 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.

In case of known soybean cyst nematode (SCN) problems, a resistant variety should be used in the production system with a recommended crop rotation program (see Kentucky Cooperative Extension Service publication PPA-42: Soybean Cyst Nematode, available at both county extension offices and on the Grain Crops website). 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 percent 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. Fields should be tested for SCN. Contact the county extension offices for more information on collecting and submitting samples.

Diseases (SMV, SDS, Stem Canker) may cause yield loss if soybean plants are infected prior to flowering. Planting disease-resistant or disease-tolerant varieties will help eliminate this possible yield loss. Growers should review Table 3 for disease resistance/tolerance ratings.

Table 5, which consists of a summary of the six 2013 full-season tests, is recommended for selecting varieties for maximum yield in double-crop systems and in full-season systems in Kentucky. 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, full-season, or double-crop test.

## Growing Conditions and Special Circumstances

Wet and cool conditions left over from March and April 2013 brought a slow start to the month of May. Monthly temperatures averaged 66 degrees across the state, 2 degrees above normal. Rainfall totaled 4.51 inches for the month.

June 2013 was the 11th wettest month on record since 1895, with precipitations totaling 6.01 inches statewide, 1.59 inches above normal. A slow moving front at the beginning of the month brought most of the rainfall. Strong and severe thunderstorms on the 26th produced damaging winds and heavy rainfall. Maximum temperatures from the second week to the end of the month remained in the low to mid-90s. The monthly average temperature was 74 degrees statewide, 2 degrees warmer than normal.

July 2013 was the 12th coldest July on record. Temperatures remained in the upper 70s to the lower 80s for much of the month, with an average of 74 degrees statewide (2 degrees cooler than normal). Only one week in the middle of the month really felt like summer. Warm and moist air from the south brought temperatures to upper 80s and lower 90s and dew points to the low 70s. Cold fronts on the 23rd and 27th reinforced cool and dry air conditions. Most of the rain came during the first week of the month with precipitation totaling 6.16 inches statewide, 1.81 inches above normal. Cool conditions in August gave the impression that fall started early this year. Temperatures dropped to the low 50s on the 15th, even low 40s in part of the state, nearly 20 degrees below normal. Temperatures recovered the last two weeks of the month, reaching the upper 80s and 90s. Temperatures averaged 74 degrees, 2 degrees cooler than normal, for the month. Most of the rain came during the first two weeks of the month. Precipitation totaled 3.96 inches statewide.

September was typically one of the driest months of the year. The conditions remained dry, except for the third week when a cold front brought most of the rainfall for the month. Temperatures averaged 70 degrees. Precipitation totaled 3.08 inches statewide.

Temperatures for October averaged 58 degrees across the state. The first week of the month, high temperatures were in the low 80s, 7 degrees above normal. Temperatures then started to cool off, and dropped to the mid 30s by mid-month, resulting in the first frost of the season. By late October, low temperatures across the state averaged in the mid to upper 20s, 10 degrees below normal. A couple of systems during the first weekend of the month and on the 31st brought significant rainfall. The second system came with wind gusts exceeding 50 mph and thunderstorms. The state received a total of 3.55 inches of rain for the month.

November saw very mixed weather conditions. Temperatures warmed early in the month, with highs in the low- to mid-60s. A cold front then swept through the region with winds becoming breezy and rainfall totaling 0.25 to 0.5 inch. Temperatures remained in the 50s until an arctic cold front on the 11th brought the first snowfall of the season, with sub-freezing conditions. A very strong storm system followed on the 17th, with temperatures in the mid-60s. Temperatures then dropped to mid- to upper 40s on the 19th. Precipitations totaled 1.08 inches statewide on the 19th. (Sources: www.kymesonet. gov, www.nws.noaa.gov, and www.agwx. ca.uky.edu/annual.shtml.)

More detailed precipitation and temperature information for each test location is provided along with Tables 6 through 11, in the Agronomic Information sections.

## **Soybean Production** Information

The Kentucky Cooperative Extension Service has a series of publications, Soybean Production in Kentucky, which contains 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 website (http://www. uky.edu/Ag/GrainCrops/varietytesting. htm). Table 2 is an updated planting guide for your convenience. For additional research on seeding rates, see the Corn & Soybean News, Volume 6, Issue 2 ("Soybean Population and Yield"), 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 rates should be based on standard germination rate as well as expected stand losses. Stand losses are typically more severe in damp, cool conditions with heavy residue or with soil crusting. Stand losses are typically minimal with warm conditions and adequate soil moisture.

In November 2013 an estimated 1.64 million acres of soybeans were harvested in the state of Kentucky. The yield estimate on November 1st was 49 bushels per acre, 9 bushels above 2012. Soybean production for Kentucky was forecast at 80.4 million bushels on November 1st, 37 percent above 2012. Soybean price reached \$13.40 per bushel in Kentucky in August. (Sources: USDA-NASS Crop Production ISSN: 1936-3737, and Kentucky AgriNews USDA-NASS: 32[11]).

## **Kentucky State Seed Law**

The Kentucky State Seed Law requires all seed exposed, offered for sale, or sold in Kentucky to be labeled as to kind and variety for each agricultural seed component present in excess of 5 percent of the whole and the percentage by weight of each component. All soybean seed blends should be labeled as to the percentage of each variety that makes up the mixture. 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**

In addition to the collaborators mentioned in Table 1, the authors would also like to thank:

- The McCornick family in Daviess County, the Halcomb family in Simpson County (Walnut Grove Farms), and the Wooden family in Hardin County (Wooden Farms) for hosting the 2013 tests
- Dr. Pfeiffer, Cam Kenimer, and Ronald Curd (University of Kentucky) for their input and support during the 2013 season

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- John Stanhope and the Service Center crew at Spindletop North Farm (University of Kentucky) for their services all year long
- Dr. J.D. Green, Sara Carter, Charlie Slack, James Dollarhide, David Smith and the farm crew at Spindletop North Farm, and Shannon Rudd (University of Kentucky) for their help with agronomic management and harvest at the Fayette County location
- The farm crew at the UK Experimental Station in Princeton for their help with agronomic management and harvest at the Calloway County location
- Jason Robertson and the farm crew at Murray State University for their help with agronomic management and harvest at the Caldwell County location
- Dr. Hershman (University of Kentucky), Southern States Coop and Crop Production Services in Franklin for their help with disease rating, agronomic management, and harvest at the Simpson County location

# Contact

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# Sources of Seeds

HORNBECK HBK RY4721

HORNBECK HBK RY5421

The seeds planted in the 2013 Soybean Variety Performance Tests were acquired from the following sources:

Armor Seed	Beck's Hybrids
Scottie Blanchard	Doug Clouser
scottieblanchard@armorseed.com	dougc@beckshybrids.com
ARMOR 39-R16 ARMOR 44-R08 ARMOR 45-R60	BECK 391R4TM* BECK 418NRTM*
ARMOR 47-R13 ARMOR 49-C3 ARMOR 49-R56	BECK 423NL BECK 444NRTM*
ARMOR X1401 ARMOR X1406 ARMOR X1408	BECK 459L4TM* BECK 477NRTM*
ARMOR X1409 ARMOR X1410 ARMOR X1413	BECK 483NL BECK 511R4TM*
ARMOR X47C ARMOR X48C ARMOR X49C	BECK 522L4
Bayer CropScienceLucas OwensLucas.owens@bayer.comHORNBECK HBK L4850HORNBECK HBK L4850HORNBECK HBK L4850HORNBECK HBK L4950HORNBECK HBK RY4620HORNBECK HBK RY421	BioGene Seeds Drew Lawwill

HORNBECK HBK RY5221

### **Caverndale Farms Brand Seeds**

Barry Welty. .859-236-2150 1921 Bluegrass Pike, Danville KY 40422 bwelty@kywimax.com CAVERNDALE CF 286 RR2Y/STSn CAVERNDALE CF 380 RR2Yn CAVERNDALE CF EXP 416 RR2Yn CAVERNDALE CF 425 LLn CAVERNDALE CF 456 RR2Y/STSn CAVERNDALE CF 466 RR2Yn CAVERNDALE CF 469 LL/STSn CAVERNDALE CF 485 LLn CAVERNDALE CF 486 RR2Y/STSn CAVERNDALE CF 496 RR2Yn

#### **Delta Grow Seed**

...800-530-7933 Lee Hughes. 220 NW 2nd, ProBox 219, England AR 72046 leehughes19@hotmail.com DELTA GROW 4670 RR2 DELTA GROW 4755 RR2 DELTA GROW 4765 RR2/STS DELTA GROW 4825 RR2/STS DELTA GROW 4867 LL DELTA GROW 4880 RR DELTA GROW 4925 RR2 DELTA GROW 4940 RR DELTA GROW 4967 LL DELTA GROW 4981 LL/STS DELTA GROW 4990 LL DELTA GROW 5130 RR2 DELTA GROW 5361 LL DELTA GROW 5461 LL DELTA GROW 5481 LL DELTA GROW 5625 RR2

#### **DuPont Pioneer**

George Stabler ..... ...... 256-650-4223 Eastern Business Unit, 59 Griel Parkway, Suite 200, Delaware OH 43015 George.Stabler@pioneer.com PIONEER 39T67R PIONEER 93Y84 PIONEER 93Y92 PIONEER 94Y23 PIONEER 94Y70 PIONEER 94Y50 PIONEER 95Y10 PIONEER P35T58R PIONEER P46T21R PIONEER P47T36R PIONEER P48T53R PIONEER P49T97R PIONEER P50T40R

#### **Dyna-Gro Seed**

#### **Great Lakes Hybrids**

#### L&M Glick Seed

#### LG Seeds

Jesse E. Grogan......765-426-2763 22827 Shissler Road, Elmwood, IL 61529 jesse.grogan@lgseeds.com LG SEEDS C3989R2 LG SEEDS C4340R2 LG SEEDS C4411R2 LG SEEDS C4544R2 LG SEEDS C4780R2 LG SEEDS C4867R2 LG SEEDS C5122R2

#### Monsanto-DEKALB/Asgrow Company

#### **Mycogen Seeds**

Travis Keene......717-327-3090 tlkeene@dow.com MYCOGEN SEEDS 5N393R2 MYCOGEN SEEDS 5N423R2 MYCOGEN SEEDS 5N431R2 MYCOGEN SEEDS 5N451R2 MYCOGEN SEEDS 5N479R2 MYCOGEN SEEDS 5N479R2 MYCOGEN SEEDS 5N510R2 MYCOGEN SEEDS 5N540R2 MYCOGEN SEEDS 5N540R2 MYCOGEN SEEDS 5N540R2 MYCOGEN SEEDS 5X5413R2

#### **Pfister Seeds**

#### **Progeny Ag. Products**

Brian Murray... .....870-238-2079 1529 Hwy 193, Wynne AR 72396 bmurray@progenyag.com PROGENY 4211 RY PROGENY 4313 RY PROGENY 4510 RYS PROGENY 4560 LL PROGENY 4613 RYS PROGENY 4710 RYS PROGENY 4747 RY PROGENY 4819 LL PROGENY 4850 RYS PROGENY 4900 RY PROGENY 4928 LL PROGENY 4930 LL

#### Seed Consultants Inc.

Bill Mullen. ......740-505-2022 648 Miami Trace Rd. SW, P.O. Box 370, Washington Court House, OH 43160-0370 bmullen@seedconsultants.com SEED CONSULTANTS SCS 9354RRTM SEED CONSULTANTS SCS 9363RRTM SEED CONSULTANTS SCS 9373RRTM SEED CONSULTANTS SCS 9392RRTM SEED CONSULTANTS SCS 9393RRTM SEED CONSULTANTS SCS 9412RRTM SEED CONSULTANTS SCS 9421RRTM SEED CONSULTANTS SCS 9434RRTM SEED CONSULTANTS SCS 9443RRTM SEED CONSULTANTS SCS 9474RRTM SEED CONSULTANTS SCS 9494RRTM SEED CONSULTANTS SCS 9544RRTM SEED CONSULTANTS SCS 9574RRTM

#### Southern States Coop, Inc.

Jason Hinton ... ..804-291-6785 6606 West Broad Street, Richmond VA 23230 jason.hinton@sscoop.com SOUTHERN STATES LL 423N SOUTHERN STATES LL 473N SOUTHERN STATES LL 513N SOUTHERN STATES SS 3801N R2 SOUTHERN STATES SS 3813N R2 SOUTHERN STATES SS 4312NR2 SOUTHERN STATES SS 4510N R2 SOUTHERN STATES SS 4700 R2-STS SOUTHERN STATES SS 4725NS R2 SOUTHERN STATES SS 4913N R2 SOUTHERN STATES SS 4917N R2 SOUTHERN STATES SS 453N

#### **Stewart Seeds**

Justin Petrosino......419-681-3427 2230 E County Rd 300N, Greensburg IN 47240 justin.petrosino@stewartseeds.com STEWART 4113R2 STEWART 4212R2 STEWART 4412R2 STEWART 4512R2 STEWART 4514R2 STEWART 4714R2

#### Steyer Seeds Joe Steyer ......

...800-231-4274

P.O. Box 209, Old Fort OH 44861 joesteyer@yahoo.com STEYER 4203R2 STEYER 4301R2 STEYER 4401R2 STEYER 4701R2 STEYER 4702R2 STEYER 4802R2 STEYER 5101R2

#### **Stine Seed Company**

#### Stratton Seed Company

Heath North 800-264-4433 P.O. Box 1088, Stuttgart, AR 72160 hnorth@strattonseed.com SCHILLINGER SEED 458.RCS SCHILLINGER SEED 4712R SCHILLINGER SEED 495.RC SCHILLINGER SEED 4990.RC

#### Syngenta Seeds

#### **Terral Seed, Inc**

Phil Michener 662-822-8242 111 Elington Drive, Rayville LA 71269 pmichener@terralseed.com REV® 38R10TM **REV® 44R22 TM** REV® 46R64 TM REV<sup>®</sup> 47R34 TM REV<sup>®</sup> 47R53 TM REV® 48R22 TM REV® 48R33 TM REV<sup>®</sup> 48R44 TM REV® 49R22 TM REV® 49R94 TM REV<sup>®</sup> 51R53 TM REV<sup>®</sup> 52R74 TM REV® 53R23 TM REV® 54R84 TM REV® 55R53 TM **REV® 59R13 TM** 

#### Unisouth Genetics, Inc.

Stacy Burwick 800-505-3133 3205-C HWY 46S, Dickson, TN 37055 sburwick@usgseed.com UNISOUTH GENETICS USG 5002T UNISOUTH GENETICS USG 5601T UNISOUTH GENETICS USG 73P93R UNISOUTH GENETICS USG 74A33R UNISOUTH GENETICS USG 74E88 UNISOUTH GENETICS USG ALLEN

#### **University of Arkansas**

## University of Missouri

## University of Kentucky

Dr. Todd W. Pfeiffer

Department of Plant and Soil Sciences, 105 Plant Science Bldg, Lexington KY 40546 tpfeiffer@uky.edu ESSEX (long term check-released 1974)

PENNYRILE (long term check-released 1987)

#### **US Seeds**

Dr., Jonesboro AR	72401
eeds.net	
HALO 4:65	HALO 4:94
HALO 5:01	HALO 5:01-5
HALO 5:45	HALO X466
HALO X496	HALO X530
	Dr., Jonesboro AR eeds.net HALO 4:65 HALO 5:01 HALO 5:45

## USDA-ARS

Lisa Fritz ......731-425-4736 605 Airways Blvd, Jackson, TN 38301 lisa.fritz@ars.usda.gov EXP USDA-ARS JTN-5110 USDA-ARS JTN-5203

## Warren Seed and Agronomy Service

### Table 3. Company Specifications for Entries in the 2013 Kentucky Soybean Variety Performance Tests<sup>A</sup>.

Table 5. company specification				•	ra sojae <sup>B,C</sup>	. Sudden	Soybean			
Variety/ Brand Name	Type	Relative Maturity Group	Nematode Resistance	Resistance Gene Rps	Field Tolerance	Death Syndrome	Mosaic Virus	Stem Canker	Other Reported Resistance	Seed Treatment(s)
ARMOR 39-R16	RR2Y/STS	3.9	3, 14	1c	MR	MR				1, 5, 12
ARMOR 44-R08	RR2Y	4.4	3, 14		MR	MR				1, 5, 12
ARMOR 45-R60	RR2Y/STS	4.5	3, 14	1c	MR	MR	R			1, 5, 12
ARMOR 47-R13	RR2Y/STS	4.8								1, 5, 12
ARMOR 48-R66	RR2Y/STS	4.8								1, 5, 12
ARMOR 49-C3	CONV	4.9								1, 5, 12
ARMOR 49-R56	RR2Y	4.9	3, 14	1a	MR	MR	R			1, 5, 12
ARMOR X1401	RR2Y	4.2								1, 5, 12
ARMOR X1406	RR2Y/STS	4.6								1, 5, 12
ARMOR X1409	RR2Y	4.9								1, 5, 12
ARMOR X1410	RR2Y	5.0								1, 5, 12
ARMOR X1413	RR2Y CONV/STS	5.1								1, 5, 12
ARMOR X47C		4.8								1, 5, 12
ARMOR X48C	CONV/STS	4.8								1, 5, 12
ARMOR X49C	CONV/STS	4.9	2	1c	Т	MR		R		1, 5, 12
ASGROW AG3832	RR2Y RR2Y	3.8 3.9	3	1c	T	MS		R		2, 25 2, 25
ASGROW AG3934 ASGROW AG4033	RR2Y/STS	5.9 4.0	3	1c 1c	MT	MR		R		2,25
ASGROW AG4055 ASGROW AG4232	RR2Y/STS	4.0	3	1a	MT	MS		R		2,25
ASGROW AG4232 ASGROW AG4433	RR2Y	4.2	3	1a 1c	T	MR		R		2,25
ASGROW AG4433 ASGROW AG4534	RR2Y/STS	4.4	3	1a	T	MS		MR		2,25
ASGROW AG4632	RR2Y/STS	4.6	3	1a	Ť	MS		MR		2,25
ASGROW AG4832	RR2Y/STS	4.8	5	Id	MS	R		MR		2, 25
ASGROW AG4831	RR2Y/STS	4.8	3	1c	MT	MS		MR		2, 25
ASGROW AG4933	RR2Y	4.9	3	10	T	MR		R		2, 25
ASGROW AG4934	RR2Y/STS	4.9	3	10		IVIIA		R		2,25
BECK 391R4 <sup>TM*</sup>	11121/515	3.9	5					i i		2,25
BECK 418NR <sup>TM*</sup>	RR	4.1	3, 14	1k	Т	MR	MR	MR		22
BECK 423NL	LL	4.2	3, 14	1a, 3	Ť	MR	MR	MR		22
BECK 444NR <sup>TM*</sup>	RR	4.4	3, 14	1k	Ť	MR	MR	MR		22
BECK 459L4 <sup>TM*</sup>		4.5	5,							
BECK 477NR <sup>TM*</sup>	RR	4.7	3, 14	1k	Т	MR	MR	MR		22
BECK 483NL	LL	4.8	3, 14	1k	T	MR	MR	MR		22
BECK 511R4 <sup>TM*</sup>	RR	5.1	3, 14	1k	Т	MR	MR	MR		22
BECK 522L4		5.2								
BIOGENE BG 7421	RR2Y	4.2	3, 14	1c	MT	MR	MR	S	MR-FROGEYE LEAF SPOT	2,15
BIOGENE BG 7441	RR2Y	4.4	3, 14	1c	MT	MR	MR	S	MR-FROGEYE LEAF SPOT	2,25
CAVERNDALE CF 286 RR2Y/STSn	RR2Y/STS	2.8			Т	MR				1, 12, 20, 24
CAVERNDALE CF 380 RR2Yn	RR2Y	3.8	3, 14		Т	MR		MR		1, 12, 20, 24
CAVERNDALE CF EXP 416 RR2Yn	RR2Y - EXP	4.1			Т	R				1, 12, 20, 24
CAVERNDALE CF 425 LLn	LL	4.2	3		Т	R				1, 12, 20, 24
CAVERNDALE CF 456 RR2Y/STSn	RR2Y/STS	4.5	3, 14		Т	MR		R	R-FROGEYE LEAF SPOT	1, 12, 20, 24
CAVERNDALE CF 466 RR2Yn	RR2Y	4.6	3, 14		Т	MR		R		1, 12, 20, 24
CAVERNDALE CF 469 LL/STSn	LL/STS	4.6		_	T					1, 12, 20, 24
CAVERNDALE CF 485 LLn	LL	4.8		Т	R	_				1, 12, 20, 24
CAVERNDALE CF 486 RR2Y/STSn	RR2Y/STS	4.8	3, 14		T	R		MR	MR-FROGEYE LEAF SPOT	1, 12, 20, 24
CAVERNDALE CF 496 RR2Yn	RR2Y	4.9			T	R		R	MR-FROGEYE LEAF SPOT	1, 12, 20, 24
DELTA GROW 4670 RR2	RR2Y	4.6	3, 14	1c	MR	MR		R		3, 5, 12
DELTA GROW 4755 RR2	RR2Y	4.7	3, 14	1	MR	MR		MR		3, 5, 12
DELTA GROW 4765 RR2/STS	RR2Y/STS	4.7	3, 14	1c	MR	MR		R		3, 5, 12
DELTA GROW 4825 RR2/STS	RR2Y/STS	4.8	3, 14	41.	MR	MR		MR		3, 5, 12
DELTA GROW 4867 LL	LL	4.8	3, 14	1k	MR	MR		MR		3, 5, 12
DELTA GROW 4880 RR	RR	4.8	3, 9, 14	1k	MR	MR		R		3, 5, 12
DELTA GROW 4925 RR2	RR2Y	4.9	3,14	1c	MR	MR		R		3, 5, 12
DELTA GROW 4940 RR	RR	4.9	1, 2, 3, 5, 14		MR	MR		MR	R-ROOTKNOT NEMATODE,	3, 5, 12
DELTA GROW 4967 LL	LL	4.9	3, 14	1c	MR	MR		MR	R-RENIFORM NEMATODE	3, 5, 12
DELTA GROW 4987 LL DELTA GROW 4981 LL/STS	LL/STS	4.9	3, 14	i C	MR	MR		MR		3, 5, 12
DELTA GROW 4981 LL/STS DELTA GROW 4990 LL	LL/SIS	4.9	3, 14 3, 9, 14	1k	MR	MR		R		3, 5, 12 3, 5, 12
DELTA GROW 4990 LL DELTA GROW 5130 RR2	RR2Y	5.1	3, 9, 14	1c	MR	MR		R		3, 5, 12
DELTA GROW 5150 RR2 DELTA GROW 5361 LL	LL	5.3	3, 14	1k	MR	MR		MR		3, 5, 12
DELTA GROW 5361 LL DELTA GROW 5461 LL		5.3 5.4	3, 14	1k	MR	MR		R		3, 5, 12 3, 5, 12
DELTA GROW 5461 LL	LL	5.4	3, 14	IN	MR	MR		MR		3, 5, 12
DELTA GROW 5481 LE DELTA GROW 5625 RR2	RR2	5.6	5, 17		14111	14111		14111		3, 5, 12
	11112	5.0								
										continued

## Table 3. (continued)

ariety/ Brand Name	Туре	Relative Maturity Group	Soybean Cyst Nematode Resistance	Phytophto Resistance Gene Rps	<u>ra sojae<sup>B,C</sup></u> Field Tolerance	Sudden Death Syndrome	Soybean Mosaic Virus	Stem Canker	Other Reported Resistance	Seed Treatment
YNA-GRO 38RY45	RR2Y	4.5	3, 14	1c	MT	MR		R	MR-FROGEYE LEAF SPOT	2, 27
YNA-GRO 39RY43	RR2Y	4.3	3, 14	1c	MT	MS		MS		2, 27
YNA-GRO S38RY84	RR2Y	3.8	3, 14		MT	MR		MR		2, 27
YNA-GRO S39RY33	RR2Y	3.9	3, 14	1c	MT	MR		140	MR-FROGEYE LEAF SPOT	2,27
YNA-GRO S47RY13	RR2Y	4.7	3, 14	1.	MT	MR		MR		2,27
YNA-GRO S48RS53	RR2Y/STS CONV-P	4.8 5.0	3, 14	1c	MT	MR		R	MR-FROGEYE LEAF SPOT	2, 27
SSEX (long term check-released 1974) KP USDA-ARS JTN-5110	CONV-P	5.5	225					R	<b>R-FROGEYE LEAF SPOT</b>	4, 5
REAT LAKES HYBRIDS GL4039R2	RR2Y	5.5 4.0	2, 3, 5 3, 14	1c	Т	MR		n	R-FRUGETE LEAF SPUT	4, 5
REAT LAKES HYBRIDS GL4039R2	RR2Y/STS	4.0	3, 14	1a	T	R			<b>R-FROGEYE LEAF SPOT</b>	25
REAT LAKES HYBRIDS GL4209R2	RR2Y/STS	4.7	3, 14	1a 1c	Ť	R		R	R-FROGEYE LEAF SPOT	25
ALO 4:40	LL	4.2	5, 14	ic i	1	n		n	N-INOGETE LEAF SFOT	1, 5, 12
ALO 4:65	LL	4.6	3, 14	1c	MT	MR		R		1, 5, 12
ALO 4:94	LL	4.9	5,14	i c	1411	MIN		IV.		1, 5, 12
ALO 4:95	LL	4.9	3, 14	1k	MT	MR		R		1, 5, 12
ALO 4:97	LL/STS	4.7	3, 14	1k	MT	MR		R		1, 5, 12
ALO 5:01	LL	4.9	3	1c	MT	MR		R		1, 5, 12
ALO 5:01-5	LL	5.0	3	1c	MT	MR		R		1, 5, 12
ALO 5:26	LL	5.1	3, 14		MT	MR		R		1, 5, 12
ALO 5:45	LL	5.4	3, 14	1k	MT	MR		R		1, 5, 12
ALO X466	LL	4.6								1, 5, 12
ALO X496	LL	4.9								1, 5, 12
ALO X530	LL/STS	5.3								1, 5, 12
DRNBECK HBK L4850		4.8	3	1k						17, 25
ORNBECK HBK L4950		4.9	3	1c						17, 25
RNBECK HBK L5350		5.3	3	1k						17, 25
RNBECK HBK RY4620	RR2Y/STS	4.6		1c						17, 25
RNBECK HBK RY4721	RR2Y	4.7	3, 14	1c						17, 25
RNBECK HBK RY5221	RR2Y	5.2		1, 3, 15						17, 25
RNBECK HBK RY5421	RR2Y	5.4								17, 25
M GLICK 403 R2Y	RR2Y	4.3								
M GLICK 412 R2Y	RR2Y	4.2	3, 14							4
M GLICK 853 R2Y	RR2Y	3.8	3, 14	1c	MD	140				4
SEEDS C3989R2	RR2Y	3.9	3, 14	1k	MR	MR		2		1, 11, 25, 2
SEEDS C4340R2	RR2Y/STS	4.3	3, 14	1a	MR	R		R		1, 11, 25,
SEEDS C4411R2	RR2Y	4.4	3, 14	1c	R	R		0		1, 11, 25,
SEEDS C4544R2	RR2Y	4.5	3, 14	1c	R	MR		R		1, 11, 25,
SEEDS C4780R2 SEEDS C4867R2	RR2Y/STS RR2Y/STS	4.7 4.8	3, 14 3, 14	1c	R MR	R		MR		1, 11, 25, 2
SEEDS C4007 R2 SEEDS C5122R2	RR2Y	5.1	3, 14	1c	R	R		R		1, 11, 25, 2
COGEN SEEDS 5N393R2	RR2Y	3.9	3	10	MT	MR		n		6
YCOGEN SEEDS 5N423R2	RR2Y/STS	4.2	3, 14	i c	MT	MR				6
YCOGEN SEEDS 5N431R2	RR2Y	4.3	3	1c	MT	MR		MR		6
COGEN SEEDS 5N451R2	RR2Y	4.5	3	1c	MT	MR				6
COGEN SEEDS 5N478R2	RR2Y/STS	4.7	3	1c	MT	MR				6
COGEN SEEDS 5N479R2	RR2Y/STS	4.7	3, 14	1c	MT	MR		R		6
COGEN SEEDS 5N510R2	RR2Y	5.1	3, 14	1c	MT	MR		R		6
YCOGEN SEEDS 5N540R2	RR2Y	5.2	3, 14		MT	MR		R		6
COGEN SEEDS X53413R2	RR2Y	4.1	3, 14		MT	MR		MR		6
39-U2 BRAND	RR2Y	3.9	3, 14		MT	MR				3, 5, 12
41-J6 BRAND	RR2Y	4.1	3, 14	1c	MT	MR		S		3, 5, 12
43-K1 BRAND	RR2Y	4.3	3,14		MS	MR				
45-V8 BRAND	RR2Y	4.5	3,14	1c	MT	MR				28
46-L2 BRAND	RR2Y	4.6	3, 14	1c	MT	MR				3, 5, 12
46-G9 BRAND	RRY2	4.6	3,14	none	MS	MR				
49-F8 BRAND	RR	4.9	3, 14	1a	MT	MR		R		3, 5, 12
NNYRILE (long term check-released 1987)	CONV-P	4.7					-	-		
STER 43R29	RR2Y	4.3	1, 3, 14	1c	MT	MR	R	R		6
STER 45R22	RR2Y	4.5	1 2 1 4	1k	MT	MR	R	R		6
STER 47R22	RR2Y/STS	4.7	1, 3, 14	41.	MT	MR	R	R		6
NEER 39T67R	RR	3.9	3, 14	1k 1k	MS	MR				1,10
NEER 93Y84	RR	3.8	3, 14	IK	MT	MR				1,10
NEER 93Y92 NEER 94Y23	RR RR	3.9 4.2	3, 14		MS MS	MR MR				1, 10 1, 10
	RR	4.2	3, 14		MT	MR				1, 10
NEER 94Y50 NEER 94Y70	RR	4.5	3, 14 3, 14		MT	MR				1, 10
NEER 95Y10	RR	5.1	3,14		MT	MR		R		1, 10
NEER P35T58R	RR	3.5	3,14		MT	MR		N		1, 10
NEER P46T21R	RR	4.6	3, 14		MT	MR				1,10
NEER P47T36R	RR	4.7	3, 14		MT	MR		R		1, 10
NEER P48T53R	RR	4.8	3, 14		MT	MR		R		1, 10
NEER P49T97R	RR	4.9	3, 14	1k	MT	MR		R		1, 10
NEER P50T40R	RR	5.0	3, 14	1k	MS	MR		R		1, 10
DGENY 4211 RY	RR2Y	4.2	3, 14		T	MR				25, 28
DGENY 4313 RY	RR2Y	4.3	5,11			MS		MR		25, 28
DGENY 4510 RYS	RR2Y/STS	4.5			MT	R		MS	R-CERSOSPORA LEAF BLIGHT	
DGENY 4560 LL		4.5		1c		MR		MR		25,28
DGENY 4613 RYS	RR2Y/STS	4.6		10		MR		R		25, 28
DGENY 4710 RYS	RR2Y/STS	4.7				MR		MS		25, 28
DGENY 4747 RY	RR2Y	4.7	3, 14		Т	MR		MR		25, 28
DGENY 4819 LL	LL	4.7	<i>S</i> , 1-P	1k		MR		10111		25, 28
DGENY 4850 RYS	RR2Y/STS	4.8	3, 14	1c		MR		R		25, 28
OGENY 4900 RY	RR2Y	4.9	3, 14	1a		MR		MR		25, 28
						14111				
OGENY 4928 LL	LL	4.9	3	1c				R		25, 28

## Table 3. (continued)

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#### Table 3. (continued)

	Relative	Soybean Cyst			Sudden	Soybean			
Type	Maturity Group	Nematode Resistance	Resistance Gene Rps	Field Tolerance	Death Syndrome	Mosaic Virus	Stem Canker	Other Reported Resistance	Seed Treatment(s
CONV	4.6			Т	MR		R		10, 17
CONV-P	5.3	2, 3, 5, 14			R	S	R	R-FROGEYE LEAF SPOT, R-RENIFORM NEMATODE	4, 5
RR2Y	3.9	3, 14	1c	MT	MR				6
RR2Y	4.3	3, 14	1c	MT	MR				6
RR2Y	4.3	3, 14	1c	MT	MR				6
RR2Y	4.6	3, 14	1c	MT	MR				6
RR2Y/STS	4.8	3, 14	1c	MT	MR				6
RR2Y	5.1	3, 14	1c	MT	MR				6
	CONV CONV-P RR2Y RR2Y RR2Y RR2Y RR2Y/STS	Maturity Group           CONV         4.6           CONV-P         5.3           RR2Y         3.9           RR2Y         4.3           RR2Y         4.3           RR2Y         4.6           RR2Y/STS         4.8	Maturity Group         Nematode Resistance           CONV         4.6           CONV-P         5.3         2, 3, 5, 14           RR2Y         3.9         3, 14           RR2Y         4.3         3, 14           RR2Y         4.3         3, 14           RR2Y         4.3         3, 14           RR2Y         4.6         3, 14           RR2Y/STS         4.8         3, 14	Maturity Group         Nematode Resistance         Resistance Gene Rps           CONV         4.6	Maturity Group         Nematode Resistance         Resistance Gene Rps         Field Tolerance           CONV         4.6         T           CONV-P         5.3         2, 3, 5, 14         T           RR2Y         3.9         3, 14         1c         MT           RR2Y         4.3         3, 14         1c         MT           RR2Y         4.3         3, 14         1c         MT           RR2Y         4.6         3, 14         1c         MT           RR2Y         4.6         3, 14         1c         MT           RR2Y/STS         4.8         3, 14         1c         MT	Maturity GroupNematode ResistanceResistance Gene RpsField ToleranceDeath SyndromeCONV4.6TMRCONV-P5.32, 3, 5, 14TMRRR2Y3.93, 141cMTMRRR2Y4.33, 141cMTMRRR2Y4.33, 141cMTMRRR2Y4.63, 141cMTMRRR2Y4.63, 141cMTMRRR2Y/STS4.83, 141cMTMR	MaturityNematode ResistanceResistanceField Gene RpsDeath ToleranceMosaic VirusCONV4.6TMRCONV-P5.32,3,5,14RSRR2Y3.93,141cMTMRRR2Y4.33,141cMTMRRR2Y4.33,141cMTMRRR2Y4.63,141cMTMRRR2Y4.63,141cMTMRRR2Y/STS4.83,141cMTMR	Maturity GroupNematode ResistanceResistance Gene RpsField ToleranceDeath SyndromeMosaic VirusStem CankerCONV4.6TMRRCONV-P5.32, 3, 5, 14RRRR2Y3.93, 141cMTMRRR2Y4.33, 141cMTMRRR2Y4.33, 141cMTMRRR2Y4.63, 141cMTMRRR2Y4.63, 141cMTMRRR2Y/STS4.83, 141cMTMR	Maturity GroupNematode ResistanceResistance Gene RpsField ToleranceDeath SyndromeMosaic VirusStem CankerOther Reported ResistanceCONV4.6TMRRCONV-P5.32, 3, 5, 14RSRR-FROGEYE LEAF SPOT, R-RENIFORM NEMATODERR2Y3.93, 141cMTMRRRR2Y4.33, 141cMTMRRR2Y4.63, 141cMTMRRR2Y4.63, 141cMTMRRR2Y/STS4.83, 141cMTMR

Α

RR Roundup Ready Variety (RR1 first generation, original trait, released in 1996) Introduced in 2009, Roundup Ready 2 Yield soybean variety RR2Y

LL Introdced in 2009, Liberty Link is an ignite (glufosate ammonium) herbicide toler- B ant sovhean variety

STS Introduced in 1994, STS is a sulfonylurea herbicide tolerant soybean variety

Variety is a conventional entry, ie: not Roundup Ready or Liberty Link tolerant Variety that is soon to be released or still being evaluated

CONV EXP

Public variety

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

All races of Phytophtora sojae so far identified in Kentucky can be controlled with varieties with Rps 1 c or 1k. Race-specific resistant 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 early seedling growth stages.

Blank spaces = no data provided by seed company or data unknown С

S = susceptible, MS = moderately susceptible, MR = moderately resistant, R = resistant, T = tolerant, MT = moderately tolerant

## Seed Treatments

Research over five seasons of testing various seed-applied insecticide treatments on soybeans 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).

#### Table 4. Seed Treatments.

Code	Name (treatment combination)	Treatment	Chemical Class/Use	LD50 Oral/ Derm <sup>A</sup>	LC50 <sup>B</sup>
1	Allegiance & Meta Star ST	Metalaxyl	systemic fungicide	2,900/2,000	21.94 - 1 hr
2	Acceleron (1, 10, 11)	Metalaxyl, Imidacloprid, Pyraclostrobin	systemic & non-systemic fungicide, systemic insecticide	NA	NA
3	Apron XL	Mefenoxam	systemic fungicide	862/2,020	2.52 - 4 hrs
4	Apron Maxx (3, 12)	Mefenoxam, Fludioxonil	systemic & non-systemic fungicide	5,000/5,050	5.42 - 4 hrs
5	Cruiser	Thiamethoxam	systemic insecticide	5,000/5,050	NA
6	Cruiser Maxx (3, 5, 12)	Mefenoxam, Thiamethoxam, Fluodioxinil	systemic & non-systemic fungicide, systemic insecticide	5,000/5,000	2.5 - 4 hrs
7	Cruiser Extreme (6, 8)	Mefenoxam, Thiamethoxam, Fludioxonil, Axoxystrobin	systemic & non-systemic fungicide, systemic insecticide	5,000/5,050	NA
8	Dynasty	Azoxystrobin	systemic fungicide	2,000/2,000	5.98 - 4 hrs
9	FaSTart®	Thiamethoxam	systemic insecticide	5,000/5,050	NA
10	Gaucho	Imidacloprid	systemic insecticide	643/2,000	8.1 to 10.0 - 1 hr
11	Headline	Pyraclostrobin	strobilurin fungicide	200-500/4,000	3.51 - 4 hrs
12	Maxim 4FS	Fludioxonil	non-systemic fungicide	5,050/2,020	3.77 - 4 hrs
13	Molybdenum	Molybdenum	stimulant (nitrogen fixing)	NA	NA
14	Soygard (1, 8)	Metalaxyl, Azoxystrobin	systemic fungicide	5,000/2,000	NA
15	Sure Gro <sup>TM</sup> (4, 16)	Mefenoxam, Fludioxonil, Thiram	systemic & non-systemic fungicide	NA	NA
16	Thiram	Thiram	fungicide	3580/4000	2.6 - 4 hrs
17	Trilex®	Trifloxystrobin	systemic fungicide	5,000/5,000	2.6 - 4 hrs
18	Trilex <sup>®</sup> 6000 (1, 10, 17)	Metalaxyl, Imidacloprid, Trifloxystrobin	systemic fungicide & systemic insecticide	NA	NA
19	Warden (3, 12)	Mefenoxam, Fludioxonil	systemic & non-systemic fungicide,	5,000/200	2.65 - 4 hrs
20	Optimize 400	Lipo-chitooligosaccharide	natural growth enhancer	5,000/2,000	NA
21	Rancona 3.8 FS	Ipconazole	systemic broad-spectrum fungicide	5,000/slight	2.59 - 4 hrs
22	Escalate (3, 12, 16, 10)	Mefenoxam, Fludioxonil, Thiram, Imidacloprid	systemic & non-systemic fungicide, systemic insecticide	640/2,000	NA
23	MetaStar <sup>™</sup> ST	Metalaxyl	systemic fungicide	2,900/2,000	NA
24	Agri Star® Macho® 600 ST (10)	Imidacloprid	systemic insecticide	4,500/2,000	5.0 - 4 hrs
25	Poncho® VOTiVO®	Clothiandin, Bacillus firmus	systemic insecticide and nematicide	2,000/5,000	2.62 - 4 hrs
26	Vibrance <sup>TM</sup>	Sedaxane	fungicide	2,975/5,050	2.56 - 4 hrs
27	Xemium®	Fluxapyroxad	broad spectrum fungicide	2,000/2,000	5.10 - 4 hrs
28	Trilex <sup>®</sup> 2000	Trifloxystrobin, Metalaxyl, Glycerine	systemic fungicide	2,000/5,000	2.6 - 4 hrs

A/B The LD50 and LC50 are standardized measures for expressing and comparing the toxicity of chemicals.

Α

The LD50 is expressed as mg of chemical per kg (2.2 lbs.) body weight of test animal. The LC50 is expressed as mg of chemical per kg (2.2 lbs.) body weight of test animal. The LC50 is expressed as mg of chemical per liter of air inhaled by test animal. The LD50 and LC50 are the doses that kill half (50%) of the animals tested (LD = "lethal dose", LC = "lethal concentration"). The LD50 and LC50 data are from MSDS (Material Saftey Data Sheet). R

## Table 5. 2013 Kentucky Soybean Variety Performance Tests, State Summary.

		YIELD (BU/AC		LODGING		IL <sup>A,B</sup>	% PROTEIN <sup>A,B</sup>		
BRAND VARIETY	2013	2012-13	2011-13	2013	2013	2012-13	2013	2012-13	
ATURITY GROUP II (relative MG 2.0-2.9)									
AVERNDALE CF 286 RR2Y/STSn	57.6	NA	NA	1.5	19.01	NA	37.62	NA	
ROUP II AVERAGE	NA			NA	NA	NA	NA	NA	
SD (0.10) 	NA NA			NA	NA NA	NA NA	NA NA	NA NA	
	INA			INA	INA	INA	INA	INA	
IATURITY GROUP III (relative MG 3.0-3.9) <sup>C</sup>									
OUTHERN STATES SS 3813N R2	67.7			1.3	19.8		36.6		
G SEEDS C3989R2	67.1	57.8		1.7	20.1	20.9	36.5	35.5	
IONEER P35T58R	66.6			1.7	20.1	20.7	36.6	36.3	
SGROW AG3832	66.2	54.6	51.9	1.2	19.3	19.9	36.6	36.2	
EED CONSULTANTS SCS 9393RR	65.0			1.0	20.8		35.8		
RMOR 39-R16	65.0	54.8		1.1	19.4	20.0	36.7	36.3	
IYCOGEN SEEDS 5N393R2	64.7	_		1.5	19.0		37.4		
EED CONSULTANTS SCS 9354RR	64.7			1.1	19.9		36.3		
IONEER 39T67R	64.6			1.5	20.0	20.6	35.4	35.5	
EV® 38R10 <sup>TM</sup>	63.7	55.6	52.8	1.3	20.3		36.0		
IONEER 93Y84	63.7	56.1		1.0	20.7		35.1		
YNA-GRO S38RY84	63.2			1.3	20.0		35.6		
EED CONSULTANTS SCS 9363RR	63.1			1.5	19.9		35.9		
NISOUTH GENETICS USG 73P93R	62.9			1.0	20.0		36.5		
ECK 391R4 <sup>TM*</sup>	62.7			1.2	19.5		36.5		
EED CONSULTANTS SCS 9373RR	62.7	525	E0.2	1.3	20.3	20.0	35.9	26.2	
39-U2 BRAND	61.6	52.5	50.3 50.1	1.4	19.9 20.2	20.9	37.0	36.2	
IONEER 93Y92	61.4	52.1	50.1	1.5		20.9	36.5 36.9	35.8	
YNA-GRO S39RY33 TINE 38RD02	61.0 60.7			2.0	19.4 20.0		36.9 <b>37.7</b>		
ARREN SEED DS 4010 R2Y	60.7			2.0	20.0		34.7		
AVERNDALE CF 380 RR2Yn	59.6			2.9	19.7		36.4		
EED CONSULTANTS SCS 9392RR	58.8	53.3	50.5	1.5	20.6	21.4	35.3	34.8	
SGROW AG3934	58.6	55.5	0.5	1.5	19.0	21.4	37.6	54.0	
&M GLICK 853 R2Y	57.7			1.5	19.9		36.1		
OUTHERN STATES SS 3801N R2	57.3			1.8	19.8		35.8		
	0710			110	1910		0010		
ROUP III AVERAGE	62.7	54.6	51.1	1.5	19.9	20.7	36.3	35.8	
SD (0.10)	7.0	4.2	3.8		0.3	0.3	0.5	0.3	
.V.	8.3	7.5	7.9		1.2	1.3	1.0	0.8	
1ATURITY GROUP IV EARLY (relative MG 4.									
RMOR 44-R08	71.4	58.5	57.0	1.4	19.6	20.0	36.5	36.4	
ECK 423NL	68.5			1.5	19.4		36.3		
VARREN SEED DS 4340 R2Y	68.3	60.0		1.4	19.4	19.7	37.0	36.6	
IYCOGEN SEEDS 5N451R2	67.9			1.5	19.9		35.2		
&M GLICK 412 R2Y	66.6	56.5	55.4	1.4	19.5		36.2		
AVERNDALE CF 456 RR2Y/STSn	66.6			1.3	19.8	20.2	36.6	36.2	
EED CONSULTANTS SCS 9434RR	66.6			2.0	19.9		36.2		
SGROW AG4232	65.9	57.2	56.3	1.7	19.0	19.6	36.8	36.1	
AVERNDALE CF EXP 416 RR2Yn	65.5	55.0	52.0	1.1	19.4	20.6	37.1	25.0	
	65.4	55.8	53.8	1.4	20.1	20.6	35.3	35.0	
REAT LAKES HYBRIDS GL4039R2	65.3			1.2 1.6	19.8 19.3		36.3		
ROGENY 4313 RY	65.2						37.3		
OUTHERN STATES LL 423N SGROW AG4433	65.0 65.0	55.8		1.6 1.3	19.4 19.6	19.7	36.6 35.9	35.9	
IYCOGEN SEEDS X53413R2	64.9	55.0		2.7	19.0	19.7	36.0	55.9	
TEWART 4512R2	64.8	56.6	55.1	1.5	19.9	19.9	35.1	35.4	
ALO 4:40	64.6	50.0	55.1	1.8	19.8	17.7	36.0	55.4	
IOGENE BG 7441	64.4			1.0	20.0		35.8		
SGROW AG4033	64.4	55.1		1.2	19.0	19.5	37.4	36.6	
IONEER 94Y50	64.3	56.2	55.5	1.6	19.8	20.3	36.4	36.2	
IONEER 94Y23	64.3	56.5	5515	1.2	20.2	20.5	35.7	35.2	
YNA-GRO 39RY43	64.2	56.4	55.0	1.3	19.6	20.1	36.8	36.5	
ECK 418NR <sup>TM*</sup>	64.2	56.2		1.4	20.7	20.7	35.4	35.4	
ECK 444NR <sup>TM*</sup>	64.1	55.4		1.4	20.0	20.3	36.7	36.4	
ARREN SEED DS 4330 R2Y	64.1			1.5	19.2		37.1		
TEWART 4113R2	64.0	54.5		1.4	19.2	19.3	35.8	35.5	
G SEEDS C4544R2	63.9			1.6	19.6		35.3		
ROGENY 4211 RY	63.8	55.0	53.1	1.3	19.6	19.9	36.4	36.2	
OUTHERN STATES SS 4312N R2	63.8	54.5	55.3	1.2	19.8	20.4	36.5	35.8	
TINE 45RC32	63.6			2.1	19.6		36.2		
EED CONSULTANTS SCS 9421RR	63.4	54.5	53.5	1.4	19.8	19.9	37.2	36.6	
IYCOGEN SEEDS 5N431R2	63.3			1.3	19.6		36.5		
EED CONSULTANTS SCS 9443RR	63.3			1.4	20.1		37.0		
FISTER 45R22	63.2			1.2	19.3		37.5		
TEYER 4203R2	63.0	54.2	54.1	1.3	19.6	20.0	36.9	35.9	
OUTHERN STATES SS 4510N R2	62.9	56.3	53.5	1.3	19.2	19.7	38.1	37.2	

## Table 5. (continued)

		YIELD (BU/AC)	A	LODGING	% C	) <b>IL</b> A,B		DTEIN <sup>A,B</sup>
BRAND VARIETY	2013	2012-13	2011-13	2013	2013	2012-13	2013	2012-13
SEED CONSULTANTS SCS 9412RR	62.7			1.2	20.1		36.4	
MYCOGEN SEEDS 5N423R2	62.7			1.3	19.3		36.4	
DYNA-GRO 38RY45	62.5	55.5	54.1	1.3	19.8	20.1	36.1	36.2
ARMOR 45-R60	62.5	54.1		1.2	19.3	19.6	37.5	37.0
S43-K1 BRAND	62.5	561		1.9	20.1	10.0	36.2	35.6
LG SEEDS C4411R2 S45-V8 BRAND	62.3 62.3	56.1		1.1 1.7	19.7 19.9	19.8	36.1 36.2	35.0
STEWART 4514R2	62.2			1.7	19.9		37.5	_
CAVERNDALE CF 425 LLn	62.1			1.8	20.0		37.0	
GREAT LAKES HYBRIDS GL4209R2	62.1			1.2	19.8		36.3	
STINE 42RD02	61.9			1.3	19.7		36.3	
PFISTER 43R29	61.8	54.7		1.4	19.7	20.1	36.4	35.7
STEYER 4401R2	61.7	55.1		1.2	19.6	20.1	36.2	36.1
BIOGENE BG 7421	61.4	52.2	51.7	1.2	19.5	19.9	36.8	36.3
L&M GLICK 403 R2Y	61.4	52.0		1.2	19.8	20.4	36.9	26.0
LG SEEDS C4340R2	60.9	53.8		1.3	19.5	20.1	36.6	36.0
STEYER 4301R2 ARMOR X1401	60.9 60.8	53.8		1.1 1.0	19.2 19.7	19.6	37.2 36.2	36.1
PROGENY 4560 LL	60.8			1.0	19.7		36.2	
PROGENY 4510 RY	60.5	53.4	53.2	1.0	19.9	19.5	37.7	37.3
STEWART 4212R2	60.3	52.5	51.7	1.3	19.9	20.3	35.9	35.1
S41-J6 BRAND	59.9	51.9	51.7	1.6	19.8	20.5	37.1	36.7
ASGROW AG4534	58.9	0110		1.2	19.6		37.5	0017
REV <sup>®</sup> 44R22 <sup>TM</sup>	58.8	52.2	50.3	1.6	19.4	20.0	37.7	37.2
SOUTHERN STATES SS 453N	58.3			1.3	19.9		36.4	
BECK 459L4 <sup>TM*</sup>	57.8			1.6	19.9		35.7	
UNISOUTH GENETICS USG 74A33R	56.9			1.6	19.3		37.3	
GROUP IV EARLY AVERAGE	63.3	55.2	54.0	1.4	19.7	20.0	36.5	36.1
LSD (0.10)	6.3	4.0	3.5		0.4	0.3	0.7	0.8
C.V.	7.4	7.3	7.3		1.5	4.0	1.5	2.7
MATURITY GROUP IV LATE (relative MG 4.6	5-4 O)D							
HORNBECK HBK RY4620	72.6	61.0	58.8	1.4	19.5	19.7	35.2	35.6
ASGROW AG4933	72.0	60.4	50.0	1.4	19.2	19.6	35.8	35.9
ARMOR 47-R13	70.9	61.0		1.6	18.8	19.1	35.5	35.6
STEWART 4714R2	70.7			1.3	18.8		35.3	
CAVERNDALE CF 496 RR2Yn	70.0			1.6	19.3		35.0	
SEED CONSULTANTS SCS 9474RR	70.0			1.7	19.9		34.3	
SCHILLINGER SEED 4990.RC	69.9	58.7	56.4	1.7	18.9	19.3	35.7	36.2
SEED CONSULTANTS SCS 9494RR	69.8	_		1.8	19.6	_	35.5	_
ARMOR X1409	69.7	(0.0		1.5	19.1	10.2	36.3	26.2
ASGROW AG4831 HORNBECK HBK RY4721	69.4 69.0	60.8 59.3		1.3 2.2	19.0 19.2	19.3 19.3	36.4 34.9	36.3 35.5
DELTA GROW 4670 RR2	68.8	60.3	57.9	1.7	19.2	19.5	35.3	34.9
ASGROW AG4832	68.6	57.7	56.5	1.9	19.5	19.7	34.0	34.9
DELTA GROW 4765 RR2/STS	68.6	60.1	50.5	1.4	19.1	19.1	35.0	35.8
REV <sup>®</sup> 48R44 <sup>TM</sup>	68.5			1.7	19.7	19.6	34.1	34.6
WARREN SEED DS 4633 R2Y	68.5	59.0		1.8	20.0		34.0	
DELTA GROW 4755 RR2	68.4	57.6		1.8	19.4	19.6	35.3	35.7
DYNA-GRO S47RY13	68.2	58.0		1.3	19.3	19.4	34.4	35.4
HALO 4:95	68.1	59.0		1.8	19.6	19.9	34.5	35.4
CAVERNDALE CF 486 RR2Y/STSn	68.0	59.1		2.0	19.3	19.4	35.2	36.0
UNISOUTH GENETICS USG 74E88	67.9			1.6	19.8		35.3	
STINE 48RD00	67.8	50.4	FF 4	1.4	19.5	10.4	34.5	25.7
SCHILLINGER SEED 458.RCS	67.6	58.1	55.1	1.4	19.0	19.4	35.4	35.7
GREAT LAKES HYBRIDS GL4729R2	67.5			1.4	19.7		34.2	
PIONEER P47T36R ARMOR 49-R56	67.1 66.9			1.3 1.7	19.6 19.0	_	34.4 35.9	_
ASGROW AG4632	66.7	58.2	56.5	1.7	19.0	19.6	33.9	34.8
SOUTHERN STATES SS 4725NS R2	66.6	30.2	20.5	1.0	19.0	19.0	35.3	J4.0
WARREN SEED DS 4850 R2Y/STS	66.4	57.8		1.4	19.5	19.1	34.4	35.7
HORNBECK HBK L4850	66.4	5710		1.8	19.8		35.0	55.7
PROGENY 4613 RY	66.3			1.9	19.6		34.7	
ASGROW AG4934	66.3			1.7	19.4		35.2	
BECK 477NR <sup>TM*</sup>	66.3	56.1	52.7	2.1	19.1	19.8	35.7	35.9
PIONEER P48T53R	66.3		F2 (	1.8	19.4	10.2	35.5	27.0
DELTA GROW 4880 RR	66.2	55.5	53.6	2.3	18.8	19.2	36.8	37.2
PFISTER 47R22	66.0	59.1		1.3	19.2	19.3	33.6	34.8
PROGENY 4850 RY BECK 483NL	65.6 65.6	57.4		1.4 1.8	18.8 20.1	19.0	35.4 33.5	35.9
	65.0	55.9		1.0	19.4	19.5	35.5	35.9
STEVER 4702R2	00.2	33.9						
STEYER 4702R2 PROGENY 4710 RY		58.2	56.4	1.7	19.7	20.0	34.5	354
STEYER 4702R2 PROGENY 4710 RY ARMOR 48-R66	64.8 64.8	58.2	56.4	1.7 1.7	19.7 19.2	20.0	34.5 35.5	35.4
PROGENY 4710 RY	64.8	58.2	56.4		19.7 19.2 19.5	20.0		35.4

## Table 5. (continued)

Table 5. (continuea)		YIELD (BU/AC)	A	LODGING	% (	DIL <sup>A,B</sup>	% PRC	DTEIN <sup>A,B</sup>
BRAND VARIETY	2013	2012-13	2011-13	2013	2013	2012-13	2013	2012-13
LG SEEDS C4780R2	64.6	56.6		1.4	18.9	19.0	36.1	36.1
MYCOGEN SEEDS 5N479R2	64.6			1.4	19.0		34.9	
DYNA-GRO S48RS53	64.5	57.8		1.4	18.8	18.9	35.1	35.9
SCHILLINGER SEED 4712R	64.3			2.1	19.3	_	35.8	
PIONEER P49T97R MYCOGEN SEEDS 5N478R2	64.3 64.3			1.4 2.1	19.8 19.4		34.8 34.4	
CAVERNDALE CF 485 LLn	64.2	53.9		1.8	19.4	19.9	35.6	36.0
DELTA GROW 4990 LL	64.1	55.7		1.6	19.6	17.7	32.9	50.0
DELTA GROW 4825 RR2/STS	64.0	56.3		2.1	19.4	19.7	35.7	36.1
ARMOR X47C	63.7	50.5		2.0	19.5	12.7	34.4	50.1
DELTA GROW 4867 LL	63.6			1.8	19.7		34.9	
SOUTHERN STATES SS 4917N R2	63.5			1.2	19.3		34.8	
PROGENY 4747 RY	63.4	55.0		1.5	19.0	19.1	35.4	36.1
HALO X466	63.3			1.3	19.5		34.6	
S49-F8 BRAND	63.1	56.2		1.7	19.5	19.6	34.6	35.5
STEYER 4701R2	63.1	55.2	54.1	2.0	19.6	19.5	34.6	35.7
REV <sup>®</sup> 49R22 <sup>TM</sup>	63.1	53.0	50.5	2.1	19.2	19.4	34.9	35.6
PROGENY 4819 LL	63.1	54.9		1.8	19.7	20.0	34.5	35.3
ARMOR X1406	63.0			1.3	19.6		34.8	
REV <sup>®</sup> 46R64 <sup>TM</sup>	62.9			1.8	20.0		33.8	
CAVERNDALE CF 466 RR2Yn	62.8			1.8	19.3		34.8	
PIONEER P46T21R	62.7			1.4	19.9	10 -	34.1	25.1
DELTA GROW 4925 RR2	62.7	57.1		1.6	19.8	19.7	34.4	35.4
HALO X496	62.6	<b>FF7</b>	EA C	1.5	19.3	10.0	34.9	25.4
SOUTHERN STATES SS 4700 R2-STS	62.5	55.7	54.6	1.6	19.6	19.8	34.8	35.4
SCHILLINGER SEED 495.RC	62.5	53.7	50.9	2.3	19.4	19.4	34.6	35.7
STEYER 4802R2 HALO 4:65	62.5	E2 0	E1 0	1.7	19.1	20.4	36.9	24.5
ARMOR X49C	62.4 62.4	53.8	51.8	2.3 2.3	<b>20.5</b> 19.1	20.4	32.9 35.5	34.5
REV® 47R34 <sup>TM</sup>	62.4			2.3	19.1		34.0	
REV® 49R94 <sup>TM</sup>	62.2			2.2	19.0		35.0	
SOUTHERN STATES LL 473N	62.1			1.7	19.5		33.9	
PIONEER 94Y70	62.1	53.0	52.2	1.9	19.6	20.0	34.7	35.2
SOUTHERN STATES SS 4913N R2	62.0	55.0	JZ.Z	1.6	19.4	20.0	34.1	55.2
DELTA GROW 4967 LL	61.7			2.1	19.4		34.4	
ARMOR X48C	61.6			2.2	19.4		33.4	
UNIVERSITY OF MISSOURI S09-9943	61.5			1.9	19.5		34.8	
PROGENY 4930 LL	61.4			1.5	19.1		34.2	
S46-L2 BRAND	61.1			2.1	19.8		33.7	
ARMOR 49-C3	61.0			3.7	19.0	19.4	36.3	36.2
REV <sup>®</sup> 48R33 <sup>TM</sup>	61.0	52.0	51.9	1.9	19.3		34.5	
CAVERNDALE CF 469 LL/STSn	60.8			1.9	19.6		34.2	
HORNBECK HBK L4950	60.7			1.7	19.7	19.6	35.2	36.0
PROGENY 4900 RY	60.7	54.9		1.6	19.4		33.7	
DELTA GROW 4981 LL/STS	60.5			2.2	19.6		33.5	
S46-G9 BRAND	60.4	52.4	54.4	2.3	20.0	10.6	33.7	25.0
PROGENY 4928 LL	60.1	53.1	51.1	1.8	19.4	19.6	34.4	35.0
HALO 4:97	59.8	F2 (		2.2	19.1	10.7	36.1	25.1
HALO 5:01	59.0	53.6	50.9	1.8	19.2	19.7	35.1	35.1
HALO 4:94 REV® 48R22 <sup>TM</sup>	58.9	53.9	50.8	1.7	19.7	19.9	34.4	34.8
DELTA GROW 4940 RR	58.5 57.7	50.6	49.9	2.1	19.2 19.1	19.5	35.1	35.0
PENNYRILE (long term check-released 1987)	57.7	47.1	43.9	3.3 1.8	19.1	19.4	33.5 36.0	36.4
ENAMILE (IONY LETIT CHECK-TELEASED 1967)	55.4	7/.1	43.7	1.0	10.9	19.4	50.0	50.4
GROUP IV LATE AVERAGE	64.6	56.4	53.3	1.8	19.4	19.6	34.8	35.6
LSD (0.10)	5.5	3.9	3.5		0.8	0.4	1.6	0.8
C.V.	7.4	6.9	7.2		2.9	2.4	3.4	2.5
		•						
MATURITY GROUP V (relative MG 5.0-5.9)D								
ARMOR X1413	66.0			1.3	19.6		35.0	
WARREN SEED DS 5122 R2Y	65.6			1.4	19.4		35.3	
MYCOGEN SEEDS 5N510R2	64.4			1.3	19.5		36.0	
BECK 511R4 <sup>TM*</sup>	64.4			1.3	19.9		37.2	
LG SEEDS C5122R2	63.9			1.3	19.4		35.1	
STEYER 5101R2	63.8			1.3	19.3		35.9	
BECK 522L4	63.5	_		1.3	19.6	_	34.2	
ARMOR X1410	63.3	54.0		2.7	18.6	10 4	35.1	267
UNIVERSITY OF ARKANSAS UA5612	62.9	54.9		3.1	18.5	18.4	36.8	36.7
SEED CONSULTANTS SCS 9574RR HALO 5:01-5	62.8	55.5		2.6 1.8	19.5 19.5	19.4	34.5	34.8
PIONEER 95Y10	62.7 62.7	<b>55.5</b> 55.4	55.3	1.8	19.5	19.4	34.0	34.8
HORNBECK HBK L5350	62.7	55.4	55.5	2.2	19.3	19.1	37.2 35.8	57.5
	62.7 62.4			1.4	19.7		35.8 34.7	
SOLITHERNI STATES LL 513N				1.4	17.1		14./	
SOUTHERN STATES LL 513N								
SOUTHERN STATES LL 513N SEED CONSULTANTS SCS 9544RR USDA-ARS JTN-5203	62.4 62.3 61.9	54.3	54.3	2.8	18.6 19.2	19.4	37.1 36.5	36.3

## Table 5. (continued)

	YIELD (BU/AC)	A	LODGING	% (	DIL <sup>A,B</sup>	% PR	otein <sup>a,b</sup>
2013	2012-13	2011-13	2013	2013	2012-13	2013	2012-13
61.6	52.7	54.4	1.5	19.8	20.1	37.1	36.9
61.6			3.2	18.2		37.3	
61.3			1.3	19.4		37.4	
60.9	53.3		2.2	18.4	18.6	36.5	35.9
60.7	53.6	54.5	2.1	18.5	18.5	36.5	36.5
60.6			1.6	19.4		34.4	
60.1	52.8		1.7	19.1	19.2	36.3	36.8
59.8			2.6	18.4		37.2	
59.7			1.2	19.0		36.2	
59.7	53.5	53.7	2.7	18.6	18.5	36.4	36.4
59.6	54.3	53.5	2.4	19.4	19.4	35.7	35.9
59.5	53.6	55.2	2.1	18.6	18.3	37.2	37.4
59.0	52.2		1.8	18.4	18.5	37.0	36.6
58.6	49.5		2.0	18.0	18.3	36.8	36.8
58.3	51.9		3.2	19.1	19.1	36.1	36.0
58.2	52.9	54.5	2.5	18.5	18.5	38.0	37.8
58.1	48.3		1.8	18.7	18.8	37.3	37.2
57.9	51.0		2.8	18.6	18.7	36.1	36.0
57.6			2.4	17.9		37.9	
57.4	53.3		2.2	19.5	19.2	35.9	36.9
57.2			1.8	18.5		36.2	
57.2	51.8		2.9	18.6	18.7	37.0	36.9
56.6	49.7	48.4	1.9	19.2	18.8	36.5	37.3
56.3			2.6	18.7		34.2	
55.3	50.6		2.9	19.4	19.2	36.3	36.6
55.1			1.7	19.4		34.5	
53.8			2.9	17.9		36.7	
60.4	52.6	53.8	2.1	19.0	18.9	36.1	36.6
4.9	3.4	3.4		0.3	0.2	0.5	0.3
6.0	6.6	7.3		1.2	1.3	1.1	0.8
	2013 61.6 61.6 61.3 60.9 60.7 60.6 60.1 59.8 59.7 59.7 59.7 59.7 59.6 59.5 59.0 58.6 58.3 58.2 58.1 57.9 57.6 57.4 57.2 57.2 57.2 56.6 56.3 55.3 55.1 53.8 <b>60.4</b> 4.9	2013         2012-13           61.6         52.7           61.6         60.7           60.9         53.3           60.7         53.6           60.6         60.1           59.8         59.7           59.7         53.6           59.6         54.3           59.5         53.6           59.0         52.2           58.6         49.5           58.2         52.9           58.1         48.3           57.9         51.0           57.6         57.4           57.9         51.0           57.6         57.4           57.2         51.8           56.6         49.7           56.3         50.6           55.1         53.8           60.4         52.6           4.9         3.4	61.6         52.7         54.4           61.6         52.7         54.4           61.6         61.3         52.7           60.7         53.6         54.5           60.7         53.6         54.5           60.6         60.1         52.8           59.8         59.7         53.5         53.7           59.7         53.5         53.7         59.6           59.7         53.6         55.2         59.0           59.5         53.6         55.2         59.0         52.2           58.6         49.5         58.3         51.9         58.2         52.9         54.5           58.1         48.3         57.9         51.0         57.6         57.4         53.3           57.2         51.8         56.6         49.7         48.4         56.3           55.3         50.6         55.1         53.8         53.8         4.9         3.4         3.4	2013         2012-13         2011-13         2013           61.6         52.7         54.4         1.5           61.6         3.2         1.3           60.9         53.3         2.2           60.7         53.6         54.5         2.1           60.6         1.6         1.6         1.7           59.8         2.6         59.7         1.2           59.7         53.5         53.7         2.7           59.6         54.3         55.2         2.1           59.7         53.6         55.2         2.1           59.6         54.3         53.5         2.4           59.0         52.2         1.8         58.6           58.2         52.9         54.5         2.5           58.1         48.3         1.8         57.9         51.0         2.8           57.6         2.4         57.4         53.3         2.2         57.2           57.2         51.8         2.9         56.6         2.9         55.1         1.7           57.8         2.0.6         2.9         55.1         1.7         53.8         2.9           56.6         49.7         48.		$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$

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

Within a maturity group, shaded yields are not significantly different (0.10) from the highest-yielding cultivar (bold data) of that maturity group and year column.
 B Data was collected at the following locations: 2013—Calloway, Fayette, and Hardin; 2012—Calloway, Daviess, and Fayette.
 Data was collected at the following locations: 2013—Caldwell, Calloway, Fayette, Hardin, and Simpson; 2012—Caldwell, Calloway, Daviess, Fayette, and Simpson; 2011—Caldwell, Calloway, Fayette, Marten.
 D Data was collected at the following locations: 2013—Caldwell, Calloway, Daviess, Fayette, Hardin, and Simpson; 2012—Caldwell, Calloway, Daviess, Fayette, and Simpson; 2011—Caldwell, Calloway, Fayette, McLean, and Warren.

# Table 6. 2013 Kentucky Soybean Variety Performance Tests, Caldwell County.

		IELD (BU/AC		
BRAND VARIETY MATURITY GROUP II (relative MG 2.0-2.9)	2013	2012-13	2011-13	2013
CAVERNDALE CF 286 RR2Y/STSn	67.2	NA	NA	1.3
GROUP II AVERAGE	NA			NA
LSD (0.10)	NA NA			
C.V.	NA			
MATURITY GROUP III (relative MG 3.0-3.9)		_		
PIONEER 39T67R BECK 391R4 <sup>TM*</sup>	<b>80.2</b> 80.1			1.7 1.3
LG SEEDS C3989R2	79.9	65.1		2.7
SEED CONSULTANTS SCS 9354RR	79.3			0.7
UNISOUTH GENETICS USG 73P93R MYCOGEN SEEDS 5N393R2	78.7 78.4	_		1.0 2.0
REV® 38R10 <sup>TM</sup>	77.2	68.5	64.0	1.7
PIONEER 93Y92	75.3	62.6	58.7	1.7
SOUTHERN STATES SS 3813N R2 DYNA-GRO S39RY33	74.7 74.4	_		1.7 2.3
SEED CONSULTANTS SCS 9393RR	74.4			1.0
SEED CONSULTANTS SCS 9363RR	73.8			1.7
PIONEER P35T58R	73.7	-		2.7
WARREN SEED DS 4010 R2Y ASGROW AG3832	73.0 71.9	58.5	57.5	3.7 1.3
STINE 38RD02	71.5			1.3
SEED CONSULTANTS SCS 9373RR ARMOR 39-R16	70.8 70.7	(5.7		1.3
SEED CONSULTANTS SCS 9392RR	69.8	65.7 64.7	58.1	1.3 2.3
PIONEER 93Y84	69.5	59.1	50.1	1.0
NK39-U2 BRAND	68.9	59.3	55.8	2.3
DYNA-GRO S38RY84 ASGROW AG3934	68.1 64.9			2.0 2.0
SOUTHERN STATES SS 3801N R2	64.7			2.7
L&M GLICK 853 R2Y	64.7			2.3
CAVERNDALE CF 380 RR2Yn	62.2			2.0
GROUP III AVERAGE	72.7	62.9	58.8	1.8
LSD (0.10)	9.0	5.1	5.2	
C.V.	9.0	7.8	9.4	
MATURITY GROUP IV EARLY (relative MG 4.0	0-4.5)			
MYCOGEN SEEDS 5N451R2	87.8			2.0
PROGENY 4313 RY SEED CONSULTANTS SCS 9443RR	87.5 86.8	_		2.3 1.7
STEWART 4412R2	86.7	63.9	64.6	1.7
SOUTHERN STATES SS 4312N R2	86.3	63.5	67.8	1.0
WARREN SEED DS 4340 R2Y SEED CONSULTANTS SCS 9434RR	85.8 85.8	61.6		1.7 2.3
CAVERNDALE CF EXP 416 RR2Yn	85.7			1.0
PROGENY 4211 RY	84.4	64.5	62.5	1.3
ARMOR 44-R08 CAVERNDALE CF 456 RR2Y/STSn	84.2 83.5	61.3	63.4	1.7 1.0
NK45-V8 BRAND	82.8			2.3
STINE 45RC32	82.1			3.3
LG SEEDS C4544R2 PIONEER 94Y50	82.0 82.0	65.6	67.6	2.0 1.7
BECK 459L4 <sup>TM*</sup>	82.0	05.0	07.0	1.7
STEYER 4203R2	81.3	61.6	65.0	1.3
PROGENY 4510 RYS BECK 418NR <sup>TM*</sup>	81.1 81.0	64.3	61.9	2.0
BECK 423NL	81.0	63.0		1.3 2.3
DYNA-GRO 39RY43	80.3	63.8	64.6	1.3
SOUTHERN STATES SS 453N	79.8	(2.2		1.3
ARMOR 45-R60 MYCOGEN SEEDS X53413R2	79.7 79.5	63.2		1.0 4.0
STEWART 4512R2	79.5	62.2	63.2	2.0
GREAT LAKES HYBRIDS GL4209R2	79.5	_		1.3
MYCOGEN SEEDS 5N431R2 STEWART 4212R2	79.1 78.9	63.6	64.4	1.0 1.3
SEED CONSULTANTS SCS 9421RR	78.9	57.0	62.2	1.3
STEYER 4401R2	78.6	62.2		1.0
LG SEEDS C4340R2 BIOGENE BG 7441	78.4 78.1	60.1		1.3 1.0
ASGROW AG4232	77.6	61.8	65.3	2.0
		60.3		2.3
BECK 444NR <sup>TM*</sup>	77.0			
STINE 42RD02	77.0			1.3
STINE 42RD02 PFISTER 43R29	77.0 76.6	66.1		1.0
STINE 42RD02 PFISTER 43R29 PROGENY 4560 LL ASGROW AG4433	77.0 76.6 76.5 76.3	<b>66.1</b> 60.7		1.0 2.7 1.3
STINE 42RD02 PFISTER 43R29 PROGENY 4560 LL	77.0 76.6 76.5	66.1		1.0 2.7

SOUTHERN STATES LL 423N 74.9 17 59.5 **BIOGENE BG 7421** 74.8 57.6 1.7 PFISTER 45R22 74.4 1.0 STEWART 4113R2 744 56.8 1.3 CAVERNDALE CF 425 LLn 73.9 2.3 NK43-K1 BRAND 738 30 WARREN SEED DS 4330 R2Y 73.7 1.7 61.5 64.4 DYNA-GRO 38RY45 73.7 13 GREAT LAKES HYBRIDS GL4039R2 73.7 2.0 ASGROW AG4033 73.5 57.6 2.0 PIONEER 94Y23 72.9 59.0 1.0 NK41-J6 BRAND 72.6 52.6 1.7 STEWART 4514R2 71.7 1.0 SOUTHERN STATES SS 4510N R2 71.6 57.4 56.9 1.3 REV<sup>®</sup> 44R22<sup>TM</sup> 71.2 57.2 57.1 1.7 SEED CONSULTANTS SCS 9412RR 70.5 1.3 ARMOR X1401 70.2 1.0 L&M GLICK 412 R2Y 69.1 52.7 59.3 1.3 L&M GLICK 403 R2Y 68.7 1.0 MYCOGEN SEEDS 5N423R2 68.2 1.3 STEYER 4301R2 68.1 55.7 1.0 ASGROW AG4534 67.6 1.7 UNISOUTH GENETICS USG 74A33R 62.2 2.0 AVERAGE GROUP IV EARLY 77.6 60.6 62.9 1.6 LSD (0.10) 9.8 4.9 5.6 C.V. 9.4 8.9 8.9 MATURITY GROUP IV LATE (relative MG 4.5-4.9) SCHILLINGER SEED 4990.RC 89.9 70.2 70.2 2.7 SEED CONSULTANTS SCS 9494RR 3.0 86.1 85.7 ARMOR X1409 2.0 DELTA GROW 4755 RR2 85.3 64.5 2.3 STEWART 4714R2 85.0 20 BECK 483NL 83.6 3.0 HORNBECK HBK RY4721 83.5 64.9 3.0 HORNBECK HBK L4850 83.2 3.3 DYNA-GRO S47RY13 66.2 82.6 2.0 HALO 4:95 82.1 63.0 2.7 PIONEER P47T36R 81.3 1.3 HORNBECK HBK RY4620 63.9 65.5 81.0 23 SEED CONSULTANTS SCS 9474RR 80.8 2.0 63.9 66.6 STEYER 4701R2 80.7 2.3 SCHILLINGER SEED 458.RCS 80.4 63.9 64.8 2.0 ARMOR 47-R13 80.0 68.3 3.3 DELTA GROW 4765 RR2/STS 79.9 63.5 2.3 ASGROW AG4934 79.8 2.0 GREAT LAKES HYBRIDS GL4729R2 78.2 2.3 STEYER 4802R2 77.9 2.7 HALO 4:94 77.8 65.5 63.7 3.3 SOUTHERN STATES SS 4917N R2 77.7 1.7 SOUTHERN STATES SS 4725NS R2 77.5 2.0 ARMOR 48-R66 77.2 2.7 REV® 47R53TM 77.0 60.7 62.1 3.0 ASGROW AG4933 76.9 57.6 2.0 CAVERNDALE CF 486 RR2Y/STSn 59.4 76.9 3.7 PIONEER 94Y70 76.6 58.3 60.9 2.3 REV<sup>®</sup> 48R44<sup>TM</sup> 76.0 2.3 DELTA GROW 4880 RR 58.7 59.9 75.7 3.3 **ARMOR 49-R56** 75.5 3.0 PROGENY 4710 RYS 75.5 63.1 64.4 2.7 REV<sup>®</sup> 49R94<sup>TM</sup> 74.8 2.7 HALO X466 74.5 1.7 PIONEER P49T97R 74.4 1.7 SOUTHERN STATES SS 4913N R2 74.3 2.0 73.8 ASGROW AG4632 61.7 64.8 2.0 BECK 477NR<sup>TM\*</sup> REV<sup>®</sup> 48R22<sup>TM</sup> 73.5 61.5 61.5 2.7 57.2 73.4 51.6 2.3 HALO 4:97 73.4 3.0 NK49-F8 BRAND 58.6 73.3 3.0 UNISOUTH GENETICS USG 74E88 72.9 2.3 WARREN SEED DS 4850 R2Y/STS 617 72.8 20 REV<sup>®</sup> 48R33<sup>TM</sup> 62.2 72.7 57.1 2.3 DELTA GROW 4867 LL 72.6 27 PROGENY 4819 LL 72.4 61.7 3.0 DELTA GROW 4670 RR2 72.1 63.2 65.3 23 MYCOGEN SEEDS 5N478R2 72.1 3.0 STINE 48RD00 72.0 2.3 SOUTHERN STATES SS 4700 R2-STS 71.9 59.7 64.2 2.7 NK46-L2 BRAND 71.9 2.7 61.5 HALO 4:65 71.8 61.5 3.3

YIELD (BU/AC)A

2012-13

2011-13

2013

LODGING

2013

Table 6. (continued)

**BRAND VARIETY** 

## Table 6. (continued)

	Y	IELD (BU/AC	)A	LODGING
BRAND VARIETY	2013	2012-13	2011-13	2013
DELTA GROW 4967 LL REV® 47R34 <sup>TM</sup>	71.7 71.7			3.7 3.3
PROGENY 4613 RYS	71.7			3.0
WARREN SEED DS 4633 R2Y	71.4	57.3		2.3
CAVERNDALE CF 496 RR2Yn	71.4	(2)(		2.0
PROGENY 4850 RYS REV® 46R64 <sup>TM</sup>	71.1 70.8	63.6		2.0 3.0
CAVERNDALE CF 466 RR2Yn	70.8			2.7
HALO X496	70.6			2.7
NK46-G9 BRAND	70.2	(0.2		3.3
PFISTER 47R22 PROGENY 4747 RY	69.8 69.5	60.2 54.7		2.0 2.0
PROGENY 4928 LL	69.5	58.1	58.9	3.0
ASGROW AG4832	69.5	54.6	59.2	2.0
SCHILLINGER SEED 495.RC MYCOGEN SEEDS 5N479R2	69.4 69.3	57.1	57.3	3.0 2.0
DELTA GROW 4925 RR2	69.0	61.2		2.0
SCHILLINGER SEED 4712R	69.0			2.0
UNIVERSITY OF MISSOURI S09-9943	68.8		50 F	3.0
REV <sup>®</sup> 49R22 <sup>TM</sup> DELTA GROW 4825 RR2/STS	68.6 68.2	55.5 56.0	58.5	3.7 3.0
DYNA-GRO S48RS53	68.2	60.2		2.0
CAVERNDALE CF 469 LL/STSn	68.2			2.7
LG SEEDS C4780R2	67.9	57.7		2.3
DELTA GROW 4990 LL ARMOR X1406	67.4 66.7			3.0 2.0
LG SEEDS C4867R2	66.5			3.3
DELTA GROW 4940 RR	66.4			4.3
PIONEER P46T21R CAVERNDALE CF 485 LLn	66.2 66.0	55.4		2.7 2.7
STEYER 4702R2	65.6	53.3		2.7
PROGENY 4900 RY	65.5	55.6		3.0
ARMOR X47C	65.5			3.0
HORNBECK HBK L4950 ARMOR X49C	64.6 64.3			3.0 3.3
ASGROW AG4831	64.1	55.2		2.3
SOUTHERN STATES LL 473N	62.1			3.3
HALO 5:01	60.7	57.8		2.7
PROGENY 4930 LL DELTA GROW 4981 LL/STS	60.5 60.3			2.7
ARMOR 49-C3	58.3			4.3
PENNYRILE (long term check-released 1987)	57.7	50.0	51.1	3.3
PIONEER P48T53R ARMOR X48C	57.6 56.5			3.0 3.0
Animon A40C	50.5			5.0
AVERAGE GROUP IV LATE	72.6	59.9	61.9	2.6
LSD (0.10) C.V.	6.2 6.3	4.1 6.7	3.7 6.8	
C.V.	0.5	0.7	0.0	
MATURITY GROUP V (5.0-5.9)				
SEED CONSULTANTS SCS 9574RR MYCOGEN SEEDS 5N510R2	<b>89.0</b>			2.7
DELTA GROW 5461 LL	83.6 82.5	_		2.0 2.0
SEED CONSULTANTS SCS 9544RR	82.4			2.7
HALO 5:01-5	82.0	61.5		2.7
WARREN SEED DS 5122 R2Y ARMOR X1413	80.6 80.4			1.7 2.0
PIONEER 95Y10	79.3	61.9	62.1	1.3
USDA-ARS JTN-5203	78.1	60.4	60.1	3.0
UNISOUTH GENETICS USG ALLEN	76.7	60.8	62.4	2.7
LG SEEDS C5122R2 BECK 511R4 <sup>TM*</sup>	76.5 76.2			2.0 1.3
HORNBECK HBK RY5221	75.7	54.2		2.7
STEYER 5101R2	75.6			1.7
DELTA GROW 5361 LL	74.9	50.0	566	3.3
ESSEX (long term check-released 1974) HALO 5:26	74.8 73.0	58.0 56.0	56.6	1.7 2.3
BECK 522L4	73.0	50.0		2.0
PIONEER P50T40R	72.4			1.7
SOUTHERN STATES LL 513N	72.2	56.2		2.0
UNIVERSITY OF ARKANSAS UA5612 UNIVERSITY OF ARKANSAS R04-1250RR	71.5 71.5	56.2		3.0 3.0
HALO 5:45	71.4	59.9		2.0
UNIVERSITY OF ARKANSAS OZARK	70.4	57.4	58.5	3.7
DELTA GROW 5130 RR2 UNISOUTH GENETICS USG 5002T	70.4 69.9	56.7	58.2	1.3 3.0
MYCOGEN SEEDS 5N540R2	69.9 69.8	50./	30.2	3.0
UNISOUTH GENETICS USG 5601T	69.0	57.8	61.5	2.0
REV® 55R53TM	68.8	60.2	56.2	3.0
REV <sup>®</sup> 51R53 <sup>TM</sup> HORNBECK HBK L5350	68.1 68.0	52.2	56.2	2.0 2.0
HALO X530	67.6			2.0
				continued

## Table 6. (continued)

	Y	IELD (BU/AC	:)A	LODGING
BRAND VARIETY	2013	2012-13	2011-13	2013
REV <sup>®</sup> 52R74 <sup>TM</sup>	67.4	57.0		2.3
ARMOR X1410	67.0			3.3
UNIVERSITY OF ARKANSAS UA5213C	66.7			3.3
DELTA GROW 5625 RR2	66.7			3.3
DELTA GROW 5481 LL	66.4			2.3
HORNBECK HBK RY5421	65.4	49.0		3.0
REV <sup>®</sup> 54R84 <sup>TM</sup>	62.9	53.1		3.7
REV <sup>®</sup> 53R23 <sup>TM</sup>	62.2	43.9		1.7
EXP USDA-ARS JTN-5110	60.0	47.7		3.0
REV <sup>®</sup> 59R13 <sup>TM</sup>	57.6	49.3		3.0
UNIVERSITY OF ARKANSAS OSAGE	57.0	51.7	57.3	3.0
UNIVERSITY OF ARKANSAS R04-1268RR	53.5			3.0
AVERAGE GROUP V	71.5	55.5	59.2	2.5
LSD (0.10)	6.5	4.3	3.7	
C.V.	6.7	7.2	7.2	

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

## **AGRONOMIC INFORMATION**

Location	Caldwell County
Soil type	Crider silt loam
Previous crop	Tobacco (wheat as winter cover crop)
Soil test	NA
Fertilizer applied	None
Agricultural practice	No-till
Pre-planting treatments	Gramoxone (3 pt/ac), Dual II Magnum (1.3 pt/ac), and Spartan
	(5.33 oz/ac) June
Planting dates	MG II, III, and MG IV Early 5/15/2013
_	MG IV Late and V 5/16/2013
Harvest dates	MG II, III 11/09
	MG IV 11/10
	MG V 11/11
50% chance of killing frost	10/21

Precipitation and temperature history (Caldwell County)

	Total Monthly	Temperature (°F)				
	Precipitation (in.)	Average Monthly	Highest Recorded	Lowest Recorded		
March	4.29	41.1	72.4	18.0		
April	5.72	56.0	84.6	28.5		
May	4.26	65.7	86.6	37.2		
June	7.55	73.8	91.2	52.8		
July	4.43	74.0	91.3	51.3		
August	5.59	74.8	92.2	53.7		
September	5.36	70.2	90.2	46.5		
October	4.19	58.3	83.9	25.1		
November (11/1-11)	0.41	44.8	67.6	28.2		

## Table 7. 2013 Kentucky Soybean Variety Performance Tests, Calloway County.

Calloway County.	Y	IELD (BU/AC	)A	LODGING
BRAND VARIETY	2013	2012-13	2011-13	2013
MATURITY GROUP II (relative MG 2.0-2.9) CAVERNDALE CF 286 RR2Y/STSn	72.7	NA	NA	1.0
GROUP II AVERAGE LSD (0.10)	NA NA			NA
C.V.	NA			
MATURITY GROUP III (relative MG 3.0-3.9)				
DYNA-GRO S38RY84	83.2			1.0
SEED CONSULTANTS SCS 9373RR SOUTHERN STATES SS 3813N R2	78.1 76.7	_		1.0 1.0
ARMOR 39-R16	76.6	56.2		1.0
ASGROW AG3832	75.2	51.3	46.3	1.0
LG SEEDS C3989R2 PIONEER 39T67R	74.6 74.2	56.0		2.0 1.0
CAVERNDALE CF 380 RR2Yn	72.6			1.3
PIONEER P35T58R	71.9			1.3
MYCOGEN SEEDS 5N393R2 PIONEER 93Y84	71.7 71.3	55.0		1.0 1.0
SEED CONSULTANTS SCS 9393RR	69.8	55.0		1.0
SEED CONSULTANTS SCS 9363RR	69.2			1.0
STINE 38RD02 BECK 391R4 <sup>TM*</sup>	68.8 66.4			1.0 1.0
UNISOUTH GENETICS USG 73P93R	66.3			1.0
SEED CONSULTANTS SCS 9354RR	65.3			1.0
NK39-U2 BRAND	64.4	47.8	45.7	1.0
SEED CONSULTANTS SCS 9392RR L&M GLICK 853 R2Y	61.6 60.1	47.3	46.7	1.0 2.7
DYNA-GRO S39RY33	59.4			2.0
ASGROW AG3934	58.8			1.3
REV® 38R10 <sup>TM</sup> SOUTHERN STATES SS 3801N R2	57.7 56.8	47.4	46.4	1.0 1.0
PIONEER 93Y92	56.3	48.0	45.8	1.0
WARREN SEED DS 4010 R2Y	56.2			3.7
GROUP III AVERAGE	63.5	51.1	46.2	1.3
LSD (0.10)	7.7	4.0	3.5	
C.V.	8.2	7.0	7.1	
MATURITY GROUP IV EARLY (relative MG 4.	0-4.5)	_		
WARREN SEED DS 4340 R2Y	90.3	-		2.0
SEED CONSULTANTS SCS 9412RR SOUTHERN STATES LL 423N	82.9 82.8	-		1.3 2.3
STEYER 4203R2	81.7	65.8	56.7	2.0
ARMOR 44-R08	81.5	64.9	55.4	1.7
ARMOR X1401 MYCOGEN SEEDS 5N451R2	79.6 78.7			1.0 2.0
HALO 4:40	78.1			2.7
PFISTER 45R22	77.5			1.7
BIOGENE BG 7441 BECK 418NR <sup>TM*</sup>	77.2 76.6			1.3 2.0
STEWART 4514R2	76.3			1.7
PIONEER 94Y23	76.3			1.7
L&M GLICK 412 R2Y BECK 423NL	76.2 76.1	65.9	56.3	1.7 2.7
DYNA-GRO 39RY43	76.1	60.0	53.0	1.7
STEWART 4113R2	76.0			2.0
CAVERNDALE CF 456 RR2Y/STSn NK43-K1 BRAND	75.8 74.6			2.0 3.3
ASGROW AG4033	74.0			2.0
UNISOUTH GENETICS USG 74A33R	73.5			2.3
GREAT LAKES HYBRIDS GL4039R2	73.1 72.6			1.0 1.7
ASGROW AG4433 LG SEEDS C4411R2	72.0			1.7
NK41-J6 BRAND	72.3			3.0
GREAT LAKES HYBRIDS GL4209R2	72.1	<b>57 5</b>		1.7
STINE 45RC32 CAVERNDALE CF EXP 416 RR2Yn	72.1 72.0	57.5		2.7 1.3
SOUTHERN STATES SS 4510N R2	71.7	56.0	50.6	1.7
STINE 42RD02	71.7	56.0	FOC	1.7
STEWART 4512R2 STEYER 4401R2	71.6 70.9	56.8	50.6	2.0 1.3
CAVERNDALE CF 425 LLn	70.7			2.7
WARREN SEED DS 4330 R2Y	70.7			2.0
BECK 444NR <sup>TM*</sup> BIOGENE BG 7421	70.6 70.6	59.7	52.0	1.7 1.0
ASGROW AG4534	70.6	59.7	52.0	1.0
LG SEEDS C4340R2	70.2			2.0
MYCOGEN SEEDS 5N423R2 SEED CONSULTANTS SCS 9434RR	70.1 70.1			2.0 3.7
JLLD CUNJULIANI J JCJ 9434KK	70.1			5./

Table 7. (continued)

BRAND VARIETY	2013	ELD (BU/AC 2012-13	<u>-)^</u> 2011-13	LODGIN 2013
MYCOGEN SEEDS X53413R2	70.0	1012 13	201110	4.0
ARMOR 45-R60	70.0			1.7
MYCOGEN SEEDS 5N431R2	69.9			2.0
STEWART 4412R2	69.8	55.5	48.6	2.0
PIONEER 94Y50	69.3	58.0	52.9	2.3
SEED CONSULTANTS SCS 9443RR	68.2			1.7
DYNA-GRO 38RY45	68.0	55.8	48.5	2.0
REV® 44R22TM	67.8	56.3	48.7	2.3
G SEEDS C4544R2	66.8			2.3
PROGENY 4313 RY PFISTER 43R29	66.7 66.6			2.7 2.3
STEYER 4301R2	66.5			1.0
PROGENY 4211 RY	66.4	56.4	48.8	2.0
SEED CONSULTANTS SCS 9421RR	66.2	57.0	50.9	2.3
SOUTHERN STATES SS 453N	66.0	5710	5015	1.7
NK45-V8 BRAND	65.4			2.7
STEWART 4212R2	64.3	54.9	48.3	1.3
SOUTHERN STATES SS 4312N R2	64.1	57.1	50.6	2.0
PROGENY 4560 LL	63.0			3.0
BECK 459L4 <sup>TM*</sup>	61.4			3.0
&M GLICK 403 R2Y	60.2			2.0
ASGROW AG4232	59.6	55.0	48.7	2.3
PROGENY 4510 RYS	59.3	52.0	47.0	1.3
GROUP IV EARLY AVERAGE	71.7	58.0	51.0	2.0
_SD (0.10) C.V.	8.7 9.0	5.8 8.2	3.7 7.2	
	9.0	0.2	1.2	
MATURITY GROUP IV LATE (relative MG 4				4.2
WARREN SEED DS 4633 R2Y	94.9	<b>68.6</b>		1.3
DELTA GROW 4755 RR2 DELTA GROW 4880 RR	92.4	63.9	(1)	1.3
CAVERNDALE CF 485 LLn	91.9 90.3	64.3 64.2	61.3	3.0 1.3
CAVERNDALE CF 465 LLIT	90.3 89.3	04.2		1.3
ASGROW AG4933	89.5 88.1	61.9		1.3
HORNBECK HBK RY4620	86.9	64.1	61.6	1.3
STINE 48RD00	86.7	01.1	0110	1.3
ASGROW AG4832	86.2	60.4	59.9	2.0
REV <sup>®</sup> 49R22 <sup>TM</sup>	84.5	60.1	53.9	2.0
BECK 483NL	84.5			2.0
SOUTHERN STATES LL 473N	84.4			1.7
JNISOUTH GENETICS USG 74E88	84.0			2.3
DELTA GROW 4990 LL	83.9			2.0
PFISTER 47R22	83.6	63.3		1.0
LG SEEDS C4867R2	83.3	(2.4	50.2	1.3
DELTA GROW 4670 RR2 SEED CONSULTANTS SCS 9474RR	83.2 82.5	62.4	58.2	2.3 1.7
SCHILLINGER SEED 4990.RC	82.5	61.1	58.3	1.7
BECK 477NR <sup>TM*</sup>	82.2	58.2	51.6	2.0
PIONEER P49T97R	82.0	J0.2	51.0	1.7
PROGENY 4747 RY	81.9	63.8		1.0
REV® 46R64 <sup>TM</sup>	81.9	05.0		1.3
SEED CONSULTANTS SCS 9494RR	81.4			2.0
STEYER 4802R2	81.3			2.0
HALO 4:65	81.2	56.2	54.1	2.3
ASGROW AG4831	81.2	63.8		1.3
DYNA-GRO S47RY13	81.2	58.8		1.0
DELTA GROW 4765 RR2/STS	80.7	63.4		1.0
DELTA GROW 4925 RR2	80.5	62.6		1.7
REV® 49R94 <sup>TM</sup> PROGENY 4930 LL	80.5			1.7
HORNBECK HBK RY4721	80.4 80.4	60.7		1.3 2.3
PIONEER P48T53R	79.7	00.7		2.5
STEWART 4714R2	79.7			1.3
ARMOR X48C	79.2			2.3
ARMOR X1406	79.0			1.0
REV® 48R44 <sup>TM</sup>	78.7			1.7
MYCOGEN SEEDS 5N478R2	78.2			2.0
SOUTHERN STATES SS 4725NS R2	78.1			1.7
ARMOR 49-R56	77.9			1.3
DELTA GROW 4981 LL/STS	77.8	F0 -		2.7
CAVERNDALE CF 486 RR2Y/STSn	77.7	58.4		2.0
HALO 4:95	77.4	61.3		1.7
	77.3	58.5		1.3
DYNA-GRO S48RS53	77.2	50.0	55.7	1.0 2.0
PIONEER P46T21R				/11
PIONEER P46T21R ASGROW AG4632	77.0	58.8		
PIONEER P46T21R ASGROW AG4632 SOUTHERN STATES SS 4700 R2-STS	77.0 76.9	58.8 57.8	54.9	1.3
PIONEER P46T21R ASGROW AG4632 SOUTHERN STATES SS 4700 R2-STS NK46-L2 BRAND	77.0 76.9 76.9			1.3 1.7
PIONEER P46T21R ASGROW AG4632 SOUTHERN STATES SS 4700 R2-STS	77.0 76.9			1.3

continued

## Table 7. (continued)

	Y	IELD (BU/AC	)A	LODGING
BRAND VARIETY	2013	2012-13	2011-13	2013
PROGENY 4710 RYS PIONEER P47T36R	76.2 76.2	59.0	56.5	1.3 1.3
ARMOR X1409	76.1			1.0
ARMOR 47-R13	76.0	58.5		1.0
STEYER 4701R2	75.2	57.2	55.9	2.0
PIONEER 94Y70 HALO X496	75.1 74.9	53.9	54.4	1.3 1.7
PROGENY 4928 LL	74.5	55.2	51.0	2.0
LG SEEDS C4780R2	74.5	58.2		1.0
PROGENY 4819 LL	73.9	55.1	51.6	2.0
SCHILLINGER SEED 495.RC HORNBECK HBK L4850	73.8 73.8	56.2	51.6	3.3 2.0
ASGROW AG4934	73.6			1.7
PROGENY 4900 RY	73.5	56.6		1.3
CAVERNDALE CF 469 LL/STSn MYCOGEN SEEDS 5N479R2	73.4			3.0
HORNBECK HBK L4950	73.0 72.7			1.3 2.0
DELTA GROW 4867 LL	71.6			2.0
SCHILLINGER SEED 4712R	71.5			1.0
PROGENY 4850 RYS CAVERNDALE CF 466 RR2Yn	71.4 71.2	53.0		1.0 2.3
DELTA GROW 4825 RR2/STS	71.2	56.5		1.7
STEYER 4702R2	70.9	56.3		1.0
DELTA GROW 4940 RR	70.5			3.3
SOUTHERN STATES SS 4917N R2 ARMOR 48-R66	70.3 69.9			1.3 1.0
SCHILLINGER SEED 458.RCS	69.9	51.2	50.5	2.0
REV <sup>®</sup> 48R33 <sup>TM</sup>	69.9	51.7	51.5	2.3
REV® 48R22TM	69.4	55.9	52.4	3.0
HALO X466 UNIVERSITY OF MISSOURI S09-9943	69.2 69.0			1.3 2.3
ARMOR X49C	69.0			2.7
HALO 4:97	68.9			2.7
ARMOR X47C WARREN SEED DS 4850 R2Y/STS	68.8	55.2		2.3
HALO 5:01	68.6 68.5	55.2 53.5		1.7 2.3
ARMOR 49-C3	68.3	0010		3.0
REV® 47R53 <sup>TM</sup>	68.1	51.5	50.7	2.0
NK46-G9 BRAND REV® 47R34 <sup>TM</sup>	67.6 66.9			2.0
HALO 4:94	65.6	55.6	51.9	2.0
SOUTHERN STATES SS 4913N R2	65.3			2.0
DELTA GROW 4967 LL	64.5	10.2	44.2	2.3
PENNYRILE (long term check-released 1987)	55.5	40.3	41.2	2.0
GROUP IV LATE AVERAGE	76.8	58.4	54.1	1.8
LSD (0.10)	6.0 5.8	3.9	3.7	
C.V.	5.0	6.3	7.1	
MATURITY GROUP V (relative MG 5.0-5.9)				
STEYER 5101R2	82.1			1.7
MYCOGEN SEEDS 5N510R2 REV® 59R13 <sup>TM</sup>	82.0 78.3	59.3		1.0 2.0
SOUTHERN STATES LL 513N	78.2	59.5		2.0
REV <sup>®</sup> 52R74 <sup>TM</sup>	76.5	55.3		1.7
UNIVERSITY OF ARKANSAS UA5612	76.2	60.8		3.3
BECK 511R4 <sup>TM*</sup> ARMOR X1413	75.5 75.1			1.7 1.0
USDA-ARS JTN-5203	74.5	54.8	55.4	2.3
UNISOUTH GENETICS USG ALLEN	72.8	56.6	56.9	2.0
HORNBECK HBK L5350	72.6	540	52.2	2.0
PIONEER 95Y10 UNIVERSITY OF ARKANSAS UA5213C	72.1 72.0	54.8	53.3	2.0 3.3
UNIVERSITY OF ARKANSAS OKSZISC	71.9	57.1	56.8	2.7
MYCOGEN SEEDS 5N540R2	71.3			2.0
UNISOUTH GENETICS USG 5002T WARREN SEED DS 5122 R2Y	69.0	55.7	52.5	2.3
LG SEEDS C5122R2	68.3 68.0			1.7 1.0
REV® 54R84 <sup>TM</sup>	67.5	55.5		3.3
ARMOR X1410	67.1			3.0
REV <sup>®</sup> 53R23 <sup>TM</sup> PIONEER P50T40R	66.8 66.7	46.7		2.0
UNIVERSITY OF ARKANSAS OZARK	66.6	54.2	56.4	2.0
DELTA GROW 5130 RR2	66.6		2.511	1.3
BECK 522L4	66.5	53.0		1.3
HALO 5:45 DELTA GROW 5481 LL	66.0 64.8	53.2		1.7 2.0
HALO 5:26	64.8	53.1		2.0
UNIVERSITY OF ARKANSAS R04-1250RR	63.9			3.0
DELTA GROW 5461 LL	63.8	50.7	57.0	2.0
UNISOUTH GENETICS USG 5601T	62.8	50.7	57.8	2.0
				continued

## Table 7. (continued)

	Y	IELD (BU/AC	C)A	LODGING
BRAND VARIETY	2013	2012-13	2011-13	2013
SEED CONSULTANTS SCS 9544RR	61.7			3.0
HORNBECK HBK RY5421	61.4	51.8		3.0
ESSEX (long term check-released 1974)	61.2	47.0	46.7	2.0
REV <sup>®</sup> 55R53 <sup>TM</sup>	61.1	47.8		2.7
DELTA GROW 5361 LL	60.5			3.0
HALO X530	60.3			1.7
UNIVERSITY OF ARKANSAS R04-1268RR	60.2			2.7
DELTA GROW 5625 RR2	59.7			2.7
SEED CONSULTANTS SCS 9574RR	58.9			2.3
REV <sup>®</sup> 51R53 <sup>TM</sup>	58.0	49.0	50.5	1.7
HALO 5:01-5	57.6	50.8		2.0
HORNBECK HBK RY5221	57.0	44.1		2.0
EXP USDA-ARS JTN-5110	56.4	47.0		3.0
GROUP V AVERAGE	67.4	52.6	54.0	2.1
LSD (0.10)	4.2	2.9	3.5	
C.V.	4.6	5.1	7.3	

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

## **AGRONOMIC INFORMATION**

Location	Calloway County
Soil type	Grenada silt loam A
Previous crop	Tobacco (winter wheat cover crop)
Soil test	pH 6.24
	P 120
	K 232
Fertilizer applied	None
Agricultural practice	Shallow tillage
Pre-planting treatments	Spartan Charge (8 oz/ac), Zidua (2.5 oz/ac), and Glyphosate
	(24 oz/ac) 05/13/2013
Planting date	5/24/2013
Harvest dates	MG II, III 9/27
	MG IV Early 10/10
	MG IV Late, V 11/02
50% chance of killing frost	10/30

Precipitation and temperature history (Calloway County)

	Total Monthly	Temperature (°F)					
	Precipitation (in.)	Average Monthly	Highest Recorded	Lowest Recorded			
March	5.01	42.2	74.8	20.8			
April	7.95	56.7	83.9	32.9			
May	5.65	66.0	85.7	39.6			
June	9.23	75.0	92.3	54.2			
July	5.15	74.8	91.6	54.5			
August	6.06	75.3	91.5	53.9			
September	4.54	70.8	89.6	49.4			
October	3.51	59.5	83.9	29.3			
November (11/1-2)	0.00	52.5	68	36.1			

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## Table 8. 2013 Kentucky Soybean Variety Performance Tests, Daviess County.

YIELD (BU/AC)A LODGING						
BRAND VARIETY	2013	2012-13	2011-13	LODGING 2013		
MATURITY GROUP IV EARLY (relative MG 4						
STEWART 4412R2	72.9	62.4	59.5	1.0		
BECK 444NR <sup>TM*</sup>	71.8	61.1		1.0		
BECK 423NL PIONEER 94Y50	71.7 69.5	62.3	60.5	1.0 1.0		
ASGROW AG4033	69.1	62.6	00.5	1.0		
ASGROW AG4433	68.8	62.4		1.0		
MYCOGEN SEEDS 5N451R2	67.2			1.0		
MYCOGEN SEEDS X53413R2	66.7			1.3		
MYCOGEN SEEDS 5N423R2 GREAT LAKES HYBRIDS GL4039R2	66.3 66.1			1.0 1.0		
PROGENY 4510 RYS	65.5	61.2	62.3	1.0		
PFISTER 45R22	64.8			1.0		
WARREN SEED DS 4330 R2Y	64.0			1.0		
PROGENY 4313 RY SEED CONSULTANTS SCS 9434RR	63.9 62.3			1.0 1.0		
ARMOR 44-R08	62.0	58.5	58.9	1.0		
PFISTER 43R29	61.4	56.4		1.0		
CAVERNDALE CF 456 RR2Y/STSn	61.3			1.0		
MYCOGEN SEEDS 5N431R2 SEED CONSULTANTS SCS 9443RR	60.9 59.7			1.0 1.0		
L&M GLICK 403 R2Y	59.7			1.0		
ASGROW AG4232	58.8	58.5	58.7	1.3		
SOUTHERN STATES SS 4312N R2	58.8	57.3	58.0	1.0		
DYNA-GRO 38RY45	58.7	61.2	59.2	1.0		
ARMOR X1401	58.3	50.9	58.7	1.0		
L&M GLICK 412 R2Y NK45-V8 BRAND	57.8 57.8	59.8	30./	1.0 1.0		
BIOGENE BG 7421	57.5	53.7	56.2	1.0		
PROGENY 4211 RY	57.4	57.8	56.1	1.0		
STINE 45RC32	57.3			1.3		
CAVERNDALE CF EXP 416 RR2Yn BIOGENE BG 7441	57.2			1.0		
STEYER 4301R2	57.1 57.0	58.5		1.0 1.0		
PIONEER 94Y23	56.7	59.0		1.0		
SOUTHERN STATES SS 4510N R2	56.4	55.3	56.2	1.3		
STEWART 4514R2	56.4			1.0		
STEWART 4512R2 LG SEEDS C4411R2	56.3	54.8	55.6	1.0		
PROGENY 4560 LL	56.2 55.8	53.9		1.0 1.0		
SEED CONSULTANTS SCS 9421RR	55.8	54.6	54.6	1.0		
ARMOR 45-R60	55.7	55.1		1.0		
STINE 42RD02	55.4			1.0		
REV <sup>®</sup> 44R22 <sup>TM</sup> SEED CONSULTANTS SCS 9412RR	55.0 54.9	54.1	52.7	1.0 1.0		
UNISOUTH GENETICS USG 74A33R	54.9			1.0		
CAVERNDALE CF 425 LLn	54.5			1.0		
HALO 4:40	54.3			1.0		
LG SEEDS C4544R2	53.9	F0 7	547	1.0		
STEYER 4203R2 SOUTHERN STATES LL 423N	53.7 53.6	53.7	54.7	1.0 1.0		
SOUTHERN STATES SS 453N	53.4			1.0		
DYNA-GRO 39RY43	53.3	55.1	56.5	1.0		
STEWART 4113R2	53.0	56.0		1.0		
STEYER 4401R2	52.6	54.6	F2 F	1.0		
STEWART 4212R2 WARREN SEED DS 4340 R2Y	52.6	54.6	53.5	1.0		
BECK 418NR <sup>TM*</sup>	52.6 51.4	53.9 55.5		1.0 1.3		
GREAT LAKES HYBRIDS GL4209R2	51.4	55.5		1.0		
LG SEEDS C4340R2	50.4	56.2		1.0		
NK41-J6 BRAND	49.8	52.7		1.0		
NK43-K1 BRAND BECK 459L4 <sup>TM*</sup>	46.4 46.1			1.0		
ASGROW AG4534	40.1			1.0 1.0		
	11.0					
GROUP IV EARLY AVERAGE	58.2	57.2	57.2	1.0		
LSD (0.10)	4.9	3.3	2.8			
C.V.	6.2	6.1	5.9			
MATURITY GROUP IV LATE (relative MG 4.	6-4.9)					
ARMOR 49-C3	77.2			4.0		
SEED CONSULTANTS SCS 9494RR	75.4	45.5		1.0		
ASGROW AG4831	74.4	67.5		1.0		
GREAT LAKES HYBRIDS GL4729R2 DELTA GROW 4765 RR2/STS	74.2 72.8	63.4		1.3 1.0		
PIONEER P48T53R	72.2			0.8		
ASGROW AG4832	71.5	62.3	59.3	1.6		
ARMOR 47-R13	71.2	64.2		1.0		
HALO 4:95	70.4	64.9		1.3		
				continued		

Table 8. (continued)

Table 8. (continued)	V	ELD (BU/AC	1A	
BRAND VARIETY	2013	2012-13	2011-13	LODGING 2013
SEED CONSULTANTS SCS 9474RR	69.9			2.3
SOUTHERN STATES SS 4917N R2 DELTA GROW 4670 RR2	69.3 68.8	61.8	59.1	1.0 1.0
HALO X466	68.3	01.0	39.1	1.0
ARMOR X48C	68.3			1.1
CAVERNDALE CF 486 RR2Y/STSn ASGROW AG4933	68.2 68.1	63.1 60.9		2.0 1.0
DELTA GROW 4825 RR2/STS	67.8	61.1		2.0
DELTA GROW 4880 RR	66.7	59.0	56.0	2.3
STEYER 4701R2 CAVERNDALE CF 496 RR2Yn	65.9 65.9	57.8	56.7	2.0 1.0
REV® 47R34 <sup>TM</sup>	65.9			2.0
DYNA-GRO S47RY13	65.3	59.0		1.3
HORNBECK HBK RY4620	65.3	61.2	59.1	1.0
PIONEER P47T36R MYCOGEN SEEDS 5N479R2	65.2 64.7			1.0 1.3
SOUTHERN STATES SS 4725NS R2	64.6			1.0
PROGENY 4819 LL	64.2	58.8		1.0
UNISOUTH GENETICS USG 74E88 WARREN SEED DS 4850 R2Y/STS	64.0 63.9	56.9		1.0 1.0
DELTA GROW 4867 LL	63.4			1.0
LG SEEDS C4780R2	62.8	55.6		1.0
HORNBECK HBK RY4721 SCHILLINGER SEED 4990.RC	62.7 62.7	57.2 55.6	55.4	1.7 1.7
REV <sup>®</sup> 49R94 <sup>TM</sup>	62.6	55.0	55.1	2.7
ARMOR 48-R66	62.6	<b>F7 7</b>		1.0
PROGENY 4900 RY STEWART 4714R2	61.5 61.3	57.7		1.7 1.0
PFISTER 47R22	61.1	55.2		1.0
MYCOGEN SEEDS 5N478R2	61.1			1.7
ARMOR X47C ARMOR X1409	61.0 61.0			1.0 1.0
HORNBECK HBK L4950	60.6			1.0
DELTA GROW 4990 LL	60.0	52.0	46.0	1.0
PENNYRILE (long term check-released 1987) STINE 48RD00	59.9 59.9	52.8	46.9	1.3 1.0
DELTA GROW 4925 RR2	59.4	57.3		2.0
REV <sup>®</sup> 48R33 <sup>TM</sup>	59.0	54.2	53.9	1.3
ASGROW AG4934 PROGENY 4747 RY	59.0 58.9	55.3		2.0 1.7
SCHILLINGER SEED 458.RCS	58.5	59.2	57.0	1.3
HALO X496	58.5			1.0
DELTA GROW 4967 LL REV® 48R44 <sup>TM</sup>	58.2 58.1			1.0 1.3
PROGENY 4928 LL	58.1	53.5	51.9	1.0
REV® 49R22TM	58.0	51.7	51.7	1.7
UNIVERSITY OF MISSOURI S09-9943 ARMOR 49-R56	58.0 58.0			1.0 1.3
NK46-G9 BRAND	57.8			2.3
SCHILLINGER SEED 4712R	57.6			2.3
CAVERNDALE CF 466 RR2Yn REV® 46R64 <sup>TM</sup>	57.6 57.4			1.0 1.7
PIONEER 94Y70	57.2	53.3	52.9	2.0
PROGENY 4850 RYS	57.2	54.8		1.3
WARREN SEED DS 4633 R2Y REV® 47R53 <sup>TM</sup>	57.1 57.0	56.5 53.8	54.7	1.3 1.1
HORNBECK HBK L4850	56.9	33.0	54.7	1.0
SOUTHERN STATES SS 4913N R2	56.9			1.3
DELTA GROW 4755 RR2	56.7	54.8	FO 4	2.0
HALO 4:65 SOUTHERN STATES LL 473N	56.6 56.6	52.7	50.4	1.3 1.0
BECK 477NR <sup>TM*</sup>	56.3	57.6	56.4	1.7
PROGENY 4613 RYS	56.3	F2 4		1.3
HALO 5:01 CAVERNDALE CF 485 LLn	56.2 55.8	53.4 52.6		1.3 2.3
STEYER 4702R2	55.7	55.6		1.3
ARMOR X1406	55.4			1.3
PIONEER P49T97R DYNA-GRO S48RS53	55.0 54.8	57.2		1.0 1.1
PIONEER P46T21R	54.8	37.2		1.0
ARMOR X49C	54.6			1.3
CAVERNDALE CF 469 LL/STSn STEYER 4802R2	54.1 53.9			1.1 1.0
SOUTHERN STATES SS 4700 R2-STS	53.8	52.3	54.3	1.7
PROGENY 4930 LL	53.6			1.0
NK46-L2 BRAND REV® 48R22 <sup>TM</sup>	53.6 53.5	50.3	53.2	1.7 1.0
SCHILLINGER SEED 495.RC	53.2	49.8	49.6	1.7
DELTA GROW 4981 LL/STS	53.0			1.3
LG SEEDS C4867R2	52.4			1.7

## Table 8. (continued)

	Y	ELD (BU/AG	_)A	LODGING
BRAND VARIETY -	2013	2012-13		2013
ASGROW AG4632	52.1	53.3	53.8	1.0
HALO 4:94	51.5	51.3	50.5	1.3
BECK 483NL	50.5			1.3
PROGENY 4710 RYS	50.3	51.9	53.6	2.0
NK49-F8 BRAND	49.2	51.5		1.0
DELTA GROW 4940 RR	48.1			4.0
HALO 4:97	45.6			2.7
GROUP IV LATE AVERAGE	60.4	56.7	54.1	1.4
LSD (0.10)	6.6	4.4	3.6	
C.V.	8.1	7.9	7.4	
MATURITY GROUP V (relative MG 5.0-5.9)				
WARREN SEED DS 5122 R2Y	65.8			1.3
BECK 522L4	64.4			1.0
HORNBECK HBK L5350	63.3			2.3
UNIVERSITY OF ARKANSAS OSAGE	63.2	54.0	57.1	1.7
REV <sup>®</sup> 53R23 <sup>TM</sup>	62.7	52.1		1.0
HORNBECK HBK RY5421	62.1	55.9		2.7
UNIVERSITY OF ARKANSAS R04-1268RR	61.1			2.3
BECK 511R4 <sup>TM*</sup>	61.0			1.0
HALO 5:01-5	60.9	57.2		1.0
REV® 55R53 <sup>TM</sup>	60.9	55.5		2.3
REV <sup>®</sup> 59R13 <sup>TM</sup>	60.1	54.8		2.0
UNIVERSITY OF ARKANSAS R04-1250RR	59.9			2.3
REV <sup>®</sup> 51R53 <sup>TM</sup>	59.5	52.8	55.6	1.3
SEED CONSULTANTS SCS 9544RR	59.5			2.3
MYCOGEN SEEDS 5N540R2	59.3			2.0
SOUTHERN STATES LL 513N	59.0			1.0
MYCOGEN SEEDS 5N510R2	58.0			1.3
ARMOR X1413	57.9			1.0
LG SEEDS C5122R2	57.7			1.3
UNISOUTH GENETICS USG 5002T	57.6	59.5	55.8	2.3
PIONEER P50T40R	57.3			1.0
STEYER 5101R2	56.1			1.0
SEED CONSULTANTS SCS 9574RR	56.0			2.3
UNIVERSITY OF ARKANSAS OZARK	55.5	52.8	53.0	2.0
DELTA GROW 5361 LL	54.8			1.9
UNIVERSITY OF ARKANSAS UA5213C	54.7			3.0
ARMOR X1410	54.3			2.3
DELTA GROW 5461 LL	53.6			1.0
REV® 54R84 <sup>TM</sup>	52.8	52.3		2.7
USDA-ARS JTN-5203	52.5	51.6	51.4	2.3
EXP USDA-ARS JTN-5110	52.3	52.7		2.0
UNIVERSITY OF ARKANSAS UA5612	51.9	51.9		1.7
PIONEER 95Y10	51.8	53.0	53.3	1.3
HALO 5:45	51.0	49.3		1.7
UNISOUTH GENETICS USG 5601T	50.7	52.6	51.5	2.1
REV® 52R74TM	50.4	48.7		1.3
HALO X530	50.4			1.0
DELTA GROW 5625 RR2	50.3			2.0
DELTA GROW 5130 RR2	50.2			1.0
DELTA GROW 5481 LL	47.8	16.5	47.4	1.0
ESSEX (long term check-released 1974)	47.7	46.6	47.1	1.3
HALO 5:26	47.3	46.8	54.0	2.0
UNISOUTH GENETICS USG ALLEN	45.9	49.6	51.0	2.0
HORNBECK HBK RY5221	45.4	47.2		2.0
GROUP V AVERAGE	55.7	52.2	52.9	1.7
LSD (0.10)	6.9	4.4	4.0	
C.V.	9.0	8.5	8.8	

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

## **AGRONOMIC INFORMATION**

Location	Daviess County
Soil type	Loring silt loam
Previous crop	Corn
Soil test	NA
Fertilizer applied	DAP 9-23-30 (corn, 500 lbs/ac.)
Agricultural practice	Shallow tillage
Pre-planting treatments	NA
Planting date	6/14/2013
Harvest dates	MG II, III NA
	MG IV Early and Late 10/25
	MG V 10/26

50% chance of killing frost 10/25

### Precipitation and temperature history (Daviess County)

	Total Monthly	Temperature (°F)						thiv Temperature (°F)	
	Precipitation (in.)	Average Monthly	Highest Recorded	Lowest Recorded					
March	3.62	41.6	70	23					
April	4.08	57.8	85	31					
May	3.64	68.6	89	44					
June	6.43	76.6	95	45					
July	2.40	76.0	93	52					
August	0.44	76.4	97	56					
September	3.02	71.3	93	49					
October	0.73	58.2	87	24					

		YIELD (BU/AC		LODGING	PLANT HEIGHT (IN.)	
BRAND VARIETY	2013	2012-13	2011-13	2013	2013	DATE 2013 <sup>B</sup>
MATURITY GROUP II (relative MG 2.0-2.9)	64.1	N1 A	NIA	1.0	22	22
CAVERNDALE CF 286 RR2Y/STSn	64.1	NA	NA	1.0	33	23
GROUP II AVERAGE	NA			NA	33	23 (Sept. 23)
LSD (0.10)	NA					
c.v.	NA					
MATURITY GROUP III (relative MG 3.0-3.9)						
REV <sup>®</sup> 38R10 <sup>TM</sup>	73.7	57.1	59.1	1.0	37	33
PIONEER 93Y92	68.4	44.7	51.2	1.3	38	28
SOUTHERN STATES SS 3813N R2	65.6			1.0	32	34
DYNA-GRO S39RY33	64.9			1.3	36	30
UNISOUTH GENETICS USG 73P93R SEED CONSULTANTS SCS 9393RR	64.7 64.6			1.0 1.0	36 36	34 35
ARMOR 39-R16	64.1	43.3		1.0	38	31
_G SEEDS C3989R2	64.1	53.9		1.0	35	29
PIONEER P35T58R	63.8			1.0	38	28
STINE 38RD02	63.2			4.3	34	33
L&M GLICK 853 R2Y BECK 391R4 <sup>TM*</sup>	62.9 62.7			1.0 1.0	33 33	32 30
PIONEER 39T67R	62.3			1.0	34	31
PIONEER 93Y84	61.8	52.6		1.0	33	33
SEED CONSULTANTS SCS 9354RR	60.7			1.0	33	27
NK39-U2 BRAND	60.1	48.6	54.6	1.0	34	31
WARREN SEED DS 4010 R2Y	60.1			2.0	37	33
CAVERNDALE CF 380 RR2Yn DYNA-GRO S38RY84	60.0 59.8			1.0 1.0	35 32	31 32
SEED CONSULTANTS SCS 9392RR	59.0	50.5	53.7	1.0	36	32
SEED CONSULTANTS SCS 9363RR	58.7	0010	0011	1.0	37	28
SEED CONSULTANTS SCS 9373RR	58.2			1.0	35	29
SOUTHERN STATES SS 3801N R2	57.3			1.0	32	33
MYCOGEN SEEDS 5N393R2 ASGROW AG3832	57.0 56.8	46.4	53.7	1.0 1.0	37 33	33 35
ASGROW AG3832 ASGROW AG3934	55.0	40.4	55./	1.0	33	35 27
	55.0			1.0	55	27
GROUP III AVERAGE	61.9	49.6	54.5	1.2	35	31 (Oct. 1)
LSD (0.10)	4.8	3.1	2.9			
C.V.	5.7	5.8	6.1			
MATURITY GROUP IV EARLY (relative MG 4	.0-4.5)					
ASGROW AG4232	80.4	57.0	61.7	1.7	42	39
ARMOR 44-R08	76.6	55.5	62.2	1.0	36	39
BECK 423NL	71.9	50.9	57.2	1.0	36	31
L&M GLICK 412 R2Y HALO 4:40	69.5 68.1	50.8	57.3	1.0 1.0	38 35	36 33
SOUTHERN STATES LL 423N	67.7			1.0	36	36
CAVERNDALE CF 456 RR2Y/STSn	67.7			1.0	33	38
BIOGENE BG 7441	65.4			1.0	35	39
STINE 42RD02	65.2			1.0	34	35
L&M GLICK 403 R2Y LG SEEDS C4544R2	64.7 64.6			1.0 1.0	41	38 37
CAVERNDALE CF EXP 416 RR2Yn	63.6			1.0	40	37
STEWART 4512R2	63.2	50.8	59.5	1.0	38	37
NK43-K1 BRAND	62.9			1.0	39	36
PROGENY 4560 LL	62.1			1.0	41	34
SEED CONSULTANTS SCS 9421RR STEWART 4514R2	61.7	48.0	55.4	1.0	35	39
BECK 418NR <sup>TM*</sup>	61.5 61.3	47.9		1.0 1.0	39 35	37 35
WYCOGEN SEEDS 5N451R2	60.7	-7.5		1.0	39	40
STEWART 4113R2	60.0	45.1		1.0	35	36
DYNA-GRO 38RY45	60.0	46.1	55.3	1.0	36	40
PIONEER 94Y23	59.8	47.9		1.0	38	36
ASGROW AG4033 STEWART 4412R2	59.8	47.1	F6 0	1.0	34	31
STEVER 4301R2	59.5 59.2	49.7 47.2	56.9	1.0 1.0	43 35	35 38
GREAT LAKES HYBRIDS GL4039R2	59.2	17.2		1.0	39	38
SEED CONSULTANTS SCS 9434RR	58.9			1.7	42	37
NK41-J6 BRAND	58.7	44.6		1.0	40	34
ARMOR 45-R60	58.4	45.1		1.0	34	41
NK45-V8 BRAND PROGENY 4211 RY	57.9 57.9	44.9	53.5	1.0 1.0	37 34	35 36
STINE 45RC32	57.9	44.9	55.5	1.0	34	30
CAVERNDALE CF 425 LLn	57.5			1.0	37	32
PIONEER 94Y50	57.5	44.9	53.9	1.0	41	39
ASGROW AG4534	57.4			1.0	42	38
	57.2			1.0	44	36
	57.2	45.0	FCO			
BECK 459L4 <sup>TM*</sup> PROGENY 4510 RYS UNISOUTH GENETICS USG 74A33P	57.2	45.2	56.0	1.0	36	41
	57.2 57.1 56.9	45.2	56.0	1.0 1.0 1.0	36 36 36	41 39 40

## Table 9. 2013 Kentucky Soybean Variety Performance Tests, Fayette County.

Tal	ble	<u>9.</u>	(continued)	۱

			•\^		PLANT	
BRAND VARIETY	2013	YIELD (BU/AC 2012-13	. <u>)^</u> 2011-13	LODGING 2013	HEIGHT (IN.) 2013	MATURITY DATE 2013 <sup>B</sup>
PROGENY 4313 RY	56.8	2012 10	201110	1.0	41	38
WARREN SEED DS 4340 R2Y	56.8	55.8		1.0	36	36
MYCOGEN SEEDS 5N431R2	56.4			1.0	34	38
STEYER 4401R2	56.2	44.9		1.0	32	33
DYNA-GRO 39RY43	56.2	44.9	54.5	1.0	35	36
PFISTER 45R22	56.1			1.0	37	38
PFISTER 43R29	56.1	43.3		1.0	36	36
MYCOGEN SEEDS X53413R2	55.9	42.0		2.0	37	30
LG SEEDS C4340R2 LG SEEDS C4411R2	55.8 55.8	43.0 56.1		1.0 1.0	36 44	36 38
SEED CONSULTANTS SCS 9412RR	55.4	50.1		1.0	35	36
ASGROW AG4433	55.3	44.4		1.0	41	30
SOUTHERN STATES SS 453N	55.2			1.0	38	35
GREAT LAKES HYBRIDS GL4209R2	55.1			1.0	34	38
STEYER 4203R2	54.1	41.7	52.1	1.0	33	38
SEED CONSULTANTS SCS 9443RR	54.0			1.0	38	38
BIOGENE BG 7421	53.7	40.8	50.6	1.0	40	36
SOUTHERN STATES SS 4312N R2	53.4	42.3	56.6	1.0	35	38
MYCOGEN SEEDS 5N423R2	53.1			1.0	36	35
REV <sup>®</sup> 44R22 <sup>TM</sup>	53.0	43.0	49.9	1.0	38	42
STEWART 4212R2	52.4	39.4	49.0	1.3	39	35
BECK 444NR <sup>TM*</sup>	52.4	41.6		1.0	38	43
ARMOR X1401	50.3			1.0	39	42
GROUP IV EARLY AVERAGE	59.4	46.8	55.4	1.1	38	27 (Oct 7)
LSD (0.10)	<b>59.4</b> 4.2	<b>46.8</b> 2.9	<b>55.4</b> 2.9	1.1	50	37 (Oct. 7)
C.V.	4.2 5.3	5.9	6.4			
	5.5	5.5	0.4			
MATURITY GROUP IV LATE (relative MG 4	.6-4.9)					
ASGROW AG4934	70.0			1.0	47	43
ARMOR X1409	69.8		_	1.3	44	44
WARREN SEED DS 4633 R2Y	69.8	51.3		1.0	38	43
STINE 48RD00	68.3			1.0	38	48
SEED CONSULTANTS SCS 9474RR	68.3			1.0	45	48
WARREN SEED DS 4850 R2Y/STS	67.7	50.5	_	1.0	45	44
ASGROW AG4831	67.7	51.6		1.0	38	46
STEYER 4802R2	67.3	50.7	FF 4	1.0	40	43
ASGROW AG4832	66.6	50.7	55.1	1.0	44	44
HALO 4:95 DELTA GROW 4670 RR2	66.4 65.6	50.0 50.2	55.4	1.0 1.0	34 40	46 44
DELTA GROW 4870 RR2	65.4	48.5	55.4	1.0	40	53
CAVERNDALE CF 496 RR2Yn	65.4	40.0		1.0	41	46
PIONEER P46T21R	65.3			1.0	38	40
BECK 483NL	65.2			1.0	39	44
PROGENY 4710 RYS	65.0	51.1	54.5	1.3	41	42
DELTA GROW 4990 LL	64.8	0	0 110	1.0	43	57
DYNA-GRO S48RS53	64.8	48.2		1.0	42	42
ASGROW AG4933	64.6	52.3		1.0	44	42
HORNBECK HBK L4850	64.4			1.0	37	46
PIONEER P48T53R	64.3			1.7	38	43
REV <sup>®</sup> 47R34 <sup>TM</sup>	64.0			1.7	45	43
DELTA GROW 4755 RR2	63.9	48.2		1.3	43	43
SOUTHERN STATES SS 4913N R2	63.8			1.0	42	43
REV® 48R44 <sup>TM</sup>	63.2			1.0	43	45
ARMOR 48-R66	63.1			1.0	39	43
CAVERNDALE CF 466 RR2Yn CAVERNDALE CF 486 RR2Y/STSn	62.8 62.8	48.6		1.7 1.0	36 35	42 51
ARMOR X47C	62.8	40.0		1.0	35	43
ARMOR X1406	62.1			1.0	39	43
REV® 47R53TM	62.0	47.8	50.9	1.0	39	43
NK46-L2 BRAND	61.9	17.0	50.7	2.3	44	43
HORNBECK HBK RY4620	61.9	45.0	47.8	1.0	40	43
STEWART 4714R2	61.7			1.0	45	43
PROGENY 4900 RY	61.3	47.3		1.0	35	45
DELTA GROW 4925 RR2	61.0	49.5		1.0	43	44
SOUTHERN STATES SS 4725NS R2	60.9			1.0	46	42
SCHILLINGER SEED 495.RC	60.8	45.5	47.3	2.0	49	51
SOUTHERN STATES SS 4700 R2-STS	60.6	48.9	52.4	1.0	37	46
BECK 477NR <sup>TM*</sup>	60.6	44.3	46.7	1.7	47	45
CAVERNDALE CF 469 LL/STSn	60.6	10.0		1.3	48	53
NK49-F8 BRAND	60.5	48.9		1.0	39	43
SOUTHERN STATES SS 4917N R2	60.4	45.0	50.2	1.0	35	42
SCHILLINGER SEED 4990.RC	60.1	45.9	50.3	1.0	43	42
HALO 5:01 ARMOR 47-R13	60.0 59.9	46.6 47.1		1.3 1.0	45 43	60 42
SCHILLINGER SEED 4712R	59.9	4/.1		2.0	43	42
STEYER 4702R2	59.7	45.8		1.0	47	45
UNIVERSITY OF MISSOURI S09-9943	59.7	45.0		1.0	41	42
DELTA GROW 4967 LL	59.3			1.7	40	60
DELTA GROW 4765 RR2/STS	59.2	50.3		1.0	47	43
ASGROW AG4632	59.1	46.1	51.8	1.3	42	43
	55.1	10.1	0110		12	

_		YIELD (BU/AC)	A	LODGING	PLANT HEIGHT (IN.)	MATURITY
BRAND VARIETY	2013	2012-13	2011-13	2013	2013	DATE 2013
EV <sup>®</sup> 49R94 <sup>TM</sup>	59.1			1.3	41	43
AVERNDALE CF 485 LLn	59.0	45.0		1.0	36	46
RMOR X49C	58.9			2.0	46	51
DELTA GROW 4981 LL/STS	58.9			2.0	54	60
OUTHERN STATES LL 473N	58.9			1.0	37	46
RMOR 49-R56	58.8			1.0	32	46
ROGENY 4613 RYS	58.7			1.0	44	43
AYCOGEN SEEDS 5N478R2	58.6			1.7	46	43
EED CONSULTANTS SCS 9494RR	58.6	17.0		1.0	41	46
FISTER 47R22	58.4	47.9	45.0	1.0	42	46
IALO 4:94	57.9	43.1	45.2	1.0	44	52
G SEEDS C4780R2	57.8	46.9		1.0	45	43
IORNBECK HBK RY4721	57.7	47.3	F1 0	1.3	42	45
TEYER 4701R2	57.6	47.4	51.3	1.0	41	42
IONEER P49T97R	57.4	44.0	40.0	1.0	39	44
CHILLINGER SEED 458.RCS	57.4	44.9	49.0	1.0	40	41
NK46-G9 BRAND	57.3			1.7	37	41
IALO X466	57.2			1.0	35	42
ARMOR X48C	57.2			2.0	42	42
GREAT LAKES HYBRIDS GL4729R2	57.0		46.0	1.0	45	42
PROGENY 4928 LL	56.7	44.6	46.0	1.3	46	53
PIONEER P47T36R	56.7			1.0	36	44
IALO 4:97	56.5			1.3	46	56
JNISOUTH GENETICS USG 74E88	56.3			1.0	37	42
G SEEDS C4867R2	56.3			1.0	39	48
REV® 49R22 <sup>TM</sup>	56.0	43.1	43.2	1.3	47	42
PROGENY 4930 LL	55.8			1.0	39	57
PROGENY 4850 RYS	55.7	46.4		1.0	44	45
PENNYRILE (long term check-released 1987)	55.6	41.1	39.7	1.3	46	43
HALO X496	55.2			1.0	45	48
PROGENY 4747 RY	55.1	42.8		1.0	42	42
AYCOGEN SEEDS 5N479R2	54.3			1.0	45	42
PROGENY 4819 LL	54.0	43.0		1.3	36	46
DELTA GROW 4940 RR	53.9			3.0	53	60
PIONEER 94Y70	53.8	44.0	47.5	1.7	47	42
REV® 46R64 <sup>TM</sup>	53.8			1.7	39	44
ARMOR 49-C3	53.4			3.7	48	60
DELTA GROW 4880 RR	53.4	41.1	43.3	1.7	41	45
DELTA GROW 4867 LL	53.0			1.0	37	47
HORNBECK HBK L4950	52.8			1.3	49	56
DYNA-GRO S47RY13	52.6	43.6		1.0	40	45
REV® 48R33 <sup>TM</sup>	51.3	40.2	47.1	1.3	46	45
REV® 48R22 <sup>TM</sup>	51.3	41.2	44.8	1.7	42	44
1ALO 4:65	50.0	41.1	45.2	2.3	39	42
GROUP IV LATE AVERAGE	60.0	46.6	48.3	1.3	42	46 (Oct. 16
SD (0.10)	4.4	2.9	2.9			
	5.4	5.9	6.7			
ATURITY GROUP V (relative MG 5.0-5.9)						
G SEEDS C5122R2	72.9			1.3	42	53
IORNBECK HBK L5350	70.5			3.0	38	76
ARMOR X1410	70.3			2.0	54	71
VARREN SEED DS 5122 R2Y	70.1			1.0	42	59
TEYER 5101R2				1.0	45	55
ILILIN JIUINZ	67.9			1.0		
		51.3	52.9		49	71
JNISOUTH GENETICS USG 5601T	66.9		<b>52.9</b> 52.0	2.3	49	
UNISOUTH GENETICS USG 5601T REV® 51R53 <sup>TM</sup>	66.9 65.6	<b>51.3</b> 50.1	<b>52.9</b> 52.0	2.3 1.3	49 38	61
JNISOUTH GENETICS USG 5601T REV® 51R53TM BED CONSULTANTS SCS 9574RR	66.9 65.6 64.7	50.1	52.0	2.3 1.3 2.7	49 38 53	
INISOUTH GENETICS USG 5601T IEV® 51R53TM EED CONSULTANTS SCS 9574RR INISOUTH GENETICS USG ALLEN	66.9 65.6 64.7 64.6	50.1 44.6		2.3 1.3 2.7 2.0	49 38 53 49	61 79 74
JNISOUTH GENETICS USG 5601T EEV® 51R53™ EED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN EEV® 52R74™	66.9 65.6 64.7 64.6 64.5	50.1	52.0	2.3 1.3 2.7 2.0 1.7	49 38 53 49 42	61 79 74 64
INISOUTH GENETICS USG 5601T IEV® 51R53TM EED CONSULTANTS SCS 9574RR INISOUTH GENETICS USG ALLEN IEV® 52R74TM IECK 522L4	66.9 65.6 64.7 64.6 64.5 64.4	50.1 44.6	52.0	2.3 1.3 2.7 2.0 1.7 1.0	49 38 53 49 42 38	61 79 74 64 81
INISOUTH GENETICS USG 5601T IEV® 51R53TM EED CONSULTANTS SCS 9574RR INISOUTH GENETICS USG ALLEN IEV® 52R74TM IECK 522L4 INIVERSITY OF ARKANSAS UA5213C	66.9 65.6 64.7 64.6 64.5 64.4 63.6	50.1 44.6	52.0	2.3 1.3 2.7 2.0 1.7 1.0 2.7	49 38 53 49 42 38 42	61 79 74 64 81 71
INISOUTH GENETICS USG 5601T IEV® 51R53TM EED CONSULTANTS SCS 9574RR INISOUTH GENETICS USG ALLEN IEV® 52R74TM IECK 522L4 INIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL	66.9 65.6 64.7 64.6 64.5 64.4	50.1 44.6	52.0	2.3 1.3 2.7 2.0 1.7 1.0	49 38 53 49 42 38	61 79 74 64 81
JNISOUTH GENETICS USG 5601T IEEV® 51R53TM IEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN IEEV® 52R74TM IEEV® 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL IALO 5:45	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4	50.1 44.6 49.2	52.0	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3	49 38 53 49 42 38 42 42 45	61 79 74 64 81 71 78 76
JNISOUTH GENETICS USG 5601T IEV® 51R53TM IEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN INSOUTH GENETICS USG ALLEN ISECK 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL IALO 5:45 DELTA GROW 5130 RR2	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1	50.1 44.6 49.2 44.9	52.0	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0	49 38 53 49 42 38 42 45 42	61 79 74 64 81 71 78
INISOUTH GENETICS USG 5601T IEV® 51R53TM EED CONSULTANTS SCS 9574RR INISOUTH GENETICS USG ALLEN IEV® 52R74TM IECK 522L4 INIVERSITY OF ARKANSAS UA5213C IELTA GROW 5481 LL IALO 5:45 IELTA GROW 5130 RR2 IORNBECK HBK RY5221	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1 63.0	50.1 44.6 49.2	52.0	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3	49 38 53 49 42 38 42 45 45 42 42	61 79 74 64 81 71 78 76 56
JNISOUTH GENETICS USG 5601T IEV® 51R53TM SEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN IEV® 52R74TM SECK 522L4 JNIVERSITY OF ARKANSAS UA5213C JELTA GROW 5481 LL IALO 5:45 DELTA GROW 5130 RR2 HORNBECK HBK RY5221 DELTA GROW 5461 LL	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1 63.0 62.9	50.1 44.6 49.2 44.9	52.0	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.7	49 38 53 49 42 38 42 45 42 45 42 45 42 45 44	61 79 74 64 81 71 78 76 56 64 76
JNISOUTH GENETICS USG 5601T IEV® 51R53TM JNISOUTH GENETICS USG ALLEN IEV® 52R74TM IECK 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL IALO 5:45 DELTA GROW 5130 RR2 IORNBECK HBK RY5221 DELTA GROW 5461 LL IOUTHERN STATES LL 513N	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1 63.0 62.9 62.4	50.1 44.6 49.2 44.9	52.0	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.7 1.0	49 38 53 49 42 38 42 45 42 45 42 45 44 41	61 79 74 64 81 71 78 76 56 64 76 64 76 76
JNISOUTH GENETICS USG 5601T IEV® 51RS3 <sup>TM</sup> SEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN REV® 52R74 <sup>TM</sup> SECK 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL HALO 5:45 DELTA GROW 5130 RR2 HORNBECK HBK RYS221 DELTA GROW 5461 LL DOUTHERN STATES LL 513N PIONEER P50T40R	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1 63.0 62.9 62.4 62.3	50.1 44.6 49.2 44.9 48.4	52.0	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.7 1.0 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.0 1.7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	49 38 53 49 42 38 42 45 42 45 42 45 42 45 44 41 37	61 79 74 64 81 71 78 76 56 64 76 76 76 48
JNISOUTH GENETICS USG 5601T IEU® 51R53TM SEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN IEU® 52R74TM SECK 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL IALO 5:45 DELTA GROW 5130 RR2 IORNBECK HBK RY5221 DELTA GROW 5461 LL SOUTHERN STATES LL 513N IOONEER P50T40R XP USDA-ARS JTN-5110	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1 63.0 62.9 62.4 62.3 62.0	50.1 44.6 49.2 44.9	52.0	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.7 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.0 2.3 1.0 1.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.3 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7	49 38 53 49 42 38 42 45 42 45 42 45 44 41 37 40	61 79 74 64 81 71 78 76 56 64 76 76 48 71
JNISOUTH GENETICS USG 5601T IEV® 51R53TM SEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN IEV® 52R74TM SECK 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL IALO 5:45 DELTA GROW 5130 RR2 IORNBECK HBK RY5221 DELTA GROW 5461 LL OUTHERN STATES LL 513N IONEER P50T40R XP USDA-ARS JTN-5110 AYCOGEN SEEDS 5N510R2	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1 63.0 62.9 62.4 62.3 62.0 61.6	50.1 44.6 49.2 44.9 48.4 49.0	52.0 49.3	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 1.7 1.0 2.7 1.3	49 38 53 49 42 38 42 45 42 45 42 45 44 41 37 40 40	61 79 74 64 81 71 78 76 56 64 76 76 76 76 76 48 71 59
JNISOUTH GENETICS USG 5601T IEV® 51R53TM SEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN IEV® 52R74TM SECK 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL IALO 5:45 DELTA GROW 5130 RR2 HORNBECK HBK RY5221 DELTA GROW 5461 LL JOUTHERN STATES LL 513N PIONEER P50T40R XP USDA-ARS JTN-5110 AVCOGEN SEEDS 5N510R2 ISSEX (long term check-released 1974)	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1 63.0 62.9 62.4 62.3 62.0 61.6 61.0	50.1 44.6 49.2 44.9 48.4 49.0 48.1	52.0 49.3 47.0	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.7 1.0 1.7 1.7 1.0 2.7 1.0 2.7 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.7 1.0 2.7 2.7 2.0 2.3 1.0 1.7 1.7 1.7 1.0 2.7 2.7 2.0 2.7 2.7 2.0 2.3 2.7 2.7 2.0 2.7 2.7 2.0 2.7 2.7 2.7 2.0 2.7 2.7 2.7 2.7 2.7 2.7 2.7 2.7	49 38 53 49 42 38 42 45 42 45 42 45 44 41 37 40 40 38	61 79 74 64 81 71 78 76 56 64 76 64 76 76 48 71 59 59
JNISOUTH GENETICS USG 5601T REV® 51R53 <sup>TM</sup> SEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN REV® 52R74 <sup>TM</sup> SECK 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL 4ALO 5:45 DELTA GROW 5130 RR2 HORNBECK HBK RYS221 DELTA GROW 5461 LL SOUTHERN STATES LL 513N PIONEER P50T40R XP USDA-ARS JTN-5110 MYCOGEN SEEDS 5N510R2 SSEX (long term check-released 1974) JNISOUTH GENETICS USG 5002T	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1 63.0 62.9 62.4 62.3 62.0 61.6 61.0 60.9	50.1 44.6 49.2 44.9 48.4 49.0 48.1 49.1	52.0 49.3 47.0 51.2	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.7 1.0 1.7 1.0 1.7 1.0 2.3 1.0 2.7 2.0 2.3 1.0 2.3 1.0 2.3 1.7 1.0 2.7 2.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.0 2.7 2.7 2.0 2.3 1.0 1.0 2.7 2.7 2.0 2.3 1.0 1.0 2.7 2.7 2.0 2.7 2.7 2.0 2.7 2.7 2.0 2.7 2.7 2.0 2.7 2.7 2.7 2.0 2.7 2.7 2.7 2.7 2.7 2.3 2.0 2.7 2.3 2.0 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3	49 38 53 49 42 38 42 45 42 42 45 42 45 44 41 37 40 40 38 39	61 79 74 64 81 71 78 76 56 64 76 76 48 71 59 59 64
JNISOUTH GENETICS USG 5601T EV® 51R53 <sup>TM</sup> SEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN REV® 52R74 <sup>TM</sup> SECK 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL HALO 5:45 DELTA GROW 5481 LL HORNBECK HBK RY5221 DELTA GROW 5461 LL SOUTHERN STATES LL 513N PIONEER PSOT40R EXP USDA-ARS JTN-5110 MYCOGEN SEEDS 5NS10R2 SSEX (long term check-released 1974) JNISOUTH GENETICS USG 5002T JNIVERSITY OF ARKANSAS OSAGE	66.9 65.6 64.7 64.6 64.5 64.4 63.5 63.4 63.5 63.4 63.0 62.9 62.4 62.3 62.0 61.6 61.0 60.9 60.6	50.1 44.6 49.2 44.9 48.4 49.0 48.1 49.1 47.9	52.0 49.3 47.0 51.2 50.4	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 1.7 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.3 1.0 2.7 2.0 2.3 1.0 2.3 1.0 2.7 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.0 2.3 2.0 2.0 2.3 2.0 2.0 2.3 2.0 2.0 2.3 2.0 2.0 2.3 2.0 2.0 2.3 2.0 2.0 2.3 2.0 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.3 2.0 2.7 2.0 2.3 2.0 2.7 2.0 2.3 2.0 2.7 2.0 2.3 2.0 2.7 2.0 2.7 2.0 2.7 2.0 2.7 2.0 2.7 2.0 2.7 2.0 2.7 2.0 2.7 2.0 2.7 2.0 2.7 2.0 2.0 2.7 2.0 2.0 2.0 2.7 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	49 38 53 49 42 38 42 45 42 45 42 45 44 41 37 40 40 38 39 38	61 79 74 64 81 71 78 76 56 64 76 48 71 59 59 59 64 78
JNISOUTH GENETICS USG 5601T REV® 51R53 <sup>TM</sup> SEED CONSULTANTS SCS 9574RR JNISOUTH GENETICS USG ALLEN REV® 52R74 <sup>TM</sup> SECK 522L4 JNIVERSITY OF ARKANSAS UA5213C DELTA GROW 5481 LL 4ALO 5:45 DELTA GROW 5130 RR2 HORNBECK HBK RYS221 DELTA GROW 5461 LL SOUTHERN STATES LL 513N PIONEER P50T40R XP USDA-ARS JTN-5110 MYCOGEN SEEDS 5N510R2 SSEX (long term check-released 1974) JNISOUTH GENETICS USG 5002T	66.9 65.6 64.7 64.6 64.5 64.4 63.6 63.5 63.4 63.1 63.0 62.9 62.4 62.3 62.0 61.6 61.0 60.9	50.1 44.6 49.2 44.9 48.4 49.0 48.1 49.1	52.0 49.3 47.0 51.2	2.3 1.3 2.7 2.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.7 1.0 1.7 1.0 1.7 1.0 2.3 1.0 2.7 2.0 2.3 1.0 2.3 1.0 2.3 1.7 1.0 2.7 2.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.7 1.0 2.7 2.0 2.3 1.0 1.0 2.7 2.7 2.0 2.3 1.0 1.0 2.7 2.7 2.0 2.3 1.0 1.0 2.7 2.7 2.0 2.7 2.7 2.0 2.7 2.7 2.0 2.7 2.7 2.0 2.7 2.7 2.7 2.0 2.7 2.7 2.7 2.7 2.7 2.3 2.0 2.7 2.3 2.0 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3	49 38 53 49 42 38 42 45 42 42 45 42 45 44 41 37 40 40 38 39	61 79 74 64 81 71 78 76 56 64 76 76 48 71 59 59 64

Table 9.	(continued)
	continucu/

	YIELD (BU/AC)A			PLANT LODGING HEIGHT (IN.)		
BRAND VARIETY	2013	2012-13	2011-13	2013	2013	MATURITY DATE 2013 <sup>B</sup>
HALO 5:01-5	59.7	45.4		1.7	45	76
HALO X530	59.6			2.0	57	78
SEED CONSULTANTS SCS 9544RR	59.0			3.0	44	66
REV <sup>®</sup> 55R53 <sup>TM</sup>	58.6	44.9		2.7	45	78
USDA-ARS JTN-5203	57.8	46.9	48.9	2.7	43	71
REV <sup>®</sup> 54R84 <sup>TM</sup>	57.1	42.4		2.7	42	74
ARMOR X1413	56.2			1.0	45	48
DELTA GROW 5625 RR2	56.2			2.7	43	74
REV <sup>®</sup> 59R13 <sup>TM</sup>	56.2	46.1		2.3	44	81
DELTA GROW 5361 LL	55.9			2.0	48	74
UNIVERSITY OF ARKANSAS UA5612	55.6	42.9		3.3	41	76
HALO 5:26	54.4	47.0		2.3	46	76
UNIVERSITY OF ARKANSAS R04-1250RR	51.6			2.3	45	78
REV <sup>®</sup> 53R23 <sup>TM</sup>	48.5	37.0		2.0	37	71
MYCOGEN SEEDS 5N540R2	48.1			3.0	44	76
UNIVERSITY OF ARKANSAS R04-1268RR	47.9			2.3	43	76
HORNBECK HBK RY5421	44.1	35.5		2.7	39	79
	<i>(</i> <b>)</b> <i>(</i>	46.0	40.0	2.0	42	70 (Name 0)
GROUP V AVERAGE	60.4	46.0	49.8	2.0	43	70 (Nov. 9)
LSD (0.10)	4.5	2.7	2.8			
C.V.	5.4	5.5	6.3			

A Within a maturity group, shaded yield are not significantly different (0.10) from the highest yielding cultivar (bold data) of that maturity group and year column.
 B The maturity date is expressed as days after August 31.

#### **AGRONOMIC INFORMATION**

Location	Fayette County
Soil type	Lanton silty clay loam
Previous crop	Corn
Soil test	pH 6.15
	P 367
	K 465
Fertilizer applied	None
Agricultural practice	No-till
Pre-planting treatments	Glyophosate (40 oz/ac) And Authority XL (6.5 oz/ac) 5/2/2013 Gramoxone SL (2.5 qt/ac) and First Rate 84WDG (0.3 oz/ac) 6/8/2013
Pre-planting treatments Planting date	Gramoxone SL (2.5 qt/ac) and First Rate 84WDG (0.3 oz/ac)
	Gramoxone SL (2.5 qt/ac) and First Rate 84WDG (0.3 oz/ac) 6/8/2013
Planting date	Gramoxone SL (2.5 qt/ac) and First Rate 84WDG (0.3 oz/ac) 6/8/2013 6/12/2013
Planting date	Gramoxone SL (2.5 qt/ac) and First Rate 84WDG (0.3 oz/ac) 6/8/2013 6/12/2013 MG II, III 11/04
Planting date	Gramoxone SL (2.5 qt/ac) and First Rate 84WDG (0.3 oz/ac) 6/8/2013 6/12/2013 MG II, III 11/04 MG IV Early 11/05

50% chance of killing frost 10/26

Precipitation and temperature history (Fayette County)

	Total Monthly	Temperature (°F)				
	Precipitation (in.)	Average Monthly	Highest Recorded	Lowest Recorded		
March	5.57	38.5	70.4	18.6		
April	5.16	55.0	81.4	28.1		
May	5.64	64.6	84.4	39.2		
June	6.53	72.3	89.4	55.1		
July	9.17	73.2	90.3	54.3		
August	7.13	73.6	88.8	52.6		
September	1.42	68.5	87.7	48.8		
October	4.03	56.8	82.3	27.1		
November (11/1-20)	1.69	46.0	68.5	20.8		

# Table 10. 2013 Kentucky Soybean Variety Performance Tests, Hardin County.

BRAND VARIETY	YIELD (BU/AC) <sup>A</sup> 2013	LODGING 2013
MATURITY GROUP II (relative MG 2.0-2.9) CAVERNDALE CF 286 RR2Y/STSn	41.8	1.0
GROUP II AVERAGE LSD (0.10)	NA NA	NA
C.V.	NA	
MATURITY GROUP III (relative MG 3.0-3.9) LG SEEDS C3989R2	66.6	1.3
PIONEER P35T58R	65.5	1.7
UNISOUTH GENETICS USG 73P93R	64.4	1.0
PIONEER 93Y84 WARREN SEED DS 4010 R2Y	64.0 62.4	1.0 2.0
SEED CONSULTANTS SCS 9354RR	61.9	1.0
SOUTHERN STATES SS 3813N R2	61.1	1.0
SEED CONSULTANTS SCS 9373RR REV® 38R10 <sup>TM</sup>	60.7 59.8	1.0 1.3
PIONEER 39T67R	58.1	1.0
SEED CONSULTANTS SCS 9363RR	57.9	1.7
ASGROW AG3832 CAVERNDALE CF 380 RR2Yn	57.0 56.7	1.0 2.0
ARMOR 39-R16	56.7	1.0
MYCOGEN SEEDS 5N393R2	56.5	1.3
PIONEER 93Y92 STINE 38RD02	55.8 55.8	1.3 1.7
SEED CONSULTANTS SCS 9393RR	55.8 55.8	1./
ASGROW AG3934	55.6	1.7
BECK 391R4 <sup>TM*</sup>	54.8	1.0
DYNA-GRO S39RY33 SOUTHERN STATES SS 3801N R2	54.4 53.9	2.0 2.3
NK39-U2 BRAND	53.3	1.0
DYNA-GRO S38RY84	51.6	1.3
SEED CONSULTANTS SCS 9392RR L&M GLICK 853 R2Y	51.2 46.6	1.0 1.0
	40.0	1.0
GROUP III AVERAGE	57.6	1.3
LSD (0.10) C.V.	8.4 10.8	
	10.0	
MATURITY GROUP IV EARLY (relative MG 4.0-		1.0
L&M GLICK 412 R2Y ASGROW AG4232	<b>66.1</b> 65.9	1.0 1.3
WARREN SEED DS 4340 R2Y	64.7	1.0
SEED CONSULTANTS SCS 9434RR	63.7	1.3
SOUTHERN STATES SS 4312N R2 STEYER 4401R2	63.4 62.0	1.0 1.0
SOUTHERN STATES SS 4510N R2	60.9	1.0
WARREN SEED DS 4330 R2Y	60.0	1.0
NK43-K1 BRAND PROGENY 4313 RY	59.8 59.7	1.0 1.0
ARMOR 45-R60	58.9	1.0
UNISOUTH GENETICS USG 74A33R	58.6	1.0
MYCOGEN SEEDS X53413R2 SEED CONSULTANTS SCS 9443RR	57.8	1.3
MYCOGEN SEEDS 5N451R2	57.7 57.3	1.0 1.0
BECK 418NR <sup>TM*</sup>	57.3	1.0
STEWART 4113R2 LG SEEDS C4411R2	57.2 57.1	1.0 1.0
MYCOGEN SEEDS 5N423R2	57.0	1.0
PROGENY 4211 RY	56.5	1.0
STEYER 4301R2	56.4	1.0
ARMOR 44-R08 GREAT LAKES HYBRIDS GL4039R2	56.3 56.2	1.0 1.0
STINE 45RC32	56.2	1.0
CAVERNDALE CF EXP 416 RR2Yn	55.9	1.0
PFISTER 43R29 GREAT LAKES HYBRIDS GL4209R2	55.8 55.8	1.0 1.0
BIOGENE BG 7441	55.8	1.0
ASGROW AG4433	55.6	1.0
SEED CONSULTANTS SCS 9421RR STEWART 4512R2	55.6 55.4	1.0 1.0
MYCOGEN SEEDS 5N431R2	55.4 55.4	1.0
BECK 444NR <sup>TM*</sup>	55.4	1.0
SOUTHERN STATES LL 423N	55.3	1.0
	55.0 54.9	1.0 1.0
LG SEEDS C4544R2 ASGROW AG4534	.)4.9	
ASGROW AG4534 SEED CONSULTANTS SCS 9412RR	54.9	1.0
ASGROW AG4534		

Tab	le 1	10. (	continued)	
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BRAND VARIETY	YIELD (BU/AC) <sup>A</sup> 2013	LODGING 2013
CAVERNDALE CF 456 RR2Y/STSn	54.2	1.0
NK45-V8 BRAND	54.2	1.0
PROGENY 4560 LL	54.1	1.0
PROGENY 4510 RYS	53.5	1.0
BECK 423NL	53.4	1.0
HALO 4:40	53.4	1.0
DYNA-GRO 39RY43	53.4	1.0
CAVERNDALE CF 425 LLn	53.2	1.0
STEYER 4203R2	52.7	1.0
PIONEER 94Y50	52.2	1.7
STEWART 4514R2	52.1	1.0
ASGROW AG4033	52.0	1.0
PFISTER 45R22	52.0	1.0
LG SEEDS C4340R2	51.6	1.0
STINE 42RD02	50.7	1.0
L&M GLICK 403 R2Y	50.1	1.0
DYNA-GRO 38RY45	49.5	1.0
ARMOR X1401	49.4	1.0
NK41-J6 BRAND		
	48.9	1.0
PIONEER 94Y23	47.4	1.0
REV <sup>®</sup> 44R22 <sup>TM</sup>	47.3	1.0
BECK 459L4 <sup>TM*</sup>	46.9	1.0
STEWART 4412R2	45.3	1.0
SOUTHERN STATES SS 453N	44.3	1.0
GROUP IV EARLY AVERAGE	55.2	1.0
LSD (0.10) C.V.	4.8 6.4	
MATURITY GROUP IV LATE (relative MG 4.5- ASGROW AG4632	-4.9) 81.0	1.3
ARMOR 47-R13	76.9	1.0
STEWART 4714R2	74.3	1.0
STEVER 4702R2	72.5	1.0
SCHILLINGER SEED 458.RCS	72.3	1.0
REV <sup>®</sup> 48R44 <sup>TM</sup>	70.8	1.3
PROGENY 4850 RYS	70.2	1.0
HORNBECK HBK RY4721	70.1	2.0
ASGROW AG4831	68.6	1.0
DELTA GROW 4755 RR2	67.6	1.0
GREAT LAKES HYBRIDS GL4729R2	67.4	1.0
ASGROW AG4933	67.1	1.3
ARMOR X49C	66.6	1.7
ARMOR 48-R66	66.1	1.3
HALO X496	66.0	1.0
WARREN SEED DS 4850 R2Y/STS	65.9	1.3
PROGENY 4710 RYS	65.8	1.0
PROGENY 4930 LL	65.8	1.0
WARREN SEED DS 4633 R2Y		
	65.7	1.3
HORNBECK HBK L4850	65.5	1.0
UNISOUTH GENETICS USG 74E88	65.3	1.0
PIONEER P47T36R	65.2	1.0
CAVERNDALE CF 486 RR2Y/STSn	65.0	1.0
DELTA GROW 4670 RR2	64.4	1.0
PROGENY 4747 RY	63.9	1.0
HORNBECK HBK RY4620		1.0
	63.8	
ARMOR X48C	63.8	1.3
HORNBECK HBK L4950	63.8	1.0
	63.7	1.3
	63.3	1.0
		1.0
LG SEEDS C4780R2	63.2	1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2	63.2 62.9	1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn	62.9	1 0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2	62.9 62.9	1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO 547RY13	62.9 62.9 62.9	1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO 547RY13 NK46-G9 BRAND	62.9 62.9 62.9 62.8	1.0 1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup>	62.9 62.9 62.9 62.8 62.3	1.0 1.0 2.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM®</sup> PROGENY 4613 RYS	62.9 62.9 62.9 62.8	1.0 1.0 2.0 1.3
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM®</sup> PROGENY 4613 RYS	62.9 62.9 62.9 62.8 62.3	1.0 1.0 2.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC	62.9 62.9 62.8 62.3 62.2 61.9	1.0 1.0 2.0 1.3 1.3
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832	62.9 62.9 62.8 62.3 62.2 61.9 61.8	1.0 1.0 2.0 1.3 1.3 1.3
LG SEEDS C4780R2 MYCOGEN SEEDS SN478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8	1.0 1.0 2.0 1.3 1.3 1.3 1.3 1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8	1.0 1.0 2.0 1.3 1.3 1.3 1.3 1.0 1.3
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8 61.8	1.0 1.0 2.0 1.3 1.3 1.3 1.0 1.3 1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934 SOUTHERN STATES LL 473N	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8	1.0 1.0 2.0 1.3 1.3 1.3 1.3 1.0 1.3 1.0 1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934 SOUTHERN STATES LL 473N	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8 61.8	1.0 1.0 2.0 1.3 1.3 1.3 1.0 1.3 1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934 SOUTHERN STATES LL 473N PIONEER P48T53R	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8 61.7 61.3 61.2	1.0 1.0 2.0 1.3 1.3 1.3 1.3 1.0 1.3 1.0 1.0 1.0 1.3
LG SEEDS C4780R2 MYCOGEN SEEDS SN478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934 SOUTHERN STATES LL 473N PIONEER P48T53R PIONEER P48T53R	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8 61.8 61.7 61.3 61.2 60.4	1.0 1.0 2.0 1.3 1.3 1.3 1.0 1.3 1.0 1.0 1.0 1.0 1.3 1.7
LG SEEDS C4780R2 MYCOGEN SEEDS SN478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934 SOUTHERN STATES LL 473N PIONEER P48T53R PIONEER P4Y70 PROGENY 4819 LL	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8 61.8 61.7 61.3 61.2 60.4 60.4	1.0 1.0 2.0 1.3 1.3 1.3 1.0 1.3 1.0 1.0 1.0 1.3 1.7 1.0
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934 SOUTHERN STATES LL 473N PIONEER 948770 PROGENY 4819 LL REV* 49R22TM	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8 61.8 61.7 61.3 61.2 60.4 60.4 60.3	1.0 1.0 2.0 1.3 1.3 1.3 1.0 1.3 1.0 1.3 1.0 1.3 1.7 1.0 1.3
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934 SOUTHERN STATES LL 473N PIONEER 94Y70 PROGENY 4819 LL REV* 49R22TM HALO 4:95	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8 61.8 61.7 61.3 61.2 60.4 60.4 60.3 60.3	1.0 1.0 2.0 1.3 1.3 1.3 1.3 1.0 1.3 1.0 1.0 1.3 1.7 1.0 1.3 1.0
ARMOR X47C LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 R2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934 SOUTHERN STATES LL 473N PIONEER P48T53R PIONEER 94Y70 PROGENY 4819 LL REV* 49R22TM HALO 4:95 HALO 4:97	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8 61.8 61.7 61.3 61.2 60.4 60.4 60.3	1.0 1.0 2.0 1.3 1.3 1.3 1.0 1.3 1.0 1.3 1.0 1.3 1.7 1.0 1.3
LG SEEDS C4780R2 MYCOGEN SEEDS 5N478R2 CAVERNDALE CF 496 RR2Yn SOUTHERN STATES SS 4913N R2 DYNA-GRO S47RY13 NK46-G9 BRAND BECK 477NR <sup>TM*</sup> PROGENY 4613 RYS SCHILLINGER SEED 495.RC ASGROW AG4832 MYCOGEN SEEDS 5N479R2 BECK 483NL ASGROW AG4934 SOUTHERN STATES LL 473N PIONEER 94Y70 PROGENY 4819 LL REV* 49R22TM HALO 4:95	62.9 62.9 62.8 62.3 62.2 61.9 61.8 61.8 61.8 61.8 61.7 61.3 61.2 60.4 60.4 60.3 60.3	1.0 1.0 2.0 1.3 1.3 1.3 1.3 1.0 1.3 1.0 1.0 1.3 1.7 1.0 1.3 1.0

### Table 10. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A</sup> 2013	LODGING 2013
DELTA GROW 4940 RR	59.9	2.3
NK46-L2 BRAND	59.8	1.0
ARMOR 49-R56	59.8	1.3
PFISTER 47R22 CAVERNDALE CF 485 LLn	59.4	1.0
SOUTHERN STATES SS 4700 R2-STS	59.0 58.9	1.0 1.0
DELTA GROW 4765 RR2/STS	58.9	1.0
STEYER 4701R2	58.8	1.0
UNIVERSITY OF MISSOURI S09-9943	58.7	1.0
REV <sup>®</sup> 49R94 <sup>TM</sup>	58.7	1.3
HALO 4:65	58.7	1.7
DELTA GROW 4867 LL	58.4	1.0
CAVERNDALE CF 466 RR2Yn	58.3	1.0
DYNA-GRO S48RS53 DELTA GROW 4925 RR2	58.1	1.0
SOUTHERN STATES SS 4725NS R2	58.0 57.7	1.0 1.3
DELTA GROW 4825 RR2/STS	57.5	1.0
SEED CONSULTANTS SCS 9494RR	57.3	1.0
SEED CONSULTANTS SCS 9474RR	57.0	1.0
DELTA GROW 4990 LL	56.8	1.0
DELTA GROW 4880 RR	56.7	1.0
DELTA GROW 4981 LL/STS	56.7	1.3
HALO 5:01	56.7	1.0
ARMOR X1406	56.4	1.0
ARMOR 49-C3 REV® 48R33TM	56.3	3.3
10100	55.6 55.4	1.7
REV® 48R22 <sup>TM</sup> SCHILLINGER SEED 4990.RC	55.2	1.0 1.0
REV® 47R53TM	55.0	1.0
STINE 48RD00	54.9	1.0
CAVERNDALE CF 469 LL/STSn	54.5	1.0
PROGENY 4928 LL	54.4	1.0
PIONEER P46T21R	54.1	1.0
LG SEEDS C4867R2	53.2	1.0
SCHILLINGER SEED 4712R	53.1	1.7
HALO X466	52.6	1.0
REV® 46R64TM	52.5	1.0
NK49-F8 BRAND STEYER 4802R2	51.9 50.8	1.0
HALO 4:94	49.4	1.0
DELTA GROW 4967 LL	47.9	1.0
PENNYRILE (long term check-released 1987)	45.4	1.0
PROGENY 4900 RY	44.1	1.0
REV <sup>®</sup> 47R34 <sup>TM</sup>	43.2	1.3
SOUTHERN STATES SS 4917N R2	41.5	1.0
	(0.4	1.2
GROUP IV LATE AVERAGE LSD (0.10)	<b>60.4</b> 6.6	1.2
CV	8.1	
	0.1	
MATURITY GROUP V (relative MG 5.0-5.9)		
HORNBECK HBK RY5221	66.8	1.7
HALO 5:01-5	65.9	1.0
UNIVERSITY OF ARKANSAS UA5612	62.4	3.3
REV® 51R53TM	61.9	1.3
USDA-ARS JTN-5203	61.9	2.3
UNIVERSITY OF ARKANSAS UA5213C ARMOR X1410	61.6 60.8	3.0 2.7
UNIVERSITY OF ARKANSAS R04-1250RR	60.3	2.0
ARMOR X1413	60.3	1.7
DELTA GROW 5361 LL	60.2	2.0
BECK 522L4	58.5	1.0
REV <sup>®</sup> 53R23 <sup>TM</sup>	58.4	1.7
HORNBECK HBK RY5421	57.6	2.0
SEED CONSULTANTS SCS 9544RR	56.9	3.0
BECK 511R4 <sup>TM*</sup>	56.7	1.3
SOUTHERN STATES LL 513N	56.1	1.0
REV® 54R84TM	56.0	3.0
REV® 59R13 <sup>TM</sup> LG SEEDS C5122R2	56.0 54.2	1.3 1.0
UNIVERSITY OF ARKANSAS OZARK	54.2	2.7
PIONEER P50T40R	53.6	1.0
UNIVERSITY OF ARKANSAS R04-1268RR	52.4	3.3
HORNBECK HBK L5350	52.4	1.7
DELTA GROW 5481 LL	51.9	1.0
REV® 52R74 <sup>TM</sup>	51.9	1.3
DELTA GROW 5461 LL	51.3	1.0
UNIVERSITY OF ARKANSAS OSAGE	51.3	2.7
EXP USDA-ARS JTN-5110	50.7	3.0
SEED CONSULTANTS SCS 9574RR	50.5	3.0
REV <sup>®</sup> 55R53 <sup>TM</sup>	50.1	3.3

## Table 10. (continued)

BRAND VARIETY	YIELD (BU/AC)A 2013	LODGING 2013
MYCOGEN SEEDS 5N510R2	49.6	1.0
UNISOUTH GENETICS USG ALLEN	48.9	1.7
WARREN SEED DS 5122 R2Y	48.7	1.3
DELTA GROW 5625 RR2	47.7	2.0
PIONEER 95Y10	47.6	1.0
UNISOUTH GENETICS USG 5002T	47.2	2.0
HALO 5:26	46.7	2.0
UNISOUTH GENETICS USG 5601T	46.3	1.7
DELTA GROW 5130 RR2	46.1	1.0
HALO X530	45.5	1.3
MYCOGEN SEEDS 5N540R2	45.1	2.7
ESSEX (long term check-released 1974)	43.7	1.7
HALO 5:45	43.3	1.7
STEYER 5101R2	42.6	1.3
GROUP V AVERAGE	53.4	1.9
LSD (0.10)	3.7	
C.V.	5.1	

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

#### **AGRONOMIC INFORMATION**

Location Soil type Previous crop	Hardin County Crider silt loam Soybean
Soil test	pH 6.2
	P NA K NA
Fortilizer expliced	
Fertilizer applied	0-80-90
Agricultural practice	No-till
Pre-planting treatments	2,4D (2 pt/ac) in March
	Authority First Early June
	Glyphosate Early June
Planting date	6/3/2013
Harvest dates	MG II, III 10/11
	MG IV Early 10/28
	MG IV Late 11/13
	MG V 11/14

50% chance of killing frost 10/16

Precipitations and temperature history (Hardin County)

	Total Monthly	Temperature (°F)					Total Monthly Temperature (°F				
	Precipitation (in.)	Average Monthly	Highest Recorded	Lowest Recorded							
March	4.43	39.0	70.2	18.0							
April	4.19	55.0	82.3	24.7							
May	4.28	65.4	87.4	35.7							
June	3.96	73.2	92.3	51.4							
July	5.24	73.3	91.7	49.6							
August	1.78	73.7	93.3	51.5							
September	3.25	68.8	90.9	45.5							
October	5.37	56.7	84.1	23.8							
November (11/1-14)	0.35	45.6	69.1	20.0							

## Table 11. 2013 Kentucky Soybean Variety Performance Tests, Simpson County.

Table 11.2019 Kentucky Soybean Va						DISEASES			
BRAND VARIETY	2013	YIELD (BU/AC 2012-13	) <sup>A</sup> 2011-13	LODGING 2013	SUDDEN DEATH SYNDROME <sup>B</sup> INDEX	FROGEYE L INCIDENCE	EAFSPOT <sup>C</sup> RATING	SOYBEAN DEVELOPMENT STAGE <sup>D</sup>	
MATURITY GROUP II (relative MG 2.0-20.9) CAVERNDALE CF 286 RR2Y/STSn	42.2	NA	NA	3.3	0.0	0.0	0.0	R8	
GROUP II AVERAGE	NA			NA					
LSD (0.10)	NA								
I.V.	NA								
MATURITY GROUP III (relative MG 3.0-3.9)									
SGROW AG3832	69.9	62.6	47.0	1.7	0.9	0.0	1.0	R6	
NK39-U2 BRAND SEED CONSULTANTS SCS 9393RR	61.2 60.7	56.3	43.4	1.7	0.0 0.2	6.7 16.7	1.3 1.3	R6 R6	
OUTHERN STATES SS 3813N R2	60.6			2.0	0.2	0.0	1.0	R6	
AYCOGEN SEEDS 5N393R2	60.1			2.0	0.4	16.7	1.7	R6	
SGROW AG3934	58.6 58.2			1.7 2.0	1.5 0.7	26.7 0.0	1.7	R6 R6	
IONEER P35T58R RMOR 39-R16	56.6	53.6		1.0	0.4	0.0	1.0	R6	
EED CONSULTANTS SCS 9354RR	56.1			1.7	0.0	0.0	1.0	R6	
EED CONSULTANTS SCS 9363RR	56.0			2.0 2.0	0.0	0.0	1.0	R6	
&M GLICK 853 R2Y OUTHERN STATES SS 3801N R2	54.0 53.7			2.0	0.2 0.4	43.3 26.7	2.0 1.7	R6 R6	
YNA-GRO S38RY84	53.5			1.3	0.4	0.0	1.0	R6	
SEED CONSULTANTS SCS 9392RR	52.1	52.9	42.0	2.3	2.2	0.0	1.0	R6	
IONEER 93Y84 DYNA-GRO S39RY33	51.9 51.7	55.2		1.0 2.3	0.2 0.4	6.7 13.3	1.3 1.3	R6 R6	
ARREN SEED DS 4010 R2Y	51.7			3.3	0.4	0.0	1.0	R6	
IONEER 93Y92	51.1	51.0	40.6	2.0	0.2	6.7	1.7	R6	
G SEEDS C3989R2 EV® 38R10 <sup>TM</sup>	50.3 50.2	51.8 50.5	40.6	1.3 1.7	0.0 3.3	0.0 0.0	1.0 1.7	R7 R6	
ECK 391R4 <sup>TM*</sup>	49.7	50.5	40.0	1.7	0.2	0.0	1.0	R6	
IONEER 39T67R	48.2			2.7	1.1	0.0	1.0	R6	
AVERNDALE CF 380 RR2Yn	46.6			1.7	0.4	30.0	1.3	R6	
EED CONSULTANTS SCS 9373RR TINE 38RD02	45.8 44.3			2.0 1.7	1.1 0.4	6.7 0.0	1.3	R7 R6	
NISOUTH GENETICS USG 73P93R	40.2			1.0	0.0	16.7	1.7	R6	
ROUP III AVERAGE SD (0.10)	<b>53.6</b> 7.1	<b>54.2</b> 4.7	<b>42.7</b> 3.8	1.8					
.v.	9.7	9.3	9.2						
	4.0)								
MATURITY GROUP IV EARLY (relative MG 4.0 PIONEER 94Y23	72.5	62.7		1.7	0.4	0.0	1.0	R6	
RMOR 44-R08	68.1	59.4	45.4	2.0	2.2	0.0	1.0	R6	
NNA-GRO 39RY43	65.9 65.3	62.0	46.8	2.0 1.0	4.6 0.0	0.0 1.7	1.0 1.3	R6 R6	
&M GLICK 403 R2Y YNA-GRO 38RY45	65.1	60.6	44.8	1.7	11.1	0.0	1.0	R7	
REAT LAKES HYBRIDS GL4039R2	63.6			1.0	0.4	0.0	1.0	R6	
TEWART 4113R2	63.2	58.3		2.0	2.2	0.0	1.0	R6	
TEWART 4512R2 AVERNDALE CF 425 LLn	62.9 62.7	60.6	46.5	2.0 2.7	0.7 17.8	0.0	1.0 1.0	R6 R6	
EED CONSULTANTS SCS 9421RR	62.3	59.8	43.5	1.7	11.3	0.0	1.0	R7	
ASGROW AG4433	61.4	54.9		1.7	1.5	66.7	2.0	R6	
G SEEDS C4544R2 IYCOGEN SEEDS 5N423R2	61.3 61.2			2.3	0.4 0.5	0.0 33.3	1.0	R6 R6	
&M GLICK 412 R2Y	61.0	57.5	42.0	2.3	1.5	1.7	1.3	R6	
ROGENY 4211 RY	60.0	57.2	43.6	1.7	0.2	0.0	1.0	R6	
OUTHERN STATES SS 4510N R2 /ARREN SEED DS 4340 R2Y	59.6 59.4	57.4 62.5	43.7	1.7 1.7	6.1 0.2	0.0	1.0	R6 R6	
IYCOGEN SEEDS X53413R2	59.4	02.5		3.3	0.2	6.7	1.3	R6	
TEWART 4212R2	59.3	54.4	42.3	2.0	0.6	10.0	1.3	R6	
/ARREN SEED DS 4330 R2Y G SEEDS C4340R2	59.3 59.1	E0 D		2.3 1.7	1.1	0.0	1.0	R6	
REAT LAKES HYBRIDS GL4209R2	59.1	58.2		1.7	0.2	0.0	1.0 1.0	R6 R6	
EED CONSULTANTS SCS 9434RR	58.8			2.0	0.0	0.0	1.0	R6	
AVERNDALE CF EXP 416 RR2Yn	58.6			1.0	2.2	0.0	1.0	R7	
ALO 4:40 EV® 44R22 <sup>TM</sup>	58.4 58.3	58.5	44.3	2.3 2.3	0.0 0.2	3.3 0.0	1.3 1.0	R6 R6	
YCOGEN SEEDS 5N431R2	58.3	50.5	- <del>+</del> .J	1.7	0.2	0.0	1.0	R5	
TEWART 4412R2	58.2	56.0	42.1	2.0	0.2	60.0	2.0	R5	
FEYER 4301R2 SGROW AG4534	58.1 57.9	55.1		1.3 1.0	0.0 0.2	0.0 33.3	1.0 1.3	R6 R6	
SGROW AG4033	57.9	56.3		2.0	0.2	1.7	1.3	RO R7	
EED CONSULTANTS SCS 9412RR	57.7			1.3	0.6	6.7	1.3	R6	
ECK 418NR <sup>TM*</sup> ECK 444NR <sup>TM*</sup>	57.6	58.1 57.8		1.7 1.7	4.6 0.0	0.0 0.0	1.0 1.0	R6 R6	
K43-K1 BRAND	57.5 57.4	57.8		2.0	0.0	1.7	1.0	RO R7	
AVERNDALE CF 456 RR2Y/STSn	57.3			2.0	0.4	1.7	1.3	R6	
RMOR X1401	57.3			1.0	0.6	1.7	1.3	R6	
	57.1			1.0	0.0	0.0	1.0	R6	
		58.1		2.0	0.2	0.0	10	R6	
BECK 423NL NK41-J6 BRAND BIOGENE BG 7421	57.1 56.9	58.1 53.8	38.9	2.0 1.3	0.2 0.4	0.0 26.7	1.0 1.3	R6 R6	

## Table 11. (continued)

						DISEASES			
BRAND VARIETY	2013	YIELD (BU/AC 2012-13	)A 2011-13	LODGING 2013	SUDDEN DEATH SYNDROME <sup>B</sup> INDEX	FROGEYE L INCIDENCE	EAFSPOT <sup>C</sup> RATING	SOYBEAN DEVELOPMENT STAGE <sup>D</sup>	
STINE 45RC32	56.6	545	40.0	2.7	0.2	26.7	1.3	R6	
SOUTHERN STATES SS 4312N R2 PROGENY 4313 RY	56.5 56.3	54.5	40.8	1.3 1.7	0.0 0.0	0.0	1.0 1.0	R6 R6	
SOUTHERN STATES LL 423N	55.8			2.3	15.6	0.0	1.0	R6	
NK45-V8 BRAND	55.8			2.0	1.5	0.0	1.0	R7	
MYCOGEN SEEDS 5N451R2	55.5			2.0	0.6	0.0	1.0	R7	
UNISOUTH GENETICS USG 74A33R STEWART 4514R2	55.4 55.3			2.3 2.3	5.9 0.4	0.0 33.3	1.0 1.3	R6 R6	
PIONEER 94Y50	55.3	54.5	43.8	2.0	2.4	3.3	1.3	R7	
PFISTER 45R22	54.4			1.7	0.4	1.7	1.3	R6	
STEYER 4203R2	54.3	54.6	42.4	1.7	1.5	0.0	1.0	R6	
PFISTER 43R29 BECK 459L4 <sup>TM*</sup>	54.3 53.6	55.1		2.0 1.7	1.7 0.2	0.0	1.0 1.0	R6 R6	
ASGROW AG4232	53.3	56.6	43.6	1.7	1.9	33.3	1.3	R7	
SEED CONSULTANTS SCS 9443RR	53.2			2.3	0.0	0.0	1.3	R6	
BIOGENE BG 7441	53.0			1.7	1.7	0.0	1.0	R6	
ARMOR 45-R60 PROGENY 4560 LL	52.1 51.8	51.7		1.3 2.3	0.9 1.9	0.0 3.3	1.0 1.3	R7 R6	
STINE 42RD02	51.8			2.0	8.9	0.0	1.0	R7	
SOUTHERN STATES SS 453N	51.0			1.7	0.0	0.0	1.0	R6	
STEYER 4401R2	49.6	55.0		1.7	3.0	0.0	1.0	R6	
PROGENY 4510 RYS	46.6	48.0	38.9	2.0	4.4	66.7	1.7	R6	
GROUP IV EARLY AVERAGE	57.9	56.9	43.1	1.8					
LSD (0.10) C.V.	5.2 6.7	4.1 7.6	3.3 7.6						
		7.0	7.0						
MATURITY GROUP IV LATE (relative MG 4.6 HORNBECK HBK RY4620	-4.9) 76.7	69.4	58.1	1.7	0.4	0.0	1.0	R6	
LG SEEDS C4867R2	76.5	0,111	5011	3.7	17.9	0.0	1.0	R6	
SCHILLINGER SEED 4712R	75.2			3.3	7.4	0.0	1.0	R6	
PROGENY 4613 RYS	73.0	_		3.0	11.1	0.0	1.0	R6	
ARMOR 49-R56 SCHILLINGER SEED 4990.RC	71.1 69.3	62.5	48.0	2.0 2.0	11.9 0.4	33.3 0.0	1.3 1.0	R6 R6	
DELTA GROW 4967 LL	68.6	02.5	40.0	2.0	26.7	0.0	1.0	R6	
REV <sup>®</sup> 47R53 <sup>TM</sup>	68.6	59.8	49.3	2.3	2.2	0.0	1.0	R6	
PROGENY 4850 RYS	67.9	62.6		2.0	4.4	0.0	1.0	R6	
NK49-F8 BRAND ASGROW AG4933	67.5 67.4	64.6 65.8		2.0 2.0	0.0 0.4	0.0	1.0 1.0	R6 R6	
SCHILLINGER SEED 458.RCS	67.0	64.2	48.2	1.3	0.4	0.0	1.0	R6	
STEYER 4702R2	66.6	60.2	1012	2.7	0.0	0.0	1.0	R6	
CAVERNDALE CF 496 RR2Yn	65.4			2.7	3.3	0.0	1.0	R6	
ARMOR X1409 STINE 48RD00	65.3 65.1			2.7 1.7	3.7 0.7	0.0	1.0	R6 R6	
DYNA-GRO S47RY13	64.6	60.1		1.7	2.2	0.0	1.0	R6	
UNISOUTH GENETICS USG 74E88	64.6	00.1		1.7	0.4	0.0	1.0	R6	
REV <sup>®</sup> 48R44 <sup>TM</sup>	64.3			2.3	0.9	0.0	1.0	R6	
MYCOGEN SEEDS 5N479R2 DYNA-GRO S48RS53	64.2 64.1	64.4		1.7 1.7	3.7 12.6	0.0	1.0 1.0	R6 R6	
PFISTER 47R22	63.8	68.9		1.7	0.0	0.0	1.0	R6	
BECK 477NR <sup>TM*</sup>	62.9	55.6	44.4	2.7	3.0	0.0	1.0	R6	
DELTA GROW 4867 LL	62.9			3.3	15.9	0.0	1.0	R6	
PIONEER P48T53R	62.6			2.0	5.9	0.0	1.0	R6	
REV® 47R34 <sup>TM</sup> STEWART 4714R2	62.5 61.9			3.0 1.3	1.5 33.3	0.0	1.0 1.0	R6 R6	
SOUTHERN STATES SS 4917N R2	61.7			1.3	4.1	0.0	1.0	R6	
SEED CONSULTANTS SCS 9474RR	61.5			2.3	3.3	0.0	1.0	R6	
ARMOR 47-R13	61.3	58.9		2.0	9.3	0.0	1.0	R6	
LG SEEDS C4780R2 ARMOR X47C	61.2 61.1	61.4		2.0 3.0	5.6 0.0	0.0	1.0	R6 R6	
SOUTHERN STATES SS 4725NS R2	61.1			1.7	2.2	0.0	1.0	R6	
REV <sup>®</sup> 46R64 <sup>TM</sup>	60.9			2.0	0.1	0.0	1.0	R6	
ARMOR X49C	60.8	(1.0		2.7	0.4	0.0	1.0	R6	
ASGROW AG4831 DELTA GROW 4765 RR2/STS	60.4 60.0	61.9 60.2		1.3 2.0	0.0 11.9	0.0 0.0	1.0 1.0	R6 R6	
SEED CONSULTANTS SCS 9494RR	59.9	00.2		2.0	9.6	0.0	1.0	R6	
HORNBECK HBK RY4721	59.8	60.7		2.7	0.0	0.0	1.0	R6	
WARREN SEED DS 4850 R2Y/STS	59.6	60.9		1.7	0.0	0.0	1.0	R6	
DELTA GROW 4670 RR2	58.9	61.6	49.3	2.7	11.9	0.0	1.0	R6	
PIONEER P46T21R ARMOR X1406	58.7 58.5			2.0 1.7	0.4 0.0	0.0 0.0	1.0 1.0	R6 R6	
PENNYRILE (long term check-released 1987)	58.5	52.3	40.1	2.0	2.2	0.0	1.0	R6	
PROGENY 4900 RY	58.3	62.5		1.7	14.1	0.0	1.0	R6	
HALO X466	58.0			2.0	0.4	0.0	1.0	R6	
PIONEER P47T36R ASGROW AG4632	57.9 57.5	59.9	48.1	2.0 3.0	0.7 4.4	0.0 0.0	1.0 1.0	R6 R6	
CAVERNDALE CF 486 RR2Y/STSn	57.5	59.9 63.1	40.1	3.0 2.3	4.4 0.0	0.0	1.0	R6	
REV® 48R33 <sup>TM</sup>	57.3	54.8	43.9	2.7	2.2	0.0	1.0	R6	
PIONEER P49T97R	57.2			2.3	3.7	0.0	1.0	R6	
DELTA GROW 4981 LL/STS	56.5			2.3 2.0	7.4 0.4	0.0 0.0	1.0 1.0	R6 R6	
CAVERNDALE CF 466 RR2Yn	56.1								

## Table 11. (continued)

					DISEASES			
BRAND VARIETY	2013	YIELD (BU/AC 2012-13	)A 2011-13	LODGING	SUDDEN DEATH SYNDROME <sup>B</sup> INDEX	FROGEYE L	EAFSPOT <sup>C</sup> RATING	SOYBEAN DEVELOPMEN STAGE <sup>D</sup>
PROGENY 4710 RYS	56.1	62.1	49.9	1.7	8.9	0.0	1.0	R6
ASGROW AG4832	56.1	58.5	47.4	3.3	4.6	0.0	1.0	R6
HALO 4:65	56.0	55.2	45.6	3.0	25.2	0.0	1.0	R6
CHILLINGER SEED 495.RC CAVERNDALE CF 485 LLn	55.7 55.2	55.8 49.6	45.1	2.3 2.7	1.5 13.3	0.0	1.0 1.0	R6 R6
INIVERSITY OF MISSOURI S09-9943	55.0	47.0		3.3	15.6	0.0	1.0	R6
IORNBECK HBK L4850	54.6			2.3	3.7	6.7	1.7	R6
ELTA GROW 4825 RR2/STS	54.1	58.7		3.7	13.3	6.7	1.3	R6
ALO 4:97	53.9			2.7	26.7	0.0	1.0	R6
AVERNDALE CF 469 LL/STSn	53.8			2.0	16.7	0.0	1.0	R6
SGROW AG4934	53.8	50.0		2.7	1.3	0.0	1.0	R6
ROGENY 4819 LL	53.5	52.9	467	2.7	11.1	0.0	1.0	R6
ELTA GROW 4880 RR OUTHERN STATES SS 4700 R2-STS	53.0 52.8	53.7 58.3	46.7 45.9	2.3 1.7	0.4 5.9	0.0 0.0	1.0 1.0	R6 R6
1YCOGEN SEEDS 5N478R2	52.5	20.5	43.9	3.3	8.9	0.0	1.0	R6
RMOR 49-C3	52.4			3.7	1.6	0.0	1.0	R6
ROGENY 4930 LL	52.4			2.0	7.0	0.0	1.0	R6
/ARREN SEED DS 4633 R2Y	52.1	58.0		3.3	4.4	0.0	1.0	R6
IALO 5:01	52.0	54.9		2.3	10.7	0.0	1.0	R6
ALO 4:95	51.8	55.4		3.0	3.0	0.0	1.0	R6
ELTA GROW 4990 LL	51.8			1.7	2.2	0.0	1.0	R6
REAT LAKES HYBRIDS GL4729R2	51.6	F1 1	41.0	2.0	1.9	0.0	1.0	R6
EV® 49R22 <sup>TM</sup>	51.3	51.1	41.8	2.7	0.7	0.0	1.0	R6
ROGENY 4747 RY ALO 4:94	51.3 51.0	53.8 56.1	43.3	2.3 1.7	4.4 14.8	0.0	1.0 1.0	R6 R6
ALO X496	50.6	50.1	C.CP	1.7	14.0	0.0	1.0	R6
IORNBECK HBK L4950	49.7			2.0	17.8	0.0	1.0	R6
RMOR 48-R66	49.7			3.3	0.1	0.0	1.0	R6
OUTHERN STATES LL 473N	49.3			2.3	24.4	0.0	1.0	R6
IONEER 94Y70	49.3	51.6	42.8	2.3	2.2	0.0	1.0	R6
OUTHERN STATES SS 4913N R2	48.6			2.0	17.8	0.0	1.0	R6
ELTA GROW 4925 RR2	48.2	54.4		2.0	5.9	0.0	1.0	R6
EV® 48R22 <sup>TM</sup>	48.0	51.8	40.2	3.3	0.0	0.0	1.0	R6
ECK 483NL ELTA GROW 4940 RR	47.9 47.5			2.3 2.7	0.7 3.0	0.0	1.0 1.0	R6 R6
ROGENY 4928 LL	47.3	53.6	46.9	2.7	0.7	0.0	1.0	R6 R6
IK46-G9 BRAND	46.7	55.0	40.9	3.3	10.4	0.0	1.0	R6
RMOR X48C	44.9			3.3	11.1	0.0	1.0	R6
ELTA GROW 4755 RR2	44.5	51.4		2.7	3.0	0.0	1.0	R6
TEYER 4802R2	43.7			2.0	0.0	0.0	1.0	R6
IK46-L2 BRAND	42.2			3.0	0.2	0.0	1.0	R6
TEYER 4701R2 EV® 49R94 <sup>TM</sup>	40.5 37.6	48.0	38.5	3.7 2.7	5.9 14.1	0.0 0.0	1.0 1.0	R6 R6
ROUP IV LATE AVERAGE	57.5	58.3	45.9	2.4				
SD (0.10)	7.5	5.3	4.3					
.V.	9.6	9.5	9.6					
IATURITY GROUP V (Relative MG 5.0-5.9) RMOR X1413	65.9			1.0	0.0	0.0	1.0	R5
IONEER 95Y10	65.2	61.2	58.8	2.0	0.0	0.0	1.0	R5
ELTA GROW 5361 LL	63.6	0.112	2010	2.7	0.0	0.0	1.0	R5
ELTA GROW 5130 RR2	61.9			1.3	0.2	0.0	1.0	R5
NISOUTH GENETICS USG 5601T	61.0	59.1	55.8	2.3	11.9	0.0	1.0	R5
RMOR X1410	60.1			3.0	0.0	0.0	1.0	R5
VARREN SEED DS 5122 R2Y	59.9	F0 7		1.3	0.7	0.0	1.0	R5
NIVERSITY OF ARKANSAS UA5612	59.7	58.7		3.7	0.0	0.0	1.0	R5
ALO 5:26 TEYER 5101R2	59.0 58.7	67.0		2.3 1.3	13.3 0.0	0.0	1.0 1.0	R5 R5
ALO 5:45	58.6	58.0		1.5	17.8	0.0	1.0	R5 R6
EED CONSULTANTS SCS 9574RR	57.5	50.0		2.3	1.1	0.0	1.0	R5
ELTA GROW 5625 RR2	57.1			2.7	0.0	0.0	1.0	R5
ECK 511R4 <sup>TM*</sup>	57.0			1.7	4.4	0.0	1.0	R5
EV <sup>®</sup> 59R13 <sup>TM</sup>	57.0	56.0		2.3	3.0	0.0	1.0	R5
ORNBECK HBK RY5421	57.0	59.3	_	3.3	0.0	0.0	1.0	R5
EV® 51R53 <sup>TM</sup>	56.4	55.0	57.0	1.3	0.0	0.0	1.0	R5
NISOUTH GENETICS USG ALLEN			L77	2.3	5.2	0.0 0.0	1.0	R6
	55.4	59.0	57.2	2.0			1.0	R5
	55.4 55.3	59.0	57.2	2.0	13.3			DE
EED CONSULTANTS SCS 9544RR	55.4 55.3 54.5	59.0	57.2	3.0	0.0	0.0	1.0	R5 85
EED CONSULTANTS SCS 9544RR G SEEDS C5122R2	55.4 55.3 54.5 54.2	59.0	57.2	3.0 1.3	0.0 0.0	0.0 0.0	1.0 1.0	R5
EED CONSULTANTS SCS 9544RR G SEEDS C5122R2 ECK 522L4	55.4 55.3 54.5 54.2 54.0		57.2	3.0 1.3 1.3	0.0 0.0 5.2	0.0 0.0 0.0	1.0 1.0 1.0	R5 R5
EED CONSULTANTS SCS 9544RR G SEEDS C5122R2 ECK 522L4 EV® 54R84 <sup>TM</sup>	55.4 55.3 54.5 54.2	59.0 54.0 54.2	52.3	3.0 1.3	0.0 0.0	0.0 0.0	1.0 1.0	R5
EED CONSULTANTS SCS 9544RR G SEEDS C5122R2 ECK 522L4 EV® 54R84TM NISOUTH GENETICS USG 5002T	55.4 55.3 54.5 54.2 54.0 53.6	54.0		3.0 1.3 1.3 3.7	0.0 0.0 5.2 5.4	0.0 0.0 0.0 0.0	1.0 1.0 1.0 1.0	R5 R5 R6
EED CONSULTANTS SCS 9544RR G SEEDS C5122R2 ECK 522L4 EV® 54R84TM INISOUTH GENETICS USG 5002T INIVERSITY OF ARKANSAS OZARK IYCOGEN SEEDS 5N510R2	55.4 55.3 54.5 54.2 54.0 53.6 53.2 52.2 51.8	54.0 54.2	52.3	3.0 1.3 1.3 3.7 2.3 3.0 1.0	0.0 0.0 5.2 5.4 4.4 4.4 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0	R5 R5 R6 R5 R5 R5
EED CONSULTANTS SCS 9544RR G SEEDS C5122R2 ECK 522L4 EV® 54R84TM NISOUTH GENETICS USG 5002T NIVERSITY OF ARKANSAS OZARK IYCOGEN SEEDS 5N510R2 IYCOGEN SEEDS 5N540R2	55.4 55.3 54.5 54.2 54.0 53.6 53.2 52.2 51.8 51.7	54.0 54.2	52.3	3.0 1.3 1.3 3.7 2.3 3.0 1.0 2.7	0.0 0.0 5.2 5.4 4.4 4.4 0.0 3.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	R5 R5 R6 R5 R5 R5 R5 R5
EED CONSULTANTS SCS 9544RR G SEEDS C5122R2 ECK 522L4 EV® 54R84TM INISOUTH GENETICS USG 5002T INIVERSITY OF ARKANSAS OZARK MYCCGEN SEEDS 5N510R2 MYCCGEN SEEDS 5N540R2 INIVERSITY OF ARKANSAS R04-1250RR	55.4 55.3 54.5 54.2 54.0 53.6 53.2 52.2 51.8 51.7 51.4	54.0 54.2 57.4	52.3 56.1	3.0 1.3 1.3 3.7 2.3 3.0 1.0 2.7 2.7	0.0 0.0 5.2 5.4 4.4 4.4 0.0 3.0 0.4	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	R5 R5 R5 R5 R5 R5 R5 R5 R5
EED CONSULTANTS SCS 9544RR G SEEDS C5122R2 BECK 522L4 EV® 54R84 <sup>TM</sup> INISOUTH GENETICS USG 5002T JNIVERSITY OF ARKANSAS OZARK AYCOGEN SEEDS 5N510R2 AYCOGEN SEEDS 5N540R2 JNIVERSITY OF ARKANSAS R04-1250RR ESSEX (long term check-released 1974)	55.4 55.3 54.5 54.2 54.0 53.6 53.2 52.2 51.8 51.7 51.4 51.1	54.0 54.2	52.3	3.0 1.3 1.3 3.7 2.3 3.0 1.0 2.7 2.7 2.7	0.0 0.0 5.2 5.4 4.4 4.4 0.0 3.0 0.4 4.4	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	R5 R5 R5 R5 R5 R5 R5 R5 R5 R5 R5 R5
EED CONSULTANTS SCS 9544RR G SEEDS C5122R2 ECK 522L4 EV® 54R84 <sup>TM</sup> JNISOUTH GENETICS USG 5002T JNIVERSITY OF ARKANSAS OZARK AYCOGEN SEEDS 5N510R2 AYCOGEN SEEDS 5N540R2 JNIVERSITY OF ARKANSAS R04-1250RR	55.4 55.3 54.5 54.2 54.0 53.6 53.2 52.2 51.8 51.7 51.4	54.0 54.2 57.4	52.3 56.1	3.0 1.3 1.3 3.7 2.3 3.0 1.0 2.7 2.7	0.0 0.0 5.2 5.4 4.4 4.4 0.0 3.0 0.4	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	R5 R5 R6 R5 R5 R5 R5 R5 R5

#### Table 11. (continued)

						DISEASES		
	<u> </u>	IELD (BU/AC	)A		SUDDEN DEATH SYNDROME <sup>B</sup>	FROGEYE L		SOYBEAN DEVELOPMENT
BRAND VARIETY	2013	2012-13	2011-13	2013	INDEX	INCIDENCE	RATING	STAGED
REV <sup>®</sup> 53R23 <sup>TM</sup>	50.1	56.7		2.3	1.5	0.0	1.0	R5
REV <sup>®</sup> 52R74 <sup>TM</sup>	50.1	54.1		1.7	0.4	0.0	1.0	R5
DELTA GROW 5461 LL	49.5			2.0	10.0	0.0	1.0	R5
HORNBECK HBK L5350	49.2			2.3	0.7	0.0	1.0	R5
DELTA GROW 5481 LL	48.8			2.7	1.5	0.0	1.0	R5
UNIVERSITY OF ARKANSAS R04-1268RR	47.7			4.0	0.0	0.0	1.0	R6
HALO X530	47.1			1.3	15.9	0.0	1.0	R5
USDA-ARS JTN-5203	46.6	54.2	53.1	3.3	4.4	0.0	1.0	R5
SOUTHERN STATES LL 513N	46.4			1.7	12.6	0.0	1.0	R5
UNIVERSITY OF ARKANSAS OSAGE	45.5	54.7	57.6	2.7	6.7	0.0	1.0	R6
HORNBECK HBK RY5221	43.9	45.1		2.0	0.0	0.0	1.0	R5
REV <sup>®</sup> 55R53 <sup>TM</sup>	43.6	51.4		3.2	4.4	33.3	1.3	R6
GROUP V AVERAGE	54.0	56.3	55.4	2.3				
LSD (0.10)	5.2	4.0	3.7					
C.V.	7.1	7.5	8.0					

DICEACEC

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

For each plot, 1) the Disease Incidence (DI) was recorded as percentage of plants showing visible leaf symptoms; 2) the Disease Severity (DS) was recorded using a 1 - 9 scale (1 = 0 - 10% total leaf area is necrotic, 2 = 10 - 20% chlorotic or up to 10% necrotic, 3 = 20 - 40% chlorotic or 10 - 20 necrotic, 4 = 40 - 60% chlorotic, 5 = more than 60% chlorotic or more than 40% necrotic, 6 = premature leaf drop up to 1/3 defoliation, <math>7 = premature leaf drop from 1/3 to 2/3 defoliation, <math>8 = premature leaf drop greater than 2/3 defoliation, <math>9 = prematureВ death; and 3 the Disease index (DX) was calculated using the following formula: DX = DI x DS /9. The data in the table are reported as the mean index: for each variety, the mean index was calculated using the DIs of all three plot replicates.

C For each plot, 1) the Disease Incidence (DI) was reported as percentage of plants showing visible leaf symptoms; 2) the Disease Rating (DR) was recorded using a 1 - 9 scale (1 = resistant or row visible lesion, 2 = moderately resistant or 1 - 25% of the leaf surface has lesion, 3 = moderately resistant or 25 - 50% of the leaf surface has lesion, 4 = susceptible or 50% of the leaf surface has lesion, 5 = very susceptible or more than 50% of the leaf has lesion or the leaf is dead). The data in the table are reported as means: for each variety, the DI mean and DR mean were calculated using the DIs and DRs of all three plot replicates.
 D Stage of development/reproduction of soybean varieties when diseases were first observed (disease incidence and rating notes were taken).

#### AGRONOMIC INFORMATION

Location	Simpson County
Soil type	Pembroke silt loam
Previous crop	Soybean (rye winter cover crop)
Soil test	pH 6.02
	P 26
	K 327
Fertilizer applied	MAP 10-50-0 (195 lbs/ac.)
Pre-planting treatments	Glyphosate (40 oz/ac) and Authority XL (6.5 ai/ac) 4/17/2013
Agricultural practice	No-till
Planting dates	MG II, III, and MG IV Early 5/25/2013
	MG IV Late and MG V 5/26/2013
Harvest dates	MG II, III 10/11
	MG IV Early 10/20
	MG IV Late and V 10/21
50% chance of killing frost	10/24

Precipitation and temperature history (Simpson County)

	Total Monthly	Temperature (°F)					
	Precipitation (in.)	Average Monthly	Highest Recorded	Lowest Recorded			
March	5.07	41.4	71.9	19.1			
April	8.07	56.5	85.8	31.7			
May	4.29	65.9	86.9	39.1			
June	2.72	75.1	93.4	54.7			
July	8.43	74.6	91.9	55.2			
August	4.10	74.6	90.9	54.3			
September	3.08	70.3	89.7	48.3			
October	2.52	59.2	88.0	24.6			



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