

2016 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 sold 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 in the 2016 tests were entered by soybean growers, commercial companies, and state and federal institutions.

Forty soybean tests were planted in 2016 in Kentucky, at the eight test locations shown below. Test locations, planting and harvest dates are shown in Table 1.

Methods

All tests were planted in a randomized complete block design by maturity group with a specially built no-till plot planter. The tests (Tables 6 through 10) had three replications (plots) for 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.

Seed source information is located on page 4. Companies could choose to treat their seed with fungicides, insecticides, nematicides, beneficial organisms, and/or germination/growth/systemic acquired resistance enhancers (Table 3). The treatment codes are provided in Table 4.

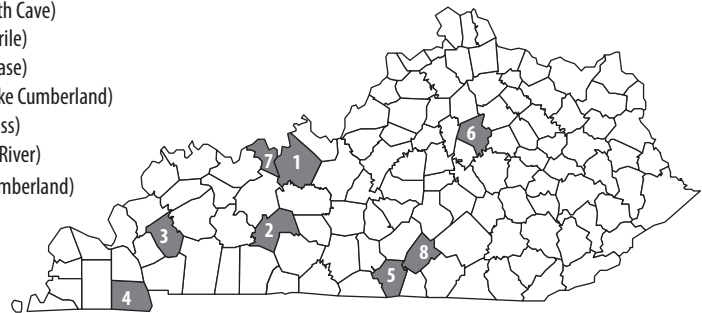
Harvesting was done with a small plot combine (Wintersteiger Delta plot combine—intersteiger, USA) according

to maturity. Sixteen feet of the four center rows were harvested from the plots.

Yield is reported in bushels (60 pounds) per acre adjusted to 13% moisture. An electronic weight and moisture monitor (HarvestMaster HM800 GrainGage system, 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 (Allegra Mx, Juniper Systems, Inc., USA) connected to the monitor and analyzed with Agrobases GEN II statistical software (Agronomix Software Inc., Canada).

Location of the 2016 Kentucky Soybean Variety Performance Tests

1. Breckinridge County (Lincoln Trail)
2. Butler County (Mammoth Cave)
3. Caldwell County (Pennyrile)
4. Calloway County (Purchase)
5. Cumberland County (Lake Cumberland)
6. Fayette County (Bluegrass)
7. Hancock County (Green River)
8. Russell County (Lake Cumberland)



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Table 1. Locations, planting and harvest dates for the 2016 Kentucky Soybean Variety Performance Tests

TEST SITE	REGION	COLLABORATORS	PLANTING DATE(S)	AG. PRACTICE	HARVEST DATES
Breckinridge County	Lincoln Trail	Mr. Campton - soybean producer Carol Hinton - UK County Extension Agent for Agriculture and Natural Resources	6/10/2016	No-till	MG II, III, IV Early: 10/12/2016 MG IV Late, V: 11/02/2016
Butler County	Mammoth Cave	Mr. Wells - soybean producer Gregory Drake - UK County Extension Agent for Agriculture and Natural Resources	6/8/2016	No-till	MG II, III, IV Early, V: 10/18/2016 MG IV Late: 10/19/2016
Caldwell County	Pennyrile	Joe Williams - Farm Superintendent at the UK Research and Education Center, Princeton KY	6/6/2016	No-till	MG II: 10/07/2016 MG III: 1/08/2016 MG IV Early: 10/10/2016 MG IV Late, V: 11/01/2016
Calloway County	Purchase	Dr. Ferguson - Professor of Agronomy Mr. Robertson - Farm manager Murray State University	MG II and III: 5/23/2016 MG IV Early, IV Late, V: 5/24/2016	Tillage	MG II, III: 09/27/2016 MG IV Early: 9/28/2016 MG IV Late, V: 10/17/2016
Cumberland County	Lake Cumberland (1)	Mr. Mims - soybean producer Colby Guffey and Chelsea Pickens - UK County Extension Agents for Agriculture and Natural Resources	5/14/2016	No-till	MG II: 0/29/2016 MG III, IV Early: 10/06/2016 MG IV Late, V: 10/31/2016
Fayette County	Bluegrass	C. Venard and J. Duckworth	5/30/2016	No-till	MG II, III: 1/13/2016 MG IV Early, IV Late: 10/14/2016 MG V: 10/24/2016
Hancock County	Green River	Mr. Ray - soybean producer Evan Tates - UK County Extension Agent for Agriculture and Natural Resources	6/9/2016	Minimum tillage	MG II, III, IV Early: 10/11/2016 MG V: 11/01/2016 MG IV Late: 11/02/2016
Russell County	Lake Cumberland (2)	Mr. Pierce - soybean producer Andrew Faison - UK County Extension Agent for Agriculture and Natural Resources	5/31/2016	No-till	MG II, III: 10/03/2016 MG IV Early, IV Late: 10/04/2016 MG V: 10/26/2016

Lodging was recorded at harvest. 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% down; 4 = all plants over considerably or 50% to 80% down; 5 = all plants down.

Maturity date. A variety was considered mature when 99% of the pods have turned their normal mature color. (One to two weeks of good drying weather may be needed beyond the date given before the beans 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, at harvest.

Disease ratings. Diseases 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 (Company specifications) for disease resistance/tolerance ratings. In addition to the company specifications, the test plot fields were scouted every other week during the soybean growing season for disease. During the 2016 season, frogeye leaf spot (FLS) was observed at all of the Kentucky Soybean Variety Performance Test sites. Disease ratings for FLS were taken during the third week of August in Calloway County and Russell County, where the disease developed enough to potentially affect yield. The disease ratings are presented in table 10 (Calloway) and 14 (Russell).

Protein, Oil. Variety protein and oil concentrations are reported on the basis of 13% moisture. The 2016 samples were collected at the Fayette County, Calloway County, and Hancock County locations, and analyzed with a NIR spectrophotometer (DA 720, Perten Instruments, Sweden). The data were analyzed with Agrobases GEN II statistical software.

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 soybean-producing areas of the state. The yields as reported in this publication should be used for relative comparisons; actual yields on a grower's farm may be different.

Performance of soybean varieties will vary from year to year and from location to location depending on adaptability, weather conditions, and management practices. Performance of a variety across a period of years and at several locations in the state is the best indicator of its production potential (see the University of Kentucky publication *Agronomy Notes*, Volume 21, No. 3, "Using Performance Test Results in Soybean Variety Selection in Kentucky"). The data presented in the Table 5, (State summary) have been averaged across years and locations and are recommended to evaluate variety relative 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 each maturity group should be used. The significance level in Tables 5 through 13 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 a production system. Oil and protein contents, date of maturity, lodging resistance, disease resistance, availability of time and equipment, economic management, and weed control costs should be considered as well.

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 ones those that have the highest average

concentrations. This approach should help select a variety that has the best chance of producing acceptable yield and that meets 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% chance of a fall killing frost is important in determining which variety should be planted. The dates, presented along with Tables 6 through 13, are average dates over a long term. Actual dates will vary from year to year. For the dates of a one-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*). The importance of resistant varieties has increased as the number of acres affected by SCN in Kentucky has increased. SCN occurs in 51 western Kentucky counties. Low levels of SCN show few visible symptoms but can cause yield losses of up to 25%. Fields should be tested for SCN. Producers should contact their local University of Kentucky County Extension office for more information on collecting and submitting samples.

Table 5, consisting of a summary of the 2014-2015-2016 full-season tests for each maturity group, 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 yield is a better indicator of performance than late-planted soybeans that have reduced yields. The data from three 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—2016

February saw near normal temperatures and above normal rainfall. The month started out very active as a strong storm system pushed through the Lower Ohio Valley with temperatures in the upper 60s to low 70s (normal highs for February are in the low to mid 40s). Another significant winter storm came on the 14th with totals ranging from 2 to over six inches across the area, with highest accumulations across the southern half of Kentucky. Activity then increased over the latter half of February with multiple rounds of widespread activity. The 2015-2016 winter was one of the warmest on record for the state of Kentucky.

March was also above normal temperatures over a period of three weeks. The average state temperature of 61 degrees was 16 degrees above normal for this time of year. Over this period, a low pressure system sat over northern Mexico and Texas, setting up a southerly flow pattern into the Ohio Valley. Temperatures for the period averaged 53 degrees across the state which was 6 degrees warmer than normal. In addition to the extremely warm temperatures seen over the second week of the month, rainfall was abundant across the western half of the state.

April started off with a couple rounds of widespread showers and storms as low pressure passed through the area. Conditions then turned dry, with around 55% of the state showing signs of abnormally dry conditions, mainly in east-central and southeastern Kentucky. By the last week of April the entire state experienced some rainfall. Exceptionally wet conditions soaked the ground. Temperatures for the period averaged 58 degrees across, 2 degrees warmer than normal.

After an exceptionally wet end to April, the active pattern remained in place for much of May, which is typically the wettest month of the year for Kentucky. The entirety of the state averaged over 5 inches of rainfall. The active period occurred between the 10th and the 12th. Strong to severe storms were seen each day with excessive lightning, heavy rain, large hail, and damaging winds as the main hazards. By mid-May, standing water was being seen in many fields. Behind northwest flow, most of the state exceeded the 10% threshold for freezing occurrence, with temperatures dropping into the middle 30s to low 40s by the 15th, 15 to 20 degrees below normal for mid-May. The last week of the month brought a drastic change to this

pattern as it started to feel more like summer. Through the last week, temperatures were in the 80s about each day, along with an increase in humidity as Gulf moisture filtered into the area. Precipitation for the period totaled 6.03 inches statewide which was 1.11 inches above normal and 122% of normal.

June was dry and warm, 12 degrees warmer than May. June had over one inch below normal. The cool, wet conditions of May 2016 slowed crop planting (corn, soybean) but also emergence/development. Then the dry June caused crops to start showing some stress, especially in western and west central regions. The west only received 61 per cent of normal monthly rainfall. Temperatures for the period averaged 75 degrees across the state which was 2 degrees warmer than normal. Precipitation for the period totaled 3.34 inches statewide which was 1.06 inches below normal and 76% of normal.

July 2016 was an exceptionally wet month with an average of 8.86 inches, only slightly behind 2015. Western Kentucky alone averaged 12.43 inches. Most of the rainfall fell over the first and last weeks of July, with below normal rainfall in between. Any storms that did develop were heavy-rain producers as the state remained entrenched in a humid air mass for much of July. The heavy rain at the start of the month left many low lying fields in standing water and resulted in crop losses for tobacco, corn, and soybeans. Temperatures remained above normal for each week of July. Between the 18th and 24th, the state saw a prolonged period of heat. Temperatures for the period averaged 78 degrees across the state which was 2 degrees warmer than normal.

The wet summer trend continued through much of the month of August. The state averaged nearly 5 inches for the month, which was over an inch above normal. Several rounds of storms pushed through the Commonwealth. Storms were capable of torrential rainfall and occasional localized flooding. After a very active period, the final week and half of August were fairly dry with showers and scattered storms. The hot and muggy conditions continued. Throughout the month, temperatures remained elevated, peaking in the middle 90s at times. Temperatures for the period averaged 78 degrees across the state which was 2 degrees warmer than normal.

A dry pattern developed in September, with an average of 2 inches of rain for the state. Weak, passing cold fronts brought few precipitations. By the end of the month,

the Bluegrass area and southern part of the state was considered under abnormally dry conditions. Temperatures also remained above seasonable, with high temperatures rising into the low to mid-90s throughout September. Temperatures averaged 72 degrees across the state. These conditions favored harvest.

Dry conditions continued in October. The state averaged just 0.99 inches of rain for the month, which was over 2 inches below normal, which added to the September deficit. The first update of U.S. Drought Monitor on November 1st showed nearly 82% of the state under a 'moderate drought'. Soybean harvest progressed rapidly, but the dry conditions were detrimental to other agricultural production systems such as pasture feeding for livestock and contributed to poor germination of wheat and cover crops. Temperatures remained fairly warm for October, reaching mid- to upper 80s.

More detailed precipitation and temperature information for each test location is provided next to Tables 6 through 13, in the sections Agronomic Information (Sources: www.kymesonet.gov, www.nws.noaa.gov, and www.wagwx.ca.uky.edu/annual.shtml).

Soybean Production Information

The Kentucky Cooperative Extension Service has a series of publications, Soybean Production in Kentucky, which contains a more detailed discussion of soybean production practices:

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

Table 2 is a seeding rate planting guide for full-season and double-crop soybeans. 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 adequate for maximum yields in full-season soybeans in most situations. Seeding rates should be adjusted on standard germination rates as well as expected stand losses. Stand losses are typically more severe in damp, cool conditions with heavy residues or with soil crusting. Stand losses are typically less with

warm conditions and adequate soil moisture.

As of November 9, 2016, soybean production for Kentucky was forecast at 89.5 million bushels, unchanged, up 1% from 2015. Yield was estimated at 50 bushels per acre. Acreage for harvest was estimated at 1.79 million acres, down 20,000 acres from 2015. Soybean average price reached \$9.86 per bushel for Kentucky in September (Source: November Crop Production—News Release USDA NASS, November 9, 2016; Kentucky AgriNews 35(11) USDA NASS, November 15, 2016).

Kentucky State Seed Law

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

Acknowledgments

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Variety Performance Tests Website

The University of Kentucky Grain Crops website (<http://graincrops.ca.uky.edu/>) provides links to all Kentucky variety test publications and related resources (<http://graincrops.ca.uky.edu/variety-testing>). This site includes a link to the Soybean Variety Performance Tests website (<http://pss.ca.uky.edu/extension/soybean-variety-trials>).

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

2A, Full-season						
Target Stand plants/acre	Standard Germination	Assumed Stand Loss	Final Seeding Rate (seeds/acre)	Row spacing (inches)		
				7.5	15	30
				Seeds per foot		
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-crop						
Target Stand plants/acre	Standard Germination	Assumed Stand Loss	Final Seeding Rate (seeds/acre)	Row spacing (inches)		
				7.5	15	30
				Seeds per foot		
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

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University of Kentucky

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Murray State University

The farm crew at Murray State University for their help with agronomic management and harvest at the Calloway County location.

Sources of Seeds

The seeds planted in the 2016 Soybean Variety Performance Tests were acquired from the following sources:

Armor Seed, LLC

Chris Ouzts 662-719-3157
183 Pennsylvania Avenue, Waldenburg AR 72475
chrisouzs@armorseed.com

ARMOR 35-D20	ARMOR 39-D90
ARMOR 43-D34	ARMOR 44-D40
ARMOR 46-D08	ARMOR 47-D17
ARMOR 47-R70	ARMOR 48-D24
ARMOR 48-D80	ARMOR 49-D66
ARMOR 49-D90	ARMOR ARX2906
ARMOR ARX3306	ARMOR ARX3706
ARMOR ARX4706	ARMOR ARX4906

Bayer CropScience

Lucas Owen 731-793-3530
lucas.owen@bayer.com

CZ 3233 LL	CZ 3383 RY	CZ 3443 LL
CZ 3560 RY	CZ 3737 LL	CZ 3841 LL
CZ 3945 LL	CZ 3991 RY	CZ 4044 LL
CZ 4105 LL	CZ 4181 RY	CZ 4222 LL
CZ 4540 LL	CZ 4590 RY	CZ 4656 RY
CZ 4748 LL	CZ 4818 LL	CZ 4898 RY
CZ 4959 RY		

Beck's Hybrids

Craig Hurley 317-984-3508
6767 E. 276th Street, Atlanta IN 46031
craig.hurley@beckshybrids.com

BECK 4291X2	BECK 453R4™™™brand
BECK 465R4™™™brand	BECK 474L4
BECK 487R4™™™brand	BECK 493R4™™™brand
BECK 494L4	BECK 4991X2

Brodbeck Seeds

Daniel Ritter 219-863-1727
15 Ringel Avenue, Wabash IN 46992
dritter@brodbeckseed.com

BRODBECK 295R2	BRODBECK 333R2
BRODBECK 365R2	BRODBECK 377R2
BRODBECK 386R2	BRODBECK 396R2
BRODBECK 417R2	BRODBECK 426R2
BRODBECK 446R2	

Caverndale Farms Brand Seed

Barry Welty 859-236-2150
1921 Bluegrass Pike, Danville KY 40422
bwelty@kywimax.com

CAVERNDALE CF 387 HT-GLYn
CAVERNDALE CF 404n
CAVERNDALE CF 426 RR2Y/STSn
CAVERNDALE CF 452 RR2Yn
CAVERNDALE CF 478 RR2Y/STSn
CAVERNDALE CF 479 LLn

DuPont Pioneer

George Stabler 800-308-1003
59 Greif Parkway Suite 200, Delaware OH 43105
George.Stabler@pioneer.com

PIONEER P28T08R	PIONEER P35T58R
PIONEER P38T42R	PIONEER P38T61BR
PIONEER P41T33R	PIONEER P45T11R
PIONEER P46T01R	PIONEER P47T36R
PIONEER P48T53R	PIONEER P49T97R
PIONEER P50T64R	

Dyna-Gro Seed

Mick Schonauer 614-620-5008
 615 Hilliard Rome Road, Columbus OH 43228
 michael.schonauer@cpsagu.com

DYNA-GRO S38LL54 DYNA-GRO S38RY87
 DYNA-GRO S39RY65 DYNA-GRO S42RY77
 DYNA-GRO S43RY95 DYNA-GRO S43XS27
 DYNA-GRO S45LL97 DYNA-GRO S46XS87
 DYNA-GRO S48RS53 DYNA-GRO S48XT56
 DYNA-GRO S49LL34 DYNA-GRO S49XS576
 DYNA-GRO SX16848XS

Great Lakes Hybrids

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GREAT LAKES HYBRIDS GL3729R2
 GREAT LAKES HYBRIDS GL3758NRX
 GREAT LAKES HYBRIDS GL3962NRX
 GREAT LAKES HYBRIDS GL4366NSRX
 GREAT LAKES HYBRIDS GL4761NRX

Growmark

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HS 46X60 HS 48X60 HS 49X60

Hoegemeyer

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HPT 3919NR HPT 4190NR
 HPT 4514NR HPT 4852NR

LG Seeds

Jesse Grogan 765-426-2763
 22827 Shissler Road, Elmwood IL 61529
 jesse.grogan@lgseeds.com

LG SEEDS C2766RX LG SEEDS C3550RX
 LG SEEDS C3911RX LG SEEDS C4145R2
 LG SEEDS C4458RX LG SEEDS C4615RX
 LG SEEDS C4845RX LG SEEDS C4900RX

Monsanto - Dekalb and Agrrow

Dr. Glen Murphy 502-377-5053
 264 Persimmon Ridge Drive, Louisville KY 40245
 glen.p.murphy@monsanto.com

ASGROW AG36X6 ASGROW AG38X6
 ASGROW AG39X7 ASGROW AG40X6
 ASGROW AG42X6 ASGROW AG43X7
 ASGROW AG44X6 ASGROW AG45X6
 ASGROW AG45X7 ASGROW AG46X6
 ASGROW AG46X7 ASGROW AG47X6
 ASGROW AG48X6 ASGROW AG49X6

Pfister Seeds, LLC

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 201 Knollwood Dr., Suite A, Champaign IL 61820
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PFISTER 29R25 PFISTER 35R25
 PFISTER 39R29 PFISTER 41RS01
 PFISTER 43R29 PFISTER 45R203
 PFISTER 48RS01

Progeny Ag. Products

John D. Rocconi 979-587-9968 (cell)
 888-535-7333 (pub)

1529 HWY 193, Wynne AR 72396
 JohnR@progenyag.com

PROGENY 4211 RY PROGENY 4247 LL
 PROGENY 4588 RY PROGENY 4613 RYS
 PROGENY 4757 RY PROGENY 4788 RY
 PROGENY 4814 LLS PROGENY 4930 LL

Seed Consultants Inc.

Bill Mullen 800-708-2676
 www.seedconsultants.com

SEED CONSULTANTS SC 9367R™
 SEED CONSULTANTS SCS 9385RR™
 SEED CONSULTANTS SCS 9393RR™
 SEED CONSULTANTS SCS 9412RR™
 SEED CONSULTANTS SCS 9456SR™
 SEED CONSULTANTS SCS 9474RR™
 SEED CONSULTANTS SC 9497R™

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6606 West Broad Street, Richmond VA 23230
 SOUTHERN STATES LL 423N
 SOUTHERN STATES SS 3813N R2
 SOUTHERN STATES SS 3916NS X
 SOUTHERN STATES SS 4215NS R2
 SOUTHERN STATES SS 4216N X
 SOUTHERN STATES SS 4417NS X
 SOUTHERN STATES SS 4717NS X
 SOUTHERN STATES SS 4725NS R2
 SOUTHERN STATES SS 4915NS R2
 SOUTHERN STATES SS 4918N X

Stewart Seeds

Justin Petrosino 1-800-365-SEED
 justin.petrosino@stewartseeds.com

STEWART 4113R2 STEWART 4116R2X
 STEWART 4327R2X STEWART 4527R2X
 STEWART 4716R2X STEWART 4927R2X

Steyer Seeds

Joe Steyer 419-355-6708
 PO Box 209, Old Fort OH 44861
 joe@steyerseeds.com

STEYER 4004XR STEYER 4402R2
 STEYER 4403XR STEYER 4704XR
 STEYER 4803XR

Stine Seed Company

Kyle Ross 270-993-4590
 PO Box 521 Rockport IN 47635
 kwross@stineseed.com

STINE 29RE22 STINE 38LE02
 STINE 38RE02 STINE 41RH22
 STINE 42LH02 STINE 43RE02
 STINE 44LH22 STINE 47LF32
 STINE 47RF32 STINE48RI22

Stratton Seed Company

Heath North 800-264-4433
 1530 Hwy 79 South, Stuggart AR 72160
 hnorth@strattonseed.com

AGS GS43R216 AGS GS48R216
 GO SOY 39C15 GO SOY 42L16
 GO SOY 43L16 GO SOY 4714LL
 GO SOY 483.C GO SOY 4913LL
 GO SOY 49G16 GO SOY IREANE

Syngenta

Mike Saxton 270-307-4440
 4320 Upton Talley Road, Upton KY 42784
 mike.saxton@syngenta.com

NK S39-T3 NK S42-P6
 NK S45-R7 NK S47-K5
 NK S48-D9

Terral Seed, Inc.

Marty Hale cell: 318-341-8814
 office: 318-231-8800

117 Ellington Drive, Rayville LA 71269
 mhale@terralseed.com

REV® 45A46™ REV® 47R34™
 REV® 48A26™ REV® 48A76™
 REV® 48L63™ REV® 49L49™
 REV® 49R94™ REV® 51A56™
 REV® 52A94™

UniSouth Genetics, Inc.

Stacy Burwick 800-505-3133
 3205 C HWY 46 S Dickson, TN 37055
 sburwick@usgseed.com

UNISOUTH GENETICS USG 7426XTS
 UNISOUTH GENETICS USG 7496XTS
 UNISOUTH GENETICS USG 7506XTS

Warren Seed and Agronomy Services

Lanny Warren 731-234-2921
 208 South Thompson Street, Union City TN 38261
 Lanny.warren@charter.net

WARREN SEED DS 3745
 WARREN SEED DS 3838
 WARREN SEED DS 4225
 WARREN SEED DS 4340
 WARREN SEED DS 4633
 WARREN SEED DS 47-003
 WARREN SEED DS 4850

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GO SOY 56C16
 UNIVERSITY OF ARKANSAS OSAGE
 UNIVERSITY OF ARKANSAS R09-430
 UNIVERSITY OF ARKANSAS R10-197RY
 UNIVERSITY OF ARKANSAS R11-89RY
 UNIVERSITY OF ARKANSAS UA 5014C
 UNIVERSITY OF ARKANSAS UA 5213C
 UNIVERSITY OF ARKANSAS UA 5414RR
 UNIVERSITY OF ARKANSAS UA 5612
 UNIVERSITY OF ARKANSAS UA 5715GT
 UNIVERSITY OF ARKANSAS UA 5814HP
 UNIVERSITY OF ARKANSAS UAX 5101OC

University of Kentucky

Todd Pfeiffer/Claire Venard 859-257-2993
 cvenard@uky.edu

ESSEX PENNYRILE

USDA-ARS

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

Table 3. Company Specifications for Entries in the 2016 Kentucky Soybean Variety Performance Tests^A

Variety/Brand name	Relative Maturity Group	Type	Disease resistance traits ^C							Seed treatments
			Soybean Cyst nematode	Phytophthora sojae ^D		SDS	SMV	Stem Canker	Other resistance traits	
				R gene	Rps					
AGS G543R216	4.3	R2Y	3, 14			Yes	MR			5, 13
AGS G548R216	4.8	R2Y	3, 14			Yes	MR	MR		5, 13
ARMOR 35-D20	3.5	RR2/Xtend								
ARMOR 39-D90	3.9	RR2/Xtend								
ARMOR 43-D34	4.3	RR2/Xtend								
ARMOR 44-D40	4.4	RR2/Xtend								
ARMOR 46-D08	4.6	RR2/Xtend								
ARMOR 47-D17	4.7	RR2/Xtend								
ARMOR 47-R70	4.7	RR2								
ARMOR 48-D24	4.8	RR2/Xtend								
ARMOR 48-D80	4.8	RR2/Xtend								
ARMOR 49-D66	4.9	RR2/Xtend								
ARMOR 49-D90	4.9	RR2/Xtend								
ARMOR ARX2906	2.9	RR2/Xtend								
ARMOR ARX3306	3.3	RR2/Xtend								
ARMOR ARX3706	3.7	RR2/Xtend								
ARMOR ARX4706	4.7	RR2/Xtend								
ARMOR ARX4906	4.9	RR2/Xtend								
ASGROW AG36X6	3.6	GENRR2X		1c	T		MR		R	2
ASGROW AG38X6	3.8	GENRR2X		1c	MT		MR		R	2
ASGROW AG39X7	3.9	GENRR2X/SR		1c	MT		MR		R	2
ASGROW AG40X6	4.0	GENRR2X		1c	MT		MR		R	2
ASGROW AG42X6	4.2	GENRR2X		1c	T		MR		R	2
ASGROW AG43X7	4.3	GENRR2X/SR		1c	MT		MR		R	2
ASGROW AG44X6	4.4	GENRR2X		1c	MT		MR		R	2
ASGROW AG45X6	4.5	GENRR2X/SR		1c	T		MR		MR	2
ASGROW AG45X7	4.5	GENRR2X		1c	MT		MR		R	2
ASGROW AG46X6	4.6	GENRR2X/SR		1a	T		MS		R	2
ASGROW AG46X7	4.6	GENRR2X/SR		1c	MT		MR		R	2
ASGROW AG47X6	4.7	GENRR2X/SR		1c	MT		MR		R	2
ASGROW AG48X6	4.8	GENRR2X/SR		1c	MT		MR		R	2
ASGROW AG49X6	4.9	GENRR2X		1c	MT		MR		R	2
BECK 4291X2	4.2	Xtend	3, 14				MR	MR		10
BECK 453R4™*brand	4.5	RR	3, 14				MR	MR	R	10
BECK 465R4™*brand	4.6	RR	3, 14				MR	MR	R	10
BECK 474L4	4.7	LL	3, 14	1c			MR	MS	R	10
BECK 487R4™*brand	4.8	RR	3, 14				MR	MR	R	10
BECK 493R4™*brand	4.9	RR	3, 14				MR	MR	R	10
BECK 494L4	4.9	LL	3, 14	1c			R	MR	R	10
BECK 4991X2	4.9	Xtend	3, 14	1a			R	R	R	10
BRODBECK 295R2	2.9	R2Y	3, 14	1a			T	MR		FELS - MT 5, 13, 29
BRODBECK 333R2	3.3	R2Y	3, 14	3a, 1k			T	MS		FELS - MS 5, 13, 29
BRODBECK 365R2	3.6	R2Y	3, 14	1k			MT	MS		FELS - T 5, 13, 29
BRODBECK 377R2	3.7	R2Y	3, 14				MS	MR		FELS - MT 5, 13, 29
BRODBECK 386R2	3.8	R2Y	3, 14	1c			MT	MS		FELS - S 5, 13, 29
BRODBECK 396R2	3.9	R2Y	3, 14	1c			S	S		5, 13, 29
BRODBECK 417R2	4.1	R2Y	3, 14	1c			MT	MR		FELS - T 5, 13, 29
BRODBECK 426R2	4.2	R2Y	3, 14	1c			MS	T		FELS - MS 5, 13, 29
BRODBECK 446R2	4.4	R2Y	3, 14	1c			T	R		FELS - MS 5, 13, 29
CAVERNDALE CF 387 HT-GLYn	3.8	RR	3, 14	1c			T	MR	MR	FELS - MR 18, 19, 20
CAVERNDALE CF 404n	4.0	CONV	3, 14	1c			T	MR	MR	FELS - MR 18, 19, 20
CAVERNDALE CF 426 RR2Y/STSn	4.2	RR2/STS	3, 14	1c			T	MR	MR	18, 19, 20
CAVERNDALE CF 452 RR2Yn	4.5	RR2	3, 14	1c			T	MR	MR	18, 19, 20
CAVERNDALE CF 478 RR2Y/STSn	4.7	RR2/STS	3, 14	1c			T	MR	R	18, 19, 20
CAVERNDALE CF 479 LLn	4.7	LL	3, 14	1c			T	MR	MR	FELS - MR 18, 19, 20
CZ 3233 LL	3.2	LL						1	1	12, 17
CZ 3383 RY	3.3	R2Y								12, 17
CZ 3443 LL	3.4	LL								12, 17
CZ 3560 RY	3.5	R2Y						5	1	12, 17
CZ 3737 LL	3.7	LL								12, 17
CZ 3841 LL	3.8	LL						3	1	12, 17
CZ 3945 LL	3.9	LL						2	1	12, 17
CZ 3991 RY	3.9	R2Y								12, 17
CZ 4044 LL	4.0	LL								12, 17
CZ 4105 LL	4.1	LL						3	1	12, 17
CZ 4181 RY	4.1	R2Y						5	1	12, 17
CZ 4222 LL	4.2	LL								12, 17
CZ 4540 LL	4.5	LL						1	8	12, 17

continued

Table 3. continued

Variety/Brand name	Realtive Maturity Group	Type	Disease resistance traits ^C								
			Soybean Cyst nematode	Phytophthora sojae ^D		SDS	SMV	Stem Canker	Other resistance traits	Seed treatments	
				R gene	Rps						Field Tolerance
CZ 4590 RY	4.5	R2Y				4	1				12, 17
CZ 4656 RY	4.6	R2Y									12, 17
CZ 4748 LL	4.7	LL				5	1				12, 17
CZ 4818 LL	4.8	LL				1	1				12, 17
CZ 4898 RY	4.8	R2Y				5	2				12, 17
CZ 4959 RY	4.9	R2Y									12, 17
DYNA-GRO S38LL54	3.8	LL	3, 14	1c	MT	MR		MR			16
DYNA-GRO S38RY87	3.8	R2Y	3, 14	1c	MT	MR		MR	MR FELS		16
DYNA-GRO S39RY65	3.9	R2Y	3, 14		MT	MS		MR			16
DYNA-GRO S42RY77	4.2	R2Y	3, 14		T	MT		MR	R FELS		16
DYNA-GRO S43RY95	4.3	R2Y	3, 14	1c	MT	MS		R	MR FELS		16
DYNA-GRO S43XS27	4.3	XT/STS	3, 14	1c	T	MR		MS			16
DYNA-GRO S45LL97	4.5	LL	3	1k	MT	MR		R	MR FELS		16
DYNA-GRO S46XS87	4.6	XT/STS	3, 14	1c	MT	MS		R			16
DYNA-GRO S48RS53	4.8	R2Y/STS	3, 14	1c	MT	MS		R			16
DYNA-GRO S48XT56	4.8	Xtend	3, 14	1a	T	R		R	MR FELS		16
DYNA-GRO S49LL34	4.9	LL	3, 14	1c	MT	MR		MR			16
DYNA-GRO S49XS576	4.9	XT/STS	3, 14	1a	MT	R		R			16
DYNA-GRO SX16848XS	4.8	XT/STS	3, 14	1c	T	MR		R			16
ESSEX (long term check-release 1974)	5.0	CONV									
EXP USDA-ARS JTN-5110	5.5	CONV, EXP	2, 3, 5				R	R	FELS, Reniform		4, 7
GO SOY 39C15	3.9	CONV	3		Yes	R					5, 13
GO SOY 42L16	4.2	LL	3, 14		Yes	MR		MR			5, 13
GO SOY 43L16	4.3	LL	3, 14								
GO SOY 4714LL	4.7	LL	3, 14		Yes	MS		MR			5, 13
GO SOY 483.C	4.8	CONV			Yes						5, 13
GO SOY 4913LL	4.9	LL	3, 14		Yes	MR		MR			5, 13
GO SOY 49G16	4.9	RR	1, 2, 3, 5, 14		Yes	MR		R	RKN, Reniform		5, 13
GO SOY 56C16	5.6	CONV									4
GO SOY IREANE	4.9	CONV			Yes			MR			5, 13
GREAT LAKES HYBRIDS GL3729R2	3.7	R2Y	3, 14	1k	T	MR					
GREAT LAKES HYBRIDS GL3758NRX	3.7	R2Y	3, 14	1c	T	MR					
GREAT LAKES HYBRIDS GL3962NRX	3.9	XTEND	3, 14	1c	T	MR					
GREAT LAKES HYBRIDS GL4366NSRX	4.3	XTEND	3, 14	1c	MT	MR					
GREAT LAKES HYBRIDS GL4761NRX	4.7	XTEND	3, 14	1a	T	T					
HPT 3919NR	3.9	RR	PI88788		MT	R					1, 7, 23, 28
HPT 4190NR	4.1	RR	PI88788	1k	MS	MR					1, 7, 23, 28
HPT 4514NR	4.5	RR	PI88788	1k	MT	R		S			1, 7, 23, 28
HPT 4852NR	4.8	RR	PI88788		MT	MR		R			1, 7, 23, 28
HS 46X60	4.6	RR2Xtend	3, 14	1c	2.2	MR		MR			1, 2
HS 48X60	4.8	RR2Xtend	3, 14	1c	1.5	MR		MR			1, 2
HS 49X60	4.9	RR2Xtend	3, 14	1a	1.5	MR		MR			1, 2
LG SEEDS C2766RX	2.7	Xtend	3, 14	1c	TOL	MR					5, 13
LG SEEDS C3550RX	3.0	Xtend	3, 14	1c	T	MR	MR	MR			3, 5, 12
LG SEEDS C3911RX	3.9	Xtend	3, 14	1c	TOL	MR		R	BSR		5, 13
LG SEEDS C4145R2	4.1	RR2Y	3, 14	1c	MOD	MR		R			5, 13
LG SEEDS C4458RX	4.4	Xtend/STS	3, 14	1c	TOL	MR		MS	FLS		5, 13
LG SEEDS C4615RX	4.6	Xtend/STS	3, 14	1c	MED TOL	MS		R			5, 13
LG SEEDS C4845RX	4.8	Xtend	3, 14	1a	TOL	R		R	FLS		5, 13
LG SEEDS C4900RX	4.9	Xtend	3, 14		TOL	MR		R	FLS		5, 13
NK S39-T3	3.9	RR2/STS	3, 14		MT	MR			AVG FELS		16
NK S42-P6	4.2	RR2	3, 14		AVG	AVG			Excellent FLS		16
NK S45-R7	4.5	RR2/STS	3, 14		AVG	R			Excellent FELS		16
NK S47-K5	4.7	RR2	3, 14	1a	MT	AVG			Excellent FELS		16
NK S48-D9	4.8	RR2	3, 14	1c	AVG	MT			Excellent FELS		16
PENNYRILE (long term check-release 1987)	4.7	CONV-P									
PFISTER 29R25	2.9	R2Y	3, 14	1a	T	MR	MR	MR			3, 5, 12
PFISTER 35R25	3.5	R2Y	3, 14	1c	T	MR	MR	MR			3, 5, 12
PFISTER 39R29	3.9	R2Y	3, 14	1c	T	MR	MR	MR			3, 5, 12
PFISTER 41RS01	4.1	R2Y	3, 14		T	MR	MR	MR			3, 5, 12
PFISTER 43R29	4.3	R2Y									
PFISTER 45R203	4.5	R2Y	3, 14	1c	T	MR	MR	MR			3, 5, 12
PFISTER 48RS01	4.8	R2Y	3, 14	1c	T	MR	MR	MR			3, 5, 12
PIONEER P28T08R	2.8	RR	3, 14		MS-3	MR-6					3, 7
PIONEER P35T58R	3.5	RR	3, 14		MT-5	MR-6					3, 7
PIONEER P38T42R	3.8	RR	3, 14		MT-6	MR-6					3, 7
PIONEER P38T61BR	3.8	Bolt/RR	3.8	1a	MS-4	MR-5					3, 7
PIONEER P41T33R	4.1	RR	3, 14		MS-4	MS-4		R-8			3, 7

continued

Table 3. continued

Variety/Brand name	Relative Maturity Group	Type	Disease resistance traits ^C							Seed treatments
			Soybean Cyst nematode	Phytophthora sojae ^D		SDS	SMV	Stem Canker	Other resistance traits	
				R gene	Rps					
PIONEER P45T11R	4.5	RR	3, 14			MT-5	MR-6	R-9		3, 7
PIONEER P46T01R	4.6	RR	3, 14	1k		MT-6	MR-6	R-9		3, 7
PIONEER P47T36R	4.7	RR	3, 14			MT-5	MR-6	R-9		3, 7
PIONEER P48T53R	4.8	RR	3, 14			MT-5	MR-6	R-9		3, 7
PIONEER P49T97R	4.9	RR	3, 14	1k		MT-5	MR-7	R-9		3, 7
PIONEER P50T64R	5.0	RR	3, 14	1k		MT-5	MR-6	R-9		3, 7
PROGENY 4211 RY	4.2	R2Y	3, 14			T	MR			12, 15
PROGENY 4247 LL	4.2	LL					MR	MR		12, 15
PROGENY 4588 RY	4.5	R2Y	3					R		12, 15
PROGENY 4613 RYS	4.6	R2Y, STS	3, 14	1c			MR	R		12, 15
PROGENY 4757 RY	4.7	R2Y	3, 14	1a			MR	R		12, 15
PROGENY 4788 RY	4.7	R2Y	3, 14	1c			MS	MR		12, 15
PROGENY 4814 LLS	4.8	LL, STS	Susc				MR			12, 15
PROGENY 4930 LL	4.9	LL	3	1c			MR	MR		12, 15
REV [®] 45A46™	4.5	RR	3, 14	1k	5	6	9			3, 23, 7, 24
REV [®] 47R34™	4.7	RR	3, 14	1a	5	5	8			3, 23, 7, 24
REV [®] 48A26™	4.8	RR	3, 14	1k	5	5	8			3, 23, 7, 24
REV [®] 48A76™	4.8	RR	3, 14		5	5	9			3, 23, 7, 24
REV [®] 48L63™	4.8	LL	3, 14	1a	5	6	9			3, 23, 7, 24
REV [®] 49L49™	4.9	LL		1k	4	4	9			3, 23, 7, 24
REV [®] 49R94™	4.9	RR	3, 14	1k	4	5	9			3, 23, 7, 24
REV [®] 51A56™	5.1	RR	3, 14		6	4	8			3, 23, 7, 24
REV [®] 52A94™	5.2	RR/STS	3, 14		7	6	1			3, 23, 7, 24
SEED CONSULTANTS SC 9367R™	3.6	RR	3, 14	1k	MT	MR			FELS-S	
SEED CONSULTANTS SCS 9385RR™	3.8	RR	3, 14		MT	MR			FELS-MR, Charcoal Rot- MR	
SEED CONSULTANTS SCS 9393RR™	3.9	RR	3, 14	1k	MT	MR			FELS-R, Charcoal Rot- MR	
SEED CONSULTANTS SCS 9412RR™	4.1	RR	3, 14	1k	MT	MR			FELS-S, Charcoal Rot- MR	
SEED CONSULTANTS SCS 9456SR™	4.5	RR, STS	3, 14		MT	MR	R		FELS-R	
SEED CONSULTANTS SCS 9474RR™	4.7	RR	3, 14		MT	MR	R		FELS-MR	
SEED CONSULTANTS SC 9497R™	4.9	RR	3, 14		MT	MR	R		FELS-S	
SOUTHERN STATES LL 423N	4.2	LL	3, 14	1c	MT	MS				8, 12
SOUTHERN STATES SS 3813N R2	3.8	RR2Y	3, 14	1c	MT	R				8, 12
SOUTHERN STATES SS 3916NS X	3.9	Xtend	3, 14	1c	MT	MS	R			8, 12
SOUTHERN STATES SS 4215NS R2	4.2	RR2Y/STS	3, 14		T	MS				8, 12
SOUTHERN STATES SS 4216N X	4.2	Xtend	3, 14		MS	MS	S			8, 12
SOUTHERN STATES SS 4417NS X	4.4	Xtend	3, 14	1c	MT	MS	MS			8, 12
SOUTHERN STATES SS 4717NS X	4.7	Xtend	3, 14	1c	T	MR	R			8, 12
SOUTHERN STATES SS 4725NS R2	4.7	RR2Y/STS	3, 14	1c		MS				8, 12
SOUTHERN STATES SS 4915NS R2	4.9	RR2Y/STS	3, 14	1c	MT	MR				8, 12
SOUTHERN STATES SS 4918N X	4.9	Xtend	3, 14	1a	T	R	R			8, 12
STEWART 4113R2	4.1	R2X	3	1c	MR	MR	MR			1, 10, 11
STEWART 4116R2X	4.1	Xtend	3		MR	MR	S			1, 10, 11
STEWART 4327R2X	4.3	Xtend	3	1c	MS	MR	MS			1, 10, 11
STEWART 4527R2X	4.5	Xtend	3	1c	MS	MR	R			1, 10, 11
STEWART 4716R2X	4.7	Xtend	3	1c	MS		S			1, 10, 11
STEWART 4927R2X	4.9	Xtend	1, 3	1c	MS	MR	MR			1, 10, 11
STEWART 4004XR	4.0	Extend, R2Y	3, 14	1c	MT	MS	MR	R		1, 11, 25
STEYER 4402R2	4.4	R2Y	3, 14	1a	MT	MR	MR	MR		1, 11, 25
STEYER 4403XR	4.4	Extend, R2Y, STS	3, 14	1c	MT	MR	MR	MR		1, 11, 25
STEYER 4704XR	4.7	Extend, R2Y, STS	3, 14	1c	MT	MS	MR	R		1, 11, 25
STEYER 4803XR	4.8	Extend, R2Y, STS	3, 14	1c	MT	MR	MR	MR		1, 11, 25
STINE 29RE22	2.9	RR2	R		R	R				
STINE 38LE02	3.8	LL	R	1c	R	R	R			
STINE 38RE02	3.8	RR2	R	1c	R	MR				
STINE 41RH22	4.1	RR2/STS	R		R	MR			FELS - MR	21
STINE 42LH02	4.2	LL	R		R	R	R		FELS-R	21
STINE 43RE02	4.3	RR2	R		R		R			21
STINE 44LH22	4.4	LL	R	1k	R	MR	R		FELS - R	21
STINE 47LF32	4.7	LL	R	1c	R	T	R			21
STINE 47RF32	4.7	RR2/STS	R	1c	R	R	MR		FELS- MR	21
STINE 48RI22	4.9	RR2	R	1a	R	R	R		FELS - MR	21
UNISOUTH GENETICS USG 7426XTS	4.2	Xtend	3, 14	1c		MR	MR			1, 9, 27
UNISOUTH GENETICS USG 7496XTS	4.9	Xtend	3, 14	1a		MR	R		Soybean Root Nematode - MR	1, 9, 27
UNISOUTH GENETICS USG 7506XTS	5.0	Xtend	3, 14	1a		MR	R		Soybean Root Nematode - MR	1, 9, 27
UNIVERSITY OF ARKANSAS OSAGE	5.6	CONV								4
UNIVERSITY OF ARKANSAS R09-430	5.1	CONV								4

continued

Table 3. continued

Variety/Brand name	Realtive Maturity Group	Type	Disease resistance traits ^C						Seed treatments
			Soybean Cyst nematode	Phytophthora sojae ^D		Stem Canker	Other resistance traits	Seed treatments	
				R gene	Rps				
UNIVERSITY OF ARKANSAS R10-197RY	5.6	R2Y							4
UNIVERSITY OF ARKANSAS R11-89RY	5.4	R2Y							4
UNIVERSITY OF ARKANSAS UA 5014C	5.0	CONV							4
UNIVERSITY OF ARKANSAS UA 5213C	5.2	CONV							4
UNIVERSITY OF ARKANSAS UA 5414RR	5.4	RR1							4
UNIVERSITY OF ARKANSAS UA 5612	5.6	CONV							4
UNIVERSITY OF ARKANSAS UA 5715GT	5.7	RR1							4
UNIVERSITY OF ARKANSAS UA 5814HP	5.8	CONV							4
UNIVERSITY OF ARKANSAS UAX 51010C	5.2	CONV							4
WARREN SEED DS 3745	3.7	R2Y	3, 14	1c	MT	MR			6
WARREN SEED DS 3838	3.8	R2Y	3, 14	1c	MT	MR			6
WARREN SEED DS 4225	4.3	R2Y	3, 14	1c	MT	MR			6
WARREN SEED DS 4340	4.3	R2Y	3, 14	1c	MT	MR			6
WARREN SEED DS 4633	4.6	R2Y	3, 14	1c	MT	MR			6
WARREN SEED DS 47-003	4.7	R2Y	3, 14	1c	MT	MR			6
WARREN SEED DS 4850	4.8	R2Y/STS	3, 14	1c	MT	MR			6

^A This information is provided by the seed companies and has not been verified by the soybean variety performance test program
^B Bolt: enhanced tolerance to DuPont™ LeadOff® and DuPont™ Basis® Blend herbicides variety; CONV: conventional soybean variety; GENRR2, RR2, R2Y: Roundup Ready 2 Yield soybean variety (introduced in 2009); LL: Liberty Link herbicide (glufosate ammonium) tolerant soybean variety (introduced in 2009); P: Public variety; RR, RR1: Roundup Ready Variety (first generation - original trait released in 1996); STS: sulfonylurea herbicide tolerant soybean variety (introduced in 1994); SR: sulfonylurea resistant soybean variety; XTEND, Xtend, Extend, XT: dicamba tolerant soybean variety
^C Blank spaces = no information provided by seed companies, or information unknown; S = susceptible, MS = moderately susceptible, MT = moderately resistant, T = tolerant, MR = moderately resistant, R = resistant
^D All races of Phytophthora sojae so far identified in Kentucky can be controlled with varieties in the Rps 1c or 1k. Race-specific resistance is highly effective, but requires a proper match between pathogen race and variety. Field tolerance is a lower level of protection that will provide good 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.

Table 4. Seed Treatments.

Code	Name (treatment combination)	Treatment	Chemical class/use	LD50 oral/derm ^A	LC50 ^B
1	Allegiance & Meta Star ST	Metalaxyl	systemic fungicide	2,900/2,000	21.94 - 1hr
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 - 4hrs
4	Apron Maxx (3, 12)	Mefenoxam, Fludioxonil	systemic & non-systemic fungicide	5,000/5,050	5.42 - 4hrs
5	Cruiser Maxx (3, 5, 12)	Mefenoxam, Thiamethoxam, Fludioxonil	systemic & non-systemic fungicide, systemic insecticide	5,000/5,000	2.5 - 4hrs
6	Cruiser Extreme (6, 8)	Mefenoxam, Thiamethoxam, Fludioxonil, Azoxystrobin	systemic & non-systemic fungicide, systemic insecticide	5,000/5,050	NA
7	Gaucho	Imidacloprid	systemic insecticide	643/2,000	8.1 to 10.0 - 1hr
8	Trilex®	Trifloxystrobin	systemic fungicide	5,000/5,000	2.6 - 4hrs
9	Rancona 3.8 FS	Ipconazole	systemic broad-spectrum fungicide	5,000/5,000	2.59 - 4hrs
10	Escalate (3, 12, 16, 10)	Mefenoxam, Fludioxonil, Thiram, Imidacloprid	systemic & non-systemic fungicide, systemic insecticide	640/2,000	NA
11	Agri Star® Macho® 600 ST (10)	Imidacloprid	systemic insecticide	4,500/2,000	5.0 - 4hrs
12	Poncho® VOTIVO®	Clothianidin, <i>Bacillus firmus</i>	systemic insecticide and nematocide	2,000/5,000	2.62 - 4hrs
13	Vibrance™	Sedaxane	fungicide	2,975/5,050	2.56 - 4hrs
14	Xemium®	Fluxapyroxad	broad spectrum fungicide	2,000/2,000	5.10 - 4hrs
15	Trilex® 2000	Trifloxystrobin, Metalaxyl, Glycerine	systemic fungicide	2,000/5,000	2.6 - 4hrs
16	Clariva™ Complete Beans	<i>Pasteuria nishizawae</i> , Mefenoxam, Thiamethoxam, Fludioxonil, Sedaxane	nematocide, systemic & non-systemic fungicide, systemic insecticide	see 5 & 13	see 5 & 13
17	ILeVO®	Fluopyram	fungicide, nematocide	1,750/5,000	2.0 - 96hrs
18	Eclipse TEN	Metalaxyl, Fludioxonil, Thiabendazole, Imidacloprid	systemic & non-systemic fungicide	NA	NA
19	TagTeam® LCO liquid	<i>Penicillium bilaii</i> , <i>Bradyrhizobium japonicum</i>	beneficial microorganisms	NA	NA
20	N-Hibit™ CST	Harpin protein	activates a natural defense mechanism in plants, referred to as systemic acquired resistance	NA	NA
21	Stine XP		fungicide		
22	Avicta Complete Beans	Abamectin, Thiamethoxam, Mefenoxam, Fludioxonil	nematocide, insecticide & fungicide	97.83/5,000	0.055-0.50 - 4hrs
23	EverGol™ Energy	Prothioconazole, Penflufen, Metalaxyl, Polyethylene-polypropylene copolymer, 1,2-Propanediol	fungicide	2,000/2,000	2,205 - 4hrs
24	PPST 2030	premium on-seed inoculant plus extender product - Pioneer	beneficial microorganisms	NA	NA
25		Rancona (9), Thiabendazole, Azoxystrobin	systemic broad-spectrum fungicide, systemic & non-systemic fungicides	NA	NA
26	AgriShield® Fungicide + Insecticide with Clariva®		nematocide, insecticide & fungicide		
27		Thiabendazole			
28	PA2030		Biological Component	NA	NA
29	Excalibre-SA™	<i>Bradyrhizobium japonicum</i>	beneficial microorganisms	NA	NA

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

^A The LD50 is expressed as mg of chemical per kg (2.2 lbs.) body weight of test animal.

^B 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 Safety Data Sheet).

RECOMMENDED TABLE

Table 5. 2016 Kentucky Soybean Variety Performance Tests, state summary, recommended table

BRAND VARIETY	YIELD (BU/AC) ^{A/B}				OIL ^{A/C}			PROTEIN ^{A/C}		
	2016 ^B	2015-16	2014-16	LOGGING 2016	2016	2015-16	2014-16	2016	2015-16	2014-16
MATURITY GROUP II (relative MG 2.0-2.9)^D										
STINE 29RE22	49.4			1.4	18.7			35.3		
LG SEEDS C2766RX	48.8			1.8	18.8			35.6		
BRODBECK 295R2	47.9			1.7	20.0			35.3		
PFISTER 29R25	47.3			1.5	20.0			35.2		
ARMOR ARX2906	46.2			1.6	19.0			36.0		
PIONEER P28T08R	45.6	51.8		1.5	21.0	21.1		35.0	34.9	
AVERAGE Group II	47.5				19.6			35.4		
LSD (0.10)	3.4				0.3			0.5		
C.V.	5.3				1.1			1.0		
MATURITY GROUP III (relative MG 3.0-3.9)										
CAVERNDALE CF 387 HT-GLYn	61.7			1.4	20.5			34.1		
SEED CONSULTANTS SCS 9385RR™	58.7	64.3	64.5	1.4	20.7	20.6	20.4	33.5	33.6	34.7
HPT 3919NR	57.7			1.6	20.7			33.4		
BRODBECK 365R2	56.5			2.0	20.1			34.2		
GO SOY 39C15	56.1			1.3	20.4			33.6		
PIONEER P38T61BR	56.1			1.8	20.1			34.0		
SEED CONSULTANTS SCS 9393RR™	55.8	63.8	63.9	1.3	21.2	21.0	20.6	33.3	33.6	34.9
GREAT LAKES HYBRIDS GL3729R2	55.8	62.8	62.0	1.8	20.6	20.5	20.2	33.6	33.9	35.2
ASGROW AG39X7	55.5			1.6	19.2			34.7		
BRODBECK 396R2	55.2			1.6	19.5			35.8		
WARREN SEED DS 3838	54.9	59.6	60.5	1.5	21.2	20.9	20.6	33.0	33.6	34.7
PIONEER P38T42R	54.8			1.6	20.2			34.4		
SEED CONSULTANTS SC 9367R™	54.7			1.5	19.9			34.9		
ARMOR ARX3706	54.6			1.4	19.6			35.5		
PFISTER 39R29	54.6	61.2	61.3	1.5	19.4	19.3	19.0	35.1	35.2	36.4
SOUTHERN STATES SS 3813N R2	54.6	62.5	62.4	1.6	20.3	20.5	20.1	34.1	34.0	35.1
CZ 3841 LL	54.4	59.6	59.9	1.8	19.8	19.9	19.6	34.6	34.8	36.1
ASGROW AG38X6	54.2			1.6	20.4			34.7		
CZ 3945 LL	53.9	58.5		1.7	19.7	20.0		35.3	35.0	
WARREN SEED DS 3745	53.6			1.9	19.9			34.9		
PIONEER P35T58R	53.5	59.7	59.9	1.6	20.8	20.7	20.5	33.3	33.6	34.8
NK S39-T3	53.4	62.9	63.7	1.4	19.1	19.3	19.1	35.7	35.5	36.3
PFISTER 35R25	53.2			1.7	19.4			35.0		
STINE 38RE02	53.1	58.8	58.8	1.7	20.2	20.0	19.7	34.2	34.6	35.7
STINE 38LE02	53.0			1.3	19.8			34.0		
BRODBECK 333R2	52.7			2.1	19.9			34.8		
BRODBECK 377R2	51.9			1.9	19.8			33.8		
CZ 3737 LL	51.7			1.8	19.6			35.4		
CZ 3560 RY	51.7	58.6		1.5	18.6	18.6		35.1	35.5	
DYNA-GRO S38RY87	51.5			1.6	20.0			33.0		
DYNA-GRO S39RY65	51.0	58.0	59.1	1.4	20.1	20.4	19.9	34.3	34.1	35.4
ARMOR 39-D90	50.7			2.1	20.6			33.5		
ASGROW AG36X6	50.6			1.5	19.4			35.1		
CZ 3991 RY	50.4			1.4	19.2			35.8		
LG SEEDS C3550RX	50.0			1.5	19.5			34.9		
ARMOR 35-D20	50.0			1.6	19.4			35.3		
GREAT LAKES HYBRIDS GL3758NRX	49.9			1.7	20.1			33.8		
DYNA-GRO S38LL54	49.0	57.2		1.5	19.7	19.9		34.7	34.7	
CZ 3443 LL	48.8			1.5	20.1			35.0		
CZ 3383 RY	48.7			1.8	19.5			35.0		
SOUTHERN STATES SS 3916NS X	47.8			1.4	19.4			35.0		
BRODBECK 386R2	47.3			2.2	19.5			34.4		
ARMOR ARX3306	47.3			1.7	18.7			36.0		
GREAT LAKES HYBRIDS GL3962NRX	46.6			1.8	19.7			33.3		
CZ 3233 LL	46.4			1.8	19.6			34.3		
LG SEEDS C3911RX	44.3			1.6	19.7			33.9		
AVERAGE Group III	52.6	60.5	61.5	1.6	19.9	20.1	20.0	34.5	34.4	35.4
LSD (0.10)	4.3	3.7	3.0		1.8	0.9	0.6	3.3	1.6	1.1
C.V.	6.2	6.9	6.9		6.7	4.8	4.0	7.0	5.0	4.0

continued

RECOMMENDED TABLE

Table 5. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}				OIL ^{A/C}			PROTEIN ^{A/C}		
	2016 ^B	2015-16	2014-16	LOGGING 2016	2016	2015-16	2014-16	2016	2015-16	2014-16
MATURITY GROUP IV EARLY (relative MG 4.0-4.5)										
AGS GS43R216	61.8			1.8	19.8			33.8		
NK S42-P6	59.1			1.1	20.0			33.5		
BECK 453R4™*brand	58.9	62.8		1.6	19.8	20.0		33.6	34.4	
SEED CONSULTANTS SCS 9456SR™	58.6	64.1		1.5	19.9	20.1		34.4	34.9	
DYNA-GRO S42RY77	58.1			1.8	20.1			34.9		
SOUTHERN STATES LL 423N	57.7	61.6	63.1	1.8	19.4	19.5	19.3	34.3	34.6	35.8
GO SOY 43L16	57.0			1.8	20.9			33.7		
REV® 45A46™	57.0			1.7	20.2			33.4		
ASGROW AG44X6	56.9			1.6	18.9			35.0		
SOUTHERN STATES SS 4215NS R2	56.7	62.8		1.3	19.3	19.7		34.4	34.6	
ASGROW AG43X7	56.5			1.9	19.1			33.3		
STEYER 4403XR	56.4			1.5	19.3			33.5		
STINE 42LH02	56.4			1.3	20.5			33.6		
ASGROW AG42X6	56.3			1.7	18.8			34.7		
PFISTER 41RS01	56.2	61.7		1.7	19.2	19.3		33.7	34.4	
PIONEER P45T11R	56.0			1.1	19.6			33.3		
PIONEER P41T33R	55.9			1.3	20.1			34.4		
STINE 44LH22	55.8			1.3	20.4			34.0		
STEYER 4402R2	55.6	62.3		1.4	19.6	19.7		34.7	34.6	
LG SEEDS C4145R2	55.6			1.2	19.7			36.0		
ASGROW AG40X6	55.6			1.3	19.0			35.2		
NK S45-R7	55.3	63.0		1.2	20.7	20.4		33.8	35.1	
BRODBECK 446R2	55.1			1.9	20.2			33.3		
LG SEEDS C4458RX	55.1			1.4	19.0			34.2		
STEWART 4113R2	55.0	64.1	64.2	1.3	20.2	20.4		34.0	34.1	
CAVERDALE CF 404n	55.0	61.7		1.5	19.3	19.6	19.2	33.5	33.1	34.4
ARMOR 44-D40	54.9			1.2	19.5			34.1		
SOUTHERN STATES SS 4216N X	54.7			1.5	20.5			33.3		
HPT 4514NR	54.7			1.5	20.2			33.3		
STEWART 4527R2X	54.5			1.3	19.6			34.0		
STINE 41RH22	54.4			1.5	19.7			33.7		
PROGENY 4247 LL	54.4	58.3		1.2	20.1	20.2		32.5	32.9	
GO SOY 42L16	54.3			1.2	20.3			33.4		
CZ 4181 RY	54.2	59.5	59.8	1.7	19.4	19.4	19.0	35.3	35.1	36.3
STEWART 4327R2X	54.0			1.5	19.9			33.7		
SOUTHERN STATES SS 4417NS X	54.0			1.7	19.5			35.0		
DYNA-GRO S43RY95	53.9	61.7	62.4	2.0	19.8	19.9	19.7	34.3	34.2	35.4
PFISTER 43R29	53.7			1.7	19.6			34.0		
ARMOR 43-D34	53.7			1.3	19.4			34.2		
ASGROW AG45X7	53.4			2.1	19.8			34.0		
CAVERDALE CF 452 RR2Yn	53.3	61.0		1.3	19.2	19.7		34.5	34.1	
GREAT LAKES HYBRIDS GL4366NSRX	53.2			1.5	19.1			35.2		
WARREN SEED DS 4225	53.1			1.0	19.6			34.3		
PFISTER 45R203	53.0			1.4	19.4			34.0		
CZ 4590 RY	52.7	57.9		1.3	18.1	18.3		35.5	35.8	
BRODBECK 417R2	52.6			1.2	19.8			34.7		
BECK 4291X2	52.5			1.5	20.5			33.7		
DYNA-GRO S43XS27	52.5			1.7	20.1			33.6		
STEWART 4116R2X	52.5			1.3	20.0			33.0		
CZ 4105 LL	52.4	60.6		1.1	19.4	19.8		35.7	35.3	
CAVERDALE CF 426 RR2Y/STS _n	52.3	62.1	63.3	1.8	20.2	20.1	19.8	33.7	34.2	35.4
DYNA-GRO S45LL97	52.3			1.2	19.8			34.0		
PROGENY 4211 RY	51.5	58.4	60.2	2.0	19.9	19.9	19.6	33.7	34.1	35.4
BRODBECK 426R2	51.3			1.1	20.1			33.4		
CZ 4044 LL	51.3			1.5	19.2			35.2		
STINE 43RE02	51.1	57.7	59.7	1.6	20.0	19.8	19.6	33.3	34.3	35.1
SEED CONSULTANTS SCS 9412RR™	50.9	58.2		1.5	20.1	19.9		34.3	34.9	
ASGROW AG45X6	50.8			1.8	19.0			35.2		
CZ 4540 LL	50.7	53.7		2.5	20.0	20.0		33.0	33.7	
WARREN SEED DS 4340	50.1			1.8	20.0			34.4		
HPT 4190NR	49.8			1.3	20.1			34.5		

continued

RECOMMENDED TABLE

Table 5. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}				OIL ^{A/C}			PROTEIN ^{A/C}		
	2016 ^B	2015-16	2014-16	LOGGING 2016	2016	2015-16	2014-16	2016	2015-16	2014-16
STEYER 4004XR	49.6			1.8	20.8			32.4		
CZ 4222 LL	47.9			1.5	19.9			32.8		
PROGENY 4588 RY	47.4			2.1	19.9			34.8		
UNISOUTH GENETICS USG 7426XTS	46.4			1.5	19.1			35.8		
AVERAGE Group IV Early	54.0	60.7	61.8	1.5	19.7	19.8	19.5	34.1	34.4	35.4
LSD (0.10)	4.3	3.6	3.1		0.3	0.2	0.2	0.5	0.3	0.3
C.V.	5.9	6.6	6.9		1.3	1.2	1.3	1.0	0.9	1.0
MATURITY GROUP IV LATE (relative MG 4.6-4.9)										
ARMOR 47-R70	60.2	64.6		2.3	19.7	19.9		32.8	33.3	
BECK 493R4™*brand	60.0			1.7	19.7			34.0		
PIONEER P48T53R	59.2	63.0	63.4	1.3	20.3	20.5	20.1	33.8	33.7	35.0
NK S47-K5	58.4	63.7	63.7	1.4	20.9	20.9	20.5	32.4	32.9	34.1
REV® 48A26™	58.3			1.7	20.1			34.3		
REV® 48A76™	58.2			1.6	19.8			33.6		
UNISOUTH GENETICS USG 7496XTS	57.7			1.3	19.0			34.3		
PIONEER P46T01R	57.6	63.8		2.2	19.4	20.2		34.7	34.0	
BECK 487R4™*brand	57.5			1.6	19.8			33.8		
AGS GS48R216	57.5			2.8	19.9			32.8		
SEED CONSULTANTS SCS 9474RR™	57.4	63.1	63.4	2.0	20.5	20.5	20.0	32.7	33.3	34.7
ASGROW AG47X6	57.4			1.5	19.6			33.5		
SOUTHERN STATES SS 4918N X	57.3			1.2	18.8			34.5		
SEED CONSULTANTS SC 9497R™	57.2			1.8	20.0			34.2		
WARREN SEED DS 4633	57.0	63.2	65.1	2.1	19.2	19.8	19.3	34.0	33.7	34.9
REV® 49R94™	56.9	61.2	62.2	1.5	19.0	19.4	19.3	34.8	35.1	36.0
ASGROW AG46X6	56.7			1.5	19.5			33.8		
BECK 465R4™*brand	56.6	61.0	62.7	1.4	19.7	20.1	19.7	34.9	34.8	35.9
PIONEER P47T36R	56.2	63.9	64.2	1.3	20.0	20.3	20.0	32.9	33.4	34.7
NK S48-D9	56.2			1.7	19.7			34.1		
REV® 48L63™	56.2			2.3	19.1			34.5		
PROGENY 4613 RYS	56.1	62.6	62.9	2.3	18.9	19.2	19.0	35.1	35.1	36.2
WARREN SEED DS 47-003	55.8			2.0	19.2			32.9		
CZ 4748 LL	55.8			1.5	19.6			33.9		
REV® 47R34™	55.7	61.7	61.8	2.0	20.0	20.2	19.7	33.1	33.7	35.2
LG SEEDS C4845RX	55.7			1.1	18.8			35.0		
PIONEER P49T97R	55.5	61.4	62.6	1.2	19.9	20.1	19.7	34.5	34.8	35.9
GREAT LAKES HYBRIDS GL4761NRX	55.5			1.0	18.7			34.8		
ASGROW AG46X7	55.4			1.6	19.6			33.3		
HPT 4852NR	55.3			1.8	20.0			33.3		
PROGENY 4788 RY	54.8	61.4	61.9	1.8	19.2	19.7	19.2	33.8	33.8	35.3
PROGENY 4757 RY	54.7	61.4		2.2	19.8	20.0		32.2	32.8	
BECK 4991X2	54.6			1.1	18.6			34.5		
GO SOY 4714LL	54.6			1.8	20.0			33.5		
GO SOY 4913LL	54.4			1.4	18.7			34.4		
ARMOR ARX4706	54.4			1.6	19.6			33.3		
DYNA-GRO S46XS87	54.4			1.4	19.1			34.0		
HS 49X60	54.4			1.3	18.9			34.4		
BECK 474L4	54.2	59.6		1.8	20.1	20.2		33.0	33.2	
GO SOY Ireane	54.2			2.4	19.1			33.7		
ARMOR 49-D90	54.2			1.4	19.0			34.0		
ASGROW AG48X6	54.1			1.3	19.3			34.0		
PROGENY 4930 LL	53.9	57.7	59.3	1.6	19.4	19.8	19.5	33.8	33.7	34.4
DYNA-GRO S48XT56	53.7			1.3	19.1			33.8		
CZ 4959 RY	53.7	55.5	57.3	1.3	18.5	18.8	18.5	36.0	36.3	37.1
STINE 47LF32	53.7			1.5	20.3			32.8		
ARMOR 46-D08	53.5			2.1	19.1			33.6		
BECK 494L4	53.5			1.7	19.5			34.0		
CAVERNDALE CF 479 LLn	52.9	61.0	62.2	1.5	20.0	20.1	19.7	33.1	33.4	34.5
STEYER 4803XR	52.9			1.2	19.3			33.5		
ASGROW AG49X6	52.9			1.5	19.7			33.0		
GO SOY 483.C	52.7			3.3	19.7			33.8		
ARMOR 48-D24	52.6			1.4	19.4			33.3		
REV® 49L49™	52.4			1.7	19.7			33.2		

continued

RECOMMENDED TABLE

Table 5. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}				OIL ^{A/C}			PROTEIN ^{A/C}		
	2016 ^B	2015-16	2014-16	LOGGING 2016	2016	2015-16	2014-16	2016	2015-16	2014-16
HS 46X60	52.2			1.5	19.0			33.6		
WARREN SEED DS 4850	52.1	59.0	61.2	1.5	18.9	18.9	18.7	34.8	35.0	35.7
DYNA-GRO S49XS576	52.0			1.4	19.2			33.2		
ARMOR 47-D17	52.0			2.6	20.2			32.4		
SOUTHERN STATES SS 4717NS X	51.9			1.2	19.3			33.3		
ARMOR 48-D80	51.8			1.4	18.9			34.1		
DYNA-GRO S49LL34	51.8	57.5		1.5	19.7	19.6		33.2	33.8	
CAVERNDALE CF 478 RR2Y/STS _n	51.8			1.5	18.3			34.8		
CZ 4818 LL	51.6	55.8		1.9	19.7	19.8		34.0	34.4	
DYNA-GRO S48RS53	51.5	58.4	60.7	1.4	18.3	18.8	18.7	35.2	35.1	36.0
STEYER 4704XR	51.3			1.1	18.8			34.7		
LG SEEDS C4615RX	51.1			1.4	19.1			33.8		
DYNA-GRO SX16848XS	51.1			1.5	19.8			32.6		
PFISTER 48RS01	50.5			1.6	18.4			34.6		
STEWART 4927R2X	50.0			1.3	19.1			32.9		
SOUTHERN STATES SS 4725NS R2	49.9	58.8	61.2	1.4	18.3	18.7	18.6	35.3	35.2	36.0
STINE 48RI22	49.7			1.8	19.5			33.4		
ARMOR 49-D66	49.6			2.0	18.9			33.1		
ARMOR ARX4906	49.5			2.5	18.6			33.9		
HS 48X60	49.4			1.4	19.4			33.0		
PROGENY 4814 LLS	49.4	53.3		2.7	20.3	19.6		34.9	35.4	
STINE 47RF32	49.2			1.6	18.4			34.8		
LG SEEDS C4900RX	48.9			2.0	18.5			34.3		
SOUTHERN STATES SS 4915NS R2	48.6	56.6		2.0	18.3	18.5		34.9	35.2	
CZ 4898 RY	46.1			2.0	19.1			34.9		
GO SOY 49G16	46.0			3.9	19.6			33.5		
CZ 4656 RY	45.8			1.6	18.7			35.4		
STEWART 4716R2X	43.7			1.8	18.9			34.8		
PENNYRILE (long term check-released 1987)	41.4			2.1	19.3			36.3		
AVERAGE Group IV Late	53.5	60.4	62.1	1.7	19.3	19.7	19.4	33.9	34.2	35.4
LSD (0.10)	4.0	3.3	2.9		0.3	0.2	0.2	0.4	0.3	0.2
C.V.	5.6	6.2	6.4		1.1	1.1	1.2	0.9	0.9	0.9
MATURITY GROUP V (relative MG 5.0-5.9)										
PIONEER P50T64R	54.6	59.3	59.4	1.9	19.4	19.6	19.2	35.7	35.7	36.8
REV [®] 51A56 [™]	54.6	60.3		1.9	19.7	19.9		35.0	34.6	
UNISOUTH GENETICS USG 7506XTS	53.2			1.6	18.7			35.8		
UNIVERSITY OF ARKANSAS UA 5014C	52.5			2.0	19.1			35.5		
UNIVERSITY OF ARKANSAS R11-89RY	52.0	54.2		2.0	19.0	19.1		37.1	36.8	
UNIVERSITY OF ARKANSAS R10-197RY	50.5	54.2		2.0	19.2	19.0		34.9	35.1	
UNIVERSITY OF ARKANSAS UAX 51010C	50.0			2.5	19.3			35.3		
GO SOY 56C16	50.0			3.5	19.4			34.6		
UNIVERSITY OF ARKANSAS R09-430	48.4	56.8		2.9	20.0	20.2		35.8	35.7	
UNIVERSITY OF ARKANSAS UA 5612	48.2	51.2	51.9	3.7	19.0	19.1	18.7	35.4	35.0	36.0
EXP USDA-ARS JTN-5110	48.2	50.9	51.5	2.9	19.5	19.5	19.2	35.2	35.6	36.4
REV [®] 52A94 [™]	47.7	53.1	53.3	3.0	18.6	18.8	18.5	34.7	34.8	35.7
UNIVERSITY OF ARKANSAS OSAGE	47.5	50.2	51.3	2.1	18.5	18.4	18.0	37.3	37.4	38.2
UNIVERSITY OF ARKANSAS UA 5814HP	46.8	50.1		2.8	18.4	18.6		38.6	38.4	
UNIVERSITY OF ARKANSAS UA 5213C	46.7	50.2	50.8	3.1	18.4	18.1	18.0	36.8	37.5	38.0
UNIVERSITY OF ARKANSAS UA 5414RR	44.7	47.6	48.6	2.8	18.5	18.6	18.4	34.9	35.0	35.7
UNIVERSITY OF ARKANSAS UA 5715GT	43.5			2.5	18.9			34.2		
ESSEX (long term check-released 1974)	43.3			2.1	18.8			37.3		
AVERAGE Group V (relative MG 5.0-5.9)	49.0	53.2	52.4	2.5	19.0	19.1	18.6	35.8	36.0	36.7
LSD (0.10)	3.7	3.0	2.6	0.4	0.3	0.2	0.2	0.4	0.3	0.2
C.V.	5.6	6.1	6.4	36.0	1.1	1.2	1.2	0.9	0.9	0.8

[2016 protein and oil samples collected in Calloway Co., Hancock Co., and Fayette Co. - analyzed data will be provided ASAP]

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

^B 2016 yield data were collected at the Breckinridge Co., Butler Co., Caldwell Co., Calloway Co., Cumberland Co., Fayette Co., Hancock Co., and Russell Co. locations. The 2015 yield data were collected at the Breckinridge Co., Butler Co., Caldwell Co., Calloway Co., Clinton Co., Fayette Co., Hancock Co., and Pulaski Co. locations. The 2014 yield data were collected at the Caldwell Co., Calloway Co., Daviess Co., Fayette Co., Hardin Co., and Simpson Co. locations.

^C 2016 oil and protein samples were collected at the Calloway Co. (except for MG IV Early and Late samples), Hancock Co., and Fayette Co. locations. The 2015 samples were collected at the Fayette Co., Hancock Co., and Pulaski Co. locations. The 2014 samples were collected at the Caldwell Co., Fayette Co., and Simpson Co. locations.

^D MG II: no varieties entered in 2016 matched the varieties entered in 2014

Table 6. 2016 Kentucky Soybean Variety Performance Tests, Breckinridge County, Lincoln Trail Region

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING	BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING
	2016	2015-16	2014-16	2016		2016	2015-16	2014-16	2016
MATURITY GROUP II (relative MG 2.0-2.9)^C									
STINE 29RE22	46.3			1.0	STEYER 4402R2	60.2	74.5		1.0
PIONEER P28T08R	44.2	62.2		1.0	PFISTER 43R29	60.1			1.3
PFISTER 29R25	39.9			1.0	SOUTHERN STATES SS 4216N X	59.4			1.0
LG SEEDS C2766RX	38.2			1.0	GO SOY 42L16	59.2			1.0
ARMOR ARX2906	33.4			1.0	BECK 4291X2	58.5			1.0
BRODBECK 295R2	31.1			1.0	CZ 4590 RY	58.4	71.6		1.0
					HPT 4190NR	57.7			1.0
					REV [®] 45A46 [™]	57.4			1.3
AVERAGE Group II	38.9			1.0	STEWART 4327R2X	57.1			1.0
LSD (0.10)	2.8				ARMOR 43-D34	56.8			1.0
C.V.	4.3				DYNA-GRO S43R95	56.6	84.6	75.7	1.0
					GO SOY 43L16	56.4			1.0
MATURITY GROUP III (relative MG 3.0-3.9)									
CAVERNDALE CF 387 HT-GLYn	57.7			1.0	PFISTER 41R501	56.3	68.7		1.0
GREAT LAKES HYBRIDS GL3729R2	56.0	74.6	70.9	1.0	WARREN SEED DS 4340	55.8			1.0
PIONEER P38T42R	55.8			1.0	CAVERNDALE CF 426 RR2Y/STSn	55.7	74.8	72.2	1.3
PIONEER P35T58R	55.9	74.8	72.1	1.3	PIONEER P41T33R	54.9			1.0
GO SOY 39C15	53.7			1.0	SOUTHERN STATES SS 4215NS R2	54.8	74.1		1.0
SEED CONSULTANTS SCS 9385RR [™]	53.2	73.0	70.2	1.0	PFISTER 45R203	54.6			1.0
ASGROW AG38X6	53.0			1.0	SOUTHERN STATES LL 423N	54.4	68.5	66.6	1.0
CZ 3841 LL	52.4	67.4	66.8	1.0	ASGROW AG45X7	54.3			1.3
BRODBECK 365R2	52.1			1.0	GREAT LAKES HYBRIDS GL4366NSRX	53.2			1.0
BRODBECK 396R2	52.1			1.3	CZ 4540 LL	53.1	62.7		1.3
PFISTER 39R29	51.5	68.2	65.0	1.0	NK S45-R7	53.1	73.9		1.0
CZ 3945 LL	51.3	67.2		1.0	CZ 4181 RY	52.9	65.7	62.8	1.0
HPT 3919NR	51.0			1.0	ASGROW AG43X7	52.7			1.3
DYNA-GRO S39RY65	50.9	67.7	65.2	1.0	CAVERNDALE CF 452 RR2Yn	52.4	76.8		1.0
WARREN SEED DS 3838	50.8	67.6	66.6	1.0	STEWART 4116R2X	52.0			1.0
CZ 3560 RY	50.6	67.9		1.0	STEWART 4113R2	51.9	73.0	71.0	1.0
SEED CONSULTANTS SCS 9393RR [™]	50.5	70.0	68.1	1.0	SEED CONSULTANTS SCS 9412RR [™]	51.8	72.9		1.0
WARREN SEED DS 3745	49.9			1.0	PROGENY 4211 RY	51.4	65.3	66.1	1.0
LG SEEDS C3550RX	49.9			1.0	BRODBECK 417R2	51.4			1.0
PIONEER P38T61BR	49.7			1.0	STINE 41RH22	51.3			1.0
SEED CONSULTANTS SC 9367R [™]	49.6			1.0	UNISOUTH GENETICS USG 7426XTS	51.2			1.0
CZ 3737 LL	48.8			1.0	CAVERNDALE CF 404n	51.0	72.3		1.0
NK S39-T3	48.5	71.9	70.1	1.0	LG SEEDS C4145R2	51.0			1.0
CZ 3991 RY	48.4			1.0	ASGROW AG40X6	51.0			1.0
ARMOR ARX3706	47.3			1.0	ARMOR 44-D40	50.8			1.0
BRODBECK 377R2	47.1			1.0	BRODBECK 446R2	50.6			1.0
BRODBECK 333R2	46.8			1.0	STINE 43RE02	49.8	66.7	66.9	1.0
STINE 38RE02	46.6	64.4	62.2	1.0	PROGENY 4247 LL	49.7	66.6		1.0
STINE 38LE02	46.2			1.0	PROGENY 4588 RY	49.7			1.7
BRODBECK 386R2	45.8			1.0	PIONEER P45T11R	48.7			1.3
CZ 3383 RY	45.8			1.0	SOUTHERN STATES SS 4417NS X	48.5			1.0
DYNA-GRO S38LL54	45.4	67.3		1.0	CZ 4044 LL	48.1			1.0
ASGROW AG39X7	44.6			1.0	BRODBECK 426R2	46.4			1.3
GREAT LAKES HYBRIDS GL3758NRX	43.6			1.0	STEWART 4527R2X	46.3			1.0
DYNA-GRO S38RY87	43.1			1.0	CZ 4222 LL	45.6			1.0
SOUTHERN STATES SS 3916NS X	43.1			1.0	ASGROW AG45X6	44.7			1.0
SOUTHERN STATES SS 3813N R2	42.6	61.8	63.4	1.0	HPT 4514NR	44.4			1.0
CZ 3443 LL	42.4			1.0	ASGROW AG42X6	43.1			1.0
PFISTER 35R25	42.0			1.0	CZ 4105 LL	43.0	67.6		1.0
GREAT LAKES HYBRIDS GL3962NRX	41.7			1.0	STEYER 4004XR	41.3			1.0
ASGROW AG36X6	40.5			1.0	STEYER 4403XR	40.7			1.0
ARMOR 35-D20	40.4			1.0	WARREN SEED DS 4225	39.5			1.0
LG SEEDS C3911RX	38.8			1.0	DYNA-GRO S45LL97	38.4			1.0
ARMOR 39-D90	38.4			1.0					
CZ 3233 LL	37.8			1.0	AVERAGE Group IV Early	53.4	71.9	68.8	1.1
ARMOR ARX3306	36.3			1.0	LSD (0.10)	4.5	3.7	2.8	
					C.V.	6.3	6.3	5.8	
AVERAGE Group III	47.6	68.8	67.3	1.0	MATURITY GROUP IV LATE (relative MG 4.6-4.9)				
LSD (0.10)	4.5	3.8	3.1		PIONEER P48T53R	70.0	70.8	66.8	1.0
C.V.	7.2	7.1	6.8		ARMOR 47-R70	69.9	74.9		1.0
					REV [®] 47R34 [™]	69.6	73.6	69.4	1.3
MATURITY GROUP IV EARLY (relative MG 4.0-4.5)					PIONEER P46T01R	67.6	65.9		1.3
AGS GS43R216	68.5			1.0	BECK 493R4 [™] brand	67.3			1.3
SEED CONSULTANTS SCS 9456SR [™]	66.5	80.7		1.3	WARREN SEED DS 47-003	67.1			2.0
DYNA-GRO S42RY77	66.3			1.0	SEED CONSULTANTS SC 9497R [™]	66.5			1.0
ASGROW AG44X6	65.3			1.0	REV [®] 48L63 [™]	66.0			2.3
BECK 453R4 [™] brand	61.8	76.7		1.0	NK S48-D9	64.6			1.0
NK S42-P6	61.8			1.0	ASGROW AG46X6	64.2			1.3
DYNA-GRO S43XS27	61.8			1.0	AGS GS48R216	63.6			1.3
STINE 44LH22	61.7			1.0	GO SOY Ireane	63.2			3.7
STINE 42LH02	60.9			1.0	SOUTHERN STATES SS 4918N X	63.2			1.0
LG SEEDS C4458RX	60.3			1.3	PIONEER P49T97R	63.1	72.2	69.0	1.0

continued

Table 6. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING	BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING
	2016	2015-16	2014-16	2016		2016	2015-16	2014-16	2016
UNISOUTH GENETICS USG 7496XTS	63.1			1.0	PENNYRILE (long term check-released 1987)	50.2			1.0
HPT 4852NR	61.9			1.3	STEYER 4704XR	49.6			1.3
ARMOR 49-D90	61.3			1.3	ARMOR ARX4906	49.5			1.0
PROGENY 4613 RYS	61.0	69.5	65.7	2.0	SOUTHERN STATES SS 4915NS R2	48.7	62.0		1.3
HS 49X60	60.9			1.0	HS 46X60	48.4			1.0
NK S47-K5	60.9	64.3	63.4	1.0	BECK 487R4™*brand	48.1			1.0
REV® 48A76™	60.8			1.0	ASGROW AG49X6	47.6			1.3
PIONEER P47T36R	60.4	73.0	70.4	1.0	CZ 4898 RY	47.4			1.3
BECK 465R4™*brand	60.3	65.5	64.5	1.3	PROGENY 4757 RY	46.9	61.1		1.7
DYNA-GRO S49XSS76	60.2			1.0	HS 48X60	46.6			1.3
GO SOY 4913LL	60.2			1.0	WARREN SEED DS 4850	46.5	60.3	59.2	1.0
ARMOR 47-D17	60.0			2.0	DYNA-GRO SX16848XS	46.5			1.0
BECK 494L4	59.8			1.3	GO SOY 49G16	46.2			4.7
ASGROW AG46X7	59.6			1.3	SOUTHERN STATES SS 4725NS R2	45.9	55.9	57.7	1.0
REV® 49R94™	59.4	61.2	61.1	1.3	ARMOR 48-D80	45.1			1.3
BECK 474L4	58.8	60.6		1.0	ARMOR 49-D66	44.9			2.0
WARREN SEED DS 4633	58.6	66.0	64.7	1.0	CZ 4656 RY	44.4			1.0
CZ 4959 RY	58.5	60.5	58.9	1.0	ARMOR 48-D24	42.4			1.0
REV® 48A26™	58.5			1.0	GREAT LAKES HYBRIDS GL4761NRX	41.8			1.0
DYNA-GRO S46XS87	58.4			1.3					
GO SOY 483.C	58.3			4.7	AVERAGE Group IV Late	56.0	65.0	63.9	1.4
PROGENY 4788 RY	58.1	63.8	62.0	1.0	LSD (0.10)	5.3	4.2	3.2	
GO SOY 4714LL	57.6			1.7	C.V.	7.1	7.4	6.8	
DYNA-GRO S48RSS3	57.5	66.7	64.3	1.0					
BECK 4991X2	57.2			1.0	MATURITY GROUP V (relative MG 5.0-5.9)				
STINE 48RI22	56.4			1.7	PIONEER P50T64R	63.6	66.5	65.1	1.0
REV® 49L49™	56.3			1.0	REV® 51A56™	60.9	68.4		1.0
PROGENY 4930 LL	56.0	64.7	61.9	1.0	UNIVERSITY OF ARKANSAS R11-89RY	60.3	65.3		1.7
CZ 4748 LL	55.6			1.0	EXP USDA-ARS JTN-5110	57.7	59.2	55.1	2.3
LG SEEDS C4615RX	55.5			1.0	UNISOUTH GENETICS USG 7506XTS	55.4			1.0
SOUTHERN STATES SS 4717NS X	55.5			1.3	UNIVERSITY OF ARKANSAS UA 5014C	55.3			1.7
CZ 4818 LL	55.4	64.7		2.3	UNIVERSITY OF ARKANSAS OSAGE	55.1	58.9	58.2	1.0
SEED CONSULTANTS SCS 9474RR™	55.0	70.5	66.9	1.7	UNIVERSITY OF ARKANSAS UA 5814HP	55.1	56.1		4.3
PROGENY 4814 LLS	54.9	54.6		2.7	UNIVERSITY OF ARKANSAS UAX 51010C	55.0			2.3
LG SEEDS C4845RX	54.7			1.0	UNIVERSITY OF ARKANSAS R09-430	54.8	73.2		3.0
ARMOR ARX4706	54.1			1.3	UNIVERSITY OF ARKANSAS UA 5213C	54.4	63.3	58.2	3.0
ASGROW AG48X6	53.8			1.3	REV® 52A94™	52.9	64.5	58.1	4.0
PFISTER 48RS01	53.8			1.3	UNIVERSITY OF ARKANSAS UA 5715GT	52.2			1.7
STEYER 4803XR	53.7			1.3	GO SOY 56C16	49.8			2.3
STINE 47RF32	53.6			1.3	UNIVERSITY OF ARKANSAS UA 5612	49.2	56.8	53.9	4.3
DYNA-GRO S48XTS6	53.4			1.0	UNIVERSITY OF ARKANSAS R10-197RY	48.8	57.5		1.3
CAVERNDALE CF 478 RR2Y/STSn	53.3			2.3	UNIVERSITY OF ARKANSAS UA 5414RR	46.7	51.8	48.6	3.0
CAVERNDALE CF 479 LLn	51.9	59.8	61.1	1.7	ESSEX (long term check-released 1974)	41.2			1.3
STEWART 4716R2X	51.8			1.3					
STINE 47LF32	51.8			1.3	AVERAGE Group V (relative MG 5.0-5.9)	53.8	61.8	56.7	2.2
LG SEEDS C4900RX	51.8			1.0	LSD (0.10)	5.4	3.5	2.7	
DYNA-GRO S49LL34	51.1	62.8		1.0	C.V.	7.2	6.1	6.1	
ARMOR 46-D08	50.8			1.7					
ASGROW AG47X6	50.5			1.0					
STEWART 4927R2X	50.4			1.0					

A Within a maturity group, shaded yield are not significantly different (0.10) from the highest yielding cultivar (bold) of that maturity group and year column.
 B 2016, 2015 data were collected in Breckinridge Co. 2014 data were collected in Hardin Co.
 C MG II: no varieties entered in 2016 matched the varieties entered in 2014.

AGRONOMIC INFORMATION

Soil type Nolin Silt Loam
 Previous crop Soybean
 Soil test pH 6.34, P 121, K 237
 SCN test 375
 Fertilizer/lime applied NA
 Agricultural practice No-till
 Pre-planting treatments none
 Planting date (all maturity groups) 6/10/2016
 Post-planting treatments Verdict, Glyphosate: 6/11/2016
 First Rate, Reflex: 6/30/2016
 Harvest dates MG II, III, IV Early: 10/12/2016
 MG IV Late, V: 11/02/2016
 50% chance of killing frost 10/22

Temperatures and Precipitations, Breckinridge Co. - 2016

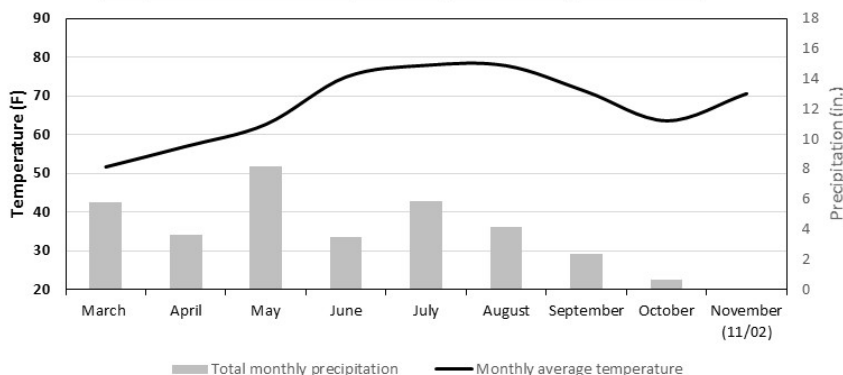


Table 7. 2016 Kentucky Soybean Variety Performance Tests, Butler County, Mammoth Cave Region

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING	BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING
	2016	2015-16	2014-16	2016		2016	2015-16	2014-16	2016
MATURITY GROUP II (relative MG 2.0-2.9)^C					SOUTHERN STATES SS 4417NS X				
LG SEEDS C2766RX	51.6			1.0	ASGROW AG45X7	66.5			1.3
PFISTER 29R25	51.4			1.0	ASGROW AG44X6	66.4			1.3
STINE 29RE22	51.2			1.0	NK S42-P6	66.0			1.0
ARMOR ARX2906	50.0			1.0	ASGROW AG45X6	66.0			1.0
PIONEER P28T08R	46.4	50.4		1.0	SOUTHERN STATES LL 423N	65.2	63.9	65.4	1.7
BRODBECK 295R2	43.8			1.0	BRODBECK 446R2	65.2			1.3
					STEWART 4113R2	64.9	71.5	67.9	1.0
AVERAGE Group II	49.1			1.0	BRODBECK 417R2	64.7			1.0
LSD (0.10)	3.2				DYNA-GRO S43RY95	64.6	67.2	67.1	1.7
C.V.	4.3				ARMOR 44-D40	64.5			1.0
					SOUTHERN STATES SS 4216N X	64.4			1.3
MATURITY GROUP III (relative MG 3.0-3.9)					GO SOY 43L16				
PIONEER P38T61BR	68.5			1.0	ASGROW AG43X7	64.1			1.7
ASGROW AG38X6	68.2			1.0	HPT 4514NR	63.9			1.3
SEED CONSULTANTS SCS 9385RR™	68.0	66.2	67.8	1.0	ARMOR 43-D34	63.5			1.0
HPT 3919NR	66.7			1.0	PFISTER 41RS01	63.1	65.5		1.7
CAVERNDALE CF 387 HT-GLYn	64.8			1.0	PFISTER 45R203	63.0			1.3
PIONEER P38T42R	64.5			1.0	STINE 42LH02	63.0			2.3
ASGROW AG39X7	64.2			1.0	STINE 43RE02	62.7	62.1	61.7	1.0
GREAT LAKES HYBRIDS GL3729R2	62.7	65.8	63.1	1.3	PIONEER P45T11R	62.7			1.0
SEED CONSULTANTS SC 9367R™	62.6			1.0	STINE 44LH22	62.5			1.0
SEED CONSULTANTS SCS 9393RR™	62.2	67.6	65.9	1.0	PIONEER P41T33R	62.4			1.0
PFISTER 39R29	61.6	70.8	67.1	1.0	STEYER 4004XR	62.4			1.7
ARMOR 39-D90	61.5			1.0	GREAT LAKES HYBRIDS GL4366NSRX	62.1			1.0
CZ 3841 LL	60.9	63.2	62.8	1.7	LG SEEDS C4458RX	61.7			1.0
DYNA-GRO S38RY87	60.8			1.0	STEYER 4402R2	61.5	70.3		1.3
SOUTHERN STATES SS 3813N R2	60.6	70.4	67.8	1.3	DYNA-GRO S43XS27	60.9			1.3
ARMOR ARX3706	60.5			1.0	CZ 4181 RY	60.8	66.7	64.9	1.3
PIONEER P35T58R	60.5	62.4	60.4	1.0	CZ 4590 RY	60.4	65.6		1.0
STINE 38LE02	60.4			1.0	WARREN SEED DS 4225	60.4			1.0
BRODBECK 365R2	60.1			1.0	STEWART 4327R2X	60.0			1.0
BRODBECK 396R2	60.0			1.0	LG SEEDS C4145R2	59.9			1.0
BRODBECK 333R2	59.6			1.3	PROGENY 4211 RY	59.8	65.7	67.1	1.3
DYNA-GRO S39RY65	59.6	62.6	63.4	1.0	CAVERNDALE CF 452 RR2Yn	59.5	66.8		1.0
NK S39-T3	59.3	64.8	63.2	1.0	STEWART 4116R2X	59.5			1.0
WARREN SEED DS 3745	58.9			1.3	BRODBECK 426R2	59.3			1.0
ASGROW AG36X6	58.8			1.0	DYNA-GRO S45LL97	59.1			1.0
CZ 3945 LL	58.2	61.3		1.3	DYNA-GRO S42RY77	58.8			1.0
PFISTER 35R25	58.0			1.0	PROGENY 4247 LL	58.7	53.8		1.0
ARMOR 35-D20	57.8			1.0	ASGROW AG40X6	58.2			1.0
GO SOY 39C15	57.7			1.0	CAVERNDALE CF 426 RR2Y/STSn	57.5	64.9	65.2	1.3
CZ 3991 RY	57.6			1.0	WARREN SEED DS 4340	57.0			1.0
ARMOR ARX3306	57.5			1.7	GO SOY 42L16	56.7			1.0
SOUTHERN STATES SS 3916NS X	57.3			1.3	STINE 41RH22	56.4			1.3
GREAT LAKES HYBRIDS GL3962NRX	57.1			1.0	NK S45-R7	56.2	68.4		1.0
WARREN SEED DS 3838	57.0	63.5	64.0	1.0	CZ 4044 LL	56.1			1.3
STINE 38RE02	56.5	58.5	55.6	1.0	PROGENY 4588 RY	55.7			2.3
CZ 3383 RY	56.0			1.3	CZ 4222 LL	55.4			1.7
BRODBECK 377R2	53.5			1.0	PFISTER 43R29	55.0			1.3
LG SEEDS C3911RX	53.4			1.3	CZ 4540 LL	54.5	60.3		2.3
BRODBECK 386R2	53.1			1.0	CAVERNDALE CF 404n	54.3	64.2		2.3
DYNA-GRO S38LL54	52.1	58.1		1.0	SEED CONSULTANTS SCS 9412RR™	54.1	60.5		1.3
CZ 3443 LL	51.8			1.3	HPT 4190NR	54.1			1.3
CZ 3737 LL	51.0			1.0	UNISOUTH GENETICS USG 7426XTS	48.1			1.7
GREAT LAKES HYBRIDS GL3758NRX	50.5			1.0					
CZ 3560 RY	48.3	59.6		1.0	AVERAGE Group IV Early	61.8	66.2	65.6	1.3
LG SEEDS C3550RX	46.0			1.0	LSD (0.10)	4.0	3.6	3.0	
CZ 3233 LL	44.5			1.0	C.V.	4.8	5.9	6.0	
AVERAGE Group III	58.5	63.9	63.7	1.1	MATURITY GROUP IV LATE (relative MG 4.6-4.9)				
LSD (0.10)	4.4	3.8	3.4		CZ 4959 RY	77.2	67.0	64.1	1.0
C.V.	5.7	6.5	7.1		SEED CONSULTANTS SCS 9474RR™	70.7	72.1	66.8	1.3
					UNISOUTH GENETICS USG 7496XTS	70.5			1.0
MATURITY GROUP IV EARLY (relative MG 4.0-4.9)					BECK 465R4™*brand	70.5	71.6	70.4	1.0
AGS GS43R216	69.4			1.3	AGS GS48R216	69.5			2.7
SEED CONSULTANTS SCS 9456SR™	68.8	73.6		1.0	REV® 48A26™	69.3			1.7
SOUTHERN STATES SS 4215NS R2	68.7	72.8		1.0	HS 49X60	69.2			1.0
ASGROW AG42X6	68.7			2.3	HS 46X60	68.7			1.0
BECK 453R4™*brand	68.7	70.3		1.0	BECK 4991X2	68.7			1.0
STEWART 4527R2X	68.6			1.0	BECK 487R4™*brand	68.5			1.0
BECK 4291X2	68.2			1.3	CZ 4818 LL	68.4	68.0		2.3
REV® 45A46™	67.7			1.3	REV® 47R34™	68.2	72.3	66.4	1.0
CZ 4105 LL	67.1	70.2		1.0	BECK 474L4	68.0	64.5		1.0
STEYER 4403XR	67.0			1.0	WARREN SEED DS 4850	67.6	67.6	67.2	1.0

continued

Table 7. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING	BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING
	2016	2015-16	2014-16	2016		2016	2015-16	2014-16	2016
ARMOR 49-D66	67.4			2.0	DYNA-GRO SX16848XS	59.3			1.3
DYNA-GRO S49LL34	67.4	70.4		1.0	GO SOY 483.C	58.8			3.3
ARMOR 47-R70	66.8	72.0		1.3	ASGROW AG46X7	58.5			1.0
WARREN SEED DS 47-003	66.7			1.3	CZ 4898 RY	58.2			1.7
CZ 4656 RY	66.4			1.0	PFISTER 48RS01	57.9			1.3
PROGENY 4613 RYS	66.3	69.0	64.2	2.3	PROGENY 4930 LL	57.7	66.4	65.3	2.0
DYNA-GRO S46XS87	66.3			1.0	BECK 494L4	57.4			1.7
SOUTHERN STATES SS 4918N X	66.3			1.0	GO SOY 4714LL	57.1			1.3
REV [®] 48A76™	66.2			1.3	PIONEER P49T97R	57.0	59.1	60.4	1.0
ASGROW AG49X6	65.6			1.0	PIONEER P47T36R	56.8	67.3	63.5	1.0
CZ 4748 LL	65.5			1.0	STEWART 4927R2X	56.8			1.0
LG SEEDS C4615RX	65.3			1.7	NK S48-D9	56.6			1.0
PROGENY 4814 LLS	65.2	65.1		2.3	REV [®] 48L63™	56.4			2.7
DYNA-GRO S48XT56	64.9			1.0	LG SEEDS C4900RX	56.4			1.7
DYNA-GRO S48RS53	64.6	68.4	67.0	1.0	PENNYRILE (long term check-released 1987)	56.2			1.7
REV [®] 49L49™	64.5			1.3	PIONEER P48T53R	55.9	61.2	60.4	1.0
ARMOR 49-D90	64.5			1.0	ARMOR ARX4706	53.8			1.0
GO SOY Ireane	64.4			2.0	GO SOY 49G16	50.5			3.7
GO SOY 4913LL	64.3			1.0	STEWART 4716R2X	42.7			1.3
PROGENY 4757 RY	64.1	68.2		2.0					
NK S47-K5	63.8	68.9	65.5	1.0	AVERAGE Group IV Late	62.6	67.6	65.5	1.4
SOUTHERN STATES SS 4915NS R2	63.4	68.6		2.0	LSD (0.10)	4.3	3.4	2.7	
ASGROW AG47X6	63.3			1.0	C.V.	5.1	5.5	5.5	
PROGENY 4788 RY	63.1	71.3	65.8	1.0					
ARMOR 47-D17	63.0			3.0	MATURITY GROUP V (relative MG 5.0-5.9)				
STINE 47RF32	62.6			1.3	PIONEER P50T64R	68.8	70.9	67.3	1.0
ARMOR ARX4906	62.5			2.3	UNISOUTH GENETICS USG 7506XTS	65.2			1.0
STEYER 4704XR	62.3			1.0	UNIVERSITY OF ARKANSAS UA 5612	63.8	62.2	63.5	3.3
ASGROW AG48X6	62.2			1.0	UNIVERSITY OF ARKANSAS R10-197RY	62.7	68.0		1.7
CAVERNDALE CF 479 LLn	62.1	65.7	64.6	1.7	UNIVERSITY OF ARKANSAS R11-89RY	62.6	60.9		1.0
SOUTHERN STATES SS 4717NS X	62.1			1.0	REV [®] 51A56™	61.0	59.3		1.0
STEYER 4803XR	61.8			1.0	UNIVERSITY OF ARKANSAS UA 5814HP	59.9	63.9		2.3
GREAT LAKES HYBRIDS GL4761NRX	61.8			1.0	UNIVERSITY OF ARKANSAS OSAGE	59.8	57.6	60.0	1.0
ASGROW AG46X6	61.3			1.0	UNIVERSITY OF ARKANSAS UA 5014C	59.7			1.0
SOUTHERN STATES SS 4725NS R2	61.3	66.4	70.1	1.0	GO SOY 56C16	59.1			4.0
HS 48X60	61.3			1.0	UNIVERSITY OF ARKANSAS UA 5414RR	58.6	56.7	58.7	1.7
LG SEEDS C4845RX	61.2			1.3	UNIVERSITY OF ARKANSAS UA 5213C	57.2	56.1	56.6	1.0
ARMOR 48-D80	61.0			1.3	UNIVERSITY OF ARKANSAS UAX 51010C	57.0			2.3
REV [®] 49R94™	60.9	62.8	62.7	1.7	EXP USDA-ARS JTN-5110	56.9	59.2	61.8	3.0
PIONEER P46T01R	60.9	69.8		1.0	REV [®] 52A94™	54.9	56.5	58.5	2.3
DYNA-GRO S49XS76	60.7			1.0	UNIVERSITY OF ARKANSAS R09-430	54.5	65.4		1.0
SEED CONSULTANTS SC 9497R™	60.4			1.0	ESSEX (long term check-released 1974)	53.3			1.0
ARMOR 48-D24	60.4			1.0	UNIVERSITY OF ARKANSAS UA 5715GT	51.2			2.0
STINE 47LF32	60.4			1.3					
CAVERNDALE CF 478 RR2Y/STSn	60.2			1.0	AVERAGE Group V (relative MG 5.0-5.9)	59.2	61.4	60.9	1.8
WARREN SEED DS 4633	60.1	66.5	69.4	2.3	LSD (0.10)	3.6	3.4	2.9	
ARMOR 46-D08	60.1			1.0	C.V.	4.4	5.8	6.0	
STINE 48RI22	60.1			2.0					
BECK 493R4™*brand	59.4			1.0					
HPT 4852NR	59.3			1.3					

A Within a maturity group, shaded yield are not significantly different (0.10) from the highest yielding cultivar (bold) of that maturity group and year column.
 B 2016, 2015 data were collected in Butler Co. 2014 data were collected in Simpson Co.
 C MG II: no varieties entered in 2016 matched the varieties entered in 2014.

AGRONOMIC INFORMATION

Soil type	Melvin Silt Loam
Previous crop	Corn
Soil test	pH 5.54, P 30, K 177
SCN test	0
Fertilizer/lime applied	None
Agricultural practice	No-till
Pre-planting treatments	Glyphosate, Authority XL: 06/07/2016
Planting date (all maturity groups)	6/8/2016
Post-planting treatments	Intensity One, Classic 25DF: 7/19/2016
Harvest dates	MG II, III, IV Early, V: 10/18/2016 MG IV Late: 10/19/2016
50% chance of killing frost	10/20

Temperatures and Precipitations, Butler County - 2016

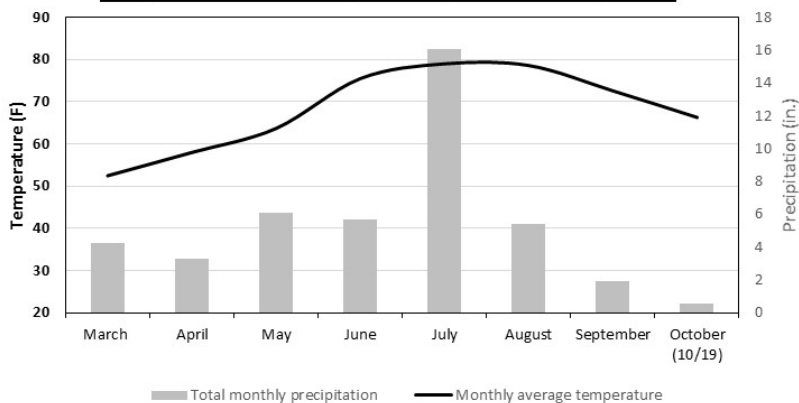


Table 8. 2016 Kentucky Soybean Variety Performance Tests, Caldwell County, Pennyrile Region

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING 2016	BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING 2016
	2016	2015-16	2014-16			2016	2015-16	2014-16	
MATURITY GROUP II (relative MG 2.0-2.9)^C									
STINE 29RE22	60.7			1.3	BECK 453R4 ^{***} brand	65.6	70.9		1.0
BRODBECK 295R2	57.1			1.7	AGS GS43R216	65.4			1.3
LG SEEDS C2766RX	53.5			1.0	REV [®] 45A46 [™]	65.3			1.0
ARMOR ARX2906	47.8			1.0	SEED CONSULTANTS SCS 9456SR [™]	65.0	68.9		1.0
PIONEER P28T08R	47.3	59.4		1.0	LG SEEDS C4458RX	64.8			1.0
PFISTER 29R25	46.4			1.0	LG SEEDS C4145R2	64.2			1.0
					ASGROW AG45X6	63.1			1.0
					ASGROW AG40X6	63.1			1.0
AVERAGE Group II	59.4			1.2	STEWART 4116R2X	62.6			1.0
LSD (0.10)	4.0				GO SOY 42L16	61.9			1.0
C.V.	7.2				PIONEER P45T11R	61.5			1.0
					STINE 44LH22	61.5			1.0
					GO SOY 43L16	61.4			1.3
MATURITY GROUP III (relative MG 3.0-3.9)									
GREAT LAKES HYBRIDS GL3758NRX	62.6			1.0	STEWART 4113R2	61.1	77.3	71.6	1.0
BRODBECK 396R2	61.5			1.0	ASGROW AG44X6	60.8			1.3
CZ 3945 LL	61.3	59.1		1.0	STEYER 4403XR	60.8			1.0
PIONEER P38T61BR	61.2			1.0	ASGROW AG42X6	60.3			1.0
ARMOR 39-D90	60.8			1.0	PFISTER 41RS01	60.1	72.1		1.3
CZ 3841 LL	60.7	69.4	70.2	1.0	CAVERNDALE CF 452 RR2Yn	59.9	69.4		1.3
BRODBECK 377R2	60.5			1.3	STINE 41RH22	59.8			1.0
ARMOR ARX3706	59.9			1.0	BRODBECK 426R2	59.6			1.0
PFISTER 35R25	59.9			1.3	CZ 4590 RY	59.6	70.7		1.0
SEED CONSULTANTS SCS 9385RR [™]	59.8	71.0	71.5	1.0	PIONEER P41T33R	59.5			1.0
ASGROW AG39X7	59.5			1.0	PROGENY 4247 LL	59.5	64.8		1.0
DYNA-GRO S39RY65	59.4	72.1	74.3	1.0	STINE 42LH02	59.3			1.0
GO SOY 39C15	59.4			1.0	SEED CONSULTANTS SCS 9412RR [™]	59.2	72.7		1.0
BRODBECK 365R2	59.3			1.0	SOUTHERN STATES SS 4216N X	59.0			1.0
HPT 3919NR	59.2			1.0	STEWART 4527R2X	58.9			1.0
STINE 38RE02	59.1	66.3	67.0	1.0	STEYER 4402R2	58.9	69.8		1.0
STINE 38LE02	58.7			1.0	GREAT LAKES HYBRIDS GL4366NSRX	58.8			1.0
SEED CONSULTANTS SC 9367R [™]	58.7			1.0	CZ 4105 LL	58.5	71.3		1.0
SEED CONSULTANTS SCS 9393RR [™]	57.8	75.5	75.2	1.0	DYNA-GRO S42RY77	58.1			1.7
GREAT LAKES HYBRIDS GL3729R2	57.6	70.1	67.2	1.7	CAVERNDALE CF 426 RR2Y/STS ⁿ	58.0	74.1	73.0	1.7
BRODBECK 333R2	57.0			1.3	WARREN SEED DS 4225	57.5			1.0
SOUTHERN STATES SS 3813N R2	56.8	72.6	72.0	1.3	PFISTER 45R203	57.3			1.3
WARREN SEED DS 3745	55.8			1.7	ASGROW AG45X7	57.1			1.0
ASGROW AG38X6	55.5			1.0	DYNA-GRO S43XS27	56.7			1.3
ASGROW AG36X6	55.3			1.0	CZ 4540 LL	56.5	61.5		1.3
LG SEEDS C3911RX	55.3			1.0	SOUTHERN STATES SS 4417NS X	56.3			1.3
CZ 3233 LL	55.0			1.3	CAVERNDALE CF 404 ⁿ	55.8	70.6		1.0
CAVERNDALE CF 387 HT-GLY ⁿ	54.3			1.0	PROGENY 4211 RY	55.7	69.5	67.2	1.0
PFISTER 39R29	54.2	68.5	70.1	1.0	BRODBECK 417R2	55.5			1.0
LG SEEDS C3550RX	54.1			1.0	SOUTHERN STATES SS 4215NS R2	55.2	69.2		1.0
PIONEER P35T58R	54.1	70.0	72.4	1.0	CZ 4181 RY	55.1	66.2	64.2	1.0
PIONEER P38T42R	53.7			1.3	PFISTER 43R29	54.7			1.0
DYNA-GRO S38RY87	53.0			1.3	BECK 4291X2	54.7			1.3
ARMOR 35-D20	52.8			1.3	HPT 4190NR	54.2			1.0
CZ 3737 LL	52.7			1.0	CZ 4044 LL	53.6			1.3
WARREN SEED DS 3838	52.3	66.4	69.9	1.0	STINE 43RE02	53.5	67.4	67.6	1.0
CZ 3383 RY	52.2			1.0	STEYER 4004XR	52.5			1.0
CZ 3560 RY	52.2	63.5		1.0	UNISOUTH GENETICS USG 7426XTS	50.8			1.0
SOUTHERN STATES SS 3916NS X	50.9			1.0	WARREN SEED DS 4340	50.8			1.0
NK S39-T3	50.8	66.3	70.4	1.0	PROGENY 4588 RY	50.3			1.3
GREAT LAKES HYBRIDS GL3962NRX	49.8			1.0	CZ 4222 LL	45.2			1.3
CZ 3991 RY	48.7			1.0					
DYNA-GRO S38LL54	46.1	65.1		1.0	AVERAGE Group IV Early	60.0	70.9	69.9	1.1
BRODBECK 386R2	45.8			1.3	LSD (0.10)	5.1	5.3	4.0	
ARMOR ARX3306	44.4			1.0	C.V.	6.3	8.6	7.9	
CZ 3443 LL	44.0			1.0					
					MATURITY GROUP IV LATE (relative MG 4.6-4.9)				
AVERAGE Group III	55.5	68.3	70.9	1.1	PIONEER P46T01R	68.0	73.6		2.0
LSD (0.10)	5.0	5.3	4.0		BECK 493R4 ^{***} brand	67.7			2.0
C.V.	6.8	9.0	8.2		GREAT LAKES HYBRIDS GL4761NRX	66.6			1.0
					BECK 487R4 ^{***} brand	65.4			1.0
MATURITY GROUP IV EARLY (relative MG 4.0-4.5)									
NK S45-R7	70.0	83.1		1.0	REV [®] 48A76 [™]	64.7			1.7
NK S42-P6	69.3			1.0	UNISOUTH GENETICS USG 7496XTS	64.3			1.0
ASGROW AG43X7	68.9			2.0	PROGENY 4757 RY	64.1	64.0		2.0
ARMOR 43-D34	68.2			1.0	PIONEER P49T97R	64.0	77.6	76.1	1.0
DYNA-GRO S43RY95	67.5	73.4	71.1	1.0	ASGROW AG47X6	63.7			1.0
HPT 4514NR	67.1			1.0	SEED CONSULTANTS SCS 9474RR [™]	63.5	72.9	72.0	1.3
SOUTHERN STATES LL 423N	66.9	75.4	74.9	1.7	ASGROW AG46X7	62.8			1.0
STEWART 4327R2X	66.4			1.0	PROGENY 4613 RYS	62.5	73.1	72.2	1.7
ARMOR 44-D40	66.3			1.0	ARMOR ARX4906	62.5			2.0
BRODBECK 446R2	66.2			1.0	SEED CONSULTANTS SC 9497R [™]	62.5			1.3
DYNA-GRO S45LL97	66.1			1.0	SOUTHERN STATES SS 4918N X	62.3			1.0

continued

Table 8. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING	BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING
	2016	2015-16	2014-16	2016		2016	2015-16	2014-16	2016
REV® 48A26™	62.3			1.3	SOUTHERN STATES SS 4717NS X	54.0			1.3
REV® 48L63™	62.2			1.3	PFISTER 48RS01	53.9			1.0
LG SEEDS C4845RX	62.2			1.0	DYNA-GRO S49XSS76	53.6			1.0
AGS G548R216	61.4			2.0	GO SOY 49G16	53.5			4.0
WARREN SEED DS 4850	61.3	72.5	72.7	1.3	REV® 47R34™	52.4	60.5	61.8	2.0
STEYER 4704XR	61.0			1.0	PROGENY 4814 LLS	52.3	48.5		1.7
ASGROW AG49X6	60.8			1.3	CAVERNDALE CF 479 LLn	52.1	69.1	71.1	1.0
NK S48-D9	60.8			1.7	BECK 4991X2	52.1			1.0
SOUTHERN STATES SS 4725NS R2	60.8	71.2	70.8	1.0	CZ 4656 RY	51.8			1.3
STEWART 4927R2X	60.6			1.3	STINE 47LF32	51.4			1.3
REV® 49R94™	60.5	70.9	71.7	1.3	LG SEEDS C4900RX	51.1			2.7
DYNA-GRO S46XS87	60.3			1.0	HS 48X60	50.5			1.0
ASGROW AG48X6	60.0			1.0	ARMOR 47-D17	49.4			1.3
PIONEER P48T53R	59.8	67.3	69.3	1.0	DYNA-GRO S48RS53	49.1	59.4	63.2	1.0
ASGROW AG46X6	59.7			1.0	CZ 4898 RY	48.9			1.7
PROGENY 4930 LL	59.6	63.4	66.4	1.3	STINE 48RI22	47.0			1.7
ARMOR 48-D80	59.6			1.3	STEWART 4716R2X	45.6			1.0
GO SOY 4913LL	59.4			1.7	PENNYRILE (long term check-released 1987)	44.9			1.0
GO SOY 483.C	59.1			4.0	AVERAGE Group IV Late	57.7	66.7	69.2	1.4
WARREN SEED DS 47-003	59.0			1.7	LSD (0.10)	4.3	3.4	3.0	
BECK 465R4™*brand	58.8	67.6	68.1	1.0	C.V.	5.5	5.8	6.2	
ARMOR 48-D24	58.7			1.0	MATURITY GROUP V (relative MG 5.0-5.9)				
ARMOR 47-R70	58.5	69.7		2.7	REV® 51A56™	62.8	69.6		1.0
WARREN SEED DS 4633	58.4	68.1	69.5	1.0	PIONEER P50T64R	61.8	63.4	63.7	1.0
CZ 4818 LL	58.4	61.6		1.7	UNIVERSITY OF ARKANSAS R10-197RY	60.2	59.6		1.3
NK S47-K5	58.3	65.7	64.6	1.3	UNIVERSITY OF ARKANSAS R11-89RY	58.6	57.9		1.0
STEYER 4803XR	57.9			1.0	UNIVERSITY OF ARKANSAS UAX 51010C	56.6			2.3
PIONEER P47T36R	57.4	68.3	69.4	1.3	EXP USDA-ARS JTN-5110	56.4	55.0	53.7	2.0
BECK 494L4	57.3			1.3	UNISOUTH GENETICS USG 7506XTS	56.3			1.0
BECK 474L4	57.2	65.5		1.0	Go Soy 56C16	56.2			3.7
ARMOR 49-D90	57.2			1.0	UNIVERSITY OF ARKANSAS UA 5612	56.0	54.0	55.2	4.0
HS 46X60	56.8			1.3	UNIVERSITY OF ARKANSAS R09-430	55.8	60.7		1.7
STINE 47RF32	56.8			1.3	UNIVERSITY OF ARKANSAS OSAGE	52.7	56.9	59.0	1.3
CAVERNDALE CF 478 RR2Y/STSn	56.7			1.0	UNIVERSITY OF ARKANSAS UA 5213C	52.4	52.2	52.5	2.3
REV® 49L49™	56.4			1.7	UNIVERSITY OF ARKANSAS UA 5014C	52.2			1.3
PROGENY 4788 RY	56.3	71.7	70.9	1.0	UNIVERSITY OF ARKANSAS UA 5715GT	50.6			3.0
LG SEEDS C4615RX	56.2			1.3	UNIVERSITY OF ARKANSAS UA 5814HP	50.4	49.6		2.7
HPT 4852NR	56.1			1.7	REV® 52A94™	50.0	53.5	55.3	3.0
CZ 4748 LL	56.0			1.3	UNIVERSITY OF ARKANSAS UA 5414RR	49.9	52.6	53.2	2.0
ARMOR 49-D66	56.0			2.0	ESSEX (long term check-released 1974)	48.3			1.0
GO SOY Ireane	55.9			1.0	AVERAGE Group V (relative MG 5.0-5.9)	54.8	57.1	56.1	2.0
DYNA-GRO SX16848XS	55.8			1.3	LSD (0.10)	4.4	3.2	2.8	
DYNA-GRO S48XT56	55.7			1.3	C.V.	5.8	5.8	6.4	
HS 49X60	55.1			1.0					
CZ 4959 RY	55.0	64.1	66.7	1.0					
ARMOR ARX4706	54.9			1.7					
ARMOR 46-D08	54.8			1.3					
DYNA-GRO S49LL34	54.7	66.9		1.7					
GO SOY 4714LL	54.7			1.7					
SOUTHERN STATES SS 4915NS R2	54.3	55.1		1.7					

^A Within a maturity group, shaded yield are not significantly different (0.10) from the highest yielding cultivar (bold) of that maturity group and year column.
^B 2016, 2015, and 2014 data were collected in Caldwell Co.
^C MG II: no varieties entered in 2016 matched the varieties entered in 2014.

AGRONOMIC INFORMATION

Soil type Crider Silt Loam
 Previous crop Tobacco (rye winter cover crop)
 Soil test pH6.23, P 99, K 333
 SCN test 938
 Fertilizer/lime applied NA
 Agricultural practice No-till
 Pre-planting treatments Glyphosate, Spartan: 05/24/2016
 Planting date (all maturity groups) 6/6/2016
 Post-planting treatments First Rate, Reflex, Intensity One: 7/11/2016
 Harvest dates MG II: 10/07/2016
 MG III: 10/08/2016
 MG IV Early: 10/10/2016
 MG IV Late, V: 11/01/2016
 50% chance of killing frost 10/21

Temperatures and Precipitations, Cadwell County - 2016

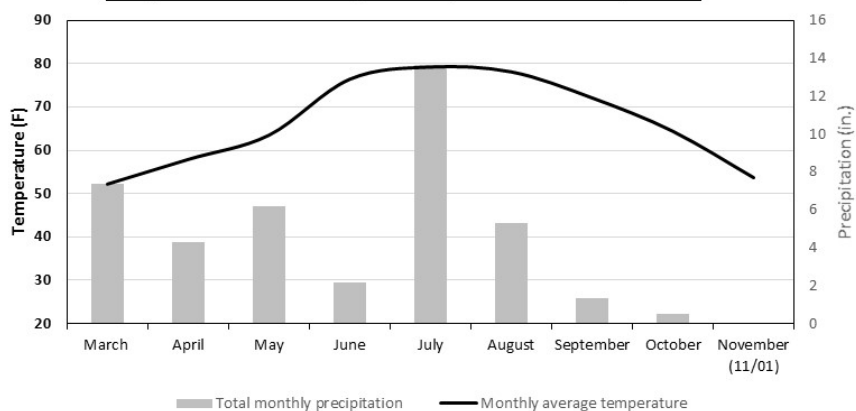


Table 9. 2016 Kentucky Soybean Variety Performance Tests, Calloway County, Purchase Region

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING 2016	FROGEYE LEAF SPOT		SOYBEAN DEVELOPMENT STAGE
	2016	2015-16	2014-16		INCIDENCE	RATING	
MATURITY GROUP II (relative MG 2.0-2.9)^C							R5 (FLS ratings)
BRODBECK 295R2	44.4			1.3	100	1	
LG SEEDS C2766RX	44.2			1.0	100	1	
PFISTER 29R25	43.4			1.3	100	1	
ARMOR ARX2906	39.4			1.3	100	1	
STINE 29RE22	38.3			1.0	100	3	
PIONEER P28T08R	35.1	43.7		1.0	100	2	
AVERAGE Group II	40.8			1.2			
LSD (0.10)	1.8						
C.V.	2.8						
MATURITY GROUP III (relative MG 3.0-3.9)							R4/R5 (FLS ratings)
CAVERNDALE CF 387 HT-GLYn	63.5			1.0	0	0	
SEED CONSULTANTS SCS 9385RR™	61.6	59.7	56.2	1.0	100	1	
BRODBECK 377R2	58.1			1.7	0	0	
PIONEER P38T61BR	58.0			1.0	0	0	
HPT 3919NR	56.7			1.3	100	1	
BRODBECK 365R2	56.1			1.0	0	0	
WARREN SEED DS 3745	55.4			1.7	100	1	
SEED CONSULTANTS SC 9367R™	55.3			1.0	100	1	
GO SOY 39C15	54.5			1.3	0	0	
CZ 3737 LL	53.7			1.0	0	0	
PIONEER P38T42R	51.2			1.0	100	2	
CZ 3560 RY	51.1	56.1		1.0	100	1	
SOUTHERN STATES SS 3813N R2	50.9	55.0	51.2	1.3	100	2	
LG SEEDS C3550RX	50.9			1.0	100	2	
PFISTER 39R29	50.7	53.5	52.1	1.3	100	1	
STINE 38RE02	50.2	53.3	51.2	1.0	100	1	
WARREN SEED DS 3838	48.7	49.9	47.0	1.0	100	2	
PIONEER P35T58R	48.4	51.0	46.7	1.0	100	2	
BRODBECK 396R2	48.4			1.3	100	1	
ASGROW AG39X7	47.9			1.7	100	3	
ASGROW AG38X6	47.8			1.3	100	1	
DYNA-GRO S38RY87	47.4			1.3	100	2	
SEED CONSULTANTS SCS 9393RR™	47.3	55.6	53.7	1.0	100	1	
ARMOR 35-D20	47.3			1.0	0	0	
ARMOR ARX3706	46.9			1.0	100	2	
CZ 3945 LL	46.6	52.2		1.3	0	0	
GREAT LAKES HYBRIDS GL3729R2	46.3	53.2	50.8	1.0	100	1	
ASGROW AG36X6	46.0			1.0	100	2	
NK S39-T3	45.8	55.5	52.7	1.3	100	3	
STINE 38LE02	45.6			1.0	100	1	
PFISTER 35R25	45.0			1.3	100	1	
ARMOR 39-D90	44.3			1.0	100	1	
CZ 3383 RY	44.1			1.3	100	1	
CZ 3443 LL	43.2			1.3	0	0	
CZ 3841 LL	43.1	47.6	46.2	1.0	100	2	
ARMOR ARX3306	43.0			1.3	100	1	
CZ 3233 LL	41.8			1.3	100	2	
GREAT LAKES HYBRIDS GL3758NRX	41.5			1.0	100	1	
CZ 3991 RY	40.9			1.0	100	2	
BRODBECK 333R2	38.6			1.0	100	2	
DYNA-GRO S39RY65	38.2	45.1	43.4	1.0	100	3	
BRODBECK 386R2	35.7			1.7	100	3	
SOUTHERN STATES SS 3916NS X	34.7			1.3	100	1	
DYNA-GRO S38LL54	34.2	43.6		1.0	100	3	
GREAT LAKES HYBRIDS GL3962NRX	34.2			1.0	100	2	
LG SEEDS C3911RX	32.0			1.0	100	3	
AVERAGE Group III	47.2	52.2	50.1	1.2			
LSD (0.10)	4.7	3.6	2.8				
C.V.	7.4	7.5	7.3				
MATURITY GROUP IV EARLY (relative MG 4.0-4.9)							R4 (FLS ratings)
CAVERNDALE CF 404n	64.9	59.3		1.0	0	0	
NK S42-P6	63.6			1.0	0	0	
PIONEER P41T33R	62.9			1.0	0	0	
AGS GS43R216	62.8			1.7	100	2	
BECK 453R4™*brand	62.6	60.5		1.0	0	0	
PROGENY 4247 LL	62.0	56.8		1.0	0	0	
SOUTHERN STATES LL 423N	61.4	62.2	58.4	1.3	0	0	
GO SOY 43L16	61.4			1.3	0	0	
SEED CONSULTANTS SCS 9456SR™	61.1	56.6		1.3	0	0	

continued

Table 9. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING 2016	FROGEYE LEAF SPOT		SOYBEAN DEVELOPMENT STAGE
	2016	2015-16	2014-16		INCIDENCE	RATING	
ASGROW AG43X7	60.5			1.3	0	0	
STEYER 4403XR	59.7			1.3	0	0	
STINE 44LH22	59.7			1.0	0	0	
GO SOY 42L16	58.4			1.0	0	0	
DYNA-GRO S42RY77	58.1			1.3	100	1	
PIONEER P45T11R	57.8			1.0	0	0	
ARMOR 44-D40	57.3			1.0	0	0	
PFISTER 41RS01	57.2	56.2		1.3	100	2	
BECK 4291X2	57.1			1.7	100	1	
GREAT LAKES HYBRIDS GL4366NSRX	57.1			2.0	0	0	
CZ 4105 LL	56.8	58.8		1.0	0	0	
REV [®] 45A46™	56.8			2.0	100	2	
HPT 4514NR	56.6			1.3	100	2	
BRODBECK 446R2	56.6			2.0	100	2	
DYNA-GRO S45LL97	56.4			1.0	100	1	
STEYER 4402R2	55.6	56.4		2.0	100	1	
ASGROW AG42X6	55.0			1.0	100	1	
SOUTHERN STATES SS 4215NS R2	54.9	54.2		1.0	100	1	
CZ 4181 RY	54.7	52.8	50.8	1.3	100	1	
WARREN SEED DS 4225	54.2			1.0	100	1	
ASGROW AG40X6	54.1			1.0	100	1	
STEWART 4113R2	53.9	58.0	54.2	1.3	100	2	
STEWART 4327R2X	53.4			1.0	100	1	
LG SEEDS C4145R2	53.1			1.0	100	1	
ASGROW AG44X6	53.0			1.3	100	1	
PFISTER 43R29	52.4			1.3	100	2	
BRODBECK 426R2	52.2			1.0	100	1	
CAVERNDALE CF 452 RR2Yn	51.8	55.5		2.0	100	2	
PFISTER 45R203	51.5			1.7	100	2	
DYNA-GRO S43RY95	51.4	56.8	53.3	2.0	100	1	
STINE 42LH02	50.4			1.0	0	0	
LG SEEDS C4458RX	50.3			1.3	0	0	
CZ 4540 LL	50.1	50.0		2.7	100	1	
PROGENY 4588 RY	49.9			2.0	0	0	
BRODBECK 417R2	49.8			1.0	100	1	
STINE 43RE02	49.8	52.4	51.2	1.0	100	3	
STEWART 4116R2X	49.7			1.0	100	1	
STEWART 4527R2X	49.3			1.7	100	2	
DYNA-GRO S43XS27	49.1			1.3	100	2	
CZ 4044 LL	49.1			1.0	0	0	
STINE 41RH22	49.0			1.0	100	1	
SEED CONSULTANTS SCS 9412RR™	48.8	52.8		1.0	100	3	
SOUTHERN STATES SS 4417NS X	48.7			1.3	100	1	
ASGROW AG45X7	48.5			1.7	0	0	
STEYER 4004XR	47.8			1.0	100	1	
WARREN SEED DS 4340	47.2			1.0	100	3	
ARMOR 43-D34	47.0			1.0	100	2	
CZ 4590 RY	46.9	49.5		1.3	100	2	
PROGENY 4211 RY	46.8	53.6	49.1	1.0	100	2	
SOUTHERN STATES SS 4216N X	46.8			1.3	100	2	
ASGROW AG45X6	46.2			1.0	100	2	
HPT 4190NR	46.0			1.0	100	3	
NK S45-R7	43.0	49.5		1.0	100	3	
CAVERNDALE CF 426 RR2Y/STS _n	42.4	51.2	51.9	1.0	100	3	
CZ 4222 LL	37.6			1.3	100	3	
UNISOUTH GENETICS USG 7426XTS	35.1			1.0	100	3	
AVERAGE Group IV Early	53.2	55.2	52.7	1.3			
LSD (0.10)	5.0	3.6	3.8				
C.V.	6.9	7.0	9.1				
MATURITY GROUP IV LATE (relative MG 4.6-4.9)							R4 (FLS ratings)
ARMOR 47-R70	67.9	64.5		3.0	0	0	
WARREN SEED DS 4633	67.4	63.4	58.9	2.0	0	0	
PROGENY 4757 RY	66.4	66.3		2.3	0	0	
PIONEER P48T53R	65.6	66.0	62.2	1.0	0	0	
REV [®] 48A76™	65.2			1.3	0	0	
AGS GS48R216	64.5			1.7	0	0	
PIONEER P46T01R	64.4	69.2		2.3	0	0	
NK S47-K5	63.5	69.0	62.6	1.7	0	0	
REV [®] 47R34™	63.0	60.0	53.8	1.7	0	0	
REV [®] 49R94™	62.9	61.1	59.8	1.3	0	0	
BECK 487R4™**brand	62.4			1.7	0	0	
ARMOR ARX4706	61.6			1.0	0	0	

continued

Table 9. 2016 (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING 2016	FROGEYE LEAF SPOT		SOYBEAN DEVELOPMENT STAGE
	2016	2015-16	2014-16		INCIDENCE	RATING	
SEED CONSULTANTS SC 9497R™	61.6			1.3	0	0	
REV® 48A26™	61.3			1.3	0	0	
PIONEER P47T36R	59.6	57.9	57.6	1.3	100	1	
SEED CONSULTANTS SCS 9474RR™	59.5	60.5	59.1	1.7	0	0	
REV® 48L63™	58.3			1.3	0	0	
WARREN SEED DS 47-003	58.1			1.3	0	0	
HPT 4852NR	58.1			1.3	0	0	
DYNA-GRO S49XSS76	57.9			1.0	100	2	
PROGENY 4930 LL	57.7	61.5	59.4	1.0	0	0	
BECK 493R4™**brand	57.6			1.0	0	0	
BECK 4991X2	57.2			1.0	100	1	
NK S48-D9	57.1			1.0	0	0	
ASGROW AG47X6	56.8			1.3	0	0	
GO SOY 4913LL	56.3			1.0	0	0	
ARMOR 46-D08	56.3			2.7	100	1	
PIONEER P49T97R	55.8	57.7	57.2	1.0	0	0	
ASGROW AG46X7	55.6			1.3	0	0	
CZ 4748 LL	55.5			1.0	0	0	
PROGENY 4788 RY	55.4	53.0	52.3	1.7	100	1	
CAVERNDAL CF 479 LLn	55.3	58.4	58.8	1.3	0	0	
REV® 49L49™	55.0			1.3	0	0	
ASGROW AG46X6	54.9			1.0	100	1	
PROGENY 4613 RYS	54.8	57.5	53.9	2.7	100	1	
GO SOY 483.C	54.4			3.7	0	0	
SOUTHERN STATES SS 4918N X	54.2			1.0	100	1	
STINE 47LF32	54.2			1.0	0	0	
GO SOY Ireane	54.1			3.0	0	0	
DYNA-GRO S49LL34	54.0	54.6		1.0	0	0	
GO SOY 4714LL	54.0			1.0	0	0	
LG SEEDS C4845RX	53.9			1.0	100	1	
UNISOUTH GENETICS USG 7496XTS	53.6			1.0	100	2	
GO SOY 49G16	53.4			2.7	0	0	
ARMOR 48-D24	52.4			1.3	100	1	
BECK 494L4	51.9			2.0	100	1	
GREAT LAKES HYBRIDS GL4761NRX	51.7			1.0	100	1	
BECK 465R4™**brand	51.4	55.4	55.2	1.0	0	0	
ARMOR 47-D17	51.1			2.0	0	0	
PROGENY 4814 LLS	51.0	61.9		3.0	0	0	
BECK 474L4	50.4	58.6		2.3	0	0	
ASGROW AG49X6	49.9			1.0	0	0	
ARMOR 49-D90	48.7			1.3	100	2	
HS 49X60	48.0			2.3	100	1	
ARMOR 48-D80	48.0			1.3	100	1	
LG SEEDS C4900RX	47.8			1.0	0	0	
CZ 4818 LL	47.6	53.1		1.7	0	0	
SOUTHERN STATES SS 4717NS X	47.1			1.0	100	1	
DYNA-GRO S48XT56	46.9			1.0	100	1	
DYNA-GRO S46XS87	45.4			1.0	100	1	
CZ 4959 RY	44.9	47.5	50.0	1.0	100	2	
WARREN SEED DS 4850	44.9	51.2	51.4	1.3	100	1	
CAVERNDAL CF 478 RR2Y/STSn	44.8			1.3	100	2	
DYNA-GRO SX16848XS	44.8			2.0	100	1	
HS 48X60	44.8			1.7	100	1	
HS 46X60	43.8			1.7	100	1	
LG SEEDS C4615RX	42.8			1.0	100	1	
PFISTER 48RS01	42.7			1.7	100	1	
ASGROW AG48X6	41.6			1.3	100	1	
STINE 48RI22	41.3			1.3	100	3	
CZ 4898 RY	40.9			1.0	100	2	
STEYER 4704XR	40.8			1.0	100	1	
STEYER 4803XR	40.7			1.3	100	1	
SOUTHERN STATES SS 4725NS R2	40.1	51.0	51.8	1.7	100	1	
CZ 4656 RY	39.1			1.0	100	2	
ARMOR ARX4906	39.0			3.0	100	1	
DYNA-GRO S48RS53	38.9	48.5	53.4	1.7	100	1	
PENNYRILE (long term check-released 1987)	38.7			3.0	100	2	
STEWART 4716R2X	38.4			1.0	100	2	
STEWART 4927R2X	37.5			1.0	100	1	
ARMOR 49-D66	35.1			1.0	0	0	
SOUTHERN STATES SS 4915NS R2	33.5	48.1		1.3	100	1	
STINE 47RF32	29.7			2.0	100	1	
AVERAGE Group IV Late	51.7	58.2	56.3	1.5			
LSD (0.10)	3.9	3.4	3.7				

continued

Table 9. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LOGGING 2016	FROGEYE LEAF SPOT		SOYBEAN DEVELOPMENT STAGE
	2016	2015-16	2014-16		INCIDENCE	RATING	
C.V.	5.6	6.7	8.7				
MATURITY GROUP V (relative MG 5.0-5.9)							R3(FLS ratings)
UNIVERSITY OF ARKANSAS UA 5014C	63.5			2.3	100	2	
UNIVERSITY OF ARKANSAS UA 5612	61.0	56.0	58.6	2.3	100	1	
UNIVERSITY OF ARKANSAS UAX 51010C	60.3			2.0	0	0	
GO SOY 56C16	60.0			2.7	100	1	
UNIVERSITY OF ARKANSAS R11-89RY	56.1	54.0		3.3	0	0	
REV® 51A56™	54.7	55.8		1.0	0	0	
PIONEER P50T64R	54.6	56.0	54.5	1.3	100	2	
UNIVERSITY OF ARKANSAS R09-430	52.1	49.9		3.7	100	1	
UNIVERSITY OF ARKANSAS R10-197RY	50.6	47.2		1.7	100	1	
REV® 52A94™	49.8	43.9	49.0	2.3	0	0	
EXP USDA-ARS JTN-5110	49.4	46.8	48.5	1.7	100	1	
UNIVERSITY OF ARKANSAS UA 5814HP	46.7	39.0		2.0	0	0	
ESSEX (long term check-released 1974)	46.1			1.0	100	1	
UNISOUTH GENETICS USG 7506XTS	45.8			1.3	100	2	
UNIVERSITY OF ARKANSAS UA 5213C	45.2	46.8	51.3	2.0	100	2	
UNIVERSITY OF ARKANSAS OSAGE	44.6	47.2	51.1	1.3	100	1	
UNIVERSITY OF ARKANSAS UA 5715GT	39.2			1.7	100	1	
UNIVERSITY OF ARKANSAS UA 5414RR	38.2	39.3	46.7	1.3	100	2	
AVERAGE Group V (relative MG 5.0-5.9)	51.0	48.5	51.4	1.9			
LSD (0.10)	4.4	3.6	3.8				
C.V.	6.2	7.5	9.6				

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

^B 2016, 2015, and 2014 data were collected in Calloway Co.

^C MG II: no varieties entered in 2016 matched the varieties entered in 2014.

AGRONOMIC INFORMATION

Soil type	Grenada Silt Loam
Previous crop	Tobacco
Soil test	pH 6.13, P 55, K 224
SCN test	0
Fertilizer/lime applied	P2O5 K2O 30/50 lbs/acre
Agricultural practice	Tillage
Pre-planting treatments	NA
Planting dates	MG II and III: 5/23/2016 MG IV Early, IV Late, V: 5/24/2016
Post-planting treatments	Intensity One (back pack): 7/11/2016
Harvest dates	MG II, III: 09/27/2016 MG IV Early: 9/28/2016 MG IV Late, V: 10/17/2016
50% chance of killing frost	10/30

Temperatures and Precipitations, Calloway County - 2016

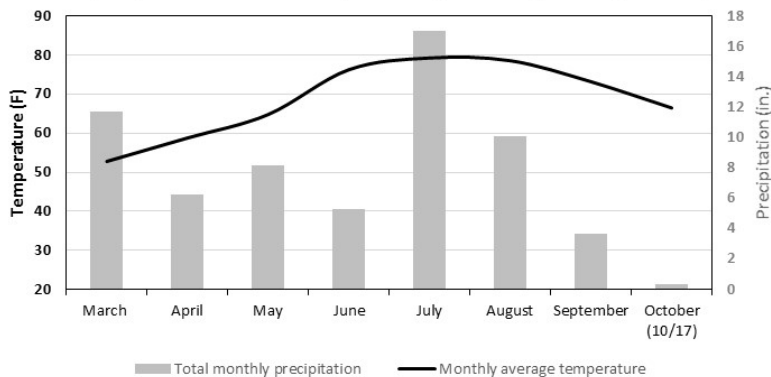


Table 10. 2016 Kentucky Soybean Variety Performance Tests, Cumberland County, Lake Cumberland Region (1)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}		LOGGING	BRAND VARIETY	YIELD (BU/AC) ^{A/B}		LOGGING
	2016	2015-16	2016		2016	2015-16	2016
MATURITY GROUP II (relative MG 2.0-2.9)							
PIONEER P28T08R	50.0	56.3	3.7	STEYER 4403XR	56.7		3.3
LG SEEDS C2766RX	48.7		4.3	CZ 4222 LL	56.6		2.0
PFISTER 29R25	47.2		3.3	ASGROW AG43X7	56.5		2.7
BRODBECK 295R2	47.1		4.3	STEWART 4527R2X	56.1		2.0
STINE 29RE22	45.4		3.3	CZ 4540 LL	55.9	56.7	4.0
ARMOR ARX2906	44.1		4.3	LG SEEDS C4145R2	55.2		2.0
				HPT 4514NR	55.2		2.0
				REV [®] 45A46 [™]	54.9		2.3
AVERAGE Group II	47.1		3.9	BRODBECK 446R2	54.7		3.3
LSD (0.10)	7.2			CZ 4181 RY	54.3	64.4	2.3
C.V.	9.7			NK S42-P6	53.8		1.3
				PFISTER 43R29	53.7		2.7
MATURITY GROUP III (relative MG 3.0-3.9)							
CAVERNDALE CF 387 HT-GLYn	73.7		3.3	STEYER 4402R2	53.4	62.1	1.7
WARREN SEED DS 3838	69.2	73.2	4.3	ASGROW AG44X6	52.1		3.3
PFISTER 35R25	62.8		3.0	CZ 4590 RY	51.9	57.8	1.3
HPT 3919NR	62.6		4.0	CAVERNDALE CF 426 RR2Y/STS _n	51.7	57.7	2.7
ASGROW AG39X7	61.7		4.3	GO SOY 43L16	51.7		3.3
CZ 3560 RY	61.7	65.7	3.3	UNISOUTH GENETICS USG 7426XTS	51.2		2.3
BRODBECK 333R2	61.4		4.3	PROGENY 4211 RY	50.5	52.8	4.3
DYNA-GRO S38RY87	61.1		4.0	ASGROW AG40X6	50.4		1.7
BRODBECK 396R2	60.9		4.0	WARREN SEED DS 4340	49.2		3.0
DYNA-GRO S38LL54	60.2	64.5	4.7	PROGENY 4247 LL	49.0	60.2	1.7
SOUTHERN STATES SS 3813N R2	60.1	69.7	3.3	WARREN SEED DS 4225	49.0		1.0
PIONEER P35T58R	59.7	64.0	4.0	STEYER 4004XR	48.8		3.7
SEED CONSULTANTS SCS 9393RR [™]	58.8	68.0	3.0	SOUTHERN STATES SS 4417NS X	48.8		3.3
PIONEER P38T42R	58.7		3.7	SOUTHERN STATES LL 423N	48.6	60.1	3.3
ASGROW AG36X6	57.8		4.0	ASGROW AG45X7	48.2		4.3
WARREN SEED DS 3745	57.5		2.7	CZ 4044 LL	48.1		2.7
NK S39-T3	57.4	74.2	3.0	STINE 44LH22	47.7		2.3
GO SOY 39C15	57.4		2.0	CAVERNDALE CF 452 RR2Y _n	47.0	58.3	1.7
SEED CONSULTANTS SCS 9385RR [™]	57.4	70.6	2.7	GO SOY 42L16	46.9		2.3
ARMOR ARX3706	57.1		4.3	DYNA-GRO S43XS27	46.8		3.7
DYNA-GRO S39RY65	56.9	64.8	3.7	STEWART 4113R2	45.8	62.4	1.7
GREAT LAKES HYBRIDS GL3962NRX	56.8		5.0	GREAT LAKES HYBRIDS GL4366NSRX	45.7		3.0
CZ 3443 LL	56.5		1.7	PFISTER 45R203	45.7		2.3
SOUTHERN STATES SS 3916NS X	55.5		2.7	SOUTHERN STATES SS 4216N X	45.7		2.3
BRODBECK 365R2	55.2		4.7	STEWART 4327R2X	45.4		3.3
BRODBECK 386R2	55.0		4.0	SEED CONSULTANTS SCS 9412RR [™]	45.2	53.6	3.7
STINE 38RE02	54.6	65.7	3.7	CAVERNDALE CF 404n	44.4	54.6	2.7
CZ 3991 RY	54.3		4.0	HPT 4190NR	43.8		2.7
ASGROW AG38X6	54.2		4.3	BRODBECK 426R2	43.8		1.3
STINE 38LE02	53.5		3.0	STINE 43RE02	43.1	57.1	2.3
ARMOR 35-D20	53.3		4.0	PIONEER P41T33R	42.4		2.0
CZ 3841 LL	52.8	61.1	4.7	PROGENY 4588 RY	42.1		3.0
GREAT LAKES HYBRIDS GL3729R2	52.7	66.6	4.3	DYNA-GRO S43RY95	42.0	52.5	2.7
CZ 3737 LL	52.0		4.7	STEWART 4116R2X	41.2		1.7
CZ 3945 LL	51.2	64.9	4.7	LG SEEDS C4458RX	41.1		2.3
PIONEER P38T61BR	50.7		3.3	BRODBECK 417R2	41.0		1.3
ARMOR ARX3306	50.5		4.7	DYNA-GRO S45LL97	40.1		2.0
ARMOR 39-D90	50.4		5.0	ARMOR 44-D40	40.0		2.3
PFISTER 39R29	48.7	70.3	4.0	ARMOR 43-D34	39.8		1.7
CZ 3233 LL	45.6		2.7	CZ 4105 LL	35.5	50.5	1.3
CZ 3383 RY	45.6		4.7	ASGROW AG45X6	35.0		3.3
GREAT LAKES HYBRIDS GL3758NRX	45.5		4.3	BECK 4291X2	28.7		2.7
SEED CONSULTANTS SC 9367R [™]	45.2		2.7				
BRODBECK 377R2	43.5		4.3	AVERAGE Group IV Early	49.6	59.4	2.5
LG SEEDS C3911RX	42.3		3.7	LSD (0.10)	5.0	3.6	
LG SEEDS C3550RX	41.8		4.3	C.V.	7.4	7.1	
AVERAGE Group III	55.3	67.4	3.8	MATURITY GROUP IV LATE (relative MG 4.6-4.9)			
LSD (0.10)	5.1	3.8		ARMOR 49-D90	66.7		2.7
C.V.	7.0	6.6		GREAT LAKES HYBRIDS GL4761NRX	65.5		1.3
				UNISOUTH GENETICS USG 7496XTS	62.7		2.7
MATURITY GROUP IV EARLY (relative MG 4.0-4.5)							
STINE 41RH22	65.3		3.3	BECK 493R4 [™] brand	61.9		3.7
PFISTER 41RS01	61.3	62.1	2.7	PROGENY 4613 RYS	61.2	63.7	3.0
STINE 42LH02	61.1		2.0	PIONEER P48T53R	61.1	65.4	3.3
DYNA-GRO S42RY77	59.1		3.3	ARMOR ARX4706	59.8		3.3
AGS G543R216	58.9		3.3	ASGROW AG47X6	59.7		3.7
SEED CONSULTANTS SCS 9456SR [™]	58.6	68.4	1.7	ARMOR 48-D24	58.2		4.0
ASGROW AG42X6	58.6		2.7	LG SEEDS C4845RX	58.0		1.3
NK S45-R7	57.9	68.4	1.9	SEED CONSULTANTS SCS 9474RR [™]	57.9	62.1	5.0
SOUTHERN STATES SS 4215NS R2	57.8	67.5	2.7	NK S48-D9	57.8		4.0
BECK 453R4 [™] brand	57.6	60.0	3.3	CZ 4959 RY	56.8	54.8	2.3
PIONEER P45T11R	56.9		1.3	STEYER 4803XR	56.5		2.0
				ARMOR 46-D08	56.3		4.3

continued

Table 10. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}		LOGGING	BRAND VARIETY	YIELD (BU/AC) ^{A/B}		LOGGING
	2016	2015-16	2016		2016	2015-16	2016
ASGROW AG48X6	56.3		2.3	SEED CONSULTANTS SC 9497R™	47.1		3.0
HS 46X60	56.2		2.7	PROGENY 4814 LLS	46.8	46.7	4.7
SOUTHERN STATES SS 4717NS X	56.0		1.3	PIONEER P49T97R	46.5	54.1	2.0
ARMOR 48-D80	55.7		2.3	AGS GS48R216	46.1		4.7
PROGENY 4930 LL	55.7	56.1	4.0	STEWART 4927R2X	45.8		3.3
REV® 49L49™	55.5		3.3	PROGENY 4757 RY	45.6	59.8	4.3
HS 49X60	55.3		2.0	SOUTHERN STATES SS 4918N X	45.3		2.7
DYNA-GRO S48R53	55.1	61.4	3.0	DYNA-GRO S49XS576	45.1		3.0
GO SOY 4714LL	54.9		4.7	BECK 474L4	45.0	56.9	4.7
PROGENY 4788 RY	54.6	61.1	4.3	WARREN SEED DS 47-003	44.8		3.7
BECK 4991X2	54.6		2.0	CZ 4656 RY	44.8		4.0
STEYER 4704XR	54.5		1.0	ARMOR 47-D17	44.1		4.7
STINE 48RI22	54.4		3.3	GO SOY 49G16	43.4		5.0
STINE 47LF32	54.3		2.3	LG SEEDS C4615RX	43.4		3.0
DYNA-GRO SX16848XS	54.2		3.0	STEWART 4716R2X	43.2		3.7
BECK 487R4™*brand	54.0		3.3	PIONEER P46T01R	43.1	54.8	4.3
SOUTHERN STATES SS 4725NS R2	53.9	59.3	2.3	CZ 4898 RY	39.8		4.0
ASGROW AG49X6	53.9		3.3	ARMOR ARX4906	38.7		4.7
PIONEER P47T36R	53.8	62.8	2.0	PENNYRILE (long term check-released 1987)	24.1		4.0
DYNA-GRO S49LL34	53.7	61.3	4.0	AVERAGE Group IV Late	51.8	59.3	3.3
ARMOR 47-R70	53.0	57.2	4.0	LSD (0.10)	4.3	3.4	1.4
NK S47-K5	52.9	65.3	3.3	C.V.	6.2	6.5	31.0
CAVERDALE CF 478 RR2Y/STSn	52.9		3.0	MATURITY GROUP V (relative MG 5.0-5.9)			
CZ 4748 LL	52.7		4.0	UNISOUTH GENETICS USG 7506XTS	56.6		3.7
REV® 48A26™	52.3		3.7	GO SOY 56C16	55.9		5.0
LG SEEDS C4900RX	52.3		3.3	UNIVERSITY OF ARKANSAS UA 5715GT	54.6		3.7
ARMOR 49-D66	52.3		3.0	PIONEER P50T64R	54.1	63.0	3.3
GO SOY Ireane	52.2		1.7	UNIVERSITY OF ARKANSAS R11-89RY	53.1	51.6	2.7
DYNA-GRO S48XT56	52.0		2.3	UNIVERSITY OF ARKANSAS R10-197RY	53.0	50.8	4.0
CZ 4818 LL	51.9	47.6	2.3	UNIVERSITY OF ARKANSAS UA 5814HP	52.8	44.6	2.7
WARREN SEED DS 4633	51.7	63.7	3.3	REV® 51A56™	51.0	62.6	4.7
STINE 47RF32	51.7		3.0	UNIVERSITY OF ARKANSAS UAX 51010C	51.0		4.0
REV® 48L63™	51.6		4.7	UNIVERSITY OF ARKANSAS OSAGE	50.1	51.8	4.7
BECK 465R4™*brand	51.4	58.7	4.0	UNIVERSITY OF ARKANSAS UA 5014C	50.1		2.0
PFISTER 48RS01	51.4		3.0	REV® 52A94™	46.6	52.8	5.0
REV® 47R34™	51.3	60.9	4.7	UNIVERSITY OF ARKANSAS UA 5414RR	45.9	47.5	4.7
GO SOY 483.C	51.3		4.7	UNIVERSITY OF ARKANSAS R09-430	44.7	59.2	4.7
DYNA-GRO S46XS87	51.2		3.3	EXP USDA-ARS JTN-5110	43.2	45.4	4.3
GO SOY 4913LL	51.1		3.0	UNIVERSITY OF ARKANSAS UA 5213C	42.9	47.7	5.0
CAVERDALE CF 479 LLn	50.9	65.3	3.0	UNIVERSITY OF ARKANSAS UA 5612	40.9	46.2	5.0
REV® 48A76™	50.9		2.7	ESSEX (long term check-released 1974)	36.5		5.0
SOUTHERN STATES SS 4915NS R2	50.8	58.2	3.7	AVERAGE Group V (relative MG 5.0-5.9)	49.1	51.9	4.1
REV® 49R94™	50.6	63.5	3.0	LSD (0.10)	4.5	3.4	
ASGROW AG46X6	50.2		4.0	C.V.	6.6	6.9	
HPT 4852NR	48.5		4.3				
WARREN SEED DS 4850	48.4	62.2	3.0				
ASGROW AG46X7	48.3		2.7				
BECK 494L4	48.3		2.7				
HS 48X60	48.2		3.0				

^A Within a maturity group, shaded yield are not significantly different (0.10) from the highest yielding cultivar (bold) of that maturity group and year column.
^B 2016 data were collected in Cumberland Co. 2015 data were collected in Clinton Co. No data were collected in 2014.

AGRONOMIC INFORMATION

Soil type	Hungtington Silt Loam
Previous crop	Fallow (2 years)
Soil test	pH 5.68, P 26, K 131
SCN test	0
Fertilizer/lime applied	None
Agricultural practice	No-till
Pre-planting treatments	NA
Planting date (all maturity groups)	5/14/2016
Post-planting treatments	Mad Dog, First Rate, Prefix: 5/16/2016 First Rate, Classic 25DF, Intensity One: 6/29/2016
Harvest dates	MG II: 09/29/2016 MG III, IV Early: 10/06/2016 MG IV Late, V: 10/31/2016
50% chance of killing frost	10/24

Temperatures and Precipitations, Cumberland Co. - 2016

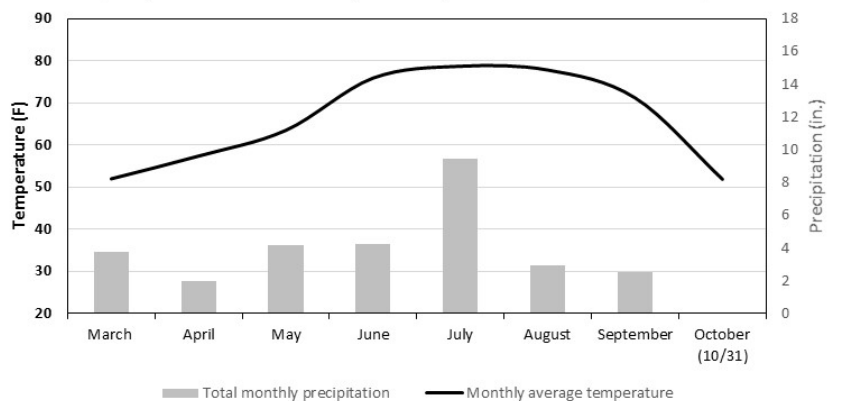


Table 11. 2016 Kentucky Soybean Variety Performance Tests, Fayette County, Bluegrass Region

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING 2016	PLANT HEIGHT (IN.) 2016	MATURITY DATE 2016
	2016	2015-16	2014-16			
MATURITY GROUP II (relative MG 2.0-2.9)^C						
BRODBECK 295R2	59.6			1.3	39	28
STINE 29RE22	58.5			1.3	38	29
PFISTER 29R25	57.5			1.3	42	28
LG SEEDS C2766RX	56.0			2.3	38	26
PIONEER P28T08R	53.0	60.9		1.3	36	30
ARMOR ARX2906	48.1			1.7	37	28
AVERAGE Group II	55.5			1.5	38	28 (Sept. 28th)
LSD (0.10)	5.6					
C.V.	6.5					
MATURITY GROUP III (relative MG 3.0-3.9)						
PFISTER 39R29	68.2	60.9	59.6	1.0	38	28
STINE 38RE02	65.9	68.9	65.5	2.3	42	33
CZ 3945 LL	63.5	60.8		1.3	44	35
NK 539-T3	63.2	62.2	64.3	1.7	42	33
SEED CONSULTANTS SCS 9385RR TM	63.1	61.7	62.3	2.0	41	25
CAVERNDAL CF 387 HT-GLYn	62.7			1.3	38	28
BRODBECK 365R2	62.4			2.3	42	28
PFISTER 35R25	61.3			2.0	38	28
CZ 3737 LL	60.7			1.7	40	28
ASGROW AG39X7	60.6			1.3	42	33
CZ 3841 LL	60.0	62.2	60.0	2.0	46	28
LG SEEDS C3550RX	59.9			1.3	35	25
SEED CONSULTANTS SC 9367R TM	59.6			1.7	40	30
ARMOR ARX3706	59.4			1.0	40	28
BRODBECK 377R2	59.0			2.3	45	28
GREAT LAKES HYBRIDS GL3729R2	58.7	60.8	60.0	1.7	45	35
BRODBECK 386R2	58.6			3.0	43	36
DYNA-GRO S38LL54	58.5	58.3		1.0	40	35
PIONEER P38T42R	58.5			1.7	44	30
CZ 3443 LL	58.2			1.3	40	28
BRODBECK 396R2	58.1			1.7	45	25
STINE 38LE02	57.2			1.0	38	28
GO SOY 39C15	57.0			1.3	40	25
CZ 3233 LL	56.9			2.3	38	28
PIONEER P38T61BR	56.3			2.3	48	28
WARREN SEED DS 3838	56.2	52.8	55.3	1.0	47	25
SEED CONSULTANTS SCS 9393RR TM	56.2	63.5	61.6	1.0	44	28
ARMOR 39-D90	55.9			2.3	42	30
CZ 3383 RY	55.8			1.7	45	30
SOUTHERN STATES SS 3813N R2	55.5	57.8	57.7	1.3	41	29
WARREN SEED DS 3745	55.4			2.0	39	28
ASGROW AG36X6	55.2			1.7	43	30
PIONEER P35T58R	55.1	55.5	55.7	1.7	40	27
CZ 3991 RY	55.1			1.0	38	25
CZ 3560 RY	54.5	55.9		1.7	39	31
BRODBECK 333R2	54.4			2.0	40	28
HPT 3919NR	54.4			1.7	51	30
DYNA-GRO S38RY87	53.3			1.0	44	28
GREAT LAKES HYBRIDS GL3962NRX	51.5			2.3	47	33
ASGROW AG38X6	50.9			1.7	44	30
DYNA-GRO S39RY65	50.7	55.7	56.6	1.3	41	26
ARMOR 35-D20	50.6			1.3	42	33
SOUTHERN STATES SS 3916NS X	49.8			1.0	44	28
LG SEEDS C3911RX	48.8			1.3	43	25
GREAT LAKES HYBRIDS GL3758NRX	48.2			1.7	40	25
ARMOR ARX3306	46.4			1.0	34	25
AVERAGE Group III	57.0	59.8	59.9	1.6	42	29 (Sept. 29th)
LSD (0.10)	3.8	4.0	3.2			
C.V.	4.9	7.2	7.1			
MATURITY GROUP IV EARLY (relative MG 4.0-4.5)						
ASGROW AG40X6	59.5			1.3	46	37
SOUTHERN STATES SS 4417NS X	59.3			1.3	46	35
PIONEER P41T33R	58.6			1.0	44	35
PROGENY 4211 RY	57.5	60.2	61.4	1.0	38	35
NK S45-R7	57.4	53.1		1.0	38	35
BRODBECK 417R2	57.1			1.0	43	37
CAVERNDAL CF 404n	56.9	64.4		1.0	37	35
LG SEEDS C4145R2	56.5			1.3	43	35
DYNA-GRO S45LL97	56.2			1.0	40	37
PFISTER 43R29	56.2			1.0	44	38
STEWART 4113R2	56.0	56.1	57.8	1.0	46	37

continued

Table 11. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING 2016	PLANT HEIGHT (IN.) 2016	MATURITY DATE 2016
	2016	2015-16	2014-16			
SEED CONSULTANTS SCS 9412RR™	55.8	56.2		1.3	40	36
SOUTHERN STATES LL 423N	55.7	53.3	57.5	1.0	40	35
ASGROW AG42X6	55.7			1.7	43	37
NK S42-P6	55.4			1.0	42	35
CAVERNDALE CF 426 RR2Y/STSn	55.4	63.1	64.3	1.7	51	35
ARMOR 43-D34	55.2			1.0	42	35
STEWART 4327R2X	55.1			1.3	40	35
SOUTHERN STATES SS 4216N X	54.9			1.0	41	38
PROGENY 4247 LL	54.9	52.0		1.0	39	38
PFISTER 45R203	54.2			1.3	48	35
BECK 4291X2	54.2			1.0	38	38
CZ 4044 LL	54.2			1.0	41	35
CZ 4181 RY	54.0	52.9	54.7	2.0	46	40
WARREN SEED DS 4340	54.0			1.0	40	36
STINE 43RE02	54.0	56.4	58.1	1.0	41	37
WARREN SEED DS 4225	53.7			1.0	41	34
DYNA-GRO S42RY77	53.5			1.3	40	36
AGS GS43R216	53.5			1.3	37	35
PIONEER P45T11R	53.3			1.0	46	35
ASGROW AG45X7	53.2			1.3	48	34
STEWART 4116R2X	53.2			1.0	43	38
ASGROW AG45X6	53.1			1.3	42	35
STEYER 4402R2	53.1	58.0		1.0	46	35
ARMOR 44-D40	52.7			1.0	42	35
CAVERNDALE CF 452 RR2Yn	52.5	54.0		1.0	44	35
HPT 4190NR	52.4			1.0	42	36
GO SOY 43L16	52.2			1.0	40	31
STINE 42LH02	52.2			1.0	38	35
STEWART 4527R2X	51.8			1.0	42	35
STINE 41RH22	51.5			1.0	40	35
SOUTHERN STATES SS 4215NS R2	51.4	50.9		1.0	44	35
ASGROW AG44X6	51.4			1.0	46	37
LG SEEDS C4458RX	51.3			1.0	42	35
UNISOUTH GENETICS USG 7426XTS	51.3			1.0	43	37
BRODBECK 446R2	50.7			1.3	46	35
GO SOY 42L16	50.6			1.0	38	35
CZ 4222 LL	50.5			1.3	38	35
STEYER 4403XR	50.4			1.0	46	37
SEED CONSULTANTS SCS 9456SR™	50.1	53.3		1.3	42	37
STINE 44LH22	50.1			1.0	40	37
DYNA-GRO S43XS27	49.4			1.3	44	35
REV® 45A46™	49.3			1.3	47	37
PFISTER 41RS01	48.9	53.4		1.0	43	37
GREAT LAKES HYBRIDS GL4366NSRX	48.8			1.0	45	35
ASGROW AG43X7	48.5			1.7	48	35
BECK 453R4™*brand	48.4	54.4		1.3	44	35
CZ 4105 LL	47.9	52.1		1.0	44	37
DYNA-GRO S43RY95	47.8	52.2	57.3	2.7	46	38
CZ 4590 RY	47.7	51.6		1.3	50	37
BRODBECK 426R2	47.0			1.0	33	38
HPT 4514NR	46.3			1.0	42	35
CZ 4540 LL	46.2	45.6		3.0	52	38
STEYER 4004XR	46.2			1.3	42	36
PROGENY 4588 RY	42.0			1.7	47	35
AVERAGE Group IV Early	52.6	54.7	58.7	1.2	43	36 (Oct. 6th)
LSD (0.10)	3.7	3.2	2.7			
C.V.	5.2	6.4	6.4			
MATURITY GROUP IV LATE (relative MG 4.6-4.9)						
CZ 4748 LL	57.0			1.3	40	35
ASGROW AG46X7	56.4			1.3	42	37
CAVERNDALE CF 479 LLn	56.3	60.9	61.8	1.0	47	37
STINE 47LF32	56.1			1.3	43	36
SOUTHERN STATES SS 4918N X	55.9			1.0	40	35
ARMOR ARX4706	55.4			1.0	43	35
ARMOR 49-D66	55.3			1.0	46	37
PIONEER P49T97R	55.3	56.9	59.5	1.0	45	38
HPT 4852NR	55.2			1.3	46	36
GO SOY 4714LL	55.2			1.0	46	38
ARMOR 47-R70	55.0	55.4		1.3	47	36
AGS GS48R216	54.7			2.3	42	35
PIONEER P48T53R	54.4	55.2	59.2	1.0	44	35
BECK 474L4	54.3	56.2		1.0	40	34
NK S47-K5	53.5	55.9	58.2	1.0	36	36

continued

Table 11. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING 2016	PLANT HEIGHT (IN.) 2016	MATURITY DATE 2016
	2016	2015-16	2014-16			
ARMOR 47-D17	53.3			2.3	46	33
PIONEER P46T01R	53.2	52.0		2.3	42	37
BECK 487R4™*brand	52.8			1.0	42	37
REV® 48A76™	52.8			1.3	40	36
WARREN SEED DS 47-003	52.4			1.7	38	35
SEED CONSULTANTS SC 9497R™	52.1			1.7	44	37
PIONEER P47T36R	52.0	61.7	63.5	1.0	44	38
ASGROW AG47X6	51.6			1.0	44	35
BECK 493R4™*brand	51.6			1.0	43	35
REV® 48A26™	51.3			1.3	48	35
CAVERNDALE CF 478 RR2Y/STSn	51.0			1.0	48	35
BECK 494L4	51.0			1.0	39	37
REV® 49R94™	50.9	55.7	57.8	1.0	42	35
UNISOUTH GENETICS USG 7496XTS	50.8			1.0	46	35
HS 46X60	50.8			2.0	49	37
LG SEEDS C4845RX	50.7			1.0	38	34
STEYER 4803XR	50.7			1.0	50	38
BECK 465R4™*brand	50.7	58.3	60.6	1.0	41	37
DYNA-GRO S46XS87	50.6			1.3	44	34
WARREN SEED DS 4633	50.6	57.8	60.9	1.7	44	36
ARMOR 46-D08	50.5			1.3	45	37
PROGENY 4788 RY	50.5	54.0	57.5	1.0	47	35
HS 48X60	50.3			1.0	46	36
GREAT LAKES HYBRIDS GL4761NRX	50.2			1.0	44	38
DYNA-GRO S48RS53	49.9	53.6	58.1	1.0	47	35
STEWART 4927R2X	49.9			1.0	50	35
CZ 4959 RY	49.8	51.7	56.2	1.0	40	34
DYNA-GRO S48XT56	49.6			1.0	38	37
ARMOR ARX4906	49.6			2.0	46	37
DYNA-GRO SX16848XS	49.6			1.0	52	35
GO SOY 4913LL	49.6			1.0	40	37
BECK 4991X2	49.5			1.0	46	35
ASGROW AG48X6	49.4			1.7	50	38
STINE 48RI22	49.4			1.3	47	38
NK S48-D9	49.3			1.0	45	37
PFISTER 48RS01	49.3			1.0	40	38
REV® 48L63™	49.2			1.0	50	35
ASGROW AG49X6	49.2			1.3	46	35
SOUTHERN STATES SS 4725NS R2	49.2	56.1	58.8	1.3	48	37
ARMOR 48-D24	49.1			1.0	36	37
WARREN SEED DS 4850	49.1	53.7	59.0	1.3	46	35
STEWART 4716R2X	49.0			1.0	42	38
PROGENY 4613 RYS	49.0	60.7	63.4	2.3	42	38
REV® 49L49™	49.0			1.0	44	35
ASGROW AG46X6	48.9			1.0	40	31
STEYER 4704XR	48.9			1.3	52	37
ARMOR 48-D80	48.7			1.3	54	37
LG SEEDS C4615RX	48.6			1.0	44	35
HS 49X60	48.2			1.3	42	36
SEED CONSULTANTS SCS 9474RR™	48.2	56.0	59.7	1.0	43	38
SOUTHERN STATES SS 4717NS X	48.2			1.0	50	37
CZ 4898 RY	48.1			1.0	47	38
PROGENY 4757 RY	47.6	55.8		1.3	46	35
STINE 47RF32	47.1			1.0	48	35
SOUTHERN STATES SS 4915NS R2	46.9	57.2		2.0	54	37
PROGENY 4930 LL	46.8	46.1	52.6	1.0	42	35
CZ 4656 RY	46.4			1.0	45	35
ARMOR 49-D90	45.8			1.0	44	35
DYNA-GRO S49LL34	45.3	47.4		1.0	40	38
DYNA-GRO S49XS576	45.3			1.3	44	37
GO SOY 483.C	45.3			1.0	44	38
REV® 47R34™	44.9	53.9	58.1	1.7	47	35
CZ 4818 LL	44.5	49.4		1.0	52	36
LG SEEDS C4900RX	44.5			1.0	44	34
PENNYRILE (long term check-released 1987)	44.2			1.0	50	38
GO SOY Ireane	44.2			3.0	50	34
PROGENY 4814 LLS	40.5	49.2		2.3	49	36
GO SOY 49G16	39.1			3.0	50	38
AVERAGE Group IV Late	50.1	54.8	59.1	1.3	45	36 (Oct. 6th)
LSD (0.10)	3.6	3.6	3.1			
C.V.	5.3	7.2	7.4			
MATURITY GROUP V (relative MG 5.0-5.9)						
UNIVERSITY OF ARKANSAS R10-197RY	45.6	52.6		1.7	52	45

continued

Table 11. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING 2016	PLANT HEIGHT (IN.) 2016	MATURITY DATE 2016
	2016	2015-16	2014-16			
REV® 52A94™	45.0	56.7	57.2	2.7	45	45
UNIVERSITY OF ARKANSAS UA 5213C	43.4	47.9	50.7	4.7	44	46
UNIVERSITY OF ARKANSAS UA 5414RR	42.6	48.2	50.2	3.0	50	46
UNIVERSITY OF ARKANSAS R09-430	42.1	50.1		2.7	43	45
UNIVERSITY OF ARKANSAS UA 5014C	41.4			2.3	44	44
ESSEX (long term check-released 1974)	41.2			2.3	40	44
UNIVERSITY OF ARKANSAS UA 5814HP	40.8	59.3		3.3	50	45
EXP USDA-ARS JTN-5110	39.8	48.8	51.1	3.7	52	44
UNIVERSITY OF ARKANSAS OSAGE	39.8	44.0	44.3	3.0	42	44
UNIVERSITY OF ARKANSAS UAX 51010C	39.6			2.3	54	46
GO SOY 56C16	38.9			3.3	54	44
PIONEER P50T64R	38.8	51.7	52.5	2.0	46	44
UNIVERSITY OF ARKANSAS R11-89RY	37.2	46.1		2.0	43	44
REV® 51A56™	36.7	51.0		3.0	48	45
UNISOUTH GENETICS USG 7506XTS	36.6			1.0	50	42
UNIVERSITY OF ARKANSAS UA 5715GT	36.4			2.3	50	46
UNIVERSITY OF ARKANSAS UA 5612	33.1	47.4	48.1	4.0	48	46
AVERAGE Group V	39.9	50.3	50.6	2.7	48	45 (Oct. 15th)
LSD (0.10)	3.9	3.9	2.9			
C.V.	7.0	8.4	7.7			

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

^B 2016, 2015, 2014 data were collected in Fayette Co.

^C MG II: no varieties entered in 2016 matched the varieties entered in 2014.

AGRONOMIC INFORMATION

Soil type	Lanton Silk Loam
Previous crop	Corn
Soil test	pH 6.04, P 322, K 242
SCN test	0
Fertilizer/lime applied	K2O 60lbs/acre: 3/22/2016
Agricultural practice	No-till
Pre-planting treatments	Salvo, Mad Dog: 4/14/2016 Mad Dog, Authority XL, Dual Magnum: 4/29/2016
Planting date (all maturity groups)	5/30/2016
Post-planting treatments	First Rate, Reflex, Intensity One: 7/10/2016
Harvest dates	MG II, III: 10/13/2016 MG IV Early, IV Late: 10/14/2016 MG V: 10/24/2016
50% chance of killing frost	10/26

Temperatures and Precipitations, Fayette County - 2016

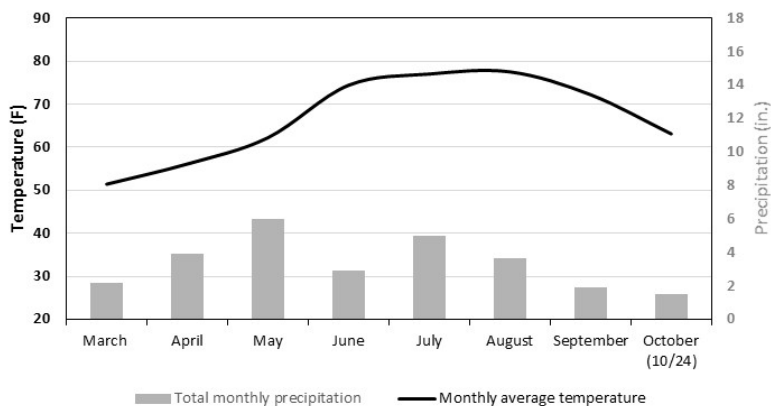


Table 12. 2016 Kentucky Soybean Variety Performance Tests, Hancock County, Green River Region

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING	BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING
	2016	2015-16	2014-16	2016		2016	2015-16	2014-16	2016
MATURITY GROUP II (relative MG 2.0-2.9)^C					MATURITY GROUP III (relative MG 3.0-3.9)				
ARMOR ARX2906	58.3			1.0	HPT 3919NR	62.0			1.3
STINE 29RE22	52.0			1.0	CAVERNDALE CF 387 HT-GLYn	61.7			1.3
LG SEEDS C2766RX	51.1			2.0	SOUTHERN STATES SS 3813N R2	61.3	56.9	62.1	1.7
PFISTER 29R25	50.0			1.3	SEED CONSULTANTS SC 9367R™	59.7			2.0
PIONEER P28T08R	49.6	40.8		2.3	SEED CONSULTANTS SCS 9385RR™	58.5	56.5	60.5	1.3
BRODBECK 295R2	47.4			1.3	NK S39-T3	58.2	58.1	63.8	1.0
					WARREN SEED DS 3838	57.9	52.9	58.9	1.7
AVERAGE Group II	51.4			1.5	PIONEER P35T58R	57.8	56.4	60.0	1.3
LSD (0.10)	2.9				PIONEER P38T61BR	57.5			2.3
C.V.	3.7				GREAT LAKES HYBRIDS GL3758NRX	57.5			1.7
					CZ 3841 LL	57.4	53.3	58.0	1.7
					ASGROW AG39X7	57.4			1.7
					GO SOY 39C15	57.1			2.0
					LG SEEDS C3550RX	56.6			1.3
					SEED CONSULTANTS SCS 9393RR™	56.4	54.2	61.1	1.0
					STINE 38LE02	56.2			1.0
					GREAT LAKES HYBRIDS GL3729R2	55.8	54.0	60.3	1.7
					DYNA-GRO S38LL54	55.8	52.9		1.3
					CZ 3945 LL	55.5	56.6		2.0
					CZ 3991 RY	55.0			1.0
					ARMOR ARX3706	54.6			1.0
					ASGROW AG38X6	54.5			1.3
					ARMOR 39-D90	54.1			2.0
					BRODBECK 396R2	54.1			1.3
					PFISTER 39R29	53.9	49.7	56.8	1.3
					DYNA-GRO S39RY65	53.9	50.6	57.3	1.3
					BRODBECK 333R2	53.6			2.7
					PIONEER P38T42R	53.0			1.7
					ARMOR 35-D20	52.8			1.7
					BRODBECK 377R2	52.3			1.7
					ARMOR ARX3306	52.1			1.7
					BRODBECK 365R2	51.9			2.7
					PFISTER 35R25	51.3			1.7
					CZ 3560 RY	50.9	55.1		1.3
					SOUTHERN STATES SS 3916NS X	50.5			1.7
					CZ 3383 RY	50.0			1.3
					DYNA-GRO S38RY87	49.0			1.3
					BRODBECK 386R2	47.0			2.7
					CZ 3737 LL	46.7			3.0
					CZ 3233 LL	46.5			3.0
					STINE 38RE02	46.5	47.2	54.9	2.0
					CZ 3443 LL	45.9			2.3
					ASGROW AG36X6	44.9			1.3
					WARREN SEED DS 3745	44.9			1.3
					LG SEEDS C3911RX	41.1			1.3
					GREAT LAKES HYBRIDS GL3962NRX	40.9			1.3
AVERAGE Group III	53.3	53.9	59.4	1.7	AVERAGE Group IV Early	56.2	54.5	60.0	2.1
LSD (0.10)	4.5	3.2	2.8		LSD (0.10)	4.8	3.4	3.6	
C.V.	6.3	6.4	6.4		C.V.	6.3	6.4	8.2	
MATURITY GROUP IV EARLY (relative MG 4.0-4.5)					MATURITY GROUP IV LATE (relative MG 4.6-4.9)				
AGS GS43R216	66.3			3.0	SOUTHERN STATES SS 4918N X	61.9			1.0
STEYER 4403XR	66.2			1.3	DYNA-GRO S48XT56	59.2			1.0
SOUTHERN STATES SS 4215NS R2	63.8	56.4		2.0	GREAT LAKES HYBRIDS GL4761NRX	58.6			1.0
SOUTHERN STATES LL 423N	63.8	57.4	61.0	3.0	ASGROW AG46X6	57.6			1.3
STEWART 4113R2	62.8	60.8	64.9	2.0	BECK 465R4™*brand	56.8	55.3	61.9	1.0
DYNA-GRO S42RY77	62.5			2.7	PIONEER P47T36R	56.4	60.5	62.5	1.3
BECK 453R4™*brand	62.4	54.1		3.0	LG SEEDS C4845RX	56.2			1.3
ASGROW AG44X6	61.0			1.7	PROGENY 4788 RY	56.1	60.5	63.5	2.0
SOUTHERN STATES SS 4216N X	60.8			2.3	REV® 49R94™	56.0	57.4	61.0	1.7
					PROGENY 4930 LL	55.5	54.2	57.4	1.7
					ASGROW AG48X6	55.3			1.0
					UNISOUTH GENETICS USG 7496XTS	55.1			1.7

continued

Table 12. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING	BRAND VARIETY	YIELD (BU/AC) ^{A/B}			LODGING
	2016	2015-16	2014-16	2016		2016	2015-16	2014-16	2016
ARMOR 48-D24	54.8			1.0	GO SOY 49G16	46.4			5.0
GO SOY Ireane	54.5			3.3	ARMOR ARX4706	46.2			2.3
REV [®] 48A26™	54.2			2.3	ARMOR 47-D17	45.9			3.7
BECK 493R4™*brand	54.2			2.3	STINE 47LF32	45.9			2.3
HS 49X60	53.8			1.0	PFISTER 48RS01	45.8			2.3
STEYER 4803XR	53.4			1.0	DYNA-GRO S49LL34	45.6	47.6		1.3
DYNA-GRO S46XS87	53.3			1.3	SOUTHERN STATES SS 4915NS R2	45.6	47.2		2.3
NK S47-K5	52.8	58.4	63.4	1.0	REV [®] 49L49™	45.3			2.3
ASGROW AG46X7	52.8			3.0	HS 46X60	45.1			1.3
HPT 4852NR	52.8			1.3	SOUTHERN STATES SS 4717NS X	45.0			1.3
BECK 487R4™*brand	52.4			2.0	BECK 474L4	44.8	56.8		1.7
ARMOR 46-D08	52.3			3.0	PROGENY 4613 RYS	44.6	53.7	58.2	2.7
ARMOR 47-R70	52.2	60.4		3.0	STINE 47RF32	42.7			1.7
ASGROW AG47X6	52.2			2.0	PROGENY 4814 LLS	40.7	48.5		3.7
REV [®] 48L63™	52.2			3.0	ARMOR 49-D66	39.3			3.0
DYNA-GRO S49XS576	52.2			2.0	SOUTHERN STATES SS 4725NS R2	37.5	45.9	54.2	1.3
REV [®] 47R34™	51.9	57.2	59.0	2.3	CZ 4818 LL	37.5	45.3		2.7
WARREN SEED DS 4633	51.8	57.8	64.7	3.7	CZ 4656 RY	36.7			2.3
PIONEER P48T53R	51.8	58.3	60.5	1.3	STEWART 4716R2X	36.3			3.3
NK S48-D9	51.2			2.3	PENNYRILE (long term check-released 1987)	35.4			2.3
SEED CONSULTANTS SC 9497R™	51.2			2.7	AVERAGE Group IV Late	49.6	54.2	59.7	2.0
AGS GS48R216	51.1			4.0	LSD (0.10)	4.3	3.0	3.0	
ARMOR 49-D90	50.9			1.7	C.V.	6.4	6.2	7.1	
ASGROW AG49X6	50.5			1.7	MATURITY GROUP V (relative MG 5.0-5.9)				
REV [®] 48A76™	50.4			2.0	UNISOUTH GENETICS USG 7506XTS	65.0			1.7
BECK 4991X2	50.4			1.0	PIONEER P50T64R	57.8	55.0	55.9	1.7
PIONEER P49T97R	50.3	55.7	59.7	1.0	UNIVERSITY OF ARKANSAS UA 5014C	54.8			2.3
STEYER 4704XR	50.1			1.3	REV [®] 51A56™	52.3	55.3		1.3
STEWART 4927R2X	50.0			1.0	UNIVERSITY OF ARKANSAS R10-197RY	50.0	51.5		2.3
CZ 4748 LL	50.0			1.3	UNIVERSITY OF ARKANSAS R11-89RY	49.0	52.3		1.7
PROGENY 4757 RY	49.8	54.6		2.7	EXP USDA-ARS JTN-5110	47.9	48.9	47.7	3.0
BECK 494L4	49.8			2.7	UNIVERSITY OF ARKANSAS UA 5612	47.7	44.1	45.7	5.0
PIONEER P46T01R	49.5	62.0		2.3	UNIVERSITY OF ARKANSAS UAX 51010C	47.1			3.0
WARREN SEED DS 4850	49.5	48.0	57.0	1.7	UNIVERSITY OF ARKANSAS UA 5213C	46.9	43.3	44.7	4.3
LG SEEDS C4615RX	49.3			1.0	REV [®] 52A94™	46.3	49.5	48.1	3.0
CAVERNDAL CF 479 LLn	49.0	55.9	58.9	1.7	UNIVERSITY OF ARKANSAS UA 5715GT	46.0			3.3
SEED CONSULTANTS SCS 9474RR™	48.9	53.4	58.3	2.7	UNIVERSITY OF ARKANSAS UA 5814HP	45.4	44.1		3.3
ARMOR 48-D80	48.9			1.0	GO SOY 56C16	45.1			4.7
ARMOR ARX4906	48.8			3.3	UNIVERSITY OF ARKANSAS UA 5414RR	43.9	44.1	44.2	3.3
CZ 4898 RY	48.6			2.3	UNIVERSITY OF ARKANSAS R09-430	43.0	45.4		3.0
STINE 48RI22	48.3			1.7	ESSEX (long term check-released 1974)	42.1			2.0
GO SOY 4714LL	48.2			1.7	UNIVERSITY OF ARKANSAS OSAGE	42.0	42.9	43.3	2.7
GO SOY 4913LL	47.9			1.3	AVERAGE Group V	48.5	48.0	47.1	2.9
CZ 4959 RY	47.7	49.3	54.0	2.3	LSD (0.10)	4.5	3.0	2.6	
GO SOY 483.C	47.7			2.3	C.V.	6.6	6.3	6.8	
DYNA-GRO SX16848XS	47.3			1.0	^A Within a maturity group, shaded yield are not significantly different (0.10) from the highest yielding cultivar (bold) of that maturity group and year column.				
WARREN SEED DS 47-003	47.3			2.7	^B 2016, 2015 data were collected in Hancock Co. 2014 data were collected in Daviess County.				
DYNA-GRO S48RS53	47.1	52.0	60.4	1.7	^C MG II: no varieties entered in 2016 matched the varieties entered in 2014.				
CAVERNDAL CF 478 RR2Y/STSn	46.9			1.7					
LG SEEDS C4900RX	46.7			2.7					
HS 48X60	46.6			1.0					

AGRONOMIC INFORMATION

Soil type	Elk Silk Silt Loam
Previous crop	Corn
Soil test	pH 5.33, P 136, K 209
SCN test	500
Fertilizer/lime applied	K20 50 lbs/acre
Agricultural practice	Minimum tillage
Pre-planting treatments	NA
Planting date (all maturity groups)	6/9/2016
Post-planting treatments	Intensity One: 7/20/2016
Harvest dates	MG II, III, IV Early: 10/11/2016
	MG V: 11/01/2016
	MG IV Late: 11/02/2016
50% chance of killing frost	10/23

Table 13. 2016 Kentucky Soybean Variety Performance Tests, Russell County, Lake Cumberland Region (2)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}		LODGING 2016	FROGEYE LEAF SPOT INCIDENCE RATING		SOYBEAN DEVELOPMENT STAGE
	2016	2015-16				
MATURITY GROUP II (relative MG 2.0-2.9)						R5
BRODBECK 295R2	52.9		1.3	100	1	
ARMOR ARX2906	48.7		1.3	100	1	
LG SEEDS C2766RX	47.2		1.7	100	2	
STINE 29RE22	42.8		1.0	100	3	
PFISTER 29R25	42.4		1.3	0	0	
PIONEER P28T08R	39.2	40.4	1.0	100	3	
AVERAGE Group II	45.5		1.3			
LSD (0.10)	5.3					
C.V.	7.5					
MATURITY GROUP III (relative MG 3.0-3.9)						R4/R5 (FLS ratings)
SEED CONSULTANTS SCS 9393RR™	57.2	56.3	1.0	0	0	
GREAT LAKES HYBRIDS GL3729R2	56.4	57.0	1.3	100	1	
CAVERNDALE CF 387 HT-GLYn	55.2		1.0	0	0	
BRODBECK 365R2	55.1		2.7	0	0	
GO SOY 39C15	51.8		1.0	0	0	
ARMOR ARX3706	51.1		1.0	100	1	
WARREN SEED DS 3745	50.6		3.3	100	2	
BRODBECK 333R2	49.9		3.0	100	3	
GREAT LAKES HYBRIDS GL3758NRX	49.6		1.7	100	1	
ASGROW AG38X6	49.2		1.3	100	1	
HPT 3919NR	48.8		1.7	100	1	
SOUTHERN STATES SS 3813N R2	48.6	55.8	1.7	0	0	
CZ 3443 LL	48.6		2.0	100	1	
CZ 3737 LL	48.3		1.3	100	2	
ASGROW AG39X7	48.2		1.0	100	1	
PFISTER 39R29	47.9	47.5	1.0	100	1	
ARMOR ARX3306	47.9		1.3	100	1	
CZ 3841 LL	47.8	52.3	1.7	100	2	
SEED CONSULTANTS SCS 9385RR™	47.6	55.7	1.3	100	1	
WARREN SEED DS 3838	46.7	50.3	1.3	0	0	
PIONEER P38T61BR	46.7		2.0	100	2	
SEED CONSULTANTS SC 9367R™	46.6		1.3	100	1	
ASGROW AG36X6	46.6		1.3	100	2	
BRODBECK 396R2	46.6		1.3	100	1	
STINE 38LE02	46.1		1.0	100	3	
STINE 38RE02	44.9	46.5	1.3	0	0	
PFISTER 35R25	44.9		2.3	0	0	
ARMOR 35-D20	44.8		1.3	100	3	
CZ 3560 RY	44.2	44.8	1.7	100	1	
DYNA-GRO S38RY87	44.2		1.7	100	2	
NK S39-T3	43.6	50.2	1.0	100	2	
CZ 3945 LL	43.4	45.6	1.0	0	0	
PIONEER P38T42R	43.3		1.3	100	1	
CZ 3991 RY	43.1		1.3	100	3	
CZ 3233 LL	43.0		1.7	100	3	
LG SEEDS C3911RX	42.6		2.0	100	2	
GREAT LAKES HYBRIDS GL3962NRX	41.2		1.7	100	3	
BRODBECK 377R2	40.8		1.7	0	0	
LG SEEDS C3550RX	40.8		1.0	100	3	
ARMOR 39-D90	40.5		3.3	100	1	
SOUTHERN STATES SS 3916NS X	40.5		1.3	100	3	
CZ 3383 RY	39.8		1.7	100	1	
DYNA-GRO S38LL54	39.6	47.9	1.0	100	3	
DYNA-GRO S39RY65	38.5	45.5	1.0	100	3	
BRODBECK 386R2	37.1		3.0	100	1	
PIONEER P35T58R	36.5	43.7	1.3	100	2	
AVERAGE Group III	46.0	49.9	1.6			
LSD (0.10)	3.8	3.2				
C.V.	6.1	7.0				
MATURITY GROUP IV EARLY (relative MG 4.0-4.5)						R4 (FLS ratings)
CAVERNDALE CF 404n	55.4	52.4	1.3	0	0	
GO SOY 43L16	53.7		1.7	0	0	
LG SEEDS C4458RX	52.9		1.3	0	0	
CZ 4044 LL	52.5		1.7	0	0	
BRODBECK 417R2	52.4		1.0	100	1	
WARREN SEED DS 4225	51.3		1.0	100	1	
CZ 4105 LL	51.2	54.9	1.0	0	0	
REV® 45A46™	50.9		1.7	100	3	
ASGROW AG40X6	50.8		1.0	100	1	
PIONEER P41T33R	50.6		1.3	0	0	

continued

Table 13. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}		LODGING 2016	FROGEYE LEAF SPOT		SOYBEAN DEVELOPMENT STAGE
	2016	2015-16		INCIDENCE	RATING	
GREAT LAKES HYBRIDS GL4366NSRX	50.2		1.3	0	0	
STINE 44LH22	50.1		1.3	0	0	
ARMOR 44-D40	49.9		1.0	0	0	
AGS GS43R216	49.8		1.3	100	1	
PIONEER P45T11R	49.6		1.0	0	0	
STEYER 4403XR	49.6		1.7	0	0	
ASGROW AG42X6	48.9		1.0	0	0	
NK S42-P6	48.8		1.3	100	1	
DYNA-GRO S42RY77	48.7		2.3	100	1	
ASGROW AG45X7	48.0		2.0	0	0	
NK S45-R7	47.8	55.9	1.0	100	1	
LG SEEDS C4145R2	47.1		1.0	100	1	
CZ 4181 RY	47.0	50.8	2.3	100	1	
ASGROW AG43X7	46.8		1.7	0	0	
PFISTER 45R203	46.7		1.3	100	2	
SOUTHERN STATES SS 4215NS R2	46.6	57.5	1.0	100	1	
DYNA-GRO S43RY95	46.5	54.1	1.7	100	3	
HPT 4514NR	46.4		1.7	100	1	
SOUTHERN STATES SS 4216N X	46.4		1.3	100	1	
BRODBECK 426R2	46.4		1.0	100	1	
PFISTER 41RS01	46.4	58.7	2.3	100	3	
STINE 42LH02	46.1		1.0	0	0	
SEED CONSULTANTS SCS 9456SR™	46.1	57.5	1.3	0	0	
SOUTHERN STATES LL 423N	45.7	52.0	1.7	0	0	
STEWART 4527R2X	45.5		1.0	100	1	
GO SOY 42L16	45.5		1.0	0	0	
PROGENY 4247 LL	45.3	53.3	1.0	0	0	
STEWART 4116R2X	45.0		1.3	100	2	
BRODBECK 446R2	45.0		2.3	100	1	
PROGENY 4588 RY	45.0		1.0	0	0	
CAVERNDALE CF 452 RR2Yn	44.8	56.1	1.3	100	1	
ASGROW AG44X6	44.7		1.7	100	2	
STEYER 4402R2	44.6	53.5	1.0	100	3	
BECK 453R4™*brand	43.7	55.2	1.3	0	0	
STEWART 4113R2	43.7	53.5	1.0	100	1	
DYNA-GRO S45LL97	43.6		1.3	0	0	
STINE 41RH22	43.3		1.7	100	1	
ARMOR 43-D34	42.6		1.3	100	1	
SOUTHERN STATES SS 4417NS X	42.6		2.0	100	1	
CZ 4590 RY	42.5	46.2	1.0	100	1	
STEYER 4004XR	42.5		2.7	100	2	
PFISTER 43R29	42.4		2.3	100	3	
CAVERNDALE CF 426 RR2Y/STSn	42.3	54.4	1.3	100	1	
CZ 4540 LL	41.9	48.2	2.3	100	1	
DYNA-GRO S43XS27	41.3		1.0	100	1	
BECK 4291X2	41.2		1.0	100	1	
ASGROW AG45X6	40.7		2.7	100	1	
WARREN SEED DS 4340	39.5		3.0	100	3	
CZ 4222 LL	38.7		1.0	100	3	
STINE 43RE02	37.4	44.7	3.0	100	3	
STEWART 4327R2X	37.3		1.0	100	1	
PROGENY 4211 RY	37.1	46.9	2.7	100	3	
SEED CONSULTANTS SCS 9412RR™	36.3	45.2	2.0	100	3	
HPT 4190NR	34.9		1.3	100	3	
UNISOUTH GENETICS USG 7426XTS	32.2		1.3	100	3	
AVERAGE Group IV Early	45.6	52.6	1.5			
LSD (0.10)	3.7	3.0				
C.V.	6.1	6.4				
MATURITY GROUP IV LATE (relative MG 4.6-4.9)						R4 (FLS ratings)
NK S47-K5	61.6	62.4	1.0	0	0	
ASGROW AG47X6	61.0		1.3	0	0	
BECK 493R4™*brand	60.1		1.0	0	0	
ARMOR 47-R70	58.2	62.7	1.7	0	0	
WARREN SEED DS 4633	57.6	62.4	2.0	0	0	
REV® 48A26™	56.8		1.0	0	0	
BECK 487R4™*brand	56.6		1.7	0	0	
ASGROW AG46X6	56.5		1.0	100	1	
SEED CONSULTANTS SC 9497R™	56.3		2.0	0	0	
BECK 474L4	55.4	57.4	1.3	0	0	
SEED CONSULTANTS SCS 9474RR™	55.2	57.5	1.3	100	2	
PIONEER P48T53R	55.2	59.8	1.0	0	0	
STINE 47LF32	55.1		1.3	0	0	
GO SOY 4714LL	55.0		1.3	0	0	

continued

Table 13. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}		LODGING 2016	FROGEYE LEAF SPOT		SOYBEAN DEVELOPMENT STAGE
	2016	2015-16		INCIDENCE	RATING	
REV® 48A76™	54.8		1.7	0	0	
ASGROW AG48X6	54.5		1.0	0	0	
CZ 4748 LL	54.0		1.0	0	0	
PIONEER P46T01R	53.9	63.2	2.0	0	0	
REV® 49R94™	53.7	57.1	1.0	0	0	
PIONEER P47T36R	53.5	59.9	1.3	0	0	
REV® 48L63™	53.3		2.0	0	0	
BECK 465R4™*brand	53.2	55.8	1.0	0	0	
PROGENY 4757 RY	53.2	61.2	1.3	0	0	
BECK 494L4	52.8		1.0	0	0	
NK S48-D9	52.4		1.7	0	0	
PIONEER P49T97R	52.2	58.1	1.3	0	0	
DYNA-GRO SX16848XS	51.6		1.0	0	0	
WARREN SEED DS 47-003	51.3		1.7	0	0	
HPT 4852NR	50.7		1.3	0	0	
SOUTHERN STATES SS 4725NS R2	50.1	64.7	1.3	0	0	
ARMOR ARX4706	49.7		1.0	0	0	
DYNA-GRO S46XS87	49.6		1.0	100	1	
STINE 47RF32	49.5		1.3	0	0	
DYNA-GRO S48RS53	49.5	57.5	1.0	0	0	
WARREN SEED DS 4850	49.4	56.6	1.3	100	1	
CZ 4818 LL	49.2	56.5	1.3	0	0	
SOUTHERN STATES SS 4918N X	49.2		1.0	0	0	
PFISTER 48RS01	49.1		1.0	100	1	
PROGENY 4613 RYS	49.1	53.8	2.0	100	1	
STEWART 4927R2X	49.1		1.0	100	1	
ASGROW AG46X7	49.0		1.0	0	0	
ARMOR 47-D17	48.9		2.0	100	1	
AGS GS48R216	48.8		3.3	0	0	
STEYER 4803XR	48.7		1.0	100	1	
LG SEEDS C4845RX	48.4		1.0	100	1	
CAVERNDALE CF 478 RR2Y/STSñ	48.3		1.0	100	1	
HS 46X60	48.0		1.3	100	1	
LG SEEDS C4615RX	48.0		1.0	100	1	
DYNA-GRO S48XT56	48.0		1.3	0	0	
ARMOR 48-D80	47.7		1.0	0	0	
GREAT LAKES HYBRIDS GL4761NRX	47.5		1.0	100	1	
BECK 4991X2	47.5		1.0	100	1	
ARMOR 46-D08	47.4		1.7	0	0	
SOUTHERN STATES SS 4717NS X	47.1		1.0	100	1	
HS 48X60	46.9		1.0	100	1	
GO SOY 483.C	46.9		2.7	0	0	
GO SOY 4913LL	46.9		1.0	100	1	
ARMOR 49-D66	46.4		1.7	0	0	
ASGROW AG49X6	45.9		1.0	0	0	
CAVERNDALE CF 479 LLñ	45.8	53.2	1.0	0	0	
SOUTHERN STATES SS 4915NS R2	45.8	56.7	1.3	0	0	
ARMOR ARX4906	45.2		1.7	0	0	
GO SOY Ireane	45.2		1.3	0	0	
ARMOR 48-D24	45.0		1.0	100	1	
PROGENY 4788 RY	44.4	55.8	2.3	100	2	
HS 49X60	44.4		1.0	100	1	
REV® 47R34™	44.2	55.4	1.0	0	0	
PROGENY 4814 LLS	43.4	51.9	1.3	0	0	
STEYER 4704XR	43.0		1.0	100	1	
DYNA-GRO S49LL34	42.4	48.8	1.0	0	0	
STEWART 4716R2X	42.3		1.7	100	3	
PROGENY 4930 LL	42.2	49.6	1.0	0	0	
UNISOUTH GENETICS USG 7496XTS	41.5		1.0	100	1	
DYNA-GRO S49XSS76	41.1		1.0	100	3	
LG SEEDS C4900RX	41.0		2.3	0	0	
STINE 48RI22	40.9		1.0	100	3	
CZ 4959 RY	39.7	48.9	1.0	100	1	
ARMOR 49-D90	38.5		1.0	100	2	
PENNYRILE (long term check-released 1987)	37.2		2.7	100	1	
REV® 49L49™	37.1		1.3	0	0	
CZ 4656 RY	37.0		1.3	100	1	
CZ 4898 RY	36.9		3.3	100	1	
GO SOY 49G16	35.6		3.3	0	0	
AVERAGE Group IV Late	48.7	57.1	1.4			
LSD (0.10)	3.7	3.0				
C.V.	5.7	6.0				

continued

Table 13. (continued)

BRAND VARIETY	YIELD (BU/AC) ^{A/B}		LODGING 2016	FROGEYE LEAF SPOT		SOYBEAN DEVELOPMENT STAGE
	2016	2015-16		INCIDENCE	RATING	
MATURITY GROUP V (relative MG 5.0-5.9)						R3(FLS ratings)
REV® 51A56™	56.8	60.1	2.3	0	0	
UNISOUTH GENETICS USG 7506XTS	44.5		2.3	100	1	
UNIVERSITY OF ARKANSAS UA 5014C	42.9		2.7	100	2	
UNIVERSITY OF ARKANSAS R09-430	40.2	50.8	3.3	0	0	
UNIVERSITY OF ARKANSAS R11-89RY	39.4	45.8	3.0	100	1	
ESSEX (long term check-released 1974)	37.9		3.0	100	1	
PIONEER P50T64R	37.3	47.7	4.0	100	3	
REV® 52A94™	36.0	47.5	1.3	100	3	
UNIVERSITY OF ARKANSAS OSAGE	35.7	42.7	2.0	100	1	
GO SOY 56C16	35.0		2.3	0	0	
EXP USDA-ARS JTN-5110	34.1	44.2	3.0	100	1	
UNIVERSITY OF ARKANSAS UA 5612	33.7	43.0	1.3	0	0	
UNIVERSITY OF ARKANSAS UAX 51010C	33.7		2.0	0	0	
UNIVERSITY OF ARKANSAS R10-197RY	33.4	46.0	2.0	100	1	
UNIVERSITY OF ARKANSAS UA 5414RR	31.9	40.9	3.3	100	1	
UNIVERSITY OF ARKANSAS UA 5213C	31.5	44.5	2.7	0	0	
UNIVERSITY OF ARKANSAS UA 5814HP	23.6	44.4	1.7	100	1	
UNIVERSITY OF ARKANSAS UA 5715GT	17.9		2.7	0	0	
AVERAGE Group V	35.9	46.5	2.5			
LSD (0.10)	3.5	2.8	1.6			
C.V.	7.0	6.6	47.0			

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

^B 2016 data were collected in Russell Co. 2015 data were collected in Pulaski Co. No data were collected in 2014.

AGRONOMIC INFORMATION

Soil type	Sango Silt Loam
Previous crop	Soybean
Soil test	pH 6.21, P 263, K 213
SCN test	1125
Fertilizer/lime applied	NA
Agricultural practice	No-till
Pre-planting treatments	Touchdown, Spartan, FirstRate (late May)
Planting date (all maturity groups)	5/31/2016
Post-planting treatments	None
Harvest dates	MG II, III: 10/03/2016 MG IV Early, IV Late: 10/04/2016 MG V: 10/26/2016
50% chance of killing frost	10/24



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