

# 2017 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 commercially available 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 2017 tests were entered by soybean growers, commercial companies, state and federal institutions.

Forty soybean tests were planted in 2017 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 6-10) 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 end-trimmed to 16 feet.

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.

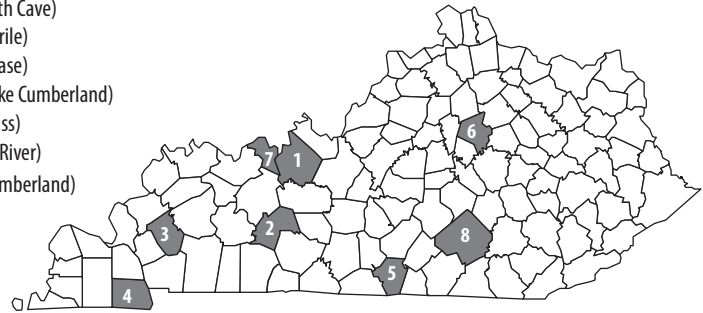
Harvesting was done with a small plot combine (Wintersteiger Delta plot combine –Wintersteiger, USA) according to maturity. Sixteen feet of the four center rows were harvested from the plots.

**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 (Allegro Mx, Juniper Systems, Inc., USA) connected to the monitor, and analyzed with Agrobase GEN II statistical software (Agronomix Software Inc., Canada).

Lodging was recorded at harvest. Lodging was rated on a scale of 1 to 5, where 1

## Location of the 2017 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. Pulaski County (Lake Cumberland)



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**Table 1. Locations, planting and harvest dates for the 2017 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	5/26/2017	No-till	MG II, III, IV Early: 10/16/2017 MG IV Late, V: 11/14/2017
Butler County	Mammoth Cave	Mr. Wells - soybean producer Gregory Drake - UK County Extension Agent for Agriculture and Natural Resources	6/2/2017	No-till	MG II, III, IV Early, IV Late, V: 11/11/2017
Caldwell County	Pennyrile	Scott Peek - Farm Superintendent at the UK Research and Education Center, Princeton KY	5/16/2017	No-till	MG II, III: 10/04/2017 MG IV Early, IV Late and V: 11/09/2017
Calloway County	Purchase	Dr. Ferguson - Professor of Agronomy Mr. Robertson - Farm manager Murray State University	5/17/2017	No-till	MG II, III: 10/02/2017 MG IV Early: 10/03/2017 MG IV Late, V: 11/10/2017
Cumberland County	Lake Cumberland (1)	Mr. Mims - soybean producer Colby Guffey and Chelsea Pickens - UK County Extension Agents for Agriculture and Natural Resources	6/8/2017	No-till	MG II, III, : 10/20/2017 MG IV Early, IV Late, V: 10/31/2017
Fayette County	Bluegrass	C. Venard, J. Gantt & B. Roberts	5/10/2017	No-till	MG II, III: 10/05/2017 MG IV Early, IV Late, V: 10/26/2017
Hancock County	Green River	Mr. Ray - soybean producer Evan Tate - UK County Extension Agent for Agriculture and Natural Resources	5/29/2017	Mimimum tillage	MG II, III, IV Early: 10/17/2017 MG IV Late, V: 11/13/2017
Pulaski County	Lake Cumberland (2)	Mr. Pierce - soybean producer	6/9/2017	No-till	MG II, III, IV Early, IV Late, V: 10/30/2017

= 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.

**Protein, Oil.** Variety protein and oil concentrations are reported on the basis of 13% moisture. The 2017 samples were collected at the Fayette County, Caldwell County, and Calloway County, 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 – recommended table, 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 the tables 5-13 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 need to 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 selecting a variety that has the best chance of producing acceptable yield and 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 percent chance of a fall killing frost is important in determining which variety should be planted. The dates, presented along with Tables 6 to 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 percent. 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 2015-2016-2017 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—2017

Weather conditions were very mild during February, with well very mild temperatures and below normal precipitation for the month, continuing a similar trend from January. Light snowfall occurred at

the start of February, and intermittent rain showers and storms developed throughout the month. Temperatures for the period averaged 47 degrees across the state, 10 degrees warmer than normal. Precipitation for the period totaled 1.60 inches statewide which was 1.78 inches below normal and 47% of normal.

March was mostly above normal temperatures and mixed rainfall amounts, but totaled near normal precipitations and temperature averages. An early storm system brought damaging winds, hail and even tornadoes and over an inch of rainfall in some areas. Mid-March brought a return to unseasonably cold conditions in Kentucky. Freeze Warnings were issued multiple nights. The coldest temperatures dipped into the middle teens to low 20s for much of the Bluegrass State.

An active pattern slowed planting progress through the month of April. In Kentucky, the wettest week of 2017 occurred between the 17th and 23rd as the state averaged 2.10 inches, which was over an inch above normal. At least some portion of the state received rainfall each day as multiple frontal boundaries and disturbances passed through the area. The wet trend continued into the last week of April as portions of Kentucky along the Ohio River, running from Western Kentucky and into the Bluegrass, saw another round of significant rainfall. Overall, the state only saw slightly above normal rainfall for the month. Temperatures remained warm through much of April. Each week saw highs peak in the 80s at some point.

May 2017 marked the third straight month with above normal precipitation. Statewide rainfall averaged over an inch for each week throughout the month. A slow moving low-pressure system in the first week led to a statewide average of 1.70 inches. Following the disturbance, temperatures plummeted that weekend. On the mornings of the 7th and 8th, much of Central/Eastern Kentucky and the Bluegrass saw low temperatures dip into the 30s. The cooler temperatures were short-lived and by the third week of May, with the return of heat and humidity.

Temperatures in June averaged 72 degrees across the state which was near normal. High temperatures averaged 84 in the West. Low temperatures averaged to 64 degrees in the West. Precipitation for the period totaled 4.90 inches statewide which was 0.48 inches above normal.

Overall, Kentucky saw near normal rainfall and temperatures for the month of

July. After an extremely wet first week of the month, when the state averaged nearly two inches, conditions became fairly dry across the state until the end of July. Showers and storms were isolated to scattered in nature for much of the area, keeping most dry. In fact, the second week of the month was one of the driest weeks of the growing season thus far. Any locations that were lucky enough to get some rainfall did see torrential rains as the state was situated within a very moist air mass. Temperatures peak in the mid to upper 90s for a couple days in the middle of July, but most of the time, the state sat in the upper 80s to low 90s, which is right around normal. Dew points increased into the 70s, pushing heat indices into the triple digits at times, leading to oppressive heat. The passage of a strong cold front at the end of the month brought a return of much welcomed below normal temperatures and noticeably less humid conditions.

While rainfall was above normal for the Bluegrass state for the month of August 2017, drier than normal conditions in the western and some central sections of the state had some crops, especially corn looking less than optimum. By the end of the month, the remnants of Hurricane Harvey had started to dump tremendous amounts of rainfall on much of the state, especially west and central. Precipitation for the period totaled 4.28 inches statewide which was 0.49 inches above normal. The average temperature was more than a degree below normal. Temperatures for the period averaged 73 degrees across the state which was 2 degrees cooler than normal. High temperatures averaged 84 in the West. Low temperatures averaged 65 degrees in the West.

Kentucky saw two tropical systems pass through the area over the first half of September. The remnants of Hurricane Harvey arrived over the first couple days of the month, bringing widespread moderate to locally heavy showers. The remnants of Hurricane Irma then followed on the 12th and 13th, bringing on and off light showers. The rain and cloud cover associated with both systems led to a cool first half of the month. The rest of the month turned mostly dry. Warmer temperatures returned over the latter half of September. Temperatures for the period averaged 68 degrees across the state.

October was a wet month. The first week of October saw the remnants of tropical system Nate, with widespread rainfall across the state of Kentucky. Wet conditions continued over the following

week. The third week had little rainfall, but brought the first frosts, with temperatures falling into the middle 30s to low 40s before climbing back to mid-70s. A slow moving front brought multiple rounds of rainfall over the last week of October, and cool temperatures. Temperatures for the month of October averaged 60 degrees across the state. Precipitation for the period totaled 5.17 inches statewide which was 1.87 inches above normal.

An active pattern remained in place as warm and cold fronts pushed north and south through the area in the end of October. Rainfall was widespread at times, but accumulations tended to stay under an inch for the week. Western and Central Kentucky averaged around three quarters of an inch. The rainfall was associated with a strong cold front. The period started with clear skies in place and temperatures in the middle 20s to low 30s, resulting in a Freeze Warning for part of the area. A strong cold front passed through the Bluegrass State the second week of October, with shower and storms Monday and Tuesday. Much of the state saw at least a half inch of rainfall with quite a few areas recording an inch across Western Kentucky and the Bluegrass. Low temperatures dipped into the middle 20s to low 30s for most of the state. Highs on Friday were only in the upper 30s to middle 40s, which was roughly 20 degrees below normal for this time of year.

More detailed precipitation and temperature information for each test location is provided next to Tables 6-13, in the sections Agronomic Information. Sources: UKAg Weather Center (<http://weather.uky.edu/ky/climate.php> and [/annuals.shtml](http://weather.uky.edu/ky/annuals.shtml)); KY Mesonet ([http://www.kymesonet.org/historical\\_data.php](http://www.kymesonet.org/historical_data.php)); National Center for Environmental Information (<https://www.ncdc.noaa.gov/>).

## **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)*

In addition a new guide, *The Comprehensive Soybean Management Guide*, will be coming soon (Winter 2017).

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 9th, 2017, soybean production for Kentucky was forecast at 101 million bushels, up 13 percent from 2016. Yield was estimated at 52 bushels per acre. Acreage for harvest was estimated at 1.94 million acres, up 160,000 acres from 2016. (Source: November Crop Production – News Release USDA NASS, November 9th, 2017).

## Contact

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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**

Full-season soybeans						
Target stand plant/acre	Germination rate	Assumed stand loss	Final seeding rate (seeds/acre)	Row spacing (in.)		
				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
Double-crop soybeans						
Target stand plant/acre	Germination rate	Assumed stand loss	Final seeding rate (seeds/acre)	Row spacing (in.)		
				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

## 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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- University of Kentucky:
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- Jason Robertson and 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 2017 Soybean Variety Performance Tests were acquired from the following sources:

### AgriGold

Justin Warren .....618-943-5776  
 5381 Akin Rd, St. Francisville IL 62460-9903  
 Justin.warren@agrigold.com

AGRIGOLD G3410RX	AGRIGOLD G3520RX
AGRIGOLD G3690RX	AGRIGOLD G3980RX
AGRIGOLD G4024RX	AGRIGOLD G4380RX
AGRIGOLD G4440RX	AGRIGOLD G4685RX
AGRIGOLD G4835RX	AGRIGOLD G4990RX

### Armor Seed, LLC

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

ARMOR 44-D51	ARMOR 46-D08
ARMOR 39-D39	ARMOR ARX3917
ARMOR 42-D27	ARMOR 44-D47
ARMOR ARX4607	ARMOR ARX4807

### Bayer CropScience

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

CZ 3737 LL	CZ 3841 LL	CZ 3945 LL
CZ 4044 LL	CZ 4105 LL	CZ 4222 LL
CZ 4540 LL	CZ 4748 LL	CZ 4818 LL
CZ 4820 LL	CZ 5147 LL	CZ 5150 LL
CZ 5242 LL	HBK LL4953	

### Beck’s Hybrids

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

BECK 4119X2	BECK 4669X2
BECK 4991X2	

### Brodbeck Seeds

Daniel Ritter .....260-563-3163  
 15 Ringel Avenue, Wabash IN 46992  
 dritter@brodbeckseed.com; dwickham@brodbeckseed.com

BRODBECK 295R2	BRODBECK 348R2
BRODBECK 365R2	BRODBECK 368R2
BRODBECK 388R2	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 427 HT-GLY/STSn  
 CAVERNDALE CF 478 RR2/STSn

**DuPont Pioneer**

George Stabler .....800-308-1003  
 425 Abbeydale Way Columbia, SC 29229  
 George.Stabler@pioneer.com

PIONEER P28T08R	PIONEER P35T58R
PIONEER P38A98X	PIONEER P38T42R
PIONEER P38T61BR	PIONEER P40A47X
PIONEER P41T33R	PIONEER P46A16R
PIONEER P47T36R	PIONEER P48T27X
PIONEER P50T64R	

**Dyna-Gro Seed**

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

DYNA-GRO S39XT08	DYNA-GRO S39XT68
DYNA-GRO S41XS98	DYNA-GRO S42RY77
DYNA-GRO S43RY95	DYNA-GRO S43XS27
DYNA-GRO S46XS87	DYNA-GRO S48XS78
DYNA-GRO S48XT56	DYNA-GRO S49XS76
DYNA-GRO SX17844XS	

**Great Lakes Hybrids**

Phil Brunner .....1-800-257-7333  
 9915 W M-21 Highway, Ovid MI 48866  
 phil.brunner@greatlakeshybrids.com

GREAT LAKES HYBRIDS GL3777NSRX  
 GREAT LAKES HYBRIDS GL3979NRX  
 GREAT LAKES HYBRIDS GL4174NSRX  
 GREAT LAKES HYBRIDS GL4573NSRX  
 GREAT LAKES HYBRIDS GL4761NRX

**Growmark, Inc**

Eric West.....309-557-6399  
 1701 Towanda Ave., Bloomington IL 61701  
 ewest@growmark.com

HS 44X60	HS 46X60
HS 48X70	HS 49X60

**Hoegemeyer Hybrids**

Jeremy Horvatic .....402-654-3399  
 1755 Hoegemeyer Road, Hooper NE 68031  
 j.horvatic@hoegemeyer.com

HPT 3916NX	HPT 3919NR
HPT 4522NR	HPT 4852NR

**LG Seeds**

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

LG SEEDS C4227RX	LG SEEDS C4458RX
LG SEEDS C4615RX	LG SEEDS C4710RX
LG SEEDS C4845RX	

**Monsanto Asgrow**

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

ASGROW AG29X8	ASGROW AG37X8
ASGROW AG38X6	ASGROW AG38X8
ASGROW AG39X7	ASGROW AG41X8
ASGROW AG43X7	ASGROW AG43X8
ASGROW AG44X6	ASGROW AG45X8
ASGROW AG46X6	ASGROW AG46X8
ASGROW AG47X6	ASGROW AG48X8

**Progeny Ag. Products**

John D. Rocconi.....979-587-9968  
 1529 HWY 193, Wynne AR 72396  
 JohnR@progenyag.com

PROGENY 4255 RX	PROGENY 4247 LL
PROGENY 4444 RXS	PROGENY 4516 RXS
PROGENY 4620 RXS	PROGENY 4716 LL
PROGENY 4757 RY	PROGENY 4799 RXS
PROGENY 4816 RX	PROGENY 4851 RX
PROGENY 4929 RXS	PROGENY 4930 LL
PROGENY 4996 RXS	PROGENY 5016 RXS
PROGENY 5157 RXS	PROGENY 5414 LLS

**Seed Consultants Inc.**

Matt Hutchason .....800-708-2676  
 648 Miami Trace Road, Washington Court House  
 OH 43160

matt@seedconsultants.com  
 SEED CONSULTANTS SC 8428X™  
 SEED CONSULTANTS SC 9367R™  
 SEED CONSULTANTS SCS 9385RR™  
 SEED CONSULTANTS SCS 9393RR™  
 SEED CONSULTANTS SCS 9428R™  
 SEED CONSULTANTS SCS 9456SR™

**Stewart Seeds**

Justin Petrosino.....1-800-365-SEED  
 2230 Country Road E 300 N, Greensburg IN 47240  
 justin.petrosino@stewartseeds.com

STEWART 4116R2X	STEWART 4228R2X
STEWART 4327R2X	STEWART 4438R2X
STEWART 4527R2X	STEWART 4716R2X
STEWART 4927R2X	

**Stine Seed Company**

Jason Green .....618-554-8773  
 22555 Laredo Trail, Adel IA 50003  
 jdgreen@stineseed.com

STINE 41RH22	STINE 42LI32
STINE 44LH22	STINE 48RI23

**Stratton Seed Company**

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

AGS G548R216	GO SOY 39C15
GO SOY 41B17	GO SOY 43L16
GO SOY 4714LL	GO SOY 47B17
GO SOY 49G16	GO SOY 49L17
GO SOY 54G16	GO SOY IREANE

**Syngenta Seeds**

Chuck Leonard .....270-519-9600  
 11055 Wayzata Blvd, Minnetonka MN 55305  
 chuck.leonard@syngenta.com

S39-P5X	S41-A1X
S43-V3X	S45-K5X
S48-R2X	

**Terral Seed, Inc.**

Marty Hale, Agronomist.....318-341-8814  
 117 Ellington Drive, Rayville LA 71269  
 mhale@terralseed.com

REV® 45L57™	REV® 47R34™
REV® 4857X™	REV® 48A26™
REV® 48A76™	REV® 48L63™
REV® 4927X™	REV® 49L88™

**UniSouth Genetics, Inc.**

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

UNISOUTH GENETICS USG 7487XTS  
 UNISOUTH GENETICS USG 7496XTS  
 UNISOUTH GENETICS USG 7497XT

**Warren Seed and Agronomy Services**

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

WARREN SEED BG 3810 RR2X  
 WARREN SEED BG 4210 RR2X  
 WARREN SEED BG 4510 RR2X  
 WARREN SEED BG 4911 RR2X  
 WARREN SEED DS 3838  
 WARREN SEED DS 4340  
 WARREN SEED DS 4633  
 WARREN SEED DS 4850

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**University of Kentucky**

Dr. Todd Pfeiffer / Dr. Claire Venard .....859-257-2993  
 University of Kentucky - CAFE - Department of Plant  
 and Soil Sciences - N122 Ag. Science Center Lexington  
 KY 40546-0091  
 cvenard@uky.edu

**University of Missouri**

Dr. Pengyin Chen; Michael Clubb .....573-379-5431  
 PO Box 160, 147 St Hwy T Portageville, MO 63873  
 Chenpe@missouri.edu; clubbm@missouri.edu

**USDA-ARS**

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

**Table 3. Company Specifications for Entries in the 2016 Kentucky Soybean Variety Performance Tests<sup>A</sup>**

Variety/Brand name	Relative Maturity Group	Type <sup>B</sup>	Disease resistance traits <sup>C</sup>							Seed treatments
			Soybean Cyst nematode	Phytophthora sojae <sup>D</sup>		SDS	Stem		Other resistance traits	
				R gene	Rps		Field Tolerance	SMV		
AGRIGOLD G3410RX	3.4					R	R			19
AGRIGOLD G3520RX	3.5					R	R			19
AGRIGOLD G3690RX	3.6					R	R			19
AGRIGOLD G3980RX	3.9					R	R			19
AGRIGOLD G4024RX	4.0					R	R			19
AGRIGOLD G4380RX	4.3					R	R			19
AGRIGOLD G4440RX	4.4					R	R			19
AGRIGOLD G4685RX	4.6					R	R			19
AGRIGOLD G4835RX	4.8					R	R			19
AGRIGOLD G4990RX	4.9					R	R			19
AGS GS48R216	4.8	R2Y	3, 14			MR	MR	MR		3, 5, 10
ARMOR 39-D39	3.9									
ARMOR 42-D27	4.2									
ARMOR 44-D47	4.4									
ARMOR 44-D51	4.4									
ARMOR 46-D08	4.6									
ARMOR ARX3917	3.9									
ARMOR ARX4607	4.6									
ARMOR ARX4807	4.8									
ASGROW AG29X8	2.9	RR2X	R3	1c	MT	MR				
ASGROW AG37X8	3.6	RR2X	R3	1c	T	MR	R			
ASGROW AG38X6	3.8	RR2X	R3	1c	MT	MR	R			
ASGROW AG38X8	3.8	RR2X	R3	1c	T	MS	MR			
ASGROW AG39X7	3.9	RR2X/SR	R3	1c	MT	MR	R			
ASGROW AG41X8	4.1	RR2X/SR	R3	1c	MT	MR	MR			
ASGROW AG43X7	4.3	RR2X/SR	R3	1c	MT	MR	R			
ASGROW AG43X8	4.3	RR2X	R3	1c	T	MS	MR			
ASGROW AG44X6	4.4	RR2X	R3	1c	MT	MR	R			
ASGROW AG45X8	4.5	RR2X/SR	R3	1c	T	MS	R			
ASGROW AG46X6	4.6	RR2X/SR	R3	1a	T	MS	R			
ASGROW AG46X8	4.6	RR2X/SR	R3	1c		MS	MR			
ASGROW AG47X6	4.7	RR2X/SR	R3	1c	MT	MR	R			
ASGROW AG48X8	4.8	RR2X/SR	R3	1c	MT	MR	R			
BECK 4119X2	4.1	Xtend	R3, M14		T	R	T			9, 14
BECK 4669X2	4.6	Xtend	R3, M14	1c	T	R	R			9, 14
BECK 4991X2	4.9	Xtend	R3, M14	1a	R	R	R			9, 14
BRODBECK 295R2	2.9	RR	R3, MR14	1a	T	MR		MT-FELS		5, 11, 21
BRODBECK 348R2	3.4	RR	R3, MR14	1k	MT	MR		MS-FELS		5, 11, 21
BRODBECK 365R2	3.6	RR	R3, MR14	1k	MT	MS		NA		5, 11, 21
BRODBECK 368R2	3.6	RR	R3, MR14	1c	T	NA				5, 11, 21
BRODBECK 388R2	3.8	RR	R3, MR14	NA	T	NA		MS-FELS		5, 11, 21
BRODBECK 417R2	4.1	RR	R3, MR14	1c	T	MR	R	T-FELS		5, 11, 21
BRODBECK 426R2	4.2	RR	R3, MR14	1c	MS	MS		MS-FELS		5, 11, 21
BRODBECK 446R2	4.4	RR	R3, MR14	1c	T	MS		MS-FELS		5, 11, 21
CAVERNDALE CF 387 HT-GLYn	3.8	RR1	3, 14	1c	T	MR	MR	MR-FELS		11, 15, 16, 23
CAVERNDALE CF 404n	4	CONV	3, 14	1c	T	MR	MR			11, 15, 16, 23
CAVERNDALE CF 427 HT-GLY/STSn	4.2	RR/STS	3, 14			MR	MR	MR-FELS		9, 11
CAVERNDALE CF 478 RR2/STSn	4.7	R2Y	3, 14	1c	T	MR	MR			11, 15, 16, 23
CZ 3737 LL	3.7	LL		Rps 1k						12, 14
CZ 3841 LL	3.8	LL		Rps 3a						12, 14
CZ 3945 LL	3.9	LL								12, 14
CZ 4044 LL	4	LL		Rps 1c						12, 14
CZ 4105 LL	4.1	LL		Rps 1c						12, 14
CZ 4222 LL	4.2	LL		Rps 1a						12, 14
CZ 4540 LL	4.5	LL								12, 14
CZ 4748 LL	4.7	LL								12, 14
CZ 4818 LL	4.8	LL								12, 14
CZ 4820 LL	4.8	LL								12, 14
CZ 5147 LL	5.1	LL								12, 14
CZ 5150 LL	5.1	LL								12, 14
CZ 5242 LL	5.2	LL								12, 14
DYNA-GRO S39XT08	3.9	Xtend	R3, MR14	Rps 1c	MT	MR	MR	MR-FELS		13, 22
DYNA-GRO S39XT68	3.9	Xtend	R3, MR14	None	MT	MR	R	MS-FELS		13, 22
DYNA-GRO S41XS98	4.1	XT/STS	R3, MR14	None	MT	R	MR	MS-FELS		13, 22
DYNA-GRO S42RY77	4.2	RR2Y	R3, MR14	None	T	MR	MR	R-FELS		13, 22

continued

Table 3. continued

Variety/Brand name	Realtime Maturity Group	Type <sup>B</sup>	Disease resistance traits <sup>C</sup>							
			Soybean Cyst nematode	Phytophthora sojae <sup>D</sup>		SDS	SMV	Stem Canker	Other resistance traits	Seed treatments
				R gene	Rps					
DYNA-GRO S43RY95	4.3	RR2Y	MR3, MR14	Rps 1c	MT	MR	R	MS-FELS	13, 22	
DYNA-GRO S43XS27	4.3	XT/STS	R3, MR14	Rps 1c	MT	MR	MS	MR-FELS	13, 22	
DYNA-GRO S46XS87	4.6	XT/STS	R3, MR14	Rps 1c	MT	MR	R	MR-FELS	13, 22	
DYNA-GRO S48XS78	4.8	XT/STS	R3, MR14	Rps 1c	MT	MS	MS	R-FELS	13, 22	
DYNA-GRO S48XT56	4.8	Xtend	R3, MR14	Rps 1a	MT	R	R	MR-FELS	13, 22	
DYNA-GRO S49XS76	4.9	XT/STS	R3, MR14	Rps 1a	MT	MR	R	MS-FELS	13, 22	
DYNA-GRO SX17844XS	4.4	XT/STS	R3, MR14	Rps 1c	MT	MR	R	R-FELS	13, 22	
ESSEX (long term check-release 1974)	5.0	CONV-PUB								
GO SOY 39C15	3.9	CONV	3, 14		MR	R			3, 5, 10	
GO SOY 41B17	4.1	RR1	3, 14		MR	MS	R		3, 5, 10	
GO SOY 43L16	4.3	LL	3, 14		MR	MR	MR		3, 5, 10	
GO SOY 4714LL	4.7	LL	3, 14		MR	MS	MR		3, 5, 10	
GO SOY 47B17	4.7	RR1	3, 14		MR	MS	R		3, 5, 10	
GO SOY 49G16	4.9	RR1	1, 3, 5, 9, 14		MR	MR	MR		3, 5, 10	
GO SOY 49L17	4.9	LL	3, 14		MR		MR		3, 5, 10	
GO SOY 54G16	5.4	RR1			MR	MR			3, 5, 10	
GO SOY IREANE	4.9	CONV	3, 5		MR	R			3, 5, 10	
GREAT LAKES HYBRIDS GL3777NSRX	3.7	Xtend, STS	3, 14	Rps 1c	T	T			19	
GREAT LAKES HYBRIDS GL3979NRX	3.9	Xtend	3, 14		T	T			19	
GREAT LAKES HYBRIDS GL4174NSRX	4.1	Xtend, STS	3, 14		T	T			19	
GREAT LAKES HYBRIDS GL4573NSRX	4.5	Xtend, STS	3, 14	Rps 1c	T	T			19	
GREAT LAKES HYBRIDS GL4761NRX	4.7	Xtend	3, 14	Rps 1a	T	T			19	
HBK LL4953	4.9	LL							12, 14	
HPT 3916NX	3.9	Extend	PI88788	Rps 1c	T	T			1, 7, 14, 18, 20	
HPT 3919NR	3.9	RR	PI88788	none	MT	R			1, 7, 14, 18, 20	
HPT 4522NR	4.5	RR	PI88788	Rps 1k	T	MR	T		1, 7, 14, 18, 20	
HPT 4852NR	4.8	RR	PI88788	none	MT	MR	R		1, 7, 14, 18, 20	
HS 44X60	4.4	RR2Xtend	3, 14	Rps 1c	MT	NR	MS		2, 14	
HS 46X60	4.6	RR2Xtend	3, 14	Rps 1c	MR	NR	R		2, 14	
HS 48X70	4.8	RR2Xtend	3, 14	Rps 1c	MR	NR	R		2, 14	
HS 49X60	4.9	RR2Xtend	3, 14	Rps 1a	MR	NR	R		2, 14	
LG SEEDS C4227RX	4.2	Xtend, STS	R3, MR 14	none	T	R	MR		5, 11	
LG SEEDS C4458RX	4.4	Xtend, STS	R3, MR 14	1c	T	MR	S		5, 11	
LG SEEDS C4615RX	4.6	Xtend, STS	R3, MR 14	1c	MT	MS	R		5, 11	
LG SEEDS C4710RX	4.7	Xtend, STS	R3, MR 14	1c	T	R	R		5, 11	
LG SEEDS C4845RX	4.8	Xtend	R3, MR 14	1c	T	R	R		5, 11	
PENNYRILE (long term check-release 1987)	4.7	CONV-PUB								
PIONEER P28T08R	2.8	RR1	3, 14	1k	MS	MR		MR-FELS	4, 7	
PIONEER P35T58R	3.5	RR1	3, 14		MT-5	MT-6			4, 7	
PIONEER P38A98X	3.8	RR2X	3, 14	1c	MR-8	MR-8			4, 7	
PIONEER P38T42R	3.8	RR1	3, 14	1a	MT-6	MR-6			4, 7	
PIONEER P38T61BR	3.8	Bolt/RR	3, 14		MT-5	MT-5			4, 7	
PIONEER P40A47X	4.0	RR2X	3, 14	1k	MT-5	MT-5			4, 7	
PIONEER P41T33R	4.1	RR1	3, 14		MS-4	MS-4	R-8	MR-FELS	4, 7	
PIONEER P46A16R	4.6	RR1	3, 14		MT-6	MT-6	MT-6		4, 7	
PIONEER P47T36R	4.7	RR1	3, 14		MR-6	MR-6	R-9		4, 7	
PIONEER P48T27X	4.8	RR2X	3, 14	1c	MT-6	MT-6	R-9		4, 7	
PIONEER P50T64R	5.0	RR1		1k	MT-6	MT-6	R-9		4, 7	
PROGENY 4247 LL	4.2	LL	3	Rps 1c		MR	MR	MR-FELS	10, 12	
PROGENY 4255 RX	4.2	R2Y, XTEND	3, 14		FT	MR/MS	S	MR-FELS	10, 12	
PROGENY 4444 RXS	4.4	R2Y, XTEND, STS	3, 14	HRps 1c		MR/MS	R	MR-FELS, R-RKN	10, 12	
PROGENY 4516 RXS	4.5	R2Y, XTEND, STS	3, 14	HRps 1a, 1c		MS	R	MR-FELS	10, 12	
PROGENY 4620 RXS	4.6	R2Y, XTEND, STS	3, 14	HRps 1a		MR	R	MR-FELS	10, 12	
PROGENY 4716 LL	4.7	LL								
PROGENY 4757 RY	4.7	R2Y	3, 14	Rps 1a		MR	R	R-FELS	10, 12	
PROGENY 4799 RXS	4.7	R2Y, XTEND, STS	3	Rps 1c		MR	R	R-FELS	10, 12	
PROGENY 4816 RX	4.8	R2Y, XTEND	3	Rps 1a		MR	R	MR-FELS	10, 12	
PROGENY 4851 RX	4.8	R2Y, XTEND	3, 14	Rps 1c		MR/MS	R	MR-FELS	10, 12	
PROGENY 4929 RXS	4.9	R2Y, XTEND, STS	3, 14	Rps 1c		MR/MS	MS	R-FELS	10, 12	
PROGENY 4930 LL	4.9	LL	3	Rps 1c		MR	MR	R-FELS	10, 12	
PROGENY 4996 RXS	5.0	R2Y, STS	3, 14	HRps 1c		MR	R	MS-FELS	10, 12	
PROGENY 5016 RXS	5	R2Y, XTEND, STS	3, 14	Rps 1a		MR	R	MR-FELS	10, 12	
PROGENY 5157 RXS	5.1	R2Y, XTEND, STS			FT		R	MR-FELS	10, 12	
PROGENY 5414 LLS	5.4	LL, STS			FT	MR	R	R-FELS	10, 12	

continued

Table 3. continued

Variety/Brand name	Relative Maturity Group	Type <sup>B</sup>	Disease resistance traits <sup>C</sup>							
			Soybean Cyst nematode	Phytophthora sojae <sup>D</sup>		SDS	SMV	Stem Canker	Other resistance traits	Seed treatments
				R gene	Rps					
REV <sup>®</sup> 45L57™	4.5	LL	9/3, 9/14	rps1c						3, 7, 18
REV <sup>®</sup> 47R34™	4.7	RR	9/3, 7/14	rps1a						3, 7, 18
REV <sup>®</sup> 4857X™	4.8	RR2X	9/3, 9/14	rps1a						3, 7, 18
REV <sup>®</sup> 48A26™	4.8	RR	9/3, 8/14	rps1k						3, 7, 18
REV <sup>®</sup> 48A76™	4.8	RR	8/3, 9/14							3, 7, 18
REV <sup>®</sup> 48L63™	4.8	LL	8/3, 7/14	rps1a						3, 7, 18
REV <sup>®</sup> 4927X™	4.9	RR2X	9/3, 6/14	rps1k						3, 7, 18
REV <sup>®</sup> 49L88™	4.9	LL		rps1k						3, 7, 18
S39-P5X	3.9	extend	3, 14		MT	MR				17
S41-A1X	4.1	extend	3, 14	1c	MT	MR	MR			17
S43-V3X	4.3	extend	3, 14		MT	MR	MR			17
S45-K5X	4.5	extend	3, 14		MT	MR	MR			17
S48-R2X	4.8	extend	3, 14	1c	MT	MR	MR			17
SEED CONSULTANTS SC 8428X™	4.2	Xtend	3, 14	1k	T	T				
SEED CONSULTANTS SC 9367R™	3.6	RR	3, 14	1k	T	MR				
SEED CONSULTANTS SCS 9385RR™	3.8	RR	3	1k	T	T				
SEED CONSULTANTS SCS 9393RR™	3.9	RR	3, 14	1k	MS	T				
SEED CONSULTANTS SCS 9428R™	4.2	RR	3, 14	1k	T	T				
SEED CONSULTANTS SCS 9456SR™	4.5	RR	3, 14		T	T				
STEWART 4116R2X	4.1	Xtend	3	Susc.	MR	MR	MS			2
STEWART 4228R2X	4.2	Xtend	3	1c	MS	MR	MS			2
STEWART 4327R2X	4.3	Xtend	3	1c	MR	MR	MS			2
STEWART 4438R2X	4.4	Xtend	3	1c	MR	MS	MR			2
STEWART 4527R2X	4.5	Xtend	3	1c	MR	MR	R			2
STEWART 4716R2X	4.7	Xtend	3	1c	MR	MR	MS			2
STEWART 4927R2X	4.9	Xtend	3	1c	MR	MR	MR			2
STINE 41RH22	4.1		R							
STINE 42LI32	4.2									
STINE 44LH22	4.4									
STINE 48RI23	4.8									
UNISOUTH GENETICS USG 7487XTS	4.8	Xtend	MR3, 14	1c	MR	MR	R			8, 4
UNISOUTH GENETICS USG 7496XTS	4.9	Xtend	R3, MR14	1a	MR	MR	R	MR-RKN		8, 4
UNISOUTH GENETICS USG 7497XT	4.9	Xtend		1a	R		R	MR-FELS		8, 4
UNIVERSITY OF ARKANSAS OSAGE	5.6	Conv - Public Release				MR	R	R	S-SCN (2,3,4,5,14), S-RKN, S-RNM, R-FELS	4
UNIVERSITY OF ARKANSAS R09-430	5.1	Conv - Experimental Public								4
UNIVERSITY OF ARKANSAS R13-1019	4.9	Conv - Experimental Public								4
UNIVERSITY OF ARKANSAS UA 5014C	5.0	Conv - Public Release				MR	R	S-SCN (2,3,4,5,14), S-RKN, S-RNM, MR-FELS		4
UNIVERSITY OF ARKANSAS UA 5414RR	5.4	RR1 - Public Release				MR	R	S-SCN (2,3,4,5,14), S-RKN, S-RNM, MS-FELS		4
UNIVERSITY OF MISSOURI S13-10590C	4.3	CONV								3, 5, 10
UNIVERSITY OF MISSOURI S13-1805C	4.8	CONV								3, 5, 10
UNIVERSITY OF MISSOURI S13-1955C	5.5	CONV								3, 5, 10
UNIVERSITY OF MISSOURI S13-2743C	4.1	CONV								3, 5, 10
UNIVERSITY OF MISSOURI S13-3851C	4.3	CONV								3, 5, 10
UNIVERSITY OF MISSOURI S14-15146R	4.7	RR								3, 5, 10
UNIVERSITY OF MISSOURI S14-6391C	4.7	CONV								3, 5, 10
UNIVERSITY OF MISSOURI S14-9017R	5.5	RR								3, 5, 10
UNIVERSITY OF MISSOURI S14-9051R	4.5	RR								3, 5, 10
USDA-ARS JTN-5110	5.5	CONV	2, 3, 5			R	R	R-FELS, R-RNM		4,7
WARREN SEED BG 3810 RR2X	3.8	Xtend	3, 14	1c	MT	MR				6
WARREN SEED BG 4210 RR2X	4.2	Xtend	3, 14	1c	MT	MR				6
WARREN SEED BG 4510 RR2X	4.5	Xtend	3, 14	1c	MT	MR				6
WARREN SEED BG 4911 RR2X	4.8	Xtend	3, 14	1c	MT	MR				6
WARREN SEED DS 3838	3.8	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 4850	4.8	R2Y/STS	3, 14	1c	MT	MR				6

<sup>A</sup> This information is provided by the seed nominators and has not been verified by the soybean variety performance test program

<sup>B</sup> Bolt: variety with enhanced tolerance to PuPont™ LeadOff™ and DuPont™ Basis™ Blend herbicides; CONV, Conv: conventional soybean variety; Experimental Public: experimental public variety; LL: Liberty Link herbicide (glufosinate ammonium) tolerant soybean variety (introduced in 2009); PUB, Public Release: public variety; RR, RR1: Roundup Ready soybean variety (first generation - original trait, introduced in 1996); RR2, R2Y: Roundup Ready 2 Yield soybean variety (2nd generation - introduced in 2008); SR: Sulfonylurea herbicide tolerant soybean variety; STS: sulfonylurea-tolerant soybean variety; X, Xtend, XT, Xtend, XTEND: dicamba-tolerant soybean variety

<sup>C</sup> S: susceptible; MS: moderately susceptible; MT: moderately tolerant; T: tolerant; MR: moderately resistant; R: resistant; blank space: no information provided or information unknown

<sup>D</sup> All races of *Phytophthora sojae* identified so far 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 soybean variety. Field tolerance is a lower level of protection that will provide good control against all races. Seed and young seedlings of tolerant soybean varieties must be protected with a 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 <sup>B</sup>
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	Rancona 3.8 FS	Ipconazole	systemic broad-spectrum fungicide	5,000/ slight	2.59 - 4hrs
9	Escalate (3, 12, 16)	Mefenoxam, Fludioxonil, Thiram, Imidacloprid	systemic & non-systemic fungicide, systemic insecticide	640/2,000	NA
10	Poncho® VOTIVO®	Clothiandin, Bacillus firmus	systemic insecticide and nematocide	2,000/5,000	2.62 - 4hrs
11	VibranceTM	Sedaxane	fungicide	2,975/5,050	2.56 - 4hrs
12	Trilex® 2000	Trifloxystrobin, Metalaxyl, Glycerine	systemic fungicide	2,000/5,000	2.6 - 4hrs
13	Clariva™ Complete Beans	Pasteuria nishizawae, Mefenoxam, Thiamethoxam, Fludioxonil, Sedaxane	nematicide, systemic & non-systemic fungicide, systemic insecticide	see 5 & 13	see 5 & 13
14	ILeVO®	Fluopyram	fungicide, nematocide	1,750/5,000	2.0 - 96hrs
15	Eclipse TEN	Metalaxyl, Fludioxonil, Thiabendazole, Imidacloprid	systemic & non-systemic fungicide	NA	NA
16	TagTeam® LCO liquid	Penicillium bilaii, Bradyrhizobium japonicum	beneficial microorganisms	NA	NA
17	Avicta Complete Beans	Abamectin, Thiamethoxam, Mefenoxam, Fludioxonil	nematicide, insecticide & fungicide	97.83/5,000	0.055-0.50 - 4hrs
18	EverGol™ Energy	Prothioconazole, Penflufen, Metalaxyl, Polyethylene-polypropylene copolymer, 1,2-Propanediol	fungicide	2,000/2,000	2,205 - 4hrs
19		Rancona (9), Thiabendazole, Azoxystrobin	systemic broad-spectrum fungicide, systemic & non-systemic fungicides	NA	NA
20	AgriShield® Fungicide + Insecticide with Clariva®		nematicide, insecticide & fungicide		
21	PA2030		Biological Component	NA	NA
22	Equity® VIP	Thiamethoxam, Mefenoxam, Fludioxonil, Thiabendazole, Sedaxane	systemic insecticide and fungicide	3758/>5,000	>2.60 - 4 hrs
23	N-Hibit CST	Harpin protein	activates a natural defense mechanism in plants, referred to as systemic acquired resistance	NA	NA

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

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

<sup>B</sup> 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. 2017 Kentucky Soybean Variety Performance Tests, State Summary - Recommended Table

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>				OIL <sup>A/C</sup>			PROTEIN <sup>A/C</sup>		
	2017	2016-17	2015-17	LOGGING 2017	2017	2016-17	2015-17	2017	2016-17	2015-17
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>										
ASGROW AG29X8	60.8			1.5	17.5			35.7		
BRODBECK 295R2	55.9	51.9		1.8	18.7	19.3		35.4	35.4	
PIONEER P28T08R	53.0	49.3	52.2	1.8	19.8	20.4	20.7	34.5	34.8	
<b>AVERAGE Group II</b>	<b>56.5</b>	<b>50.6</b>	<b>52.2</b>	<b>1.7</b>	<b>18.7</b>	<b>19.9</b>		<b>35.2</b>	<b>35.1</b>	
LSD (0.10)	3.0	2.0			0.2	0.2		0.4	0.3	
C.V.	5.0	5.1			1.1	1.1		0.9	1.0	
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>										
SEED CONSULTANTS SCS 9393RR™	70.3	63.0	66.0	1.2	19.3	20.3	20.4	33.4	33.4	33.5
SEED CONSULTANTS SCS 9385RR™	69.8	64.3	66.1	2.0	19.1	19.9	20.1	33.7	33.6	33.7
ARMOR ARX3917	67.6			2.1	18.3			35.8		
ASGROW AG37X8	66.7			2.0	17.8			35.8		
HPT 3919NR	66.6	62.1		1.9	19.2	19.9		33.4	33.4	
ASGROW AG38X8	66.3			1.9	18.3			34.2		
ASGROW AG39X7	66.0	60.8		2.0	17.6	18.4		34.0	34.3	
ASGROW AG38X6	65.8	60.0		2.2	18.7	19.5		34.7	34.7	
PIONEER P38T42R	65.7	60.3		2.4	18.9	19.6		34.2	34.3	
PIONEER P38T61BR	65.0	60.6		2.7	18.9	19.5		34.0	34.0	
DYNA-GRO S39XT68	64.9			2.3	17.9			34.5		
BRODBECK 388R2	64.8			2.0	18.6			33.5		
GO SOY 39C15	64.7	60.4		2.2	17.9			34.4		
AGRIGOLD G3980RX	64.7			2.5	18.6	19.5		34.3	34.0	
AGRIGOLD G3690RX	64.2			2.0	19.2			34.0		
AGRIGOLD G3410RX	63.4			2.0	18.4			34.8		
HPT 3916NX	62.9			1.6	18.4			34.1		
CAVERNDALE CF 387 HT-GLYn	62.9	62.3		1.6	19.1	19.8		33.4	33.7	
ARMOR 39-D39	62.7			2.2	17.8			34.2		
\$39-P5X	62.1			2.2	19.1			32.9		
GREAT LAKES HYBRIDS GL3777NSRX	61.9			2.0	18.6			34.5		
DYNA-GRO S39XT08	61.8			2.2	18.2			35.8		
WARREN SEED BG 3810 RR2X	61.7			1.6	17.5			35.7		
SEED CONSULTANTS SC 9367R™	61.5	58.1		2.0	18.5	19.2		34.3	34.6	
PIONEER P35T58R	61.4	57.4	60.3	2.2	19.2	20.0	20.2	33.0	33.2	33.4
BRODBECK 365R2	60.8	58.6		2.5	18.4			35.1		
AGRIGOLD G3520RX	60.8			2.2	19.0	19.5		33.6	33.9	
BRODBECK 368R2	60.4			1.8	18.3			35.5		
PIONEER P38A98X	60.1			2.5	17.6			34.2		
CZ 3945 LL	59.9	56.9	58.9	2.2	19.1	19.4	19.7	33.7	34.5	34.5
CZ 3841 LL	59.7	57.1	59.6	2.8	18.4	19.1	19.4	34.8	34.7	34.8
WARREN SEED DS 3838	59.2	57.0	59.4	1.8	19.4	20.3	20.4	33.1	33.0	33.4
BRODBECK 348R2	58.4			2.6	19.2			33.8		
CZ 3737 LL	58.0	54.9		3.2	18.4	19.0		34.6	35.0	
GREAT LAKES HYBRIDS GL3979NRX	57.3			2.1	17.9			34.5		
<b>GROUP III AVERAGE</b>	<b>63.1</b>	<b>59.6</b>	<b>61.7</b>	<b>2.1</b>	<b>18.5</b>	<b>19.6</b>	<b>20.0</b>	<b>34.3</b>	<b>34.0</b>	<b>33.9</b>
LSD (0.10)	5.6	3.3	2.7		0.3	0.7	0.5	0.3	1.3	0.9
C.V.	8.4	7.2	7.2		1.3	5.0	4.1	1.0	5.0	4.1
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>										
LG SEEDS C4458RX	76.4	65.8		2.2	17.7	18.2		34.5	34.4	
HPT 4522NR	76.4			1.7	18.8			33.1		
DYNA-GRO S43XS27	73.7	63.1		2.8	17.6	18.6		34.5	34.2	
STEWART 4438R2X	73.4			1.8	18.6			33.5		
\$45-K5X	73.3			2.5	18.5			34.7		
STEWART 4327R2X	73.0	63.5		2.6	18.4	19.0		32.9	33.2	
AGRIGOLD G4380RX	72.9			2.4	17.8			34.8		
HS 44X60	72.8			1.8	18.0			34.2		
ARMOR 44-D51	72.3			3.1	18.3			33.3		
PROGENY 4247 LL	71.9	63.2	62.9	1.8	18.8	19.3	19.7	32.2	32.3	32.6
ASGROW AG45X8	71.6			2.4	17.7			33.9		

continued

# RECOMMENDED TABLE

Table 5. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>				OIL <sup>A/C</sup>			PROTEIN <sup>A/C</sup>		
	2017	2016-17	2015-17	LODGING 2017	2017	2016-17	2015-17	2017	2016-17	2015-17
WARREN SEED BG 4510 RR2X	71.5			1.7	18.1			33.9		
SEED CONSULTANTS SCS 9456SR™	71.5	65.0	66.5	1.8	18.8	19.3	19.6	33.6	34.0	34.4
BRODBECK 446R2	71.4	63.3		3.0	19.0	19.5		33.3	33.3	
DYNA-GRO SX17844XS	71.2			2.1	17.9			34.7		
PIONEER P41T33R	71.2	63.5		2.2	19.2	19.5		32.3	33.2	
STEWART 4228R2X	71.0			1.3	17.5			34.4		
PIONEER P40A47X	70.9			1.6	18.4			33.2		
DYNA-GRO S42RY77	70.9	64.5		2.8	18.8	19.3		33.5	34.1	
PROGENY 4516 RXS	70.8			2.5	19.1			32.5		
ASGROW AG41X8	70.7			2.1	18.2			33.9		
ASGROW AG43X7	70.5	63.5		2.8	18.0	18.4		33.4	33.4	
CZ 4105 LL	69.9	61.1	63.7	2.2	18.5	18.8	19.3	34.2	34.8	34.9
WARREN SEED BG 4210 RR2X	69.8			1.8	18.0			34.4		
PROGENY 4444 RXS	69.4			2.7	18.4			33.5		
BRODBECK 426R2	69.4	60.4		1.3	18.6	19.2		34.5	34.1	
GREAT LAKES HYBRIDS GL4174NSRX	69.0			1.7	18.7			33.8		
STEWART 4527R2X	68.9	61.7		2.1	18.4	18.9		33.1	33.5	
REV® 45L57™	68.8			2.4	18.8			32.6		
GREAT LAKES HYBRIDS GL4573NSRX	68.6			1.9	18.2			33.3		
STINE 42LI32	68.4			2.8	19.7			33.5		
BRODBECK 417R2	68.2	60.4		2.4	18.6	19.1		34.9	34.8	
LG SEEDS C4227RX	68.0			1.8	18.3			33.5		
ARMOR 44-D47	68.0			2.3	18.2			33.9		
GO SOY 41B17	67.9			2.1	19.2			31.8		
ASGROW AG43X8	67.8			2.2	17.9			34.6		
STINE 41RH22	67.6	61.0		1.8	18.2	18.8		33.8	33.8	
CAVERNDALE CF 427 HT-GLY/STS <sub>n</sub>	67.5			1.8	19.1			34.2		
UNIVERSITY OF MISSOURI S13-3851C	67.4			2.0	18.9			33.8		
S41-A1X	67.3			2.4	18.5			34.4		
AGRIGOLD G4024RX	67.2			2.7	18.3			33.8		
UNIVERSITY OF MISSOURI S14-9051R	67.2			2.2	18.8			32.6		
WARREN SEED DS 4340	66.9	58.5		2.6	18.2	18.9		34.5	34.5	
DYNA-GRO S41XS98	66.5			1.7	18.4			33.5		
DYNA-GRO S43RY95	66.2	60.0	63.2	3.4	18.8	19.2	19.5	33.3	33.7	33.8
AGRIGOLD G4440RX	65.9			2.6	17.9			34.0		
ASGROW AG44X6	65.5	61.2		2.6	17.9	18.3		34.6	34.8	
BECK 4119X2	65.1			1.9	18.0			34.0		
CAVERNDALE CF 404n	65.1	60.0	62.8	2.8	18.6	19.2	19.7	34.4	34.2	34.2
CZ 4044 LL	64.9	58.1		2.8	19.1	19.2		33.9	34.4	
SEED CONSULTANTS SC 8428X™	64.7			3.7	18.3			34.5		
GO SOY 43L16	64.6	60.8		2.6	19.7	20.2		33.5	33.6	
SEED CONSULTANTS SCS 9428R™	64.4			2.8	19.0			33.5		
STEWART 4116R2X	64.3	58.4		2.0	18.6	19.2		32.6	32.7	
S43-V3X	64.3			2.5	18.3			33.3		
ARMOR 42-D27	64.1			1.6	17.8			34.7		
STINE 44LH22	64.0	59.9		3.0	19.1	19.6		33.9	33.9	
PROGENY 4255 RX	63.8			2.3	18.2			33.4		
CZ 4540 LL	63.6	57.1	57.0	3.1	18.7	19.2	19.5	33.1	33.0	33.5
UNIVERSITY OF MISSOURI S13-10590C	62.9			2.0	19.1			33.4		
UNIVERSITY OF MISSOURI S13-2743C	62.8			2.7	18.7			34.3		
CZ 4222 LL	61.4	54.6		2.0	19.2	19.5		32.5	32.6	
<b>GROUP IV EARLY AVERAGE</b>	<b>68.5</b>	<b>61.2</b>	<b>62.7</b>	<b>2.3</b>	<b>18.5</b>	<b>19.1</b>	<b>19.6</b>	<b>33.7</b>	<b>33.8</b>	<b>33.9</b>
LSD (0.10)	5.5	3.2	2.6		0.2	0.2	0.1	0.4	0.3	0.2
C.V.	7.6	6.7	6.7		1.3	1.3	1.3	1.0	1.0	1.0
<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>										
HS 49X60	<b>76.9</b>	<b>65.6</b>		1.5	17.8	18.2		34.5	34.5	
HBK LL4953	75.2			1.8	19.0			32.2		
PROGENY 4930 LL	75.0	64.5	63.5	1.9	18.5	18.8	19.3	33.4	33.6	33.6
CZ 4820 LL	74.4			2.7	18.8			32.5		
<b>PIONEER P46A16R</b>	<b>74.1</b>			1.5	18.9			32.9		
LG SEEDS C4615RX	73.9	62.5		2.2	18.0	18.5		33.6	33.7	

continued

# RECOMMENDED TABLE

Table 5. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>				OIL <sup>A/C</sup>			PROTEIN <sup>A/C</sup>		
	2017	2016-17	2015-17	LODGING 2017	2017	2016-17	2015-17	2017	2016-17	2015-17
DYNA-GRO S48XS78	73.5			2.8	18.5			34.4		
<b>BECK 4669X2</b>	73.3			1.8	17.4			34.6		
HS 48X70	73.3			1.6	17.6			34.1		
PROGENY 4929 RXS	73.2			2.0	18.5			33.4		
HS 46X60	73.2	62.7		1.8	18.0	18.4		33.6	33.6	
STEWART 4927R2X	73.2	61.6		2.0	18.3	<b>18.6</b>		32.5	32.7	
AGRIGOLD G4685RX	73.1			2.2	18.4			32.5		
ASGROW AG46X8	73.1			2.8	18.6			32.8		
DYNA-GRO S48XT56	72.8	63.3		1.3	18.1	18.5		33.1	33.4	
UNISOUTH GENETICS USG 7496XTS	72.2	65.0		2.0	18.3	18.6		33.8	34.0	
LG SEEDS C4845RX	72.1	63.9		1.5	17.7	18.2		34.5	34.7	
PROGENY 4757 RY	71.8	63.3	64.8	2.7	18.3	18.9	19.4	33.0	32.7	32.9
REV <sup>®</sup> 48A26™	71.3	64.8		2.9	<b>19.3</b>	<b>19.6</b>		33.6	33.9	
BECK 4991X2	71.0	62.8		1.6	17.7	18.1		34.3	34.4	
CZ 4748 LL	71.0	63.4		2.1	18.6	19.0		33.1	33.4	
STINE 48RI22	70.7	60.2		2.5	17.8	18.5		33.5	33.4	
ASGROW AG47X6	70.5	63.9		2.2	17.8	18.5		33.9	33.7	
GO SOY 4714LL	70.3	62.4		2.7	18.6	19.2		33.1	33.3	
ARMOR 46-D08	70.2	61.9		2.8	17.9	18.4		33.9	33.8	
ARMOR ARX4807	70.2			2.7	18.4			34.6		
PROGENY 4799 RXS	70.1			1.8	17.6			34.1		
S48-R2X	69.8			2.3	19.0			34.4		
WARREN SEED DS 4850	69.7	60.9	62.6	2.1	17.6	18.1	18.4	34.5	34.6	<b>34.8</b>
DYNA-GRO S49XS76	69.7	60.8		2.2	17.8	18.4		34.5	34.0	
PROGENY 4620 RXS	69.5			2.5	18.0			33.9		
PROGENY 4716 LL	69.5			2.7	18.8			32.6		
PIONEER P47T36R	69.4	62.8	<b>65.7</b>	2.0	19.0	19.4	<b>19.8</b>	33.0	33.0	33.2
WARREN SEED DS 4633	69.0	63.0	65.1	3.4	19.0	19.1	19.5	32.1	32.9	33.1
GREAT LAKES HYBRIDS GL4761NRX	68.4	61.9		2.0	17.9	18.3		33.6	34.1	
GO SOY 49L17	68.2			2.8	18.2			33.7		
WARREN SEED BG 4911 RR2X	68.2			2.1	18.6			33.1		
ASGROW AG46X6	68.2	62.4		2.1	18.6	18.9		33.6	33.7	
UNISOUTH GENETICS USG 7487XTS	68.0			2.0	18.2			32.2		
REV <sup>®</sup> 49L88™	67.8			2.4	19.0			33.6		
REV <sup>®</sup> 48L63™	67.7	62.0		3.5	18.3	18.6		35.0	34.8	
HPT 4852NR	67.6	61.5		3.1	18.7	19.2		33.1	33.2	
PROGENY 4816 RX	67.4			1.4	17.8			34.5		
PROGENY 4851 RX	67.2			3.7	18.5			33.7		
DYNA-GRO S46XS87	66.8	60.6		2.5	18.5	18.7		32.5	33.1	
PIONEER P48T27X	66.8			2.4	18.2			34.8		
REV <sup>®</sup> 4927X™	66.6			3.1	18.8			32.5		
REV <sup>®</sup> 48A76™	66.5	62.3		2.9	18.8	19.2		33.6	33.6	
REV <sup>®</sup> 4857X™	66.3			2.4	18.7			33.6		
CAVERNDALE CF 478 RR2Y/STS <sub>n</sub>	66.1	59.0		2.0	17.9	18.1		33.4	34.0	
AGRIGOLD G4990RX	65.6			2.9	18.0			33.6		
UNIVERSITY OF MISSOURI S14-15146R	65.3			2.6	19.1			32.7		
REV <sup>®</sup> 47R34™	64.9	60.3	62.8	3.5	18.8	19.3	19.7	33.1	33.1	33.5
LG SEEDS C4710RX	64.8			3.5	19.2			32.3		
ASGROW AG48X8	64.6			2.9	18.2			32.8		
AGRIGOLD G4835RX	64.6			2.4	18.2			34.9		
ARMOR ARX4607	64.3			3.3	18.1			33.7		
GO SOY Ireane	63.7	59.0		3.6	17.3	18.0		34.5	34.2	
GO SOY 47B17	63.3			2.6	19.2			34.1		
UNIVERSITY OF MISSOURI S13-1805C	63.2			4.5	18.7			33.5		
UNIVERSITY OF MISSOURI S14-6391C	63.1			3.1	18.2			33.8		
STEWART 4716R2X	62.8	53.3		2.6	18.3	18.6		33.8	34.2	
CZ 4818 LL	61.4	56.5	57.6	3.1	18.3	18.9	19.2	34.7	34.4	34.5
AGS GS48R216	61.3	59.4		3.5	18.7	19.2		32.6	32.7	
UNISOUTH GENETICS USG 7497XT	60.8			3.3	17.2			34.3		
UNIVERSITY OF ARKANSAS R13-1019	58.9			4.3	17.4			<b>35.3</b>		
PENNYRILE (long term check-released 1987)	53.1	47.2		2.7	18.9	19.1		34.7	<b>35.3</b>	
GO SOY 49G16	51.6	48.8		4.4	17.9	18.6		34.1	33.8	

continued

# RECOMMENDED TABLE

Table 5. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>				OIL <sup>A/C</sup>			PROTEIN <sup>A/C</sup>		
	2017	2016-17	2015-17	LODGING 2017	2017	2016-17	2015-17	2017	2016-17	2015-17
<b>GROUP IV LATE AVERAGE</b>	<b>68.3</b>	<b>61.0</b>	<b>63.2</b>	<b>2.6</b>	<b>18.3</b>	<b>18.7</b>	<b>19.3</b>	<b>33.6</b>	<b>33.7</b>	<b>33.7</b>
LSD (0.10)	4.3	2.6	2.2		0.2	0.2	0.1	0.3	0.2	0.2
C.V.	6.0	5.6	5.8		1.2	1.2	1.2	1.0	0.9	0.9
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>										
CZ 5150 LL	<b>71.4</b>			1.7	18.7			32.5		
UNIVERSITY OF MISSOURI 514-9017R	71.3			1.8	<b>19.9</b>			31.9		
PROGENY 5016 RXS	69.9			2.1	18.0			34.1		
PIONEER P50T64R	<b>68.7</b>	<b>61.7</b>	<b>62.4</b>	1.3	18.7	19.1	19.3	33.6	34.7	35.0
CZ 5242 LL	66.0			2.5	18.2			34.7		
UNIVERSITY OF ARKANSAS UA 5014C	66.0	59.2		3.0	17.5	18.3		34.7	35.1	
PROGENY 5157 RXS	64.7			1.8	17.7			33.7		
CZ 5147 LL	61.9			3.1	17.5			34.0		
UNIVERSITY OF ARKANSAS R09-430	61.5	55.0	58.4	3.9	19.2	<b>19.6</b>	<b>19.9</b>	33.3	34.5	34.9
PROGENY 4996 RXS	59.5			3.0	18.8			33.6		
UNIVERSITY OF ARKANSAS OSAGE	57.7	52.6	52.7	3.7	17.4	18.0	18.1	<b>36.3</b>	<b>36.8</b>	<b>37.0</b>
GO SOY 54G16	57.6			3.5	18.0			33.5		
USDA-ARS JTN-5110	56.9	52.6	52.9	3.9	18.4	18.9	19.2	34.5	34.8	35.2
UNIVERSITY OF ARKANSAS UA 5414RR	56.2	50.4	50.5	3.9	17.6	18.1	18.3	34.5	34.7	34.8
ESSEX (long term check-released 1974)	56.0	49.7		3.0	18.6	18.7		34.4	35.9	
PROGENY 5414 LLS	54.2			3.8	17.6			35.0		
UNIVERSITY OF MISSOURI 513-1955C	53.5			4.4	18.5			32.4		
<b>GROUP V AVERAGE</b>	<b>61.9</b>	<b>54.4</b>	<b>55.4</b>	<b>3.0</b>	<b>18.2</b>	<b>18.7</b>	<b>18.9</b>	<b>33.9</b>	<b>35.2</b>	<b>35.4</b>
LSD (0.10)	3.8	2.4	2.0		0.2	0.2	0.1	0.4	0.2	0.2
C.V.	5.8	5.5	5.7		1.3	1.2	1.2	1.0	0.9	0.9

<sup>A</sup> 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.

<sup>B</sup> The 2017 yield data were collected at the Breckinridge Co., Butler Co., Caldwell Co., Calloway Co., Cumberland Co., Fayette Co., Hardin Co., and Pulaski Co. locations. 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.

<sup>C</sup> The 2017 samples were collected at the Caldwell Co., Calloway Co., and Fayette Co. locations. The 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.

**Table 6. 2017 Kentucky Soybean Variety Performance Tests, Breckinridge County - Lincoln Trail Region**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING	BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2017	2016-17	2015-17	2017		2017	2016-17	2015-17	2017
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>					PROGENY 4444 RXS 75.1 2.3				
PIONEER P28T08R	72.8	58.5	65.8	1.7	STEWART 4438R2X	75.0			2.3
BRODBECK 295R2	68.4	49.8		1.3	SEED CONSULTANTS SCS 9428R™	75.0			3.7
ASGROW AG29X8	66.0			1.3	HS 44X60	74.0			1.7
<b>GROUP II AVERAGE</b>					UNIVERSITY OF MISSOURI S13-3851C 73.1 1.7				
LSD (0.10)	4.8	2.3			STEWART 4527R2X	72.7	59.5		1.7
C.V.	5.2	4.9			STINE 41RH22	72.7	62.0		1.7
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>					PIONEER P40A47X 72.2 1.0				
SEED CONSULTANTS SCS 9393RR™	77.2	63.9	72.4	1.0	AGRIGOLD G4380RX	72.2			2.7
ASGROW AG38X6	77.0	65.0		2.0	DYNA-GRO SX17844XS	72.1			1.3
GO SOY 39C15	76.7	65.2		2.0	PROGENY 4516 RXS	71.9			1.7
DYNA-GRO S39XT68	76.5			3.0	ARMOR 44-D51	71.8			4.0
ARMOR ARX3917	76.2			1.3	ASGROW AG45X8	71.8			2.0
ASGROW AG37X8	75.6			1.3	DYNA-GRO S43RY95	71.2	63.9	80.1	2.7
ASGROW AG39X7	72.8	58.7		1.0	CZ 4540 LL	71.2	62.2	65.5	4.0
SEED CONSULTANTS SC 9367R™	72.0	60.8		1.3	ASGROW AG44X6	71.2	68.2		2.0
WARREN SEED BG 3810 RR2X	71.5			1.0	AGRIGOLD G4440RX	70.7			3.7
SEED CONSULTANTS SCS 9385RR™	71.2	62.2	72.4	2.0	ASGROW AG43X8	70.4			2.0
DYNA-GRO S39XT08	70.0			2.3	WARREN SEED BG 4210 RR2X	69.4			1.7
PIONEER P38T42R	68.9	62.4		2.0	GO SOY 41B17	69.1			1.3
ASGROW AG38X8	68.8			1.3	DYNA-GRO S43XS27	68.9	65.3		4.3
HPT 3919NR	68.2	59.6		1.3	STEWART 4327R2X	68.6	62.9		3.7
BRODBECK 348R2	66.6			2.3	ARMOR 44-D47	68.6			2.0
AGRIGOLD G3410RX	66.5			1.7	GO SOY 43L16	68.5	62.5		1.7
CAVERNDALE CF 387 HT-GLYn	66.5	62.1		1.7	DYNA-GRO S42RY77	68.3	67.3		2.3
PIONEER P38A98X	65.7			1.7	CAVERNDALE CF 404n	68.2	59.6	70.9	3.7
AGRIGOLD G3980RX	65.6			3.0	DYNA-GRO S41XS98	67.2			1.3
CZ 3841 LL	65.3	58.9	66.7	3.0	S43-V3X	67.0			1.7
PIONEER P38T61BR	65.2	57.4		2.3	CZ 4222 LL	66.2	55.9		1.7
HPT 3916NX	65.0			1.0	LG SEEDS C4227RX	66.0			1.0
AGRIGOLD G3690RX	64.0			1.0	CZ 4044 LL	65.3	56.7		3.7
GREAT LAKES HYBRIDS GL3777NSRX	63.8			1.0	ARMOR 42-D27	65.0			2.0
AGRIGOLD G3520RX	62.2			1.7	STINE 42LI32	64.9			1.7
CZ 3945 LL	62.0	56.7	65.4	1.3	WARREN SEED DS 4340	64.2	60.0		4.3
BRODBECK 365R2	61.5	56.8		1.3	BECK 4119X2	63.8			1.7
S39-P5X	61.1			1.3	PROGENY 4255 RX	63.8			4.3
CZ 3737 LL	60.8	54.8		3.0	UNIVERSITY OF MISSOURI S13-10590C	58.5			2.0
BRODBECK 388R2	59.5			1.0	AGRIGOLD G4024RX	57.7			4.0
ARMOR 39-D39	56.0			1.3	STEWART 4116R2X	45.2	48.6		2.7
GREAT LAKES HYBRIDS GL3979NRX	54.4			2.3	<b>GROUP IV EARLY AVERAGE</b>				
BRODBECK 368R2	54.1			2.3	LSD (0.10)	7.5	4.2	3.2	
PIONEER P35T58R	53.7	54.8	67.8	1.7	C.V.	9.9	8.3	7.5	
WARREN SEED DS 3838	48.8	49.8	61.3	1.0	<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
<b>GROUP III AVERAGE</b>					HS 46X60 83.4 65.9 1.7				
LSD (0.10)	6.7	3.7	3.0		STINE 48RI22	76.5	66.5		3.3
C.V.	9.5	8.2	7.6		ASGROW AG46X8	75.1			2.7
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>					ASGROW AG47X6 74.0 62.3 2.0				
PIONEER P41T33R	87.9	71.4		2.0	CZ 4748 LL	73.4	64.5		1.7
LG SEEDS C4458RX	86.2	73.2		2.7	CZ 4820 LL	70.9			1.0
HPT 4522NR	84.8			2.0	HBK LL4953	70.3			1.3
GREAT LAKES HYBRIDS GL4174NSRX	83.0			1.7	PIONEER P46A16R	70.3			1.3
S45-K5X	82.8			1.7	AGRIGOLD G4685RX	69.8			1.7
BRODBECK 426R2	82.4	64.4		1.0	REV® 48A76™	68.9	64.9		2.3
ASGROW AG43X7	82.0	67.4		3.0	UNIVERSITY OF MISSOURI S14-15146R	68.7			3.0
BRODBECK 417R2	81.5	66.5		2.0	REV® 4857X™	68.3			2.0
STEWART 4228R2X	81.4			1.0	STEWART 4927R2X	68.3	59.4		1.0
S41-A1X	81.1			1.7	WARREN SEED DS 4633	67.4	63.0	66.4	2.4
ASGROW AG41X8	79.5			2.0	ASGROW AG48X8	67.3			3.0
REV® 45L57™	78.7			2.0	PROGENY 4851 RX	67.2			4.0
UNIVERSITY OF MISSOURI S13-2743C	78.2			2.3	PROGENY 4799 RXS	66.8			1.7
GREAT LAKES HYBRIDS GL4573NSRX	77.8			2.3	LG SEEDS C4615RX	66.6	61.1		1.7
CAVERNDALE CF 427 HT-GLY/ST5n	77.7			2.3	DYNA-GRO S48XT56	66.2	59.8		1.3
CZ 4105 LL	77.6	60.3	70.9	2.3	REV® 48A26™	65.9	62.2		1.3
PROGENY 4247 LL	77.1	63.4	70.1	1.3	REV® 4927X™	65.8			3.3
WARREN SEED BG 4510 RR2X	76.6			1.0	PROGENY 4930 LL	65.2	60.6	64.9	1.0
UNIVERSITY OF MISSOURI S14-9051R	76.4			1.7	DYNA-GRO S48XS78	64.9			1.7
SEED CONSULTANTS SC 8428X™	76.2			3.7	GO SOY 4714LL	64.9	61.3		2.3
SEED CONSULTANTS SCS 9456SR™	75.9	71.2	79.1	2.0	PROGENY 4757 RY	64.8	55.9	62.3	1.3
BRODBECK 446R2	75.6	63.1		3.0	REV® 48L63™	64.1	65.1		3.3
STINE 44LH22	75.3	68.5		2.3	UNISOUTH GENETICS USG 7487XTS	63.2			1.7
					UNISOUTH GENETICS USG 7497XT	63.0			2.7
					GO SOY Ireane	62.9	63.1		4.0

continued

Table 6. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2017	2016-17	2015-17	2017
CAVERNDALE CF 478 RR2Y/ST5n	62.2	57.8		1.3
UNISOUTH GENETICS USG 7496XTS	62.1	62.6		2.3
S48-R2X	61.0			2.3
LG SEEDS C4845RX	60.9	57.8		1.0
PROGENY 4620 RXS	60.5			2.0
HS 49X60	59.6	60.3		2.3
GO SOY 49L17	59.5			2.3
PROGENY 4929 RXS	58.5			2.0
AGS GS48R216	58.2	60.9		3.0
BECK 4669X2	58.1			1.3
ARMOR 46-D08	57.8	54.3		2.3
UNIVERSITY OF MISSOURI S14-6391C	57.0			2.0
REV <sup>®</sup> 47R34™	56.9	63.3	<b>68.0</b>	3.0
AGRIGOLD G4835RX	56.6			2.7
GO SOY 47B17	56.3			3.0
WARREN SEED DS 4850	54.9	50.7	58.5	1.7
PROGENY 4816 RX	54.2			1.0
GREAT LAKES HYBRIDS GL4761NRX	54.0	47.9		2.7
BECK 4991X2	53.8	55.5		1.0
PIONEER P47T36R	53.3	56.9	66.4	1.0
HS 48X70	52.8			1.3
UNIVERSITY OF ARKANSAS R13-1019	52.3			2.3
REV <sup>®</sup> 49L88™	52.1			2.0
ASGROW AG46X6	51.5	57.9		1.0
PIONEER P48T27X	51.5			1.0
WARREN SEED BG 4911 RR2X	50.6			2.0
HPT 4852NR	50.5	56.2		2.3
STEWART 4716R2X	49.6	50.7		2.3
PROGENY 4716 LL	49.3			1.0
CZ 4818 LL	49.3	52.4	59.6	2.3
ARMOR ARX4607	48.8			4.7
ARMOR ARX4807	48.6			3.3
LG SEEDS C4710RX	48.6			4.3
GO SOY 49G16	48.4	47.3		5.0
DYNA-GRO S46XS87	48.2	53.3		2.7
AGRIGOLD G4990RX	48.0			4.7
PENNYRILE (long term check-released 1987)	47.0	48.6		4.0
UNIVERSITY OF MISSOURI S13-1805C	46.8			3.7
DYNA-GRO S49XS76	45.4	52.8		1.7
<b>GROUP IV LATE AVERAGE</b>	<b>60.0</b>	<b>58.3</b>	<b>63.7</b>	<b>2.3</b>
LSD (0.10)	4.4	3.0	2.6	
C.V.	6.9	6.9	7.2	
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>				
CZ 5150 LL	<b>72.1</b>			1.3
UNIVERSITY OF MISSOURI S14-9017R	65.4			1.0
UNIVERSITY OF ARKANSAS UA 5014C	63.6	<b>59.5</b>		3.7
CZ 5147 LL	63.4			2.7
PROGENY 5016 RXS	62.7			1.0
UNIVERSITY OF ARKANSAS R09-430	59.8	57.3	<b>68.7</b>	5.0
CZ 5242 LL	59.3			1.7
UNIVERSITY OF ARKANSAS UA 5414RR	57.6	52.2	53.8	4.0
PROGENY 5157 RXS	56.3			1.0
GO SOY 54G16	54.7			4.3
PIONEER P50T64R	54.3	59.0	62.4	1.3
ESSEX (long term check-released 1974)	49.8	45.5		3.7
UNIVERSITY OF ARKANSAS OSAGE	46.1	50.6	54.7	4.7
PROGENY 5414 LLS	46.0			4.3
USDA-ARS JTN-5110	42.8	50.3	53.8	4.3
PROGENY 4996 RXS	42.1			3.0
UNIVERSITY OF MISSOURI S13-1955C	36.8			5.0
<b>GROUP V AVERAGE</b>	<b>54.9</b>	<b>53.5</b>	<b>58.7</b>	<b>3.1</b>
LSD (0.10)	5.8	6.5	6.1	
C.V.	3.4	2.6	2.1	

<sup>A</sup> 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.

<sup>B</sup> 2017, 2016, and 2015 data were collected in Breckinridge Co

## AGRONOMIC INFORMATION

GPS coordinates	37°51'23.0"N 86°18'6.1"W
Soil type	Crider silt loam
Slopes	2-6 %, eroded
Previous crop	Tobacco, winter wheat (cover crop)
Soil test	pH 6.85, P 107, K 258
SCN test	0
Fertilizer/lime applied	NA
Agricultural practice	No-till
Pre-planting herbicides	NA
Planting date	5/26/2017
Post-planting herbicides	Reflex, FirstRate, Intensity One (6/16/2017)
Harvest dates	MG II, III, and IV Early: 10/16/2017; MG IV Late and V: 11/14/2017
50% chance of killing frost	10/22

## Breckinridge (Hardinsburg)

Month	Total Monthly Precipitation (in.)	Monthly Average (°F)	Temperatures	
			Highest T <sup>o</sup> recorded (°F)	Lowest T <sup>o</sup> re-corded (°F)
March	4.12	48	77.2	16.1
April	4.81	61.8	84.4	33.4
May	7.89	64.6	84.5	35.4
June	4.92	71.8	89.7	50.4
July	3.51	76.4	93.3	58.2
August	2.04	72.7	90.7	51.8
September	5.67	68.2	88.6	43.9
October	9.19	58.9	83.4	29.4
November (11/14)	1.02	51.5	77.0	27.1

**Table 7. 2017 Kentucky Soybean Variety Performance Tests, Butler County - Mammoth Cave Region**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING	BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2017	2016-17	2015-17	2017		2017	2016-17	2015-17	2017
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>					BECK 4119X2 71.1 1.7				
ASGROW AG29X8	61.2			3.0	ARMOR 42-D27	70.7			2.0
BRODBECK 295R2	36.4	40.1		3.0	ARMOR 44-D47	69.7			2.3
PIONEER P28T08R	32.0	39.2	44.2	4.0	ASGROW AG41X8	69.5			2.3
<b>GROUP II AVERAGE</b>					CZ 4540 LL 69.5 62.0 63.3 3.7				
LSD (0.10)	2.7	1.6			BRODBECK 426R2	68.5	63.9		1.7
C.V.	4.7	4.7			ASGROW AG43X8	68.1			2.0
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>					PIONEER P41T33R 67.7 65.1 1.7				
HPT 3919NR	76.2	71.5		3.0	STINE 42LI32	67.7			3.7
SEED CONSULTANTS SCS 9385RR™	76.2	72.1	69.5	3.0	STEWART 4116R2X	66.0	62.8		2.7
SEED CONSULTANTS SCS 9393RR™	73.8	68.0	69.6	1.3	PIONEER P40A47X	65.9			1.7
ARMOR ARX3917	68.5			3.7	STINE 41RH22	65.8	61.1		2.0
PIONEER P38T61BR	67.1	67.8		4.0	S41-A1X	65.6			3.3
ASGROW AG38X6	66.7	67.5		3.3	DYNA-GRO S43RY95	65.3	65.0	66.6	4.3
AGRIGOLD G3690RX	66.6			4.0	UNIVERSITY OF MISSOURI S13-10590C	65.1			3.0
AGRIGOLD G3980RX	65.4			3.3	UNIVERSITY OF MISSOURI S13-3851C	64.8			2.0
DYNA-GRO S39XT08	64.1			4.3	DYNA-GRO S41XS98	64.7			1.0
PIONEER P35T58R	63.2	61.9	62.6	4.0	BRODBECK 446R2	64.5	64.9		4.0
BRODBECK 368R2	63.1			2.7	WARREN SEED BG 4510 RR2X	64.3			2.0
PIONEER P38T42R	62.2	63.3		3.7	DYNA-GRO SX17844XS	64.3			2.0
DYNA-GRO S39XT68	61.9			4.0	CZ 4222 LL	64.3	59.8		2.0
BRODBECK 388R2	61.8			4.0	UNIVERSITY OF MISSOURI S13-2743C	63.4			3.7
GREAT LAKES HYBRIDS GL3979NRX	60.6			3.7	REV® 45L57™	62.9			2.7
WARREN SEED DS 3838	60.2	58.6	62.4	2.3	ASGROW AG44X6	62.6	64.5		3.0
ARMOR 39-D39	60.1			4.3	WARREN SEED DS 4340	61.4	59.2		1.7
CAVERNDALE CF 387 HT-GLYn	59.9	62.4		2.0	GREAT LAKES HYBRIDS GL4174NSRX	61.1			1.3
ASGROW AG38X8	59.9			3.7	SEED CONSULTANTS SCS 9456SR™	60.9	64.9	69.4	1.7
ASGROW AG37X8	57.9			3.7	GO SOY 41B17	60.4			2.0
AGRIGOLD G3410RX	56.0			4.3	S43-V3X	58.4			4.3
SEED CONSULTANTS SC 9367R™	55.4	59.0		3.3	CAVERNDALE CF 427 HT-GLY/STSn	57.4			1.7
HPT 3916NX	54.7			3.0	SEED CONSULTANTS SCS 9428R™	57.2			3.0
ASGROW AG39X7	54.6	59.4		4.0	CAVERNDALE CF 404n	57.0	55.7	61.8	2.7
GO SOY 39C15	54.3	56.0		3.0	BRODBECK 417R2	56.9	60.8		3.0
GREAT LAKES HYBRIDS GL3777NSRX	54.0			3.7	PROGENY 4516 RXS	56.4			3.7
BRODBECK 348R2	52.5			4.3	PROGENY 4255 RX	56.0			2.0
PIONEER P38A98X	52.0			5.0	CZ 4044 LL	53.3	54.7		4.0
CZ 3945 LL	51.7	54.9	58.1	3.7	STINE 44LH22	53.3	57.9		3.3
WARREN SEED BG 3810 RR2X	51.0			2.3	PROGENY 4444 RXS	52.5			5.0
S39-P5X	50.7			4.3	GO SOY 43L16	52.4	58.3		4.0
CZ 3737 LL	48.6	49.8		4.7	<b>GROUP IV EARLY AVERAGE</b>				
CZ 3841 LL	46.9	53.9	57.8	5.0	LSD (0.10)	4.0	2.5	2.3	
AGRIGOLD G3520RX	40.9			3.7	C.V.	5.5	5.1	5.7	
BRODBECK 365R2	35.7	47.9		5.0	<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
<b>GROUP III AVERAGE</b>					UNISOUTH GENETICS USG 7496XTS 89.9 80.2 1.7				
LSD (0.10)	4.2	2.7	2.4		HS 48X70	89.3			1.3
C.V.	6.8	6.1	6.6		BECK 4991X2	87.4	78.1		1.3
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>					ARMOR 46-D08 87.0 73.6 2.3				
HS 44X60	89.7			1.7	HBK LL4953	83.8			1.0
STEWART 4438R2X	83.8			1.7	DYNA-GRO S48XS78	83.6			2.7
DYNA-GRO S43XS27	82.7	71.8		3.0	LG SEEDS C4615RX	82.7	74.0		2.3
WARREN SEED BG 4210 RR2X	80.1			2.0	STINE 48RI22	80.9	70.5		2.0
STEWART 4228R2X	79.6			1.7	PROGENY 4930 LL	80.4	69.1	71.1	3.0
ASGROW AG43X7	79.1	71.6		3.0	LG SEEDS C4710RX	79.3			4.0
STEWART 4327R2X	79.0	69.5		3.0	DYNA-GRO S46XS87	79.2	72.8		2.3
STEWART 4527R2X	78.2	73.4		3.0	AGRIGOLD G4685RX	78.9			1.7
AGRIGOLD G4380RX	78.1			3.0	REV® 49L88™	78.8			3.3
ARMOR 44-D51	78.0			3.0	BECK 4669X2	78.6			1.3
UNIVERSITY OF MISSOURI S14-9051R	77.9			2.3	PROGENY 4929 RXS	76.9			1.7
GREAT LAKES HYBRIDS GL4573NSRX	77.5			1.7	PIONEER P48T27X	76.2			2.3
S45-K5X	77.3			3.3	STEWART 4927R2X	76.0	66.4		1.7
PROGENY 4247 LL	76.6	67.7	61.4	3.0	CZ 4818 LL	75.8	72.1	70.6	3.7
ASGROW AG45X8	76.2			2.7	REV® 47R34™	75.1	71.6	73.2	2.7
HPT 4522NR	75.7			1.3	CZ 4820 LL	74.8			2.7
SEED CONSULTANTS SC 8428X™	75.7			5.0	AGRIGOLD G4990RX	74.7			2.0
AGRIGOLD G4440RX	74.7			2.7	DYNA-GRO S49XS76	74.6	67.7		1.3
AGRIGOLD G4024RX	74.5			2.3	PIONEER P46A16R	74.3			1.3
CZ 4105 LL	74.4	70.7	71.6	1.3	HS 46X60	74.0	71.4		1.7
LG SEEDS C4227RX	74.2			1.3	S48-R2X	73.6			2.3
LG SEEDS C4458RX	73.6	67.7		2.3	PROGENY 4799 RXS	73.2			2.7
DYNA-GRO S42RY77	73.0	65.9		3.7	PROGENY 4757 RY	72.8	68.5	69.7	2.3
					ASGROW AG46X6 72.0 66.7 1.3				
					DYNA-GRO S48XT56 71.7 68.3 2.0				

continued



Table 7. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2017	2016-17	2015-17	2017
PROGENY 4620 RXS	70.6			2.3
REV <sup>®</sup> 48A26 <sup>™</sup>	70.4	69.9		3.3
WARREN SEED BG 4911 RR2X	69.9			3.0
PIONEER P47T36R	69.8	63.3	68.1	2.7
HPT 4852NR	69.2	64.2		4.3
UNIVERSITY OF MISSOURI S14-6391C	69.1			3.0
ARMOR ARX4807	68.9			2.0
PROGENY 4816 RX	68.5			1.0
GO SOY 49L17	67.7			2.0
CZ 4748 LL	67.5	66.5		1.3
ASGROW AG47X6	66.8	65.0		1.3
GO SOY Ireane	66.6	65.5		3.3
ASGROW AG46X8	66.4			2.7
UNISOUTH GENETICS USG 7487XTS	66.0			1.3
PROGENY 4851 RX	65.7			3.3
HS 49X60	65.7	67.4		1.3
GREAT LAKES HYBRIDS GL4761NRX	65.2	63.5		2.7
UNIVERSITY OF MISSOURI S13-1805C	64.9			3.7
LG SEEDS C4845RX	64.8	63.0		1.0
GO SOY 47B17	64.6			2.0
REV <sup>®</sup> 48A76 <sup>™</sup>	64.2	65.2		2.0
REV <sup>®</sup> 4927X <sup>™</sup>	63.5			2.3
AGRIGOLD G4835RX	63.3			1.7
UNISOUTH GENETICS USG 7497XT	62.7			3.0
CAVERNDAL CF 478 RR2Y/STS <sub>n</sub>	62.3	61.3		2.3
WARREN SEED DS 4633	62.0	61.1	65.0	4.3
AGS GS48R216	60.9	65.2		4.3
WARREN SEED DS 4850	60.1	63.9	65.1	2.0
UNIVERSITY OF MISSOURI S14-15146R	60.1			2.3
GO SOY 49G16	58.0	54.3		3.7
REV <sup>®</sup> 4857X <sup>™</sup>	58.0			2.0
ASGROW AG48X8	57.6			2.7
PROGENY 4716 LL	57.2			3.7
ARMOR ARX4607	56.5			4.3
STEWART 4716R2X	55.9	49.3		1.7
REV <sup>®</sup> 48L63 <sup>™</sup>	55.5	56.0		3.7
GO SOY 4714LL	55.4	56.3		4.3
PENNYRILE (long term check-released 1987)	52.4	54.3		1.7
UNIVERSITY OF ARKANSAS R13-1019	50.3			4.0
<b>GROUP IV LATE AVERAGE</b>	<b>69.7</b>	<b>66.1</b>	<b>69.0</b>	<b>2.4</b>
LSD (0.10)	4.3	2.7	2.3	
C.V.	5.9	5.4	5.5	
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>				
CZ 5147 LL	<b>87.4</b>			3.3
PROGENY 5016 RXS	82.4			2.0
UNIVERSITY OF MISSOURI S14-9017R	80.7			1.3
UNIVERSITY OF ARKANSAS UA 5014C	78.8	69.3		3.0
CZ 5150 LL	78.8			1.0
PROGENY 4996 RXS	78.4			1.7
PROGENY 5414 LLS	76.7			3.3
UNIVERSITY OF ARKANSAS OSAGE	76.3	68.0	63.8	3.7
PIONEER P50T64R	75.8	<b>72.3</b>	<b>72.5</b>	1.3
CZ 5242 LL	75.7			3.0
PROGENY 5157 RXS	73.8			3.0
USDA-ARS JTN-5110	72.4	64.7	63.6	3.7
GO SOY 54G16	72.1			2.0
UNIVERSITY OF MISSOURI S13-1955C	70.2			4.0
UNIVERSITY OF ARKANSAS R09-430	63.3	58.9	64.7	3.3
ESSEX (long term check-released 1974)	62.5	57.9		2.0
UNIVERSITY OF ARKANSAS UA 5414RR	61.9	60.3	58.4	4.7
<b>GROUP V AVERAGE</b>	<b>74.6</b>	<b>64.5</b>	<b>64.6</b>	<b>2.7</b>
LSD (0.10)	4.1	2.5	2.2	
C.V.	5.1	4.7	5.2	

<sup>A</sup> 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.

<sup>B</sup> 2017, 2016, and 2015 data were collected in Butler Co.

## AGRONOMIC INFORMATION

GPS coordinates	37°14'03.4"N 86°52'57.0"W
Soil type	Newark silt loam
Slopes	0 – frequently flooded
Previous crop	Corn (corn soybean rotation)
Soil test	pH 6.86, P 35, K 135 (Nov. 2015)
SCN test	0
Fertilizer/lime applied	0-0-60 & 18-46-0 (10/7/2016) and Ammonium Sulfate 21-0-0 (12/12/2016)
Agricultural practice	No-till
Pre-planting herbicides	Shredded 2,4-D LV6, Metribuzin 75DF, Roundup Weather-MAX (12/12/2016)
Post-planting herbicides	Reflex, FirstRate, Intensity One (7/19/2017)
Harvest dates	11/11/2017 (all MG)
50% chance of killing frost	10/20

### Butler (Morgantown)

Month	Total Monthly Precipitation (in.)	Monthly Average (°F)	Temperatures	
			Highest T <sup>o</sup> recorded (°F)	Lowest T <sup>o</sup> recorded (°F)
March	3.18	49.3	78.7	16.8
April	4.24	62.2	87.0	33.0
May	4.95	65.8	87.5	36.6
June	5.40	72.6	92.3	50.1
July	2.25	77.6	94.2	54.4
August	2.65	73.3	92.9	50.5
September	7.31	68.6	91.1	44.6
October	4.35	58.8	86.0	27.0
November (11/11)	1.21	56.0	80.6	39.2

**Table 8. 2017 Kentucky Soybean Variety Performance Tests, Caldwell County - Pennyrite Region**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING	BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2017	2016-17	2015-17	2017		2017	2016-17	2015-17	2017
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>					WARREN SEED DS 4340	60.4	55.6		3.0
ASGROW AG29X8	46.4			1.0	DYNA-GRO S41XS98	60.3			3.0
BRODBECK 295R2	43.0	50.0		1.7	ASGROW AG45X8	59.9			2.0
PIONEER P28T08R	40.4	43.9	53.1	1.0	STEWART 4438R2X	58.3			1.7
					STINE 42LI32	58.3			2.7
<b>GROUP II AVERAGE</b>	<b>43.3</b>	<b>47.0</b>	<b>53.1</b>	<b>1.2</b>	STINE 41RH22	57.8	58.8		1.3
LSD (0.10)	4.1	2.7			BRODBECK 446R2	57.6	61.9		3.3
C.V.	7.5	7.3			GO SOY 43L16	57.1	59.3		2.7
					BECK 4119X2	56.7			1.7
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>					CZ 4105 LL	56.6	57.6	66.4	3.3
SEED CONSULTANTS SCS 9393RR™	67.7	62.8	72.9	1.0	PIONEER P41T33R	56.3	57.9		2.3
HPT 3919NR	67.1	63.2		2.0	STINE 44LH22	56.0	58.8		3.0
CAVERNDAL CF 387 HT-GLYn	66.8	60.6		1.7	STEWART 4116R2X	55.9	59.3		1.3
SEED CONSULTANTS SCS 9385RR™	66.2	63.0	69.4	1.7	ASGROW AG43X8	55.7			2.7
ASGROW AG39X7	64.5	62.0		1.7	PROGENY 4444 RXS	55.4			1.7
BRODBECK 388R2	62.7			2.3	UNIVERSITY OF MISSOURI S13-10590C	55.1			2.0
CZ 3945 LL	62.2	61.8	60.2	2.0	ASGROW AG44X6	54.8	57.8		4.3
PIONEER P38T61BR	62.0	61.6		2.3	CZ 4540 LL	54.7	55.6	59.2	2.7
GREAT LAKES HYBRIDS GL3777NSRX	59.7			1.3	SEED CONSULTANTS SC 8428X™	54.5			4.0
GREAT LAKES HYBRIDS GL3979NRX	59.4			1.7	GREAT LAKES HYBRIDS GL4573NSRX	54.1			2.7
HPT 3916NX	58.4			1.3	WARREN SEED BG 4210 RR2X	53.7			2.3
PIONEER P38A98X	57.8			2.3	STEWART 4527R2X	52.2	55.6		1.7
WARREN SEED DS 3838	57.4	54.9	63.4	1.3	UNIVERSITY OF MISSOURI S13-3851C	52.2			2.3
PIONEER P35T58R	56.0	55.1	65.4	1.7	CZ 4044 LL	51.8	52.7		1.7
AGRIGOLD G3980RX	55.4			1.3	LG SEEDS C4227RX	51.0			3.0
AGRIGOLD G3690RX	54.6			1.7	GO SOY 41B17	50.9			3.0
BRODBECK 365R2	54.3	56.8		2.3	CAVERNDAL CF 404n	50.6	53.2	63.9	2.7
DYNA-GRO S39XT68	53.7			1.7	PIONEER P40A47X	49.4			2.3
ARMOR 39-D39	53.7			2.3	STEWART 4327R2X	49.3	57.8		2.3
PIONEER P38T42R	53.0	53.3		1.7	S41-A1X	49.0			3.0
CZ 3737 LL	52.8	52.8		2.7	CAVERNDAL CF 427 HT-GLY/STS <sub>n</sub>	48.1			1.7
SEED CONSULTANTS SC 9367R™	52.6	55.6		1.0	UNIVERSITY OF MISSOURI S13-2743C	47.3			2.3
DYNA-GRO S39XT08	51.9			1.3	ARMOR 42-D27	45.3			1.3
ARMOR ARX3917	51.6			1.7	SEED CONSULTANTS SCS 9428R™	45.2			2.7
AGRIGOLD G3410RX	50.5			1.7	BRODBECK 417R2	44.3	49.9		3.0
BRODBECK 348R2	50.4			1.7	GREAT LAKES HYBRIDS GL4174NSRX	44.2			2.3
GO SOY 39C15	50.0	54.7		2.0	S43-V3X	42.2			2.3
ASGROW AG37X8	49.6			1.0	PROGENY 4255 RX	39.8			2.0
ASGROW AG38X8	48.8			1.0	CZ 4222 LL	37.3	41.3		2.3
AGRIGOLD G3520RX	47.7			1.3					
CZ 3841 LL	47.5	54.1	62.1	2.3	<b>GROUP IV EARLY AVERAGE</b>	<b>57.2</b>	<b>58.5</b>	<b>65.4</b>	<b>2.4</b>
BRODBECK 368R2	47.1			1.0	LSD (0.10)	4.8	3.0	3.2	
WARREN SEED BG 3810 RR2X	47.0			1.0	C.V.	7.9	7.0	8.8	
S39-P5X	46.2			1.7					
ASGROW AG38X6	45.8	50.7		2.0	<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
					PROGENY 4851 RX	76.6			3.3
<b>GROUP III AVERAGE</b>	<b>55.2</b>	<b>57.7</b>	<b>65.6</b>	<b>1.7</b>	HBK LL4953	71.3			1.0
LSD (0.10)	4.9	3.1	3.2		GREAT LAKES HYBRIDS GL4761NRX	70.4	68.5		1.3
C.V.	8.5	7.5	9.0		CZ 4820 LL	70.3			3.7
					BECK 4669X2	69.8			2.3
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>					PROGENY 4929 RXS	69.7			2.3
ARMOR 44-D51	71.3			3.3	DYNA-GRO S48XS78	69.5			2.3
S45-K5X	70.9			2.3	ARMOR ARX4807	68.7			2.0
DYNA-GRO S43RY95	68.3	67.9	71.7	4.0	HS 48X70	68.5			1.7
WARREN SEED BG 4510 RR2X	67.8			2.3	GO SOY Ireane	68.4	62.2		2.3
BRODBECK 426R2	67.4	63.5		2.0	REV® 48L63™	68.0	65.1		3.3
ARMOR 44-D47	67.2			2.0	PIONEER P47T36R	66.4	61.9	67.6	1.0
UNIVERSITY OF MISSOURI S14-9051R	66.9			1.3	<b>UNIVERSITY OF MISSOURI S14-15146R</b>	65.8			2.7
DYNA-GRO SX17844XS	66.8			1.3	HS 49X60	65.6	60.4		1.0
DYNA-GRO S42RY77	66.6	62.3		4.0	AGRIGOLD G4990RX	65.1			1.7
LG SEEDS C4458RX	66.3	65.5		2.0	PIONEER P46A 16R	64.8			1.0
STEWART 4228R2X	66.1			2.0	<b>PROGENY 4716 LL</b>	64.7			3.0
HS 44X60	65.8			1.3	REV® 48A76™	64.4	64.6		1.0
ASGROW AG43X7	65.4	67.2		3.0	REV® 49L88™	63.5			0.9
PROGENY 4516 RXS	64.9			2.3	ASGROW AG46X6	63.4	61.6		2.0
DYNA-GRO S43XS27	63.4	60.1		2.7	WARREN SEED DS 4633	62.4	60.4	66.2	4.0
ASGROW AG41X8	63.3			2.0	GO SOY 49L17	61.8			1.3
SEED CONSULTANTS SCS 9456SR™	63.0	64.0	66.9	2.7	WARREN SEED BG 4911 RR2X	61.6			1.3
AGRIGOLD G4024RX	63.0			3.8	REV® 48A26™	61.6	61.9		1.3
PROGENY 4247 LL	62.9	61.2	64.1	1.7	ARMOR ARX4607	61.3			2.0
REV® 45L57™	62.5			2.7	LG SEEDS C4615RX	61.1	58.7		2.0
HPT 4522NR	62.2			1.7	GO SOY 4714LL	60.9	57.8		0.9
AGRIGOLD G4380RX	61.7			1.7	WARREN SEED DS 4850	60.9	61.1	68.6	1.0
AGRIGOLD G4440RX	61.6			2.0	DYNA-GRO S46XS87	60.9	60.6		2.0

continued

Table 8. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LOGGING
	2017	2016-17	2015-17	2017
S48-R2X	59.9			2.0
UNISOUTH GENETICS USG 7496XTS	59.9	62.1		1.0
PROGENY 4930 LL	59.5	59.6	62.1	1.3
CAVERNDALE CF 478 RR2Y/STS <sub>n</sub>	58.8	57.8		1.7
STEWART 4927R2X	58.4	59.5		1.3
HPT 4852NR	57.9	57.0		3.7
UNISOUTH GENETICS USG 7497XT	57.6			1.0
ARMOR 46-D08	57.5	56.2		1.3
PROGENY 4757 RY	57.3	60.7	61.8	1.3
REV <sup>®</sup> 47R34 <sup>™</sup>	56.8	54.6	59.3	3.7
PROGENY 4620 RXS	56.1			1.7
UNIVERSITY OF MISSOURI S14-6391C	56.1			1.0
CZ 4748 LL	55.9	56.0		1.0
REV <sup>®</sup> 4857X <sup>™</sup>	55.1			1.3
UNIVERSITY OF MISSOURI S13-1805C	55.1			4.3
DYNA-GRO S49XS76	54.6	54.1		1.0
AGRIGOLD G4835RX	54.0			1.0
UNISOUTH GENETICS USG 7487XTS	53.8			2.0
GO SOY 47B17	53.5			2.0
ASGROW AG47X6	53.2	58.4		1.0
ASGROW AG46X8	53.2			3.0
LG SEEDS C4845RX	53.0	57.6		1.0
STINE 48RI22	52.7	49.9		1.3
HS 46X60	52.6	54.7		1.0
AGRIGOLD G4685RX	52.1			1.3
STEWART 4716R2X	51.7	48.7		1.7
UNIVERSITY OF ARKANSAS R13-1019	51.5			4.0
AGS GS48R216	50.4	55.9		1.0
CZ 4818 LL	49.7	54.1	57.6	1.3
REV <sup>®</sup> 4927X <sup>™</sup>	49.5			0.9
PROGENY 4799 RXS	49.0			1.3
ASGROW AG48X8	48.3			2.0
LG SEEDS C4710RX	48.1			2.0
PIONEER P48T27X	47.6			1.0
DYNA-GRO S48XT56	46.7	51.2		1.0
PROGENY 4816 RX	46.6			1.0
BECK 4991X2	46.4	49.3		2.0
PENNYRILE (long term check-released 1987)	45.3	45.1		2.7
GO SOY 49G16	45.2	49.3		3.0
<b>GROUP IV LATE AVERAGE</b>	<b>58.5</b>	<b>57.5</b>	<b>63.3</b>	<b>1.8</b>
LSD (0.10)	4.2	2.7	2.3	
C.V.	6.8	6.2	6.3	
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>				
UNIVERSITY OF ARKANSAS R09-430	<b>70.9</b>	<b>63.4</b>	<b>64.1</b>	2.7
UNIVERSITY OF ARKANSAS OSAGE	60.6	56.7	58.1	2.3
PIONEER P50T64R	59.3	60.6	62.0	1.0
CZ 5242 LL	56.6			1.0
CZ 5150 LL	55.8			1.7
UNIVERSITY OF MISSOURI S14-9017R	55.0			1.0
UNIVERSITY OF MISSOURI S13-1955C	53.4			3.3
UNIVERSITY OF ARKANSAS UA 5414RR	53.2	51.5	52.8	2.3
CZ 5147 LL	51.9			1.7
PROGENY 5016 RXS	51.5			1.0
USDA-ARS JTN-5110	51.1	53.8	53.7	3.7
UNIVERSITY OF ARKANSAS UA 5014C	51.0	51.6		1.0
PROGENY 4996 RXS	49.0			1.7
ESSEX (long term check-released 1974)	48.4	48.4		1.7
GO SOY 54G16	48.1			2.0
PROGENY 5157 RXS	45.8			1.0
PROGENY 5414 LLS	43.5			2.0
<b>GROUP V AVERAGE</b>	<b>53.2</b>	<b>55.1</b>	<b>58.1</b>	<b>1.8</b>
LSD (0.10)	5.3	3.1	2.4	
C.V.	9.2	7.7	7.1	

<sup>A</sup> 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.

<sup>B</sup> 2017, 2016, and 2015 data were collected in Caldwell Co.

## AGRONOMIC INFORMATION

GPS coordinates	37°5'50.5"N 87°51'51.4"W
Soil type	Crider silt loam
Slopes	0-6%, eroded
Previous crop	Tobacco, winter wheat (cover crop)
Soil test	pH 6.64, P 82, K 328
SCN test	3,375 (moderate)
Fertilizer/lime applied	NA
Agricultural practice	No-till
Pre-planting herbicides	Sharpen, Glyphosate (4/20/2017); Glyphosate, Dual II Magnum, and Authority XL (5/9/2017)
Planting date	5/16/2017
Post-planting herbicides	Intensity One (6/30/2017)
Harvest dates	MG II and III: 10/04/2017; MG IV Early, IV Late and V: 11/09/2017
50% chance of killing frost	10/21

## Caldwell (Princeton)

Month	Total Monthly Precipitation (in.)	Monthly Average (°F)	Temperatures	
			Highest T <sup>o</sup> recorded (°F)	Lowest T <sup>o</sup> recorded (°F)
March	4.06	49.2	80.6	17.5
April	4.29	62.3	85.9	34.3
May	4.41	66.3	85.6	39.9
June	5.41	72.9	89.4	52.0
July	2.23	77.8	94.3	59.4
August	1.96	74.1	93.0	50.2
September	3.35	70.1	89.2	44.4
October	6.69	60.0	84.8	29.8
November (11/09)	2.53	58.9	75.1	38.9

**Table 9. 2017 Kentucky Soybean Variety Performance Tests, Calloway County - Purchase Region**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2017	BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2017
	2017	2016-17	2015-17			2017	2016-17	2015-17	
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>									
ASGROW AG29X8	61.4			1.7	ASGROW AG44X6	67.2	60.1		2.3
BRODBECK 295R2	52.8	48.6		1.7	LG SEEDS C4458RX	67.1	58.7		2.0
PIONEER P28T08R	47.5	41.3	45.0	1.7	ASGROW AG41X8	66.6			2.7
					DYNA-GRO S42RY77	66.5	62.3		3.3
<b>GROUP II AVERAGE</b>	<b>53.9</b>	<b>45.0</b>	<b>45.0</b>	<b>1.7</b>	BRODBECK 426R2	66.4	59.3		1.7
LSD (0.10)	1.6	1.0			BRODBECK 417R2	65.9	57.9		2.3
C.V.	2.4	2.5			DYNA-GRO S43RY95	65.6	58.5	59.7	3.3
					DYNA-GRO S43XS27	65.6	57.4		2.3
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>									
PIONEER P38T42R	75.5	63.4		2.3	GREAT LAKES HYBRIDS GL4174NSRX	65.6			1.7
ASGROW AG38X8	71.8			2.0	UNIVERSITY OF MISSOURI S13-2743C	65.3			3.3
CAVERNDALE CF 387 HT-GLYn	71.1	67.3		1.2	GO SOY 43L16	64.9	63.1		3.3
SEED CONSULTANTS SCS 9385RR™	69.1	65.4	62.8	1.7	PROGENY 4247 LL	64.7	63.3	59.4	2.3
PIONEER P38T61BR	68.8	63.4		2.7	WARREN SEED BG 4210 RR2X	64.2			1.3
HPT 3919NR	68.5	62.6		2.3	STEWART 4438R2X	63.9			2.0
SEED CONSULTANTS SCS 9393RR™	68.3	57.8	59.8	1.0	CAVERNDALE CF 404n	63.2	64.1	60.6	3.3
BRODBECK 368R2	67.6			1.7	SEED CONSULTANTS SCS 9428R™	63.0			2.7
AGRIGOLD G3690RX	67.5			2.3	STEWART 4527R2X	61.9	55.6		1.3
GREAT LAKES HYBRIDS GL3777NSRX	66.8			2.7	S41-A1X	61.8			2.0
ASGROW AG38X6	66.7	57.2		1.3	ARMOR 42-D27	61.7			1.0
AGRIGOLD G3980RX	65.9			3.3	WARREN SEED DS 4340	61.7	54.5		3.3
HPT 3916NX	65.8			2.7	GREAT LAKES HYBRIDS GL4573NSRX	61.5			1.7
BRODBECK 388R2	64.9			1.3	CZ 4222 LL	60.8	49.2		3.3
ASGROW AG39X7	64.8	56.3		2.0	ARMOR 44-D51	60.6			3.0
S39-P5X	64.6			1.7	GO SOY 41B17	60.0			2.7
AGRIGOLD G3520RX	64.2			2.3	PIONEER P40A47X	60.0			2.0
ASGROW AG37X8	62.7			3.7	SEED CONSULTANTS SCS 94565R™	59.8	60.5	57.6	1.7
ARMOR ARX3917	61.4			1.7	CZ 4105 LL	58.4	57.6	58.7	3.0
AGRIGOLD G3410RX	61.1			1.7	REV® 45L57™	58.3			2.7
PIONEER P35T58R	60.2	54.3	54.0	2.3	PROGENY 4255 RX	57.5			3.7
DYNA-GRO S39XT68	59.2			3.7	ASGROW AG45X8	56.9			3.3
GREAT LAKES HYBRIDS GL3979NRX	58.9			1.3	DYNA-GRO S41X598	56.7			1.3
SEED CONSULTANTS SC 9367R™	58.8	57.0		2.7	ASGROW AG43X7	55.5	58.0		3.0
CZ 3945 LL	58.3	52.5	54.3	2.7	UNIVERSITY OF MISSOURI S14-9051R	55.5			4.0
GO SOY 39C15	58.3	56.4		3.7	STINE 44LH22	54.9	57.3		4.0
WARREN SEED BG 3810 RR2X	57.5			2.3	STEWART 4228R2X	54.1			1.7
BRODBECK 348R2	56.4			3.3	AGRIGOLD G4024RX	53.0			2.7
WARREN SEED DS 3838	55.9	52.3	51.9	2.7	STINE 41RH22	51.7	50.4		2.3
CZ 3737 LL	55.7	54.7		4.3	CZ 4540 LL	51.3	50.7	50.4	2.3
BRODBECK 365R2	55.7	55.9		3.0	STEWART 4116R2X	50.4	50.0		2.3
PIONEER P38A98X	55.3			2.7	UNIVERSITY OF MISSOURI S13-3851C	46.7			2.7
CZ 3841 LL	54.5	48.8	49.9	2.7					
ARMOR 39-D39	53.7			1.7	<b>GROUP IV EARLY AVERAGE</b>	<b>64.3</b>	<b>58.4</b>	<b>57.7</b>	<b>2.5</b>
DYNA-GRO S39XT08	51.2			2.3	LSD (0.10)	6.1	3.6	2.7	
					C.V.	8.9	7.9	7.4	
<b>GROUP III AVERAGE</b>	<b>62.5</b>	<b>57.8</b>	<b>55.5</b>	<b>2.4</b>	<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
LSD (0.10)	5.2	3.1	2.5		HBK LL4953	80.7			1.7
C.V.	7.8	7.1	7.0		LG SEEDS C4845RX	78.6	66.2		2.0
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>					HS 49X60	78.5	63.3		1.7
DYNA-GRO SX17844XS	80.1			2.7	BECK 4991X2	76.9	67.0		2.7
HS 44X60	77.4			1.7	DYNA-GRO S48XT56	76.3	61.6		2.0
WARREN SEED BG 4510 RR2X	76.9			1.3	PROGENY 4930 LL	76.2	67.0	66.4	2.3
HPT 4522NR	74.5			2.0	HPT 4852NR	75.2	66.7		4.0
LG SEEDS C4227RX	73.8			2.3	CZ 4820 LL	73.5			5.0
BRODBECK 446R2	73.1	64.9		2.7	PIONEER P46A16R	73.4			2.0
S45-K5X	72.7			3.3	PROGENY 4716 LL	73.3			4.3
PIONEER P41T33R	72.0	67.5		2.7	ASGROW AG47X6	72.5	64.6		3.0
AGRIGOLD G4380RX	71.9			2.3	PROGENY 4757 RY	72.0	69.2	68.2	5.0
STEWART 4327R2X	71.3	62.3		2.3	ASGROW AG46X6	68.7	61.8		3.0
PROGENY 4516 RXS	71.1			3.0	REV® 48A76™	68.6	66.9		4.7
STINE 42LI32	70.9			3.0	ASGROW AG46X8	68.2			4.3
BECK 4119X2	70.4			1.7	DYNA-GRO S49XS576	68.1	63.0		3.0
ASGROW AG43X8	69.8			2.3	REV® 47R34™	67.6	65.3	62.5	4.0
SEED CONSULTANTS SC 8428X™	69.6			4.3	BECK 4669X2	67.3			2.0
AGRIGOLD G4440RX	68.6			2.7	ARMOR 46-D08	67.2	61.7		3.7
PROGENY 4444 RXS	68.6			3.7	WARREN SEED DS 4633	66.9	67.1	64.5	3.3
ARMOR 44-D47	68.5			1.7	GO SOY 4714LL	66.5	60.3		3.0
S43-V3X	68.3			3.0	STEWART 4927R2X	66.5	52.0		4.0
CAVERNDALE CF 427 HT-GLY/STSn	67.7			2.7	PROGENY 4620 RXS	66.4			2.3
CZ 4044 LL	67.6	58.3		3.0	LG SEEDS C4615RX	66.0	54.4		4.0
UNIVERSITY OF MISSOURI S13-10590C	67.4			1.7	AGRIGOLD G4835RX	65.7			4.3
					PROGENY 4851 RX	65.4			3.3
					PIONEER P47T36R	65.3	62.4	60.4	2.7

continued

**Table 9. 2016** (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2017
	2017	2016-17	2015-17	
HS 48X70	65.2			2.0
GO SOY Ireane	64.8	59.5		4.3
AGRIGOLD G4685RX	64.3			3.3
UNIVERSITY OF MISSOURI S14-15146R	64.0			4.0
REV <sup>®</sup> 49L88™	63.9			3.3
REV <sup>®</sup> 48A26™	63.7	62.5		4.0
CZ 4748 LL	63.4	59.5		3.3
S48-R2X	62.4			3.0
PROGENY 4799 RXS	62.3			1.3
ARMOR ARX4807	61.9			4.0
PIONEER P48T27X	61.6			3.0
GREAT LAKES HYBRIDS GL4761NRX	61.3	56.5		2.3
PROGENY 4816 RX	61.2			1.7
PROGENY 4929 RXS	60.8			2.7
REV <sup>®</sup> 48L63™	58.4	58.3		4.3
GO SOY 49L17	58.3			4.0
CZ 4818 LL	58.0	52.8	54.7	3.7
GO SOY 47B17	58.0			3.7
ASGROW AG48X8	57.6			3.0
WARREN SEED DS 4850	57.6	51.2	53.3	3.0
CAVERNDAL CF 478 RR2Y/ST5n	57.4	51.1		3.3
UNISOUTH GENETICS USG 7487XTS	56.9			3.0
UNIVERSITY OF ARKANSAS R13-1019	56.8			4.7
UNISOUTH GENETICS USG 7497XT	56.3			4.7
UNIVERSITY OF MISSOURI S14-6391C	56.2			4.0
AGRIGOLD G4990RX	56.1			4.7
HS 46X60	55.6	49.7		3.0
UNIVERSITY OF MISSOURI S13-1805C	55.4			4.7
WARREN SEED BG 4911 RR2X	55.1			4.0
REV <sup>®</sup> 4927X™	55.1			4.3
AGS GS48R216	54.4	59.5		4.7
UNISOUTH GENETICS USG 7496XTS	53.5	53.6		2.3
DYNA-GRO S48XS78	53.3			5.0
ARMOR ARX4607	53.0			3.0
DYNA-GRO S46XS87	51.4	48.4		2.7
STINE 48RI22	50.5	45.9		3.3
LG SEEDS C4710RX	50.4			2.7
STEWART 4716R2X	49.9	44.1		4.3
REV <sup>®</sup> 4857X™	45.5			3.7
PENNYRILE (long term check-released 1987)	45.1	41.9		3.3
GO SOY 49G16	44.3	48.8		5.0
<b>GROUP IV LATE AVERAGE</b>	<b>62.5</b>	<b>58.4</b>	<b>61.4</b>	<b>3.4</b>
LSD (0.10)	4.8	2.8	2.4	
C.V.	7.3	6.4	6.6	
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>				
CZ 5150 LL	<b>74.9</b>			2.7
PROGENY 5016 RXS	67.7			3.7
CZ 5147 LL	65.9			3.7
UNIVERSITY OF ARKANSAS UA 5014C	65.1	<b>64.3</b>		4.0
PIONEER P50T64R	60.8	57.7	<b>57.6</b>	1.7
USDA-ARS JTN-5110	60.1	54.8	51.2	3.3
GO SOY 54G16	59.6			3.7
UNIVERSITY OF MISSOURI S14-9017R	58.7			4.0
PROGENY 5157 RXS	58.7			2.3
UNIVERSITY OF ARKANSAS R09-430	58.1	55.1	52.7	4.3
PROGENY 4996 RXS	56.9			4.3
CZ 5242 LL	55.1			4.3
PROGENY 5414 LLS	54.3			3.0
UNIVERSITY OF MISSOURI S13-1955C	50.8			4.7
ESSEX (long term check-released 1974)	48.0	47.1		4.3
UNIVERSITY OF ARKANSAS UA 5414RR	47.9	43.1	42.2	4.7
UNIVERSITY OF ARKANSAS OSAGE	47.7	46.2	47.4	4.3
<b>GROUP V AVERAGE</b>	<b>58.3</b>	<b>52.6</b>	<b>50.2</b>	<b>3.7</b>
LSD (0.10)	4.7	2.9	2.4	
C.V.	7.5	6.8	7.2	

<sup>A</sup> 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.

<sup>B</sup> 2017, 2016, and 2015 data were collected in Calloway Co.

**AGRONOMIC INFORMATION**

GPS coordinates	36°36'55.7"N 88°21'00.4"W
Soil type	Grenada silt loam
Slopes	0-2%
Previous crop	Tobacco, winter wheat (cover crop)
Soil test	pH 6.2, P 104, K 433
SCN test	0
Fertilizer/lime applied	0.5, 20-40-80 (February 2017)
Agricultural practice	No-till
Pre-planting herbicides	NA
Planting date	5/17/2017
Post-planting herbicides	Intensity One (6/30/2017)
Harvest dates	MG II and III: 10/02/2017; MG IV Early: 10/03/2017; MG IV Late and V: 11/10/2017
50% chance of killing frost	10/21

**Calloway (Murray)**

Month	Total Monthly Precipitation (in.)	Monthly Average (°F)	Temperatures	
			Highest T <sup>o</sup> recorded (°F)	Lowest T <sup>o</sup> re-corded (°F)
March	4.89	50.3	82.2	18.7
April	5.03	62.2	85.6	33.9
May	4.64	66.8	85.6	41.3
June	5.51	73.8	90.9	52.9
July	3.93	78.3	93.2	58.1
August	5.98	74.3	91.2	51.8
September	2.2	70.3	90.1	46
October	5.98	60.6	86.1	30.8
November (11/10)	2.11	59.0	75.8	48.5

**Table 10. 2017 Kentucky Soybean Variety Performance Tests, Cumberland County - Lake Cumberland Region (1)**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING	BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2017	2016-17	2015-17			2017	2017	2016-17	
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>					<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>				
BRODBECK 295R2	61.6	54.4		1.0	DYNA-GRO S39XT08	81.3			1.3
PIONEER P28T08R	58.2	54.1	56.9	1.3	ASGROW AG39X7	76.2	69.0		1.0
ASGROW AG29X8	46.7			1.0	ARMOR ARX3917	74.3			1.3
					ASGROW AG38X6	73.3	63.7		1.3
<b>GROUP II AVERAGE</b>	<b>55.5</b>	<b>54.2</b>	<b>56.9</b>	<b>1.1</b>	S39-P5X	73.1			1.7
LSD (0.10)	4.4	3.2	2.5		SEED CONSULTANTS SCS 9393RR™	72.6	65.7	69.6	1.0
C.V.	6.0	7.6	7.3		AGRIGOLD G3690RX	72.3			1.7
					SEED CONSULTANTS SCS 9385RR™	72.2	64.8	71.1	1.0
					PIONEER P38T42R	71.9	65.3		3.0
					BRODBECK 368R2	71.8			1.0
					ASGROW AG38X8	71.8			1.0
					ARMOR 39-D39	71.3			1.0
					ASGROW AG37X8	70.8			1.3
					PIONEER P35T58R	70.5	65.1	66.1	1.7
					BRODBECK 388R2	70.4			1.0
					HPT 3916NX	69.3			1.0
					GO SOY 39C15	68.3	62.9		1.0
					BRODBECK 365R2	68.1	61.7		1.0
					DYNA-GRO S39XT68	68.0			1.0
					WARREN SEED BG 3810 RR2X	67.8			1.0
					SEED CONSULTANTS SC 9367R™	67.1	56.2		1.7
					AGRIGOLD G3980RX	66.7			2.3
					PIONEER P38A98X	65.8			1.0
					HPT 3919NR	65.3	63.9		1.0
					CZ 3841 LL	65.1	59.0	62.4	2.0
					AGRIGOLD G3410RX	65.0			1.0
					CAVERNDAL CF 387 HT-GLYn	64.7	69.2		1.0
					PIONEER P38T61BR	63.3	57.0		1.7
					CZ 3737 LL	62.8	57.4		3.7
					GREAT LAKES HYBRIDS GL3777NSRX	62.0			1.3
					AGRIGOLD G3520RX	61.5			1.7
					BRODBECK 348R2	60.2			1.3
					CZ 3945 LL	59.9	55.6	63.3	2.0
					WARREN SEED DS 3838	54.7	62.0	67.0	2.0
					GREAT LAKES HYBRIDS GL3979NRX	37.8			1.3
<b>GROUP III AVERAGE</b>	<b>67.4</b>	<b>62.4</b>	<b>66.6</b>	<b>1.4</b>	<b>GROUP IV EARLY AVERAGE</b>	<b>82.1</b>	<b>65.7</b>	<b>65.5</b>	<b>1.6</b>
LSD (0.10)	5.9	3.6	2.8		LSD (0.10)	5.2	3.2	2.6	
C.V.	8.3	7.4	7.0		C.V.	6.0	6.0	5.8	
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>					<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
BRODBECK 446R2	96.1	75.4		2.3	WARREN SEED DS 4850	91.3	69.8	71.9	1.3
SEED CONSULTANTS SCS 9456SR™	92.9	75.8	76.5	1.3	PIONEER P46A16R	89.5			1.0
STINE 44LH22	92.7	70.2		2.3	UNISOUTH GENETICS USG 7496XTS	88.1	75.4		1.7
HPT 4522NR	92.2			1.3	REV® 48A26™	87.8	70.1		2.7
ASGROW AG45X8	90.8			1.3	S48-R2X	87.7			1.3
STEWART 4527R2X	89.3	72.7		1.3	CAVERNDAL CF 478 RR2Y/STSn	87.2	70.1		1.0
PIONEER P40A47X	89.2			1.0	DYNA-GRO S49XS76	87.0			1.7
LG SEEDS C4458RX	89.0	65.1		1.3	AGRIGOLD G4685RX	86.3			1.3
PROGENY 4444 RXS	88.9			2.0	ASGROW AG47X6	85.8	72.8		1.0
STEWART 4438R2X	88.9			1.0	WARREN SEED DS 4633	85.5	68.6	71.0	3.3
REV® 45L57™	88.7			1.7	STEWART 4927R2X	85.4	65.6		1.0
ARMOR 44-D51	88.6			2.3	PROGENY 4620 RXS	85.3			2.0
STEWART 4327R2X	88.0	66.7		2.0	REV® 48L63™	84.8	68.2		2.0
UNIVERSITY OF MISSOURI S14-9051R	87.0			1.3	GO SOY 4714LL	83.3	69.1		2.0
ASGROW AG44X6	86.8	69.5		2.0	DYNA-GRO S46XS87	83.2	67.2		3.0
PROGENY 4255 RX	86.6			1.0	PROGENY 4929 RXS	82.9			1.7
CZ 4105 LL	85.5	60.5	62.2	1.0	STINE 48RI22	82.9	68.7		2.3
UNIVERSITY OF MISSOURI S13-3851C	85.4			1.7	REV® 49L88™	82.4			1.7
AGRIGOLD G4440RX	85.3			1.3	PROGENY 4799 RXS	82.3			1.0
ARMOR 44-D47	84.3			2.0	ASGROW AG46X8	82.0			1.7
S45-K5X	84.2			2.0	PROGENY 4716 LL	82.0			3.0
CZ 4044 LL	83.9	66.0		3.0	BECK 4669X2	81.9			1.3
STINE 42LI32	83.9			2.7	LG SEEDS C4615RX	81.7	62.5		1.7
					ARMOR ARX4807	81.4			1.7
					DYNA-GRO S48XS78	81.2			1.3
					CZ 4748 LL	81.1	66.9		1.7
					PIONEER P48T27X	81.0			2.3
					PROGENY 4757 RY	79.9	62.7	66.5	2.7
					REV® 4857X™	79.7			2.0

continued

Table 10. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2017	2016-17	2015-17	2017
PROGENY 4930 LL	79.6	67.7	64.0	2.0
ARMOR 46-D08	79.5	67.9		3.3
REV <sup>®</sup> 4927X <sup>™</sup>	79.4			2.3
PIONEER P47T36R	79.3	66.6	68.3	1.3
HS 49X60	78.9	67.1		1.0
AGRIGOLD G4835RX	78.7			1.0
ASGROW AG46X6	78.5	64.3		2.3
UNISOUTH GENETICS USG 7487XTS	77.8			1.3
HS 48X70	77.5			1.3
DYNA-GRO S48XT56	77.5	64.7		1.0
HBK LL4953	77.3			2.7
GO SOY 49L17	76.9			2.0
STEWART 4716R2X	76.9	60.1		3.0
CZ 4820 LL	76.9			2.7
PROGENY 4816 RX	76.9			1.0
HS 46X60	76.6	66.4		1.0
GREAT LAKES HYBRIDS GL4761NRX	76.6	71.1		1.0
LG SEEDS C4845RX	75.8	66.9		1.3
WARREN SEED BG 4911 RR2X	75.5			1.0
HPT 4852NR	74.6	61.6		2.0
LG SEEDS C4710RX	74.3			2.7
BECK 4991X2	74.0	64.3		1.0
UNISOUTH GENETICS USG 7497XT	73.0			2.3
AGRIGOLD G4990RX	73.0			1.0
CZ 4818 LL	72.5	62.2	55.9	2.7
UNIVERSITY OF MISSOURI S14-15146R	72.0			2.0
ARMOR ARX4607	71.0			3.3
UNIVERSITY OF MISSOURI S13-1805C	69.3			4.3
REV <sup>®</sup> 47R34 <sup>™</sup>	67.5	59.4	63.1	4.0
GO SOY 47B17	66.9			1.7
REV <sup>®</sup> 48A76 <sup>™</sup>	66.5	58.7		2.3
ASGROW AG48X8	65.3			3.3
PROGENY 4851 RX	65.1			4.3
PENNYRILE (long term check-released 1987)	61.5	42.8		2.0
GO SOY Ireane	61.4	56.8		4.0
GO SOY 49G16	58.6	51.0		5.0
AGS GS48R216	57.4	51.7		3.0
UNIVERSITY OF ARKANSAS R13-1019	56.3			4.7
UNIVERSITY OF MISSOURI S14-6391C	56.3			3.0
<b>GROUP IV LATE AVERAGE</b>	<b>77.2</b>	<b>64.6</b>	<b>65.8</b>	<b>2.1</b>
LSD (0.10)	5.3	3.1	2.5	
C.V.	6.5	6.1	6.0	
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>				
CZ 5242 LL	<b>88.9</b>			1.7
UNIVERSITY OF MISSOURI S14-9017R	85.1			1.3
CZ 5150 LL	82.3			1.3
PROGENY 5016 RXS	81.0			1.3
CZ 5147 LL	75.8			3.0
UNIVERSITY OF ARKANSAS UA 5014C	75.0	<b>62.6</b>		2.0
UNIVERSITY OF ARKANSAS R09-430	75.0	59.8	64.5	3.3
PROGENY 5157 RXS	74.3			1.0
PIONEER P50T64R	71.0	<b>62.6</b>	<b>65.7</b>	1.0
PROGENY 4996 RXS	70.2			2.3
UNIVERSITY OF MISSOURI S13-1955C	68.3			4.0
GO SOY 54G16	67.6			2.7
USDA-ARS JTN-5110	67.1	55.2	52.6	3.7
ESSEX (long term check-released 1974)	60.7	48.6		1.0
UNIVERSITY OF ARKANSAS UA 5414RR	60.5	53.2	51.8	2.7
PROGENY 5414 LLS	60.4			4.7
UNIVERSITY OF ARKANSAS OSAGE	58.1	54.1	53.9	2.3
<b>GROUP V AVERAGE</b>	<b>71.9</b>	<b>56.6</b>	<b>57.7</b>	<b>2.3</b>
LSD (0.10)	3.7	2.5	2.1	
C.V.	4.8	5.2	5.5	

<sup>A</sup> 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.

<sup>B</sup> 2017 and 2016 data were collected in Cumberland Co. 2015 data were collected in Clinton Co.

**AGRONOMIC INFORMATION**

GPS coordinates	36°45'27.4"N 85°17'13.6"W
Soil type	Sensabaugh gravelly loam
Slopes	0-6%, occasionally flooded
Previous crop	Corn (corn soybean rotation)
Soil test	pH 6.77, P 475, K 330
SCN test	0
Fertilizer/lime applied	NA
Agricultural practice	No-till
Pre-planting herbicides	NA
Planting date	6/7/2017
Post-planting herbicides	Reflex, FirstRate, Intensity One (7/3/2017)
Harvest dates	MG II and III: 10/20/2017; MG IV Early, IV Late, and V: 10/31/2017
50% chance of killing frost	10/24

**Cumberland (Burkesville)**

Month	Total Monthly Precipitation (in.)	Monthly Average (°F)	Temperatures	
			Highest T <sup>°</sup> recorded (°F)	Lowest T <sup>°</sup> recorded (°F)
March	4.44	48.1	81.8	14.0
April	4.66	61.9	92.0	30.6
May	6.97	66.2	91.0	35.2
June	6.02	71.5	90.8	50.5
July	5.49	76.7	93.4	54.5
August	6.19	73.3	91.3	51.7
September	4.9	68.2	90.2	43.0
October	3.76	58.8	86.2	25.1

**Table 11. 2017 Kentucky Soybean Variety Performance Tests, Fayette County - Bluegrass Region**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LOGGING 2017	PLANT HEIGHT (IN.) 2017	MATURITY DATE 2017
	2017	2016-17	2015-17			
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>						
ASGROW AG29X8	70.9			1.3	37	20
PIONEER P28T08R	65.9	59.4	62.6	1.0	37	20
BRODBECK 295R2	65.8	62.7		1.3	35	22
<b>GROUP II AVERAGE</b>	<b>67.5</b>	<b>61.1</b>	<b>62.6</b>	<b>1.0</b>	<b>36</b>	<b>21 (Sept. 21st)</b>
LSD (0.10)	1.9	2.2				
C.V.	2.2	4.4				
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>						
ASGROW AG37X8	85.6			1.0	39	31
WARREN SEED DS 3838	81.7	68.9	62.4	1.0	44	32
PIONEER P38T42R	78.7	68.6		1.7	44	30
S39-P5X	78.3			2.3	39	30
ARMOR 39-D39	77.7			1.3	40	32
ASGROW AG38X6	77.6	64.2		3.0	44	28
HPT 3916NX	76.8			1.3	41	29
AGRIGOLD G3520RX	74.8			2.0	38	26
AGRIGOLD G3410RX	74.2			1.3	35	25
GO SOY 39C15	73.8	65.4		1.0	38	26
BRODBECK 388R2	72.5			1.7	42	30
CZ 3841 LL	72.0	66.0	65.4	1.3	40	31
BRODBECK 368R2	71.6			1.0	39	32
SEED CONSULTANTS SCS 9393RR™	71.5	63.8	66.2	1.7	44	26
BRODBECK 348R2	70.9			2.3	37	28
ASGROW AG39X7	69.9	65.2		2.0	43	30
PIONEER P35T58R	69.8	62.4	60.3	1.3	41	26
SEED CONSULTANTS SCS 9385RR™	69.7	66.4	64.4	1.7	46	26
AGRIGOLD G3690RX	69.2			1.4	38	25
WARREN SEED BG 3810 RR2X	68.5			1.0	38	30
ARMOR ARX3917	68.1			2.7	43	33
BRODBECK 365R2	66.8	64.6		2.7	40	27
DYNA-GRO S39XT68	66.7			1.0	39	27
GREAT LAKES HYBRIDS GL3979NRX	66.0			1.7	40	26
AGRIGOLD G3980RX	65.9			1.7	40	31
GREAT LAKES HYBRIDS GL3777NSRX	65.9			1.0	43	29
PIONEER P38T61BR	65.3	60.8		2.7	45	31
CAVERNDALE CF 387 HT-GLYn	65.1	63.9		1.0	39	27
SEED CONSULTANTS SC 9367R™	63.6	61.6		1.7	43	26
PIONEER P38A98X	63.5			2.3	42	26
ASGROW AG38X8	63.3			1.3	41	25
CZ 3737 LL	63.2	62.0		1.7	37	30
CZ 3945 LL	63.0	63.3	61.5	2.0	41	27
DYNA-GRO S39XT08	62.9			1.3	42	26
HPT 3919NR	60.6	57.5		1.7	42	32
<b>GROUP III AVERAGE</b>	<b>70.1</b>	<b>64.0</b>	<b>63.4</b>	<b>1.7</b>	<b>41</b>	<b>28 (Sept. 28th)</b>
LSD (0.10)	6.3	3.5	2.9			
C.V.	8.5	7.0	7.3			
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>						
STEWART 4527R2X	84.5	68.2		2.0	43	36
STEWART 4327R2X	83.5	69.3		1.7	44	37
ASGROW AG43X7	83.2	65.9		2.3	47	40
GREAT LAKES HYBRIDS GL4573NSRX	83.1			1.7	47	35
ASGROW AG41X8	81.6			1.0	43	33
GO SOY 41B17	80.8			1.7	40	33
AGRIGOLD G4380RX	80.2			2.7	44	36
DYNA-GRO S43XS27	80.2	64.8		2.7	46	38
PROGENY 4516 RXS	79.3			2.3	43	36
ASGROW AG45X8	79.0			2.3	43	36
STEWART 4438R2X	78.8			1.0	37	40
AGRIGOLD G4024RX	78.2			1.3	43	35
LG SEEDS C4458RX	77.4	64.4		2.0	45	37
BRODBECK 446R2	77.1	63.9		3.0	47	35
PROGENY 4247 LL	77.0	66.0	60.4	1.0	39	35
SEED CONSULTANTS SCS 9456SR™	76.7	63.4	61.1	1.0	42	38
UNIVERSITY OF MISSOURI S13-3851C	76.2			1.3	36	35
REV® 45L57™	76.2			1.3	45	35
DYNA-GRO SX17844XS	76.0			2.7	46	37
DYNA-GRO S42RY77	75.5	64.5		1.0	39	37
STEWART 4116R2X	75.0	64.1		1.0	41	36
GREAT LAKES HYBRIDS GL4174NSRX	74.8			1.0	42	32
PROGENY 4444 RXS	73.7			2.7	46	35

continued



Table 11. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2017	PLANT HEIGHT (IN.) 2017	MATURITY DATE 2017
	2017	2016-17	2015-17			
WARREN SEED BG 4510 RR2X	73.6			2.0	45	35
DYNA-GRO S41XS98	73.5			1.0	39	32
BRODBECK 417R2	73.5	65.3		1.3	40	34
PIONEER P41T33R	73.0	65.8		2.7	44	35
PIONEER P40A47X	72.9			1.0	37	36
STINE 44LH22	72.6	61.4		2.3	42	35
WARREN SEED DS 4340	72.5	63.3		1.7	43	38
ARMOR 44-D47	72.3			2.7	48	37
CAVERNDALE CF 427 HT-GLY/STS <sub>n</sub>	72.2			1.3	40	36
UNIVERSITY OF MISSOURI S13-10590C	71.6			1.3	42	36
CZ 4105 LL	71.6	59.7	58.6	1.0	37	36
HS 44X60	71.0			2.0	47	35
ARMOR 44-D51	70.9			3.0	45	37
STINE 42LI32	70.6			2.7	39	34
HPT 4522NR	69.5			1.7	41	38
CAVERNDALE CF 404 <sub>n</sub>	69.4	63.1	66.0	1.0	37	34
SEED CONSULTANTS SCS 9428R™	69.1			2.3	44	36
WARREN SEED BG 4210 RR2X	69.0			2.0	43	34
S41-A1X	68.4			1.7	42	35
CZ 4044 LL	67.9	61.0		1.3	40	36
ASGROW AG43X8	67.8			3.0	41	35
CZ 4540 LL	67.0	56.6	52.7	3.0	47	37
LG SEEDS C4227RX	66.4			1.7	38	34
GO SOY 43L16	66.3	59.3		3.3	42	35
PROGENY 4255 RX	66.1			1.0	37	34
UNIVERSITY OF MISSOURI S14-9051R	65.5			1.3	38	35
STEWART 4228R2X	64.8			1.0	40	35
STINE 41RH22	64.0	57.7		1.0	41	34
ASGROW AG44X6	63.6	57.5		2.7	45	35
AGRIGOLD G4440RX	63.3			2.7	42	35
SEED CONSULTANTS SC 8428X™	62.7			3.7	39	33
ARMOR 42-D27	61.4			1.7	43	34
S45-K5X	61.4			2.0	41	35
BRODBECK 426R2	61.3	54.1		1.0	37	35
DYNA-GRO S43RY95	61.0	54.4	55.1	3.7	45	36
CZ 4222 LL	60.3	55.4		1.0	36	33
S43-V3X	58.6			3.0	44	35
UNIVERSITY OF MISSOURI S13-2743C	54.6			3.0	43	35
BECK 4119X2	54.5			2.0	37	33
<b>GROUP IV EARLY AVERAGE</b>	<b>71.4</b>	<b>62.1</b>	<b>59.0</b>	<b>1.9</b>	<b>42</b>	<b>35 (Oct. 5th)</b>
LSD (0.10)	5.6	3.1	2.5			
C.V.	7.4	6.3	6.2			
<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>						
STEWART 4716R2X	84.1			1.0	43	39
WARREN SEED DS 4850	83.5	70.9	63.6	1.3	47	40
LG SEEDS C4845RX	83.0			1.0	41	40
GREAT LAKES HYBRIDS GL4761NRX	81.6			1.0	42	40
REV® 48A26™	81.5			2.0	47	39
DYNA-GRO S48XS78	81.1			2.0	44	39
REV® 4927X™	80.7			2.7	46	38
ASGROW AG48X8	80.4			1.7	48	39
HS 49X60	80.4			1.0	43	40
PIONEER P48T27X	80.0			2.0	44	39
BECK 4991X2	79.7			1.0	40	39
UNISOUTH GENETICS USG 7496XTS	79.4			1.0	48	37
ARMOR 46-D08	79.4			2.0	46	41
HBK LL4953	79.1	62.1		1.0	43	45
HS 46X60	79.1			1.0	52	39
ASGROW AG46X8	78.1			2.0	44	40
PIONEER P46A16R	78.0			1.0	45	38
BECK 4669X2	77.9			1.0	46	40
STINE 48RI22	77.8			1.0	46	40
PROGENY 4799 RXS	77.4			1.0	47	39
REV® 4857X™	77.4			1.7	46	38
PROGENY 4816 RX	77.3			1.0	43	41
WARREN SEED BG 4911 RR2X	77.3			1.0	43	40
ARMOR ARX4607	77.2			2.0	43	39
CAVERNDALE CF 478 RR2Y/STS <sub>n</sub>	76.4			1.0	49	39
LG SEEDS C4615RX	76.3			1.0	48	39
AGRIGOLD G4685RX	76.3			1.0	49	38
ARMOR ARX4807	76.2			1.7	43	39
PROGENY 4620 RXS	75.6			1.7	41	39

continued

Table 11. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2017	PLANT HEIGHT (IN.) 2017	MATURITY DATE 2017
	2017	2016-17	2015-17			
LG SEEDS C4710RX	75.2			3.0	51	38
DYNA-GRO S49XS76	74.6			1.7	44	43
HPT 4852NR	73.8			2.3	47	38
WARREN SEED DS 4633	73.4	69.2	63.0	1.7	46	38
DYNA-GRO S48XT56	73.2			1.0	44	39
STEWART 4927R2X	73.1			1.0	51	40
UNISOUTH GENETICS USG 7487XTS	72.8			1.0	50	38
GO SOY 4714LL	72.5			1.3	44	37
HS 48X70	72.5			1.3	50	39
PROGENY 4716 LL	72.0			1.7	43	38
PROGENY 4929 RXS	71.7			1.0	44	37
S48-R2X	71.6			1.3	46	38
DYNA-GRO S46XS87	71.5			1.3	47	39
ASGROW AG47X6	71.4			1.3	47	39
CZ 4748 LL	71.0			1.0	45	39
REV <sup>®</sup> 47R34 <sup>™</sup>	70.9	66.9	59.6	1.7	49	39
REV <sup>®</sup> 48L63 <sup>™</sup>	70.6			1.3	48	39
AGRIGOLD G4990RX	69.9			1.3	49	40
PROGENY 4757 RY	69.7	66.8	60.4	2.0	45	41
UNIVERSITY OF MISSOURI S14-15146R	68.7			1.7	44	39
CZ 4820 LL	68.2			1.3	43	38
GO SOY 49L17	68.0			3.0	46	45
ASGROW AG46X6	67.6			1.0	42	39
PROGENY 4930 LL	67.2	56.3	53.1	1.3	46	46
UNIVERSITY OF MISSOURI S14-6391C	67.1			3.0	53	39
PIONEER P47T36R	66.7	69.1	63.4	1.7	46	39
AGS GS48R216	66.0			3.7	44	39
GO SOY 47B17	65.8			1.0	42	41
REV <sup>®</sup> 48A76 <sup>™</sup>	65.2			2.7	43	38
AGRIGOLD G4835RX	64.9			2.0	41	39
GO SOY Ireane	63.5			2.3	45	47
REV <sup>®</sup> 49L88 <sup>™</sup>	62.8			1.3	45	39
UNIVERSITY OF ARKANSAS R13-1019	62.1			5.0	47	45
UNIVERSITY OF MISSOURI S13-1805C	61.3			5.0	45	45
PENNYRILE (long term check-released 1987)	59.1			1.0	51	38
CZ 4818 LL	58.9	56.6	52.5	2.7	49	39
UNISOUTH GENETICS USG 7497XT	58.5			3.0	46	45
PROGENY 4851 RX	58.4			2.3	45	39
GO SOY 49G16	52.9			3.3	49	41
<b>GROUP IV LATE AVERAGE</b>	<b>72.6</b>	<b>64.7</b>	<b>59.4</b>	<b>1.7</b>	<b>46</b>	<b>40 (Oct. 10th)</b>
LSD (0.10)	5.0	3.5	2.5			
C.V.	6.5	6.6	6.0			
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>						
UNIVERSITY OF ARKANSAS UA 5014C	85.9	63.7		1.3	43	46
PROGENY 5016 RXS	78.5			1.0	46	44
CZ 5150 LL	76.4			1.0	45	45
PROGENY 5157 RXS	72.2			1.0	42	44
PIONEER P50T64R	71.4	55.1	58.2	1.0	44	43
UNIVERSITY OF ARKANSAS R09-430	69.5	55.8	56.6	2.7	50	45
UNIVERSITY OF MISSOURI S14-9017R	69.3			1.3	39	43
CZ 5147 LL	64.9			2.3	46	45
UNIVERSITY OF ARKANSAS UA 5414RR	63.5	53.0	53.3	3.7	44	47
UNIVERSITY OF MISSOURI S13-1955C	62.6			4.0	48	50
PROGENY 4996 RXS	61.7			2.3	49	47
ESSEX (long term check-released 1974)	61.6	51.4		2.3	42	45
CZ 5242 LL	61.2			1.3	45	47
USDA-ARS JTN-5110	60.1	50.0	52.6	2.7	44	46
UNIVERSITY OF ARKANSAS OSAGE	57.6	48.7	48.5	3.7	43	50
PROGENY 5414 LLS	55.1			4.0	46	50
GO SOY 54G16	54.9			3.0	47	47
<b>GROUP V AVERAGE</b>	<b>66.3</b>	<b>54.0</b>	<b>53.8</b>	<b>2.3</b>	<b>45</b>	<b>46 (Oct. 16th)</b>
LSD (0.10)	5.2	2.9	2.6			
C.V.	7.2	6.7	7.4			

<sup>A</sup> 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.

<sup>B</sup> 2017, 2016, and 2015 data were collected in Fayette Co.

## AGRONOMIC INFORMATION

GPS coordinates	38°07'20.8"N 84°29'26.8"W
Soil type	Lanton silty clay loam
Slopes	0
Previous crop	Corn (corn soybean rotation)
Soil test	pH 6.39, P 345, K 351
SCN test	0
Fertilizer/lime applied	NA
Agricultural practice	No-till
Pre-planting herbicides	Sharpen, Glyphosate (4/13/2017); Glyphosate, Dual II Magnum, and Authority XL (4/28/2017)
Planting date	5/10/2017
Post-planting herbicides	Reflex, FirstRate, Intensity One (6/20/2017)
Harvest dates	MG II and III: 10/05/2017; MG IV Early, IV Late, and V: 10/26/2017
50% chance of killing frost	10/26

## Fayette (Lexington)

Month	Total Monthly Precipitation (in.)	Temperatures		
		Monthly Average (°F)	Highest T <sup>o</sup> recorded (°F)	Lowest T <sup>o</sup> recorded (°F)
March	2.94	46.6	77.9	16.8
April	2.72	61.2	83.2	35.4
May	5.71	64.4	85.0	37.3
June	5.10	71.5	90.0	51.3
July	2.70	76.2	91.9	59.3
August	4.13	72.4	89.5	52.7
September	4.04	67.4	86.2	47.7
October	5.90	58.3	80.7	30.0

**Table 12. 2017 Kentucky Soybean Variety Performance Tests, Hancock County - Green River Region**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING	BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2017	2016-17	2015-17	2017		2017	2016-17	2015-17	2017
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>					<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>				
ASGROW AG29X8	96.7			1.7	PIONEER P40A47X	102.4			3.0
PIONEER P28T08R	78.1	63.9	53.2	3.0	LG SEEDS C4458RX	101.3	79.9		4.3
BRODBECK 295R2	77.8	62.6		3.3	STINE 41RH22	99.3	79.0		3.0
					HPT 4522NR	98.1			2.3
<b>GROUP II AVERAGE</b>	<b>84.2</b>	<b>63.2</b>	<b>53.2</b>	<b>2.7</b>	SEED CONSULTANTS SCS 9456SR™	95.8	74.0	67.6	2.7
LSD (0.10)	5.6	2.7	1.8		BRODBECK 426R2	94.5	75.1		1.3
C.V.	5.3	4.9	4.6		STEWART 4116R2X	91.8	74.1		4.0
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>					<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
ASGROW AG38X8	106.2			4.0	HS 49X60	94.1	73.9		2.3
AGRIGOLD G3410RX	94.7			3.7	DYNA-GRO S48XT56	90.0	74.6		1.3
SEED CONSULTANTS SCS 9393RR™	93.9	75.2	67.4	1.7	LG SEEDS C4845RX	89.7	72.9		2.3
AGRIGOLD G3520RX	93.4			3.7	GO SOY 49L17	86.4			3.3
GO SOY 39C15	91.3	74.2		3.7	PROGENY 4930 LL	86.1	70.8	64.8	2.7
GREAT LAKES HYBRIDS GL3777NSRX	91.2			3.7	BECK 4669X2	85.3			3.0
ASGROW AG37X8	91.0			2.7	ASGROW AG46X8	85.1			3.3
PIONEER P38T61BR	90.5	74.0		4.7	STEWART 4927R2X	81.5	65.8		3.3
BRODBECK 365R2	89.4	70.7		4.0	WARREN SEED BG 4911 RR2X	81.4			3.0
WARREN SEED DS 3838	89.3	73.6	65.0	3.3	PROGENY 4929 RXS	79.3			2.7
SEED CONSULTANTS SCS 9385RR™	88.7	73.6	67.2	3.7	HS 46X60	78.6	61.9		3.3
SEED CONSULTANTS SC 9367R™	87.9	73.8		3.3	BECK 4991X2	78.4	64.4		2.0
BRODBECK 368R2	87.3			3.7	CZ 4820 LL	78.3			3.0
CZ 3945 LL	86.6	71.1	66.6	3.0	DYNA-GRO S49XS76	78.1	65.1		3.7
HPT 3916NX	86.1			1.7	UNIVERSITY OF MISSOURI S13-1805C	77.9			5.0
ARMOR 39-D39	85.6			4.3	REV® 48A26™	77.9	66.1		4.3
HPT 3919NR	85.4	73.7		3.0	HS 48X70	77.9			1.7
AGRIGOLD G3980RX	85.1			4.0	HBK LL4953	77.8			3.0
S39-P5X	84.8			3.3	REV® 4857X™	77.8			3.3
ARMOR ARX3917	84.5			3.7	PROGENY 4799 RXS	77.6			3.0
DYNA-GRO S39XT68	84.0			3.3	ASGROW AG47X6	77.6	64.9		4.3
PIONEER P38A98X	83.6			3.7	PROGENY 4816 RX	77.5			2.0
AGRIGOLD G3690RX	83.3			2.7	PROGENY 4757 RY	77.4	63.6	62.2	3.7
GREAT LAKES HYBRIDS GL3979NRX	82.3			3.7	DYNA-GRO S48XS78	76.9			4.7
PIONEER P38T42R	82.1	67.5		3.3	UNIVERSITY OF ARKANSAS R13-1019	76.9			5.0
CZ 3841 LL	81.4	69.4	62.7	5.0	UNISOUTH GENETICS USG 7487XTS	76.5			2.7
ASGROW AG39X7	80.7	69.1		3.3	PIONEER P47T36R	76.2	66.3	65.7	4.3
PIONEER P35T58R	80.1	68.9	64.3	3.7	GREAT LAKES HYBRIDS GL4761NRX	75.9	67.2		2.7
CAVERNDALE CF 387 HT-GLYn	78.9	70.3		3.3	PIONEER P46A16R	75.8			2.3
BRODBECK 348R2	78.2			4.7					
CZ 3737 LL	77.4	62.1		4.3	<b>GROUP IV EARLY AVERAGE</b>	<b>81.3</b>	<b>68.4</b>	<b>62.3</b>	<b>3.7</b>
DYNA-GRO S39XT08	77.2			3.7	LSD (0.10)	7.9	4.3	3.1	
BRODBECK 388R2	74.7			4.0	C.V.	9.2	7.8	7.1	
WARREN SEED BG 3810 RR2X	74.6			3.0					
ASGROW AG38X6	73.3	63.9		3.3					
<b>GROUP III AVERAGE</b>	<b>85.3</b>	<b>70.7</b>	<b>65.5</b>	<b>3.5</b>					
LSD (0.10)	8.9	4.8	3.4						
C.V.	9.9	8.4	7.6						

continued

Table 12. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2017	2016-17	2015-17	2017
UNISOUTH GENETICS USG 7496XTS	75.7	65.4		3.3
AGRIGOLD G4685RX	75.5			4.3
PROGENY 4716 LL	75.3			3.3
S48-R2X	74.8			4.3
ASGROW AG48X8	74.7			4.3
GO SOY 4714LL	74.5	61.3		4.3
CZ 4748 LL	74.1	62.0		3.7
LG SEEDS C4710RX	73.9			4.3
LG SEEDS C4615RX	73.8	61.5		3.3
HPT 4852NR	73.7	63.2		4.7
ASGROW AG46X6	73.4	65.5		3.0
AGS GS48R216	72.9	62.0		4.3
DYNA-GRO S46XS87	72.0	62.7		4.0
ARMOR ARX4807	71.7			4.9
UNIVERSITY OF MISSOURI S14-6391C	71.1			4.3
PROGENY 4620 RXS	70.9			4.3
ARMOR ARX4607	70.8			4.7
AGRIGOLD G4990RX	68.8			4.0
STINE 48R122	68.6	58.5		4.7
ARMOR 46-D08	68.5	60.4		4.7
REV <sup>®</sup> 48A76™	68.2	59.3		4.3
CAVERNDALE CF 478 RR2Y/STS <sub>n</sub>	68.1	57.5		4.0
PIONEER P48T27X	67.9			4.0
PROGENY 4851 RX	67.8			4.7
WARREN SEED DS 4633	67.5	59.7	61.0	4.3
WARREN SEED DS 4850	66.5	58.0	54.2	3.3
REV <sup>®</sup> 49L88™	65.5			4.0
REV <sup>®</sup> 48L63™	64.9	58.5		5.0
STEWART 4716R2X	64.2	50.3		4.0
GO SOY 47B17	62.6			4.7
AGRIGOLD G4835RX	62.3			4.3
UNISOUTH GENETICS USG 7497XT	62.1			4.7
GO SOY Ireane	61.7	<b>58.1</b>		4.7
UNIVERSITY OF MISSOURI S14-15146R	61.6			3.3
REV <sup>®</sup> 4927X™	60.8			5.0
CZ 4818 LL	57.8	47.7	49.5	4.3
PENNYRILE (long term check-released 1987)	57.3	46.4		4.0
REV <sup>®</sup> 47R34™	56.6	54.3	57.0	4.7
GO SOY 49G16	51.6	49.0		5.0
<b>GROUP IV LATE AVERAGE</b>	<b>73.2</b>	<b>61.7</b>	<b>59.2</b>	<b>3.8</b>
LSD (0.10)	4.9	3.0	2.3	
C.V.	6.4	6.1	5.8	
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>				
PIONEER P50T64R	<b>81.4</b>	<b>69.6</b>	<b>63.8</b>	2.0
UNIVERSITY OF MISSOURI S14-9017R	79.8			2.7
CZ 5242 LL	77.0			3.3
PROGENY 5016 RXS	74.2			3.0
CZ 5150 LL	64.5			2.3
UNIVERSITY OF ARKANSAS OSAGE	64.4	53.2	50.1	4.0
PROGENY 4996 RXS	63.8			4.7
PROGENY 5157 RXS	62.8			2.0
UNIVERSITY OF ARKANSAS UA 5014C	62.2	58.5		4.3
ESSEX (long term check-released 1974)	57.0	49.6		4.7
UNIVERSITY OF ARKANSAS R09-430	56.9	49.9	49.2	4.7
UNIVERSITY OF ARKANSAS UA 5414RR	56.1	50.0	48.1	5.0
USDA-ARS JTN-5110	55.7	51.8	51.2	5.0
UNIVERSITY OF MISSOURI S13-1955C	53.9			5.0
CZ 5147 LL	53.7			3.3
GO SOY 54G16	52.2			5.0
PROGENY 5414 LLS	50.4			4.0
<b>GROUP V AVERAGE</b>	<b>62.7</b>	<b>54.7</b>	<b>52.5</b>	<b>3.8</b>
LSD (0.10)	3.3	2.4	1.9	
C.V.	4.9	5.4	5.5	

<sup>A</sup> 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.

<sup>B</sup> 2017, 2016, and 2015 data were collected in Hancock Co.

AGRONOMIC INFORMATION

GPS coordinates	37°58'31.9"N 86°51'15.2"W
Soil type	Hungtington silt loam
Slopes	0-4%, occasionally flooded
Previous crop	Corn (corn soybean rotation)
Soil test	pH 7.59, P 115, K 380
SCN test	6,750 (moderate)
Fertilizer/lime applied	NA
Agricultural practice	minimum tillage (chisel-plow)
Pre-planting herbicides	NA
Planting date	5/29/2017
Post-planting herbicides	none
Harvest dates	MG II, III, and IV Early: 10/17/2017; MG IV Late and V: 11/13/2017
50% chance of killing frost	10/23

Hancock (Tell City, IN)

Month	Total Monthly Precipitation (in.)	Monthly Average (°F)	Temperatures	
			Highest T <sup>°</sup> recorded (°F)	Lowest T <sup>°</sup> recorded (°F)
March	3.85	47.5	75	19
April	4.43	60.6	83	35
May	7.72	63.9	84	39
June	2.18	72.9	91	53
July	3.91	76.9	94	60
August	4.54	72.8	90	56
September	4.48	69.0	79	59
October	5.56	59.5	68	51
November (11/13)	NA	NA	NA	NA

**Table 13. 2017 Kentucky Soybean Variety Performance Tests, Pulaski County - Lake Cumberland Region (2)**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2017	BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2017
	2017	2016-17	2015-17			2017	2016-17	2015-17	
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>					<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
BRODBECK 295R2	41.3	47.1		1	STINE 42LI32	52.8			1.7
ASGROW AG29X8	36.7			1	PROGENY 4247 LL	52.5	48.9	53.0	1.0
PIONEER P28T08R	28.7	34.0	36.5	1	ASGROW AG45X8	52.4			1.0
					DYNA-GRO S42RY77	52.2	50.5		1.3
					DYNA-GRO S43RY95	52.1	49.3	53.4	1.7
<b>GROUP II AVERAGE</b>	<b>35.6</b>	<b>40.5</b>	<b>36.5</b>	<b>1</b>	CZ 4222 LL	51.4	45.1		1.0
LSD (0.10)	4.6	2.7			STEWART 4438R2X	51.1			1.3
C.V.	9.6	8.6			ASGROW AG43X7	50.8	48.8		1.7
					LG SEEDS C4458RX	50.5	51.7		1.0
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>					STEWART 4116R2X	50.5	47.8		1.0
ARMOR ARX3917	56.3			1.0	STINE 41RH22	50.3	46.8		1.7
WARREN SEED BG 3810 RR2X	56.0			1.0	CZ 4105 LL	50.0	50.6	53.3	1.3
BRODBECK 365R2	54.6	54.8		1.0	WARREN SEED DS 4340	50.0	44.7		1.3
BRODBECK 388R2	52.1			1.0	STEWART 4228R2X	49.9			1.0
DYNA-GRO S39XT68	49.1			1.0	GO SOY 41B17	49.4			1.7
AGRIGOLD G3980RX	47.3			1.0	DYNA-GRO S41XS98	49.0			1.3
ASGROW AG38X6	45.8	47.5		1.0	PROGENY 4516 RXS	48.6			1.0
SEED CONSULTANTS SCS 9385RR™	45.4	46.5	52.2	1.0	WARREN SEED BG 4510 RR2X	48.6			1.0
CZ 3841 LL	45.2	46.5	49.9	1.0	CAVERNDALE CF 427 HT-GLY/STSn	48.1			1.0
ASGROW AG39X7	44.9	46.6		1.0	S41-A1X	47.9			1.0
GO SOY 39C15	44.5	48.2		1.0	SEED CONSULTANTS SC 8428X™	47.9			2.0
ARMOR 39-D39	43.4			1.3	CZ 4044 LL	47.5	50.0		1.7
CZ 3737 LL	42.8	45.6		1.0	SEED CONSULTANTS SCS 9456SR™	46.9	46.5	54.0	1.3
HPT 3919NR	41.5	45.1		1.0	S45-K5X	46.9			1.3
AGRIGOLD G3520RX	41.2			1.0	ASGROW AG41X8	46.5			1.0
ASGROW AG37X8	39.9			1.0	ARMOR 44-D47	46.5			1.0
ASGROW AG38X8	39.7			1.0	GO SOY 43L16	46.2	49.9		1.0
AGRIGOLD G3410RX	39.3			1.0	HS 44X60	45.7			1.0
GREAT LAKES HYBRIDS GL3979NRX	38.9			1.0	S43-V3X	45.5			1.0
S39-P5X	38.3			1.0	ASGROW AG44X6	45.4	45.1		1.3
PIONEER P38T61BR	38.2	42.4		1.0	UNIVERSITY OF MISSOURI S13-2743C	44.7			1.0
PIONEER P35T58R	37.6	37.1	41.7	1.0	ARMOR 42-D27	44.1			1.0
PIONEER P38A98X	37.2			1.0	BRODBECK 426R2	43.9	45.2		1.0
SEED CONSULTANTS SCS 9393RR™	37.0	47.1	49.8	1.0	ASGROW AG43X8	41.4			1.0
AGRIGOLD G3690RX	36.1			1.0	STINE 44LH22	40.2	45.2		2.0
DYNA-GRO S39XT08	35.6			1.0	GREAT LAKES HYBRIDS GL4573NSRX	37.2			1.0
CZ 3945 LL	35.4	39.4	42.2	1.0	STEWART 4527R2X	34.7	40.1		1.7
SEED CONSULTANTS SC 9367R™	34.3	40.5		1.0	UNIVERSITY OF MISSOURI S14-9051R	33.3			1.3
PIONEER P38T42R	33.2	38.3		1.3	AGRIGOLD G4440RX	31.0			1.0
BRODBECK 348R2	31.9			1.0	UNIVERSITY OF MISSOURI S13-10590C	31.0			1.0
GREAT LAKES HYBRIDS GL3777NSRX	31.5			1.0					
CAVERNDALE CF 387 HT-GLYn	30.2	42.7		1.0	<b>GROUP IV EARLY AVERAGE</b>	<b>50.7</b>	<b>48.9</b>	<b>53.2</b>	<b>1.3</b>
HPT 3916NX	27.3			1.0	LSD (0.10)	4.2	2.6	2.1	
WARREN SEED DS 3838	25.8	36.2	42.1	1.0	C.V.	7.9	7.0	6.9	
BRODBECK 368R2	20.7			1.0					
					<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>				
<b>GROUP III AVERAGE</b>	<b>39.9</b>	<b>44.0</b>	<b>46.3</b>	<b>1.0</b>	DYNA-GRO S43XS27	67.9	54.6		1.7
LSD (0.10)	3.2	2.2	2.0		WARREN SEED BG 4210 RR2X	64.5			1.0
C.V.	7.5	6.8	7.6		AGRIGOLD G4380RX	63.3			1.0
					GREAT LAKES HYBRIDS GL4174NSRX	62.9			1.0
					DYNA-GRO SX17844XS	62.4			1.3
					CAVERNDALE CF 404n	61.0	58.2	55.2	2.7
					BRODBECK 417R2	60.5	56.5		2.0
					REV® 45L5™	59.6			1.7
					STEWART 4327R2X	59.2	48.3		1.7
					PROGENY 4444 RXS	58.8			1.3
					UNIVERSITY OF MISSOURI S13-3851C	58.7			1.3
					BECK 4119X2	58.3			1.3
					ARMOR 44-DS1	57.9			1.7
					PROGENY 4255 RX	57.0			1.0
					AGRIGOLD G4024RX	55.5			1.7
					PIONEER P40A47X	55.1			1.0
					SEED CONSULTANTS SCS 9428R™	54.8			1.7
					HPT 4522NR	54.5			1.3
					LG SEEDS C4227RX	54.4			1.3
					CZ 4540 LL	54.1	48.0	50.2	2.0
					PIONEER P41T33R	54.0	52.3		1.0
					BRODBECK 446R2	53.9	49.5		1.0

continued

Table 13. (continued)

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2017
	2017	2016-17	2015-17	
UNIVERSITY OF MISSOURI S13-1805C	74.7			5.0
WARREN SEED BG 4911 RR2X	73.8			1.7
REV® 49L88™	73.3			2.3
PROGENY 4799 RXS	72.1			2.7
BECK 4991X2	71.5	59.5		1.7
UNIVERSITY OF MISSOURI S14-6391C	71.5			4.3
AGRIGOLD G4835RX	71.1			2.3
PROGENY 4851 RX	71.1			4.0
LG SEEDS C4845RX	70.7	59.6		2.7
PROGENY 4620 RXS	70.4			4.0
STEWART 4716R2X	70.3	56.3		2.7
ASGROW AG46X6	70.0	63.3		3.3
AGS GS48R216	69.9	59.3		3.7
AGRIGOLD G4990RX	69.3			3.7
UNISOUTH GENETICS USG 7496XTS	68.9	55.2		2.3
CZ 4818 LL	68.8	59.0	60.6	4.3
PIONEER P48T27X	68.6			3.7
REV® 4857X™	68.6			3.3
LG SEEDS C4710RX	68.4			4.7
REV® 47R34™	68.3	56.2	59.7	4.0
DYNA-GRO S46XS87	68.2	58.9		2.0
S48-R2X	67.3			2.0
BECK 4669X2	67.1			2.3
WARREN SEED DS 4633	67.1	62.4	64.0	4.0
GO SOY 49L17	67.0			4.0
PIONEER P46A16R	66.2			1.7
HPT 4852NR	66.0	58.3		1.3
ASGROW AG48X8	65.8			3.0
REV® 48A76™	65.5	60.2		3.7
UNIVERSITY OF ARKANSAS R13-1019	65.4			4.3
ARMOR 46-D08	64.9	56.2		3.0
ASGROW AG47X6	62.9	61.9		3.3
GREAT LAKES HYBRIDS GL4761NRX	62.2	54.8		2.0
UNIVERSITY OF MISSOURI S14-15146R	61.5			2.0
REV® 48A26™	61.3	59.0		4.3
HBK LL4953	61.2			2.7
GO SOY Ireane	60.4	52.8		4.0
PENNYRILE (long term check-released 1987)	57.1	47.1		3.0
CAVERNDALE CF 478 RR2Y/STSn	56.5	52.4		1.3
GO SOY 49G16	53.6	44.6		5.0
UNISOUTH GENETICS USG 7497XT	52.9			4.7
<b>GROUP IV LATE AVERAGE</b>	<b>72.2</b>	<b>60.2</b>	<b>63.5</b>	<b>2.9</b>
LSD (0.10)	6.5	3.6	2.7	
C.V.	8.6	7.5	6.9	
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>				
UNIVERSITY OF MISSOURI S14-9017R	<b>76.7</b>			2.0
PIONEER P50T64R	75.7	<b>56.5</b>	<b>57.0</b>	1.0
PROGENY 5157 RXS	73.4			3.3
CZ 5150 LL	66.2			2.0
PROGENY 5016 RXS	60.9			3.7
ESSEX (long term check-released 1974)	59.9	48.9		4.0
CZ 5242 LL	54.4			3.7
PROGENY 4996 RXS	54.0			4.0
GO SOY 54G16	51.7			5.0
UNIVERSITY OF ARKANSAS OSAGE	51.0	43.4	45.4	4.7
UNIVERSITY OF ARKANSAS UA 5414RR	48.7	40.3	43.5	4.3
PROGENY 5414 LLS	47.1			5.0
UNIVERSITY OF ARKANSAS UA 5014C	46.0	44.4		5.0
USDA-ARS JTN-5110	45.9	40.0	44.8	5.0
UNIVERSITY OF ARKANSAS R09-430	38.6	39.4	46.7	5.0
CZ 5147 LL	32.4			4.7
UNIVERSITY OF MISSOURI S13-1955C	32.3			5.0
<b>GROUP V AVERAGE</b>	<b>53.8</b>	<b>44.7</b>	<b>47.5</b>	<b>4.0</b>
LSD (0.10)	5.3	2.9	2.2	
C.V.	9.0	7.9	7.4	

<sup>A</sup> 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.

<sup>B</sup> 2016 data were collected in Russell Co. 2017 and 2015 data were collected in Pulaski Co.

AGRONOMIC INFORMATION

GPS coordinates	37°18'9.6"N 84°30'9.0"W
Soil type	Bedford/Hartsells silt loam
Slopes	2-12%
Previous crop	Corn, winter wheat and cover crop
Soil test	pH 6.95, P 87, K 310
SCN test	0
Fertilizer/lime applied	NA
Agricultural practice	minimum tillage (chisel-plow)
Pre-planting herbicides	2,4-D, Roundup WeatherMAX
Planting date	6/9/2017
Post-planting herbicides	Reflex, FirstRate, Intensity One (7/7/2017)
Harvest dates	10/30/2017 (all MG)
50% chance of killing frost	10/24

Pulaski (Somerset)

Month	Total Monthly Precipitation (in.)	Monthly Average (°F)	Temperatures	
			Highest T° recorded (°F)	Lowest T° re- corded (°F)
March	NA	NA	NA	NA
April	3.96	NA	NA	NA
May	6.92	66.6	86	37
June	3.79	73.1	89	53
July	4.21	78.2	92	63
August	7.17	74.2	90	57
September	3.52	64.0	87	48
October	6.10	60.5	82	30





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