

# 2018 Kentucky Soybean Variety Performance Tests

Claire M.-P. Venard and Brandon Roberts, Plant and Soil Sciences

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 2018 tests were entered by soybean growers, commercial companies, and state and federal institutions.

Forty soybean tests were planted in 2018 in Kentucky at the eight test locations shown below. However, due to weed pressure, two sites were discontinued. 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 no-till plot planter (Haldrup SNT-25, 6-rows—Haldrup USA). The tests (Tables 6-11) 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. 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 (“Soy-

**Table 1. Locations, planting, and harvest dates for the 2018 Kentucky Soybean Variety Performance Tests.**

TEST SITE	REGION	COLLABORATORS	PLANTING DATE(S)	AG. PRACTICE	HARVEST DATES
Caldwell County	Pennyrile	Scott Peek: Farm Superintendent at the UK Research and Education Center, Princeton KY	MG II, III, IV Early, and V: 05/23 MG IV Late: 05/24	No-till	MG II & III: 10/18 MG IV: 10/22 MG V: 10/23
Calloway County	Purchase	Dr. Ferguson: Professor of Agronomy, Murray State University	05/22	No-till	MG II & III: 10/09 MG IV & V: 10/12
Fayette County	Bluegrass	C. Venard and B. Roberts: UK Spindletop North farm	05/09	No-till	MG II & III: 11/05 MG IV Early: 11/21 MG IV Late & V: 11/29
Henderson County	Green River	Mr. McIndoo: Soybean producer Camille Lambert: UK County Extension Agent for ANR	05/25	Vertical tillage	MG II, III & IV Early: 10/25 MG IV Late & V: 10/30
Logan County	Mammoth Cave	Ms. Halcomb: Soybean producer Leann Martin: UK County Extension Agent for ANR	06/04	Vertical tillage	MG II & III: 10/23 MG IV & V: 10/24
Meade County	Lincoln Trail	Mr. Hager: Soybean producer Harry (Andy) Mills: UK County Extension Agent for ANR	05/21	No-till	All MG: 11/8

bean 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. All test sites were treated with fertilizers, lime, and herbicides before planting following current IPM and fertilizer/lime recommendations (UKID-249: *A comprehensive Guide to Soybean Management in Kentucky*). Seed source and varietal information are located on Page 5. Companies nominated their varieties and could choose to treat their seed with fungicides, insecticides, nematicides, beneficial organisms, and/or germination/growth/systemic acquired resistance en-

hancers (Table 3). The treatment codes are provided in Table 4. The plots were maintained as weed-free as possible during the growing season. All plots were chemically end-trimmed to 16 feet.

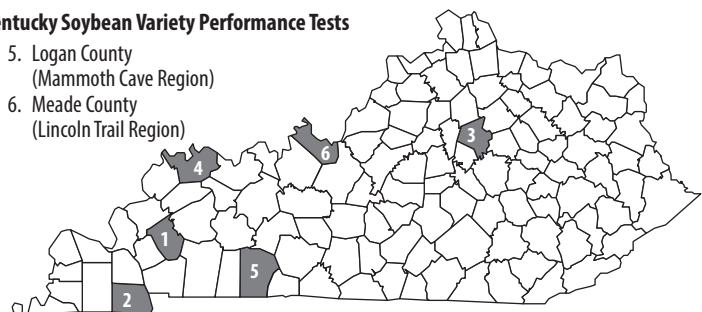
Harvesting was done with a small plot combine (Wintersteiger Delta plot combine—Wintersteiger, USA) according to maturity. Sixteen feet of the four center rows were harvested from the plots.

**Yield** is reported in bushels (60 pounds) per acre adjusted to 13 percent moisture. An electronic weight and moisture monitor (HarvestMaster HM800 GrainGage system, Juniper Systems, Inc., USA) located on the combine was used for record weight and moisture readings for each plot. Data were collected with a field computer (Mirus Harvest Software, Juniper System Inc., USA) connected to the monitor, and analyzed with Agrobases GEN II statistical software (Agronomix Software Inc., Canada).

Tables	page
Table 1. Test site information.....	1
Table 2. Seed rate planting guide for full-season soybeans (A) and double-crop (B) soybeans .....	4
Table 3. Company specifications for entries .....	6
Table 4. Seed treatments .....	9
<b>Performance Tests:</b>	
Table 5. State Summary—Recommended Table..	10
Table 6. Caldwell County.....	14
Table 7. Calloway County.....	16
Table 8. Fayette County .....	18
Table 9. Henderson County.....	20
Table 10. Logan County .....	22
Table 11. Meade County.....	24

## Location of the 2018 Kentucky Soybean Variety Performance Tests

1. Caldwell County (Pennyrile Region)
2. Calloway County (Purchase Region)
3. Fayette County (Bluegrass Region)
4. Henderson County (Green River Region)
5. Logan County (Mammoth Cave Region)
6. Meade County (Lincoln Trail Region)



**Lodging** was recorded at harvest at all test sites. Lodging was rated on a scale of 1 to 5, where:

- 1 = almost all plants erect;
- 2 = all plants over slightly, or a few down;
- 3 = all plants over moderately, or 25% down;
- 4 = all plants over considerably, or 50% to 80% down;
- 5 = all plants down.

**Maturity date.** Maturity dates were recorded at the Fayette County location. A variety was considered mature when 99 percent of the pods have turned their normal mature color. One to two weeks of good drying weather may be needed beyond the date given before ready to combine.

**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 diseases. During the 2018 season, frog-eye leaf spot (FLS) was observed at all of the Kentucky Soybean Variety Performance Test sites, passed August 15. Stem canker (not formally confirmed) and *Cercopsora* leaf blight were also observed sporadically at the Fayette County location. Due to warm and wet conditions in September and early October, seed decay, including *Phomopsis* seed disease, was observed at all test sites except for Calloway County.

**Protein, oil.** Variety protein and oil concentrations are reported on the basis of 13 percent moisture. The 2018 samples were collected at the Fayette County, Caldwell County, and Calloway County, and analyzed with a NIR spectrophotometer (DA 7250, Perten Instruments, Sweden). The data were analyzed with Agrobase GEN II statistical software.

## Interpretation

An important step in profitable soybean production is selecting 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," and UK ID-249). The data presented in Table 5, State Summary—Recommended Table, have been averaged across 2016-2018 full-season years and locations, and are recommended to evaluate variety relative performances. This table is also recommended for selecting varieties for maximum yield in double-crop 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, pages 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.

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," and UK ID-249). 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 varieties that have 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 (Table 3). 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," and UK ID-249). 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 average dates. For maximum yield, a variety must mature before the first killing frost in the fall.

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. Planting resistant varieties should be considered as the number of acres affected by SCN in Kentucky has increased. SCN occurs in at least 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 (<https://plantpathology.ca.uky.edu/extension/soybean-cyst-nematode>).

### **Growing Conditions and Special Circumstances—2018**

February 2018 was a volatile month with everything from temperatures in the teens to temperatures in the 80s; snow; tornadoes; and a major flood. Most of the first 12 days of the month were colder than normal. Several snow storms passed quickly through the region early in the month, but amounts were generally under an inch for each one. The rest of the month was warmer than normal. Warm temperatures came in two waves, one from the 14th to the 16th with temperatures climbing in the 60s and 70s, and one from the 19th to the 25th with widespread rain, from the 21st to the 25th. By the end of the month, the region had accumulated more than twice the amount of normal precipitation. This led to significant flooding. The powerful storm on the night of the 24th brought copious amounts of rain and seven tornadoes to Central Kentucky.

A cold, wet pattern persisted for much of March, which resulted in several snowy systems passing through the region. The most significant snows fell from the 11th to the 13th, with 6 to 10 inches falling of snow in the Bluegrass on the 12th. Another snowy system came through on the 20th-21st. Then on the 24th, a stripe of snow stretched from North Dakota to the Appalachians. In addition to the cold, flooding that peaked in February lingered into the first few days of March, and minor flooding returned by the end of the month. In Western Kentucky, temperature averages were 1 to 3 degrees cooler than normal and precipitation was generally near to slightly wetter than normal. Precipitation varied with heavy rain during the last week of the month.

Overall, April 2018 was not particularly active. The evening of the April 3, 2018, brought the only active weather event of the month. A cold front brought several rounds of showers and storms to the Louisville region. Straight-line winds of 75-95mph felled trees and damaged structures in the counties of Grayson, Hardin, Edmonson, and LaRue. Two small, brief EF1 tornadoes were recorded in Grayson County and in Boyle County, and 11 tornadoes were recorded in the Paducah region. Hail fell from some of the strongest storms, with hailstones the size of golf balls reported in several locations. Temperature were much cooler than normal. Every day from the 4th to the

11th was colder than normal. On the 6th, a cold front passed through the region from north to south. The next day low pressure and cold air behind the front resulted in snowfall for southern Indiana and Central Kentucky. The next cold wave came mid-month and brought more snow with it. On the 16th snowflakes flew, though most of them melted when they came in contact with the warm ground. The 16th was also significant as the average daily temperature was 18 to 23 degrees below normal. April was wetter than normal across the Jackson Purchase area of Western Kentucky. Heavy rain occurred from the night of April 22 into the day of April 24, resulting in amounts of 3 to 5 inches across much of the Jackson Purchase area of Western Kentucky into far southern Illinois.

In May, every single day of this month was warmer than normal in Louisville, Lexington, Bowling Green, and Frankfort, resulting in the warmest May this area has ever recorded. After a chilly April that felt more like March at times, the switch was flipped on May 1. Temperatures were well above normal, ranging from 7 to 8 degrees above normal across the region. Temperatures were more reminiscent of June with high temperatures consistently in the mid-80s to around 90 degrees. As for rainfall, it varied quite a bit across the region due to the nature of warm season precipitation. Some locations would get dumped on while a couple miles down the road observed very little from an individual shower or storm. Generally though, more areas experienced wetter than normal conditions for May. This was especially true across large sections of Western Kentucky. There were several days in which scattered thunderstorms resulted in a few large hail or damaging wind reports. The remnants of Tropical Storm Alberto impacted the region from May 28 to 30, a rare occurrence for so early in the season. However, the only really active day came on May 31, with the storms causing widespread damaging winds and flash flooding as they moved into southwest Indiana and northwest Kentucky during the morning and early afternoon hours. Several more waves of storms during the afternoon and evening hours were accompanied by large hail, damaging winds, flooding, and a few tornadoes.

June was a very warm month in Central Kentucky and southern Indiana. Temperatures were slightly above normal on any given day, through most of the month. No significant heat waves struck and no record highs were met. The warmest temperatures

were from the 17th to the 19th when daily average temperatures were about 8 to 10 degrees above normal. Scattered summertime thunderstorms delivered rainfall to the region. With those scattered storms came occasional severe weather, usually in the form of gusty winds. The most significant thunderstorms came on the 25th and 26th as several rounds of intense storms rolled through the region, with tornadoes touching down in Ohio, Edmonson, and Jefferson counties.

July was marked by a very lengthy and widespread severe weather event lasting from the 20th to the early morning hours of the following day as multiple rounds of storms pushed through the region. There were dozens of reports of strong winds and large hail. Four tornadoes touched down between 2pm and 10pm on the 20th. The rest of the month was fairly quiet with regards to severe weather. The only other significant event was on the 5th when thunderstorms developed in a very unstable atmosphere and generated locally gusty winds south of the Ohio River. There were few extreme temperatures during the month. The hottest days were the 4th and 5th when the mercury reached the middle and upper 90s.

Humidity levels were quite high this summer, especially during June and July. August was warm and wet, though there was very little severe weather. As is common with summertime precipitation it varied quite a bit across the region. This is largely due to the scattered nature of convective precipitation in the warm season. The strongest storms came on the evening of the 15th when a small squall line moved up the Ohio River. A drier than normal summer was observed across much of the Jackson Purchase area of western Kentucky, portions of southeast Illinois, and western portions of southwest Indiana. The most pronounced dryness was across portions of Carlisle, McCracken, Graves, and Hickman counties, where radar estimates showed less than 7 inches occurring for the entire summer. Though the month ended up on the warm side of normal, no individual day was more than 9 degrees warmer or cooler than normal.

September 2018 was the third wettest September on record for the Bluegrass State. The state averaged 8.12 inches, which was almost five inches above normal. The Bluegrass Region itself averaged 10.33 inches. The intense rainfall started with the remnants of Tropical Storm Gordon working through the area between Septem-



ber 5th and 9th. Widespread showers and storms led to several bouts of flash flooding and rivers rising into the minor flood stages. Gordon was followed by another tropical system a week later as Florence worked through Eastern Kentucky. Rainfall was less widespread and confined mainly to eastern half of the state. An active pattern remained for the second half of the month. Thunderstorms developed within an unstable atmosphere on the 21st with the passage of a cold front, producing heavy rain and signaling the start of a very active week with daily rounds of rainfall. Between the 21st and 27th, the state averaged over four inches. Already saturated grounds led to continued flooding issues, especially across the southern Bluegrass and northeastern Kentucky.

After an exceptionally wet September, in October the axis of the heavy rains shifted south. Greater than normal rainfall amounts were reported from the region east to Lake Cumberland and northeast into the southern Bluegrass counties. On the 4th a localized downpour dropped almost three and a half inches of rain. The first week and a half of the month was unusually warm, especially at night with temperatures almost feeling like August during the first 10 days. Each day from the 1st to the 10th was 10-20 degrees warmer than normal. On the 11th a cold front swept through the region and ushered in a much cooler than normal regime, making it feel more like November during the middle of the month, before finally warming up some during the last week.

Though strong storm systems affected other parts of the country during November, conditions were fairly quiet in southern Indiana and Central Kentucky. Thunderstorms took place before dawn on the 6th as a broken line of storms moved through with 40-50mph winds. The first and last weeks of the month were warm, with seasonable temperatures in between. The coldest days of the month started on the 22nd when lows were in the 20s with highs generally in the 30s. That cold air brought the region the first flurries of the month.

More detailed precipitation and temperature information for each test location is provided next to tables 6-11, 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)); and the National Weather Service (<https://www.weather.gov>).

org/historical\_data.php); and the National Weather Service (<https://www.weather.gov>).

### Soybean Production Information

This is publication PR-758 of the Kentucky Agricultural Experiment Station and is published with the approval of the Director.

The University of Kentucky and its Cooperative Extension Service offers a series of publications, blogs, websites which contains a more detailed information for soybean and grain production practices:

- KyGrains.info—The Farmer’s Resource for Grain production in Kentucky
- UK ID-249—A Comprehensive Guide to Soybean Management in Kentucky
- UK soybean Variety Performance Trials: <http://pss.ca.uky.edu/extension/soybean-variety-trials>
- Kentucky Pest Newsletter: <http://plantpathology.ca.uky.edu/extension/kpn>

As of November 8, 2018, soybean production for Kentucky was forecast at 107 million bushels, up 5 percent from 2017. Yield was estimated at 54 bushels per acre. Acreage for harvest was estimated at 1.99 million acres, up 50,000 acres from 2017. (Source: November Crop Production—News Release USDA, NASS, Kentucky Field Office, November 8th, 2018).

### 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 percent 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.

**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	7.4	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

### Acknowledgments

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

- The Kentucky Soybean Promotion Board for funding the KY Soybean Variety Performance Test program’s projects
- This work is also supported by the National Institute of Food and Agriculture, US Department of Agriculture, Hatch Project KY006099 under accession number 101341
- Seed nominators for their continuous interest in our program, which provides unbiased and objective information to Kentucky soybean producers
- University of Kentucky:
  - John Stanhope and the Service Center crew at Spindletop North Farm in Lexington, KY for their services all year long
  - Matt Peake and the farm crews at the UK Spindletop North farm, and Shannon Rudd, C. Oran Little Research Center, for their help with agronomic management at the Fayette Co. test site
  - James Roberts, Dr. McCulley, and Dr. Pfeiffer for their support and help during the 2018 growing season

- Scott Peek and the farm crew at the UK Research and Education Center in Princeton, KY, for their help with agronomic management and harvest at the Caldwell Co. location.
- Jackie Harper, for his help with equipment repairs at the Caldwell Co. and Logan Co. locations
- Maggie Maynard, Lauren McMahan, Vicki Pendleton, Kim Hall, Colette Laurent, Lois Thomas, and Dr. S. Ritchey for their help with staff, funds, and grant management
- Dr. Chad Lee and Dr. JD Green for their help with agronomic advising. Dr. Chad Lee also reviewed grant proposal.
- Jay Stone, Matt Furell, UK Cooperative Extension Office, and Mr. Garnett, soybean producer in Christian County; Chelsey Pickens, UK Extension Agent for Ag. & Natural Resources, and Mr. K. Mims, soybean producer in Cumberland County for hosting the tests. Unfortunately the Christian Co. and the Cumberland Co. test sites had to be discontinued over the course of the season
- Murray State University: Jason Robertson and the farm crew for their help with agronomic management and harvest at the Calloway County location.

## Contact

Claire Venard, PhD, CCA  
 N-122 Ag Science Center North  
 University of Kentucky  
 Lexington, KY 40546-0091  
 email: cvenard@uky.edu  
 Phone: 859-257-2993 (office)  
 859-492-1135 (cell)

## 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>).

## Sources of Seeds

The seeds planted in the 2018 Soybean Variety Performance Tests were acquired from the following sources:

### AgriGold Hybrids

Justin Warren ..... 618-292-5844  
 5381 Akin Rd, St Francisville IL 62460  
 justin.warren@agrigoold.com

AGRIGOLD G2900RX	AGRIGOLD G4440RX
AGRIGOLD G3520RX	AGRIGOLD G4579RX
AGRIGOLD G3722RX	AGRIGOLD G4685RX
AGRIGOLD G4190RX	AGRIGOLD G4705RX
AGRIGOLD G4380RX	AGRIGOLD G4995RX

### Armor Seed

Chris Ouzts ..... 662-719-3157  
 2532 Alexander Drive, Suite B  
 chrisouzts@armorseed.com

ARMOR 35-D20	ARMOR X35D92	ARMOR 45-D50
ARMOR 39-D39	ARMOR X40D85	ARMOR X46D63
ARMOR 42-D27	ARMOR X41D47	ARMOR 47-D22
ARMOR 29-D11	ARMOR 45-D43	ARMOR 49-D13
ARMOR X30D53	ARMOR X44D36	ARMOR X51D77

### BASF Agriculture (formerly Bayer Crop Science)

Lucas Owen ..... 731-793-3530  
 lucas.owen@agro.basf-se.com

CZ 3601 LL	CZ 4308 LL	CZ 4918 LL
CZ 3841 LL	CZ 4548 LL	CZ 4938 LL
CZ 4105 LL	CZ 4748 LL	HBK LL4950
CZ 4222 LL	CZ 4820 LL	HBK LL4953

### Bayer (formerly Monsanto)

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

ASGROW AG28X9	ASGROW AG43X7
ASGROW AG29X8	ASGROW AG44X6
ASGROW AG36X6	ASGROW AG46X6
ASGROW AG37X9	ASGROW AG47X6
ASGROW AG38X8	ASGROW AG47X9
ASGROW AG39X7	ASGROW AG48X9
ASGROW AG41X8	ASGROW AG49X9
ASGROW AG42X9	

### Brodbeck Seeds LLC

Dennis A Wickham ..... 614-753-0215  
 15 Ringel Ave., Wabash, IN 46992  
 wickham@brodbeckseed.com

BRODBECK 368R2	BRODBECK 446R2
BRODBECK 388R2	

### Caverndale Farms Brand Seed

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

CAVERNDALE CF 364 STSn
CAVERNDALE CF 387 HT-GLYn
CAVERNDALE CF 427 HT-GLY/STSn
CAVERNDALE CF 478 RR2Y/STSn

### Channel Seed

Whitney Monin ..... 515-314-8834  
 250 Dogwood Drive, Beaver Dam, KY 42320  
 whitney.monin@channel.com

CHANNEL 3718R2X	CHANNEL 4517R2X
CHANNEL 4218R2X	CHANNEL 4717R2X

### Corteva™ agriscience / DowDuPont-Pioneer™

George Stabler ..... 803-308-1003  
 425 Abbeydale Way, Columbia, SC 29229  
 George.Stabler@pioneer.com

PIONEER P36T36X	PIONEER P46A16R
PIONEER P37A78X	PIONEER P46A57BX
PIONEER P40A47X	PIONEER P47A76L
PIONEER P42A96X	PIONEER P48A60X
PIONEER P44A08L	PIONEER P50A85X
PIONEER P44A72BX	

### Dyna Gro Seed

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

DYNA-GRO S39XT08	DYNA-GRO S44XS68
DYNA-GRO S39XT68	DYNA-GRO S46XS87
DYNA-GRO S41XS98	DYNA-GRO S48XS78
DYNA-GRO S4209N	DYNA-GRO S48XT56
DYNA-GRO S43XS27	

### Growmark, Inc.

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

HS 45X80	HS 48X70
HS 46X60	HS 49X60

### Hoegemeyer Hybrids

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

HOEGEMEYER HPT 4211 NX
HOEGEMEYER HPT 4511 NX
HOEGEMEYER HPT 4522 NR
HOEGEMEYER HPT 4922 NRB

### LG Seeds

Dan Mitchell ..... 812-457-3232  
 22827 Shissler Rd, Elmwood, IL 61529  
 dan.mitchell@lgseeds.com

LG SEEDS C4227RX	LG SEEDS LGS4597RX
LG SEEDS C4710RX	LG SEEDS LGS4624RX
LG SEEDS C4845RX	LG SEEDS LGS4989RX

### Mission Seed Solutions

Will Scott ..... 662-822-9926  
 Bryan Olivi ..... 662-719-8685  
 516 N. Sharpe Avenue, Cleveland, MS 38732  
 Will.scott@pinnacleag.com  
 Bryan.olivi@pinnacleag.com

A4447NSXR2	MISSION A4608X
A4637NSXR2	MISSION A4950X

### NK Seed

Chuck Leonard ..... 270-519-9600  
 11055 Wayzata Blvd, Minnetonka MN 55305  
 chuck.leonard@syngenta.com  
 S35-K9X S42-B9XS S45-Z5XS

### Progeny Ag Products

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

PROGENY 4255 RX	PROGENY 4851 RX
PROGENY 4318 RX	PROGENY 4955 RX
PROGENY 4444 RXS	PROGENY 4994 RX
PROGENY 4570 RXS	PROGENY 5016 RXS
PROGENY 4620 RXS	PROGENY 5018 RX
PROGENY 4757 RY	PROGENY 5157 RXS
PROGENY 4799 RXS	PROGENY 5226 RYS
PROGENY 4816 RX	PROGENY 5252 RX
PROGENY 4821 RX	PROGENY 5279 RXS

### Seed Consultants, Inc.

Bill McDonald ..... 800-708-2676  
 648 Miami Trace Road, Washington Court House,  
 OH 43160

Bill.mcdonald@seedconsultants.com

SEED CONSULTANTS SC 8379X™
SEED CONSULTANTS SC 8399X™
SEED CONSULTANTS SC 8439X™
SEED CONSULTANTS SCS 9385RR™
SEED CONSULTANTS SCS 9393RR™
SEED CONSULTANTS SCS 9469BR™

**Stewart Seeds**

Justin Petrosino.....800-365-SEED  
 2230 E CR 300 N, Greensburg, IN 47240  
 Justin.petrosino@stewartseeds.com  
 STEWART 4029R2X STEWART 4527R2X  
 STEWART 4228R2X STEWART 4619R2X  
 STEWART 4327R2X STEWART 4927R2X  
 STEWART 4339R2X STEWART 4939R2X  
 STEWART 4438R2X

**Stine Seed Company**

Jason Green.....618-554-8773  
 22555 Laredo Trail, Adel IA 50003  
 jdgreen@stineseed.com  
 STINE 40BA02 STINE 48BA23

**Stratton Seed Company**

Heath North.....800-264-4433  
 1530 Hwy 79 South Stuttgart, AR 72160  
 hnorth@strattonseed.com  
 AGS GS46X17 GO SOY 43C17S GO SOY E4510S  
 AGS GS48X18 GO SOY 49G16 GO SOY IREANE

**Terral Seed Inc.**

Marty Hale.....318-341-8814  
 117 ellington Drive, Rayville, LA 71269  
 mhale@terralseed.com;  
 REV® 4168X™ REV® 47L38™ REV® 4927X™  
 REV® 4679X™ REV® 4857X™ REV® 49L88™  
 REV® 46L99™

**UniSouth Genetics**

Stacy Burwick.....931-996-4164  
 3205 Hwy 46 South, Dickson TN 37055  
 sburwick@usgseed.com  
 USG 7447XTS USG 7489XT  
 USG 7487XTS USG 7496XTS

**Warren Seed and Agronomy Service LLC**

Lanny Warren .....731-234-2921  
 208 Thompson St, Union City TN 38261  
 lanny.warren@charter.net  
 WARREN SEED BG 3821 RR2X  
 WARREN SEED BG 4210 RR2X  
 WARREN SEED BG 4322 RR2X  
 WARREN SEED BG 4510 RR2X  
 WARREN SEED BG 4842 RR2X  
 WARREN SEED BG 4911 RR2X  
 WARREN SEED BG 4922 RR2X

**University of Missouri**

Dr. Pengyin Chen .....573-379-5431  
 PO Box 160, 147 St Hwy T, Portageville, MO 63873  
 chenpe@missouri.edu  
 UNIVERSITY OF MISSOURI MO5201D CONV  
 UNIVERSITY OF MISSOURI S11-20242C  
 UNIVERSITY OF MISSOURI S13-10590C  
 UNIVERSITY OF MISSOURI S13-10592C  
 UNIVERSITY OF MISSOURI S13-1955C  
 UNIVERSITY OF MISSOURI S13-2743C  
 UNIVERSITY OF MISSOURI S13-3851C  
 UNIVERSITY OF MISSOURI S14-15138R  
 UNIVERSITY OF MISSOURI S14-15146R  
 UNIVERSITY OF MISSOURI S14-9017R  
 UNIVERSITY OF MISSOURI S14-9051R  
 UNIVERSITY OF MISSOURI S15-10434C

**University of Kentucky**

Dr. Todd Pfeiffer, Dr. Claire Venard.....859-257-2993  
 N122 Ag. Science Center North, Lexington KY  
 40546-0091  
 cvenard@uky.edu  
 ESSEX (long term check-release 1974)  
 PENNYRILE (long term check-release 1987)

**Table 3. Company specifications for entries in the 2018 Kentucky Soybean Variety Performance Tests.<sup>A</sup>**

Variety/Brand Name	Realtive Maturity Group	Type	Disease Resistance Traits <sup>C</sup>								Seed Treatments
			Soybean Cyst Nematode	Phytophthora Sojae <sup>D</sup>		Sudden Death Syndrome	Soybean Mosaic Virus	Stem Canker	Other Resistance Traits		
				R gene Rps	Field Tolerance						
A4447NSXR2	4.4	R2Y, Xtend, STS	R3, MR14	Rps 1c	2.0	MR	R	MR2	Column3	23	
A4637NSXR2	4.6	R2Y, Xtend	R3, MR14	Rps 1c	1.8	MR	R	MR		23	
AGRIGOLD G2900RX	2.9		R3, MR14, PI88	1c	9	9		unknown		2, 15, inoculant	
AGRIGOLD G3520RX	3.5		R3, MR14, PI88	1c	9	9		R		2, 15, inoculant	
AGRIGOLD G3722RX	3.7		R3, MR14, PI88	1c	8	7		unknown		2, 15, inoculant	
AGRIGOLD G4190RX	4.1		R3, MR14, PI88	none	8	8		MR		2, 15, inoculant	
AGRIGOLD G4380RX	4.3		R3, MR14, PI88	1c	7	8		R		2, 15, inoculant	
AGRIGOLD G4440RX	4.4		R3, MR14, PI88	1c	9	8		S		2, 15, inoculant	
AGRIGOLD G4579RX	4.5		R3, MR14, PI88	1c	8	9		R		2, 15, inoculant	
AGRIGOLD G4685RX	4.6		R3, MR14, PI88	1c	8	7		R		2, 15, inoculant	
AGRIGOLD G4705RX	4.7		R3, MR14, PI88	1c	8	9		R		2, 15, inoculant	
AGRIGOLD G4995RX	4.9		R3, MR14, PI88	none	9	9		R		2, 15, inoculant	
AGS GS46X17	4.6	X	3, 14		MT	MR		R		3, 6, 21, 27	
AGS GS48X18	4.8	X	3, 14		MT	MS		R		3, 6, 21, 27	
ARMOR 35-D20	3.5	Xtend								9	
ARMOR 39-D39	3.9	Xtend								9	
ARMOR 42-D27	4.2	Xtend								9	
ARMOR 29-D11	2.9	Xtend								9	
ARMOR X30D53	3.0	Xtend								9	
ARMOR X35D92	3.5	Xtend								9	
ARMOR X40D85	4.0	Xtend								9	
ARMOR X41D47	4.1	Xtend								9	
ARMOR 45-D43	4.3	Xtend								9	
ARMOR X44D36	4.4	Xtend								9	
ARMOR 45-D50	4.5	Xtend								9	
ARMOR X46D63	4.6	Xtend								9	
ARMOR 47-D22	4.7	Xtend								9	
ARMOR 49-D13	5.0	Xtend								9	
ARMOR X51D77	5.1	Xtend								9	
ASGROW AG28X9	2.8	RR2X	R3	C	T	MR				1	
ASGROW AG29X8	2.9	RR2X	R3	C	MT	MR				1	
ASGROW AG36X6	3.6	RR2X	R3	C	T	MR		R		1	
ASGROW AG37X9	3.7	RR2X	R3	A	T	MR		R		1	
ASGROW AG38X8	3.8	RR2X	R3	C	T	MR		R		1	
ASGROW AG39X7	3.9	RR2X/SR	R3	C	MT	MR		MR		1	
ASGROW AG41X8	4.1	RR2X/SR	R3	C	MT	MR		R		1	
ASGROW AG42X9	4.2	RR2X	R3	A	T	MR		R		1	
ASGROW AG43X7	4.3	RR2X/SR	R3	A	MT	MS		R		1	
ASGROW AG44X6	4.4	RR2X	R3	C	MT	MR		R		1	
ASGROW AG46X6	4.6	RR2X	R3	A	T	MS		MR		1	
ASGROW AG47X6	4.7	RR2X/SR	R3	C	MT	MS		R		1	
ASGROW AG47X9	4.7	RR2X	R3	A	MS	MS		R		1	
ASGROW AG48X9	4.8	RR2X/SR	R3	C	T	MS		R		1	
ASGROW AG49X9	4.9	RR2X/SR	R3	C	T	MS		R		1	
BRODBECK 368R2	3.6	RR2Y	MR3, MR14	1c	MR	MS				14, 12, 15, 16, 17	

continued

**Table 3. Company specifications for entries in the 2018 Kentucky Soybean Variety Performance Tests.<sup>A</sup>**

Variety/Brand Name	Realtive Maturity Group	Type	Disease Resistance Traits <sup>C</sup>							Seed Treatments
			Soybean Cyst Nematode	Phytophthora Sojae <sup>D</sup>		Sudden Death Syndrome	Soybean Mosaic Virus	Stem Canker	Other Resistance Traits	
				R gene Rps	Field Tolerance					
BRODBECK 388R2	3.8	RR2Y	MR3, MR14		T	MT				14, 12, 15, 16, 17
BRODBECK 446R2	4.4	RR2Y	MR3, MR14	1c	T	MT				14, 12, 15, 16, 17
CAVERNDALE CF 364 STSn	3.6	CONV	3, 14	1k	T	MR		MR	MR-FELS	9, 25, 19
CAVERNDALE CF 387 HT-GLYn	3.8	RR	3, 14	1c	T	MR		MR	MR-FELS	9, 25, 19
CAVERNDALE CF 427 HT-GLY/STSn	4.2	RR	3, 14	1c	T	MR		MR	MR-FELS	9, 25, 19
CAVERNDALE CF 478 RR2Y/STSn	4.7	RR2Y	3, 14	1c	T	MR		MR	MR-FELS	9, 25, 19
CHANNEL 3718R2X	3.7	RR2X	R3		T	MT		MT		3, 1, 21, 5
CHANNEL 4218R2X	4.2	RR2X	R3		MS	MT		MT		3, 1, 21, 5
CHANNEL 4517R2X	4.5	RR2X	R3		T	MT		T		3, 1, 21, 5
CHANNEL 4717R2X	4.7	RR2X	R3		T	MT		MT		3, 1, 21, 5
CZ 3601 LL	3.6	LL	4	Rps1a	MR	T		T		21, 15
CZ 3841 LL	3.8	LL	2	Rps1a	MR	MR		R		21, 15
CZ 4105 LL	4.1	LL	3	Rps1a	MR	MR		T		21, 15
CZ 4222 LL	4.2	LL/STS	3	Rps1a	MR	T		T		21, 15
CZ 4308 LL	4.3	LL	3	Rps1k	T	T				21, 15
CZ 4548 LL	4.5	LL/STS	3	Rps1k	T	MT				21, 15
CZ 4748 LL	4.7	LL	3	Rps1a	T	MR		R		21, 15
CZ 4820 LL	4.8	LL	2	Rps1a	T	T				21, 15
CZ 4918 LL	4.9	LL	3	Rps1a	T	T		T		21, 15
CZ 4938 LL	4.9	LL		Rps1k	T	MR		T		21, 15
DYNA-GRO S39XT08	3.9	Xtend	MR3, MR14	Rps 1c	MT	MR		MR	Frogeye - MR	12, 6
DYNA-GRO S39XT68	3.9	Xtend	MR3, MR14	None	MT	MR		R		12, 6
DYNA-GRO S41XS98	4.1	XT/STS	MR3, MR14	None	MT	R		MR		12, 6
DYNA-GRO S4209N	4.2	CONV	MR3, MR14	Rps 1c	MT	MR		R		12, 6
DYNA-GRO S43XS27	4.3	XT/STS	MR3, MR14	Rps 1c	MT	MR		MS	Frogeye - MR	12, 6
DYNA-GRO S44XS68	4.4	XT/STS	MR3, MR14	Rps 1c	MS	MR		R	Frogeye - R	12, 6
DYNA-GRO S46XS87	4.6	XT/STS	MR3, MR14	Rps 1c	MT	MR		R	Frogeye - MR	12, 6
DYNA-GRO S48XS78	4.8	XT/STS	MR3, MR14	Rps 1c	MT	MS		MS	Frogeye - R	12, 6
DYNA-GRO S48XT56	4.8	XT/STS	MR3, MR14	Rps 1a	MT	R		R	Frogeye - MR	12, 6
ESSEX (long term check-release 1974)	5.0	CONV-PUB								
GO SOY 43C17S	4.3	CONV/STS	3, 14		MT	MR		R		4, 7, 26, 27
GO SOY 49G16	4.9	GT	1, 3, 5, 14		MT	MR		R		4, 7, 26, 27
GO SOY E4510S	4.5	CONV/STS	3, 14		MT	MR		R		4, 7, 26, 27
GO SOY IREANE	4.9	CONV	2, 5		MT	R		R		4, 7, 26, 27
HBK LL4950	4.9	LL	2	Rps1c	T	MS		R		21, 15
HBK LL4953	4.9	LL	1	Rps1k	T	MT		R		21, 15
HOEGEMEYER HPT 4211 NX	4.2	Xtend	PI88788	1k	MS	MT	NA	NA		14, 12, 20, 16
HOEGEMEYER HPT 4511 NX	4.5	Xtend	PI88788	none	S	MT	NA	NA		14, 15, 12, 20, 16
HOEGEMEYER HPT 4522 NR	4.5	RR	PI88788	1k	MS	MT	NA	NA		14, 12, 20, 16
HOEGEMEYER HPT 4922 NRB	4.9	RR/STS	PI88788	1k	S	MT	NA	NA		14, 15, 12, 20, 16
HS 45X80	4.5	RR2 Xtend	3, 14	Rps 1c	MT	MT	NR	R		1, 15
HS 46X60	4.6	RR2 Xtend	3, 14	Rps 1c	MT	MR	NR	R		1, 15
HS 48X70	4.8	RR2 Xtend	3, 14	Rps 1c	MT	MR	NR	R		1, 15
HS 49X60	4.9	RR2 Xtend	3, 14	Rps 1a	MT	MR	NR	R		1, 15
LG SEEDS C4227RX	4.2	Xtend, STS	M3, MR14	none	T	R		MR		6, 27
LG SEEDS C4710RX	4.7	Xtend	M3, MR17	1c	TOL	MS		R		6, 27
LG SEEDS C4845RX	4.8	Xtend	M3, MR18	1c	TOL	R		R		6, 27
LG SEEDS LGS4597RX	4.5	Xtend	M3, MR15	1c	TOL	MR		R		6, 27
LG SEEDS LGS4624RX	4.6	Xtend	M3, MR16	1a	TOL	MR		MR		6, 27
LG SEEDS LGS4989RX	4.9	Xtend	M3, MR19	1a	TOL	N/A		R		6, 27
MISSION A4608X	4.6	R2Y, Xtend, STS	R3, MR14	Rps 1a	2.0	R	R	MR		23
MISSION A4950X	4.9	R2Y, Xtend	R3, MR14	NG	1.5	R	R	R		23
PENNYRILE (long term check-release 1987)	4.7	CONV-PUB								
PIONEER P36T36X	3.6	RR2X	3, 14	1c	MT-5	MR-8			FLS - MT - 5	2, 14
PIONEER P37A78X	3.8	RR2X	3, 14	1a	MT-6	MT-7				2, 14
PIONEER P40A47X	4.0	RR2X	3, 14	1k	MT-5	MT-6				2, 14
PIONEER P42A96X	4.2	RR2X	3, 14	1c	MT-5	MT-6			FLS - MT - 6	2, 14
PIONEER P44A08L	4.4	LL	3, 14		MT-7	MT-5			FLS - MT - 5	2, 14
PIONEER P44A72BX	4.4	Bolt, RR2X	3, 14		MT-5	MT-5			FLS - MR - 7	2, 14
PIONEER P46A16R	4.6	RR	3, 14		MS-4	MT-6				2, 14
PIONEER P46A57BX	4.6	Bolt, RR2X	3, 14		MS-4	MT-6				2, 14
PIONEER P47A76L	4.7	LL	3, 14		MS-4	MT-5			FLS - MR - 8	2, 14
PIONEER P48A60X	4.8	RR2X	3, 14		MS-4	MT-7				2, 14
PIONEER P50A85X	5.0	RR2X	3, 14		MT-5	MT-5			FLS - MT - 5	2, 14
PROGENY 4255 RX	4.2	R2X	R-3, MR-14		Field Tolerance	MR/MS		Susceptible		21, 26, 15
PROGENY 4318 RX	4.3	R2X	unknown	1c				R		21, 26, 15
PROGENY 4444 RXS	4.4	R2X, STS	R-3, MR-14	HRps 1c		MR/MS		R		21, 26, 15
PROGENY 4570 RXS	4.5	R2X, STS	R-3, MR-14	1c		MR		R		21, 26, 15
PROGENY 4620 RXS	4.6	R2X, STS	R-3, MR-14	Hrps 1a		MR		R		21, 26, 15
PROGENY 4757 RY	4.7	RR2	R-3, MR-14	1a		MR		R		21, 26, 15
PROGENY 4799 RXS	4.7	R2X, STS	R-3	HRps 1c		MR		R		21, 26, 15
PROGENY 4816 RX	4.8	R2X	R-3	1a		MR		R		21, 26, 15

continued



**Table 3. Company specifications for entries in the 2018 Kentucky Soybean Variety Performance Tests.<sup>A</sup>**

Variety/Brand Name	Realtime Maturity Group	Type	Disease Resistance Traits <sup>C</sup>							Seed Treatments
			Soybean Cyst Nematode	Phytophthora Sojae <sup>D</sup>		Sudden Death Syndrome	Soybean Mosaic Virus	Stem Canker	Other Resistance Traits	
				R gene Rps	Field Tolerance					
PROGENY 4821 RX	4.8	R2X	R-3, MR-14	1c		MR				21, 26, 15
PROGENY 4851 RX	4.8	R2X	R-3, MR-14	1c		MR/MS		R		21, 26, 15
PROGENY 4955 RX	4.9	R2X	unknown	1a		unknown		R		21, 26, 15
PROGENY 4994 RX	4.9	R2X	unknown	1k		MR		R		21, 26, 15
PROGENY 5016 RXS	5.0	R2X, STS	R-3, MR-14	1a		MR		R		21, 26, 15
PROGENY 5018 RX	5.0	R2X	R-3, MR-14	unknown		MR		R		21, 26, 15
PROGENY 5157 RXS	5.1	R2X, STS	Susceptible	unknown		unknown		R		21, 26, 15
PROGENY 5226 RYS	5.2	RR2, STS	R-3, MR-14	HRps 1c		MR		R		21, 26, 15
PROGENY 5252 RX	5.2	R2X	unknown	1k		unknown		R		21, 26, 15
PROGENY 5279 RXS	5.2	R2X	Susceptible	1c		R		R		21, 26, 15
REV <sup>®</sup> 4168X <sup>™</sup>	4.1	RR2X	9/3, 7/14	rps1k	6	7		8		3, 13, 14, 22
REV <sup>®</sup> 4679X <sup>™</sup>	4.6	RR2X	9/3, 8/14	none	5	5		9		3, 13, 14, 22
REV <sup>®</sup> 46L99 <sup>™</sup>	4.6	LL	8/3, 8/14	none	8			7		3, 13, 14, 22
REV <sup>®</sup> 47L38 <sup>™</sup>	4.7	LL	9/3, 8/14	none	4	5		8		3, 13, 14, 22
REV <sup>®</sup> 4857X <sup>™</sup>	4.8	RR2X	9/3, 9/14	rps1a	5	5		7		3, 13, 14, 22
REV <sup>®</sup> 4927X <sup>™</sup>	4.9	RR2X	9/3, 6/14	rps1k	5	6		9		3, 13, 14, 22
REV <sup>®</sup> 49L88 <sup>™</sup>	4.9	LL	8/3, 4/14	rps1k	4	6		8		3, 13, 14, 22
S35-K9X	3.5	Xtend	R3	Susc.	MT	MR		MR		5
S42-B9XS	4.2	Xtend/STS	R3	1c	MR	MR		MR		5
S45-Z5XS	4.5	Xtend/STS	R3	1a	MR	MR		MR		5
SEED CONSULTANTS SC 8379X <sup>™</sup>	3.7	Xtend								11
SEED CONSULTANTS SC 8399X <sup>™</sup>	3.9	Xtend								11
SEED CONSULTANTS SC 8439X <sup>™</sup>	4.3	Xtend								11
SEED CONSULTANTS SCS 9385RR <sup>™</sup>	3.8	R2Y	P188788		MT	MT				11
SEED CONSULTANTS SCS 9393RR <sup>™</sup>	3.9	R2Y	P188788	1k	MT	MT				11
SEED CONSULTANTS SCS 9469BR <sup>™</sup>	4.6	STS/RR								11
STEWART 4029R2X	4.0	Xtend	R3	1c	MR	MS		MR		1
STEWART 4228R2X	4.2	Xtend	R3	1c	MS	MR		MR		1
STEWART 4327R2X	4.3	Xtend	R3	1c	MR	NR		MS		1
STEWART 4339R2X	4.3	Xtend	R3	1c	MR	MR		MR		1
STEWART 4438R2X	4.4	Xtend	R3	1c	MR	MS		MR		1
STEWART 4527R2X	4.5	Xtend	R3	1c	MR	MR		R		1
STEWART 4619R2X	4.6	Xtend	R3	1c	MR	MS		MR		1
STEWART 4927R2X	4.9	Xtend	R3	1c	MR	MR		MR		1
STEWART 4939R2X	4.9	Xtend	R3	Susc.	MR	NS		MR		1
STINE 40BA02	4.0	Stine GT								
STINE 48BA23	4.8									
USG 7447XTS	4.4	XT	R3, MR14	1c	1.9	MR		MS	FELS-MS	3, 14, 24, 19
USG 7487XTS	4.8	XT	R3, MR14	1c	2.0	MR		R		3, 14, 24, 19
USG 7489XT	4.8	XT	R3, MR14	1a	1.5	MR		R	Cercospora-MR	3, 14, 24, 19
USG 7496XTS	4.9	XT	R3, MR14	1a	2.2	MR		R	SRK - MR	3, 14, 24, 19
UNIVERSITY OF MISSOURI MO5201D CONV	5.3	CONV	3, 14		X	MR		R	FLS	3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S11-20242C	5.1	CONV	2, 3, 5, 14		X	R			FLS	3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S13-10590C	4.3	CONV	5		X	R		R	FLS	3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S13-10592C	4.5	CONV			X	R		R	FLS	3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S13-1955C	5.5	CONV	3, 14		X	MR			FLS, RKNT	3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S13-2743C	4.1	CONV	3, 14		X			R		3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S13-3851C	4.4	CONV			X			R		3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S14-15138R	4.8	RR1/STS	3, 14		X			R	FLS	3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S14-15146R	4.6	RR1/STS			X			R	FLS	3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S14-9017R	5.3	RR1	1, 3, 5		X			R	FLS	3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S14-9051R	4.7	RR1	5		X			R	FLS	3, 6, 26, 15, 18
UNIVERSITY OF MISSOURI S15-10434C	5.5	CONV	1, 2, 3, 5, 14		X				RN	3, 6, 26, 15, 18
WARREN SEED BG 3821 RR2X	3.8	Xtend	3, 14	1c	MT	MR				8
WARREN SEED BG 4210 RR2X	4.2	Xtend	3, 14	1c	MT	MR				8
WARREN SEED BG 4322 RR2X	4.3	Xtend	3, 14	1c	MT	MR				8
WARREN SEED BG 4510 RR2X	4.5	Xtend	3, 14	1c	MT	MR				8
WARREN SEED BG 4842 RR2X	4.8	Xtend	3, 14	1c	MT	MR				8
WARREN SEED BG 4911 RR2X	4.9	Xtend	3, 14	1c	MT	MR				8
WARREN SEED BG 4922 RR2X	4.9	Xtend	3, 14	1c	MT	MR				8

<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<sup>™</sup> LeadOff<sup>®</sup> and DuPont<sup>™</sup> Basis<sup>®</sup> 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	Chemical class/use	LD50 oral/derm <sup>A</sup>	LC50 <sup>B</sup>
1	Acceleron	Metalaxyl, Imidacloprid, Pyraclostrobin	systemic & non-systemic fungicide, systemic insecticide	NA	NA
2	AgriShield® Fungicide + Insecticide		nematicide, fungicide & insecticide	NA	NA
3	Apron Maxx	Mefenoxam, Fludioxonil	systemic & non-systemic fungicide	5,000/5,050	5.42 - 4hrs
4	Apron XL	Mefenoxam	systemic fungicide	862/2,020	2.52 - 4hrs
5	B2000SAT		biological component	NA	NA
6	Clariva™ Complete Beans	Pasteuria nishizawae, Mefenoxam, Thiamethoxam, Fludioxonil, Sedaxane	nematicide, systemic & non-systemic fungicide, systemic insecticide	NA	NA
7	Cruiser Maxx	Mefenoxam, Thiamethoxam, Fludioxonil	systemic & non-systemic fungicide, systemic insecticide	5,000/ 5,000	2.5 - 4hrs
8	Cruiser Extrem	Mefenoxam, Thiamethoxam, Fludioxonil, Azoxystrobin	systemic & non-systemic fungicide, systemic insecticide	5,000/ 5,000	NA
9	Defend Extra				
11	Eclipse TEN	Metalaxyl, Fludioxonil, Thiabendazole, Imidacloprid	systemic & non-systemic fungicide	NA	NA
12	Equity® VIP	Thiamethoxam, Mefenoxam, Fludioxonil, Thiabendazole, Sedaxane	systemic insecticide and fungicide	3758/>5,000	>2.60 - 4 hrs
13	EverGol™ Energy	Prothioconazole, Penflufen, Metalaxyl, Polyethylene-polypropylene copolymer, 1,2-Propanediol	fungicide	2,000/2,000	2,205 - 4hrs
14	Gaucho	Imidacloprid	systemic insecticide	643/ 2,000	8.1 to 10.0 - 1hr
15	ILeVO®	Fluopyram	fungicide, nematicide	1,750/5,000	2.0 - 96hrs
16	DuPont Lumisena	Oxathiapiprolin	fungicide	>5,000/>5,000	>0.69 - 96 hrs
17	Marauder®		inoculant	NA	NA
18	Maxim®	Fludioxonil	fungicide	NA	NA
19	N-Hibit™ CST	Harpin protein	activates a natural defense mechanism in plants, referred to as systemic acquired resistance	NA	NA
20	PA2030		biological component	NA	NA
21	Poncho® VOTIVO®	Clothiandin, Bacillus firmus	systemic insecticide and nematicide	2,000/5,000	2.62 - 4hrs
22	PPST 2030		biological component and polymer	NA	NA
23	Revize® PBI	Imidacloprid	systemic insecticide	NA	NA
24	Rancona 3.8 FS	Ipconazole	systemic broad spectrum fungicide	5,000/ slight	2.59-4hrs
25	TagTeam® LCO liquid	Penicillium bilaii, Bradyrhizobium japonicum	beneficial microorganisms	NA	NA
26	Trilex® 2000	Trifloxystrobin, Metalaxyl, Glycerine	systemic fungicide	2,000/5,000	2.6 - 4hrs
27	Vibrance™	Sedaxane	fungicide	2,975/5,050	2.56 - 4hrs

<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. 2018 Kentucky Soybean Variety Performance Tests, State Summary - Recommended Table.

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018	OIL <sup>A/C</sup>			PROTEIN <sup>A/C</sup>		
	2018	2017-18	2016-18		2018	2017-18	2016-18	2018	2017-18	2016-18
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>										
AGRIGOLD G2900RX	42.4			2.6	19.3			36.3		
ARMOR 29-D11	40.8			2.6	18.5			35.6		
ASGROW AG28X9	40.8			2.4	18.8			36.3		
ASGROW AG29X8	40.7	52.2		2.1	18.9	18.2		37.2	36.4	
<b>GROUP II AVERAGE</b>	<b>41.2</b>	<b>52.2</b>		<b>2.4</b>	<b>18.9</b>			<b>36.4</b>		
LSD (0.10)	2.1	1.8			0.5			1.0		
C.V.	4.9	5.4			2.2			2.5		
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>										
SEED CONSULTANTS SCS 9385RR™	60.0	65.6	63.1	2.4	20.5	19.8	20.1	34.2	34.0	33.8
SEED CONSULTANTS SC 8399X™	59.1			2.2	20.0			34.6		
ASGROW AG38X8	55.3	61.6		2.6	19.6	18.9		35.3	34.7	
SEED CONSULTANTS SCS 9393RR™	54.6	63.5	60.7	1.9	21.0	20.2	20.5	34.6	34.0	33.8
ASGROW AG39X7	54.5	61.1	59.1	2.5	19.1	18.3	18.6	35.3	34.6	34.7
ARMOR 35-D20	53.8			2.7	19.6			36.0		
ASGROW AG37X9	53.6			2.8	19.4			35.1		
PIONEER P36T36X	53.5			2.6	19.9			35.2		
AGRIGOLD G3722RX	52.8			2.8	19.6			36.1		
DYNA-GRO S39XT68	52.6	59.6		2.6	19.1	18.5		35.1	34.8	
ARMOR 39-D39	51.5	57.9		2.3	19.1	18.5		35.3	34.8	
S35-K9X	51.4			3.2	20.1			34.3		
CAVERNDAL CF 387 HT-GLYn	51.4	58.0	59.3	2.4	20.2	19.7	20.0	35.1	34.3	34.2
BRODBECK 388R2	51.1	58.9		2.5	20.0	19.3		34.8	34.2	
CZ 3601 LL	50.6			2.4	20.2			34.5		
BRODBECK 368R2	50.5	56.2		2.3	19.5	18.9		36.0	35.8	
AGRIGOLD G3520RX	50.2	56.2		2.2	19.7	19.0		35.9	35.5	
SEED CONSULTANTS SC 8379X™	49.6			2.5	19.1			36.6		
CZ 3841 LL	48.0	54.7	54.6	2.9	19.8	19.1	19.4	35.4	35.1	34.9
PIONEER P37A78X	47.9			3.0	20.1			35.1		
CHANNEL 3718R2X	47.7			2.6	20.0			35.3		
WARREN SEED BG 3821 RR2X	46.6			2.8	19.1			35.4		
ARMOR X35D92	46.6			3.1	20.0			35.6		
ASGROW AG36X6	46.2			2.5	19.6			35.4		
CAVERNDAL CF 364 STSn	45.8			2.7	19.0			36.4		
DYNA-GRO S39XT08	45.0	54.6		2.9	19.6	18.9		37.0	36.4	
ARMOR X30D53	38.4			3.4	20.7			34.5		
<b>GROUP III AVERAGE</b>	<b>50.7</b>	<b>59.0</b>	<b>59.4</b>	<b>2.6</b>	<b>19.8</b>	<b>19.1</b>	<b>19.7</b>	<b>35.3</b>	<b>34.8</b>	<b>34.3</b>
LSD (0.10)	3.0	3.2	2.4		0.3	0.2	0.5	0.4	0.3	0.9
C.V.	5.6	7.8	7.2		1.4	1.3	4.1	1.1	1.0	4.1
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>										
STEWART 4339R2X	68.8			2.2	19.1			34.4		
PIONEER P42A96X	66.5			1.7	20.0			34.6		
STEWART 4527R2X	65.5	67.5	62.7	2.1	19.3	18.9	19.1	34.3	33.7	33.8
AGRIGOLD G4380RX	64.5	69.3		2.1	18.8	18.3		34.8	34.8	
STEWART 4438R2X	63.5	69.2		2.0	19.2	18.9		34.6	34.0	
USG 7447XTS	62.9			2.4	18.8			34.9		
WARREN SEED BG 4510 RR2X	62.2	67.5		2.5	18.7	18.4		35.2	34.6	
CHANNEL 4517R2X	61.9			2.2	19.4			34.3		
ARMOR 42-D27	61.7	63.1		2.3	19.7	18.7		34.9	34.8	
PIONEER P44A72BX	61.7			2.2	19.6			34.7		
DYNA-GRO S4209N	61.2			2.2	19.8			35.4		
PROGENY 4570 RXS	61.2			2.3	19.4			34.9		
ARMOR 45-D50	61.1			2.4	18.8			35.5		
AGRIGOLD G4579RX	60.8			1.8	19.4			34.9		
ASGROW AG41X8	60.8	66.4		2.3	19.4	18.8		34.8	34.3	
HS 45X80	60.4			2.1	19.5			34.5		
A4447NSXR2	60.0			2.4	19.1			34.8		
DYNA-GRO S41XS98	59.9	63.7		2.4	19.6	19.0		35.1	34.3	
ASGROW AG44X6	59.6	63.0	60.8	2.7	19.0	18.5	18.6	35.4	35.0	35.0

continued

# RECOMMENDED TABLE

Table 5. 2018 Kentucky Soybean Variety Performance Tests, State Summary - Recommended Table.

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018	OIL <sup>A/C</sup>			PROTEIN <sup>A/C</sup>		
	2018	2017-18	2016-18		2018	2017-18	2016-18	2018	2017-18	2016-18
PIONEER P44A08L	59.4			2.3	19.6			34.8		
PIONEER P40A47X	59.4	66.0		1.8	19.3	18.8		35.2	34.2	
S45-Z5XS	59.4			1.7	19.8			34.1		
CAVERNDALE CF 427 HT-GLY/STS <sub>n</sub>	59.1	63.9		2.1	19.8	19.5		35.3	34.8	
UNIVERSITY OF MISSOURI S13-2743C	59.1	61.2		2.9	19.9	19.3		34.5	34.4	
HOEGEMEYER HPT 4511 NX	58.9			2.4	18.8			35.0		
PROGENY 4444 RXS	58.8	64.9		3.2	19.3	18.9		35.1	34.3	
DYNA-GRO S44XS68	58.7	65.8		1.9	19.4	18.6		34.2	34.5	
CZ 4548 LL	58.4			2.9	20.1			35.5		
STEWART 4039R2X	58.4			1.9	19.4			35.6		
BRODBECK 446R2	58.3	65.8	61.9	3.1	19.5	19.2	19.5	34.7	34.0	33.8
STEWART 4228R2X	58.2	65.6		1.9	19.3	18.4		34.8	34.6	
SEED CONSULTANTS SC 8439X <sup>TM</sup>	57.6			2.2	19.4			35.5		
LG SEEDS LGS4597RX	57.4			2.0	19.3			34.9		
UNIVERSITY OF MISSOURI S13-10592C	57.3			3.2	19.8			35.6		
ARMOR X41D47	56.7			3.6	19.7			34.8		
ASGROW AG43X7	56.7	64.6	61.7	2.7	19.3	18.7	18.8	34.8	34.1	33.9
ASGROW AG42X9	56.7			2.8	19.7			34.2		
S42-B9XS	56.0			1.8	19.6			35.0		
HOEGEMEYER HPT 4522 NR	55.8	67.6		1.9	19.6	19.2		34.4	33.7	
DYNA-GRO S43XS27	55.6	65.9	61.1	2.8	18.7	18.1	18.6	34.7	34.6	34.4
PROGENY 4318 RX	55.5			3.4	19.5			34.5		
UNIVERSITY OF MISSOURI S13-3851C	55.5	62.3		2.8	19.4	19.1		34.7	34.2	
REV <sup>®</sup> 4168X <sup>TM</sup>	55.3			2.1	19.8			35.2		
AGRIGOLD G4190RX	55.3			2.2	19.5			34.9		
CZ 4105 LL	55.0	63.5	59.5	2.2	19.6	19.0	19.1	36.0	35.1	35.2
GO SOY E4510S	54.7			1.9	20.0			35.6		
CHANNEL 4218R2X	54.5			2.3	18.3			35.4		
UNIVERSITY OF MISSOURI S13-10590C	54.5	59.3		2.1	20.2	19.6		34.9	34.2	
HOEGEMEYER HPT 4211 NX	54.3			3.4	19.3			35.9		
CZ 4308 LL	54.1			2.9	20.4			35.3		
STEWART 4327R2X	54.0	64.9	60.9	2.8	18.7	18.5	18.9	34.9	33.9	33.8
AGRIGOLD G4440RX	53.6	60.6		2.3	19.1	18.5		34.3	34.2	
STINE 40BA02	53.1			2.1	20.1			33.4		
ARMOR 45-D43	53.0			3.0	19.2			34.8		
WARREN SEED BG 4322 RR2X	52.9			3.3	18.5			35.4		
CZ 4222 LL	52.3	57.5	54.0	2.6	19.5	19.3	19.5	34.8	33.6	33.4
GO SOY 43C17S	51.9			1.9	20.1			34.5		
LG SEEDS C4227RX	51.7	61.0		2.0	19.6	19.0		35.2	34.3	
PROGENY 4255 RX	50.9	58.3		2.7	19.3	18.8		34.2	33.8	
WARREN SEED BG 4210 RR2X	50.9	61.7		2.4	19.7	18.8		35.1	34.7	
ARMOR X40D85	49.3			2.9	20.0			35.4		
ARMOR X44D36	48.2			2.2	19.5			34.5		
<b>GROUP IV EARLY AVERAGE</b>	<b>57.6</b>	<b>64.1</b>	<b>60.3</b>	<b>2.4</b>	<b>19.4</b>	<b>18.9</b>	<b>19.0</b>	<b>34.9</b>	<b>34.3</b>	<b>34.2</b>
LSD (0.10)	3.2	3.2	2.4		0.3	0.2	0.2	0.4	0.3	0.2
C.V.	5.3	7.0	6.5		1.3	1.3	1.3	1.0	1.0	1.0

## MATURITY GROUP IV LATE (relative MG 4.6-4.9)

PROGENY 4757 RY	64.9	68.9	63.7	3.0	19.9	19.1	19.3	33.9	33.5	33.2
PIONEER P46A16R	63.1	69.4		2.3	19.7	19.3		33.9	33.4	
PIONEER P48A60X	63.0			2.4	19.0			34.5		
PROGENY 4816 RX	62.5	65.3		1.9	18.7	18.3		34.7	34.6	
ASGROW AG48X9	62.3			2.4	19.5			34.8		
REV <sup>®</sup> 49L88 <sup>TM</sup>	62.2	65.4		2.8	19.2	19.1		34.8	34.2	
STEWART 4619R2X	61.5			2.6	19.4			34.4		
UNIVERSITY OF MISSOURI S14-15146R	61.3	63.6		2.1	19.6	19.3		34.4	33.6	
ASGROW AG47X9	61.2			2.3	19.6			34.1		
ASGROW AG47X6	61.1	66.5	63.2	2.5	19.5	18.6	18.9	34.3	34.1	33.9
HOEGEMEYER HPT 4922 NRB	60.8			2.8	19.6			34.7		
USG 7487XTS	60.7	64.9		1.8	19.2	18.7		34.6	33.4	
CAVERNDALE CF 478 RR2Y/STS <sub>n</sub>	60.7	63.8	59.4	2.4	18.8	18.4	18.4	34.3	33.9	34.1
STINE 48BA23	60.5			3.2	19.5			34.7		

continued



# RECOMMENDED TABLE

Table 5. 2018 Kentucky Soybean Variety Performance Tests, State Summary - Recommended Table.

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018	OIL <sup>A/C</sup>			PROTEIN <sup>A/C</sup>		
	2018	2017-18	2016-18		2018	2017-18	2016-18	2018	2017-18	2016-18
PROGENY 4994 RX	60.4			2.8	19.2			34.6		
ASGROW AG46X6	60.3	64.8	61.8	2.2	19.4	19.0	19.1	34.8	34.2	34.1
CZ 4820 LL	60.3	68.3		2.4	19.5	19.2		34.1	33.3	
MISSION A4950X	60.2			2.9	18.9			34.5		
CZ 4918 LL	59.5			2.6	19.5			34.6		
HS 49X60	59.1	69.3	63.8	1.7	19.0	18.4	18.5	34.8	34.7	34.6
ARMOR 47-D22	59.1			3.2	19.6			34.4		
CZ 4748 LL	59.0	65.9	62.2	2.2	19.7	19.1	19.3	33.7	33.4	33.5
ASGROW AG49X9	58.9			3.0	19.2			34.8		
GO SOY Ireane	58.4	61.5	58.8	2.6	18.6	18.0	18.3	34.9	34.7	34.5
AGRIGOLD G4685RX	58.3	66.8		2.0	19.6	19.0		33.9	33.2	
WARREN SEED BG 4922 RR2X	57.9			1.6	19.3			34.6		
AGRIGOLD G4995RX	57.9			2.6	18.9			34.0		
USG 7496XTS	57.8	66.0	63.0	2.3	19.3	18.8	18.8	34.7	34.2	34.3
PROGENY 4620 RXS	57.5	64.4		3.1	19.0	18.5		34.6	34.3	
MISSION A4608X	57.5			3.0	19.7			34.4		
CHANNEL 4717R2X	57.5			2.2	19.1			34.7		
DYNA-GRO S48XS78	57.3	66.5		2.3	19.4	18.9		35.0	34.7	
UNIVERSITY OF MISSOURI S14-9051R	57.3			2.8	19.5			34.6		
UNIVERSITY OF MISSOURI S14-15138R	57.2			2.4	19.3			34.3		
WARREN SEED BG 4842 RR2X	56.9			2.1	19.5			34.2		
PIONEER P46A57BX	56.9			2.6	20.0			34.0		
REV® 47L38™	56.8			2.6	19.6			34.5		
HBK LL4953	56.7	67.3		2.1	19.4	19.2		34.4	33.3	
PIONEER P47A76L	56.6			2.6	20.0			34.2		
STEWART 4927R2X	56.2	65.9	60.1	2.3	19.4	18.8	18.9	34.3	33.4	33.3
HS 46X60	56.2	65.9	60.9	2.4	19.3	18.6	18.7	34.7	34.1	34.0
LG SEEDS C4710RX	56.1	61.1		2.9	19.3	19.2		34.4	33.3	
LG SEEDS C4845RX	56.1	65.2	61.7	1.7	19.2	18.5	18.5	34.7	34.6	34.7
USG 7489XT	56.0			1.7	19.7			34.7		
REV® 4679X™	55.5			2.9	19.7			34.5		
DYNA-GRO S48XT56	55.4	65.4	61.1	1.8	19.1	18.6	18.7	35.0	34.0	34.0
PROGENY 4955 RX	55.3			3.0	19.6			34.0		
REV® 46L99™	55.1			2.2	20.8			35.0		
WARREN SEED BG 4911 RR2X	55.0	62.5		2.7	19.2	18.9		34.5	33.8	
AGS GS48X18	54.8			2.4	19.6			33.9		
PROGENY 4799 RXS	54.8	63.5		2.3	18.8	18.2		35.0	34.6	
SEED CONSULTANTS SCS 9469BR™	54.7			2.0	19.7			34.3		
DYNA-GRO S46XS87	54.6	61.6	59.0	1.9	19.5	19.0	19.0	34.4	33.5	33.6
REV® 4927X™	54.3	61.3		3.7	19.6	19.2		34.0	33.2	
LG SEEDS LGS4624RX	54.2			2.9	19.9			33.6		
AGRIGOLD G4705RX	53.9			3.2	19.7			34.0		
CZ 4938 LL	53.9			2.6	19.2			34.1		
A4637NSXR2	53.7			3.2	19.2			34.6		
REV® 4857X™	53.7	60.9		3.1	19.3	19.0		34.9	34.3	
AGS GS46X17	53.6			1.9	19.9			34.4		
STEWART 4939R2X	53.5			2.3	19.3			34.4		
HS 48X70	53.3	64.7		2.1	19.0	18.3		34.8	34.4	
ARMOR X46D63	53.2			2.3	19.5			34.6		
LG SEEDS LGS4989RX	52.5			2.1	19.7			33.7		
PROGENY 4851 RX	50.7	60.1		3.9	19.2	18.8		34.6	34.1	
GO SOY 49G16	50.2	51.0	49.2	3.9	19.8	18.8	19.0	33.9	34.0	33.9
HBK LL4950	49.8			2.7	19.3			34.7		
PENNYRILE (long term check-released 1987)	41.7	48.2	45.7	2.9	20.0	19.4	19.4	35.4	35.0	35.4
<b>GROUP IV LATE AVERAGE</b>	<b>57.0</b>	<b>63.9</b>	<b>59.6</b>	<b>2.5</b>	<b>19.4</b>	<b>18.8</b>	<b>18.9</b>	<b>34.4</b>	<b>34.0</b>	<b>34.1</b>
LSD (0.10)	2.9	2.6	2.0		0.4	0.3	0.2	0.5	0.3	0.2
C.V.	4.9	5.8	5.6		2.2	1.8	1.6	1.5	1.3	1.2
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>										
PROGENY 5016 RXS	62.6	66.8		3.0	18.6	18.3		35.3	34.7	
UNIVERSITY OF MISSOURI S14-9017R	58.5	65.8		2.3	19.6	19.7		34.3	33.1	

continued

# RECOMMENDED TABLE

**Table 5. 2018 Kentucky Soybean Variety Performance Tests, State Summary - Recommended Table.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018	OIL <sup>A/C</sup>			PROTEIN <sup>A/C</sup>		
	2018	2017-18	2016-18		2018	2017-18	2016-18	2018	2017-18	2016-18
PIONEER P50A85X	58.4			2.8	19.3			34.3		
ARMOR 49-D13	57.5			3.5	18.7			34.5		
PROGENY 5018 RX	56.7			3.4	18.8			34.7		
UNIVERSITY OF MISSOURI M05201D CONV	55.3			2.9	19.3			34.5		
ARMOR X51D77	54.8			3.2	18.6			35.7		
PROGENY 5279 RXS	54.3			2.5	18.2			35.5		
PROGENY 5252 RX	52.5			3.4	18.7			35.6		
PROGENY 5226 RYS	49.3			2.7	19.1			35.6		
ESSEX (long term check-released 1974)	46.3	51.9	48.8	3.1	19.1	18.9	18.8	<b>35.9</b>	<b>35.2</b>	35.9
UNIVERSITY OF MISSOURI S15-10434C	46.2			3.7	18.5			35.4		
UNIVERSITY OF MISSOURI S11-20242C	45.5			4.3	19.0			34.4		
UNIVERSITY OF MISSOURI S13-1955C	44.5	49.7		4.3	19.1	18.8		34.8	33.6	
<b>GROUP V AVERAGE</b>	<b>53.0</b>	<b>58.5</b>		<b>3.2</b>	<b>18.9</b>	<b>18.9</b>	<b>18.8</b>	<b>35.0</b>	<b>34.2</b>	<b>35.9</b>
LSD (0.10)	2.5	2.3			0.2	0.2	0.1	0.4	0.3	0.2
C.V.	4.5	5.5			1.2	1.2	1.2	1.0	1.0	1.0

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

B The 2018 yield data were collected at the Caldwell Co., Calloway Co., Caldwell Co., Fayette Co., Henderson Co., Logan Co., and Meade Co. locations. 2017 yield data were collected at the Breckinridge Co., Butler Co., Caldwell Co., Calloway Co., Cumberland Co., Fayette Co., Hancock Co., and Pulaski Co. locations. The 2016 yield data were collected at the Breckinridge Co., Butler Co., Caldwell Co., Calloway Co., Cumberland Co., Fayette Co., Hancock Co., and Russel Co. locations.

C The 2018 and 2017 oil and protein samples were collected at the Caldwell Co., Calloway Co., and Fayette Co. locations. The 2016 samples were collected at the Calloway Co. (except for MG IV Early and Late samples), Hancock Co., and Fayette Co. locations.

**Table 6. 2018 Kentucky Soybean Variety Performance Tests  
Caldwell County - Pennyrile Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2018	2017-18	2016-2018	2018
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>				
ASGROW AG29X8	41.5	44.0		1.7
ASGROW AG28X9	39.3			1.3
ARMOR 29-D11	37.6			1.7
AGRIGOLD G2900RX	37.3			2.0
<b>GROUP II AVERAGE</b>	<b>38.9</b>	<b>44.0</b>		<b>1.7</b>
LSD (0.10)	2.5			
C.V.	5.4			
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>				
AGRIGOLD G3520RX	62.1	54.9		2.3
SEED CONSULTANTS SC 8399X™	61.9			2.3
ARMOR 35-D20	61.5			2.3
AGRIGOLD G3722RX	60.0			2.0
PIONEER P36T36X	59.3			2.7
S35-K9X	58.8			2.3
ARMOR X35D92	57.2			2.7
SEED CONSULTANTS SCS 9385RR™	56.7	61.4	60.9	2.3
SEED CONSULTANTS SC 8379X™	56.6			2.3
ARMOR 39-D39	56.6	55.1		2.0
CAVERNDAL CF 364 STSn	56.6			2.3
BRODBECK 388R2	56.5	59.6		2.3
BRODBECK 368R2	56.0	51.6		2.0
ASGROW AG38X8	55.8	52.3		2.0
ASGROW AG37X9	55.1			2.0
ASGROW AG36X6	53.0			2.3
CZ 3841 LL	52.1	49.8	53.4	2.0
DYNA-GRO S39XT68	51.7	52.7		2.3
SEED CONSULTANTS SCS 9393RR™	51.7	59.7	59.1	1.7
CAVERNDAL CF 387 HT-GLYn	51.5	59.2	57.5	2.0
DYNA-GRO S39XT08	49.9	50.9		2.7
ASGROW AG39X7	49.6	57.1	57.9	2.0
CZ 3601 LL	49.1			2.0
PIONEER P37A78X	48.0			2.3
CHANNEL 3718R2X	47.6			2.3
ARMOR X30D53	47.1			3.3
WARREN SEED BG 3821 RR2X	42.0			2.0
<b>GROUP III AVERAGE</b>	<b>54.2</b>	<b>55.4</b>	<b>57.8</b>	<b>2.3</b>
LSD (0.10)	3.1	2.9	2.3	
C.V.	5.4	7.1	6.9	
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>				
CHANNEL 4517R2X	74.9			3.0
SEED CONSULTANTS SC 8439X™	72.5			2.3
STEWART 4339R2X	71.9			3.0
A4447NSXR2	68.5			2.3
AGRIGOLD G4380RX	68.4	65.0		2.3
LG SEEDS C4227RX	68.3	59.7		2.0
CAVERNDAL CF 427 HT-GLY/STSn	68.3	58.2		2.7
PROGENY 4570 RXS	68.1			2.0
STEWART 4438R2X	67.9	63.1		2.7
ASGROW AG43X7	67.1	66.3	67.1	2.7
HOEGEMEYER HPT 4522 NR	66.7	64.5		2.3
STEWART 4527R2X	66.2	59.2	59.1	2.0
HOEGEMEYER HPT 4511 NX	66.0			2.0
USG 7447XTS	65.5			2.7
AGRIGOLD G4579RX	65.4			2.3
UNIVERSITY OF MISSOURI S13-10592C	64.6			3.0
UNIVERSITY OF MISSOURI S13-3851C	64.3	58.2		2.3
DYNA-GRO S44XS68	64.3	65.5		1.7
STEWART 4039R2X	64.2			2.0
S45-Z5XS	64.2			2.3
S42-B9XS	64.0			2.3
DYNA-GRO S43XS27	63.9	63.7	61.3	3.0

**Table 6. 2018 Kentucky Soybean Variety Performance Tests  
Caldwell County - Pennyrile Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2018	2017-18	2016-2018	2018
ASGROW AG41X8	63.8	63.6		1.7
PIONEER P44A72BX	62.4			2.7
DYNA-GRO S41XS98	62.1	61.2		2.7
LG SEEDS LGS4597RX	61.9			2.7
PIONEER P44A08L	61.8			2.7
ARMOR 42-D27	61.8	53.5		2.7
STINE 40BA02	61.6			2.7
PIONEER P42A96X	61.4			2.0
AGRIGOLD G4190RX	61.2			3.0
ASGROW AG42X9	61.1			2.7
HOEGEMEYER HPT 4211 NX	61.0			3.0
DYNA-GRO S4209N	59.8			2.7
GO SOY 43C17S	59.8			2.0
WARREN SEED BG 4322 RR2X	59.7			3.3
PIONEER P40A47X	59.1	54.3		2.3
ASGROW AG44X6	59.1	57.0	58.3	2.3
BRODBECK 446R2	58.7	58.2	60.9	2.7
HS 45X80	58.7			2.3
ARMOR 45-D50	58.3			2.3
ARMOR 45-D43	58.2			3.0
WARREN SEED BG 4210 RR2X	58.1	55.9		2.7
WARREN SEED BG 4510 RR2X	57.3	62.6		2.7
PROGENY 4318 RX	57.1			2.7
UNIVERSITY OF MISSOURI S13-10590C	57.0	56.1		2.0
CZ 4222 LL	56.8	47.1	46.4	2.7
CHANNEL 4218R2X	56.8			2.0
CZ 4105 LL	56.6	56.6	57.2	2.0
AGRIGOLD G4440RX	56.5	59.1		2.3
STEWART 4228R2X	56.2	61.2		2.3
PROGENY 4444 RXS	55.6	55.5		3.3
ARMOR X40D85	55.5			2.0
GO SOY E4510S	55.3			2.0
UNIVERSITY OF MISSOURI S13-2743C	54.4	50.9		2.7
CZ 4548 LL	54.2			2.7
PROGENY 4255 RX	54.0	46.9		2.7
ARMOR X41D47	52.9			3.0
CZ 4308 LL	52.4			2.7
ARMOR X44D36	51.0			2.3
REV® 4168X™	49.9			2.0
STEWART 4327R2X	48.2	48.7	54.6	2.7
<b>GROUP IV EARLY AVERAGE</b>	<b>61.0</b>	<b>58.2</b>	<b>58.1</b>	<b>2.5</b>
LSD (0.10)	3.5	3.0	2.3	
C.V.	5.5	6.7	6.4	
<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
STEWART 4619R2X	62.9			2.0
REV® 4679X™	62.7			2.3
GO SOY Ireane	62.6	65.5	62.3	1.7
CZ 4820 LL	59.8	65.0		2.0
ASGROW AG46X6	59.2	61.3	60.8	1.7
CZ 4748 LL	59.2	57.6	57.1	2.0
ASGROW AG49X9	58.4			2.3
USG 7487XTS	57.7	55.8		1.3
PIONEER P48A60X	57.7			2.7
PIONEER P46A16R	57.5	61.2		2.3
PROGENY 4994 RX	57.5			2.7
ASGROW AG48X9	57.3			1.7
STINE 48BA23	57.3			2.7
ASGROW AG47X9	56.9			1.3
PIONEER P47A76L	56.9			2.3
PROGENY 4757 RY	56.0	56.7	59.1	2.3
A4637NSXR2	55.8			2.0
USG 7489XT	55.3			1.0
CZ 4918 LL	55.2			2.0
CAVERNDAL CF 478 RR2Y/STSn	54.7	56.8	56.7	2.3

continued



**Table 6. 2018 Kentucky Soybean Variety Performance Tests  
Caldwell County - Pennyrile Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2018	2017-18	2016-2018	2018
STEWART 4939R2X	54.7			2.0
HS 49X60	54.4	60.0	58.4	1.3
USG 7496XTS	54.4	57.1	59.5	2.0
ARMOR 47-D22	54.0			2.3
WARREN SEED BG 4842 RR2X	54.0			1.7
PROGENY 4620 RXS	53.9	55.0		2.7
UNIVERSITY OF MISSOURI S14-15146R	53.9	59.9		2.0
LG SEEDS C4710RX	53.7	50.9		2.3
PROGENY 4955 RX	53.4			2.3
PROGENY 4816 RX	53.2	49.9		1.0
CZ 4938 LL	53.0			1.7
LG SEEDS LGS4989RX	52.4			1.3
ARMOR X46D63	52.2			2.0
AGS GS46X17	52.2			1.3
PIONEER P46A57BX	52.1			2.7
AGS GS48X18	51.7			1.7
REV <sup>®</sup> 47L38™	51.5			1.7
WARREN SEED BG 4922 RR2X	51.5			1.0
REV <sup>®</sup> 4857X™	51.0	53.1		2.0
REV <sup>®</sup> 49L88™	51.0	57.3		2.3
DYNA-GRO S48XS78	50.6	60.0		1.3
HBK LL4953	50.5	60.9		1.7
HOEGEMEYER HPT 4922 NRB	50.2			2.7
DYNA-GRO S46XS87	50.2	55.6	57.1	2.0
MISSION A4950X	50.2			3.0
HS 46X60	49.9	51.3	53.1	1.7
SEED CONSULTANTS SCS 9469BR™	49.9			2.0
ASGROW AG47X6	49.9	51.5	55.6	1.7
AGRIGOLD G4685RX	49.7	50.9		1.0
LG SEEDS LGS4624RX	49.6			2.3
AGRIGOLD G4705RX	49.3			3.3
UNIVERSITY OF MISSOURI S14-9051R	48.9			2.0
REV <sup>®</sup> 46L99™	48.8			1.3
HS 48X70	48.7	58.6		1.7
CHANNEL 4717R2X	48.6			2.7
WARREN SEED BG 4911 RR2X	48.6	55.1		2.0
MISSION A4608X	48.5			2.7

**Table 6. 2018 Kentucky Soybean Variety Performance Tests  
Caldwell County - Pennyrile Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING
	2018	2017-18	2016-2018	2018
UNIVERSITY OF MISSOURI S14-15138R	48.2			1.3
REV <sup>®</sup> 4927X™	47.9	48.7		3.0
PROGENY 4799 RXS	46.9	48.0		2.0
LG SEEDS C4845RX	46.6	49.8	54.0	1.0
AGRIGOLD G4995RX	46.4			2.3
STEWART 4927R2X	46.2	52.3	55.1	2.0
HBK LL4950	45.6			2.0
GO SOY 49G16	44.4	44.8	47.7	2.0
PROGENY 4851 RX	44.0	60.3		3.7
DYNA-GRO S48XT56	43.9	45.3	48.8	1.7
PENNYRILE (long term check-released 1987)	39.6	42.5	43.3	2.0
<b>GROUP IV LATE AVERAGE</b>	<b>52.4</b>	<b>54.9</b>	<b>55.2</b>	<b>2.0</b>
LSD (0.10)	3.0	2.6	2.0	
C.V.	5.4	6.4	6.2	

**MATURITY GROUP V (relative MG 5.0-5.9)**

PROGENY 5016 RXS	<b>74.0</b>	<b>62.7</b>		2.7
PIONEER P50A85X	65.4			2.7
PROGENY 5279 RXS	64.6			2.3
PROGENY 5018 RX	61.2			4.0
ARMOR X51D77	60.8			2.3
UNIVERSITY OF MISSOURI MOS201D CONV	58.7			2.0
ARMOR 49-D13	57.7			3.3
ESSEX (long term check-released 1974)	56.7	52.6		2.3
UNIVERSITY OF MISSOURI S15-10434C	56.0			2.7
UNIVERSITY OF MISSOURI S11-20242C	55.9			3.3
PROGENY 5252 RX	54.6			3.7
UNIVERSITY OF MISSOURI S13-1955C	54.3	53.9		4.3
PROGENY 5226 RYS	53.9			2.7
UNIVERSITY OF MISSOURI S14-9017R	42.5	48.7		2.7

<b>GROUP V AVERAGE</b>	<b>58.3</b>	<b>54.5</b>		<b>2.9</b>
LSD (0.10)	2.5	2.9		
C.V.	3.9	6.7		

<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> 2018, 2017, and 2016 data were collected in Caldwell Co.

**Agronomic Information – Caldwell County, Pennyrile Region.**

GPS coordinates	37°05'47.4"N 87°51'46.2"W
Soil type	Crider silt loam
Slopes	0-6 %, eroded
Previous crop	Tobacco, winter wheat (cover crop)
Soil test	pH 6.82, P 64, K 313
SCN test	1,125
Fertilizer/lime applied	NA
Agricultural practice	no-till
Pre-planting herbicides	NA
Planting dates	MG II, III, IV Early and V: 05/23/2018 MG IV Late: 05/24/2018
Harvest dates	MG II and III: 10/18 MG IV Early and Late: 10/22 MG V: 10/23
50% frost killing	10/21

**Caldwell County (Princeton).**

Month	Total Monthly Precipitation (in.)	Temperatures		
		Monthly Average (°F)	Highest recorded (°F)	Lowest recorded (°F)
March	3.51	46.0	73.4	22.2
April	4.86	50.9	79.9	25.3
May	4.69	73.2	88.7	45.7
June	7.79	77.5	92.6	55.4
July	2.84	77.8	94.0	61.4
August	2.41	76.6	91.7	52.1
September	5.61	73.9	95.4	48.6
October (10/23)	1.48	61.6	88.7	27.8

**Table 7. 2018 Kentucky Soybean Variety Performance Tests  
Calloway County - Purchase Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>				
ARMOR 29-D11	40.8			1.0
ASGROW AG28X9	39.3			1.0
AGRIGOLD G2900RX	38.8			1.0
ASGROW AG29X8	37.0	49.2		2.0
<b>GROUP II AVERAGE</b>	<b>39.0</b>			<b>1.3</b>
LSD (0.10)	2.1			
C.V.	4.2			
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>				
SEED CONSULTANTS SCS 9385RR™	61.0	65.0	63.9	2.3
CAVERNDALE CF 387 HT-GLYn	60.1	65.6	64.9	1.3
SEED CONSULTANTS SCS 9393RR™	59.4	63.9	58.3	1.0
SEED CONSULTANTS SC 8399X™	58.0			1.0
CZ 3841 LL	56.1	55.3	51.2	2.3
ASGROW AG36X6	55.4			2.3
ARMOR X35D92	55.1			1.7
CHANNEL 3718R2X	55.0			2.0
DYNA-GRO S39XT68	54.6	56.9		1.3
WARREN SEED BG 3821 RR2X	54.5			1.7
ARMOR 39-D39	53.9	53.8		1.3
SEED CONSULTANTS SC 8379X™	52.4			1.7
ASGROW AG38X8	52.0	61.9		2.0
BRODBECK 368R2	51.6	59.6		2.0
CZ 3601 LL	51.2			1.3
ASGROW AG39X7	51.1	57.9	54.6	2.0
S35-K9X	50.3			2.7
PIONEER P36T36X	50.2			2.0
CAVERNDALE CF 364 STSn	50.0			2.0
AGRIGOLD G3722RX	48.2			2.7
AGRIGOLD G3520RX	47.5	55.9		1.3
ARMOR 35-D20	46.2			1.7
ASGROW AG37X9	46.1			1.7
PIONEER P37A78X	45.3			1.7
DYNA-GRO S39XT08	43.6	47.4		1.3
BRODBECK 388R2	42.9	53.9		1.3
ARMOR X30D53	37.3			3.0
<b>GROUP III AVERAGE</b>	<b>51.4</b>	<b>58.1</b>	<b>58.6</b>	<b>1.8</b>
LSD (0.10)	4.5	3.4	2.6	
C.V.	8.3	8.3	7.7	
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>				
USG 7447XTS	65.5			2.0
CHANNEL 4517R2X	65.3			1.3
DYNA-GRO S4209N	64.0			1.7
STEWART 4527R2X	63.2	56.2	58.1	1.0
WARREN SEED BG 4322 RR2X	62.4			3.7
PIONEER P42A96X	62.0			1.0
PIONEER P44A72BX	61.8			2.0
S45-Z5XS	60.8			1.0
ARMOR 45-D50	59.7			2.0
ASGROW AG44X6	59.3	56.2	59.8	2.7
STEWART 4339R2X	58.2			1.0
UNIVERSITY OF MISSOURI S13-2743C	58.2			2.0
STEWART 4327R2X	58.1	55.8	60.9	1.7
GO SOY E4510S	57.8			1.3
HS 45X80	57.4			1.7
UNIVERSITY OF MISSOURI S13-3851C	57.3			1.0
DYNA-GRO S43XS27	56.9	53.0	57.2	2.0
PROGENY 4444 RXS	56.5			2.7
HOEGEMEYER HPT 4211 NX	56.0			3.0
DYNA-GRO S41XS98	56.0			1.0
A4447NSXR2	55.7			1.0
STEWART 4438R2X	55.6			1.3

**Table 7. 2018 Kentucky Soybean Variety Performance Tests  
Calloway County - Purchase Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
PROGENY 4255 RX	55.3			1.7
CZ 4548 LL	55.0			1.7
UNIVERSITY OF MISSOURI S13-10590C	54.9			1.0
HOEGEMEYER HPT 4511 NX	54.7			1.7
HOEGEMEYER HPT 4522 NR	54.6			1.0
CZ 4308 LL	54.3			2.0
WARREN SEED BG 4510 RR2X	54.1			1.3
PROGENY 4318 RX	53.9			2.0
ARMOR X41D47	53.8			3.0
AGRIGOLD G4190RX	53.7			1.3
PROGENY 4570 RXS	53.5			1.3
LG SEEDS LGS4597RX	53.4			2.0
DYNA-GRO S44XS68	53.1			1.0
ARMOR 42-D27	53.0			1.3
ASGROW AG41X8	53.0			1.7
BRODBECK 446R2	52.8	54.7	60.8	1.3
AGRIGOLD G4380RX	52.3			1.7
UNIVERSITY OF MISSOURI S13-10592C	52.2			1.7
STEWART 4228R2X	51.6			1.3
STINE 40BA02	51.1			1.0
CHANNEL 4218R2X	50.2			1.0
ASGROW AG43X7	50.1	55.3	55.4	1.0
STEWART 4039R2X	49.8			1.3
WARREN SEED BG 4210 RR2X	49.6			1.7
CAVERNDALE CF 427 HT-GLY/STSn	49.6			1.3
SEED CONSULTANTS SC 8439X™	49.5			2.0
AGRIGOLD G4440RX	49.2			2.0
S42-B9XS	48.5			1.0
ARMOR 45-D43	47.9			3.0
PIONEER P40A47X	47.5			1.3
AGRIGOLD G4579RX	47.3			1.0
LG SEEDS C4227RX	47.0			1.3
PIONEER P44A08L	46.8			1.7
ASGROW AG42X9	46.2			1.7
REV® 4168X™	46.0			1.3
ARMOR X44D36	45.8			1.3
CZ 4105 LL	45.7	51.3	53.7	1.3
CZ 4222 LL	42.9	40.3	47.1	1.7
ARMOR X40D85	42.9			2.0
GO SOY 43C17S	40.5			1.0
<b>GROUP IV EARLY AVERAGE</b>	<b>53.6</b>	<b>52.8</b>	<b>56.6</b>	<b>1.6</b>
LSD (0.10)	3.6	2.6	2.7	
C.V.	6.4	6.6	8.1	
<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
PIONEER P48A60X	69.7			4.0
UNIVERSITY OF MISSOURI S14-9051R	69.1			2.3
USG 7496XTS	65.7	59.6	57.6	3.0
UNIVERSITY OF MISSOURI S14-15146R	65.5	64.8		2.3
ASGROW AG47X6	65.5	69.0	64.9	3.0
AGRIGOLD G4685RX	64.8	64.6		2.3
AGS GS46X17	64.3			1.7
MISSION A4950X	64.3			3.3
DYNA-GRO S48XT56	64.1	70.2	62.5	1.7
STINE 48BA23	64.1			4.3
HS 49X60	63.9	71.2	63.5	2.3
PIONEER P46A16R	63.6	68.5		2.0
CZ 4820 LL	63.3	68.4		3.0
REV® 46L99™	63.1			2.7
ASGROW AG46X6	62.6	65.7	62.1	2.3
CZ 4748 LL	62.3	62.9	60.4	2.0
REV® 49L88™	61.2	62.6		3.3
PROGENY 4757 RY	60.4	66.2	66.3	3.0
STEWART 4619R2X	59.9			2.0
GO SOY Ireane	59.7	62.3	59.5	3.0

continued

**Table 7. 2018 Kentucky Soybean Variety Performance Tests  
Calloway County - Purchase Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
HOEGEMEYER HPT 4922 NRB	59.5			2.7
REV <sup>®</sup> 4857X <sup>™</sup>	59.3	52.4		3.3
REV <sup>®</sup> 4679X <sup>™</sup>	59.0			3.3
PROGENY 4816 RX	58.9	60.0		2.0
USG 7487XTS	58.7	57.8		1.7
PROGENY 4955 RX	58.0			4.0
PIONEER P46A57BX	57.9			1.7
WARREN SEED BG 4922 RR2X	57.6			1.7
REV <sup>®</sup> 4927X <sup>™</sup>	57.5	56.3		3.7
LG SEEDS C4710RX	57.3	53.9		3.3
WARREN SEED BG 4842 RR2X	56.8			2.0
ASGROW AG48X9	56.4			2.3
HS 48X70	56.2	60.7		3.3
PROGENY 4620 RXS	56.0	61.2		2.3
A4637NSXR2	55.9			2.3
AGRIGOLD G4705RX	55.9			2.3
PIONEER P47A76L	55.3			2.0
DYNA-GRO S48XS78	55.2	54.3		3.3
WARREN SEED BG 4911 RR2X	55.0	55.1		2.7
ASGROW AG49X9	54.9			3.3
CAVERNDAL CF 478 RR2Y/STS <sub>n</sub>	54.0	55.7	52.1	2.3
HS 46X60	53.9	54.8	51.1	3.3
CZ 4938 LL	53.5			2.7
STEWART 4927R2X	53.2	59.8	52.4	2.7
ASGROW AG47X9	52.9			2.3
UNIVERSITY OF MISSOURI S14-15138R	52.8			2.7
REV <sup>®</sup> 47L38 <sup>™</sup>	52.7			3.0
PROGENY 4851 RX	52.6	59.0		4.0
AGS GS48X18	51.9			1.7
CHANNEL 4717R2X	51.8			2.0
LG SEEDS LGS4624RX	51.8			2.3
ARMOR 47-D22	51.6			3.0
GO SOY 49G16	51.5	47.9	49.7	4.3
HBK LL4953	51.4	66.1		1.7
USG 7489XT	51.3			2.0
AGRIGOLD G4995RX	50.2			1.7
HBK LL4950	50.1			3.3

**Table 7. 2018 Kentucky Soybean Variety Performance Tests  
Calloway County - Purchase Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
LG SEEDS C4845RX	49.9	64.2	60.8	2.0
MISSION A4608X	49.0			2.3
CZ 4918 LL	48.3			1.7
ARMOR X46D63	48.2			2.0
LG SEEDS LGS4989RX	47.5			2.7
PROGENY 4994 RX	46.8			1.7
SEED CONSULTANTS SCS 9469BR <sup>™</sup>	46.7			2.0
PROGENY 4799 RXS	46.4	54.4		1.3
STEWART 4939R2X	43.5			1.7
DYNA-GRO S46XS87	43.2	47.3	46.7	1.3
PENNYRILE (long term check-released 1987)	35.2	40.2	39.7	2.7
<b>GROUP IV LATE AVERAGE</b>	<b>56.0</b>	<b>59.9</b>	<b>56.6</b>	<b>2.5</b>
LSD (0.10)	2.9	2.8	2.1	
C.V.	4.9	6.5	6.1	

**MATURITY GROUP V (relative MG 5.0-5.9)**

PIONEER P50A85X	<b>70.5</b>			3.0
PROGENY 5016 RXS	69.5	<b>68.6</b>		4.0
UNIVERSITY OF MISSOURI MO5201D CONV	68.9			3.7
PROGENY 5018 RX	68.0			3.7
UNIVERSITY OF MISSOURI S14-9017R	65.8	62.3		2.7
PROGENY 5252 RX	64.4			4.3
PROGENY 5226 RYS	63.3			3.3
ARMOR 49-D13	61.4			4.0
PROGENY 5279 RXS	60.5			3.3
UNIVERSITY OF MISSOURI S11-20242C	55.9			5.0
UNIVERSITY OF MISSOURI S13-1955C	53.6	52.2		4.3
UNIVERSITY OF MISSOURI S15-10434C	53.1			4.0
ARMOR X51D77	53.1			4.3
ESSEX (long term check-released 1974)	52.0	50.0		4.0
<b>GROUP V AVERAGE</b>	<b>61.4</b>	<b>58.3</b>		<b>3.8</b>
LSD (0.10)	2.3	2.6		
C.V.	3.5	5.7		

<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> 2018, 2017, and 2016 data were collected in Calloway Co.

**Agronomic Information – Calloway County, Purchase Region.**

GPS coordinates	36°36'43.9"N 88°20'57.8"W
Soil type	Grenada silt loam
Slopes	0-2%
Previous crop	Tobacco, winter wheat (cover crop)
Soil test	pH 6.8, P 114, K 187
SCN test	938
Agricultural practice	no-till
Pre-planting herbicides	NA
Planting date	05/22/2018
Post-planting herbicides	Reflex, FirstRate: 06/07/2018
Harvest date	MG II and II: 10/09 MG IV and V: 10/12
50% frost killing	10/21

**Calloway County (Murray).**

Month	Total Monthly Precipitation (in.)	Temperatures		
		Monthly Average (°F)	Highest recorded (°F)	Lowest recorded (°F)
March	4.61	47.7	73.6	26.3
April	5.84	52.2	81.0	27.8
May	3.75	73.6	89.3	49.1
June	6.11	77.7	91.7	59.6
July	1.49	78.4	93.6	63.5
August	3.29	78.0	94.3	53.8
September	5.03	74.6	96.1	49.4
October (10/12)	0.21	73.0	89.5	40.4



**Table 8. 2018 Kentucky Soybean Variety Performance Tests  
Fayette County - Bluegrass Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018	PLANT HEIGHT (IN.) 2018	MATURITY DATE 2018
	2018	2017-18	2016- 2018			
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>						
AGRIGOLD G2900RX	50.5			3.0	36	21
ARMOR 29-D11	48.9			2.7	32	30
ASGROW AG28X9	43.3			2.0	32	21
ASGROW AG29X8	36.0	53.5		1.3	36	21
<b>GROUP II AVERAGE</b>	<b>44.7</b>			<b>2.3</b>	<b>34</b>	<b>Sept. 23</b>
LSD (0.10)	3.7					
C.V.	6.5					
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>						
SEED CONSULTANTS SC 8399X™	65.7			2.3	47	40
SEED CONSULTANTS SCS 9385RR™	65.1	67.4	66.0	3.0	43	40
ASGROW AG39X7	64.3	67.1	64.9	2.0	43	40
ASGROW AG38X8	63.0	63.2		3.0	38	42
ASGROW AG37X9	62.4			2.7	48	40
SEED CONSULTANTS SCS 9393RR™	61.3	66.4	63.0	2.7	44	40
BRODBECK 368R2	59.8	65.7		2.0	42	35
PIONEER P37A78X	58.9			1.7	43	35
BRODBECK 388R2	58.8	65.7		2.3	39	35
PIONEER P36T36X	56.5			3.0	40	40
S35-K9X	54.4			3.0	42	35
CAVERNDALE CF 387 HT-GLYn	54.0	59.6	60.6	2.3	41	39
AGRIGOLD G3722RX	53.6			3.0	44	40
DYNA-GRO S39XT68	52.7	59.7		2.3	45	38
CHANNEL 3718R2X	52.4			2.3	38	35
ARMOR 35-D20	52.2			2.7	39	40
CZ 3601 LL	51.6			2.0	48	35
CAVERNDALE CF 364 STSn	51.5			2.3	32	35
SEED CONSULTANTS SC 8379X™	50.0			2.7	44	42
CZ 3841 LL	49.1	60.6	60.4	2.0	43	35
ASGROW AG36X6	48.8			2.3	37	40
DYNA-GRO S39XT08	48.6	55.8		2.7	40	35
ARMOR 39-D39	46.4	62.1		2.0	36	40
AGRIGOLD G3520RX	43.9	59.4		2.0	37	40
ARMOR X35D92	41.4			2.3	36	40
WARREN SEED BG 3821 RR2X	41.1			2.3	38	40
ARMOR X30D53	38.7			2.7	34	35
<b>GROUP III AVERAGE</b>	<b>53.6</b>	<b>62.7</b>	<b>63.0</b>	<b>2.4</b>	<b>41</b>	<b>Oct. 8th</b>
LSD (0.10)	2.9	3.5	2.5			
C.V.	5.1	7.9	7.0			
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>						
DYNA-GRO S4209N	83.5			2.7	44	45
AGRIGOLD G4380RX	79.6	79.9		2.0	44	40
STEWART 4339R2X	79.1			2.3	40	32
STEWART 4527R2X	77.8	81.1	71.4	2.0	43	46
PIONEER P42A96X	77.5			2.7	46	45
CAVERNDALE CF 427 HT- GLY/STSn	75.9	74.1		2.3	36	42
STEWART 4438R2X	75.9	77.3		1.3	43	45
PROGENY 4570 RXS	75.6			3.0	46	42
CZ 4105 LL	74.5	73.1	64.7	2.3	44	42
ASGROW AG44X6	74.5	69.1	63.2	2.0	42	42
PROGENY 4444 RXS	74.1	73.9		3.7	44	45
PIONEER P44A08L	73.4			2.7	42	45
ASGROW AG42X9	71.4			2.3	39	48
AGRIGOLD G4579RX	71.2			2.3	40	45
ARMOR 45-D50	71.1			2.0	46	45
WARREN SEED BG 4510 RR2X	70.6	72.1		2.3	50	45

**Table 8. 2018 Kentucky Soybean Variety Performance Tests  
Fayette County - Bluegrass Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018	PLANT HEIGHT (IN.) 2018	MATURITY DATE 2018
	2018	2017-18	2016- 2018			
CHANNEL 4218R2X	70.1			3.0	44	44
DYNA-GRO S41XS98	67.9	70.7		3.0	45	46
HS 45X80	67.1			2.3	50	48
USG 7447XTS	66.0			2.0	46	43
ARMOR X44D36	65.9			2.3	40	42
ARMOR 42-D27	65.5	63.5		2.7	39	40
UNIVERSITY OF MISSOURI S13-2743C	65.3	60.0		2.7	46	42
ASGROW AG41X8	64.9	73.3		2.3	46	42
PIONEER P44A72BX	64.6			2.0	42	45
LG SEEDS LGS4597RX	64.4			2.3	46	45
CZ 4222 LL	63.5	61.9	58.1	2.3	39	42
GO SOY 43C17S	63.3			3.0	42	42
STEWART 4039R2X	63.1			2.0	42	43
UNIVERSITY OF MISSOURI S13-10592C	63.0			4.7	46	40
PIONEER P40A47X	62.9	67.9		1.7	42	42
UNIVERSITY OF MISSOURI S13-3851C	62.7	69.5		3.7	34	43
REV® 4168X™	62.7			2.3	42	40
GO SOY E4510S	62.6			2.0	36	45
ASGROW AG43X7	62.2	72.7	64.7	3.3	44	40
CZ 4548 LL	61.6			3.0	42	45
SEED CONSULTANTS SC 8439X™	61.5			2.0	42	45
PROGENY 4318 RX	61.1			3.7	45	45
DYNA-GRO S44XS68	60.6	68.3		2.0	44	42
HOEGEMEYER HPT 4511 NX	59.9			1.7	48	45
WARREN SEED BG 4322 RR2X	59.6			2.0	43	45
STEWART 4228R2X	59.3	62.1		2.3	42	42
AGRIGOLD G4440RX	59.0	61.2		2.3	46	45
CZ 4308 LL	58.9			3.3	43	40
CHANNEL 4517R2X	57.9			2.3	40	42
DYNA-GRO S43XS27	57.8	69.0	62.5	2.3	42	45
BRODBECK 446R2	57.7	67.4	61.8	4.0	48	42
STEWART 4327R2X	57.5	70.5	65.4	2.0	44	45
A4447NSXR2	56.7			2.3	44	42
UNIVERSITY OF MISSOURI S13-10590C	56.7	64.2		2.7	42	40
PROGENY 4255 RX	56.5	61.3		2.0	41	45
S42-B9XS	56.5			1.7	39	38
ARMOR X41D47	56.4			3.0	42	40
HOEGEMEYER HPT 4211 NX	56.3			3.7	46	42
S45-Z5XS	56.1			2.0	38	42
HOEGEMEYER HPT 4522 NR	55.8	62.7		2.0	42	42
WARREN SEED BG 4210 RR2X	55.0	62.0		2.3	42	45
STINE 40BA02	53.6			2.0	40	45
ARMOR X40D85	52.3			3.0	40	42
ARMOR 45-D43	52.2			3.0	40	42
AGRIGOLD G4190RX	51.6			2.3	39	42
LG SEEDS C4227RX	44.0	55.2		2.7	45	42
<b>GROUP IV EARLY AVERAGE</b>	<b>64.0</b>	<b>68.3</b>	<b>64.0</b>	<b>2.5</b>	<b>43</b>	<b>Oct. 13th</b>
LSD (0.10)	3.3	3.2	2.3			
C.V.	5.0	6.5	5.9			
<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>						
PROGENY 4757 RY	77.5	73.6	64.9	2.7	50	43
UNIVERSITY OF MISSOURI S14-15146R	76.7	72.7		3.0	48	45
PIONEER P46A16R	76.1	77.1		2.7	47	42
CHANNEL 4717R2X	74.5			2.7	48	45
AGRIGOLD G4995RX	74.4			2.7	44	45
LG SEEDS C4845RX	74.0	78.5	69.3	2.0	48	45
ASGROW AG47X9	73.9			2.7	48	45
HBK LL4953	73.8	76.5		2.7	47	43

continued

**Table 8. 2018 Kentucky Soybean Variety Performance Tests  
Fayette County - Bluegrass Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018	PLANT HEIGHT (IN.) 2018	MATURITY DATE 2018
	2018	2017-18	2016- 2018			
PROGENY 4994 RX	73.1			2.7	42	45
USG 7487XTS	72.9	72.9		2.3	57	45
MISSION A4608X	72.9			4.3	52	45
CAVERNDALE CF 478 RR2Y/ STS <sub>n</sub>	71.9	74.1	66.4	3.0	52	55
CZ 4918 LL	71.1			3.0	41	45
STEWART 4927R2X	70.5	71.8	64.5	3.0	42	45
MISSION A4950X	70.4			3.0	45	55
REV <sup>®</sup> 49L88 <sup>™</sup>	69.5	66.2		3.3	48	48
CZ 4820 LL	68.6	68.4		2.7	47	45
REV <sup>®</sup> 46L99 <sup>™</sup>	67.5			2.7	48	42
ASGROW AG48X9	67.3			3.3	42	45
ASGROW AG47X6	65.8	68.6	63.0	2.7	39	40
DYNA-GRO S48XS78	65.3	73.2		2.3	48	48
AGRIGOLD G4705RX	65.0			4.0	53	48
REV <sup>®</sup> 4857X <sup>™</sup>	64.8	71.1		2.3	49	48
PROGENY 4816 RX	64.3	70.8		2.0	52	50
UNIVERSITY OF MISSOURI S14-15138R	64.0			3.0	51	45
STINE 48BA23	63.8			3.3	44	40
REV <sup>®</sup> 47L38 <sup>™</sup>	63.7			3.0	48	45
HS 46X60	63.4	71.3	64.4	2.3	48	40
CZ 4748 LL	63.3	67.2	63.8	2.0	46	45
CZ 4938 LL	63.3			3.0	46	48
ASGROW AG49X9	63.2			2.7	42	46
DYNA-GRO S48XT56	62.9	68.0	61.9	2.3	50	55
PIONEER P48A60X	62.7			2.7	45	42
PROGENY 4799 RXS	62.7	70.0		3.3	43	40
LG SEEDS LGS4624RX	62.6			3.7	53	45
WARREN SEED BG 4922 RR2X	62.6			2.7	42	48
HOEGEMEYER HPT 4922 NRB	62.4			3.0	47	45
ARMOR X46D63	61.9			2.7	47	43
WARREN SEED BG 4842 RR2X	61.5			2.7	56	45
A4637NSXR2	61.4			3.3	48	45
HBK LL4950	61.3			2.7	54	55
LG SEEDS C4710RX	60.6	67.9		3.0	50	48
HS 49X60	60.1	70.3	62.9	2.7	44	48
STEWART 4619R2X	60.1			3.3	48	43
DYNA-GRO S46XS87	60.0	65.7	60.7	2.3	46	48
STEWART 4939R2X	59.9			2.7	50	45
ASGROW AG46X6	59.6	63.6	58.7	2.0	46	48
ARMOR 47-D22	59.0			2.3	50	45
GO SOY Ireane	58.4	61.0	55.4	3.3	40	55
USG 7496XTS	58.1	68.8	62.8	2.7	54	58
PROGENY 4620 RXS	57.9	66.8		3.7	50	45
PROGENY 4955 RX	57.2			3.3	44	48
AGS GS48X18	56.9			4.0	48	43

**Table 8. 2018 Kentucky Soybean Variety Performance Tests  
Fayette County - Bluegrass Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018	PLANT HEIGHT (IN.) 2018	MATURITY DATE 2018
	2018	2017-18	2016- 2018			
REV <sup>®</sup> 4927X <sup>™</sup>	56.4	68.6		3.3	51	42
WARREN SEED BG 4911 RR2X	56.1	66.7		2.7	44	45
UNIVERSITY OF MISSOURI S14-9051R	55.7			3.7	42	45
HS 48X70	55.3	63.9		1.7	48	42
USG 7489XT	54.6			2.3	46	48
AGRIGOLD G4685RX	53.5	64.9		2.3	49	43
GO SOY 49G16	53.1	53.0	48.3	4.0	46	45
PROGENY 4851 RX	51.7	55.1		4.3	58	45
PIONEER P46A57BX	51.5			2.0	46	40
SEED CONSULTANTS SCS 9469BR <sup>™</sup>	50.7			2.0	55	45
LG SEEDS LGS4989RX	47.0			2.3	44	42
PENNYRILE (long term check-released 1987)	46.2	52.7	49.9	3.0	54	42
PIONEER P47A76L	46.2			2.7	45	45
REV <sup>®</sup> 4679X <sup>™</sup>	44.8			3.3	42	42
AGS GS46X17	40.6			3.0	48	40

GROUP IV LATE AVERAGE	62.3	68.2	61.1	2.9	48.0	Oct. 16
LSD (0.10)	2.3	2.7	2.0			
C.V.	3.6	5.6	5.3			

**MATURITY GROUP V (relative MG 5.0-5.9)**

UNIVERSITY OF MISSOURI S14-9017R	56.6	63.0		2.3	47	60
ARMOR X51D77	55.3			3.3	50	60
PROGENY 5016 RXS	53.4	66.0		3.3	52	55
PROGENY 5018 RX	52.3			2.3	45	55
PROGENY 5279 RXS	49.8			2.0	54	50
ARMOR 49-D13	48.8			3.3	45	55
UNIVERSITY OF MISSOURI S15-10434C	47.5			4.7	52	48
UNIVERSITY OF MISSOURI S11-20242C	46.6			5.0	36	55
PROGENY 5226 RYS	46.3			3.3	52	45
PIONEER P50A85X	45.7			3.0	49	50
PROGENY 5252 RX	42.7			3.0	44	60
UNIVERSITY OF MISSOURI MOS201D CONV	41.2			4.7	50	48
ESSEX (long term check- released 1974)	35.2	48.4	46.0	4.3	34	45
UNIVERSITY OF MISSOURI S13-1955C	31.0	46.8		4.7	36	58

GROUP V AVERAGE	46.6	56.0		3.5	46	Oct. 23rd
LSD (0.10)	2.4	2.8				
C.V.	4.9	7.4				

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

B 2018, 2017, and 2016 data were collected in Fayette Co.

**Agronomic Information – Fayette County, Bluegrass region.**

GPS coordinates	38°07'22.9"N 84°29'23.5"W
Soil type	Lanton silty clay, dunning, eroded, occasionally flooded
Slopes	0%
Previous crop	corn
Soil test	pH 6.73, P 276, K 261
SCN test	0
Fertilizer/lime applied	none
Agricultural practice	no-till
Pre-planting herbicides	Sharpen, Mad Dog (Glyphosate) 04/20/2018; Mad Dog, Dual II Magnum, Authority XL 05/02/2018
Planting date	05/09/2018
Post-planting herbicides:	none
Harvest dates	MG II and III: 11/05 MG IV Early: 11/21 MG IV Late and V: 11/29
50% frost killing	10/26

**Fayette County (Lexington).**

Month	Total Monthly Precipitation (in.)	Temperatures		
		Monthly Average (°F)	Highest recorded (°F)	Lowest recorded (°F)
March	4.62	41.9	66.4	20.7
April	4.48	49.7	78.1	26.0
May	8.87	71.5	86.8	44.7
June	4.67	74.5	90.2	56.6
July	4.69	75.6	92.2	59.7
August	4.34	74.8	88.5	55.1
September	10.85	71.8	89.9	50.2
October	5.39	58.0	85.5	30.3
November (11/29)	4.19	40.7	65.0	19.3

**Table 9. 2018 Kentucky Soybean Variety Performance Tests  
Henderson County - Green River Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>				
AGRIGOLD G2900RX	30.4			4.0
ARMOR 29-D11	28.0			4.0
ASGROW AG29X8	25.5	61.1		4.0
ASGROW AG28X9	21.3			4.0
<b>GROUP II AVERAGE</b>	<b>26.3</b>	<b>61.1</b>		<b>4.0</b>
LSD (0.10)	2.0	2.7		
C.V.	6.3	8.3		
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>				
SEED CONSULTANTS SCS 9385RR™	56.4	72.6	67.9	2.3
BRODBECK 388R2	50.9	62.8		3.0
ASGROW AG38X8	47.0	76.6		2.3
ASGROW AG39X7	45.7	63.2	61.3	2.7
ASGROW AG37X9	45.4			3.0
PIONEER P36T36X	43.9			2.0
CZ 3601 LL	43.4			2.7
SEED CONSULTANTS SCS 9393RR™	43.4	68.7	64.6	1.7
SEED CONSULTANTS SC 8399X™	41.7			2.3
CAVERNDALE CF 364 STSn	41.1			2.7
CHANNEL 3718R2X	41.0			2.7
DYNA-GRO S39XT68	40.6	62.3		3.3
WARREN SEED BG 3821 RR2X	39.6			3.3
ARMOR 35-D20	37.4			2.7
CAVERNDALE CF 387 HT-GLYn	36.8	57.8	59.1	3.0
BRODBECK 368R2	36.6	62.0		2.3
ARMOR 39-D39	35.8	60.7		2.7
CZ 3841 LL	33.5	57.4	57.4	3.3
DYNA-GRO S39XT08	32.8	55.0		3.7
S35-K9X	31.2			4.0
PIONEER P37A78X	31.1			4.0
AGRIGOLD G3722RX	30.1			3.0
ASGROW AG36X6	27.9			1.7
ARMOR X35D92	27.0			3.3
AGRIGOLD G3520RX	26.4	59.9		2.3
ARMOR X30D53	24.9			3.7
SEED CONSULTANTS SC 8379X™	17.4			2.0
<b>GROUP III AVERAGE</b>	<b>37.4</b>	<b>63.3</b>	<b>62.1</b>	<b>2.8</b>
LSD (0.10)	2.4	4.6	3.3	
C.V.	6.1	11.8	10.2	
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>				
CHANNEL 4517R2X	60.1			1.7
AGRIGOLD G4579RX	58.3			1.3
STEWART 4228R2X	57.6	73.6		1.7
WARREN SEED BG 4510 RR2X	56.7	69.8		2.3
UNIVERSITY OF MISSOURI S13-2743C	55.8	62.8		2.7
PIONEER P42A96X	55.3			1.0
STEWART 4527R2X	54.5	66.2	63.9	2.7
CZ 4548 LL	54.3			4.3
USG 7447XTS	54.1			3.0
HS 45X80	54.0			1.0
PIONEER P44A08L	53.6			2.0
STEWART 4339R2X	53.5			2.3
DYNA-GRO S44XS68	53.1	60.3		2.3
PROGENY 4318 RX	52.9			3.7
ARMOR X41D47	52.0			3.7
CHANNEL 4218R2X	51.9			2.3
PIONEER P44A72BX	50.1			1.3
ASGROW AG43X7	49.5	59.3	57.6	2.7
CZ 4308 LL	49.5			4.7
S45-Z5XS	49.3			1.0
ARMOR 42-D27	48.6	67.4		2.7
ASGROW AG42X9	47.8			3.3

**Table 9. 2018 Kentucky Soybean Variety Performance Tests  
Henderson County - Green River Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
REV® 4168X™	47.5			2.3
PROGENY 4570 RXS	47.0			1.7
STEWART 4327R2X	46.7	66.0	63.1	4.7
ASGROW AG44X6	46.6	59.4	59.9	3.3
STEWART 4438R2X	46.5	67.1		1.7
PIONEER P40A47X	46.5	74.5		1.7
HOEGEMEYER HPT 4511 NX	46.2			3.0
ARMOR 45-D50	46.1			2.7
BRODBECK 446R2	45.9	59.6	57.1	3.3
A4447NSXR2	45.6			3.3
PROGENY 4444 RXS	45.5	64.0		2.7
ARMOR 45-D43	45.0			1.7
CAVERNDALE CF 427 HT-GLY/STSn	44.8	67.6		1.3
LG SEEDS LGS4597RX	44.3			1.3
UNIVERSITY OF MISSOURI S13-3851C	44.1	63.1		3.7
UNIVERSITY OF MISSOURI S13-10590C	44.1	59.0		1.0
AGRIGOLD G4380RX	43.9	60.2		2.7
HOEGEMEYER HPT 4211 NX	43.4			4.3
DYNA-GRO S43XS27	43.3	64.2	60.8	4.7
SEED CONSULTANTS SC 8439X™	43.1			2.0
DYNA-GRO S4209N	42.4			1.0
S42-B9XS	42.4			1.3
ASGROW AG41X8	42.4	59.8		2.7
STINE 40BA02	42.4			2.0
UNIVERSITY OF MISSOURI S13-10592C	42.2			3.0
HOEGEMEYER HPT 4522 NR	41.7	69.9		1.7
CZ 4105 LL	41.6	63.2	61.8	1.7
DYNA-GRO S41XS98	40.9	61.8		2.7
AGRIGOLD G4440RX	39.8	55.7		3.3
STEWART 4039R2X	39.5			1.7
WARREN SEED BG 4322 RR2X	38.3			4.7
PROGENY 4255 RX	37.6	60.8		4.0
ARMOR X44D36	37.5			2.3
GO SOY E4510S	35.9			1.3
CZ 4222 LL	34.8	59.8	57.6	2.3
AGRIGOLD G4190RX	34.7			2.0
WARREN SEED BG 4210 RR2X	32.6	56.0		2.3
GO SOY 43C17S	29.8			1.3
LG SEEDS C4227RX	27.3	52.3		1.0
ARMOR X40D85	25.5			4.0
<b>GROUP IV EARLY AVERAGE</b>	<b>45.6</b>	<b>63.1</b>	<b>60.2</b>	<b>2.5</b>
LSD (0.10)	3.9	4.4	3.1	
C.V.	8.1	10.5	9.2	
<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
ARMOR 47-D22	73.0			4.3
ASGROW AG46X6	66.2	69.8	65.7	2.7
PROGENY 4757 RY	66.2	71.8	64.5	4.3
PROGENY 4620 RXS	65.2	68.0		3.3
DYNA-GRO S46XS87	65.1	68.6	63.5	2.0
GO SOY Ireane	65.1	63.4	60.4	2.0
STINE 48BA23	64.4			3.3
PIONEER P46A16R	63.5	69.7		1.3
PROGENY 4816 RX	63.0	70.3		3.0
REV® 49L88™	62.9	64.2		3.3
CAVERNDALE CF 478 RR2Y/STSn	62.3	65.2	59.1	2.7
PROGENY 4851 RX	62.2	65.0		3.3
HOEGEMEYER HPT 4922 NRB	62.0			3.3
WARREN SEED BG 4922 RR2X	62.0			1.0
ASGROW AG48X9	61.5			3.3
HBK LL4953	60.5	69.2		2.7
CHANNEL 4717R2X	59.8			1.0
CZ 4748 LL	59.4	66.7	61.2	3.7
DYNA-GRO S48XT56	59.3	74.7	69.5	1.7
AGS GS48X18	58.4			2.0

continued

**Table 9. 2018 Kentucky Soybean Variety Performance Tests  
Henderson County - Green River Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
USG 7489XT	58.4			1.3
STEWART 4619R2X	58.2			3.0
ASGROW AG47X6	58.2	67.9	62.7	2.0
AGRIGOLD G4685RX	57.9	66.7		2.0
WARREN SEED BG 4842 RR2X	57.9			1.3
PIONEER P48A60X	57.7			1.3
PIONEER P47A76L	57.6			2.7
CZ 4918 LL	57.5			3.7
UNIVERSITY OF MISSOURI S14-15138R	57.5			2.3
LG SEEDS C4710RX	57.4	65.7		3.3
ARMOR X46D63	57.0			2.0
DYNA-GRO S48XS78	56.4	66.7		2.3
PROGENY 4799 RXS	56.2	66.9		2.3
ASGROW AG49X9	56.2			3.7
MISSION A4608X	56.0			2.3
LG SEEDS LGS4624RX	56.0			3.0
REV <sup>®</sup> 4679X <sup>™</sup>	56.0			2.7
STEWART 4927R2X	55.7	68.6	62.4	1.3
AGRIGOLD G4995RX	55.6			4.0
MISSION A4950X	55.3			3.3
USG 7487XTS	55.1	65.8		2.0
REV <sup>®</sup> 47L38 <sup>™</sup>	55.0			3.0
PIONEER P46A57BX	54.9			3.7
ASGROW AG47X9	54.9			2.7
HS 48X70	54.3	66.1		1.0
REV <sup>®</sup> 4927X <sup>™</sup>	53.8	57.3		4.3
AGS GS46X17	53.7			2.3
PROGENY 4994 RX	53.7			4.3
CZ 4820 LL	53.5	65.9		2.7
PROGENY 4955 RX	53.5			1.7
SEED CONSULTANTS SCS 9469BR <sup>™</sup>	53.3			1.7
UNIVERSITY OF MISSOURI S14-9051R	53.3			3.3
CZ 4938 LL	52.8			3.3
HS 46X60	52.7	65.7	58.8	2.3
USG 7496XTS	52.6	64.1	61.1	1.7
AGRIGOLD G4705RX	52.5			3.7
HBK LL4950	52.5			3.0
STEWART 4939R2X	52.4			2.0

**Table 9. 2018 Kentucky Soybean Variety Performance Tests  
Henderson County - Green River Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
LG SEEDS C4845RX	51.4	70.5	65.7	2.0
REV <sup>®</sup> 4857X <sup>™</sup>	49.7	63.8		3.3
GO SOY 49G16	49.1	50.4	49.0	5.0
REV <sup>®</sup> 46L99 <sup>™</sup>	48.3			1.7
UNIVERSITY OF MISSOURI S14-15146R	48.2	54.9		1.7
LG SEEDS LGS4989RX	47.2			2.3
A4637NSXR2	45.6			5.0
WARREN SEED BG 4911 RR2X	44.2	62.8		3.7
HS 49X60	44.0	69.1	64.0	1.3
PENNYRILE (long term check-released 1987)	36.6	47.0	43.1	4.0
<b>GROUP IV LATE AVERAGE</b>	<b>56.3</b>	<b>65.4</b>	<b>60.7</b>	<b>2.7</b>
LSD (0.10)	3.5	3.0	2.3	
C.V.	6.0	6.6	6.3	
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>				
PROGENY 5016 RXS	<b>65.8</b>	70.0		2.7
UNIVERSITY OF MISSOURI S14-9017R	65.1	<b>72.4</b>		2.0
PIONEER P50A85X	64.8			3.3
UNIVERSITY OF MISSOURI MO5201D CONV	60.2			2.7
PROGENY 5018 RX	59.4			4.0
ARMOR 49-D13	57.5			3.7
ARMOR X51D77	56.8			3.3
PROGENY 5252 RX	54.5			4.0
PROGENY 5226 RYS	54.2			1.7
UNIVERSITY OF MISSOURI S11-20242C	50.1			5.0
PROGENY 5279 RXS	49.8			3.7
UNIVERSITY OF MISSOURI S13-1955C	44.3	49.1		5.0
UNIVERSITY OF MISSOURI S15-10434C	42.5			3.7
ESSEX (long term check-released 1974)	42.4	49.7		3.0
<b>GROUP V AVERAGE</b>	<b>54.8</b>	<b>60.3</b>		<b>3.4</b>
LSD (0.10)	3.6	2.4		
C.V.	6.2	5.7		

<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> Data were collected in Henderson Co. in 2018, and in Hancock Co. in 2017 and 2016.

**Agronomic Information – Henderson County, Green River Region.**

GPS coordinates	37°47'44.7"N 87°29'36.3"W
Soil type	Hensthraw silt loam
Slopes	0%
Previous crop	Corn
Soil test	pH 7.04, P 27, K 113
SCN test	938
Fertilizer/lime applied	NA
Agricultural practice	vertical tillage to smooth the field surface
Pre-planting herbicides	NA
Planting date	05/25/2018
Post-planting herbicides	Reflex, FirstRate, Intensity One: 06/14/2018
Harvest dates	MG II, III, and IV Early: 10/25 MG IV Late and V: 10/30
50% frost killing	10/20

**Henderson County (Henderson).**

Month	Total Monthly Precipitation (in.)	Temperatures		
		Monthly Average (°F)	Highest recorded (°F)	Lowest recorded (°F)
March	3.82	43.8	65.7	22.5
April	3.56	50.0	79.8	26.7
May	9.21	73.4	92.7	44.1
June	6.83	77.2	92.6	58.2
July	3.99	75.9	93.1	55.0
August	1.35	75.3	95.6	50.0
September	7.26	73.4	96.8	46.7
October (10/30)	1.10	58.4	91.4	25.5



**Table 10. 2018 Kentucky Soybean Variety Performance Tests  
Logan County - Mammoth Cave Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>				
ARMOR 29-D11	58.1			1.7
AGRIGOLD G2900RX	55.4			1.3
ASGROW AG28X9	54.8			1.0
ASGROW AG29X8	51.0	56.1		1.0
<b>GROUP II AVERAGE</b>	<b>54.9</b>			<b>1.3</b>
LSD (0.10)	3.0			
C.V.	4.6			
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>				
SEED CONSULTANTS SCS 9385RR™	73.3	74.7	72.5	1.7
PIONEER P37A78X	72.0			3.3
SEED CONSULTANTS SC 8399X™	70.9			1.0
CZ 3841 LL	70.2	58.5	59.3	3.0
DYNA-GRO S39XT68	69.8	65.9		2.3
CZ 3601 LL	69.3			2.0
WARREN SEED BG 3821 RR2X	69.3			2.7
S35-K9X	68.4			2.7
ARMOR 35-D20	67.5			2.7
ASGROW AG38X8	67.0	63.4		2.0
ASGROW AG37X9	66.2			2.7
PIONEER P36T36X	65.7			1.7
CAVERNDAL CF 387 HT-GLYn	64.0	62.0	62.9	2.3
AGRIGOLD G3520RX	63.5	52.2		2.0
ASGROW AG39X7	62.7	58.6	60.5	2.3
ARMOR X35D92	62.6			3.7
BRODBECK 368R2	61.6	62.4		1.3
BRODBECK 388R2	60.5	61.2		1.7
SEED CONSULTANTS SC 8379X™	60.3			1.7
AGRIGOLD G3722RX	60.3			1.3
ARMOR 39-D39	59.2	59.7		1.3
SEED CONSULTANTS SCS 9393RR™	57.3	65.5	64.4	1.0
DYNA-GRO S39XT08	57.2	60.7		2.3
ASGROW AG36X6	56.1			1.7
CHANNEL 3718R2X	55.7			1.3
CAVERNDAL CF 364 STSn	51.0			2.0
ARMOR X30D53	49.6			3.3
<b>GROUP III AVERAGE</b>	<b>63.4</b>	<b>62.1</b>	<b>63.9</b>	<b>2.1</b>
LSD (0.10)	3.1	2.6	2.1	
C.V.	4.6	5.6	5.4	
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>				
ARMOR 42-D27	77.9	74.3		1.3
STEWART 4339R2X	77.7			1.0
PIONEER P40A47X	75.9	70.9		1.0
PIONEER P42A96X	73.9			1.0
HOEGEMEYER HPT 4211 NX	72.9			1.7
AGRIGOLD G4380RX	69.7	73.9		1.7
STEWART 4527R2X	69.3	73.7	72.0	2.0
A4447NSXR2	68.7			1.7
STEWART 4039R2X	67.6			1.0
ASGROW AG41X8	67.4	68.5		2.3
STEWART 4438R2X	67.2	75.5		1.0
AGRIGOLD G4190RX	67.1			1.3
ARMOR 45-D50	66.9			2.3
DYNA-GRO S4209N	66.6			1.0
USG 7447XTS	66.0			1.0
STEWART 4327R2X	65.9	72.5	68.3	2.3
BRODBECK 446R2	65.3	64.9	65.0	3.0
PIONEER P44A72BX	64.9			2.7
AGRIGOLD G4440RX	64.4	69.6		1.0
ARMOR X40D85	64.1			2.7
WARREN SEED BG 4510 RR2X	63.9	64.1		3.0
UNIVERSITY OF MISSOURI S13-10592C	63.8			2.7

**Table 10. 2018 Kentucky Soybean Variety Performance Tests  
Logan County - Mammoth Cave Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
HOEGEMEYER HPT 4511 NX	62.5			2.0
CZ 4222 LL	61.7	63.0	60.5	3.3
ARMOR X41D47	61.5			4.7
STEWART 4228R2X	61.5	70.5		1.3
CZ 4548 LL	61.4			2.0
UNIVERSITY OF MISSOURI S13-2743C	61.4	62.4		3.3
DYNA-GRO S43XS27	60.4	71.5	68.0	1.3
GO SOY E4510S	59.9			1.3
S42-B9XS	59.8			1.7
DYNA-GRO S41XS98	59.7	62.2		1.7
LG SEEDS LGS4597RX	59.6			1.3
GO SOY 43C17S	59.5			1.7
S45-Z5XS	59.2			1.7
CZ 4105 LL	59.2	66.8	66.9	1.7
ASGROW AG42X9	58.8			3.0
UNIVERSITY OF MISSOURI S13-3851C	58.8	61.8		2.3
PROGENY 4570 RXS	58.2			1.3
PROGENY 4318 RX	57.6			4.0
WARREN SEED BG 4210 RR2X	56.6	68.4		1.3
LG SEEDS C4227RX	56.5	65.4		1.3
ASGROW AG43X7	56.5	67.8	66.6	2.0
PROGENY 4444 RXS	55.5	54.0		2.3
ASGROW AG44X6	55.3	59.0	61.5	2.0
HS 45X80	55.1			1.7
ARMOR 45-D43	55.0			3.3
AGRIGOLD G4579RX	54.8			1.3
CZ 4308 LL	54.8			1.0
CHANNEL 4517R2X	54.5			1.3
STINE 40BA02	53.8			1.0
SEED CONSULTANTS SC 8439X™	53.7			1.0
PIONEER P44A08L	53.4			1.7
CHANNEL 4218R2X	53.4			2.0
HOEGEMEYER HPT 4522 NR	52.3	64.0		1.0
PROGENY 4255 RX	52.3	54.1		1.7
UNIVERSITY OF MISSOURI S13-10590C	52.2	58.7		1.3
REV® 4168X™	51.7			1.0
CAVERNDAL CF 427 HT-GLY/STSn	50.4	53.9		2.0
WARREN SEED BG 4322 RR2X	44.5			1.7
DYNA-GRO S44XS68	42.3	53.3		1.3
ARMOR X44D36	40.0			1.0
<b>GROUP IV EARLY AVERAGE</b>	<b>60.4</b>	<b>65.4</b>	<b>66.1</b>	<b>1.8</b>
LSD (0.10)	3.3	2.6	2.0	
C.V.	5.2	5.5	5.2	
<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
UNIVERSITY OF MISSOURI S14-15146R	71.9	66.0		1.0
ASGROW AG48X9	69.9			1.3
STEWART 4619R2X	69.7			1.7
PROGENY 4816 RX	69.0	68.8		1.0
PIONEER P48A60X	68.0			1.0
WARREN SEED BG 4911 RR2X	67.6	68.8		1.3
AGRIGOLD G4685RX	67.3	73.1		1.7
HS 49X60	65.8	65.8	66.9	1.0
GO SOY 49G16	65.3	61.7	57.9	3.0
PROGENY 4757 RY	64.5	68.7	67.2	1.7
CAVERNDAL CF 478 RR2Y/STSn	64.1	63.2	62.2	1.7
HOEGEMEYER HPT 4922 NRB	63.8			2.0
STINE 48BA23	63.7			1.7
REV® 4927X™	63.4	63.5		3.0
MISSION A4608X	62.2			2.0
ASGROW AG47X6	62.2	64.5	64.1	2.0
ASGROW AG49X9	61.9			2.0
CZ 4918 LL	60.9			1.7
ARMOR 47-D22	60.3			3.0
PIONEER P47A76L	60.1			2.0

continued

**Table 10. 2018 Kentucky Soybean Variety Performance Tests Logan County - Mammoth Cave Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
UNIVERSITY OF MISSOURI S14-15138R	59.9			1.0
USG 7489XT	59.3			1.0
USG 7487XTS	59.0	62.5		1.0
HS 46X60	58.8	66.4	67.2	1.0
USG 7496XTS	58.8	<b>74.4</b>	<b>73.1</b>	1.0
UNIVERSITY OF MISSOURI S14-9051R	58.3			2.0
AGS GS48X18	57.8			1.0
CHANNEL 4717R2X	57.7			2.0
REV <sup>®</sup> 47L38 <sup>™</sup>	56.9			1.3
WARREN SEED BG 4842 RR2X	56.9			1.0
ASGROW AG46X6	56.6	64.3	63.3	1.0
PIONEER P46A57BX	56.2			1.0
ASGROW AG47X9	56.1			1.0
STEWART 4939R2X	56.1			1.3
CZ 4820 LL	56.1	65.4		1.7
DYNA-GRO S46XS87	56.0	67.6	67.2	1.3
DYNA-GRO S48XS78	56.0	69.8		1.3
SEED CONSULTANTS SCS 9469BR <sup>™</sup>	55.7			1.0
WARREN SEED BG 4922 RR2X	55.6			1.0
LG SEEDS LGS4989RX	55.1			1.0
PIONEER P46A16R	54.9	64.6		1.3
AGS GS46X17	54.0			1.0
MISSION A4950X	53.6			1.0
PROGENY 4620 RXS	53.5	62.1		2.0
STEWART 4927R2X	53.3	64.7	62.1	1.3
PROGENY 4799 RXS	52.9	63.0		1.0
REV <sup>®</sup> 4857X <sup>™</sup>	52.9	55.5		2.7
AGRIGOLD G4995RX	52.9			1.0
A4637NSXR2	52.8			2.0
CZ 4748 LL	52.3	59.9	61.8	1.0
PROGENY 4955 RX	52.3			2.3
PROGENY 4994 RX	52.3			1.7
LG SEEDS C4845RX	52.2	58.5	59.4	1.0
REV <sup>®</sup> 49L88 <sup>™</sup>	51.9	65.4		1.3
LG SEEDS C4710RX	51.3	65.3		1.7
HS 48X70	50.8	70.1		1.3
HBK LL4953	50.4	67.1		1.0
PROGENY 4851 RX	50.0	57.9		3.3

**Table 10. 2018 Kentucky Soybean Variety Performance Tests Logan County - Mammoth Cave Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
GO SOY Ireane	49.3	58.0	60.1	1.0
CZ 4938 LL	48.8			2.3
REV <sup>®</sup> 4679X <sup>™</sup>	48.3			1.7
PENNYRILE (long term check-released 1987)	47.7	50.1	52.1	1.7
REV <sup>®</sup> 46L99 <sup>™</sup>	46.9			1.3
AGRIGOLD G4705RX	46.6			2.0
ARMOR X46D63	45.3			1.0
LG SEEDS LGS4624RX	43.4			1.3
DYNA-GRO S48XT56	42.2	57.0	59.6	1.0
HBK LL4950	41.7			1.3
<b>GROUP IV LATE AVERAGE</b>	<b>56.6</b>	<b>64.2</b>	<b>62.9</b>	<b>1.5</b>
LSD (0.10)	3.1	2.7	2.1	
C.V.	5.2	5.9	5.6	
<b>MATURITY GROUP V (relative MG 5.0-5.9)</b>				
UNIVERSITY OF MISSOURI S14-9017R	<b>71.1</b>	<b>75.9</b>		1.0
UNIVERSITY OF MISSOURI MO5201D CONV	62.7			2.0
ARMOR X51D77	62.4			2.0
ARMOR 49-D13	62.1			3.0
PROGENY 5016 RXS	59.5	71.0		1.7
PROGENY 5252 RX	57.4			1.7
ESSEX (long term check-released 1974)	54.9	58.7		1.3
PIONEER P50A85X	54.2			1.3
UNIVERSITY OF MISSOURI S13-1955C	52.9	61.6		2.3
PROGENY 5279 RXS	52.6			1.3
UNIVERSITY OF MISSOURI S15-10434C	51.8			2.7
PROGENY 5018 RX	47.0			2.3
UNIVERSITY OF MISSOURI S11-20242C	35.7			2.3
PROGENY 5226 RYS	35.7			1.3
<b>GROUP V AVERAGE</b>	<b>54.3</b>	<b>66.8</b>		<b>1.9</b>
LSD (0.10)	2.2	2.3		
C.V.	3.7	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> Data were collected in Logan Co. in 2018, and in Butler Co. in 2017 and 2016.

**Agronomic Information – Logan County, Mammoth Cave Region.**

GPS coordinates	36°77'47.3"N 86°52'41.5"W
Soil type	Pembroke silt loam
Slopes	0%
Previous crop	double-crop soybean
Soil test	pH 7.19, P 94, K 374
SCN test	4,500
Fertilizer/lime applied	NA
Agricultural practice	no-till
Pre-planting herbicides	2,4-D, Valor
Planting date	06/04/2018
Post-planting herbicides	Reflex, FirstRate, Intensity One: 06/14/2018
Harvest dates	MG II and III: 10/23 MG IV Early and Late and V: 10/24
50% frost killing	10/22

**Logan County (Russellville).**

Month	Total Monthly Precipitation (in.)	Temperatures		
		Monthly Average (°F)	Highest recorded (°F)	Lowest recorded (°F)
March	5.50	46.1	76.3	21.2
April	3.79	51.7	81.8	26.1
May	5.74	73.1	89.6	48.3
June	6.08	76.8	92.6	55.9
July	2.83	77.6	93.9	59.3
August	5.86	76.9	92.9	54.5
September	5.41	73.3	93.4	48.4
October (10/24)	4.51	61.9	88.6	28.7

**Table 11. 2018 Kentucky Soybean Variety Performance Tests  
Meade County - Lincoln Trail Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
<b>MATURITY GROUP II (relative MG 2.0-2.9)</b>				
ASGROW AG29X8	53.2	59.6		3.7
ASGROW AG28X9	46.7			4.3
AGRIGOLD G2900RX	42.0			4.0
ARMOR 29-D11	31.6			4.7
<b>GROUP II AVERAGE</b>	<b>43.4</b>			<b>4.2</b>
LSD (0.10)	2.7			
C.V.	5.2			
<b>MATURITY GROUP III (relative MG 3.0-3.9)</b>				
AGRIGOLD G3722RX	64.6			5.0
SEED CONSULTANTS SC 8379X™	60.9			4.7
ARMOR 35-D20	58.2			4.0
AGRIGOLD G3520RX	57.8	60.0		3.0
ARMOR 39-D39	57.3	56.7		4.3
SEED CONSULTANTS SC 8399X™	56.4			4.0
SEED CONSULTANTS SCS 9393RR™	54.4	65.8	60.7	3.3
ASGROW AG39X7	53.6	63.2	57.0	4.0
SEED CONSULTANTS SCS 9385RR™	47.3	59.3	57.2	2.7
ASGROW AG38X8	47.0	57.9		4.0
ASGROW AG37X9	46.2			4.7
DYNA-GRO S39XT68	46.0	61.3		4.0
S35-K9X	45.6			4.7
PIONEER P36T36X	45.3			4.3
CAVERNDALE CF 387 HT-GLYn	42.1	54.3	55.4	3.7
CZ 3601 LL	39.2			4.7
DYNA-GRO S39XT08	37.6	53.8		4.7
BRODBECK 368R2	37.2	45.6		4.0
BRODBECK 388R2	36.9	48.2		4.3
ARMOR X35D92	36.3			5.0
ASGROW AG36X6	35.8			4.7
CHANNEL 3718R2X	34.7			4.7
WARREN SEED BG 3821 RR2X	33.2			4.7
ARMOR X30D53	33.1			4.7
PIONEER P37A78X	31.9			5.0
CZ 3841 LL	27.1	46.2	48.3	4.7
CAVERNDALE CF 364 STSn	24.8			4.7
<b>GROUP III AVERAGE</b>	<b>44.1</b>	<b>56.0</b>	<b>55.7</b>	<b>4.3</b>
LSD (0.10)	3.3	3.7	2.7	
C.V.	7.0	9.7	8.7	
<b>MATURITY GROUP IV EARLY (relative MG 4.0-4.5)</b>				
DYNA-GRO S44XS68	78.8	75.5		3.0
REV® 4168X™	74.2			3.7
AGRIGOLD G4380RX	73.2	72.7		2.3
ASGROW AG41X8	73.0	76.3		3.3
DYNA-GRO S41XS98	72.9	70.1		3.7
STEWART 4339R2X	72.3			3.3
WARREN SEED BG 4510 RR2X	70.6	73.6		3.3
HS 45X80	70.0			3.7
BRODBECK 446R2	69.4	72.5	65.2	4.3
PIONEER P42A96X	68.6			2.3
STEWART 4438R2X	67.9	71.4		4.0
AGRIGOLD G4579RX	67.5			2.7
PIONEER P44A08L	67.4			3.3
LG SEEDS C4227RX	67.0	66.5		3.7
S45-Z5XS	66.6			2.3
PIONEER P44A72BX	66.4			2.7
PROGENY 4444 RXS	65.9	70.5		4.7
STEWART 4039R2X	65.9			3.3
CAVERNDALE CF 427 HT-GLY/STSn	65.7	71.7		3.0
SEED CONSULTANTS SC 8439X™	65.0			4.0
PROGENY 4570 RXS	64.9			4.3
ARMOR 45-D50	64.7			3.0

**Table 11. 2018 Kentucky Soybean Variety Performance Tests  
Meade County - Lincoln Trail Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
A4447NSXR2	64.7			3.7
S42-B9XS	64.6			3.0
PIONEER P40A47X	64.3	68.3		2.7
CZ 4548 LL	64.1			4.0
HOEGEMEYER HPT 4511 NX	64.0			4.3
HOEGEMEYER HPT 4522 NR	64.0	74.4		3.3
ARMOR X41D47	63.7			4.0
ARMOR 42-D27	63.6	64.3		3.3
AGRIGOLD G4190RX	63.2			3.3
STEWART 4228R2X	63.2	72.3		2.7
ASGROW AG44X6	63.0	67.1	66.5	3.7
UNIVERSITY OF MISSOURI S13-10590C	62.1	60.3		4.7
STEWART 4527R2X	62.0	67.4	60.3	3.0
LG SEEDS LGS4597RX	60.8			2.3
USG 7447XTS	60.3			3.7
ARMOR 45-D43	59.8			4.0
UNIVERSITY OF MISSOURI S13-2743C	59.2	68.7		4.3
CHANNEL 4517R2X	58.7			3.7
GO SOY 43C17S	58.6			2.7
UNIVERSITY OF MISSOURI S13-10592C	58.0			4.3
GO SOY E4510S	56.7			3.7
STINE 40BA02	56.3			3.7
ARMOR X40D85	55.7			3.7
ASGROW AG42X9	54.8			4.0
CZ 4308 LL	54.7			4.0
ASGROW AG43X7	54.6	68.3	63.1	4.7
CZ 4222 LL	53.8	60.0	55.2	3.0
WARREN SEED BG 4210 RR2X	53.8	61.6		4.0
WARREN SEED BG 4322 RR2X	52.9			4.3
CZ 4105 LL	52.5	65.0	57.7	4.0
AGRIGOLD G4440RX	52.4	61.5		3.0
DYNA-GRO S43XS27	51.3	60.1	60.6	3.7
DYNA-GRO S4209N	51.1			4.3
PROGENY 4318 RX	50.5			4.7
PROGENY 4255 RX	50.0	56.9		4.3
ARMOR X44D36	49.3			4.0
STEWART 4327R2X	47.7	58.2	57.8	3.3
UNIVERSITY OF MISSOURI S13-3851C	45.6	59.4		3.7
CHANNEL 4218R2X	44.7			3.7
HOEGEMEYER HPT 4211 NX	36.1			4.7
<b>GROUP IV EARLY AVERAGE</b>	<b>61.0</b>	<b>67.2</b>	<b>60.8</b>	<b>3.6</b>
LSD (0.10)	3.5	4.1	3.0	
C.V.	5.4	8.7	7.8	
<b>MATURITY GROUP IV LATE (relative MG 4.6-4.9)</b>				
PROGENY 4994 RX	79.0			3.7
REV® 49L88™	76.8	64.5		3.3
ASGROW AG47X9	72.9			4.0
SEED CONSULTANTS SCS 9469BR™	71.8			3.3
PIONEER P46A57BX	68.7			4.3
AGRIGOLD G4995RX	67.7			4.0
MISSION A4950X	67.7			4.0
HOEGEMEYER HPT 4922 NRB	66.7			3.3
HS 49X60	66.5	63.1	62.3	1.7
PROGENY 4816 RX	66.3	60.2		2.7
LG SEEDS LGS4989RX	65.9			2.7
ASGROW AG47X6	65.1	69.5	63.2	3.7
PROGENY 4757 RY	64.9	64.9	58.9	4.0
CZ 4918 LL	63.8			3.7
PROGENY 4799 RXS	63.7	65.3		3.7
PIONEER P47A76L	63.2			3.7
PIONEER P46A16R	62.9	66.6		4.0
LG SEEDS C4845RX	62.4	61.6	59.3	2.0
PIONEER P48A60X	62.3			3.0
LG SEEDS LGS4624RX	62.2			4.7

continued

**Table 11. 2018 Kentucky Soybean Variety Performance Tests  
Meade County - Lincoln Trail Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
REV <sup>®</sup> 4679X <sup>™</sup>	61.9			4.3
ASGROW AG48X9	61.4			2.7
REV <sup>®</sup> 47L38 <sup>™</sup>	61.2			3.3
USG 7487XTS	60.9	62.1		2.3
UNIVERSITY OF MISSOURI S14-15138R	60.6			4.0
CZ 4820 LL	60.5	65.7		2.7
DYNA-GRO S48XS78	60.4	62.7		3.0
DYNA-GRO S48XTS6	59.9	63.1	59.8	2.3
ASGROW AG49X9	58.9			4.0
PROGENY 4620 RXS	58.7	59.6		4.7
WARREN SEED BG 4922 RR2X	58.4			2.0
STEWART 4927R2X	58.3	63.3	59.0	3.3
STEWART 4619R2X	58.2			3.3
UNIVERSITY OF MISSOURI S14-9051R	58.2			3.3
HS 46X60	58.2	<b>70.8</b>	<b>63.4</b>	3.7
WARREN SEED BG 4911 RR2X	58.1	54.4		3.7
CZ 4748 LL	57.7	65.6	62.2	2.7
ASGROW AG46X6	57.5	54.5	57.8	3.3
PROGENY 4955 RX	57.5			4.3
USG 7496XTS	57.3	59.7	60.8	3.7
CAVERNDAL CF 478 RR2Y/STS <sub>n</sub>	57.1	59.6	57.5	2.3
USG 7489XT	57.1			2.3
ARMOR 47-D22	56.8			4.3
AGS GS46X17	56.6			2.3
AGRIGOLD G4685RX	56.3	63.1		2.7
LG SEEDS C4710RX	56.3	52.5		4.0
MISSION A4608X	56.3			4.3
REV <sup>®</sup> 46L99 <sup>™</sup>	56.3			3.7
GO SOY Ireane	55.4	59.1	60.5	4.3
ARMOR X46D63	54.7			4.0
HS 48X70	54.6	53.7		3.3
STEWART 4939R2X	54.5			4.0
WARREN SEED BG 4842 RR2X	54.4			3.7
AGRIGOLD G4705RX	54.3			4.0
HBK LL4953	53.5	61.9		2.7
DYNA-GRO S46XS87	53.3	50.8	53.3	2.3
AGS GS48X18	52.4			4.3

**Table 11. 2018 Kentucky Soybean Variety Performance Tests  
Meade County - Lincoln Trail Region.**

BRAND VARIETY	YIELD (BU/AC) <sup>A/B</sup>			LODGING 2018
	2018	2017-18	2016-2018	
CHANNEL 4717R2X	52.3			2.7
CZ 4938 LL	51.8			2.7
UNIVERSITY OF MISSOURI S14-15146R	51.4	60.1		2.7
A4637NSXR2	50.7			4.3
STINE 48BA23	49.9			3.7
HBK LL4950	47.3			4.0
REV <sup>®</sup> 4927X <sup>™</sup>	46.8	56.3		5.0
PENNYRILE (long term check-released 1987)	44.7	45.9	47.3	4.0
REV <sup>®</sup> 4857X <sup>™</sup>	44.5	56.4		4.7
PROGENY 4851 RX	43.9	55.6		5.0
GO SOY 49G16	37.6	43.0	44.1	5.0
<b>GROUP IV LATE AVERAGE</b>	<b>58.6</b>	<b>59.8</b>	<b>58.0</b>	<b>3.5</b>
LSD (0.10)	3.6	2.8	2.3	
C.V.	5.8	6.4	6.5	

**MATURITY GROUP V (relative MG 5.0-5.9)**

ARMOR 49-D13	<b>57.2</b>			3.7
PROGENY 5016 RXS	53.4	<b>58.0</b>		3.7
PROGENY 5018 RX	52.7			4.0
UNIVERSITY OF MISSOURI S14-9017R	49.7	<b>57.6</b>		3.0
PIONEER P50A85X	49.7			3.7
PROGENY 5279 RXS	48.6			2.3
PROGENY 5226 RYS	42.4			3.7
PROGENY 5252 RX	41.2			3.7
ARMOR X51D77	40.1			4.0
UNIVERSITY OF MISSOURI MO5201D CONV	40.1			2.3
ESSEX (long term check-released 1974)	36.6	43.2		3.7
UNIVERSITY OF MISSOURI S13-1955C	31.0	33.9		5.0
UNIVERSITY OF MISSOURI S11-20242C	28.6			5.0
UNIVERSITY OF MISSOURI S15-10434C	26.4			4.7
<b>GROUP V AVERAGE</b>	<b>42.7</b>	<b>48.2</b>		<b>3.8</b>
LSD (0.10)	3.0	2.2		
C.V.	6.5	6.6		

<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> Data were collected in Meade Co. in 2018, and in Breckinridge Co. in 2017 and 2016.

**Agronomic Information – Meade County, Lincoln Trail Region.**

GPS coordinates	37°48'29.0"N 86°8'23.7"W
Soil type	Crider silt loam
Slopes	0%
Previous crop	Corn
Soil test	pH 6.84, P 47, K 163
SCN test	0
Agricultural practice	no-till
Pre-planting herbicides	NA
Planted date	05/21/2018
Post-planting herbicides	none
Harvest date	11/8
50% frost killing	10/13

**Meade County (Brandenburg).**

Month	Total Monthly Precipitation (in.)	Temperatures		
		Monthly Average (°F)	Highest recorded (°F)	Lowest recorded (°F)
March	5.43	42.4	67.7	19.4
April	3.04	49.7	79.1	23.1
May	3.76	71.4	88.4	37.2
June	7.72	75.3	92.1	52.3
July	3.87	75.3	93.2	55.9
August	6.93	74.8	89.9	51.6
September	6.76	71.5	91.8	49.6
October	3.50	57.6	87.7	27.6
November (11/8)	3.02	49.1	64.9	33.0



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

The College of Agriculture, Food and Environment is an Equal Opportunity Organization.  
12-2018