

2019 Arkansas Soybean Performance Results, Disease Rating, and Agronomic Characteristics

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Hundreds of soybean varieties are commercially available to growers in Arkansas. Varietal performance, including yield, varies according to location, environmental adaptability to soils, maturity, lodging, height, disease and nematode resistance, and herbicide and chloride sensitivity. This information listed in this publication is largely derived from the University of Arkansas System Division of Agriculture Soybean Performance Trials and screening programs, and is provided as an aid in variety selection.

Since proper variety selection involves knowledge of yield potential, maturity, disease reaction, herbicide sensitivity, etc., these and many other important characteristics are listed in **Tables 8 and 9**. Varieties are considered adapted to Arkansas conditions based primarily on their yield performance across the different geographical regions of Arkansas. The location, soil description, and cultural information for each of the 2019 Arkansas Soybean Performance Tests are found in **Tables 1**. **All varieties listed in this**

publication have been tested in the University of Arkansas System, Division of Agriculture Soybean Performance Trials.

Soybean variety performance may vary from year to year, and two-year averages are better predictors of performance than data from a single year. Superior performance across several locations suggests that a variety has wide adaptability, thus multi-year and multi-location yields are particularly useful for making variety selection decisions.

ADAPTED SOYBEAN VARIETIES FOR EARLY SOYBEAN PRODUCTION

Generally, varieties within MG IV are the best adapted for these early (April) plantings in Arkansas; however, there are situations where varieties from MG III and V may perform well. Recent research indicates that indeterminate MG IV varieties can produce acceptable yield when planted early (April) and will normally mature in August through mid-September. Varieties of differing relative maturity (even within the same

MG) are recommended in an attempt to spread out the risk of shattering due to adverse weather conditions or mechanical problems at harvest. In Arkansas, the following designations apply to varieties representing the various MG's: III – very early maturity; IV – early maturity; and V – mid-season maturity.

ABOUT THIS PUBLICATION

Tables 1 consist of cultural information that pertains to the 2019 University of Arkansas System Division of Agriculture Soybean Performance Trials (<http://arkansas-variety-testing.uark.edu>).

Tables 2 through 7 contain varietal yield information for 2016, 2017, 2018, and 2019. **Tables 8 and 9** contain the many varietal characteristics of those varieties designated as being adapted to the Arkansas soybean production environment.

Users of this publication are encouraged to review the “Key Code” page for further explanation regarding varietal rating to disease, herbicide sensitivity and other agronomic considerations.

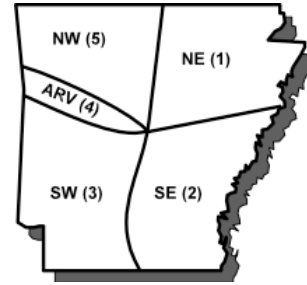


Figure 1. Area of Adaptation for Soybean Maturity Groups for All Production Systems

Northeast Arkansas (1): Groups III, IV, or V

Southeast Arkansas (2): Groups III, IV, or V

Southwest Arkansas (3): Groups III, IV, or V

Arkansas River Valley (4): Groups III, IV, or V

Northwest Arkansas (5): Groups IV or V

Acknowledgements are extended to the host of University of Arkansas System Division of Agriculture workers for their significant contributions to this update.

Table 1. Location, Soil Description, and Cultural Information of the Arkansas Soybean Performance Tests, 2019.

Location	Planting Target	Soil Classification	Planting Date	Row Width	Non-Xtend Late MG 3 – Early MG 4	Non-Xtend Late MG 4	Non-Xtend MG 5	Xtend Late MG 3 – Early MG 4	Xtend Late MG 4	Xtend MG 5
NEREC, Keiser, AR – Irrigated	Earliest Opportunity	Sharkey clay	5/17/19	38" (single)	10/04/19	10/04/19	10/20/19	10/04/19	10/04/19	10/20/19
NEREC, Keiser, AR – Irrigated	Late-Planted	Sharkey clay	6/3/19	38" (single)	10/10/19	10/10/19	11/19/19	10/05/19	10/05/19	11/19/19
LMCRS, Marianna, AR – Irrigated	Earliest Opportunity	Calloway silt loam	5/16/19	38" (single)	10/03/19	10/03/19	10/05/19	10/03/19	10/03/19	10/05/19
PTRS, Colt, AR – Irrigated	Earliest Opportunity	Calloway silt loam	5/17/19	30" (single)	10/05/19	10/10/19	10/10/19	10/05/19	10/09/19	10/10/19
RRS, Rohwer, AR – Irrigated	Earliest Opportunity	Herbert silt loam	5/15/19	38" (twin-row)	9/30/19	9/30/19	10/04/19	9/24/19	9/24/19	10/04/19
RRS, Rohwer, AR – Irrigated	Late-Planted	Herbert silt loam	5/29/19	38" (twin-row)	9/30/19	9/30/19	10/04/19	10/01/19	10/01/19	10/04/19
RREC, Stuttgart, AR – Irrigated	Earliest Opportunity	Crowley silt loam	5/31/19	30" (single)	10/10/19	10/20/19	10/20/19	10/10/19	10/19/19	10/19/19
RREC, Stuttgart, AR – Non-irrigated	Earliest Opportunity	Crowley silt loam	6/13/19	30" (single)	10/18/19	10/18/19	10/18/19	10/17/19	10/17/19	10/17/19

The KEY CODE for all the following tables is found on the back page. Refer to the KEY CODE for a description of the abbreviated varietal characteristics.

HOW TO MAKE YIELD COMPARISONS USING THE FOLLOWING TABLES: The LSD (0.05), Least Significant Difference, represents the minimum yield difference required between two varieties within the same location before concluding that their yields are truly different (while assuming a 5% risk that the yield differences are due to random chance.) Use only the LSD value listed below each column (location-maturity group) to compare variety yield averages among varieties within that column.

Note: “Shading” of a variety mean indicates that there are no statistical difference between that varietal mean and the highest yielding varietal mean at the test location utilizing the appropriate LSD (0.05) value.

2019 Soybean Update

Table 2. 2019 Yield, 2-Year, and 3-Year Average Yield (bu/ac) of Relative Maturity 3.5-4.4 Non-Xtend Soybean Varieties/Experimental Lines Across Arkansas, 2019¹.

Variety/Experimental Line	Herb. Tech.	2019 ² Keiser Irrig	Keiser ³ Irrig 2-Yr Avg	Keiser ⁴ Irrig 3-Yr Avg	2019 ² Keiser LP Irrig	2019 ² Marianna Irrig	Marianna ³ Irrig 2-Yr Avg	Marianna ⁴ Irrig 3-Yr Avg	2019 Pine Tree Irrig	2019 Rohwer Irrig	Rohwer ³ Irrig 2-Yr Avg	Rohwer ⁵ Irrig 3-Yr Avg	Rohwer LP Irrig 2019	Rohwer ³ Late Irrig 2-Yr Avg	2019 Stuttgart Irrig	Stuttgart ⁶ Irrig 2-Yr Avg	Stuttgart ⁷ Irrig 3-Yr Avg	2019 Stuttgart Non-irrig	All-Location Avg
----- (bu./ac) -----																			
Relative Maturity 3.5-4.4																			
Non-Xtend Cultivars																			
Credenz CZ 3841LL	LL	70.2	63.7	•	73.8	57.0	62.2	•	47.1	65.4	69.2	•	57.6	63.4	51.5	•	•	38.9	57.7
Credenz CZ 3929GTL	LLGT27	70.8	•	•	74.2	64.6	•	•	52.1	77.6	•	•	66.1	•	54.6	•	•	40.1	62.5
Credenz CZ 4222LL	LL	73.9	70.5	68.3	73.2	66.2	70.4	67.2	54.9	76.8	80.1	72.1	63.6	68.0	52.2	60.6	64.2	36.2	62.1
Delta Grow DG45E23	E3	76.0	•	•	77.4	61.4	•	•	57.8	76.6	•	•	55.1	•	54.3	•	•	36.8	61.9
Dyna-Gro S42EN89	E3	79.1	•	•	78.9	68.2	•	•	54.2	78.4	•	•	52.4	•	57.8	•	•	38.2	63.4
GoSoy 44GL18	LLGT27	76.9	•	•	71.0	67.3	•	•	53.2	80.1	•	•	55.5	•	48.3	•	•	32.4	60.6
Progeny P4241 E3	E3	77.2	•	•	76.2	67.6	•	•	59.3	80.8	•	•	50.9	•	56.4	•	•	36.2	63.1
Progeny P4291 LR	LLGT27	76.2	•	•	75.7	65.5	•	•	57.0	66.8	•	•	55.8	•	56.8	•	•	39.5	61.7
S13-2743C	Conv	74.2	74.0	•	76.3	69.0	68.5	•	50.7	74.0	75.7	70.9	59.8	55.7	50.0	56.6	•	34.5	61.1
S13-3851C	Conv	74.7	•	•	79.7	66.3	•	•	53.5	73.1	•	•	53.7	•	53.8	63.5	•	34.0	61.1
GRAND MEAN		74.9	•	•	75.7	65.3	•	•	54.0	74.9	•	•	57.0	•	53.6	•	•	36.7	61.5
LSD (5%) (5%)		4.8	•	•	4.1	3.6	•	•	4.7	9.7	•	•	6.6	•	3.6	•	•	7.2	•
C.V.		4.5	•	•	3.7	3.9	•	•	6.2	9.1	•	•	8.2	•	4.7	•	•	13.9	•

2019 Soybean Update

Table 3. 2019 Yield, 2-Year, and 3-Year Average Yield (bu/ac) of Relative Maturity 3.5-4.4 Xtend Soybean Varieties/Experimental Lines Across Arkansas, 2019¹.

Variety/Experimental Line	Herb. Tech.	2019 ² Keiser Irrig	Keiser ³ Irrig 2-Yr Avg	Keiser ⁴ Irrig 3-Yr Avg	2019 ² Keiser LP Irrig	2019 ² Marianna Irrig	Marianna ³ Irrig 2-Yr Avg	Marianna ⁴ Irrig 3-Yr Avg	2019 Pine Tree Irrig	2019 Rohwer Irrig	Rohwer ³ Irrig 2-Yr Avg	Rohwer ⁵ Irrig 3-Yr Avg	Rohwer ⁸ LP Irrig 2019	Rohwer ³ Late Irrig 2-Yr Avg	2019 Stuttgart Irrig	Stuttgart ⁶ Irrig 2-Yr Avg	Stuttgart ⁷ Irrig 3-Yr Avg	2019 Stuttgart Non-irrig	All-Location Avg
-----(bu./ac)-----																			
Relative Maturity 3.5-4.4																			
Xtend Cultivars																			
AgriGold G4440RX	RR2X	84.8	75.2	•	69.2	67.0	71.1	•	48.2	71.1	69.3	68.0	•	•	64.2	71.4	•	45.2	64.2
Armor 42-D27	RR2X	76.2	75.8	•	76.2	63.3	70.4	•	60.2	64.2	72.3	•	•	•	55.7	•	•	39.8	62.2
Armor 44-D92	RR2X	89.0	•	•	73.5	67.6	•	•	50.2	64.8	•	•	•	•	56.6	•	•	42.6	63.5
Asgrow AG42X9	RR2X	82.2	76.5	•	67.1	60.4	67.1	•	50.8	60.9	65.0	•	•	•	56.2	•	•	39.8	59.6
Asgrow AG43X0	RR2X	89.3	•	•	69.5	65.6	•	•	52.5	73.2	•	•	•	•	59.3	•	•	43.7	64.7
Credenz CZ 4280X	RR2X	84.0	•	•	68.4	62.9	•	•	53.9	54.9	•	•	•	•	58.2	•	•	40.8	60.5
Dyna-Gro S41XS98	RR2X/STS	90.7	•	•	70.9	65.8	•	•	57.3	68.4	•	•	•	•	52.7	•	•	43.8	64.2
Eagle Seed ES 4460RYX	RR2X	86.1	76.9	70.6	67.2	65.0	67.7	64.6	51.9	67.3	62.1	66.3	•	•	58.5	67.5	68.3	42.0	62.5
Local LS3976X	RR2X	84.1	•	•	72.4	61.4	•	•	49.4	60.1	•	•	•	•	53.8	•	•	41.3	60.4
Local LS4299XS	RR2X	83.8	•	•	69.2	69.8	•	•	50.4	70.7	•	•	•	•	56.6	•	•	46.2	63.8
Local LS4487XS	RR2X	80.9	•	•	74.0	68.0	•	•	50.9	65.4	•	•	•	•	47.9	•	•	41.7	61.2
Mission A4448X	RR2X	78.3	•	•	70.4	66.6	•	•	55.2	69.8	•	•	•	•	56.7	•	•	45.4	63.2
MorSoy 4447 RXT	RR2X	85.5	•	•	77.2	64.7	•	•	55.5	73.3	•	•	•	•	58.1	•	•	42.9	65.3
NK S39-G2X	RR2X	80.8	•	•	66.7	63.1	•	•	50.7	63.6	•	•	•	•	53.1	•	•	39.7	59.7
NK S44-C7X	RR2X	90.8	•	•	80.8	71.9	•	•	53.4	74.3	•	•	•	•	57.4	•	•	45.0	67.7
Pioneer P42A96X	RR2X	86.3	•	•	73.2	62.7	•	•	51.7	70.3	•	•	•	•	47.9	•	•	35.5	61.1
Progeny P4255 RX	RR2X	84.2	76.4	•	74.2	68.7	74.2	•	55.5	66.8	67.1	63.9	•	•	59.8	67.0	•	46.0	65.0
Progeny P4265 RXS	RR2X/STS	74.2	•	•	64.2	69.4	•	•	50.3	72.5	•	•	•	•	57.7	•	•	43.9	61.7
Progeny P4444 RXS	RR2X/STS	87.5	77.2	•	81.6	69.9	71.8	•	57.7	70.8	64.9	65.9	•	•	63.8	68.2	•	43.7	67.9
REV 4310X	RR2X	82.2	•	•	68.4	65.8	•	•	53.9	68.1	•	•	•	•	53.5	•	•	46.1	62.6
GRAND MEAN		84.0	•	•	71.7	66.0	•	•	53.0	67.5	•	•	•	•	56.4	•	•	42.8	63.0
LSD (5%) (5%)		8.8	•	•	5.9	3.5	•	•	4.2	10.4	•	•	•	•	5.1	•	•	6.4	•
C.V.		7.6	•	•	5.9	3.8	•	•	5.8	11.2	•	•	•	•	6.5	•	•	10.9	•

2019 Soybean Update

Table 4. 2019 Yield, 2-Year, and 3-Year Average Yield (bu/ac) of Relative Maturity 4.5-4.9 Non-Xtend Soybean Varieties/Experimental Lines Across Arkansas, 2019¹.

Variety/Experimental Line	Herb. Tech.	2019 ² Keiser Irrig	Keiser ³ Irrig 2-Yr Avg	Keiser ⁴ Irrig 3-Yr Avg	2019 ² Keiser LP Irrig	2019 ² Marianna Irrig	Marianna ³ Irrig 2-Yr Avg	Marianna ⁴ Irrig 3-Yr Avg	2019 Pine Tree Irrig	2019 Rohwer Irrig	Rohwer ³ Irrig 2-Yr Avg	Rohwer ⁵ Irrig 3-Yr Avg	Rohwer LP Irrig 2019	Rohwer ³ Late Irrig 2-Yr Avg	2019 Stuttgart Irrig	Stuttgart ⁶ Irrig 2-Yr Avg	Stuttgart ⁷ Irrig 3-Yr Avg	2019 Stuttgart Non-irrig	All-Location Avg
----- (bu./ac) -----																			
Relative Maturity 4.5-4.9																			
Non-Xtend Cultivars																			
Credenz CZ 4539GTLL	LLGT27	71.2	•	•	68.3	68.6	•	•	55.5	76.6	•	•	65.6	•	51.1	•	•	33.7	61.3
Credenz CZ 4540LL	LL	77.6	69.4	65.1	68.3	58.8	61.6	58.5	44.2	70.5	61.9	61.8	56.5	55.4	59.9	64.0	63.2	43.6	59.9
Credenz CZ 4649LL	LL	72.2	68.4	•	69.4	69.9	70.7	•	55.2	75.0	69.6	•	55.1	58.7	63.0	•	•	41.0	62.6
Credenz CZ 4820LL	LL	82.2	76.4	•	77.5	66.0	64.8	•	62.0	74.2	69.2	•	58.8	64.2	63.5	•	•	44.9	66.2
Credenz CZ 4918LL	LL	86.5	77.5	•	68.9	66.0	68.3	•	64.0	75.6	67.7	•	60.0	61.4	59.0	•	•	41.4	65.1
Credenz CZ 4938LL	LL	74.7	69.4	•	68.4	67.9	65.5	•	57.3	78.6	66.6	•	57.8	61.4	61.0	•	•	39.0	63.1
Delta Grow DG46E29	E3/STS	77.9	•	•	66.3	64.7	•	•	60.3	69.8	•	•	53.9	•	58.3	•	•	39.5	61.3
Delta Grow DG47E19	E3	84.7	•	•	56.0	68.7	•	•	66.7	72.0	•	•	60.4	•	57.5	•	•	40.9	63.4
Delta Grow DG47E25	E3	74.0	•	•	70.8	65.4	•	•	61.9	73.1	•	•	58.0	•	57.1	•	•	41.0	62.7
Delta Grow DG48E10	E3	79.8	•	•	66.2	71.4	•	•	60.4	76.2	•	•	63.3	•	67.8	•	•	44.7	66.2
Delta Grow DG48E39	E3	80.5	•	•	69.5	63.9	•	•	61.1	75.3	•	•	60.9	•	64.7	•	•	41.7	64.7
Delta Grow DG48E49	E3/STS	77.7	•	•	68.0	63.2	•	•	62.8	74.9	•	•	57.1	•	61.6	•	•	43.0	63.5
Delta Grow DG4977LL/STS	LL/STS	69.5	66.1	61.6	66.6	65.2	60.6	59.5	46.8	67.1	62.0	59.4	56.5	55.5	58.0	63.4	60.2	35.3	58.1
Delta Grow DG49E29	E3	74.9	•	•	69.4	67.3	•	•	54.0	69.8	•	•	58.2	•	58.7	•	•	40.8	61.6
DONMARIO DM 48E73	E3	78.9	•	•	65.0	61.8	•	•	55.5	70.6	•	•	60.4	•	58.2	•	•	36.7	60.9
Dyna-Gro S46EN29	E3	81.0	•	•	65.4	71.7	•	•	63.4	76.9	•	•	62.8	•	69.0	•	•	43.3	66.7
Dyna-Gro S49EN79	E3	84.0	•	•	69.4	71.4	•	•	54.1	76.3	•	•	58.3	•	65.5	•	•	39.9	64.9
GoSoy 46GL18	LLGT27	81.2	•	•	66.7	67.2	•	•	53.3	75.8	•	•	62.8	•	53.0	•	•	32.4	61.5
GoSoy 481E19	E3	80.7	•	•	65.4	70.2	•	•	62.9	76.3	•	•	66.2	•	62.9	•	•	42.0	65.8
GoSoy 482E18	E3	86.9	•	•	73.4	64.3	•	•	56.2	66.9	•	•	55.6	•	59.6	•	•	37.7	62.6
GoSoy 48C17S	Conv	71.6	•	•	66.7	59.3	•	•	55.8	60.8	•	•	52.3	•	55.8	•	•	38.6	57.6
GoSoy 49G16	RR1	74.6	72.2	68.3	69.4	71.7	71.8	68.1	64.3	61.6	62.4	•	63.1	58.2	60.8	•	•	44.2	63.7
Hefty H47E0	E3	77.9	•	•	73.6	67.0	•	•	61.9	76.6	•	•	51.9	•	59.8	•	•	38.3	63.4
Hefty H48E0	E3	80.2	•	•	74.6	65.6	•	•	67.1	72.8	•	•	63.5	•	62.1	•	•	40.7	65.8
Hefty H48E9	E3	87.1	•	•	74.6	67.2	•	•	56.7	62.1	•	•	57.9	•	59.2	•	•	41.9	63.3
Local ZS4596GLS	LLGT27	80.7	•	•	75.6	67.4	•	•	60.5	76.5	•	•	59.1	•	64.5	•	•	41.4	65.7
Local ZS4694E3S	E3	85.2	•	•	73.5	70.1	•	•	63.9	66.7	•	•	65.2	•	65.6	•	•	44.0	66.8
Local ZS4797E3	E3	91.9	•	•	75.1	69.7	•	•	59.9	74.8	•	•	66.8	•	66.0	•	•	41.7	68.2
Petrus Seed 4916 GT	RR1	70.0	70.9	•	69.1	63.3	68.8	•	69.9	65.6	61.5	59.3	60.8	56.3	62.4	67.1	•	46.8	63.5
Pioneer P48A99L	LL	81.7	•	•	66.5	62.9	•	•	62.6	78.0	•	•	64.3	•	61.7	•	•	42.8	65.1

2019 Soybean Update

Table 4 (Continued). 2019 Yield, 2-Year, and 3-Year Average Yield (bu/ac) of Relative Maturity 4.5-4.9 Non-Xtend Soybean Varieties/Experimental Lines Across Arkansas, 2019¹.

Variety/Experimental Line	Herb. Tech.	2019 ² Keiser Irrig	Keiser ³ Irrig 2-Yr Avg	Keiser ⁴ Irrig 3-Yr Avg	2019 ² Keiser LP Irrig	2019 ² Marianna Irrig	Marianna ³ Irrig 2-Yr Avg	Marianna ⁴ Irrig 3-Yr Avg	2019 Pine Tree Irrig	2019 Rohwer Irrig	Rohwer ³ Irrig 2-Yr Avg	Rohwer ⁵ Irrig 3-Yr Avg	Rohwer LP Irrig 2019	Rohwer ³ Late Irrig 2-Yr Avg	2019 Stuttgart Irrig	Stuttgart ⁶ Irrig 2-Yr Avg	Stuttgart ⁷ Irrig 3-Yr Avg	2019 Stuttgart Non-irrig	All-Location Avg
----- (bu./ac) -----																			
Relative Maturity 4.5-4.9																			
Non-Xtend Cultivars																			
Progeny P4525 E3	E3	78.5	•	•	68.2	66.8	•	•	54.9	79.6	•	•	57.5	•	61.9	•	•	38.7	63.3
Progeny P4565 LR	LLGT27	79.9	•	•	66.0	65.4	•	•	55.1	72.7	•	•	72.0	•	54.2	•	•	37.5	62.8
Progeny P4682 E3	E3	81.8	•	•	70.8	68.1	•	•	70.8	79.5	•	•	63.3	•	64.5	•	•	39.8	67.3
Progeny P4710 E3	E3	80.0	•	•	70.9	64.9	•	•	63.7	75.5	•	•	66.2	•	65.8	•	•	39.9	65.9
Progeny P4775 E3S	E3/STS	80.2	•	•	78.3	71.0	•	•	60.5	76.3	•	•	65.3	•	60.1	•	•	44.0	66.9
Progeny P4833 E3	E3	87.7	•	•	71.9	68.8	•	•	62.4	74.3	•	•	68.1	•	63.0	•	•	40.3	67.1
Progeny P4891 E3	E3	79.4	•	•	71.1	67.9	•	•	60.3	71.0	•	•	61.1	•	63.6	•	•	40.2	64.3
R15-2422	Conv	75.1	67.7	•	61.9	61.5	59.5	•	50.7	62.7	58.7	•	46.8	45.7	58.0	•	•	37.3	56.8
R16-253	Conv	73.4	•	•	69.0	64.5	•	•	54.4	72.7	•	•	61.7	•	58.8	•	•	39.9	61.8
R16-259	Conv	74.8	•	•	65.3	61.2	•	•	55.9	68.9	•	•	57.1	•	58.8	•	•	43.5	60.7
S14-15138R	RR1/STS	79.1	•	•	71.5	69.3	•	•	59.5	69.9	•	•	46.0	•	61.3	•	•	40.4	62.1
USG 7460ET	E3	77.0	•	•	64.9	65.6	•	•	66.9	77.6	•	•	61.5	•	61.6	•	•	39.9	64.4
USG 7480ET	E3	77.1	•	•	72.1	70.4	•	•	65.6	74.6	•	•	64.0	•	61.8	•	•	44.4	66.2
USG 7499ET	E3	81.6	•	•	71.5	66.1	•	•	50.8	69.7	•	•	57.1	•	59.9	•	•	40.1	62.1
Grand Mean		79.1	•	•	69.3	66.6	•	•	59.3	72.5	•	•	60.0	•	60.9	•	•	40.6	63.6
LSD (5%)		7.4	•	•	6.9	4.5	•	•	5.0	7.2	•	•	8.3	•	4.2	•	•	4.5	•
C.V.		5.6	•	•	5.9	5.0	•	•	6.2	7.3	•	•	8.2	•	5.0	•	•	8.1	•

2019 Soybean Update

Table 5. 2019 Yield, 2-Year, and 3-Year Average Yield (bu/ac) of Relative Maturity 4.5-4.9 Xtend Soybean Varieties/Experimental Lines Across Arkansas, 2019¹.

Variety/Experimental Line	Herb. Tech.	2019 ² Keiser Irrig	Keiser ³ Irrig 2-Yr Avg	Keiser ⁴ Irrig 3-Yr Avg	2019 ² Keiser LP Irrig	2019 ² Marianna Irrig	Marianna ³ Irrig 2-Yr Avg	Marianna ⁴ Irrig 3-Yr Avg	2019 Pine Tree Irrig	2019 Rohwer Irrig	Rohwer ³ Irrig 2-Yr Avg	Rohwer ⁵ Irrig 3-Yr Avg	Rohwer LP Irrig 2019	Rohwer ³ Late Irrig 2-Yr Avg	2019 Stuttgart Irrig	Stuttgart ⁶ Irrig 2-Yr Avg	Stuttgart ⁷ Irrig 3-Yr Avg	2019 Stuttgart Non-irrig	All-Location Avg
(bu./ac)																			
Relative Maturity 4.5-4.9																			
Xtend Cultivars																			
AgriGold G4579RX	RR2X	81.5	70.8	•	58.6	66.8	69.9	•	54.1	77.9	73.3	•	65.9	65.8	63.4	•	•	45.3	64.2
AgriGold G4605RX	RR2X	79.8	73.2	•	65.5	61.4	64.6	•	51.9	60.5	61.3	•	66.0	63.8	61.8	•	•	42.2	61.1
AgriGold G4815RX	RR2X	83.4	•	•	57.1	65.7	•	•	55.0	73.2	•	•	67.2	•	60.4	•	•	43.9	63.2
AGS GS48X19	RR2X	76.8	•	•	72.0	67.0	•	•	55.8	68.6	•	•	66.6	•	62.1	•	•	39.6	63.6
AGS GS49X19	RR2X	79.1	•	•	73.4	65.1	•	•	56.7	78.1	•	•	72.7	•	64.3	•	•	43.5	66.6
Armor 45-D51	RR2X	77.8	•	•	67.2	65.5	•	•	53.1	71.9	•	•	60.0	•	56.1	•	•	41.0	61.6
Armor 46-D09	RR2X	87.5	•	•	68.0	67.1	•	•	58.4	73.0	•	•	60.0	•	59.8	•	•	47.4	65.2
Armor 46-D30	RR2X	86.1	•	•	70.5	65.0	•	•	48.1	76.5	•	•	64.0	•	57.8	•	•	41.7	63.7
Armor 47-D18	RR2X	76.2	•	•	60.0	67.4	•	•	59.3	73.8	•	•	64.6	•	61.8	•	•	45.0	63.5
Armor 47-D85	RR2X	77.4	•	•	60.0	65.6	•	•	56.2	74.8	•	•	65.1	•	65.6	•	•	44.5	63.6
Armor 47-D86	RR2X	84.5	•	•	65.4	64.3	•	•	54.9	67.7	•	•	60.7	•	58.4	•	•	42.5	62.3
Armor 48-D25	RR2X	80.5	•	•	67.5	66.7	•	•	55.4	78.5	•	•	66.4	•	65.3	•	•	46.2	65.8
Armor 48-D88	RR2X	84.6	•	•	66.8	64.9	•	•	56.5	68.6	•	•	66.0	•	64.8	•	•	40.1	64.0
Armor 49-D67	RR2X	82.9	•	•	62.0	68.5	•	•	53.0	78.3	•	•	66.8	•	62.1	•	•	44.0	64.7
Asgrow AG46X0	RR2X	89.3	•	•	59.3	63.4	•	•	54.6	77.8	•	•	73.5	•	61.7	•	•	41.7	65.2
Asgrow AG46X6	RR2X	86.5	75.3	•	68.1	67.5	69.2	•	59.2	84.0	80.8	•	57.6	64.3	62.6	•	•	42.2	65.9
Asgrow AG47X0	RR2X	73.7	•	•	60.7	57.8	•	•	58.6	65.3	•	•	59.6	•	58.5	•	•	41.4	59.4
Asgrow AG47X9	RR2X	89.0	76.9	•	67.3	62.8	65.6	•	57.7	84.1	78.9	•	62.5	64.9	61.1	•	•	40.5	65.6
Asgrow AG48X9	RR2X	83.4	77.0	•	62.8	64.2	66.6	•	58.7	80.3	73.0	•	62.5	68.7	58.7	•	•	42.3	64.1
Asgrow AG49X9	RR2X	80.9	79.7	•	60.5	59.7	63.7	•	59.4	80.2	78.3	•	58.2	66.1	61.5	•	•	47.0	63.4
Credenz CZ 4570X	RR2X	74.7	•	•	67.3	66.2	•	•	55.8	71.2	•	•	51.5	•	61.9	•	•	41.8	61.3
Credenz CZ 4600X	RR2X	80.5	•	•	63.8	63.5	•	•	51.2	75.6	•	•	54.4	•	58.2	•	•	40.5	61.0
Credenz CZ 4770X	RR2X	85.5	•	•	68.7	70.5	•	•	53.6	79.9	•	•	65.5	•	59.2	•	•	37.1	65.0
Credenz CZ 4869X	RR2X	85.6	•	•	68.6	66.6	•	•	55.8	72.2	•	•	61.3	•	58.1	•	•	39.6	63.5
Credenz CZ 4979X	RR2X	82.4	•	•	71.1	67.8	•	•	56.9	75.6	•	•	65.8	•	61.6	•	•	40.5	65.2
Delta Grow DG46X25	RR2X	85.3	77.8	•	65.2	64.4	66.1	•	53.3	69.1	65.6	•	58.3	60.7	63.5	•	•	42.6	62.7
Delta Grow DG46X65	RR2X/STS	88.2	•	•	54.2	66.6	•	•	55.7	67.1	•	•	56.4	•	55.2	•	•	33.1	59.6
Delta Grow DG48X05	RR2X	87.1	•	•	66.0	71.6	•	•	56.9	71.1	•	•	57.7	•	61.3	•	•	38.5	63.8
Delta Grow DG48X45	RR2X	85.6	78.8	•	68.8	64.2	67.3	•	51.9	71.6	70.4	•	66.6	68.2	61.7	•	•	45.4	64.5
Delta Grow DG49X15	RR2X	82.6	•	•	70.3	65.1	•	•	54.8	64.5	•	•	48.1	•	64.8	•	•	40.4	61.3
DONMARIO DM 47x39	RR2X	89.9	•	•	72.3	68.3	•	•	53.7	70.5	•	•	58.2	•	66.1	•	•	38.5	64.7
DONMARIO Experimental	RR2X	79.4	•	•	70.5	72.0	•	•	53.2	65.0	•	•	50.6	•	66.0	•	•	44.0	62.6
Dyna-Gro S45XS37	RR2X/STS	84.5	76.3	•	72.4	66.9	67.7	•	57.8	75.9	69.1	71.3	68.7	69.0	62.8	70.3	•	41.4	66.3

2019 Soybean Update

Table 5 (Continued). 2019 Yield, 2-Year, and 3-Year Average Yield (bu/ac) of Relative Maturity 4.5-4.9 Xtend Soybean Varieties/Experimental Lines Across Arkansas, 2019¹.

Variety/Experimental Line	Herb. Tech.	2019 ² Keiser Irrig	Keiser ³ Irrig 2-Yr Avg	Keiser ⁴ Irrig 3-Yr Avg	2019 ² Keiser LP Irrig	2019 ² Marianna Irrig	Marianna ³ Irrig 2-Yr Avg	Marianna ⁴ Irrig 3-Yr Avg	2019 Pine Tree Irrig	2019 Rohwer Irrig	Rohwer ³ Irrig 2-Yr Avg	Rohwer ⁵ Irrig 3-Yr Avg	Rohwer LP Irrig 2019	Rohwer ³ Late Irrig 2-Yr Avg	2019 Stuttgart Irrig	Stuttgart ⁶ Irrig 2-Yr Avg	Stuttgart ⁷ Irrig 3-Yr Avg	2019 Stuttgart Non-irrig	All-Location Avg
----- (bu./ac) -----																			
Relative Maturity 4.5-4.9																			
Xtend Cultivars																			
Dyna-Gro S45XS66	RR2X/STS	84.7	77.0	71.9	66.8	69.0	73.4	70.2	57.1	64.0	64.5	66.2	61.9	61.2	64.7	69.9	69.6	43.8	64.0
Dyna-Gro S46XS60	RR2X/STS	84.2	•	•	68.4	68.5	•	•	55.8	76.4	•	•	63.6	•	64.8	•	•	37.8	64.9
Dyna-Gro S47XT20	RR2X	78.2	•	•	61.8	63.6	•	•	55.7	74.8	•	•	65.5	•	62.6	•	•	41.4	62.9
Dyna-Gro S48XT56	RR2X	82.5	78.9	73.8	76.1	70.3	70.4	65.7	54.5	85.5	73.5	71.7	62.6	65.0	61.7	68.7	68.0	45.3	67.3
Dyna-Gro S49XT39	RR2X	76.8	74.5	•	68.8	69.3	68.6	•	55.5	75.5	68.4	•	61.5	58.8	64.0	•	•	44.9	64.5
Dyna-Gro S49XT70	RR2X	78.6	•	•	64.0	68.2	•	•	57.0	82.7	•	•	66.3	•	62.6	•	•	38.2	64.7
Eagle Seed ES 4680RYX	RR2X	86.5	79.6	74.7	62.3	63.6	65.7	65.1	59.9	68.6	67.1	70.0	62.7	62.5	58.8	66.9	68.4	43.5	63.2
Eagle Seed ES 4840RYX	RR2X	88.2	82.6	•	67.6	69.8	70.2	•	53.3	75.6	65.0	•	63.8	64.4	58.8	•	•	44.4	65.2
Hefty H46X0S	RR2X	86.3	•	•	65.6	64.8	•	•	58.2	75.1	•	•	54.0	•	64.4	•	•	36.0	63.0
LG Seeds LG C4845RX	RR2X	87.1	78.1	•	62.6	64.6	66.7	•	50.0	70.1	71.6	•	63.4	70.0	57.7	•	•	45.5	62.6
LG Seeds LGS46682RX	RR2X	78.5	•	•	57.5	65.3	•	•	55.1	69.8	•	•	57.3	•	53.5	•	•	38.3	59.4
LG Seeds LGS4899RX	RR2X	85.9	•	•	66.0	66.0	•	•	56.4	69.1	•	•	67.5	•	62.2	•	•	45.0	64.8
LG Seeds LGS4931RX	RR2X	81.8	•	•	64.8	70.6	•	•	57.7	68.4	•	•	62.4	•	65.8	•	•	43.7	64.4
Local LS4407X	RR2X	85.9	82.1	•	66.3	62.0	68.2	•	53.7	72.4	•	•	55.3	•	67.4	•	•	35.9	62.4
Local LS4565XS	RR2X	90.5	72.6	•	67.6	68.1	70.3	•	55.9	73.6	72.4	•	56.1	63.7	65.8	•	•	36.9	64.3
Local LS4583X	RR2X	76.5	76.3	•	61.8	62.8	63.4	•	48.7	66.4	61.8	•	56.6	59.6	60.0	•	•	33.7	58.3
Local LS4677X	RR2X	86.6	•	•	71.6	63.1	•	•	61.3	68.8	70.5	•	60.2	68.9	60.5	•	•	40.1	64.0
Local LS4795XS	RR2X	84.8	74.4	•	67.0	67.8	69.8	•	58.8	74.1	•	•	61.5	•	62.2	•	•	41.3	64.7
Local LS4798X	RR2X	78.0	•	•	62.8	67.2	•	•	44.6	62.4	•	•	59.1	•	59.4	•	•	41.1	59.3
Local LS4889XS	RR2X	81.0	•	•	64.4	69.3	•	•	53.8	58.0	62.1	•	51.2	56.1	65.1	•	•	42.0	60.6
Local LS4894X	RR2X	86.0	•	•	71.2	69.3	•	•	57.4	66.9	•	•	55.8	•	63.4	•	•	38.3	63.5
Local LS4999X	RR2X	82.9	•	•	63.4	69.5	•	•	58.0	77.0	•	•	62.4	•	63.0	•	•	38.3	64.3
Mission A4618X	RR2X	77.8	•	•	71.1	66.5	•	•	52.4	74.9	•	•	66.9	•	59.5	•	•	45.8	64.4
Mission A4950X	RR2X	84.9	•	•	69.8	68.6	•	•	56.3	73.1	•	•	57.4	•	59.7	•	•	40.8	63.8
MorSoy 4706 RXT	RR2X	71.0	•	•	61.9	62.3	•	•	51.4	56.6	•	•	62.3	•	57.8	•	•	43.4	58.3
MorSoy 4846 RXT	RR2X	81.9	•	•	69.8	68.9	•	•	52.8	80.2	•	•	65.6	•	62.7	68.6	•	42.7	65.6
NK S49-F5X	RR2X	88.7	•	•	69.0	64.0	•	•	56.2	70.0	•	•	68.7	•	65.9	•	•	47.3	66.2
Pioneer P46A57BX	RR2X	83.1	72.3	•	66.7	66.6	66.2	•	55.3	80.3	78.4	•	69.1	66.3	58.6	•	•	40.9	65.1
Pioneer P48A60X	RR2X	88.6	80.8	•	72.5	70.9	69.8	•	61.3	79.8	79.5	75.4	66.4	68.8	62.8	70.5	•	39.4	67.7
Progeny P4620 RXS	RR2X/STS	89.1	79.9	76.2	60.8	65.1	68.5	63.0	55.3	69.4	71.0	71.4	62.8	63.1	59.0	67.1	69.6	37.9	62.4
Progeny P4670 RX	RR2X	89.0	•	•	66.8	70.2	•	•	54.0	72.2	•	•	73.0	•	64.4	•	•	39.3	66.1
Progeny P4799 RXS	RR2X/STS	80.1	70.5	66.8	66.6	65.1	66.6	65.9	55.7	73.7	71.5	70.7	67.4	62.6	57.7	64.5	65.9	40.8	63.4
Progeny P4816 RX	RR2X	90.7	82.1	76.3	64.3	66.4	69.9	66.5	52.8	77.2	74.0	73.1	57.6	63.7	57.6	65.4	64.8	42.1	63.6

2019 Soybean Update

Table 5 (Continued). 2019 Yield, 2-Year, and 3-Year Average Yield (bu/ac) of Relative Maturity 4.5-4.9 Xtend Soybean Varieties/Experimental Lines Across Arkansas, 2019¹.

Variety/Experimental Line	Herb. Tech.	2019 ² Keiser Irrig	Keiser ³ Irrig 2-Yr Avg	Keiser ⁴ Irrig 3-Yr Avg	2019 ² Keiser LP Irrig	2019 ² Marianna Irrig	Marianna ³ Irrig 2-Yr Avg	Marianna ⁴ Irrig 3-Yr Avg	2019 Pine Tree Irrig	2019 Rohwer Irrig	Rohwer ³ Irrig 2-Yr Avg	Rohwer ⁵ Irrig 3-Yr Avg	Rohwer LP Irrig 2019	Rohwer ³ Late Irrig 2-Yr Avg	2019 Stuttgart Irrig	Stuttgart ⁶ Irrig 2-Yr Avg	Stuttgart ⁷ Irrig 3-Yr Avg	2019 Stuttgart Non-irrig	All-Location Avg
----- (bu./ac) -----																			
Relative Maturity 4.5-4.9																			
Xtend Cultivars																			
Progeny P4821 RX	RR2X	85.6	•	•	60.1	72.4	•	•	57.4	77.9	•	•	67.5	•	64.7	•	•	43.2	66.1
Progeny P4851 RX	RR2X	86.0	80.7	•	66.0	66.3	66.3	•	52.2	59.5	63.1	63.5	56.6	57.2	65.1	71.9	•	52.1	63.0
Progeny P4999 RX	RR2X	87.2	•	•	63.2	72.3	•	•	52.9	78.7	•	•	52.7	•	66.0	•	•	39.9	64.1
REV 4679X	RR2X	78.9	71.5	•	61.9	63.4	69.6	•	61.5	70.2	65.7	•	61.1	65.3	61.0	•	•	42.5	62.5
REV 4927X	RR2X	86.3	80.1	•	68.3	69.4	70.0	•	57.1	62.5	60.9	62.0	61.9	58.6	67.6	72.1	•	46.4	64.9
REV 4940X	RR2X	87.7	•	•	64.0	64.2	•	•	57.5	73.0	•	•	60.0	•	60.0	•	•	38.5	63.1
Taylor EXP 47-90	RR2X	76.1	•	•	65.4	59.7	•	•	51.1	61.0	•	•	62.8	•	60.1	•	•	38.2	59.3
Taylor EXP 48-80	RR2X	81.6	•	•	68.6	66.5	•	•	52.3	74.8	•	•	70.1	•	66.0	•	•	43.0	65.4
USG 7470XT	RR2X	82.4	•	•	57.3	61.0	•	•	60.7	70.5	•	•	59.9	•	56.1	•	•	41.2	61.1
USG 7478XTS	RR2X/STS	85.3	•	•	63.6	71.0	•	•	61.8	74.6	•	•	63.4	•	64.2	67.1	•	45.4	66.2
USG 7480XT	RR2X	85.8	•	•	65.7	69.2	•	•	56.6	69.1	•	•	67.7	•	64.8	•	•	37.3	64.5
USG 7489XT	RR2X	82.4	•	•	65.9	73.4	•	•	55.0	82.0	•	•	63.2	•	65.0	•	•	45.7	66.6
USG 7496XTS	RR2X/STS	80.5	75.6	70.3	64.0	72.1	72.0	67.7	57.6	70.7	69.7	68.2	56.0	62.8	66.5	69.5	68.3	43.2	63.8
Grand Mean		83.2	•	•	65.7	66.6	•	•	55.5	72.5	•	•	62.0	•	61.9	•	•	41.7	63.6
LSD (5%)		7.6	•	•	6.8	4.5	•	•	5.0	7.9	•	•	10.6	•	5.2	•	•	5.7	•
C.V.		6.8	•	•	6.2	5.0	•	•	6.7	8.0	•	•	10.3	•	6.2	•	•	10.1	•

2019 Soybean Update

Table 6. 2019 Yield, 2-Year, and 3-Year Average Yield (bu/ac) of Relative Maturity 5.0-5.9 Non-Xtend Soybean Varieties/Experimental Lines Across Arkansas, 2019¹.

Variety/Experimental Line	Herb. Tech.	2019 ² Keiser Irrig	Keiser ³ Irrig 2-Yr Avg	Keiser ⁴ Irrig 3-Yr Avg	2019 ² Keiser LP Irrig	2019 ² Marianna Irrig	Marianna ³ Irrig 2-Yr Avg	Marianna ⁴ Irrig 3-Yr Avg	2019 Pine Tree Irrig	2019 Rohwer Irrig	Rohwer ³ Irrig 2-Yr Avg	Rohwer ⁵ Irrig 3-Yr Avg	Rohwer LP Irrig 2019	Rohwer ³ Late Irrig 2-Yr Avg	2019 Stuttgart Irrig	Stuttgart ⁶ Irrig 2-Yr Avg	Stuttgart ⁷ Irrig 3-Yr Avg	2019 Stuttgart Non-irrig	All-Location Avg
----- (bu./ac) -----																			
Relative Maturity 5.0-5.9																			
Non-Xtend Cultivars																			
Credenz CZ 5150LL	RR2X	77.1	73.5	68.8	61.1	67.6	65.8	60.8	60.9	80.0	70.4	68.1	60.1	65.5	63.4	67.9	66.3	38.0	63.5
Delta Grow DG52E22	E3	82.9	•	•	57.3	69.7	•	•	58.6	67.6	•	•	63.4	•	64.5	•	•	40.8	63.1
Delta Grow DG5585RR2	RR2	80.5	75.9	•	64.6	69.6	73.5	•	65.7	65.3	67.2	•	63.2	60.9	63.3	•	•	41.3	64.2
GoSoy 50G17	RR1	72.7	73.3	•	61.2	69.6	74.3	•	68.5	53.3	53.7	•	64.3	57.7	61.4	•	•	41.4	61.6
GoSoy 512E18	E3	74.9	•	•	57.1	72.0	•	•	61.6	66.3	•	•	56.0	•	61.7	•	•	42.3	61.5
Hefty H51E9	E3	78.4	•	•	56.1	71.6	•	•	58.0	64.1	•	•	55.3	•	61.0	•	•	40.6	60.6
Progeny P5211 E3	E3	84.2	•	•	58.2	67.7	•	•	59.5	72.3	•	•	60.1	•	55.2	•	•	43.0	62.5
R13-13997	Conv	83.9	76.6	•	65.1	65.3	66.4	•	67.1	64.6	59.4	59.7	59.9	60.8	66.3	69.4	•	41.1	64.2
R13-14635RR	RR1	74.6	•	•	61.2	65.0	•	•	64.4	64.8	•	•	61.3	•	62.0	65.6	•	42.2	61.9
R13-818	Conv	68.8	70.3	•	57.0	71.4	69.5	•	62.6	54.1	51.9	•	57.3	54.9	64.3	•	•	42.4	59.7
R14-1422	Conv	80.4	78.9	•	65.6	61.8	62.0	•	64.9	62.1	57.8	•	60.4	57.0	67.5	•	•	41.1	63.0
R15-1587	Conv	78.7	77.7	•	60.5	68.9	67.2	•	67.6	66.3	64.1	•	68.1	62.8	63.9	•	•	39.8	64.2
R16-1445	Conv	81.9	•	•	64.3	76.6	•	•	64.7	60.4	•	•	69.6	•	63.3	•	•	42.3	65.4
R16-2546C	Conv	74.2	•	•	62.0	62.9	•	•	66.4	60.1	•	•	55.9	•	66.8	•	•	41.0	61.2
R16-2547	Conv	73.9	•	•	52.4	63.7	•	•	57.9	55.6	•	•	60.6	•	64.0	•	•	38.9	58.4
R16-378	Conv	76.5	•	•	59.5	64.3	•	•	58.2	57.7	•	•	63.1	•	66.3	•	•	44.5	61.3
R16-39	Conv	82.8	•	•	56.8	64.1	•	•	63.0	59.9	•	•	71.5	•	67.8	•	•	37.6	62.9
Grand Mean		78.0	•	•	60.0	67.7	•	•	62.9	63.2	•	•	61.8	•	63.7	•	•	41.1	62.3
LSD (5%)		8.3	•	•	6.9	5.2	•	•	6.0	7.3	•	•	10.1	•	3.2	•	•	3.0	•
C.V.		6.0	•	•	8.2	5.5	•	•	6.8	8.4	•	•	9.4	•	3.6	•	•	5.2	•

2019 Soybean Update

Table 7. 2019 Yield, 2-Year, and 3-Year Average Yield (bu/ac) of Relative Maturity 5.0-5.9 Xtend Soybean Varieties/Experimental Lines Across Arkansas, 2019¹.

Variety/Experimental Line	Herb. Tech.	2019 ² Keiser Irrig	Keiser ³ Irrig 2-Yr Avg	Keiser ⁴ Irrig 3-Yr Avg	2019 ² Keiser LP Irrig	2019 ² Marianna Irrig	Marianna ³ Irrig 2-Yr Avg	Marianna ⁴ Irrig 3-Yr Avg	2019 Pine Tree Irrig	2019 Rohwer Irrig	Rohwer ³ Irrig 2-Yr Avg	Rohwer ⁵ Irrig 3-Yr Avg	Rohwer LP Irrig 2019	Rohwer ³ Late Irrig 2-Yr Avg	2019 Stuttgart Irrig	Stuttgart ⁶ Irrig 2-Yr Avg	Stuttgart ⁷ Irrig 3-Yr Avg	2019 Stuttgart Non-irrig	All-Location Avg
-----(bu./ac)-----																			
Relative Maturity 5.0-5.9																			
Xtend Cultivars																			
AgriGold G5000RX	RR2X	82.8	72.5	•	57.6	68.4	70.6	•	66.8	72.4	64.9	64.6	58.4	57.9	65.4	69.2	•	45.6	64.7
Armor 51-D77	RR2X	85.3	•	•	67.1	65.8	•	•	51.6	67.3	•	•	55.1	•	71.8	•	•	41.2	63.1
Armor 52-D71	RR2X	91.8	82.4	•	56.9	66.6	69.2	•	59.9	69.6	70.1	•	55.0	65.4	60.5	•	•	46.4	63.3
Armor 55-D57	RR2X	68.0	69.5	•	65.9	69.5	72.5	•	65.0	66.5	72.3	•	59.3	63.6	61.9	•	•	44.5	62.6
Asgrow AG52X9	RR2X	87.9	80.0	•	57.1	66.2	66.2	•	68.0	71.5	68.0	•	62.7	69.4	66.0	•	•	40.2	64.9
Asgrow AG53X0	RR2X	86.0	•	•	56.0	69.7	•	•	65.5	73.2	•	•	63.1	•	62.8	•	•	47.3	65.4
Credenz CZ 5299X	RR2X	80.4	•	•	63.5	65.7	•	•	55.7	67.3	•	•	56.9	•	61.1	•	•	42.8	61.7
Delta Grow DG52X05	RR2X/STS	82.9	•	•	67.9	63.3	•	•	51.7	67.9	•	•	50.5	•	64.9	•	•	40.4	61.2
Delta Grow DG54X25	RR2X	92.0	•	•	63.7	60.8	•	•	62.5	64.7	•	•	59.1	•	63.6	•	•	38.1	63.1
Dyna-Gro S52XS39	RR2X/STS	81.1	•	•	52.4	58.7	•	•	57.6	73.3	•	•	50.2	•	65.3	•	•	42.0	60.1
Dyna-Gro S56XT99	RR2X	88.4	80.6	•	63.9	74.1	73.0	•	63.8	65.9	71.6	•	53.9	60.4	62.1	•	•	40.4	64.1
Eagle Seed ES 5155RYX	RR2X	86.5	•	•	59.5	70.4	•	•	61.1	73.1	•	•	58.9	•	64.6	•	•	38.0	64.0
Local LS5087X	RR2X	94.8	79.8	•	64.2	72.2	72.5	•	59.5	71.2	71.6	•	60.0	62.6	58.5	•	•	45.6	65.7
Local LS5386X	RR2X	82.8	•	•	59.5	67.0	•	•	58.2	72.2	•	•	49.2	•	62.3	•	•	49.0	62.5
Local LS5588X	RR2X	79.5	•	•	66.2	66.6	•	•	65.2	68.5	•	•	56.4	•	62.9	•	•	38.7	63.0
Progeny P5016 RXS	RR2X/STS	86.4	77.2	71.0	52.5	74.8	72.9	67.1	70.4	71.4	68.7	70.1	66.4	66.2	65.0	70.4	70.0	49.6	67.0
Progeny P5170 RX	RR2X	88.7	•	•	55.1	69.0	•	•	58.3	71.6	•	•	57.4	•	66.2	•	•	37.2	62.9
Progeny P5252 RX	RR2X	79.3	74.4	•	61.7	69.5	65.6	•	58.2	65.3	65.1	•	51.4	56.2	64.9	•	•	46.7	62.1
Progeny P5335 RX	RR2X	78.9	•	•	53.7	59.6	•	•	45.0	58.6	•	•	43.1	•	62.4	•	•	45.0	55.8
Progeny P5554 RX	RR2X	73.1	73.3	•	65.9	70.8	73.9	•	67.3	67.3	67.8	•	54.7	61.1	60.1	•	•	42.1	62.6
Progeny P5688 RX	RR2X	77.6	76.1	•	53.2	64.9	71.8	•	63.1	61.0	63.4	62.0	50.9	58.6	62.5	68.9	•	36.2	58.7
Grand Mean		83.5	•	•	60.2	67.3	•	•	60.7	68.6	•	•	55.8	•	63.6	•	•	42.7	62.8
LSD (5%)		9.2	•	•	9.1	5.1	•	•	7.1	8.0	•	•	9.2	•	7.5	•	•	6.9	•
C.V.		7.9	•	•	10.9	5.5	•	•	8.5	8.5	•	•	9.5	•	8.6	•	•	11.7	•

2019 Soybean Update

Table 8. Nematode, Disease, and Chloride Sensitivity Ratings for Soybean Varieties in 2019 Arkansas Soybean Variety Performance Tests^{9,10}.

Variety/Experimental Line	RKN GH Gall Rating	Field Gall Rating	Stem Canker Rating ¹¹	Chloride Reaction ¹²
AgriGold G4440RX	MS	MS	S	Includer
AgriGold G4579RX	S	S	MR	Excluder
AgriGold G4605RX	VS	VS	MS	Mixed
AgriGold G4815RX	S	VS	MR	Excluder
AgriGold G5000RX	MR	VS	R	Mixed
AGS GS48X19	VS	S	R	Includer
AGS GS49X19	VS	MS	MR	Mixed
Armor 42-D27	VS	S	MR	Mixed
Armor 44-D92	VS	VS	MR	Mixed
Armor 51-D77	VS	S	MR	Mixed
Armor 52-D71	VS	S	R	Mixed
Armor 55-D57	VS	MR	MR	Excluder
Armor 45-D51	VS	S	R	Mixed
Armor 46-D09	VS	S	R	Excluder
Armor 46-D30	VS	VS	R	Mixed
Armor 47-D18	VS	S	MR	Excluder
Armor 47-D85	VS	VS	R	Excluder
Armor 47-D86	VS	S	R	Mixed
Armor 48-D25	VS	VS	R	Excluder
Armor 48-D88	VS	MR	R	Mixed
Armor 49-D67	VS	VS	MR	Excluder
Asgrow AG42X9	VS	S	MR	Includer
Asgrow AG43X0	VS	VS	MR	Mixed
Asgrow AG46X0	VS	VS	MR	Excluder
Asgrow AG46X6	VS	S	MS	Excluder
Asgrow AG47X0	VS	S	MR	Excluder
Asgrow AG47X9	VS	MS	MR	Includer
Asgrow AG48X9	VS	MS	MR	Excluder
Asgrow AG49X9	VS	VS	MR	Mixed
Asgrow AG52X9	VS	VS	MR	Mixed
Asgrow AG53X0	VS	VS	R	Mixed
Credenz CZ 3841LL	S	VS	MR	Includer
Credenz CZ 3929GTLL	S	VS	MR	Mixed
Credenz CZ 4222LL	S	S	MR	Mixed
Credenz CZ 4280X	R	VS	R	Includer
Credenz CZ 4539GTLL	S	VS	MR	Mixed
Credenz CZ 4540LL	S	S	MR	Mixed
Credenz CZ 4570X	S	S	R	Mixed
Credenz CZ 4600X	S	S	R	Mixed
Credenz CZ 4649LL	S	MS	MR	Mixed
Credenz CZ 4770X	S	S	R	Mixed
Credenz CZ 4820LL	S	VS	MR	Mixed
Credenz CZ 4869X	S	S	R	Mixed
Credenz CZ 4918LL	S	S	MR	Mixed
Credenz CZ 4938LL	S	VS	MR	Mixed
Credenz CZ 4979X	S	MS	R	Mixed
Credenz CZ 5150LL	S	VS	R	Mixed
Credenz CZ 5299X	S	S	R	Mixed
Delta Grow DG45E23	VS	VS	R	Mixed
Delta Grow DG46E29	VS	VS	R	Mixed
Delta Grow DG46X25	VS	VS	R	Mixed

2019 Soybean Update

Table 8 (Continued). Nematode, Disease, and Chloride Sensitivity Ratings for Soybean Varieties in 2019 Arkansas Soybean Variety Performance Tests^{9, 10}.

Variety/Experimental Line	RKN GH Gall Rating	Field Gall Rating	Stem Canker Rating ¹¹	Chloride Reaction ¹²
Delta Grow DG46X65	VS	VS	R	Excluder
Delta Grow DG47E19	VS	VS	R	Mixed
Delta Grow DG47E25	VS	S	R	Mixed
Delta Grow DG48E10	VS	MS	R	Mixed
Delta Grow DG48E39	VS	S	R	Mixed
Delta Grow DG48E49	VS	VS	R	Excluder
Delta Grow DG48X05	VS	MS	MR	Mixed
Delta Grow DG48X45	VS	VS	R	Excluder
Delta Grow DG4977LL/STS	VS	S	MS	Mixed
Delta Grow DG49E29	VS	VS	R	Mixed
Delta Grow DG49X15	VS	MS	R	Mixed
Delta Grow DG52E22	VS	VS	R	Mixed
Delta Grow DG52X05	VS	S	R	Mixed
Delta Grow DG54X25	VS	MS	MS	Mixed
Delta Grow DG5585RR2	VS	MS	MR	Mixed
DONMARIO DM 47x39	VS	S	MR	Mixed
DONMARIO DM 48E73	VS	VS	R	Mixed
DONMARIO Experimental	VS	VS	R	Mixed
Dyna-Gro S41XS98	VS	S	MR	Includer
Dyna-Gro S42EN89	VS	VS	R	Mixed
Dyna-Gro S45XS37	VS	VS	R	Excluder
Dyna-Gro S45XS66	VS	S	R	Mixed
Dyna-Gro S46EN29	VS	S	MR	Mixed
Dyna-Gro S46XS60	VS	VS	R	Excluder
Dyna-Gro S47XT20	VS	VS	MR	Excluder
Dyna-Gro S48XT56	VS	VS	R	Excluder
Dyna-Gro S49EN79	VS	VS	MR	Mixed
Dyna-Gro S49XT39	VS	S	MR	Mixed
Dyna-Gro S49XT70	VS	VS	MR	Mixed
Dyna-Gro S52XS39	VS	VS	R	Mixed
Dyna-Gro S56XT99	VS	HR	R	Excluder
Eagle Seed ES 4460RYX	VS	VS	VS	Mixed
Eagle Seed ES 4680RYX	VS	S	R	Excluder
Eagle Seed ES 4840RYX	VS	VS	R	Mixed
Eagle Seed ES 5155RYX	VS	VS	R	Mixed
GoSoy 44GL18	VS	S	R	Mixed
GoSoy 46GL18	VS	VS	R	Mixed
GoSoy 481E19	VS	S	R	Includer
GoSoy 482E18	VS	VS	R	Mixed
GoSoy 48C17S	VS	VS	R	Includer
GoSoy 49G16	VS	R	R	Excluder
GoSoy 50G17	VS	R	R	Mixed
GoSoy 512E18	VS	MS	R	Mixed
Hefty H46X0S	VS	S	R	Excluder
Hefty H47E0	•	•	•	Mixed
Hefty H48E0	VS	VS	R	Mixed
Hefty H48E9	VS	VS	R	Mixed
Hefty H51E9	VS	VS	R	Mixed
LG Seeds LG C4845RX	S	VS	R	Excluder
LG Seeds LGS46682RX	•	•	•	Mixed
LG Seeds LGS4899RX	S	S	R	Mixed

2019 Soybean Update

Table 8 (Continued). Nematode, Disease, and Chloride Sensitivity Ratings for Soybean Varieties in 2019 Arkansas Soybean Variety Performance Tests^{9,10}.

Variety/Experimental Line	RKN GH Gall Rating	Field Gall Rating	Stem Canker Rating ¹¹	Chloride Reaction ¹²
LG Seeds LGS4931RX	S	S	R	Mixed
Local LS3976X	VS	VS	R	Mixed
Local LS4299XS	VS	S	R	Excluder
Local LS4407X	VS	MS	R	Mixed
Local LS4487XS	VS	VS	R	Includer
Local LS4565XS	VS	S	R	Excluder
Local LS4583X	VS	VS	R	Includer
Local LS4677X	VS	S	R	Includer
Local LS4795XS	VS	S	MR	Excluder
Local LS4798X	VS	VS	MR	Excluder
Local LS4889XS	VS	S	R	Mixed
Local LS4894X	VS	S	R	Mixed
Local LS4999X	VS	VS	R	Excluder
Local LS5087X	VS	S	R	Mixed
Local LS5386X	VS	S	MR	Mixed
Local LS5588X	VS	MS	MR	Excluder
Local ZS4596GLS	VS	S	R	Mixed
Local ZS4694E3S	VS	S	R	Excluder
Local ZS4797E3	VS	S	R	Mixed
Mission A4448X	VS	S	MR	Mixed
Mission A4618X	VS	VS	MR	Excluder
Mission A4950X	VS	MS	R	Mixed
MorSoy 4447 RXT	VS	MS	MS	Mixed
MorSoy 4706 RXT	VS	VS	R	Mixed
MorSoy 4846 RXT	VS	VS	R	Excluder
NK S39-G2X	VS	MS	R	Includer
NK S44-C7X	VS	VS	MR	Includer
NK S49-F5X	VS	VS	MR	Excluder
Petrus Seed 4916 GT	VS	R	MR	Excluder
Pioneer P42A96X	VS	VS	MR	Mixed
Pioneer P46A57BX	VS	S	MR	Excluder
Pioneer P48A60X	VS	S	MR	Excluder
Pioneer P48A99L	VS	VS	MS	Excluder
Progeny P4241 E3	R	VS	R	Mixed
Progeny P4255 RX	S	S	VS	Mixed
Progeny P4265 RXS	S	S	VS	Excluder
Progeny P4291 LR	VS	VS	R	Mixed
Progeny P4444 RXS	S	MS	R	Mixed
Progeny P4525 E3	MS	MS	MR	Mixed
Progeny P4565 LR	VS	VS	R	Includer
Progeny P4620 RXS	S	S	R	Excluder
Progeny P4670 RX	MS	S	R	Mixed
Progeny P4682 E3	MR	S	R	Mixed
Progeny P4710 E3	VS	VS	R	Mixed
Progeny P4775 E3S	VS	S	R	Mixed
Progeny P4799 RXS	S	VS	R	Mixed
Progeny P4816 RX	S	VS	R	Excluder
Progeny P4821 RX	S	VS	MR	Excluder
Progeny P4833 E3	VS	S	R	Mixed
Progeny P4851 RX	S	S	R	Mixed
Progeny P4891 E3	S	VS	R	Mixed

2019 Soybean Update

Table 8 (Continued). Nematode, Disease, and Chloride Sensitivity Ratings for Soybean Varieties in 2019 Arkansas Soybean Variety Performance Tests^{9,10}.

Variety/Experimental Line	RKN GH Gall Rating	Field Gall Rating	Stem Canker Rating ¹¹	Chloride Reaction ¹²
Progeny P4999 RX	S	VS	R	Mixed
Progeny P5016 RXS	S	MS	R	Mixed
Progeny P5170 RX	S	VS	R	Mixed
Progeny P5211 E3	VS	VS	R	Mixed
Progeny P5252 RX	R	VS	MR	Mixed
Progeny P5335 RX	S	MR	R	Mixed
Progeny P5554 RX	S	MS	R	Excluder
Progeny P5688 RX	MS	R	R	Excluder
R13-13997	VS	S	R	Excluder
R13-14635RR	VS	S	R	Mixed
R13-818	VS	VS	R	Mixed
R14-1422	VS	R	R	Mixed
R15-1587	VS	MS	R	Excluder
R15-2422	VS	VS	R	Includer
R16-1445	VS	S	R	Mixed
R16-253	VS	S	R	Mixed
R16-2546C	VS	MS	R	Mixed
R16-2547	VS	S	R	Mixed
R16-259	VS	VS	R	Mixed
R16-378	VS	S	R	Mixed
R16-39	VS	VS	R	Mixed
REV 4310X	VS	S	R	Mixed
REV 4679X	VS	S	R	Mixed
REV 4927X	VS	S	R	Excluder
REV 4940X	VS	S	R	Mixed
S13-2743C	VS	VS	VS	Mixed
S13-3851C	VS	VS	R	Mixed
S14-15138R	VS	S	MR	Mixed
Taylor EXP 47-90	VS	VS	R	Mixed
Taylor EXP 48-80	VS	VS	R	Excluder
USG 7460ET	MS	VS	R	Mixed
USG 7470XT	R	S	R	Excluder
USG 7478XTS	MS	VS	MR	Excluder
USG 7480ET	S	S	R	Mixed
USG 7480XT	S	MS	R	Mixed
USG 7489XT	MS	S	R	Excluder
USG 7496XTS	S	S	R	Mixed
USG 7499ET	•	•	•	Mixed

2019 Soybean Update

Table 9. Agronomic Characteristics for Soybean Varieties/Experimental Lines in 2019 Arkansas Soybean Variety Performance Test.

Variety/Experimental Line	Relative Maturity	Herb. Tech.	STS/ BOLT	Metribuzin Sensitivity	Flower Color	Pubescence Color	Pod Color	Hilum Color	Growth ¹³ Habit	Days to ¹⁴ Maturity	Days to ¹⁵ Maturity LP	Lodging ¹⁶ Score	Plant ¹⁷ Height
AgriGold G4440RX	4.4	RR2X	Yes	Moderate	White	Lt. Tawny	Brown	Black	Ind	130	116	2	38
AgriGold G4579RX	4.5	RR2X	Yes	Moderate	Purple	Gray	Brown	Buff	Ind	132	122	1	40
AgriGold G4605RX	4.6	RR2X	•	Moderate	Purple	Tawny	Tan	Black	Ind	131	118	3	44
AgriGold G4815RX	4.6	RR2X	Yes	Moderate	Purple	Gray	Brown	Imp Black	Ind	130	117	1	40
AgriGold G5000RX	5.0	RR2X	Yes	Moderate	Purple	Lt. Tawny	Brown	Black	Ind	138	122	1	43
AGS G548X19	4.8	RR2X	No	Moderate	White	Lt. Tawny	Tan	Black	Ind	129	119	2	39
AGS G549X19	4.9	RR2X	•	Moderate	•	•	•	•	•	134	121	2	43
Armor 42-D27	4.2	RR2X	Yes	Slight	Purple	Gray	Tan	Imp Black	Ind	123	114	1	36
Armor 44-D92	4.4	RR2X	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	130	115	1	40
Armor 45-D51	4.5	RR2X	No	Slight	•	•	•	•	Ind	131	116	2	40
Armor 46-D09	4.6	RR2X	Yes	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	131	117	1	38
Armor 46-D30	4.6	RR2X	•	Slight	•	•	•	•	Ind	128	117	1	37
Armor 47-D18	4.7	RR2X	Yes	Moderate	Purple	Gray	Brown	Imp Black	Ind	129	117	1	41
Armor 47-D85	4.7	RR2X	•	Moderate	•	•	•	•	Ind	128	119	1	38
Armor 47-D86	4.7	RR2X	•	Slight	•	•	•	•	Ind	133	120	2	37
Armor 48-D25	4.8	RR2X	Yes	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	131	120	1	38
Armor 48-D88	4.8	RR2X	No	Slight	•	•	•	•	Ind	129	119	2	39
Armor 49-D67	4.9	RR2X	No	Severe	White	Lt. Tawny	•	Black	Ind	134	121	1	42
Armor 51-D77	5.1	RR2X	•	Slight	•	•	•	•	•	139	125	3	44
Armor 52-D71	5.2	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	138	123	2	43
Armor 55-D57	5.5	RR2X	No	Slight	White	Tawny	Tan	Black	Det	141	125	1	35
Asgrow AG42X9	4.2	RR2X	No	Severe	Purple	Tawny	Brown	Black	Ind	128	114	2	42
Asgrow AG43X0	4.3	RR2X	Yes	Moderate	Purple	Gray	Brown	Imp Black	Ind	123	114	1	38
Asgrow AG46X0	4.6	RR2X	Yes	Moderate	Purple	Lt Tawny	Tan	Black	Ind	131	120	1	39
Asgrow AG46X6	4.6	RR2X	No	Moderate	Purple	Tawny	Brown	Black	Ind	134	118	2	37
Asgrow AG47X0	4.7	RR2X	Yes	Slight	Purple	Gray	Brown	Imp Black	Ind	131	121	1	42
Asgrow AG47X9	4.7	RR2X	No	Moderate	Purple	Lt Tawny	Brown	Black	Ind	125	120	1	38
Asgrow AG48X9	4.8	RR2X	Yes	Slight	Purple	Lt Tawny	Tan	Black	Ind	132	121	1	40
Asgrow AG49X9	4.9	RR2X	Yes	Severe	Purple	Lt Tawny	Brown	Black	Ind	132	121	1	37
Asgrow AG52X9	5.2	RR2X	Yes	Moderate	Purple	Lt Tawny	Tan	Black	Ind	136	121	1	42
Asgrow AG53X0	5.3	RR2X	No	Moderate	Purple	Lt Tawny	Brown	Black	Ind	138	122	2	43
Credenz CZ 3841LL	3.8	LL	No	Moderate	White	Lt Tawny	Tan	Black	Ind	124	112	2	32
Credenz CZ 3929GTLL	3.9	LLGT27	No	Moderate	White	Lt. Tawny	Brown	Black	Ind	127	113	2	36
Credenz CZ 4222LL	4.2	LL	Yes	Moderate	Purple	Lt Tawny	Brown	Black	Ind	124	112	2	34
Credenz CZ 4280X	4.2	RR2X	Yes	Moderate	Purple	Gray	Brown	Imp Black	Ind	125	113	1	34
Credenz CZ 4539GTLL	4.5	LLGT27	No	Moderate	Purple	Lt Tawny	Brown	Brown	Ind	129	119	2	41
Credenz CZ 4540LL	4.5	LL	No	Moderate	White	Lt Tawny	Tan	Black	Ind	132	117	2	40
Credenz CZ 4570X	4.5	LLGT27	No	Moderate	Purple	Lt Tawny	Tan	Black	Ind	131	117	2	37
Credenz CZ 4600X	4.6	LLGT27	No	Moderate	Purple	Tawny	Tan	Black	Ind	129	118	1	38
Credenz CZ 4649LL	4.6	LL	Yes	Moderate	Purple	Gray	Tan	Buff	Ind	131	120	2	44
Credenz CZ 4770X	4.7	RR2X	No	Moderate	Purple	Lt Tawny	Tan	Black	Ind	133	120	2	38
Credenz CZ 4820LL	4.8	LL	No	Moderate	White	Lt Tawny	Brown	Black	Ind	127	117	2	38
Credenz CZ 4869X	4.8	RR2X	No	Moderate	White	Lt Tawny	Tan	Black	Ind	131	118	2	39
Credenz CZ 4918LL	4.9	LL	No	Moderate	Purple	Lt Tawny	Brown	Black	Ind	132	115	2	37
Credenz CZ 4938LL	4.9	LL	No	Slight	Purple	Gray	Tan	Imp Black	Ind	135	121	2	44
Credenz CZ 4979X	4.9	RR2X	No	Moderate	Purple	Gray	Brown	Imp Black	Ind	134	121	2	39
Credenz CZ 5150LL	5.1	LL	No	Slight	Purple	Gray	Tan	Imp Black	Sdt	134	122	2	42
Credenz CZ 5299X	5.2	RR2X	Yes	Slight	White	Gray	Tan	Buff	Ind	135	122	2	43
Delta Grow DG45E23	4.4	E3	•	Slight	White	Gray	•	Buff	Ind	125	112	2	35
Delta Grow DG46E29	4.6	E3/STS	•	Slight	White	Gray	•	Buff	Ind	128	115	1	39

2019 Soybean Update

Table 9 (Continued). Agronomic Characteristics for Soybean Varieties/Experimental Lines in 2019 Arkansas Soybean Variety Performance Test.

Variety/Experimental Line	Relative Maturity	Herb. Tech.	STS/ BOLT	Metribuzin Sensitivity	Flower Color	Pubescence Color	Pod Color	Hilum Color	Growth ¹³ Habit	Days to ¹⁴ Maturity	Days to ¹⁵ Maturity LP	Lodging ¹⁶ Score	Plant ¹⁷ Height
Delta Grow DG46X25	4.6	RR2X	No	Slight	•	Lt. Tawny	Brown	Black	Ind	129	119	1	38
Delta Grow DG46X65	4.6	RR2X/STS	•	Severe	Purple	Lt. Tawny	•	Black	Ind	130	119	1	38
Delta Grow DG47E19	4.7	E3	•	Sight	White	Lt. Tawny	•	Brown	Ind	131	117	1	37
Delta Grow DG47E25	4.7	E3	•	Moderate	Purple	Gray	•	Imp Black	Ind	131	120	1	37
Delta Grow DG48E10	4.8	E3	•	Slight	White	Gray	•	Buff	Ind	135	121	1	41
Delta Grow DG48E39	4.8	E3	•	Slight	White	Lt. Tawny	•	Brown	Ind	129	116	1	36
Delta Grow DG48E49	4.8	E3/STS	•	Slight	White	Tawny	•	Brown	Ind	129	116	2	37
Delta Grow DG48X05	4.8	RR2X	•	Slight	•	•	•	•	•	133	119	2	39
Delta Grow DG48X45	4.8	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	134	121	1	37
Delta Grow DG4977LL/STS	4.9	LL/STS	Yes	Slight	Purple	Gray	Tan	Imp Black	Ind	131	119	2	43
Delta Grow DG49E29	4.9	E3	•	Severe	White	Gray	•	Buff	Ind	127	116	1	36
Delta Grow DG49X15	4.9	RR2X	•	Slight	•	•	•	•	Ind	133	123	2	43
Delta Grow DG52E22	5.2	E3	•	Slight	White	Gray	•	Imp Black	Ind	134	124	2	37
Delta Grow DG52X05	5.2	RR2X/STS	•	Moderate	•	•	•	•	•	137	122	2	43
Delta Grow DG54X25	5.4	RR2X	•	Slight	White	Gray	•	Buff	•	136	122	2	35
Delta Grow DG5585RR2	5.5	RR2	No	Slight	Purple	Tawny	Tan	Brown	Det	138	124	2	34
DONMARIO DM 47x39	4.7	RR2X	No	Moderate	Purple	Tan	Tan	Black	Ind	133	122	2	38
DONMARIO DM 48E73	4.8	E3	Yes	Slight	White	Gray	Brown	Imp Black	Ind	131	118	1	37
DONMARIO DM Experimental	4.9	RR2X	•	Slight	Purple	Lt. Tawny	•	•	Ind	135	120	2	41
Dyna-Gro S41XS98	4.1	RR2X/STS	Yes	Slight	Purple	Gray	Tan	Imp Black	Ind	123	112	1	35
Dyna-Gro S42EN89	4.2	E3	•	Moderate	White	Gray	Tan	Buff	Ind	125	111	2	34
Dyna-Gro S45XS37	4.5	RR2X/STS	Yes	Slight	White	Tawny	Brown	Black	Ind	131	117	2	36
Dyna-Gro S45XS66	4.5	RR2X/STS	Yes	Moderate	Purple	Lt Tawny	Brown	Black	Ind	130	118	3	39
Dyna-Gro S46EN29	4.6	E3	•	Slight	Purple	Gray	Brown	Imp Black	Ind	131	118	1	36
Dyna-Gro S46XS60	4.6	RR2X/STS	Yes	Slight	Purple	Lt Tawny	Tan	Black	Ind	131	118	1	38
Dyna-Gro S47XT20	4.7	RR2X	•	Slight	Purple	Lt Tawny	Brown	Black	Ind	130	119	2	39
Dyna-Gro S48XT56	4.8	RR2X	No	Slight	Purple	Lt Tawny	Tan	Black	Ind	134	120	1	38
Dyna-Gro S49EN79	4.9	E3	•	Sight	White	Gray	Brown	Imp Black	Ind	131	122	2	37
Dyna-Gro S49XT39	4.9	RR2X	No	Moderate	Purple	Gray	Brown	Imp Black	Ind	133	121	2	42
Dyna-Gro S49XT70	4.9	RR2X	•	Moderate	White	Lt Tawny	Brown	Black	Ind	132	119	1	42
Dyna-Gro S52XS39	5.2	RR2X/STS	Yes	Moderate	White	Gray	Tan	Buff	Det	135	120	2	43
Dyna-Gro S56XT99	5.6	RR2X	No	Slight	White	Tawny	Tan	Black	Det	140	124	2	35
Eagle Seed ES4460RYX	4.4	RR2X	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	129	115	1	37
Eagle Seed ES4680RYX	4.6	RR2X	Yes	Slight	•	Tawny	Brown	Black	Ind	129	119	1	36
Eagle Seed ES4840RYX	4.8	RR2X	No	Slight	•	Lt. Tawny	Tan	Black	Ind	134	120	2	39
Eagle Seed ES5155RYX	5.1	RR2X	•	Slight	Purple	Lt. Tawny	•	Black	Ind	136	119	2	42
GoSoy 44GL18	4.4	LLGT27	•	Slight	•	Lt. Tawny	•	•	•	128	114	2	38
GoSoy 46GL18	4.6	LLGT27	•	Moderate	•	•	•	•	•	129	117	1	40
GoSoy 481E19	4.8	E3	No	Slight	•	•	Brown	•	•	134	121	1	41
GoSoy 482E18	4.8	E3	No	Moderate	•	•	Brown	•	•	129	119	2	35
GoSoy 48C17S	4.8	Conv	•	Moderate	•	•	•	•	•	132	119	1	33
GoSoy 49G16	4.9	RR1	•	Slight	Purple	Tawny	•	Black	Ind	133	120	2	34
GoSoy 50G17	5.0	RR1	•	Slight	Purple	Tawny	•	Black	Sdt	134	123	2	31
GoSoy 512E18	5.1	E3	No	Moderate	•	•	Brown	•	•	133	123	2	38
Hefty H46X0S	4.6	RR2X	•	Moderate	White	Tawny	•	Black	Ind	131	118	1	37
Hefty H47E0	4.7	E3	•	•	•	•	•	•	•	126	112	2	35
Hefty H48E0	4.8	E3	•	Moderate	Purple	Gray	•	Imp Black	Ind	130	117	1	37
Hefty H48E9	4.8	E3	•	Moderate	White	Gray	•	Buff	Ind	131	120	2	34
Hefty H51E9	5.1	E3	•	Slight	White	Gray	•	Buff	•	133	122	2	37
LG Seeds LG C4845RX	4.8	RR2X	No	Severe	Purple	Lt. Tawny	Tan	Black	Ind	134	122	1	37

2019 Soybean Update

Table 9 (Continued). Agronomic Characteristics for Soybean Varieties/Experimental Lines in 2019 Arkansas Soybean Variety Performance Test.

Variety/Experimental Line	Relative Maturity	Herb. Tech.	STS/ BOLT	Metribuzin Sensitivity	Flower Color	Pubescence Color	Pod Color	Hilum Color	Growth ¹³ Habit	Days to ¹⁴ Maturity	Days to ¹⁵ Maturity LP	Lodging ¹⁶ Score	Plant ¹⁷ Height
LG Seeds LGS46682RX	4.6	RR2X	•	•	•	•	•	•	•	129	116	1	39
LG Seeds LGS4899RX	4.8	RR2X	Yes	Slight	Purple	Lt. Tawny	Tan	Black	Ind	131	118	1	39
LG Seeds LGS4931RX	4.9	RR2X	Yes	Moderate	Purple	Lt. Tawny	Brown	Black	Ind	135	122	1	39
Local LS3976X	3.9	RR2X	No	Slight	Purple	Lt Tawny	Tan	Black	Ind	123	113	1	33
Local LS4299XS	4.2	RR2X	Yes	Slight	Purple	Lt Tawny	Brown	Black	Ind	130	115	1	39
Local LS4407X	4.5	RR2X	No	Moderate	Purple	Lt Tawny	Tan	Black	Ind	133	117	2	39
Local LS4487XS	4.4	RR2X	Yes	Slight	Purple	Lt Tawny	Tan	Black	Ind	130	112	1	38
Local LS4565XS	4.5	RR2X	Yes	Severe	White	Tawny	Brown	Black	Ind	130	118	2	38
Local LS4583X	4.5	RR2X	No	Slight	Purple	Lt Tawny	Brown	Black	Ind	130	117	2	40
Local LS4677X	4.6	RR2X	No	Slight	White	Lt Tawny	Tan	Black	Ind	131	121	2	41
Local LS4795XS	4.6	RR2X	Yes	Slight	Purple	Lt Tawny	Tan	Black	Ind	131	119	2	39
Local LS4798X	4.7	RR2X	No	Slight	White	Lt Tawny	Brown	Black	Ind	134	122	2	40
Local LS4889XS	4.8	RR2X	Yes	Severe	Purple	Lt. Tawny	Brown	Black	Ind	132	121	3	40
Local LS4894X	4.8	RR2X	No	Severe	Purple	Lt Tawny	Tan	Black	Ind	132	122	2	40
Local LS4999X	4.9	RR2X	No	Severe	White	Lt Tawny	Brown	Black	Ind	133	119	1	42
Local LS5087X	5.0	RR2X	No	Slight	Purple	Lt. Tawny	Tan	Black	Ind	137	121	2	42
Local LS5386X	5.3	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	138	123	2	42
Local LS5588X	5.5	RR2X	No	Slight	White	Tawny	Tan	Black	Det	140	123	1	33
Local ZS4596GLS	4.5	LLGT27	Yes	Slight	Purple	Lt Tawny	Brown	Black	Ind	130	117	2	37
Local ZS4694E3S	4.6	E3	Yes	Slight	White	Tawny	Tan	Brown	Ind	130	118	2	37
Local ZS4797E3	4.7	E3	No	Slight	White	Lt Tawny	Brown	Brown	Ind	131	119	1	38
Mission A4448X	4.4	RR2X	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	126	115	1	34
Mission A4618X	4.6	RR2X	Yes	Moderate	Purple	Gray	Brown	Imp Black	Ind	132	119	2	39
Mission A4950X	4.9	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	132	119	2	39
MorSoy 4447 RXT	4.4	RR2X	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	126	112	1	36
MorSoy 4706 RXT	4.7	RR2X	Yes	Slight	Purple	Gray	Tan	Imp Black	Ind	127	118	2	45
MorSoy 4846 RXT	4.8	RR2X	No	Slight	Purple	Lt. Tawny	Tan	Black	Ind	134	120	1	38
NK S39-G2X	3.9	RR2X	No	Moderate	Purple	Gray	Brown	Imp Black	Ind	124	112	1	37
NK S44-C7X	4.4	RR2X	No	Severe	Purple	Gray	Tan	Imp Black	Ind	130	116	1	35
NK S49-F5X	4.9	RR2X	No	Slight	Purple	Lt. Tawny	Tan	Black	Ind	133	118	1	35
Petrus Seed 4916 GT	4.9	RR1	No	Slight	Purple	Tawny	Tan	Black	Sdt	133	121	2	34
Pioneer P42A96X	4.2	RR2X	No	Moderate	White	Lt. Tawny	Tan	Black	Ind	129	114	1	36
Pioneer P46A57BX	4.6	RR2X	Yes	Moderate	White	Lt. Tawny	Brown	Black	Ind	128	116	2	41
Pioneer P48A60X	4.8	RR2X	No	Slight	Purple	Lt. Tawny	Brown	Black	Ind	131	117	2	37
Pioneer P48A99L	4.8	LL	No	Slight	White	Tawny	Brown	Imp Black	Ind	130	116	1	38
Progeny P4241 E3	4.2	E3	•	Moderate	•	•	•	•	•	125	112	2	34
Progeny P4255 RX	4.2	RR2X	No	Slight	Purple	Gray	Tan	Imp Black	Ind	122	113	1	37
Progeny P4265 RXS	4.2	RR2X/STS	•	Slight	•	•	•	•	Ind	129	116	1	37
Progeny P4291 LR	4.2	LLGT27	•	Slight	•	•	•	•	•	123	110	2	32
Progeny P4444 RXS	4.4	RR2X/STS	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	126	113	1	37
Progeny P4525 E3	4.5	E3	•	Moderate	•	•	•	•	•	128	117	2	37
Progeny P4565 LR	4.5	LLGT27	•	Moderate	•	•	•	•	•	129	118	1	38
Progeny P4620 RXS	4.6	RR2X/STS	Yes	Moderate	White	Tawny	Brown	Black	Ind	131	116	2	39
Progeny P4670 RX	4.6	RR2X	•	Moderate	•	•	•	•	Ind	134	121	2	40
Progeny P4682 E3	4.6	E3	•	Severe	•	•	•	•	•	130	120	1	38
Progeny P4710 E3	4.7	E3	•	Slight	•	•	•	•	•	132	122	1	37
Progeny P4775 E3S	4.7	E3/STS	•	Slight	•	•	•	•	•	130	118	2	42
Progeny P4799 RXS	4.7	RR2X/STS	Yes	Slight	White	Lt. Tawny	Brown	Black	Ind	134	121	1	43
Progeny P4816 RX	4.8	RR2X	No	Moderate	Purple	Lt Tawny	Tan	Black	Ind	134	121	1	37
Progeny P4821 RX	4.8	RR2X	•	Slight	Purple	Lt Tawny	Brown	Black	Ind	133	122	2	38

2019 Soybean Update

Table 9 (Continued). Agronomic Characteristics for Soybean Varieties/Experimental Lines in 2019 Arkansas Soybean Variety Performance Test.

Variety/Experimental Line	Relative Maturity	Herb. Tech.	STS/ BOLT	Metribuzin Sensitivity	Flower Color	Pubescence Color	Pod Color	Hilum Color	Growth ¹³ Habit	Days to ¹⁴ Maturity	Days to ¹⁵ Maturity LP	Lodging ¹⁶ Score	Plant ¹⁷ Height
Progeny P4833 E3	4.8	E3	•	Slight	•	•	•	•	•	132	118	1	36
Progeny P4851 RX	4.8	RR2X	•	Moderate	Purple	Lt Tawny	Brown	Black	Ind	134	119	3	40
Progeny P4891 E3	4.8	E3	•	Moderate	•	•	•	•	•	135	123	1	38
Progeny P4999 RX	4.9	RR2X	•	Slight	•	•	•	•	•	134	118	2	39
Progeny P5016 RXS	5.0	RR2X/STS	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	137	123	1	41
Progeny P5170 RX	5.1	RR2X	•	Severe	•	•	•	•	•	136	120	2	44
Progeny P5211 E3	5.2	E3	•	Moderate	•	•	•	•	•	131	123	2	38
Progeny P5252 RX	5.2	RR2X	•	Slight	White	Gray	•	Buff	Ind	138	123	3	43
Progeny P5335 RX	5.3	RR2X	•	Moderate	•	•	•	•	•	141	125	2	43
Progeny P5554 RX	5.5	RR2X	No	Slight	White	Tawny	Tan	Black	Det	140	124	1	33
Progeny P5688 RX	5.6	RR2X	No	Slight	White	Tawny	Brown	Black	Det	139	123	1	33
R13-13997	5.4	Conv	•	Slight	White	Tawny	•	Black	Det	139	124	2	34
R13-14635RR	5.4	RR1	•	Slight	White		•	Buff	Ind	139	124	1	43
R13-818	5.3	Conv	•	Slight	Purple	Tawny	•	Black	Det	138	125	2	31
R14-1422	5.4	Conv	•	Slight	White	Gray	•	Brown	Det	138	124	2	34
R15-1587	5.1	Conv	•	Slight	Purple	Tawny	•	•	Det	136	124	1	29
R15-2422	4.7	Conv	•	Moderate	Purple	Gray	•	•	Ind	135	119	3	42
R16-1445	5.4	Conv	•	Slight	•	•	•	•	•	139	124	3	33
R16-253	4.6	Conv	•	Slight	•	Tawny	•	•	•	130	118	1	37
R16-2546C	5.1	Conv	•	Slight	•	•	•	•	•	135	121	2	32
R16-2547	5.2	Conv	•	Moderate	•	Tawny	•	•	•	133	122	2	30
R16-259	4.6	Conv	•	Slight	•	Tawny	•	•	•	130	119	1	38
R16-378	5.4	Conv	•	Slight	•	•	•	•	•	139	125	2	34
R16-39	5.1	Conv	•	Slight	•	Tawny	•	•	•	134	122	1	30
REV 4310X	4.3	RR2X	No	Slight	Purple	Lt. Tawny	Brown	Black	Ind	123	115	1	41
REV 4679X	4.6	RR2X	No	Slight	Purple	Tawny	Tan	Black	Ind	127	117	2	38
REV 4927X	4.9	RR2X	No	Slight	Purple	Lt. Tawny	Brown	Black	Ind	131	121	3	41
REV 4940X	4.9	RR2X	No	Slight	Purple	Lt. Tawny	Brown	Black	Ind	130	118	2	38
S13-2743C	4.1	Conv	No	Slight	White	Gray	Brown	Buff	Ind	125	112	1	37
S13-3851C	4.4	Conv	No	Slight	Purple	Lt Tawny	Tan	Black	Ind	127	113	2	35
S14-15138R	4.8	RR1/STS	Yes	Moderate	White	Tawny	Tan	Black	Ind	131	118	2	36
Taylor EXP 47-90	4.7	RR2X	•	Slight	•	•	•	•	•	129	117	2	44
Taylor EXP 48-80	4.8	RR2X	•	Slight	•	•	•	•	•	128	117	2	39
USG 7460ET	4.6	E3	•	Slight	White	Lt Tawny	Brown	Brown	Ind	131	118	1	37
USG 7470XT	4.7	RR2X	No	Moderate	Purple	Gray	Brown	Imp Black	Ind	131	117	2	42
USG 7478XTS	4.7	RR2X/STS	Yes	Severe	Purple	Lt Tawny	Brown	Black	Ind	131	118	1	38
USG 7480ET	4.8	E3	•	Slight	White	Gray	Brown	Buff	Ind	134	121	1	35
USG 7480XT	4.8	RR2X	No	Moderate	Purple	Lt Tawny	Tan	Black	Ind	131	122	2	38
USG 7489XT	4.8	RR2X	No	Moderate	Purple	Lt Tawny	Tan	Black	Ind	135	121	1	39
USG 7496XTS	4.9	RR2X/STS	Yes	Moderate	Purple	Lt Tawny	Brown	Black	Ind	135	122	2	42
USG 7499ET	4.9	E3	•	•	•	•	•	•	•	131	120	3	34

Key Codes for All Tables

“ • ” Information Not Available

¹Keiser Irrig = Northeast Research and Extension Center, Keiser, AR Irrigated Test
Keiser LP Irrig = Northeast Research and Extension Center, Keiser, AR Late-Planted Irrigated Test
Marianna Irrig = Lon Mann Cotton Research Station, Marianna, AR Irrigated Test
Pine Tree Irrig = Pine Tree Research Station, Colt, AR Irrigated Test
Rohwer Irrig = Rohwer Research Station, Rohwer AR Irrigated Test
Rohwer LP Irrig = Rohwer Research Station, Rohwer AR Late-Planted Irrigated Test
Stuttgart Irrig = Rice Research and Extension Center, Stuttgart, AR Irrigated Test
Stuttgart Non-irrig = Rice Research and Extension Center, Stuttgart, AR Non-irrigated Test

²At Keiser and Marianna non-Xtend soybean varieties showed symptoms consistent with injury attributed to off-target movement of dicamba.

³Average Yield from 2018 and 2019.

⁴Average Yield from 2016, 2018, and 2019.

⁵Average Yield from 2017, 2018, and 2019.

⁶Average Yield from 2017 and 2019.

⁷Average Yield from 2016, 2017 and 2019.

⁸Rowher Late Planted Xtend cultivar test was discarded due to poor uniformity caused by standing water.

⁹By using the greatest level of disease reported over the years tested, a standardized designation system for all disease and nematode screenings is as follows: **HR = Highly Resistant, R = Resistant, MR = Moderately Resistant, MS = Moderately Susceptible, S = Susceptible, VS = Very Susceptible**

¹⁰Evaluation of soybean cultivars for reaction to root-knot nematode was conducted in a greenhouse and field test. Nematode population density ranged from moderate to severe in the field and eggs of *M. incognita* were used as inoculum in the greenhouse test. Greenhouse tests were conducted at the Southeast Research and Extension Center, Hope, AR and the field trials were conducted in a soybean production field, Kerr, AR. Greenhouse root gall ratings were a visual assessment of the of the entire root system using a 0-10 scale (<1.0 = R; 1.0-2.0 = MR; 3.0-5.0 = MS; 6.0-50.0 = S; >50.0 = VS). Field root gall ratings were a visual assessment of the percentage root system galled using on a 0-100 scale (0-1.0 = HR, 1.1-4.0 = R, 4.1-9.0 = MR, 9.1-20.0 = MS, 20.1-40.0 = S, 40.1-100 = VS) at R5 to R5+ growth stage.

¹¹Stem Canker Reaction-10 plants per plot were inoculated with infested toothpicks, replicated 3 times.

¹²Chloride Sensitivity – Excluder varieties accumulate chloride and restrict it to the roots. Includer varieties accumulate chloride throughout the plants. Varieties with a Mixed population have both Includer and Excluder plants. Don't assume that high soluble salts constitute a chloride ion problem. Chloride levels should be determined by irrigation water tests and/or plant tissue analysis.

¹³Soybean growth habit; Ind = Indeterminate; Det = Determinate; Std = Semi-determinate.

¹⁴Days to Maturity represent the average number of days (Keiser Irrigated, Pine Tree Irrigated, and Rohwer Irrigated Tests) from planting until 80% of the soybeans in the plot were thought to be mature.

¹⁵Days to Maturity LP represent the average number of days (Keiser Irrigated Late-Planted and Rohwer Irrigated Late-Planted Tests) from planting until 80% of the soybeans in the plot were thought to be mature.

¹⁶Soybean lodging is an average of data from the Keiser Irrigated, Pine Tree Irrigated, and Rohwer Irrigated Tests and is reported using the following criteria: 1 = all plants erect, 2 = all plants slightly leaning or a few plants down, 3 = all plants moderately leaning or 25-50% of the plants are down, 4 = all plants considerably leaning or 50-80% of the plants are down, 5 = all plants down.

¹⁷Soybean plant height reported in inches and is an average of data from the Keiser Irrigated, Pine Tree Irrigated, and Rohwer Irrigated Tests.