

2021 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 10 and 11**. 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 2021 Arkansas Soybean Performance Tests are found in **Tables 1 and 2**.

All varieties listed in this publication have been tested in the University of Arkansas System Division of Agriculture's 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 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 and 2 consist of cultural information that pertains to the 2021 University of Arkansas System Division of Agriculture's Soybean Performance Trials. Visit the [Arkansas Variety Testing website](#) for more information. **Tables 3 through 9** contain varietal yield information for 2020 and 2021 for the Early-Planted tests, Full-Season Irrigated Tests, Late Planted Test, and Non-irrigated Test. **Tables 10 and 11** 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.

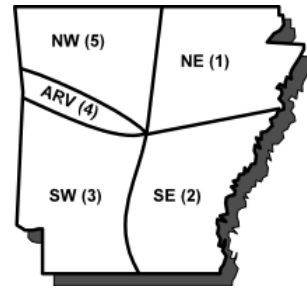


Figure 1. Area of Adaptation for Soybean Maturity Groups for All Production Systems

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 Early-Planted Soybean Performance Trials, 2021.¹

Location	Planting Target	Irrigation	Soil Texture	Row Spacing	Planting Date	Harvest Dates		
						Early 4	Late 4	MG 5
RRS, Rohwer, Ark.	Early Planted Trial	Irrigated	Sharkey, Desha silt loam	Twin-row 38"	4/6/21	9/20/21	9/20/21	•
RREC, Stuttgart, Ark.	Early Planted Trial	Irrigated	Dewitt, silt Loam	Single 30"	4/13/21	9/27/21	9/27/21	•

Table 2. Location, Soil Description, and Cultural Information of Full-Season Irrigated and Non-irrigated, and Late-Planted Soybean Performance Trials, 2021.¹

Location	Planting Target	Irrigation	Soil Texture	Row Spacing	Planting Date	Harvest Dates		
						Early 4	Late 4	MG 5
NREC, Keiser, Ark.	Traditional Planting	Irrigated	Sharkey, silty clay	Single 38"	5/21/21	10/9/21	10/21/21	10/21/21
VRS, Kibler, Ark.	Traditional Planting	Irrigated	Dardanelle, silt loam	Twin 36"	6/17/21	10/21/21	10/22/21	11/8/21
LMCRS, Marianna, Ark.	Traditional Planting	Irrigated	Loring, silt loam	Single 38"	5/15/21	10/8/21	10/8/21	10/18/21
PTRS, Colt, Ark.	Traditional Planting	Irrigated	Calhoun, silt loam	Single 30"	5/14/21	10/8/21	10/9/21	10/18/21
RRS, Rohwer, Ark.	Traditional Planting	Irrigated	Sharkey, Desha silt loam	Single 38"	5/7/21	9/27/21	10/4/21	10/12/21
NEC, Newport, Ark.	Traditional Planting	Irrigated	Dexter, silt loam/Bosket, fine sandy loam	Single 30"	5/25/21	10/14/21	10/19/21	10/20/21
RREC, Stuttgart, Ark.	Traditional Planting	Irrigated	Dewitt, silt loam	Single 30"	5/15/21	10/11/21	10/12/21	10/13/21
RRS, Rohwer, Ark.	Late Planted	Irrigated	Sharkey, Desha silt loam	Twin-row 38"	5/27/21	10/5/21	10/8/21	10/14/21
RREC, Stuttgart, Ark.	Traditional Planting	Dryland	Dewitt, silt loam	Single 30"	5/15/21	10/14/21	10/14/21	10/14/21

The **KEY CODE** for all the following tables is found on the back pages. 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: “Lighter Shading” of a variety mean indicates that there are no statistical difference between that varietal mean and the highest yielding (“Darker Shading”) varietal mean at the test location utilizing the appropriate LSD (0.05) value.

Table 3. Yield (bu/ac) of Maturity Group IV Soybean Varieties and Experimental Lines in the Early-Planted Tests at Rohwer, AR and Stuttgart, AR, 2021.¹

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Rohwer ^{2,3}	Stuttgart ²	Mean
			bu/ac		
AgriGold G4615XF	RR2XF	4.6	68.5	69.9	69.2
AgriGold G4813XF	RR2XF	4.8	68.7	63.9	66.3
AgriGold G4820RX	RR2X	4.8	69.3	68.4	68.8
Amp 4448X	RR2X	4.4	77.7	60.7	69.2
Amp 4690XF	RR2XF	4.6	75.4	71.7	73.5
Amp 4850XF	RR2XF	4.8	62.7	67.3	65.0
Amp 4950X	RR2X	4.9	85.5	63.0	74.2
Armor 44-D49	RR2X	4.4	64.8	74.7	69.7
Armor 46-D09	RR2X	4.6	73.8	68.9	71.4
Armor 46-F13	RR2XF	4.6	73.1	72.1	72.6
Armor 48-D03	RR2X	4.8	75.6	80.2	77.9
Armor 48-D25	RR2X	4.8	68.6	76.7	72.7
Armor 48-F22	RR2XF	4.8	72.8	58.4	65.6
Asgrow AG42XF0	RR2XF	4.2	65.0	73.1	69.1
Asgrow AG43XF2	RR2XF	4.3	64.0	68.7	66.3
Asgrow AG45XF0	RR2X	4.5	65.3	72.6	69.0
Asgrow AG47XF0	RR2XF	4.7	71.4	63.5	67.5
Asgrow AG48XF0	RR2XF	4.8	59.3	64.4	61.8
Asgrow AG48XF2	RR2XF	4.8	70.2	77.7	74.0
Axis 4611ES	Enlist E3	4.6	79.4	69.2	74.3
Axis 4641XFS	RR2XF	4.6	73.9	69.9	71.9
Delta Grow DG45E10	Enlist E3	4.4	59.3	73.1	66.2
Delta Grow DG46E10	Enlist E3	4.6	69.1	65.6	67.3
Delta Grow DG46X65/STS	RR2X	4.6	79.6	66.9	73.3
Delta Grow DG47E20/STS	Enlist E3	4.7	90.8	68.6	79.7
Delta Grow DG48E49/STS	Enlist E3	4.8	69.0	69.3	69.1
Delta Grow DG48E59	Enlist E3	4.8	67.1	76.9	72.0
Delta Grow DG48F20	RR2XF	4.8	68.3	64.0	66.2
Delta Grow DG48X45	RR2X	4.8	62.6	65.2	63.9
Delta Grow DG49E20	Enlist E3	4.9	71.1	71.7	71.4
Delta Grow DG49E90	Enlist E3	4.9	84.6	74.8	79.7
Dyna-Gro S43XS70	RR2X	4.3	74.0	68.4	71.2
Dyna-Gro S45ES10	Enlist E3	4.5	66.8	73.3	70.0
Dyna-Gro S46ES91	Enlist E3	4.6	85.3	72.2	78.8
Dyna-Gro S46XF31S	RR2XF	4.6	77.6	73.1	75.3
Dyna-Gro S46XS60	RR2X	4.6	72.6	78.3	75.5
Dyna-Gro S48XF61S	RR2XF	4.8	61.6	63.0	62.3
Dyna-Gro S48XT40	RR2X	4.8	83.8	77.0	80.4
Dyna-Gro S48XT90	RR2X	4.8	79.6	80.0	79.8
Local IS4324E3	Enlist E3	4.3	46.8	53.4	50.1
Local IS4684E3S	Enlist E3	4.6	84.1	69.6	76.8
Local LS4506XS	RR2X	4.5	72.7	73.6	73.1
Local LS4606XFS	RR2XF	4.6	76.5	73.6	75.1
Local LS4795XS	RR2X	4.7	77.2	78.8	78.0
Local LS4805XFS	RR2XF	4.8	75.2	68.9	72.0
Local LS4806XS	RR2X	4.8	82.1	81.9	82.0
NK 42-T5XF	RR2XF	4.2	69.0	65.0	67.0
NK 43-V8XF	RR2XF	4.3	70.4	70.1	70.2
NK 44-J4XFS	RR2XF	4.4	65.3	73.6	69.5
NK 45-P9XF	RR2XF	4.5	54.0	66.7	60.4
NK 45-V9E3	Enlist E3	4.5	68.1	70.2	69.1
NK S44-C7X	RR2X	4.4	57.5	71.3	64.4
NK S45-J3X	RR2X	4.5	49.7	70.4	60.0
NK S46-E3S	Enlist E3	4.6	79.5	74.7	77.1
NK S47-Y9X	RR2X	4.7	77.8	75.5	76.7
NK S48-2E3S	Enlist E3	4.8	50.4	76.0	63.2
NK S49-F5X	RR2X	4.9	72.9	77.0	75.0

Table 3 (Continued). Yield (bu/ac) of Maturity Group IV Soybean Varieties and Experimental Lines in the Early-Planted Tests at Rohwer, AR and Stuttgart, AR, 2021.¹

	Herbicide Technology	Relative Maturity	Rohwer ^{2,3}	Stuttgart ²	Mean
			bu/ac		
Pioneer P47A64X	RR2X	4.7	91.6	77.2	84.4
Pioneer P48A60X	RR2X	4.4	69.2	77.5	73.3
Progeny P4431E3	Enlist E3	4.4	65.2	65.9	65.6
Progeny P4501XFS	RR2XF	4.5	77.9	75.7	76.8
Progeny P4505RXS	RR2X	4.5	64.2	78.7	71.5
Progeny P4604XFS	RR2XF	4.6	71.6	75.2	73.4
Progeny P4775E3S	Enlist E3	4.7	97.6	75.6	86.6
Progeny P4806XFS	RR2XF	4.8	75.8	68.9	72.3
Progeny P4816RX	RR2X	4.8	70.3	71.4	70.9
Progeny P4821RX	RR2X	4.8	75.2	72.1	73.7
R13- 14635RR:0010	RR1	4.6	79.6	68.6	74.1
R15-2422	Conv	4.7	69.8	63.9	66.9
R16-253	Conv	4.6	62.6	67.9	65.2
R18-14142	Conv	4.6	76.5	67.1	71.8
R18-14147	Conv	4.3	83.2	63.2	73.2
R18-14229	Conv	4.3	70.7	68.3	69.5
R18-14272	Conv	4.6	82.5	72.9	77.7
R18-14287	Conv	4.3	71.8	69.1	70.4
R18-14502	Conv	4.9	82.3	74.9	78.6
R18-14753	Conv	4.6	85.9	67.5	76.7
R18C-13283	Conv	4.6	74.3	66.8	70.6
R18C-1450	Conv	4.3	40.9	45.5	43.2
S16-7922C	Conv	4.9	95.1	71.2	83.2
S17-2243C	Conv	4.5	84.7	65.1	74.9
UA46i20C	Conv	4.6	65.7	71.0	68.3
USG 7461XFS	RR2XF	4.6	84.4	73.5	79.0
USG 7481XF	RR2XF	4.8	69.4	78.7	74.1
USG 7489XT	RR2X	4.8	72.9	67.9	70.4
USG 7491XFS	RR2XF	4.9	72.5	67.1	69.8
Grand Mean	•	•	72.3	70.1	71.2
LSD	•	•	9.9	7.9	6.3
C.V.	•	•	10.1	8.3	9.3
LSD (Non-Xtend)⁴	•	•	9.3	5.7	•
LSD (Xtend)⁵	•	•	10.3	9.0	•

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Table 4. 2021 Yield and 2-Year Average Yield (bu/ac) of Relative Maturity 4.0 - 4.5 Non-Xtend Soybean Varieties/Experimental Lines Across Arkansas.¹

Variety/Experimental Line	2021 ^{2,6}	Keiser ⁷	2021	Kibler ⁷	2021 ²	Marianna ⁷	2021 ²	Newport ⁷	2021 ²	Pine Tree ⁷	2021 ^{2,3}	Rohwer ⁷	2021 ²	Stuttgart ⁷	2021 ²	Rohwer LP	2021	Stuttgart	Irrig ⁸
Relative Maturity 4.0-4.5																			
(bu./ac)																			
Non-Xtend Cultivars																			
Delta Grow DG45E10	82.2	74.2	64.7	64.8	57.8	56.8	53.4	•	78.3	74.3	68.1	67.6	68.4	74.5	41.9	•	42.0	48.2	67.6
Dyna-Gro S45E10	73.3	69.2	64.2	66.7	58.8	62.4	58.0	•	71.6	75.1	63.8	68.5	72.9	79.1	50.8	•	41.1	50.5	66.1
Local IS4324E3	84.3	•	62.6	•	65.3	•	57.6	•	75.6	•	63.0	•	66.5	•	37.6	•	44.0	•	67.9
NK 45-V9E3	81.6	•	70.3	•	59.5	•	59.6	•	78.7	•	64.9	•	68.2	•	50.3	•	47.2	•	69.0
Progeny P4431E3	71.9	•	64.1	•	52.5	•	49.9	•	61.1	•	61.1	•	64.7	•	44.7	•	39.6	•	60.7
Progeny P4541E3S	76.4	•	69.1	•	56.6	•	50.6	•	71.7	•	60.6	•	67.4	•	35.6	•	39.8	•	64.6
R18-14147	64.6	•	72.2	•	50.3	•	53.1	•	68.9	•	58.6	•	64.7	•	45.2	•	34.1	•	61.8
R18-14229	69.2	•	65.3	•	50.9	•	54.9	•	71.3	•	62.1	•	64.3	•	53.5	•	41.0	•	62.6
R18-14287	61.5	•	64.5	•	47.4	•	47.0	•	65.5	•	56.7	•	59.9	•	47.0	•	36.5	•	57.5
R18C-1450	•	•	52.4	•	51.4	•	46.2	•	60.2	•	60.5	•	55.9	•	27.9	•	33.5	•	54.4
S17-2243C	73.7	•	76.6	•	52.1	•	53.7	•	71.4	•	63.0	•	68.1	•	53.0	•	43.7	•	65.5
Grand Mean	74.8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LSD (5%)	4.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
C.V.	3.8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LSD (5%) – Non-Xtend⁴	•	•	8.2	•	4.7	•	5.8	•	6.9	•	•	•	4.1	•	•	•	•	•	•

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Table 5. 2021 Yield and 2-Year Average Yield (bu/ac) of Relative Maturity 4.0 - 4.5 Xtend Soybean Varieties/Experimental Lines Across Arkansas.¹

Variety/Experimental Line	2021 ^{2,6}	Keiser ⁷	2021	Kibler ⁷	2021 ²	Marianna ⁷	2021 ²	Newport ⁷	2021 ²	Pine Tree ⁷	2021 ^{2,3}	Rohwer ⁷	2021 ²	Stuttgart ⁷	2021 ²	Rohwer LP	2021	Stuttgart	Irrig ⁸
Relative Maturity 4.0-4.5																			
(bu./ac)																			
Xtend Cultivars																			
Amp 4448X	86.9	•	72.7	•	57.0	•	53.6	•	75.4	•	61.0	•	69.9	•	52.0	•	44.4	•	68.1
Armor 44-D49	91.8	86.5	79.0	79.6	59.5	62.7	56.7	•	84.4	71.8	66.6	67.5	74.2	75.0	58.5	•	42.1	53.3	73.2
Armor 45-F81	89.2	•	72.3	•	62.5	•	60.5	•	79.5	•	68.5	•	71.6	•	65.7	•	40.8	•	72.0
Asgrow AG42XF0	80.6	•	66.4	•	60.9	•	51.8	•	78.2	•	65.7	•	67.0	•	46.0	•	41.3	•	67.2
Asgrow AG43XF2	84.9	•	68.6	•	66.4	•	50.4	•	76.0	•	71.9	•	71.6	•	45.9	•	38.7	•	70.0
Asgrow AG45XF0	86.9	•	73.1	•	63.7	•	50.0	•	80.4	•	66.8	•	70.8	•	41.8	•	40.1	•	70.2
Axis 4522XF	85.9	•	71.3	•	58.2	•	56.3	•	82.7	•	69.1	•	71.1	•	52.1	•	43.7	•	70.6
DONMARIO DM45X61	88.4	•	77.1	•	59.2	•	51.4	•	89.9	•	67.8	•	73.0	•	54.8	•	42.3	•	72.4
Dyna-Gro S43XS70	89.5	85.0	78.1	77.2	65.3	67.3	56.4	•	77.2	71.7	66.6	68.0	68.5	74.7	59.2	•	44.1	51.0	71.6
Integra 74551NS	85.3	•	73.9	•	58.0	•	50.7	•	85.9	•	60.0	•	72.3	•	56.2	•	45.7	•	69.4
Local LS4415XF	89.0	•	77.2	•	58.7	•	63.9	•	79.1	•	66.2	•	73.1	•	53.3	•	41.3	•	72.4
Local LS4506XS	86.0	•	68.1	•	58.2	•	58.3	•	76.6	•	59.8	•	71.1	•	47.3	•	36.0	•	68.3
Local LS4517XFS	85.4	•	74.0	•	60.7	•	54.3	•	75.7	•	65.0	•	69.8	•	43.0	•	40.8	•	69.3
NK 42-T5XF	87.0	•	69.2	•	63.1	•	56.5	•	81.4	•	73.6	•	68.9	•	49.7	•	38.5	•	71.4
NK 43-V8XF	84.7	•	73.0	•	62.0	•	46.7	•	76.8	•	66.0	•	63.5	•	48.6	•	31.2	•	67.5
NK 44-J4XFS	84.8	•	72.1	•	68.7	•	55.5	•	81.2	•	73.0	•	72.3	•	48.4	•	43.9	•	72.5
NK 45-P9XF	90.7	•	69.8	•	61.6	•	54.5	•	73.9	•	68.4	•	73.1	•	49.6	•	41.2	•	70.3
NK S44-C7X	88.6	89.7	65.7	78.2	61.5	66.7	54.1	•	79.7	66.6	66.8	70.5	75.0	66.2	55.6	•	43.9	44.5	70.2
NK S45-J3X	84.8	•	71.3	•	58.9	•	55.3	•	71.6	•	59.9	•	70.6	•	29.1	•	44.5	•	67.5
Progeny P4501XFS	85.9	•	74.2	•	54.1	•	56.2	•	82.5	•	60.4	•	70.0	•	49.9	•	48.0	•	69.0
Progeny P4505RXS	92.3	82.5	73.4	73.4	60.2	57.7	46.3	•	82.8	79.9	69.4	69.3	74.3	77.2	53.2	•	42.2	51.5	71.3
Progeny P4521XFS	89.0	•	77.2	•	54.2	•	56.9	•	72.6	•	62.6	•	70.7	•	49.9	•	41.5	•	69.0
Grand Mean	85.7	•	70.0	•	58.7	•	53.8	•	75.9	•	64.7	•	68.8	•	47.9	•	41.1	•	•
LSD (5%)	3.9	•	7.8	•	4.2	•	6.0	•	7.1	•	4.9	•	4.0	•	6.2	•	4.0	•	•
C.V.	3.3	•	8.2	•	5.2	•	8.2	•	6.9	•	5.5	•	4.2	•	9.4	•	7.2	•	•
LSD (5%) – Xtend⁵	•	•	8.0	•	4.1	•	6.0	•	7.2	•	4.1	•	4.0	•	•	•	•	•	•

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Table 6. 2021 Yield and 2-Year Average Yield (bu/ac) of Relative Maturity 4.6 - 4.9 Non-Xtend Soybean Varieties/Experimental Lines Across Arkansas.¹

Variety/Experimental Line	2021 ^{2,6}	Keiser ⁷	2021	Kibler ⁷	2021 ²	Marianna ⁷	2021 ²	Newport ⁷	2021 ²	Pine Tree ⁷	2021 ^{2,3}	Rohwer ⁷	2021 ²	Stuttgart ⁷	2021 ²	Rohwer LP	2021	Stuttgart	Irrig ⁸
Relative Maturity 4.6-4.9																			
(bu./ac)																			
Non-Xtend Cultivars																			
Armor 47-E03	83.3	•	74.2	•	53.4	•	69.7	•	75.3	•	64.4	•	71.2	•	63.0	63.0	39.3	•	70.2
Armor 48-E82	78.1	•	78.2	•	55.1	•	54.9	•	67.9	•	66.2	•	69.9	•	60.8	60.8	40.7	•	67.2
Axis 4611ES	80.4	•	74.1	•	56.5	•	61.5	•	68.4	•	62.2	•	68.2	•	57.9	•	43.6	•	67.3
Delta Grow DG46E10	71.6	•	61.0	•	57.2	•	67.6	•	56.2	•	61.5	•	57.7	•	51.0	•	37.5	•	61.8
Delta Grow DG47E20/STS	79.2	69.2	71.9	67.4	58.6	61.3	62.8	•	68.7	69.2	65.0	67.0	67.7	68.4	63.8	•	42.5	46.7	67.7
Delta Grow DG48E49/STS	78.0	68.0	71.2	66.5	55.2	57.0	62.1	•	69.7	67.8	63.4	66.6	67.4	71.8	59.0	•	41.8	47.6	66.7
Delta Grow DG48E59	81.9	•	83.2	•	60.1	•	64.6	•	77.1	•	65.9	•	71.7	•	57.0	•	39.7	•	72.1
Delta Grow DG49E20	77.1	•	66.2	•	55.1	•	66.0	•	74.9	•	74.6	•	71.9	•	65.5	•	42.9	•	69.4
Delta Grow DG49E90	76.1	•	69.5	•	53.7	•	62.9	•	62.4	•	58.1	•	63.8	•	54.5	•	32.7	•	63.8
DONMARIO DM46E62	78.3	•	79.0	•	52.1	•	54.5	•	63.9	•	57.4	•	66.9	•	55.6	•	38.7	•	64.6
DONMARIO DM48E62S	73.1	•	69.0	•	48.9	•	58.5	•	68.1	•	58.1	•	68.4	•	50.4	•	36.5	•	63.5
Dyna-Gro S46E591	78.9	70.7	69.7	66.5	56.5	62.6	56.0	•	66.8	69.5	68.9	69.0	67.6	70.2	53.1	•	44.8	47.1	66.3
Local IS4684E3S	77.7	•	77.7	•	56.5	•	58.6	•	67.2	•	67.6	•	68.0	•	56.6	•	40.7	•	67.6
NK S46-E3S	78.5	•	73.0	•	58.6	•	62.6	•	64.7	•	66.3	•	66.2	•	58.2	•	42.3	•	67.1
NK S48-2E3S	81.2	•	71.5	•	58.3	•	57.9	•	67.8	•	62.0	•	70.9	•	58.6	•	40.9	•	67.1
Progeny P4775E3S	81.0	70.8	71.6	68.3	54.5	61.2	63.8	•	66.3	69.6	66.1	70.7	67.1	70.0	58.2	61.7	41.5	47.1	67.2
Progeny P4931E3S	77.0	•	68.1	•	52.5	•	59.4	•	71.6	•	70.5	•	71.2	•	62.2	•	41.9	•	67.2
R13- 14635RR:0010	77.8	67.5	78.2	70.9	54.3	58.6	60.0	•	64.7	67.1	61.9	59.3	70.6	73.1	57.8	•	40.5	46.2	66.8
R15-2422	66.3	63.9	55.7	58.9	49.7	53.1	51.8	•	45.5	54.0	52.6	57.5	57.7	64.1	43.7	45.2	38.8	46.0	54.2
R16-253	72.2	64.9	56.1	60.8	52.7	53.3	51.7	•	61.4	62.0	58.0	52.8	63.8	67.6	54.5	58.1	40.7	47.0	59.4
R18-14142	67.6	•	69.9	•	50.8	•	61.4	•	66.1	•	65.4	•	66.9	•	57.7	•	34.6	•	64.0
R18-14272	72.7	•	73.2	•	60.4	•	64.1	•	71.1	•	63.1	•	66.5	•	62.4	•	45.8	•	67.3
R18-14502	74.7	•	72.8	•	53.9	•	62.3	•	66.9	•	62.9	•	69.6	•	61.8	•	41.7	•	66.2
R18-14753	74.9	•	68.5	•	52.7	•	53.8	•	61.2	•	65.2	•	68.4	•	56.2	•	43.1	•	63.5
R18C-13283	79.9	•	72.4	•	55.6	•	55.9	•	65.1	•	60.5	•	70.1	•	57.9	•	39.2	•	65.6
S16-7922C	83.8	•	74.3	•	61.9	•	66.7	•	72.5	•	64.5	•	73.5	•	66.7	•	42.5	•	71.0
UA46i20C	77.6	68.6	71.8	66.4	55.0	60.5	50.6	•	65.6	66.5	58.3	57.8	64.4	67.2	57.3	57.2	38.3	44.6	63.3
Grand Mean	77.1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LSD (5%)	4.4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
C.V.	4.2	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LSD (5%) – Non-Xtend⁴	•	•	8.6	•	•	•	7.8	•	5.3	•	5.0	•	4.7	•	•	•	•	•	•

2021 Soybean Update

Table 7. 2021 Yield and 2-Year Average Yield (bu/ac) of Relative Maturity 4.6 - 4.9 Xtend Soybean Varieties/Experimental Lines Across Arkansas.¹

Variety/Experimental Line	2021 ^{2,6}	Keiser ⁷	2021	Kibler ⁷	2021 ²	Marianna ⁷	2021 ²	Newport ⁷	2021 ²	Pine Tree ⁷	2021 ^{2,3}	Rohwer ⁷	2021 ²	Stuttgart ⁷	2021 ²	Rohwer LP	2021	Stuttgart	Irrig ⁸
Relative Maturity 4.6-4.9																			
(bu./ac)																			
Xtend Cultivars																			
AgriGold G4615XF	85.2	•	71.8	•	58.4	•	70.5	•	76.6	•	64.6	•	69.3	•	63.6	63.6	43.8	•	70.9
AgriGold G4813XF	80.5	•	65.3	•	58.7	•	56.2	•	68.8	•	67.2	•	65.9	•	47.2	47.2	43.2	•	66.1
AgriGold G4820RX	82.3	81.9	79.8	77.0	62.0	63.7	66.4	•	70.5	76.5	68.6	70.9	72.1	77.5	59.6	59.6	43.0	52.7	71.7
AgriGold G4900XF	79.3	•	70.0	•	53.4	•	56.0	•	70.8	•	53.4	•	66.7	•	60.8	60.8	39.2	•	64.3
Amp 4690XF	85.3	•	77.0	•	61.2	•	66.1	•	77.4	•	67.0	•	71.0	•	58.0	58.0	48.4	•	72.1
Amp 4850XF	83.5	•	69.1	•	55.8	•	66.9	•	69.4	•	66.2	•	65.2	•	55.2	55.2	40.2	•	68.0
Amp 4950X	81.8	•	74.2	•	60.8	•	67.1	•	77.2	•	66.7	•	71.4	•	57.5	57.5	35.7	•	71.3
Armor 46-D09	86.3	81.8	78.6	76.5	59.5	62.9	61.9	•	74.2	77.8	64.0	69.4	76.9	78.7	64.6	64.6	43.0	50.8	71.7
Armor 46-F13	86.5	•	68.4	•	58.8	•	65.8	•	75.0	•	66.3	•	72.3	•	67.3	67.3	45.4	•	70.4
Armor 48-D03	83.1	•	70.6	•	59.4	•	69.7	•	80.3	•	65.5	•	70.1	•	58.3	58.3	40.8	•	71.2
Armor 48-D25	82.2	80.1	75.2	73.7	62.0	68.0	72.1	•	78.4	77.5	69.3	69.1	73.4	78.7	67.6	67.6	41.6	51.3	73.2
Armor 48-F01	76.0	•	76.0	•	58.9	•	55.6	•	68.3	•	57.8	•	63.1	•	59.3	59.3	43.7	•	65.1
Armor 48-F22	81.4	•	75.8	•	61.2	•	59.6	•	67.8	•	67.4	•	65.4	•	56.9	56.9	46.2	•	68.4
Asgrow AG47XF0	80.1	•	77.2	•	60.9	•	56.6	•	73.3	•	69.1	•	67.6	•	52.2	52.2	45.0	•	69.2
Asgrow AG48XF0	81.2	•	68.7	•	53.3	•	62.5	•	63.8	•	57.9	•	66.6	•	54.2	54.2	40.2	•	64.8
Asgrow AG48XF2	80.5	•	72.6	•	66.0	•	51.8	•	75.6	•	73.0	•	77.0	•	57.4	57.4	46.2	•	70.9
Axis 4641XFS	87.4	•	75.1	•	55.3	•	57.7	•	79.2	•	65.5	•	71.2	•	58.8	•	43.6	•	70.2
Delta Grow DG46F17/STS	78.2	•	77.5	•	58.7	•	66.4	•	69.4	•	65.3	•	70.0	•	60.1	•	46.3	•	69.4
Delta Grow DG46X65/STS	87.4	81.7	80.3	76.5	62.4	64.7	58.7	•	76.5	73.3	61.6	66.5	74.8	80.1	66.2	•	46.2	52.3	71.7
Delta Grow DG48F20	81.0	•	74.0	•	64.5	•	56.0	•	71.8	•	65.7	•	67.8	•	57.7	•	41.7	•	68.7
Delta Grow DG48X45	85.7	79.3	77.1	75.9	64.4	67.4	52.5	•	76.4	75.9	72.2	68.6	76.5	82.1	65.2	•	45.9	51.2	72.1
Delta Grow DG49F22/STS	77.2	•	73.8	•	53.7	•	46.4	•	76.5	•	53.9	•	68.7	•	60.0	•	41.0	•	64.3
DONMARIO DM46F62	78.9	•	75.7	•	58.2	•	62.2	•	69.4	•	61.2	•	64.7	•	56.8	•	39.0	•	67.2
DONMARIO DM48F61	73.1	•	77.1	•	51.9	•	54.1	•	73.3	•	64.2	•	66.9	•	61.1	•	38.2	•	65.8
Dyna-Gro S46XF31S	86.6	•	79.6	•	60.6	•	57.8	•	76.7	•	67.0	•	69.6	•	64.1	•	46.0	•	71.1
Dyna-Gro S46XS60	84.7	78.8	79.0	74.6	63.3	69.6	67.4	•	74.0	75.8	67.4	71.0	72.8	78.8	63.9	63.7	41.9	50.5	72.7
Dyna-Gro S48XF61S	83.0	•	75.8	•	60.5	•	57.2	•	69.1	•	64.1	•	64.3	•	54.9	•	41.8	•	67.7
Dyna-Gro S48XT40	81.5	76.5	73.1	69.1	57.7	64.8	60.0	•	77.0	76.3	66.1	68.6	66.1	70.1	66.4	•	37.4	45.4	68.8
Dyna-Gro S48XT90	82.3	78.5	75.5	72.6	58.6	65.3	64.7	•	75.7	74.8	69.2	70.6	72.3	75.3	67.5	•	41.6	49.2	71.2
ES4875XF	82.9	•	71.4	•	59.6	•	60.6	•	68.1	•	67.1	•	65.8	•	53.0	•	42.2	•	67.9
Integra 54606NS	85.1	79.9	77.4	75.0	56.9	59.9	61.7	•	79.7	78.8	64.7	67.2	73.6	77.1	60.0	•	44.6	51.4	71.3
Integra 54660NS	87.7	83.7	77.3	76.2	60.6	61.7	67.4	•	79.5	81.2	70.3	76.2	76.7	76.5	67.3	•	45.6	53.2	74.2
Integra 54816N	82.9	78.8	87.5	79.6	61.5	61.8	55.0	•	73.2	76.6	72.8	74.9	70.9	77.9	60.2	•	47.4	55.0	72.0
Integra 54891NS	83.8	80.6	89.7	83.0	59.7	63.8	63.8	•	82.0	79.6	70.7	70.6	69.6	73.5	63.1	•	35.7	47.1	74.2
Integra 74621NS	86.8	•	75.6	•	62.1	•	57.7	•	78.7	•	64.7	•	72.1	•	59.0	•	44.7	•	71.1
Integra 74731NS	80.5	•	74.7	•	59.9	•	60.2	•	68.5	•	65.6	•	65.1	•	48.1	•	44.7	•	67.8
Integra 74852NS	77.8	•	77.8	•	53.7	•	52.9	•	68.6	•	•	•	67.6	•	61.0	•	40.4	•	66.4

2021 Soybean Update

Table 7 (Continued). 2021 Yield and 2-Year Average Yield (bu/ac) of Relative Maturity 4.6 - 4.9 Xtend Soybean Varieties/Experimental Lines Across Arkansas.¹

Variety/Experimental Line	2021 ^{2,6}	Keiser ⁷	2021	Kibler ⁷	2021 ²	Marianna ⁷	2021 ²	Newport ⁷	2021 ²	Pine Tree ⁷	2021 ^{2,3}	Rohwer ⁷	2021 ²	Stuttgart ⁷	2021 ²	Rohwer LP	2021	Stuttgart	Irrig ⁸
Relative Maturity 4.6-4.9																			
(bu./ac)																			
Xtend Cultivars																			
Local LS4606XFS	88.0	•	74.7	•	59.5	•	59.3	•	71.3	•	65.6	•	70.9	•	62.5	•	42.2	•	69.9
Local LS4707XF	•	•	64.4	•	60.5	•	60.7	•	73.5	•	61.1	•	68.2	•	60.3	•	41.0	•	64.7
Local LS4795XS	88.7	80.6	77.5	77.4	60.7	65.7	69.9	•	75.1	77.1	65.8	70.3	76.6	79.8	69.4	65.4	47.7	53.7	73.5
Local LS4805XFS	80.2	•	70.2	•	61.4	•	60.6	•	69.3	•	68.6	•	65.7	•	48.8	•	44.7	•	68.0
Local LS4806XS	81.9	77.3	89.9	78.6	61.4	65.9	66.0	•	80.4	79.0	68.8	72.7	68.4	74.4	64.6	•	41.8	50.2	73.8
Local LS4919XFS	78.0	•	69.5	•	56.4	•	63.1	•	70.7	•	56.8	•	68.1	•	60.0	•	39.8	•	66.1
NK S47-Y9X	84.4	•	79.5	•	65.3	•	63.1	•	82.4	•	72.3	•	75.1	•	62.2	•	45.8	•	74.6
NK S49-F5X	88.6	•	•	•	65.7	•	61.5	•	76.6	•	66.5	•	65.6	•	62.1	•	42.7	•	70.8
Pioneer P47A64X	83.0	•	81.4	•	61.7	•	57.5	•	88.8	•	69.2	•	75.0	•	70.5	•	46.6	•	73.8
Pioneer P48A60X	83.4	80.5	80.4	78.1	66.6	63.1	68.5	•	78.9	79.6	64.3	72.4	72.6	72.9	63.0	64.7	41.1	48.7	73.5
Progeny P4604XFS	84.4	•	82.4	•	57.3	•	61.7	•	72.6	•	65.4	•	72.9	•	64.7	•	45.1	•	71.0
Progeny P4806XFS	82.6	•	75.2	•	58.1	•	62.5	•	68.4	•	68.9	•	64.0	•	57.5	•	43.7	•	68.5
Progeny P4816RX	86.2	80.8	78.8	76.2	60.0	62.0	62.6	•	75.2	77.6	72.3	74.7	71.0	76.0	65.6	61.6	45.0	52.9	72.3
Progeny P4821RX	85.1	79.4	72.1	73.0	64.0	65.6	60.5	•	74.7	76.8	73.4	74.7	75.4	78.4	66.6	•	48.1	55.2	72.2
Progeny P4921XFS	76.3	•	90.2	•	53.7	•	62.8	•	73.0	•	57.8	•	69.5	•	61.8	•	40.7	•	69.0
Progeny P4970RX	81.8	78.1	82.9	77.5	56.5	59.9	60.8	•	74.3	77.1	72.3	72.1	73.3	79.2	62.8	•	37.2	47.6	71.7
USG 7461XFS	83.4	•	80.4	•	60.9	•	60.1	•	75.2	•	62.3	•	70.8	•	53.7	•	45.9	•	70.4
USG 7481XF	82.0	•	74.2	•	62.3	•	62.5	•	72.6	•	60.4	•	69.9	•	59.6	•	39.2	•	69.1
USG 7489XT	81.3	81.6	79.9	75.8	62.2	61.2	72.2	•	74.2	77.6	76.5	75.6	81.1	82.7	59.1	61.1	44.3	51.7	75.3
USG 7491XFS	79.7	•	62.5	•	61.2	•	65.2	•	68.5	•	71.5	•	66.3	•	49.2	•	41.6	•	67.8
Grand Mean	82.0	•	74.0	•	58.0	•	60.6	•	71.2	•	64.9	•	69.1	•	59.3	•	42.0	•	•
LSD	3.5	•	7.9	•	5.2	•	7.7	•	6.0	•	4.8	•	5.7	•	8.0	•	4.1	•	•
C.V.	3.2	•	7.9	•	6.7	•	9.4	•	6.3	•	5.5	•	6.1	•	10.0	•	7.3	•	•
LSD (5%) – Xtend⁵	•	•	7.5	•	4.2	•	7.5	•	6.4	•	4.8	•	6.1	•	•	•	•	•	•

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Table 8. 2021 Yield and 2-Year Average Yield (bu/ac) of Relative Maturity 5.0 - 5.9 Non-Xtend Soybean Varieties/Experimental Lines Across Arkansas.¹

Variety/Experimental Line	2021 ^{2,6}	Keiser ⁷	2021	Kibler ⁷	2021 ²	Marianna ⁷	2021 ²	Newport ⁷	2021 ²	Pine Tree ⁷	2021 ^{2,3}	Rohwer ⁷	2021 ²	Stuttgart ⁷	2021 ²	Rohwer LP	2021	Stuttgart	Irrig ⁸
Relative Maturity 5.0-5.9																			
(bu./ac)																			
Non-Xtend Cultivars																			
Delta Grow DG50E10	65.3	60.0	60.7	61.6	•	•	52.6	59.3	39.3	47.7	51.5	50.6	55.4	59.4	49.9	•	32.9	41.7	54.1
Delta Grow DG51E60	74.2	67.5	71.3	77.1	•	•	60.9	67.7	68.5	67.7	74.6	73.5	71.3	70.9	56.3	•	33.8	36.8	70.1
Delta Grow DG52E80	75.2	•	66.6	•	•	•	61.0	•	69.7	•	62.4	•	72.8	•	56.9	•	37.6	•	68.0
Delta Grow DG53E30	71.3	•	71.0	•	•	•	56.8	•	66.5	•	67.3	•	70.5	•	55.0	•	35.3	•	67.2
Local IS5067E3	79.5	•	75.0	•	•	•	68.3	•	71.2	•	66.4	•	72.6	•	59.7	•	40.2	•	72.2
Local IS5232E3	75.5	•	67.8	•	•	•	65.0	•	66.9	•	74.6	•	72.8	•	58.7	•	37.5	•	70.4
NK S51-E3	73.3	•	68.7	•	•	•	62.7	•	67.2	•	75.6	•	71.0	•	56.9	•	35.0	•	69.8
Progeny P5121E3S	77.9	•	75.0	•	•	•	60.3	•	51.0	•	61.2	•	69.9	•	58.6	•	38.8	•	65.9
Progeny P5521E3	65.6	•	87.9	•	•	•	69.5	•	70.0	•	67.2	•	72.9	•	64.6	•	33.3	•	72.2
R13-13997	82.8	69.3	78.6	76.5	•	•	55.9	60.4	64.2	62.8	70.2	68.7	71.4	72.9	65.4	62.6	38.0	46.6	70.5
R14-1422	78.3	68.8	81.1	73.7	•	•	60.3	64.5	70.9	65.7	77.4	71.0	79.0	80.1	67.0	63.7	38.4	44.8	74.5
R15-1587	81.2	72.4	79.6	74.3	•	•	58.9	67.4	67.4	66.3	67.9	67.2	74.8	74.6	58.8	63.5	33.2	45.1	71.6
R15-5695	76.6	•	80.5	•	•	•	57.8	•	51.8	•	64.2	•	67.2	•	56.3	•	35.9	•	66.3
R16-1445	81.4	66.6	71.2	66.0	•	•	58.0	63.8	46.8	54.1	70.6	68.2	64.6	72.0	63.3	66.4	35.9	47.3	65.4
R17-283F	70.7	•	76.2	•	•	•	48.1	•	64.3	•	63.0	•	67.9	•	57.5	•	34.5	•	65.0
R17-3488	70.2	•	75.1	•	•	•	56.1	•	57.8	•	62.0	•	67.5	•	55.6	•	37.1	•	64.8
R17-4177	71.8	•	74.6	•	•	•	57.3	•	56.2	•	63.1	•	64.4	•	56.7	•	35.2	•	64.6
R18-3048	73.8	•	76.5	•	•	•	53.6	•	57.8	•	61.5	•	60.7	•	52.4	•	35.3	•	64.0
R18-3250	62.9	•	82.9	•	•	•	61.9	•	61.6	•	62.0	•	65.7	•	56.5	•	28.8	•	66.1
S16-14801C	80.5	•	77.0	•	•	•	56.7	•	76.8	•	77.4	•	75.9	•	66.0	•	42.0	•	74.0
UA54i19GT	73.4	65.2	84.2	75.2	•	•	60.0	65.0	64.1	63.9	69.3	67.0	69.3	72.1	65.8	63.5	34.1	44.8	70.0
Grand Mean	74.4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LSD (5%)	6.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
C.V.	5.9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LSD (5%) – Non-Xtend⁴	•	•	6.0	•	•	•	6.6	•	7.0	•	6.1	•	4.8	•	•	•	•	•	•

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Table 9. 2021 Yield and 2-Year Average Yield (bu/ac) of Relative Maturity 5.0 - 5.9 Xtend Soybean Varieties/Experimental Lines Across Arkansas.¹

Variety/Experimental Line	2021 ^{2,6}	Keiser ⁷	2021	Kibler ⁷	2021 ²	Marianna ⁷	2021 ²	Newport ⁷	2021 ²	Pine Tree ⁷	2021 ^{2,3}	Rohwer ⁷	2021 ²	Stuttgart ⁷	2021 ²	Rohwer LP	2021	Stuttgart	Irrig ⁸
Relative Maturity 5.0-5.9																			
(bu./ac)																			
Xtend Cultivars																			
Asgrow AG52XF0	75.0	•	78.5	•	•	•	67.9	•	76.5	•	71.9	•	67.5	•	39.4	•	39.1	•	72.9
Asgrow AG53XF2	78.8	•	74.0	•	•	•	67.6	•	79.0	•	76.9	•	75.6	•	54.6	•	38.8	•	75.3
Asgrow AG54XF0	75.2	•	89.1	•	•	•	62.6	•	77.2	•	64.0	•	61.8	•	63.0	•	33.7	•	71.6
Asgrow AG55XF0	74.9	•	76.7	•	•	•	56.7	•	57.7	•	58.5	•	63.7	•	53.3	•	31.8	•	64.7
Delta Grow DG54F20	77.0	•	72.1	•	•	•	55.2	•	56.0	•	59.9	•	65.6	•	57.1	•	31.8	•	64.3
Dyna-Gro S52XT91	79.8	•	78.4	•	•	•	62.7	•	73.0	•	65.8	•	70.6	•	62.1	•	36.6	•	71.7
Dyna-Gro S56XT99	77.9	83.2	75.0	•	•	•	56.9	•	52.0	57.9	57.1	61.5	64.8	63.4	62.4	58.2	31.1	35.8	63.9
Local LS5009XS	81.1	75.4	85.1	79.2	•	•	64.6	71.0	72.6	72.8	69.8	69.2	68.1	75.2	62.9	•	34.5	49.0	73.5
Local LS5119XF	79.4	•	76.1	•	•	•	64.7	•	76.5	•	70.9	•	71.5	•	67.2	•	36.3	•	73.2
Local LS5418XFS	61.9	•	83.4	•	•	•	65.7	•	63.6	•	56.7	•	62.7	•	54.9	•	41.0	•	65.7
Local LS5614XF	68.0	•	80.5	•	•	•	54.9	•	65.9	•	61.5	•	61.4	•	51.4	•	32.4	•	65.4
Progeny P5003XF	78.4	•	79.0	•	•	•	61.2	•	67.6	•	64.3	•	71.9	•	67.4	•	42.7	•	70.4
Progeny P5411XF	74.5	•	66.0	•	•	•	54.3	•	55.0	•	59.8	•	62.4	•	54.6	•	30.3	•	62.0
Grand Mean	74.8	•	76.3	•			59.8	•	64.1	•	65.9	•	68.2	•	57.9	•	35.6	•	•
LSD (5%)	6.4	•	5.8	•			6.5	•	6.7	•	5.8	•	4.7	•	6.9	•	4.0	•	•
C.V.	6.2	•	5.6	•			8.0	•	7.6	•	6.4	•	5.0	•	8.7	•	8.3	•	•
LSD (5%) – Xtend⁵	•	•	5.0	•	•	•	6.5	•	5.9	•	5.3	•	4.6	•	•	•	•	•	•

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Table 10. Nematode, Disease, and Chloride Sensitivity Ratings for Soybean varieties in 2021 Arkansas Soybean Variety Performance Test.^{9,12}

Variety/Experimental Line	RKN GH ¹⁰	Stem ¹¹	Frogeye Leaf	Septoria	Cercospora	Target Leaf	Chloride Reaction ¹³
AgriGold G4615XF	VS	S	R	R	R	R	Mod. Includer
AgriGold G4813XF	VS	R	MR	R	MR	R	Mod. Includer
AgriGold G4820RX	VS	S	R	R	MR	R	Mod. Excluder
AgriGold G4900XF	VS	R	R	R	MR	R	Mod. Includer
Amp 4448X	S	R	R	R	MR	R	Mixed
Amp 4690XF	VS	S	R	R	R	R	Mod. Includer
Amp 4850XF	S	S	MS	R	MR	R	Strong Includer
Amp 4950X	VS	R	R	R	MR	R	Mod. Includer
Armor 44-D49	VS	R	R	R	MR	MR	Mixed
Armor 45-F81	VS	R	R	R	R	R	Strong Includer
Armor 46-D09	VS	S	R	R	R	R	Strong Excluder
Armor 46-F13	VS	R	MR	R	MR	R	Mixed
Armor 47-E03	VS	R	R	R	MR	R	Strong Excluder
Armor 48-D03	VS	S	MR	R	MR	R	Mod. Includer
Armor 48-D25	VS	R	R	R	MR	R	Strong Excluder
Armor 48-E82	VS	R	R	R	MR	R	Strong Excluder
Armor 48-F01	VS	R	MR	R	MR	R	Mod. Includer
Armor 48-F22	VS	R	MR	R	MS	R	Mod. Includer
Asgrow AG42XF0	S	R	MR	MR	MR	R	Mod. Includer
Asgrow AG43XF2	S	R	MR	R	R	R	Mod. Includer
Asgrow AG45XF0	MS	R	R	R	R	R	Mixed
Asgrow AG47XF0	MR	R	MS	R	MR	R	Mod. Includer
Asgrow AG48XF0	S	R	MR	R	MR	R	Mod. Includer
Asgrow AG48XF2	MR	R	MR	R	MR	R	Strong Excluder
Asgrow AG52XF0	S	R	MS	R	MR	R	Mixed
Asgrow AG53XF2	MS	R	R	R	MR	R	Mod. Includer
Asgrow AG54XF0	MS	R	MR	R	MR	R	Mixed
Asgrow AG55XF0	MS	R	R	R	MR	R	Strong Excluder
Axis 4522XF	VS	S	R	R	R	R	Mixed
Axis 4611ES	VS	R	MR	R	MR	R	Strong Excluder
Axis 4641XFS	VS	S	R	R	R	R	Strong Includer
Delta Grow DG45E10	S	R	R	MR	MR	R	Mod. Includer
Delta Grow DG46E10	S	R	MR	R	MR	R	Strong Excluder
Delta Grow DG46F17/STS	VS	R	R	R	MR	R	Mod. Includer
Delta Grow DG46X65/STS	VS	R	MR	R	R	R	Strong Excluder
Delta Grow DG47E20/STS	VS	R	MS	R	R	R	Strong Excluder
Delta Grow DG48E49/STS	VS	R	R	R	MR	R	Strong Excluder
Delta Grow DG48E59	VS	R	R	R	MR	R	Strong Excluder
Delta Grow DG48F20	S	R	MS	R	MR	R	Mod. Includer
Delta Grow DG48X45	VS	R	MR	R	R	R	Strong Excluder
Delta Grow DG49E20	VS	R	R	R	MR	R	Strong Excluder
Delta Grow DG49E90	VS	R	R	R	MR	R	Mod. Includer
Delta Grow DG49F22/STS	VS	R	MR	R	MR	R	Mixed
Delta Grow DG50E10	S	R	R	R	R	R	Mod. Excluder
Delta Grow DG51E60	VS	R	R	R	R	R	Strong Excluder
Delta Grow DG52E80	VS	R	MS	R	R	R	Mod. Excluder
Delta Grow DG53E30	•	•	•	•	•	•	Mod. Excluder
Delta Grow DG54F20	S	R	R	R	MR	R	Strong Excluder
DONMARIO DM45X61	VS	R	R	R	R	R	Mixed
DONMARIO DM46E62	VS	S	R	MR	R	R	Strong Excluder
DONMARIO DM46F62	VS	R	R	R	MR	R	Mod. Excluder
DONMARIO DM48E62S	VS	R	MR	R	MS	R	Mod. Excluder
DONMARIO DM48F61	VS	R	R	R	MR	R	Mod. Includer
Dyna-Gro S43XS70	VS	R	R	R	MR	R	Strong Excluder
Dyna-Gro S45ES10	VS	R	R	R	MR	R	Strong Excluder
Dyna-Gro S46ES91	VS	R	MR	R	MR	R	Strong Excluder
Dyna-Gro S46XF31S	VS	R	R	R	MR	R	Mod. Includer
Dyna-Gro S46XS60	VS	R	MR	MR	R	R	Strong Excluder
Dyna-Gro S48XF61S	VS	R	MS	R	MS	R	Mod. Includer
Dyna-Gro S48XT40	VS	R	R	R	MR	R	Strong Includer

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Table 10 (Cont.). Nematode, Disease, and Chloride Sensitivity Ratings for Soybean varieties in 2021 Arkansas Soybean Variety Performance Test.^{9,12}

Variety/Experimental Line	RKN GH ¹⁰	Stem ¹¹	Frogeye Leaf	Septoria	Cercospora	Target Leaf	Chloride Reaction ¹³
Dyna-Gro S48XT90	VS	R	R	R	MR	R	Mixed
Dyna-Gro S52XT91	VS	R	R	R	MS	R	Mixed
Dyna-Gro S56XT99	S	S	R	R	MR	R	Strong Excluder
Eagle Seed ES4875XF	•	•	•	•	•	•	•
Integra 54606NS	VS	R	R	R	R	R	Mixed
Integra 54660NS	VS	S	MR	R	R	R	Strong Excluder
Integra 54816N	VS	R	R	R	MR	R	Strong Excluder
Integra 54891NS	VS	S	R	R	MS	R	Mod. Excluder
Integra 74551NS	VS	R	R	R	R	R	Mixed
Integra 74621NS	VS	S	R	R	MR	R	Strong Includer
Integra 74731NS	VS	S	MS	R	MR	R	Mod. Includer
Integra 74852NS	•	R	MR	R	MR	R	•
Local IS4324E3	VS	R	R	R	R	R	Mixed
Local IS4684E3S	VS	R	MR	R	R	R	Strong Excluder
Local IS5067E3	VS	R	R	R	MR	R	Mixed
Local IS5232E3	VS	R	R	R	MR	R	Strong Excluder
Local LS4415XF	VS	R	R	MR	MR	MR	Mixed
Local LS4506XS	S	R	R	R	R	R	Mixed
Local LS4517XFS	VS	R	R	R	R	MR	Mod. Includer
Local LS4606XFS	VS	R	R	R	R	R	Mod. Includer
Local LS4707XF	VS	R	R	R	MR	R	Strong Includer
Local LS4795XS	VS	R	MR	R	R	R	Strong Excluder
Local LS4805XFS	VS	R	MS	R	MR	R	Mod. Includer
Local LS4806XS	VS	R	R	R	MS	R	Strong Excluder
Local LS4919XFS	VS	R	MR	R	MR	R	Mod. Excluder
Local LS5009XS	VS	R	MR	R	MR	R	Strong Excluder
Local LS5119XF	S	R	R	R	MR	R	Mixed
Local LS5418XFS	S	R	MS	R	MR	R	Mixed
Local LS5614XF	VS	R	MR	MR	MS	R	Mod. Includer
NK 42-T5XF	VS	R	MR	R	R	R	Mod. Includer
NK 43-V8XF	VS	R	R	R	MR	R	Mod. Includer
NK 44-J4XFS	VS	R	MR	R	R	MR	Strong Includer
NK 45-P9XF	VS	R	R	R	R	R	Mixed
NK 45-V9E3	VS	R	R	R	R	R	Strong Includer
NK S44-C7X	VS	R	R	MR	MR	R	Strong Includer
NK S45-J3X	S	R	R	R	R	R	Mixed
NK S46-E3S	VS	S	MS	R	R	R	Strong Excluder
NK S47-Y9X	VS	R	R	R	MR	R	Strong Excluder
NK S48-2E3S	VS	R	R	R	MR	R	Strong Includer
NK S49-F5X	VS	R	R	R	MR	R	Strong Excluder
NK S51-E3	S	R	R	R	MR	R	Strong Excluder
Pioneer P47A64X	VS	R	R	R	MR	R	Strong Excluder
Pioneer P48A60X	VS	R	MR	R	MR	R	Strong Excluder
Progeny P4431E3	S	R	MR	R	R	R	Mod. Excluder
Progeny P4501XFS	VS	R	R	R	MR	R	Mod. Includer
Progeny P4505RXS	VS	R	R	R	MR	R	Mod. Includer
Progeny P4521XFS	VS	R	MR	R	R	R	Mod. Includer
Progeny P4541E3S	VS	R	R	R	R	R	Mod. Includer
Progeny P4604XFS	VS	R	R	R	R	R	Mod. Includer
Progeny P4775E3S	VS	S	MS	R	MR	R	Strong Excluder
Progeny P4806XFS	VS	S	MS	R	MS	R	Mod. Includer
Progeny P4816RX	VS	R	R	R	MR	R	Strong Excluder
Progeny P4821RX	VS	S	R	R	MR	R	Strong Excluder
Progeny P4921XFS	VS	R	MR	R	MS	R	Mixed
Progeny P4931E3S	VS	R	R	R	MR	R	Strong Excluder
Progeny P4970RX	VS	R	R	R	MR	R	Mod. Includer
Progeny P5003XF	VS	R	MR	R	MR	R	Mod. Includer
Progeny P5121E3S	VS	R	MS	R	MR	R	Strong Excluder
Progeny P5411XF	S	R	R	R	MS	R	Strong Excluder
Progeny P5521E3	MS	R	R	R	R	R	Mixed

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Table 10 (Continued). Nematode, Disease, and Chloride Sensitivity Ratings for Soybean varieties in 2021 Arkansas Soybean Variety Performance Test. ^{9,12}

Variety/Experimental Line	RKN GH ¹⁰	Stem ¹¹	Frogeye Leaf	Septoria	Cercospora	Target Leaf	Chloride Reaction ¹³
R13-14635RR:0010	VS	R	R	R	MR	R	Mixed
R13-13997	S	R	R	R	MR	R	Strong Excluder
R14-1422	VS	R	R	R	MR	R	Strong Excluder
R15-1587	VS	R	R	R	MR	R	Strong Excluder
R15-2422	VS	S	MS	R	R	R	Mod. Includer
R15-5695	S	R	R	R	MS	R	Strong Includer
R16-1445	VS	R	R	R	MR	R	Strong Excluder
R16-253	VS	R	MS	R	MR	R	Mod. Includer
R17-283F	VS	R	R	R	MR	R	Strong Excluder
R17-3488	VS	R	R	R	MR	R	Strong Includer
R17-4177	VS	R	R	R	MR	R	Strong Excluder
R18-14142	VS	R	MS	R	MR	R	Strong Excluder
R18-14147	VS	R	MS	MR	R	R	Mod. Excluder
R18-14229	VS	R	R	R	MR	R	Mixed
R18-14272	VS	R	MS	R	MR	R	Mod. Includer
R18-14287	VS	R	MR	R	MR	R	Mixed
R18-14502	VS	R	MR	R	MR	R	Mod. Includer
R18-14753	VS	R	MR	R	MR	R	Strong Excluder
R18-3048	VS	R	MR	R	R	R	Mixed
R18-3250	VS	R	MR	R	R	R	Mixed
R18C-13283	VS	R	R	R	R	R	Mod. Excluder
R18C-1450	VS	R	MR	MR	MR	R	Strong Includer
S16-14801C	S	R	R	R	MR	R	Strong Excluder
S16-7922C	S	R	R	R	MR	R	Strong Excluder
S17-2243C	VS	R	MS	R	R	R	Strong Excluder
UA46i20C	VS	R	R	MR	MR	R	Mod. Includer
UA54i19GT	VS	R	R	R	MR	R	•
USG 7461XFS	VS	R	R	R	R	R	Strong Includer
USG 7481XF	VS	R	R	R	MS	R	Strong Includer
USG 7489XT	VS	R	MR	R	MR	R	Strong Excluder
USG 7491XFS	VS	R	MS	R	MS	R	Mixed

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Table 11. Agronomic Characteristics for Soybean Varieties/Experimental Lines in 2021 Arkansas Soybean Variety Performance Tests.

Variety/Experimental Line	Relative	Herb. ¹⁴	STS/	Metribuzin ¹⁵	Flower	Pubescence	Pod	Hilum Color	Growth ¹⁶	Days to ¹⁷	Lodging ¹⁸	Plant ¹⁹
AgriGold G4615XF	4.6	RR2XF	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	136	1	40
AgriGold G4813XF	4.8	RR2XF	Yes	Slight	White	Lt. Tawny	Tan	Black	Ind	138	1	36
AgriGold G4820RX	4.8	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	140	1	39
AgriGold G4900XF	4.9	RR2XF	Yes	Slight	White	Gray	Brown	Imp Black	Ind	138	1	36
Amp 4448X	4.4	RR2X	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	132	2	35
Amp 4690XF	4.6	RR2XF	No	Slight	Purple	Lt. Tawny	Brown	Black	Ind	138	1	40
Amp 4850XF	4.8	RR2XF	Yes	Slight	White	Tawny	Brown	Black	Ind	140	1	35
Amp 4950X	4.9	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	141	1	40
Armor 44-D49	4.4	RR2X	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	136	2	40
Armor 45-F81	4.5	RR2XF	No	Slight	Purple	Lt. Tawny	Brown	Black	Ind	135	2	35
Armor 46-D09	4.6	RR2X	Yes	Slight	Purple	Tawny	L. Brown	Black	Ind	136	1	36
Armor 46-F13	4.6	RR2XF	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	138	1	40
Armor 47-E03	4.7	Enlist E3	No	Moderate	White	Gray	Brown	Buff	Ind	138	1	34
Armor 48-D03	4.8	RR2X	Yes	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	139	1	39
Armor 48-D25	4.8	RR2X	Yes	Severe	Purple	Lt. Tawny	Tan	Black	Ind	138	1	38
Armor 48-E82	4.8	Enlist E3	No	Moderate	White	Gray	Brown	Buff	Ind	139	2	36
Armor 48-F01	4.8	RR2XF	•	Slight	White	Lt. Tawny	•	Black	Ind	139	2	42
Armor 48-F22	4.8	RR2XF	Yes	Moderate	White	Tawny	Brown	Black	Ind	137	1	36
Asgrow AG42XF0	4.2	RR2XF	No	Moderate	Purple	Lt. Tawny	Brown	Black	Ind	130	1	38
Asgrow AG43XF2	4.3	RR2XF	No	Slight	White	Lt. Tawny	Tan	Black	Ind	132	1	35
Asgrow AG45XF0	4.5	RR2XF	Yes	Moderate	Purple	Lt. Tawny	Brown	Black	Ind	133	2	37
Asgrow AG47XF0	4.7	RR2XF	Yes	Slight	White	Tawny	Brown	Black	Ind	138	1	36
Asgrow AG48XF0	4.8	RR2XF	Yes	Moderate	Purple	Lt. Tawny	Brown	Black	Ind	138	1	39
Asgrow AG48XF2	4.8	RR2XF	No	Slight	Purple	Tawny	Brown	Black	Ind	138	2	36
Asgrow AG52XF0	5.2	RR2XF	Yes	Slight	White	Lt. Tawny	Tan	Black	Ind	141	2	40
Asgrow AG53XF2	5.3	RR2XF	No	Severe	Purple	Lt. Tawny	Tan	Black	Ind	140	2	39
Asgrow AG54XF0	5.4	RR2XF	Yes	Severe	Purple	Lt. Tawny	Tan	Black	Ind	150	2	42
Asgrow AG55XF0	5.5	RR2XF	No	Moderate	White	Tawny	Brown	Black	Det	143	1	33
Axis 4522XF	4.5	RR2XF	No	Moderate	Purple	Lt. Tawny	•	Black	Ind	135	1	34
Axis 4611ES	4.6	Enlist E3	Yes	Slight	Purple	Gray	•	Imp Black	Ind	136	1	39
Axis 4641XFS	4.6	RR2XF	Yes	Slight	Purple	Lt. Tawny	•	Black	Ind	138	1	39
Delta Grow DG45E10	4.4	Enlist E3	No	Moderate	Purple	Gray	Tan	Imp Black	Ind	133	1	33
Delta Grow DG46E10	4.6	Enlist E3	No	Severe	White	Gray	Brown	Buff	Ind	132	1	33
Delta Grow DG46F17/STS	4.6	RR2XF	Yes	Moderate	Purple	Gray	Brown	Gray	Ind	135	1	38
Delta Grow DG46X65/STS	4.6	RR2X	Yes	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	138	1	37
Delta Grow DG47E20/STS	4.7	Enlist E3	Yes	Moderate	Purple	Gray	Brown	Imp Black	Ind	135	1	39
Delta Grow DG48E49/STS	4.8	Enlist E3	Yes	Moderate	White	Tawny	Tan	Brown	Ind	136	1	35
Delta Grow DG48E59	4.8	Enlist E3	No	Moderate	White	Gray	Brown	Buff	Ind	139	1	33
Delta Grow DG48F20	4.8	RR2XF	No	Moderate	Purple	Gray	Tan	Gray	Ind	139	1	36
Delta Grow DG48X45	4.8	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	141	1	36
Delta Grow DG49E20	4.9	Enlist E3	No	Moderate	White	Gray	Brown	Buff	Ind	140	2	36
Delta Grow DG49E90	4.9	Enlist E3	No	Severe	White	Lt. Tawny	Tan	Brown	Ind	138	1	35
Delta Grow DG49F22/STS	4.8	RR2XF	Yes	Severe	White	Gray	Tan	Imp Black	Ind	139	1	35
Delta Grow DG50E10	5.0	Enlist E3	No	Slight	Purple	Gray	Tan	Imp Black	Semi	139	3	39
Delta Grow DG51E60	5.1	Enlist E3	No	Moderate	White	Gray	Brown	Buff	Ind	141	2	35
Delta Grow DG52E80	5.2	Enlist E3	No	Slight	Purple	Lt. Tawny	Brown	Black	Semi	139	2	37
Delta Grow DG53E30	5.3	Enlist E3	No	•	Purple	Gray	Tan	Gray	Semi	142	1	36
Delta Grow DG54F20	5.4	RR2XF	No	Severe	Purple	Tawny	Brown	Black	Semi	139	1	32
DONMARIO DM45X61	4.5	RR2X	•	Slight	•	•	•	•	•	136	3	40
DONMARIO DM46E62	4.6	Enlist E3	•	Moderate	•	•	•	•	•	135	2	33
DONMARIO DM46F62	4.6	RR2XF	•	Slight	•	•	•	•	•	134	1	39
DONMARIO DM48E62S	4.8	Enlist E3	•	Moderate	•	•	•	•	•	138	1	32
DONMARIO DM48F61	4.8	RR2XF	•	Slight	•	•	•	•	•	138	1	39
Dyna-Gro S43XS70	4.3	RR2X	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	135	1	37
Dyna-Gro S45ES10	4.5	Enlist E3	Yes	Moderate	White	Tawny	Brown	Brown	Ind	134	1	35
Dyna-Gro S46ES91	4.6	Enlist E3	Yes	Slight	Purple	Gray	Brown	Imp Black	Ind	134	1	39
Dyna-Gro S46XF31S	4.6	RR2XF	Yes	Severe	Purple	Lt. Tawny	Brown	Black	Ind	135	1	38
Dyna-Gro S46XS60	4.6	RR2X	Yes	Slight	Purple	Lt. Tawny	Tan	Black	Ind	136	1	37
Dyna-Gro S48XF61S	4.8	RR2XF	Yes	Slight	White	Tawny	Brown	Black	Ind	139	1	35
Dyna-Gro S48XT40	4.8	RR2X	No	Slight	Purple	Gray	Brown	Imp Black	Ind	138	1	39

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Table 11 (Continued). Agronomic Characteristics for Soybean Varieties/Experimental Lines in 2021 Arkansas Soybean Variety Performance Tests.

Variety/Experimental Line	Relative	Herb. ¹⁴	STS/ ¹⁵	Metribuzin ¹⁵	Flower	Pubescence	Pod	Hilum Color	Growth ¹⁶	Days to ¹⁷	Lodging ¹⁸	Plant ¹⁹
Dyna-Gro S48XT90	4.8	RR2X	No	Slight	Purple	Lt. Tawny	Tan	Black	Ind	142	2	37
Dyna-Gro S52XT91	5.2	RR2X	No	Moderate	Purple	Tawny	Tan	Black	Ind	138	2	37
Dyna-Gro S56XT99	5.6	RR2X	No	Slight	White	Tawny	Tan	Black	Det	140	2	33
Eagle Seed ES4875XF	4.8	RR2XF	•	•	•	•	•	•	•	141	1	36
Integra 54606NS	4.6	RR2X	Yes	Moderate	Purple	Lt. Tawny	Brown	Black	Ind	138	2	40
Integra 54660NS	4.6	RR2X	Yes	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	138	1	36
Integra 54816N	4.8	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	140	1	36
Integra 54891NS	4.8	RR2X	Yes	Slight	Purple	Lt. Tawny	Tan	Black	Ind	139	1	39
Integra 74551NS	4.5	RR2XF	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	136	3	40
Integra 74621NS	4.6	RR2XF	Yes	Moderate	Purple	Lt. Tawny	Brown	Black	Ind	135	1	40
Integra 74731NS	4.7	RR2XF	Yes	Moderate	White	Tawny	Brown	Black	Ind	139	1	36
Integra 74852NS	4.8	RR2XF	Yes	Moderate	White	Lt. Tawny	Brown	Imp Black	Ind	137	1	36
Local IS4324E3	4.3	Enlist E3	No	Slight	•	•	•	•	Ind	128	2	33
Local IS4684E3S	4.6	Enlist E3	Yes	Moderate	•	•	•	•	Ind	135	1	37
Local IS5067E3	5.0	Enlist E3	No	Moderate	•	•	•	•	•	139	3	33
Local IS5232E3	5.2	Enlist E3	No	Moderate	•	•	•	•	Det	141	2	36
Local LS4415XF	4.4	RR2XF	No	Moderate	•	•	•	•	Ind	134	2	35
Local LS4506XS	4.5	RR2X	Yes	Slight	•	•	•	•	Ind	131	2	35
Local LS4517XFS	4.5	RR2XF	Yes	Slight	•	•	•	•	Ind	133	2	36
Local LS4606XFS	4.6	RR2XF	Yes	Moderate	Purple	Lt. Tawny	•	•	Ind	138	1	39
Local LS4707XF	4.9	RR2XF	No	Moderate	•	•	•	•	Ind	136	2	38
Local LS4795XS	4.7	RR2X	Yes	Severe	Purple	Tan	•	•	Ind	134	1	36
Local LS4805XFS	4.8	RR2XF	Yes	Severe	White	Lt. Tawny	•	•	Ind	141	1	35
Local LS4806XS	4.8	RR2X	Yes	Moderate	Purple	Tan	•	•	Ind	139	1	38
Local LS4919XFS	4.9	RR2XF	Yes	Moderate	•	•	•	•	Ind	140	1	36
Local LS5009XS	5.0	RR2X	Yes	Severe	Purple	Lt. Tawny	•	•	Ind	140	3	40
Local LS5119XF	5.1	RR2XF	No	Moderate	•	•	•	•	Det	139	2	37
Local LS5418XFS	5.4	RR2XF	Yes	Slight	•	•	•	•	Det	147	2	44
Local LS5614XF	5.6	RR2XF	No	Severe	•	•	•	•	Det	141	1	30
NK 42-T5XF	4.2	RR2XF	No	Severe	Purple	Lt. Tawny	Brown	Black	Ind	132	1	34
NK 43-V8XF	4.3	RR2XF	No	Slight	Purple	Lt. Tawny	Brown	Black	Ind	132	2	38
NK 44-J4XFS	4.4	RR2XF	Yes	Slight	White	Gray	Brown	Buff	Ind	130	1	35
NK 45-P9XF	4.5	RR2XF	No	Slight	Purple	Lt. Tawny	Brown	Black	Ind	134	1	34
NK 45-V9E3	4.5	Enlist E3	No	Slight	White	Gray	Brown	Buff	Ind	133	3	33
NK S44-C7X	4.4	RR2X	No	Slight	Purple	Gray	Tan	Imp Black	Ind	133	1	35
NK S45-J3X	4.5	RR2X	No	Moderate	Purple	Gray	Brown	Imp Black	Ind	129	2	34
NK S46-E3S	4.6	Enlist E3	Yes	Moderate	Purple	Gray	Brown	Imp Black	Ind	135	1	38
NK S47-Y9X	4.7	RR2X	No	Slight	Purple	Lt. Tawny	Brown	Black	Ind	138	1	36
NK S48-2E3S	4.8	Enlist E3	Yes	Severe	Purple	Gray	Brown	Imp Black	Ind	133	1	33
NK S49-F5X	4.9	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	136	1	36
NK S51-E3	5.1	Enlist E3	No	Moderate	White	Gray	Brown	Buff	Ind	141	2	37
Pioneer P47A64X	4.7	RR2X	No	Severe	Purple	Gray	Brown	Imp Black	Ind	137	2	41
Pioneer P48A60X	4.8	RR2X	No	Moderate	Purple	Lt. Tawny	Brown	Black	Ind	135	1	36
Progeny P4431E3	4.4	Enlist E3	No	Slight	White	Gray	Brown	Buff	Ind	129	2	34
Progeny P4501XFS	4.5	RR2XF	Yes	Moderate	Purple	Lt. Tawny	Brown	Black	Ind	135	3	40
Progeny P4505RXS	4.5	RR2X	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	135	2	38
Progeny P4521XFS	4.5	RR2XF	Yes	Slight	White	Gray	Brown	Buff	Ind	137	2	37
Progeny P4541E3S	4.5	Enlist E3	Yes	Moderate	Purple	Gray	Tan	Imp Black	Ind	136	1	36
Progeny P4604XFS	4.6	RR2XF	Yes	Slight	Purple	Lt. Tawny	Brown	Black	Ind	137	1	40
Progeny P4775E3S	4.7	Enlist E3	Yes	Slight	Purple	Gray	Brown	Imp Black	Ind	137	1	39
Progeny P4806XFS	4.8	RR2XF	Yes	Moderate	White	Lt. Tawny	Brown	Black	Ind	139	1	36
Progeny P4816RX	4.8	RR2X	No	Severe	Purple	Lt. Tawny	Tan	Black	Ind	140	1	36
Progeny P4821RX	4.8	RR2X	No	Severe	Purple	Tawny	Brown	Black	Ind	141	2	37
Progeny P4921XFS	4.9	RR2XF	Yes	Severe	White	Lt. Tawny	Brown	Black	Ind	139	1	37
Progeny P4931E3S	4.9	Enlist E3	Yes	Moderate	White	Gray	Brown	Buff	Ind	140	2	35
Progeny P4970RX	4.9	RR2X	No	Moderate	Purple	Lt. Tawny	Tan	Black	Ind	144	1	38
Progeny P5003XF	5.0	RR2X	No	Slight	White	Lt. Tawny	Tan	Black	Ind	138	3	37
Progeny P5121E3S	5.1	Enlist E3	Yes	Severe	Purple	Gray	Tan	Imp Black	Ind	139	3	34
Progeny P5411XF	5.4	RR2XF	•	Severe	•	•	•	•	•	138	1	31
Progeny P5521E3	5.5	Enlist E3	No	Moderate	Purple	Gray	Tan	•	Ind	147	3	43

Key Codes for All Tables

“ • ” Information Not Available

¹LMCRS = Lon Mann Cotton Research Station, Marianna, AR
NEC = Newport Extension Center, Newport, AR
NREC = Northeast Research and Extension Center, Keiser, AR
PTRS = Pine Tree Research Station, Colt, AR
RREC = Rice Research and Extension Center, Stuttgart, AR
RRS = Rohwer Research Station, Rohwer AR
VRS = Vegetable Research Station, Kibler, AR

²Non-Xtend soybean varieties showed symptoms consistent with injury attributed to off-target movement of dicamba.

³The Rohwer location received 19.22 inches of rainfall between June 8th and 9th.

⁴ANOVA of Non-Xtend varieties (Conv., RR1, and Enlist E3)

⁵ANOVA of Xtend varieties (Xtend and XtendFlex)

⁶ Soybean varieties with Xtend/XtendFlex technologies were tested separately from varieties with all other herbicide technologies.

⁷Average Yield from 2020 and 2021.

⁸Yield mean (bu/ac) from Keiser, Kibler, Marianna, Newport, Pine Tree, Rohwer, and Stuttgart Full-Season irrigated tests.

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. 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. 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).

¹¹Stem Canker Reaction-10 plants per plot were inoculated with infested toothpicks, replicated 3 times. Ratings were based on the greatest level of disease observed using a R = no stem canker found and S = stem canker found.

¹²Frogeye Leaf Spot, Septoria Brown Spot, Cercospora Leaf Blight, and Target Spot values represent a visual estimate of the disease severity.

¹³Chloride Reaction – Excluder varieties accumulate chloride and restrict it to the roots. Includer varieties accumulate chloride throughout the plants. Trifoliolate-leaf samples were collected from each soybean variety at the Rohwer Research Station in 2021. Based on leaf-CL concentrations, varieties were rated as Strong Excluder, Moderate Excluder, Mixed, Moderate Includer, and Strong Includer. Chloride levels should be determined by irrigation water tests and/or plant tissue analysis.

¹⁴Herbicide Technologies: Conv. = Conventional; RR1= RoundUp Ready; RR2X = RoundUp Ready 2 Xtend; and RR2XF = RoundUp Ready 2 XtendFlex.

¹⁵Metribuzin Ratings - Slight = Some symptoms observed in the green house but unlikely to injure soybean plants in the field at a 1X rate if applied to the correct soil texture at the appropriate soil pH. It is recommended that these soybean varieties be planted if metribuzin is intended to be applied. Moderate = Likely to observe some injury in the field, even when applying a premix product that contains a lower rate of metribuzin. Severe = Do not spray any formulation or rate of metribuzin if these varieties are planted as severe injury and yield loss would be expected.

¹⁶Soybean growth habit; Ind = Indeterminate; Det = Determinate; Std = Semi-determinate.

¹⁷Days to Maturity represent the average number of days (Keiser Irrigated, Pine Tree Irrigated, Rohwer Irrigated, and Stuttgart Irrigated Tests) from planting until 80% of the soybeans in the plot were thought to be mature.

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¹⁸Soybean lodging is an average of data from the Keiser Irrigated, Kibler Irrigated, Marianna Irrigated, Newport Irrigated, Pine Tree Irrigated, Rohwer Irrigated, and Stuttgart 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.

¹⁹Soybean plant height reported in inches and is an average of data from the Keiser Irrigated, Pine Tree Irrigated, Rohwer Irrigated, and Stuttgart Irrigated Tests.