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Arkansas Soybean Performance Tests 2021

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Arkansas

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DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

ARKANSAS CROP VARIETY IMPROVEMENT PROGRAM

ARKANSAS AGRICULTURAL EXPERIMENT STATION

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Report Statement

This Arkansas Agricultural Experiment Station (AAES) publication summarizes variety test research conducted by the Arkansas Crop Variety Improvement Program. Variety test information presented here furthers the AAES mission of conducting research that benefits the citizens of Arkansas by expanding agricultural profitability and strengthening local and state economies. This information is not a recommendation or an endorsement of any product by the University of Arkansas System Division of Agriculture or AAES. Recommendations interpreted from this information are made and presented by the Arkansas Cooperative Extension Service.

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ARKANSAS CROP VARIETY IMPROVEMENT PROGRAM

Contents

Arkansas Soybean Performance Tests[1] 2021

J.F. Carlin,[2] R.B. Morgan,[2] and R.D. Bond[2]

Introduction

Soybean variety and strain performance tests are conducted each year in Arkansas by the University of Arkansas System Division of Agriculture's Arkansas Crop Variety Improvement Program. The tests provide information to companies developing varieties and/or marketing seed within the state, and aid the Arkansas Cooperative Extension Service in formulating variety recommendations for soybean producers.

Methods

The 2021 Arkansas Performance Tests contained 151 soybean varieties and strains and were conducted at the Northeast Research and Extension Center (NEREC) at Keiser, the Vegetable Research Station (VRS) near Kibler, the Lon Mann Cotton Research Station (LMCRS) near Marianna, the Jackson County Extension Center (JCEC) near Newport, the Pine Tree Research Station (PTRS) near Colt, the Rohwer Research Station (RRS) near Rohwer, and the Rice Research and Extension Center (RREC) near Stuttgart. A test location map can be found on the next to the last page. Entries containing any herbicide technology trait(s) were eligible to enter. To facilitate field operations and to allow for fairer comparisons between varieties and strains, entries were divided into three maturity ranges based on information provided by the originating company or institution; they are RM 4.0–4.4, RM 4.5–4.9, and RM 5.0–5.9. Soybean varieties with Xtend technology were tested separately from varieties with all other herbicide technologies at the Keiser location only.

Flood Tolerance Tests were conducted at the PTRS, RRS, and RREC locations. Tests were divided into RM 4.3–4.9, and RM 5.0–5.6. Tests were arranged as a split block design with 3 non-flooded and 3 flooded replications. The flood treatment was applied at vegetative growth stage 2–4 (V2–V4) and held for five consecutive days then levees were broken to allow for drainage. For the remainder of the season, tests were managed in a furrow-irrigated production system. Plant heights were recorded at maturity on each replication and plots were harvested for grain yield.

Within each test, entries were arranged as a randomized complete block design with three replications. Plots in all tests were 2 or 4 rows wide depending on location and 20–21 feet in length. Seeds were packaged for recommended planting rates and were planted with a cone planter. Specific location and cultural practice information accompany each table.

All rows of each 2-row plot and the two interior rows of each 4-row plot were harvested for yield determination. Percent moisture was recorded for all harvested seed, and plot weights were adjusted to 13% moisture. Plot weights of all tests were converted to yield in bushels per acre (bu./ac). Statistical analysis for grain yield (bu./ac) was conducted using Duncan's Multiple Range Test (MRT) with GENOVIX® (AGRONOMIX Software).

Plots were visually rated for shattering and lodging. Shattering ratings were carried out on border rows according to the following scale:

1. no shattering
2. 1–3% shattered
3. 4–8% shattered
4. 9–19% shattered
5. 20% or more shattered

Lodging ratings were typically recorded on a scale from 1 to 5 based on the following criteria:

1. Almost all plants erect.
2. Either all plants leaning slightly or a few plants down.
3. Either all plants leaning moderately, or 25–50% of the plants down.
4. Either all plants leaning considerably, or 50-80% of the plants down.
5. All plants down badly.

Average plant height was recorded in inches for each plot in the first replication of each test.

Variety Testing Website

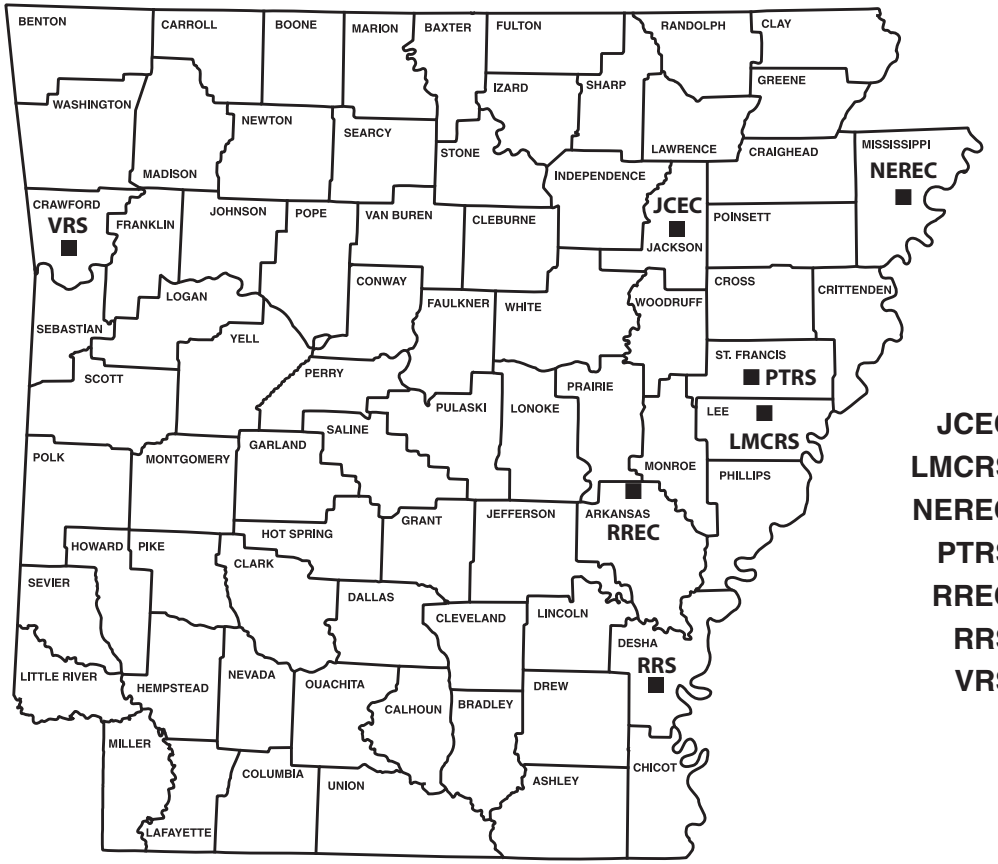
This report and other information about variety testing for corn, cotton, grain sorghum, rice, wheat, and soybean can be found at https://aaes.uada.edu/variety-testing
Disease ratings that do not appear in this or other reports may also be found on this website.

[1] Use of products and trade names in this report does not constitute a guarantee or warranty of the products named and does not signify that those products are approved to the exclusion of comparable products.

[2] Program Director, Program Technician, and Program Associate, respectively, University of Arkansas System Division of Agriculture, Arkansas Agricultural Experiment Station, Fayetteville.

Table 1. Summary of Arkansas Soybean Performance Testing Locations, 2021.

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



Test Locations 2021

JCEC - **Jackson County Extension Center, Newport, Arkansas**
LMCRS - **Lon Mann Cotton Research Station, Marianna**
NEREC - **Northeast Research and Extension Center, Keiser, Arkansas**
PTRS - **Pine Tree Research Station, Colt, Arkansas**
RREC - **Rice Research and Extension Center, Stuttgart, Arkansas**
RRS - **Rohwer Research Station, Rohwer, Arkansas**
VRS - **Vegetable Research Station, Kibler, Arkansas**

Table 2. Yields of Early Planted Maturity Group IV Soybean Varieties in Arkansas Performance Tests, 2021.[a]

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Rohwer[b,c]	Stuttgart[b]	Mean
			(bu./ac)	(bu./ac)	(bu./ac)
AgriGold G4615XF	XtendFlex	4.6	68.5	69.9	69.2
AgriGold G4813XF	XtendFlex	4.8	68.7	63.9	66.3
AgriGold G4820RX	Xtend	4.8	69.3	68.4	68.8
Amp 4448X	Xtend	4.4	77.7	60.7	69.2
Amp 4690XF	XtendFlex	4.6	75.4	71.7	73.5
Amp 4850XF	XtendFlex	4.8	62.7	67.3	65.0
Amp 4950X	Xtend	4.9	85.5	63.0	74.2
Armor 44-D49	Xtend	4.4	64.8	74.7	69.7
Armor 46-D09	Xtend	4.6	73.8	68.9	71.4
Armor 46-F13	XtendFlex	4.6	73.1	72.1	72.6
Armor 48-D03	Xtend	4.8	75.6	80.2	77.9
Armor 48-D25	Xtend	4.8	68.6	76.7	72.7
Armor 48-F22	XtendFlex	4.8	72.8	58.4	65.6
Asgrow AG42XF0	XtendFlex	4.2	65.0	73.1	69.1
Asgrow AG43XF2	XtendFlex	4.3	64.0	68.7	66.3
Asgrow AG45XF0	Xtend	4.5	65.3	72.6	69.0
Asgrow AG47XF0	XtendFlex	4.7	71.4	63.5	67.5
Asgrow AG48XF0	XtendFlex	4.8	59.3	64.4	61.8
Asgrow AG48XF2	XtendFlex	4.8	70.2	77.7	74.0
Axis 4611ES	Enlist	4.6	79.4	69.2	74.3
Axis 4641XFS	XtendFlex	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	Xtend	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	XtendFlex	4.8	68.3	64.0	66.2
Delta Grow DG48X45	Xtend	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	Xtend	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	XtendFlex	4.6	77.6	73.1	75.3
Dyna-Gro S46XS60	Xtend	4.6	72.6	78.3	75.5
Dyna-Gro S48XF61S	XtendFlex	4.8	61.6	63.0	62.3
Dyna-Gro S48XT40	Xtend	4.8	83.8	77.0	80.4
Dyna-Gro S48XT90	Xtend	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	Xtend	4.5	72.7	73.6	73.1
Local LS4606XFS	XtendFlex	4.6	76.5	73.6	75.1
Local LS4795XS	Xtend	4.7	77.2	78.8	78.0
Local LS4805XFS	XtendFlex	4.8	75.2	68.9	72.0
Local LS4806XS	Xtend	4.8	82.1	81.9	82.0
NK 42-T5XF	XtendFlex	4.2	69.0	65.0	67.0
NK 43-V8XF	XtendFlex	4.3	70.4	70.1	70.2
NK 44-J4XFS	XtendFlex	4.4	65.3	73.6	69.5

Continued

Table 2. Yields of Early Planted Maturity Group IV Soybean Varieties in Arkansas Performance Tests, 2021, continued.[a]

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Rohwer[b,c]	Stuttgart[b]	Mean
			(bu./ac)	(bu./ac)	(bu./ac)
NK 45-P9XF	XtendFlex	4.5	54.0	66.7	60.4
NK 45-V9E3	Enlist	4.5	68.1	70.2	69.1
NK S44-C7X	Xtend	4.4	57.5	71.3	64.4
NK S45-J3X	Xtend	4.5	49.7	70.4	60.0
NK S46-E3S	Enlist	4.6	79.5	74.7	77.1
NK S47-Y9X	Xtend	4.7	77.8	75.5	76.7
NK S48-2E3S	Enlist	4.8	50.4	76.0	63.2
NK S49-F5X	Xtend	4.9	72.9	77.0	75.0
Pioneer P47A64X	Xtend	4.7	91.6	77.2	84.4
Pioneer P48A60X	Xtend	4.4	69.2	77.5	73.3
Progeny P4431E3	Enlist E3	4.4	65.2	65.9	65.6
Progeny P4501XFS	XtendFlex	4.5	77.9	75.7	76.8
Progeny P4505RXS	Xtend	4.5	64.2	78.7	71.5
Progeny P4604XFS	XtendFlex	4.6	71.6	75.2	73.4
Progeny P4775E3S	Enlist	4.7	97.6	75.6	86.6
Progeny P4806XFS	XtendFlex	4.8	75.8	68.9	72.3
Progeny P4816RX	Xtend	4.8	70.3	71.4	70.9
Progeny P4821RX	Xtend	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	XtendFlex	4.6	84.4	73.5	79.0
USG 7481XF	XtendFlex	4.8	69.4	78.7	74.1
USG 7489XT	Xtend	4.8	72.9	67.9	70.4
USG 7491XFS	XtendFlex	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)[d]	9.3	5.7	•
		LSD (Xtend)[e]	10.3	9.0	•

[a] Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.

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

[c] The Rohwer location received 19.22 inches of rainfall between 8–9 June.

[d] ANOVA of Non-Xtend varieties (Conv., RR1, Enlist E3).

[e] ANOVA of Xtend varieties (Xtend, XtendFlex).

Table 3. Yields of Non-Xtend Early Planted Maturity Group IV Soybean Varieties in Arkansas Performance Tests, 2021.[a]

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Rohwer[b,c]***	Stuttgart[b]***
			(bu./ac)	(bu./ac)
Axis 4611ES	Enlist	4.6	79.4	69.2
Delta Grow DG45E10	Enlist E3	4.4	59.3	73.1
Delta Grow DG46E10	Enlist E3	4.6	69.1	65.6
Delta Grow DG47E20/STS	Enlist E3	4.7	90.8	68.6
Delta Grow DG48E49/STS	Enlist E3	4.8	69.0	69.3
Delta Grow DG48E59	Enlist E3	4.8	67.1	76.9
Delta Grow DG49E20	Enlist E3	4.9	71.1	71.7
Delta Grow DG49E90	Enlist E3	4.9	84.6	74.8
Dyna-Gro S45ES10	Enlist E3	4.5	66.8	73.3
Dyna-Gro S46ES91	Enlist E3	4.6	85.3	72.2
Local IS4324E3	Enlist E3	4.3	46.8	53.4
Local IS4684E3S	Enlist E3	4.6	84.1	69.6
NK 45-V9E3	Enlist	4.5	68.1	70.2
NK S46-E3S	Enlist	4.6	79.5	74.7
NK S48-2E3S	Enlist	4.8	50.4	76.0
Progeny P4431E3	Enlist	4.4	65.2	65.9
Progeny P4775E3S	Enlist	4.7	97.6	75.6
R13- 14635RR:0010	RR1	4.6	79.6	68.6
R15-2422	Conv.	4.7	69.8	63.9
R16-253	Conv.	4.6	62.6	67.9
R18-14142	Conv.	4.6	76.5	67.1
R18-14147	Conv.	4.3	83.2	63.2
R18-14229	Conv.	4.3	70.7	68.3
R18-14272	Conv.	4.6	82.5	72.9
R18-14287	Conv.	4.3	71.8	69.1
R18-14502	Conv.	4.9	82.3	74.9
R18-14753	Conv.	4.6	85.9	67.5
R18C-13283	Conv.	4.6	74.3	66.8
R18C-1450	Conv.	4.3	40.9	45.5
S16-7922C	Conv.	4.9	95.1	71.2
S17-2243C	Conv.	4.5	84.7	65.1
UA46i20C	Conv.	4.6	65.7	71.0
		Grand Mean	73.3	68.7
		LSD	9.3	5.7
		C.V.	9.3	6.1
		P-value	0.000	0.000

[a] Rohwer = Rohwer Research Station, Rohwer, Ark.
Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.

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

[c] The Rohwer location received 19.22 inches of rainfall between 8–9 June.

*** Significant at the 0.001 probability level.

Table 4. Yields of Xtend Early Planted Maturity Group IV Soybean Varieties in Arkansas Performance Tests, 2021.[a]

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Rohwer[b,c]***	Stuttgart[b]***
			(bu./ac)	(bu./ac)
AgriGold G4615XF	XtendFlex	4.6	68.5	69.9
AgriGold G4813XF	XtendFlex	4.8	68.7	63.9
AgriGold G4820RX	Xtend	4.8	69.3	68.4
Amp 4448X	Xtend	4.4	77.7	60.7
Amp 4690XF	XtendFlex	4.6	75.4	71.7
Amp 4850XF	XtendFlex	4.8	62.7	67.3
Amp 4950X	Xtend	4.9	85.5	63.0
Armor 44-D49	Xtend	4.4	64.8	74.7
Armor 46-D09	Xtend	4.6	73.8	68.9
Armor 46-F13	XtendFlex	4.6	73.1	72.1
Armor 48-D03	Xtend	4.8	75.6	80.2
Armor 48-D25	Xtend	4.8	68.6	76.7
Armor 48-F22	XtendFlex	4.8	72.8	58.4
Asgrow AG42XF0	XtendFlex	4.2	65.0	73.1
Asgrow AG43XF2	XtendFlex	4.3	64.0	68.7
Asgrow AG45XF0	XtendFlex	4.5	65.3	72.6
Asgrow AG47XF0	XtendFlex	4.7	71.4	63.5
Asgrow AG48XF0	XtendFlex	4.8	59.3	64.4
Asgrow AG48XF2	XtendFlex	4.8	70.2	77.7
Axis 4641XFS	XtendFlex	4.6	73.9	69.9
Delta Grow DG46X65/STS	Xtend	4.6	79.6	66.9
Delta Grow DG48F20	XtendFlex	4.8	68.3	64.0
Delta Grow DG48X45	Xtend	4.8	62.6	65.2
Dyna-Gro S43XS70	Xtend	4.3	74.0	68.4
Dyna-Gro S46XF31S	XtendFlex	4.6	77.6	73.1
Dyna-Gro S46XS60	Xtend	4.6	72.6	78.3
Dyna-Gro S48XF61S	XtendFlex	4.8	61.6	63.0
Dyna-Gro S48XT40	Xtend	4.8	83.8	77.0
Dyna-Gro S48XT90	Xtend	4.8	79.6	80.0
Local LS4506XS	Xtend	4.5	72.7	73.6
Local LS4606XFS	XtendFlex	4.6	76.5	73.6
Local LS4795XS	Xtend	4.7	77.2	78.8
Local LS4805XFS	XtendFlex	4.8	75.2	68.9
Local LS4806XS	Xtend	4.8	82.1	81.9
NK 42-T5XF	XtendFlex	4.2	69.0	65.0
NK 43-V8XF	XtendFlex	4.3	70.4	70.1
NK 44-J4XFS	XtendFlex	4.4	65.3	73.6
NK 45-P9XF	XtendFlex	4.5	54.0	66.7
NK S44-C7X	Xtend	4.4	57.5	71.3
NK S45-J3X	Xtend	4.5	49.7	70.4

Continued

Table 4. Yields of Xtend Early Planted Maturity Group IV Soybean Varieties in Arkansas Performance Tests, 2021, continued.[a]

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Rohwer[b,c]***	Stuttgart[b]***
			(bu./ac)	(bu./ac)
NK S47-Y9X	Xtend	4.7	77.8	75.5
NK S49-F5X	Xtend	4.9	72.9	77.0
Pioneer P47A64X	Xtend	4.7	91.6	77.2
Pioneer P48A60X	Xtend	4.4	69.2	77.5
Progeny P4501XFS	XtendFlex	4.5	77.9	75.7
Progeny P4505RXS	Xtend	4.5	64.2	78.7
Progeny P4604XFS	XtendFlex	4.6	71.6	75.2
Progeny P4806XFS	XtendFlex	4.8	75.8	68.9
Progeny P4816RX	Xtend	4.8	70.3	71.4
Progeny P4821RX	Xtend	4.8	75.2	72.1
USG 7461XFS	XtendFlex	4.6	84.4	73.5
USG 7481XF	XtendFlex	4.8	69.4	78.7
USG 7489XT	Xtend	4.8	72.9	67.9
USG 7491XFS	XtendFlex	4.9	72.5	67.1
		Grand Mean	71.7	70.9
		LSD	10.3	9.0
		C.V.	10.7	9.3
		P-value	0.000	0.000

[a] Rohwer = Rohwer Research Station, Rohwer, Ark.
Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.

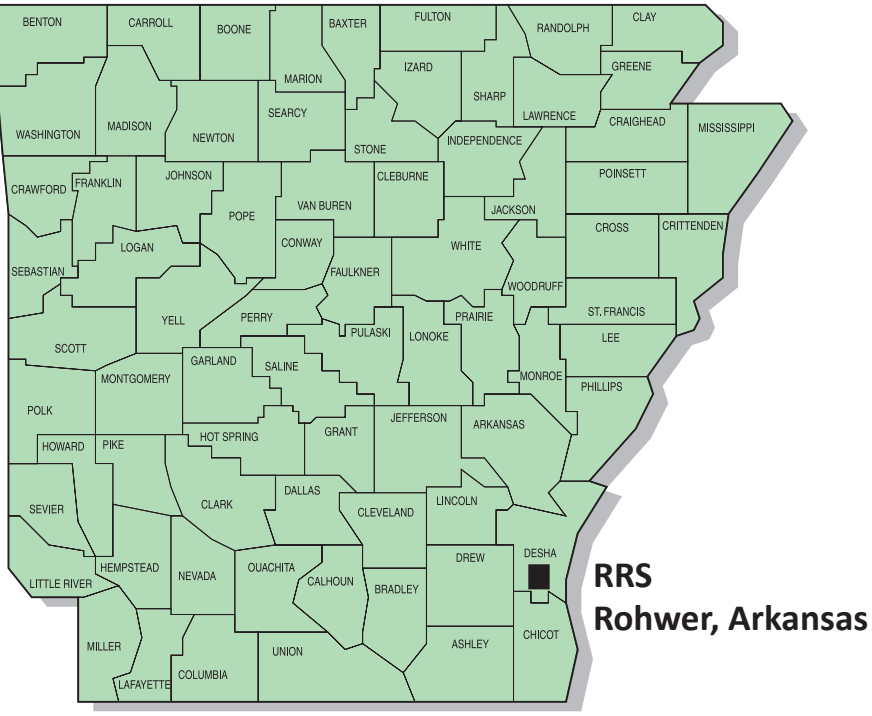
[b] Non-Xtend soybean varieties showed symptoms consistent with injury attributed to off-target movement of dicamba.

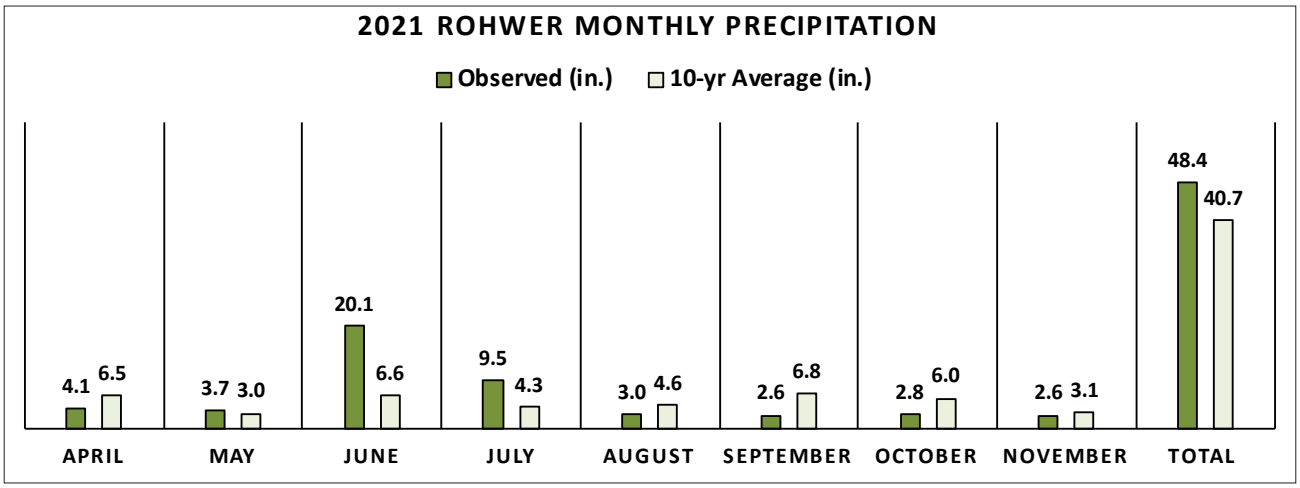
[c] The Rohwer location received 19.22 inches of rainfall between 8–9 June.

*** Significant at the 0.001 probability level.

Rohwer: Rohwer Research Station (RRS)

Early Planted Irrigated Soybean Varieties and Strains, 2021





Soil Series
Sharkey, desha silt loam
Previous Crop
Corn
Row Spacing
38 in.
Planting Date
April 6
Harvest Date
Sept. 20
Irrigation Dates
June 25; July 6; Aug. 6, 17

Fertilizer Application(s)	Date
66 lb K_2O	April 20
Herbicide Application(s)	**Date**
2,4-D 1 qt Roundup® 1 qt	March 7
Dual® 1.33 pt Prowl® 1 qt	April 6
Fomesafen 1.5 pt	June 2
Zidua® 3 oz	June 17
Blazer® 2 pt Basagran® 1 pt Select® 1 pt	June 22
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on May 15th. The Rohwer location received 19.22 inches of rainfall between June 8th and 9th.	

Table 5. Performance of Early Planted Irrigated Soybean Varieties and Strains, Rohwer Research Station, Rohwer, Ark., 2021.

Variety/Experimental Line	2021	Maturity Date	Lodging Score[a]	Plant Height
	(bu./ac)			(in.)
Progeny P4775E3S	97.6	9/10	1	28
S16-7922C	95.1	9/18	1	27
Pioneer P47A64X	91.6	9/8	1	31
Delta Grow DG47E20/STS	90.8	9/11	1	29
R18-14753	85.9	9/6	2	36
Amp 4950X	85.5	9/13	1	28
Dyna-Gro S46ES91	85.3	9/8	1	29
S17-2243C	84.7	9/8	1	31
Delta Grow DG49E90	84.6	9/15	4	39
USG 7461XFS	84.4	9/8	2	30
Local IS4684E3S	84.1	9/6	1	26
Dyna-Gro S48XT40	83.8	9/10	1	26
R18-14147	83.2	9/7	1	31
R18-14272	82.5	9/10	2	34
R18-14502	82.3	9/18	3	41
Local LS4806XS	82.1	9/12	1	23
Delta Grow DG46X65/STS	79.6	9/12	1	22
R13- 14635RR:0010	79.6	9/18	3	40
Dyna-Gro S48XT90	79.6	9/8	1	27
NK S46-E3S	79.5	9/10	1	29
Axis 4611ES	79.4	9/10	1	27
Progeny P4501XFS	77.9	9/12	1	26
NK S47-Y9X	77.8	9/12	1	23
Amp 4448X	77.7	9/6	1	24
Dyna-Gro S46XF31S	77.6	9/5	1	26
Local LS4795XS	77.2	9/9	1	24
Local LS4606XFS	76.5	9/8	1	27
R18-14142	76.5	9/12	3	28
Progeny P4806XFS	75.8	9/13	1	28
Armor 48-D03	75.6	9/13	1	24
Amp 4690XF	75.4	9/5	1	27
Progeny P4821RX	75.2	9/15	2	24
Local LS4805XFS	75.2	9/15	1	24
R18C-13283	74.3	9/5	1	24
Dyna-Gro S43XS70	74.0	9/8	1	24
Axis 4641XFS	73.9	9/9	1	24
Armor 46-D09	73.8	9/5	1	21
Armor 46-F13	73.1	9/6	1	25
NK S49-F5X	72.9	9/12	1	20
USG 7489XT	72.9	9/13	1	20
Armor 48-F22	72.8	9/13	1	25
Local LS4506XS	72.7	9/10	1	24
Dyna-Gro S46XS60	72.6	9/10	1	20
USG 7491XFS	72.5	9/15	1	25
R18-14287	71.8	9/5	2	30
Progeny P4604XFS	71.6	9/9	1	26
Asgrow AG47XF0	71.4	9/13	1	25
Delta Grow DG49E20	71.1	9/15	1	23
R18-14229	70.7	9/4	1	28
NK 43-V8XF	70.4	9/1	2	26

Continued

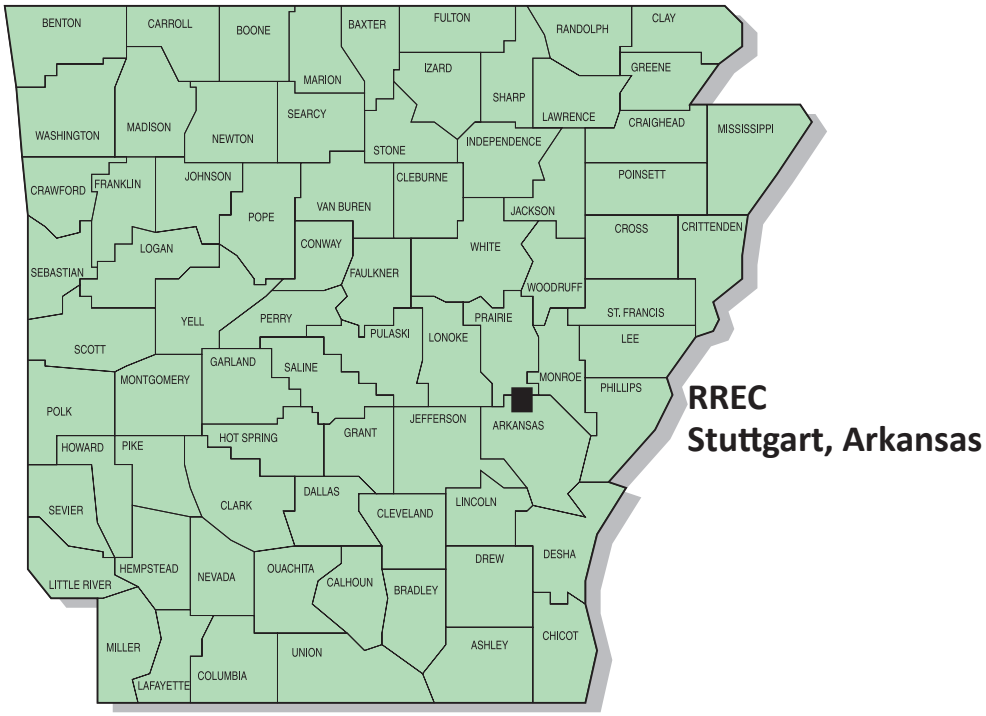
Table 5. Performance of Early Planted Irrigated Soybean Varieties and Strains, Rohwer Research Station, Rohwer, Ark., 2021, continued.

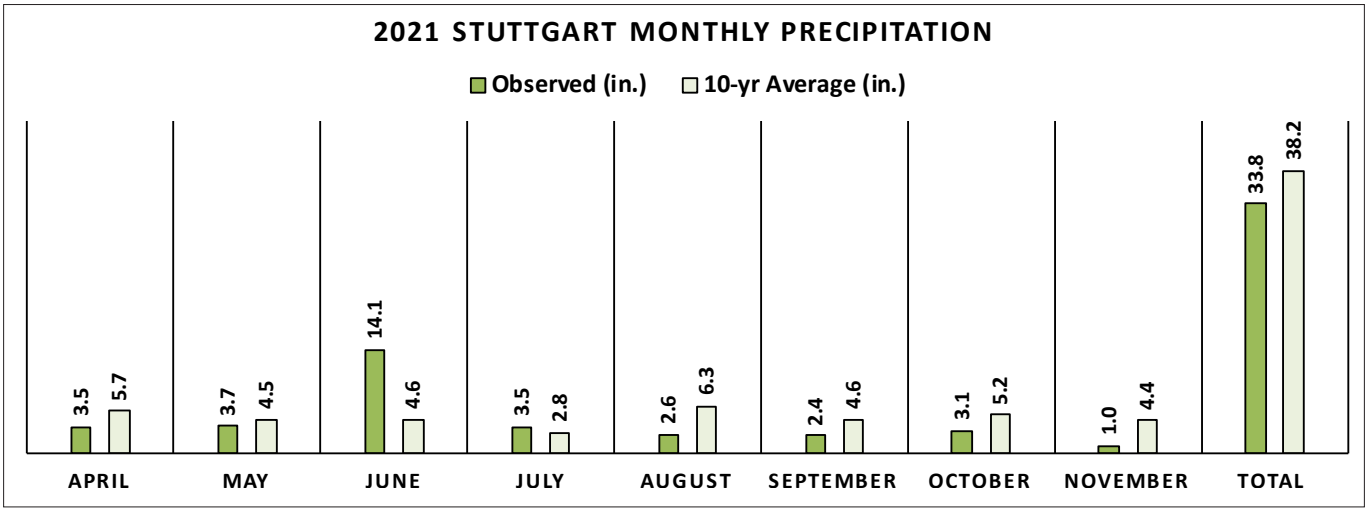
Variety/Experimental Line	2021	Maturity Date	Lodging Score[a]	Plant Height
	(bu./ac)			(in.)
Progeny P4816RX	70.3	9/16	1	22
Asgrow AG48XF2	70.2	9/13	1	21
R15-2422	69.8	9/14	8	40
USG 7481XF	69.4	9/11	1	24
AgriGold G4820RX	69.3	9/12	1	25
Pioneer P48A60X	69.2	9/8	1	22
Delta Grow DG46E10	69.1	9/4	1	25
NK 42-T5XF	69.0	9/8	1	21
Delta Grow DG48E49/STS	69.0	9/4	1	27
AgriGold G4813XF	68.7	9/15	1	24
Armor 48-D25	68.6	9/13	1	23
AgriGold G4615XF	68.5	9/4	1	25
Delta Grow DG48F20	68.3	9/15	1	23
NK 45-V9E3	68.1	9/1	1	27
Delta Grow DG48E59	67.1	9/5	1	23
Dyna-Gro S45ES10	66.8	9/4	1	24
UA46i20C	65.7	9/12	1	25
Asgrow AG45XF0	65.3	9/11	1	22
NK 44-J4XFS	65.3	9/11	1	22
Progeny P4431E3	65.2	9/3	1	22
Asgrow AG42XF0	65.0	9/3	1	27
Armor 44-D49	64.8	9/6	1	24
Progeny P4505RXS	64.2	9/11	1	22
Asgrow AG43XF2	64.0	9/5	1	22
Amp 4850XF	62.7	9/12	1	25
Delta Grow DG48X45	62.6	9/15	1	21
R16-253	62.6	9/12	1	24
Dyna-Gro S48XF61S	61.6	9/13	1	25
Delta Grow DG45E10	59.3	9/5	1	20
Asgrow AG48XF0	59.3	9/4	1	24
NK S44-C7X	57.5	9/6	1	20
NK 45-P9XF	54.0	9/6	1	20
NK S48-2E3S	50.4	9/6	1	20
NK S45-J3X	49.7	9/5	1	18
Local IS4324E3	46.8	8/29	1	21
R18C-1450	40.9	8/30	1	21
Grand Mean	72.3	9/9	1	26
LSD (5%)	9.9	•	1	3
C.V.	10.1	•	•	•

[a] 1 = 10° angle. 2 = 11–20° angle. 3 = 21–30° angle. 4 = 31–40° angle. 5 = 41–50° angle. 6 = 51–60° angle. 7 = 61–70° angle. 8 = 71–80° angle. 9 = 81–90° angle.

Stuttgart: Rice Research and Extension Center (RREC)

Early Planted Irrigated Soybean Varieties and Strains, 2021





Soil Series
Dewitt silt loam
Previous Crop
Soybean
Row Spacing/pH
30 in./5.9
Planting Date
April 13
Irrigation Dates
June 27; July 9, 30; Aug. 12; Sept. 3

Harvest Date	
Sept. 27	
Fertilizer Application(s)	**Date**
54 lb P_2O_5 33 lb K_2O	April 5
Herbicide Application(s)	**Date**
Roundup® 1 qt Dual® 1.5 pt Select® 1 pt Storm® 1.5 pt First Rate® 0.3 oz	April 15 May 25 June 15
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on July 2.	

Table 6. Performance of Early Planted Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021.

Variety/Experimental Line	2021	Maturity Date	Plant Height
	(bu./ac)		(in.)
Local LS4806XS	81.9	9/12	25
Armor 48-D03	80.2	9/8	29
Dyna-Gro S48XT90	80.0	9/13	30
Local LS4795XS	78.8	9/8	26
USG 7481XF	78.7	9/9	29
Progeny P4505RXS	78.7	9/9	29
Dyna-Gro S46XS60	78.3	9/8	24
Asgrow AG48XF2	77.7	9/11	25
Pioneer P48A60X	77.5	9/7	27
Pioneer P47A64X	77.2	9/9	31
NK S49-F5X	77.0	9/7	24
Dyna-Gro S48XT40	77.0	9/9	28
Delta Grow DG48E59	76.9	9/9	27
Armor 48-D25	76.7	9/9	25
NK S48-2E3S	76.0	9/5	25
Progeny P4501XFS	75.7	9/9	30
Progeny P4775E3S	75.6	9/8	32
NK S47-Y9X	75.5	9/9	25
Progeny P4604XFS	75.2	9/8	28
R18-14502	74.9	9/10	35
Delta Grow DG49E90	74.8	9/13	39
Armor 44-D49	74.7	9/6	26
NK S46-E3S	74.7	9/8	30
Local LS4606XFS	73.6	9/6	28
Local LS4506XS	73.6	9/4	24
NK 44-J4XFS	73.6	9/4	25
USG 7461XFS	73.5	9/7	27
Dyna-Gro S45ES10	73.3	9/8	27
Asgrow AG42XF0	73.1	9/4	29
Delta Grow DG45E10	73.1	9/7	23
Dyna-Gro S46XF31S	73.1	9/7	29
R18-14272	72.9	9/9	35
Asgrow AG45XF0	72.6	9/5	24
Dyna-Gro S46ES91	72.2	9/8	29
Progeny P4821RX	72.1	9/12	26
Armor 46-F13	72.1	9/3	30
Delta Grow DG49E20	71.7	9/13	27
Amp 4690XF	71.7	9/4	29
Progeny P4816RX	71.4	9/13	26
NK S44-C7X	71.3	9/9	23
S16-7922C	71.2	9/14	28
UA46i20C	71.0	9/8	26
NK S45-J3X	70.4	9/7	22
NK 45-V9E3	70.2	9/9	26
NK 43-V8XF	70.1	9/9	29

Continued

Table 6. Performance of Early Planted Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021, continued.

Variety/Experimental Line	2021	Maturity Date	Plant Height
	(bu./ac)		(in.)
Axis 4641XFS	69.9	9/5	28
AgriGold G4615XF	69.9	9/2	26
Local IS4684E3S	69.6	9/8	28
Delta Grow DG48E49/STS	69.3	9/9	27
Axis 4611ES	69.2	9/9	29
R18-14287	69.1	9/7	33
Armor 46-D09	68.9	9/3	24
Local LS4805XFS	68.9	9/13	26
Progeny P4806XFS	68.9	9/13	25
Asgrow AG43XF2	68.7	9/6	25
Delta Grow DG47E20/STS	68.6	9/10	28
R13-14635RR:0010	68.6	9/24	40
Dyna-Gro S43XS70	68.4	9/6	25
AgriGold G4820RX	68.4	9/13	26
R18-14229	68.3	9/5	31
USG 7489XT	67.9	9/12	24
R16-253	67.9	9/7	28
R18-14753	67.5	9/11	36
Amp 4850XF	67.3	9/10	27
R18-14142	67.1	9/7	28
USG 7491XFS	67.1	9/13	27
Delta Grow DG46X65/STS	66.9	9/6	22
R18C-13283	66.8	9/7	25
NK 45-P9XF	66.7	9/9	24
Progeny P4431E3	65.9	9/6	26
Delta Grow DG46E10	65.6	9/7	26
Delta Grow DG48X45	65.2	9/15	24
S17-2243C	65.1	9/6	28
NK 42-T5XF	65.0	9/6	23
Asgrow AG48XF0	64.4	9/6	25
Delta Grow DG48F20	64.0	9/13	26
R15-2422	63.9	9/9	37
AgriGold G4813XF	63.9	9/12	24
Asgrow AG47XF0	63.5	9/12	26
R18-14147	63.2	9/8	34
Amp 4950X	63.0	9/15	27
Dyna-Gro S48XF61S	63.0	9/13	24
Amp 4448X	60.7	9/1	23
Armor 48-F22	58.4	9/13	26
Local IS4324E3	53.4	9/6	25
R18C-1450	45.5	9/3	23
Grand Mean	70.1	9/8	28
LSD (5%)	7.9	•	2.5
C.V.	8.3	•	•

Table 7. Yields of Early Maturity Group IV (RM 4.0–4.5) Soybean Varieties and Strains in Arkansas Performance tests, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser Non-Xtend[b,c]	Keiser Xtend[b,c]	Kibler	Marianna[c]	Pine Tree[c]	Rohwer[c,d]	Stuttgart[c]	Newport[c]	Stuttgart Non-Irrigated	Rohwer[c] Late-Planted	Irrigated Mean
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
Amp 4448X	Xtend	4.4	•	86.9	72.7	57.0	75.4	61.0	69.9	53.6	44.4	52.0	64.9
Armor 44-D49	Xtend	4.4	•	91.8	79.0	59.5	84.4	66.6	74.2	56.7	42.1	58.5	70.1
Armor 45-F81	XtendFlex	4.5	•	89.2	72.3	62.5	79.5	68.5	71.6	60.5	40.8	65.7	69.2
Asgrow AG42XF0	XtendFlex	4.2	•	80.6	66.4	60.9	78.2	65.7	67.0	51.8	41.3	46.0	65.0
Asgrow AG43XF2	XtendFlex	4.3	•	84.9	68.6	66.4	76.0	71.9	71.6	50.4	38.7	45.9	67.5
Asgrow AG45XF0	XtendFlex	4.5	•	86.9	73.1	63.7	80.4	66.8	70.8	50.0	40.1	41.8	67.5
Axis 4522XF	XtendFlex	4.5	•	85.9	71.3	58.2	82.7	69.1	71.1	56.3	43.7	52.1	68.1
Delta Grow DG45E10	Enlist E3	4.4	82.2	•	64.7	57.8	78.3	68.1	68.4	53.4	42.0	41.9	65.1
DONMARIO DM45X61	Xtend	4.5	•	88.4	77.1	59.2	89.9	67.8	73.0	51.4	42.3	54.8	69.8
Dyna-Gro S43XS70	Xtend	4.3	•	89.5	78.1	65.3	77.2	66.6	68.5	56.4	44.1	59.2	68.7
Dyna-Gro S45ES10	Enlist E3	4.5	73.3	•	64.2	58.8	71.6	63.8	72.9	58.0	41.1	50.8	64.9
Integra 74551NS	XtendFlex	4.5	•	85.3	73.9	58.0	85.9	60.0	72.3	50.7	45.7	56.2	66.8
Local IS4324E3	Enlist E3	4.3	84.3	•	62.6	65.3	75.6	63.0	66.5	57.6	44.0	37.6	65.1
Local LS4415XF	XtendFlex	4.4	•	89.0	77.2	58.7	79.1	66.2	73.1	63.9	41.3	53.3	69.7
Local LS4506XS	Xtend	4.5	•	86.0	68.1	58.2	76.6	59.8	71.1	58.3	36.0	47.3	65.4
Local LS4517XFS	XtendFlex	4.5	•	85.4	74.0	60.7	75.7	65.0	69.8	54.3	40.8	43.0	66.6
NK 42-T5XF	XtendFlex	4.2	•	87.0	69.2	63.1	81.4	73.6	68.9	56.5	38.5	49.7	68.8
NK 43-V8XF	XtendFlex	4.3	•	84.7	73.0	62.0	76.8	66.0	63.5	46.7	31.2	48.6	64.7
NK 44-J4XFS	XtendFlex	4.4	•	84.8	72.1	68.7	81.2	73.0	72.3	55.5	43.9	48.4	70.5
NK 45-P9XF	XtendFlex	4.5	•	90.7	69.8	61.6	73.9	68.4	73.1	54.5	41.2	49.6	66.9
NK 45-V9E3	Enlist E3	4.5	81.6	•	70.3	59.5	78.7	64.9	68.2	59.6	47.2	50.3	66.9
NK S44-C7X	Xtend	4.4	•	88.6	65.7	61.5	79.7	66.8	75.0	54.1	43.9	55.6	67.1
NK S45-J3X	Xtend	4.5	•	84.8	71.3	58.9	71.6	59.9	70.6	55.3	44.5	29.1	64.6
Progeny P4431E3	Enlist E3	4.4	71.9	•	64.1	52.5	61.1	61.1	64.7	49.9	39.6	44.7	58.9
Progeny P4501XFS	XtendFlex	4.5	•	85.9	74.2	54.1	82.5	60.4	70.0	56.2	48.0	49.9	66.2

Continued

Table 7. Yields of Early Maturity Group IV (RM 4.0–4.5) Soybean Varieties and Strains in Arkansas Performance tests, 2021, continued.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser Non-Xtend[b,c] (bu./ac)	Keiser Xtend[b,c] (bu./ac)	Kibler (bu./ac)	Marianna[c] (bu./ac)	Pine Tree[c] (bu./ac)	Rohwer[c,d] (bu./ac)	Stuttgart[c] (bu./ac)	Newport[c] (bu./ac)	Stuttgart Non-Irrigated (bu./ac)	Rohwer[c] Late-Planted (bu./ac)	Irrigated Mean (bu./ac)
Progeny P4505RXS	Xtend	4.5	•	92.3	73.4	60.2	82.8	69.4	74.3	46.3	42.2	53.2	67.7
Progeny P4521XFS	XtendFlex	4.5	•	89.0	77.2	54.2	72.6	62.6	70.7	56.9	41.5	49.9	65.7
Progeny P4541E3S	Enlist E3	4.5	76.4	•	69.1	56.6	71.7	60.6	67.4	50.6	39.8	35.6	62.7
R18-14147	Conv.	4.3	64.6	•	72.2	50.3	68.9	58.6	64.7	53.1	34.1	45.2	61.3
R18-14229	Conv.	4.3	69.2	•	65.3	50.9	71.3	62.1	64.3	54.9	41.0	53.5	61.5
R18-14287	Conv.	4.3	61.5	•	64.5	47.4	65.5	56.7	59.9	47.0	36.5	47.0	56.8
R18C-1450	Conv.	4.3	•	•	52.4	51.4	60.2	60.5	55.9	46.2	33.5	27.9	54.4
S17-2243C	Conv.	4.5	73.7	•	76.6	52.1	71.4	63.0	68.1	53.7	43.7	53.0	64.1
		Grand Mean	74.8	85.7	70.0	58.7	75.9	64.7	68.8	53.8	41.1	47.9	65.3
		LSD (5%)	4.0	3.9	7.8	4.2	7.1	4.9	4.0	6.0	4.0	6.2	•
		C.V.	3.8	3.3	8.2	5.2	6.9	5.5	4.2	8.2	7.2	9.4	•
		LSD (Non-Xtend)[e]	•	•	8.2	4.7	6.9	•	4.1	5.8	•	•	•
		LSD (Xtend)[f]	•	•	8.0	4.1	7.2	4.1	4.0	6.0	•	•	•

[a] Keiser = Northeast Research and Extension Center, Keiser, Ark.; Kibler = Vegetable Research Station, Alma, Ark.; Marianna = Lon Mann Cotton Research Station, Marianna, Ark.; Pine Tree = Pine Tree Research Station, Colt, Ark.; Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.; Newport = Jackson County Extension Center, Newport, Ark.; Stuttgart Non-Irrigated = Rice Research and Extension Center, Stuttgart, Ark.; Rohwer Late Planted = Rohwer Research Station, Rohwer, Ark.

[b] Soybean varieties with Xtend technologies were tested separately from varieties with all other herbicide technologies.

[c] Non-Xtend soybean varieties showed symptoms consistent with injury attributed to off-target movement of

[d] The Rohwer location received 19.22 inches of rainfall between 8–9 June.

[d] ANOVA of Non-Xtend varieties (Conv., RR1, Enlist E3).

[e] ANOVA of Xtend varieties (Xtend, XtendFlex).

Table 8. Yields of Non-Xtend Early Maturity Group IV Soybean Cultivars in Arkansas Performance Tests, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser[b,c]***	Kibler**	Marianna[c]***	Pine Tree[c]***	Rohwer[c,d]	Stuttgart[c]***	Newport[c]***
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
Delta Grow DG45E10	Enlist E3	4.4	82.2	64.7	57.8	78.3	68.1	68.4	53.4
Dyna-Gro S45ES10	Enlist E3	4.5	73.3	64.2	58.8	71.6	63.8	72.9	58.0
Local IS4324E3	Enlist E3	4.3	84.3	62.6	65.3	75.6	63.0	66.5	57.6
NK 45-V9E3	Enlist E3	4.5	81.6	70.3	59.5	78.7	64.9	68.2	59.6
Progeny P4431E3	Enlist E3	4.4	71.9	64.1	52.5	61.1	61.1	64.7	49.9
Progeny P4541E3S	Enlist E3	4.5	76.4	69.1	56.6	71.7	60.6	67.4	50.6
R18-14147	Conv.	4.3	64.6	72.2	50.3	68.9	58.6	64.7	53.1
R18-14229	Conv.	4.3	69.2	65.3	50.9	71.3	62.1	64.3	54.9
R18-14287	Conv.	4.3	61.5	64.5	47.4	65.5	56.7	59.9	47.0
R18C-1450	Conv.	4.3	•	52.4	51.4	60.2	60.5	55.9	46.2
S17-2243C	Conv.	4.5	73.7	76.6	52.1	71.4	63.0	68.1	53.7
		Grand Mean	74.8	66.2	55.8	71.3	62.2	65.6	53.6
		LSD	4.0	8.2	4.7	6.9	•	4.1	5.8
		C.V.	3.8	8.8	6.0	7.0	7.5	4.4	7.7
		P-value	0.000	0.017	0.000	0.000	0.308	0.000	0.004

[a] Keiser = Northeast Research and Extension Center, Keiser, Ark.; Kibler = Vegetable Research Station, Alma, Ark.; Marianna = Lon Mann Cotton Research Station, Marianna, Ark.; Pine Tree = Pine Tree Research Station, Colt, Ark.; Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.; Newport = Jackson County Extension Center, Newport, Ark.

[b] Soybean varieties with Xtend technologies were tested separately from varieties with all other herbicide technologies.

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

[d] The Rohwer location received 19.22 inches of rainfall 8–9 June.

** Significant at the 0.01 probability level

*** Significant at the 0.001 probability level

Table 9. Yields of Xtend Early Maturity Group IV Soybean Cultivars in Arkansas Performance Tests, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser[b,c]***	Kibler***	Marianna[c]***	Pine Tree[c]***	Rohwer[c,d]***	Stuttgart[c]***	Newport[c]***
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
Amp 4448X	Xtend	4.4	86.9	72.7	57.0	75.4	61.0	70.0	53.6
Armor 44-D49	Xtend	4.4	91.8	79.0	59.5	84.4	66.6	74.3	56.7
Armor 45-F81	XtendFlex	4.5	89.2	72.3	62.5	79.5	68.5	71.6	60.5
Asgrow AG42XF0	XtendFlex	4.2	80.6	66.4	60.9	78.2	65.7	67.9	51.8
Asgrow AG43XF2	XtendFlex	4.3	84.9	68.6	66.4	76.0	71.9	72.3	50.4
Asgrow AG45XF0	XtendFlex	4.5	86.9	73.1	63.7	80.4	66.8	71.1	50.0
Axis 4522XF	XtendFlex	4.5	85.9	71.3	58.2	82.7	69.1	71.6	56.3
DONMARIO DM45X61	Xtend	4.5	88.4	77.1	59.2	89.9	67.8	73.1	51.4
Dyna-Gro S43XS70	Xtend	4.3	89.5	78.1	65.3	77.2	66.6	68.9	56.4
Integra 74551NS	XtendFlex	4.5	85.3	73.9	58.0	85.9	60.0	73.0	50.7
Local LS4415XF	XtendFlex	4.4	89.0	77.2	58.7	79.1	66.2	73.1	63.9
Local LS4506XS	Xtend	4.5	86.0	68.1	58.2	76.6	59.8	71.1	58.3
Local LS4517XFS	XtendFlex	4.5	85.4	74.0	60.7	75.7	65.0	69.9	54.3
NK 42-T5XF	XtendFlex	4.2	87.0	69.2	63.1	81.4	73.6	69.8	56.5
NK 43-V8XF	XtendFlex	4.3	84.7	73.0	62.0	76.8	66.0	67.0	46.7
NK 44-J4XFS	XtendFlex	4.4	84.8	72.1	68.7	81.2	73.0	72.3	55.5
NK 45-P9XF	XtendFlex	4.5	90.7	69.8	61.6	73.9	68.4	74.2	54.5
NK S44-C7X	Xtend	4.4	88.6	65.7	61.5	79.7	66.8	58.4	54.1
NK S45-J3X	Xtend	4.5	84.8	71.3	58.9	71.6	59.9	70.7	55.3
Progeny P4501XFS	XtendFlex	4.5	85.9	74.2	54.1	82.5	60.4	70.6	56.2
Progeny P4505RXS	Xtend	4.5	92.3	73.4	60.2	82.8	69.4	75.0	46.3
Progeny P4521XFS	XtendFlex	4.5	89.0	77.2	54.2	72.6	62.6	70.8	56.9
		Grand Mean	85.7	72.1	60.1	78.2	65.7	70.4	53.6
		LSD	3.9	8.0	4.1	7.2	4.1	4.0	6.0
		C.V.	3.3	8.1	5.0	6.8	4.6	4.2	8.2
		P-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000

[a] Keiser = Northeast Research and Extension Center, Keiser, Ark.; Kibler = Vegetable Research Station, Alma, Ark.; Marianna = Lon Mann Cotton Research Station, Marianna, Ark.; Pine Tree = Pine Tree Research Station, Colt, Ark.; Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.; Newport = Jackson County Extension Center, Newport, Ark.

[b] Soybean varieties with Xtend technologies were tested separately from varieties with all other herbicide technologies.

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

[d] The Rohwer location received 19.22 inches of rainfall 8–9 June.

*** Significant at the 0.001 probability level.

Table 10. Yields of Late Maturity Group IV (RM 4.6–4.9) Soybean Varieties and Strains in Arkansas Performance tests, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser Non-Xtend[b,c]	Keiser Xtend[b,c]	Kibler	Marianna[c]	Pine Tree[c]	Rohwer[c,d]	Stuttgart[c]	Newport[c]	Stuttgart Non-Irrigated	Rohwer[c] Late-Planted	Irrigated Mean
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
AgriGold G4615XF	XtendFlex	4.6	•	85.2	71.8	58.4	76.6	64.6	69.3	70.5	43.8	63.6	68.6
AgriGold G4813XF	XtendFlex	4.8	•	80.5	65.3	58.7	68.8	67.2	65.9	56.2	43.2	47.2	63.7
AgriGold G4820RX	Xtend	4.8	•	82.3	79.8	62.0	70.5	68.6	72.1	66.4	43.0	59.6	69.9
AgriGold G4900XF	XtendFlex	4.9	•	79.3	70.0	53.4	70.8	53.4	66.7	56.0	39.2	60.8	61.7
Amp 4690XF	XtendFlex	4.6	•	85.3	77.0	61.2	77.4	67.0	71.0	66.1	48.4	58.0	70.0
Amp 4850XF	XtendFlex	4.8	•	83.5	69.1	55.8	69.4	66.2	65.2	66.9	40.2	55.2	65.4
Amp 4950X	Xtend	4.9	•	81.8	74.2	60.8	77.2	66.7	71.4	67.1	35.7	57.5	69.1
Armor 46-D09	Xtend	4.6	•	86.3	78.6	59.5	74.2	64.0	76.9	61.9	43.0	64.6	69.2
Armor 46-F13	XtendFlex	4.6	•	86.5	68.4	58.8	75.0	66.3	72.3	65.8	45.4	67.3	67.8
Armor 47-E03	Enlist	4.7	83.3	•	74.2	53.4	75.3	64.4	71.2	69.7	39.3	63.0	68.0
Armor 48-D03	Xtend	4.8	•	83.1	70.6	59.4	80.3	65.5	70.1	69.7	40.8	58.3	69.3
Armor 48-D25	Xtend	4.8	•	82.2	75.2	62.0	78.4	69.3	73.4	72.1	41.6	67.6	71.7
Armor 48-E82	Enlist	4.8	78.1	•	78.2	55.1	67.9	66.2	69.9	54.9	40.7	60.8	65.3
Armor 48-F01	XtendFlex	4.8	•	76.0	76.0	58.9	68.3	57.8	63.1	55.6	43.7	59.3	63.3
Armor 48-F22	XtendFlex	4.8	•	81.4	75.8	61.2	67.8	67.4	65.4	59.6	46.2	56.9	66.2
Asgrow AG47XF0	XtendFlex	4.7	•	80.1	77.2	60.9	73.3	69.1	67.6	56.6	45.0	52.2	67.4
Asgrow AG48XF0	XtendFlex	4.8	•	81.2	68.7	53.3	63.8	57.9	66.6	62.5	40.2	54.2	62.1
Asgrow AG48XF2	XtendFlex	4.8	•	80.5	72.6	66.0	75.6	73.0	77.0	51.8	46.2	57.4	69.3
Axis 4611ES	Enlist	4.6	80.4	•	74.1	56.5	68.4	62.2	68.2	61.5	43.6	57.9	65.1
Axis 4641XFS	XtendFlex	4.6	•	87.4	75.1	55.3	79.2	65.5	71.2	57.7	43.6	58.8	67.3
Delta Grow DG46E10	Enlist E3	4.6	71.6	•	61.0	57.2	56.2	61.5	57.7	67.6	37.5	51.0	60.2
Delta Grow DG46F17/STS	XtendFlex	4.6	•	78.2	77.5	58.7	69.4	65.3	70.0	66.4	46.3	60.1	67.9
Delta Grow DG46X65/STS	Xtend	4.6	•	87.4	80.3	62.4	76.5	61.6	74.8	58.7	46.2	66.2	69.0
Delta Grow DG47E20/STS	Enlist E3	4.7	79.2	•	71.9	58.6	68.7	65.0	67.7	62.8	42.5	63.8	65.8
Delta Grow DG48E49/STS	Enlist E3	4.8	78.0	•	71.2	55.2	69.7	63.4	67.4	62.1	41.8	59.0	64.8
Delta Grow DG48E59	Enlist E3	4.8	81.9	•	83.2	60.1	77.1	65.9	71.7	64.6	39.7	57.0	70.4
Delta Grow DG48F20	XtendFlex	4.8	•	81.0	74.0	64.5	71.8	65.7	67.8	56.0	41.7	57.7	66.6
Delta Grow DG48X45	Xtend	4.8	•	85.7	77.1	64.4	76.4	72.2	76.5	52.5	45.9	65.2	69.8
Delta Grow DG49E20	Enlist E3	4.9	77.1	•	66.2	55.1	74.9	74.6	71.9	66.0	42.9	65.5	68.1
Delta Grow DG49E90	Enlist E3	4.9	76.1	•	69.5	53.7	62.4	58.1	63.8	62.9	32.7	54.5	61.7
Delta Grow DG49F22/STS	XtendFlex	4.8	•	77.2	73.8	53.7	76.5	53.9	68.7	46.4	41.0	60.0	62.2
DONMARIO DM46E62	Enlist	4.6	78.3	•	79.0	52.1	63.9	57.4	66.9	54.5	38.7	55.6	62.3
DONMARIO DM46F62	XtendFlex	4.6	•	78.9	75.7	58.2	69.4	61.2	64.7	62.2	39.0	56.8	65.2
DONMARIO DM48E62S	Enlist	4.8	73.1	•	69.0	48.9	68.1	58.1	68.4	58.5	36.5	50.4	61.9
DONMARIO DM48F61	XtendFlex	4.8	•	73.1	77.1	51.9	73.3	64.2	66.9	54.1	38.2	61.1	64.6

Continued

Table 10. Yields of Late Maturity Group IV (RM 4.6–4.9) Soybean Varieties and Strains in Arkansas Performance tests, 2021, continued.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser Non-Xtend[b,c]	Keiser Xtend[b,c]	Kibler	Marianna[c]	Pine Tree[c]	Rohwer[c,d]	Stuttgart[c]	Newport[c]	Stuttgart Non-Irrigated	Rohwer[c] Late-Planted	Irrigated Mean
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
Dyna-Gro S46ES91	Enlist E3	4.6	78.9	•	69.7	56.5	66.8	68.9	67.6	56.0	44.8	53.1	64.2
Dyna-Gro S46XF31S	XtendFlex	4.6	•	86.6	79.6	60.6	76.7	67.0	69.6	57.8	46.0	64.1	68.5
Dyna-Gro S46XS60	Xtend	4.6	•	84.7	79.0	63.3	74.0	67.4	72.8	67.4	41.9	63.9	70.7
Dyna-Gro S48XF61S	XtendFlex	4.8	•	83.0	75.8	60.5	69.1	64.1	64.3	57.2	41.8	54.9	65.2
Dyna-Gro S48XT40	Xtend	4.8	•	81.5	73.1	57.7	77.0	66.1	66.1	60.0	37.4	66.4	66.7
Dyna-Gro S48XT90	Xtend	4.8	•	82.3	75.5	58.6	75.7	69.2	72.3	64.7	41.6	67.5	69.4
ES4875XF	XtendFlex	4.8	•	82.9	71.4	59.6	68.1	67.1	65.8	60.6	42.2	53.0	65.4
Integra 54606NS	Xtend	4.6	•	85.1	77.4	56.9	79.7	64.7	73.6	61.7	44.6	60.0	69.0
Integra 54660NS	Xtend	4.6	•	87.7	77.3	60.6	79.5	70.3	76.7	67.4	45.6	67.3	72.0
Integra 54816N	Xtend	4.8	•	82.9	87.5	61.5	73.2	72.8	70.9	55.0	47.4	60.2	70.2
Integra 54891NS	Xtend	4.8	•	83.8	89.7	59.7	82.0	70.7	69.6	63.8	35.7	63.1	72.6
Integra 74621NS	XtendFlex	4.6	•	86.8	75.6	62.1	78.7	64.7	72.1	57.7	44.7	59.0	68.5
Integra 74731NS	XtendFlex	4.7	•	80.5	74.7	59.9	68.5	65.6	65.1	60.2	44.7	48.1	65.7
Integra 74852NS	XtendFlex	4.8	•	77.8	77.8	53.7	68.6	•	67.6	52.9	40.4	61.0	63.9
Local IS4684E3S	Enlist E3	4.6	77.7	•	77.7	56.5	67.2	67.6	68.0	58.6	40.7	56.6	65.9
Local LS4606XFS	XtendFlex	4.6	•	88.0	74.7	59.5	71.3	65.6	70.9	59.3	42.2	62.5	66.9
Local LS4707XF	XtendFlex	4.9	•	•	64.4	60.5	73.5	61.1	68.2	60.7	41.0	60.3	64.7
Local LS4795XS	Xtend	4.7	•	88.7	77.5	60.7	75.1	65.8	76.6	69.9	47.7	69.4	70.9
Local LS4805XFS	XtendFlex	4.8	•	80.2	70.2	61.4	69.3	68.6	65.7	60.6	44.7	48.8	66.0
Local LS4806XS	Xtend	4.8	•	81.9	89.9	61.4	80.4	68.8	68.4	66.0	41.8	64.6	72.5
Local LS4919XFS	XtendFlex	4.9	•	78.0	69.5	56.4	70.7	56.8	68.1	63.1	39.8	60.0	64.1
NK S46-E3S	Enlist E3	4.6	78.5	•	73.0	58.6	64.7	66.3	66.2	62.6	42.3	58.2	65.2
NK S47-Y9X	Xtend	4.7	•	84.4	79.5	65.3	82.4	72.3	75.1	63.1	45.8	62.2	72.9
NK S48-2E3S	Enlist E3	4.8	81.2	•	71.5	58.3	67.8	62.0	70.9	57.9	40.9	58.6	64.7
NK S49-F5X	Xtend	4.9	•	88.6	75.3	65.7	76.6	66.5	65.6	61.5	42.7	62.1	68.5
Pioneer P47A64X	Xtend	4.7	•	83.0	81.4	61.7	88.8	69.2	75.0	57.5	46.6	70.5	72.3
Pioneer P48A60X	Xtend	4.8	•	83.4	80.4	66.6	78.9	64.3	72.6	68.5	41.1	63.0	71.9
Progeny P4604XFS	XtendFlex	4.6	•	84.4	82.4	57.3	72.6	65.4	72.9	61.7	45.1	64.7	68.7
Progeny P4775E3S	Enlist E3	4.7	81.0	•	71.6	54.5	66.3	66.1	67.1	63.8	41.5	58.2	64.9
Progeny P4806XFS	XtendFlex	4.8	•	82.6	75.2	58.1	68.4	68.9	64.0	62.5	43.7	57.5	66.2
Progeny P4816RX	Xtend	4.8	•	86.2	78.8	60.0	75.2	72.3	71.0	62.6	45.0	65.6	70.0
Progeny P4821RX	Xtend	4.8	•	85.1	72.1	64.0	74.7	73.4	75.4	60.5	48.1	66.6	70.0
Progeny P4921XFS	XtendFlex	4.9	•	76.3	90.2	53.7	73.0	57.8	69.5	62.8	40.7	61.8	67.8
Progeny P4931E3S	Enlist E3	4.9	77.0	•	68.1	52.5	71.6	70.5	71.2	59.4	41.9	62.2	65.5
Progeny P4970RX	Xtend	4.9	•	81.8	82.9	56.5	74.3	72.3	73.3	60.8	37.2	62.8	70.0
R13-14635RR:0010	RR1	4.6	77.8	•	78.2	54.3	64.7	61.9	70.6	60.0	40.5	57.8	65.0

Continued

Table 10. Yields of Late Maturity Group IV (RM 4.6–4.9) Soybean Varieties and Strains in Arkansas Performance tests, 2021, continued.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser Non-Xtend[b,c]	Keiser Xtend[b,c]	Kibler	Marianna[c]	Pine Tree[c]	Rohwer[c,d]	Stuttgart[c]	Newport[c]	Stuttgart Non-Irrigated	Rohwer[c] Late-Planted	Irrigated Mean
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
R15-2422	Conv.	4.7	66.3	•	55.7	49.7	45.5	52.6	57.7	51.8	38.8	43.7	52.2
R16-253	Conv.	4.6	72.2	•	56.1	52.7	61.4	58.0	63.8	51.7	40.7	54.5	57.3
R18-14142	Conv.	4.6	67.6	•	69.9	50.8	66.1	65.4	66.9	61.4	34.6	57.7	63.4
R18-14272	Conv.	4.6	72.7	•	73.2	60.4	71.1	63.1	66.5	64.1	45.8	62.4	66.4
R18-14502	Conv.	4.9	74.7	•	72.8	53.9	66.9	62.9	69.6	62.3	41.7	61.8	64.7
R18-14753	Conv.	4.6	74.9	•	68.5	52.7	61.2	65.2	68.4	53.8	43.1	56.2	61.6
R18C-13283	Conv.	4.6	79.9	•	72.4	55.6	65.1	60.5	70.1	55.9	39.2	57.9	63.3
S16-7922C	Conv.	4.9	83.8	•	74.3	61.9	72.5	64.5	73.5	66.7	42.5	66.7	68.9
UA46i20C	Conv.	4.6	77.6	•	71.8	55.0	65.6	58.3	64.4	50.6	38.3	57.3	61.0
USG 7461XFS	XtendFlex	4.6	•	83.4	80.4	60.9	75.2	62.3	70.8	60.1	45.9	53.7	68.3
USG 7481XF	XtendFlex	4.8	•	82.0	74.2	62.3	72.6	60.4	69.9	62.5	39.2	59.6	67.0
USG 7489XT	Xtend	4.8	•	81.3	79.9	62.2	74.2	76.5	81.1	72.2	44.3	59.1	74.4
USG 7491XFS	XtendFlex	4.9	•	79.7	62.5	61.2	68.5	71.5	66.3	65.2	41.6	49.2	65.9
	Grand Mean		77.1	82.0	74.0	58.0	71.2	64.9	69.1	60.6	42.0	59.3	66.3
	LSD (5%)		4.4	3.5	7.9	5.2	6.0	4.8	5.7	7.7	4.1	8.0	•
	C.V.		4.2	3.2	7.9	6.7	6.3	5.5	6.1	9.4	7.3	10.0	•
	LSD (Non-Xtend)[e]		•	•	8.6	•	5.3	5.0	4.7	7.8	•	•	•
	LSD (Xtend)[f]		•	•	7.5	4.2	6.4	4.8	6.1	7.5	•	•	•

[a] Keiser = Northeast Research and Extension Center, Keiser, Ark.; Kibler = Vegetable Research Station, Alma, Ark.; Marianna = Lon Mann Cotton Research Station, Marianna, Ark.; Pine Tree = Pine Tree Research Station, Colt, Ark.; Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.; Newport = Jackson County Extension Center, Newport, Ark.; Stuttgart Non-Irrigated = Rice Research and Extension Center, Stuttgart, Ark.; Rohwer Late Planted = Rohwer Research Station, Rohwer, Ark.

[b] Soybean varieties with Xtend technologies were tested separately from varieties with all other herbicide technologies.

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

[d] The Rohwer location received 19.22 inches of rainfall 8–9 June.

[e] ANOVA of Non-Xtend varieties (Conv., RR1, Enlist E3).

[f] ANOVA of Xtend varieties (Xtend, XtendFlex).

Table 11. Yields of Non-Xtend Late Maturity Group IV Soybean Cultivars in Arkansas Performance Tests, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser[b,c]***	Kibler***	Marianna[c]	Pine Tree[c]***	Rohwer[c,d]***	Stuttgart[c]***	Newport[c]***
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
Armor 47-E03	Enlist	4.7	83.3	74.2	53.4	75.3	64.4	71.2	69.7
Armor 48-E82	Enlist	4.8	78.1	78.2	55.1	67.9	66.2	69.9	54.9
Axis 4611ES	Enlist	4.6	80.4	74.1	56.5	68.4	62.2	68.2	61.5
Delta Grow DG46E10	Enlist E3	4.6	71.6	61.0	57.2	56.2	61.5	57.7	67.6
Delta Grow DG47E20/STS	Enlist E3	4.7	79.2	71.9	58.6	68.7	65.0	67.7	62.8
Delta Grow DG48E49/STS	Enlist E3	4.8	78.0	71.2	55.2	69.7	63.4	67.4	62.1
Delta Grow DG48E59	Enlist E3	4.8	81.9	83.2	60.1	77.1	65.9	71.7	64.6
Delta Grow DG49E20	Enlist E3	4.9	77.1	66.2	55.1	74.9	74.6	71.9	66.0
Delta Grow DG49E90	Enlist E3	4.9	76.1	69.5	53.7	62.4	58.1	63.8	62.9
DONMARIO DM46E62	Enlist	4.6	78.3	79.0	52.1	63.9	57.4	66.9	54.5
DONMARIO DM48E62S	Enlist	4.8	73.1	69.0	48.9	68.1	58.1	68.4	58.5
Dyna-Gro S46ES91	Enlist E3	4.6	78.9	69.7	56.5	66.8	68.9	67.6	56.0
Local IS4684E3S	Enlist E3	4.6	77.7	77.7	56.5	67.2	67.6	68.0	58.6
NK S46-E3S	Enlist E3	4.6	78.5	73.0	58.6	64.7	66.3	66.2	62.6
NK S48-2E3S	Enlist E3	4.8	81.2	71.5	58.3	67.8	62.0	70.9	57.9
Progeny P4775E3S	Enlist E3	4.7	81.0	71.6	54.5	66.3	66.1	67.1	63.8
Progeny P4931E3S	Enlist E3	4.9	77.0	68.1	52.5	71.6	70.5	71.2	59.4
R13- 14635RR:0010	RR1	4.6	77.8	78.2	54.3	64.7	61.9	70.6	60.0
R15-2422	Conv.	4.7	66.3	55.7	49.7	45.5	52.6	57.7	51.8
R16-253	Conv.	4.6	72.2	56.1	52.7	61.4	58.0	63.8	51.7
R18-14142	Conv.	4.6	67.6	69.9	50.8	66.1	65.4	66.9	61.4
R18-14272	Conv.	4.6	72.7	73.2	60.4	71.1	63.1	66.5	64.1
R18-14502	Conv.	4.9	74.7	72.8	53.9	66.9	62.9	69.6	62.3
R18-14753	Conv.	4.6	74.9	68.5	52.7	61.2	65.2	68.4	53.8
R18C-13283	Conv.	4.6	79.9	72.4	55.6	65.1	60.5	70.1	55.9
S16-7922C	Conv.	4.9	83.8	74.3	61.9	72.5	64.5	73.5	66.7
UA46i20C	Conv.	4.6	77.6	71.8	55.0	65.6	58.3	64.4	50.6
		Grand Mean	77.1	70.8	55.2	66.6	63.1	67.6	59.5
		LSD	4.4	8.6	•	5.3	5.0	4.7	7.8
		C.V.	4.2	8.9	9.4	5.8	5.8	5.1	9.6
		P-value	0.000	0.000	0.400	0.000	0.000	0.000	0.001

[a] Keiser = Northeast Research and Extension Center, Keiser, Ark.; Kibler = Vegetable Research Station, Alma, Ark.; Marianna = Lon Mann Cotton Research Station, Marianna, Ark.; Pine Tree = Pine Tree Research Station, Colt, Ark.; Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.; Newport = Jackson County Extension Center, Newport, Ark.

[b] Soybean varieties with Xtend technologies were tested separately from varieties with all other herbicide technologies.

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

[d] The Rohwer location received 19.22 inches of rainfall 8–9 June.

*** Significant at the 0.001 probability level.

Table 12. Yields of Xtend Late Maturity Group IV Soybean Cultivars in Arkansas Performance Tests, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser[b,c]	Kibler	Marianna[c]	Pine Tree[c]	Rohwer[c,d]	Stuttgart[c]	Newport[c]
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
AgriGold G4615XF	XtendFlex	4.6	85.2	71.8	58.4	76.6	64.6	69.3	70.5
AgriGold G4813XF	XtendFlex	4.8	80.5	65.3	58.7	68.8	67.2	65.9	56.2
AgriGold G4820RX	Xtend	4.8	82.3	79.8	62.0	70.5	68.6	72.1	66.4
AgriGold G4900XF	XtendFlex	4.9	79.3	70.0	53.4	70.8	53.4	66.7	56.0
Amp 4690XF	XtendFlex	4.6	85.3	77.0	61.2	77.4	67.0	71.0	66.1
Amp 4850XF	XtendFlex	4.8	83.5	69.1	55.8	69.4	66.2	65.2	66.9
Amp 4950X	Xtend	4.9	81.8	74.2	60.8	77.2	66.7	71.4	67.1
Armor 46-D09	Xtend	4.6	86.3	78.6	59.5	74.2	64.0	76.9	61.9
Armor 46-F13	XtendFlex	4.6	86.5	68.4	58.8	75.0	66.3	72.3	65.8
Armor 48-D03	Xtend	4.8	83.1	70.6	59.4	80.3	65.5	70.1	69.7
Armor 48-D25	Xtend	4.8	82.2	75.2	62.0	78.4	69.3	73.4	72.1
Armor 48-F01	XtendFlex	4.8	76.0	76.0	58.9	68.3	57.8	63.1	55.6
Armor 48-F22	XtendFlex	4.8	81.4	75.8	61.2	67.8	67.4	65.4	59.6
Asgrow AG47XF0	XF/SR	4.7	80.1	77.2	60.9	73.3	69.1	67.6	56.6
Asgrow AG48XF0	XF/SR	4.8	81.2	68.7	53.3	63.8	57.9	66.6	62.5
Asgrow AG48XF2	XtendFlex	4.8	80.5	72.6	66.0	75.6	73.0	77.0	51.8
Axis 4641XFS	XtendFlex	4.6	87.4	75.1	55.3	79.2	65.5	71.2	57.7
Delta Grow DG46F17/STS	XtendFlex	4.6	78.2	77.5	58.7	69.4	65.3	70.0	66.4
Delta Grow DG46X65/STS	Xtend	4.6	87.4	80.3	62.4	76.5	61.6	74.8	58.7
Delta Grow DG48F20	XtendFlex	4.8	81.0	74.0	64.5	71.8	65.7	67.8	56.0
Delta Grow DG48X45	Xtend	4.8	85.7	77.1	64.4	76.4	72.2	76.5	52.5
Delta Grow DG49F22/STS	XtendFlex	4.8	77.2	73.8	53.7	76.5	53.9	68.7	46.4
DONMARIO DM46F62	XtendFlex	4.6	78.9	75.7	58.2	69.4	61.2	64.7	62.2
DONMARIO DM48F61	XtendFlex	4.8	73.1	77.1	51.9	73.3	64.2	66.9	54.1
Dyna-Gro S46XF31S	XtendFlex	4.6	86.6	79.6	60.6	76.7	67.0	69.6	57.8
Dyna-Gro S46XS60	XtendFlex	4.6	84.7	79.0	63.3	74.0	67.4	72.8	67.4
Dyna-Gro S48XF61S	XtendFlex	4.8	83.0	75.8	60.5	69.1	64.1	64.3	57.2
Dyna-Gro S48XT40	XtendFlex	4.8	81.5	73.1	57.7	77.0	66.1	66.1	60.0
Dyna-Gro S48XT90	XtendFlex	4.8	82.3	75.5	58.6	75.7	69.2	72.3	64.7
ES4875XF	XtendFlex	4.8	82.9	71.4	59.6	68.1	67.1	65.8	60.6
Integra 54606NS	Xtend	4.6	85.1	77.4	56.9	79.7	64.7	73.6	61.7
Integra 54660NS	Xtend	4.6	87.7	77.3	60.6	79.5	70.3	76.7	67.4
Integra 54816N	Xtend	4.8	82.9	87.5	61.5	73.2	72.8	70.9	55.0
Integra 54891NS	Xtend	4.8	83.8	89.7	59.7	82.0	70.7	69.6	63.8
Integra 74621NS	XtendFlex	4.6	86.8	75.6	62.1	78.7	64.7	72.1	57.7

Continued

Table 12. Yields of Xtend Late Maturity Group IV Soybean Cultivars in Arkansas Performance Tests, 2021, continued.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser[b,c]	Kibler	Marianna[c]	Pine Tree[c]	Rohwer[c,d]	Stuttgart[c]	Newport[c]
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
Integra 74731NS	XtendFlex	4.7	80.5	74.7	59.9	68.5	65.6	65.1	60.2
Integra 74852NS	XtendFlex	4.8	77.8	77.8	53.7	68.6	•	67.6	52.9
Local LS4606XFS	XtendFlex	4.6	88.0	74.7	59.5	71.3	65.6	70.9	59.3
Local LS4707XF	XtendFlex	4.9	•	64.4	60.5	73.5	61.1	68.2	60.7
Local LS4795XS	Xtend	4.7	88.7	77.5	60.7	75.1	65.8	76.6	69.9
Local LS4805XFS	XtendFlex	4.8	80.2	70.2	61.4	69.3	68.6	65.7	60.6
Local LS4806XS	Xtend	4.8	81.9	89.9	61.4	80.4	68.8	68.4	66.0
Local LS4919XFS	XtendFlex	4.9	78.0	69.5	56.4	70.7	56.8	68.1	63.1
NK S47-Y9X	Xtend	4.7	84.4	79.5	65.3	82.4	72.3	75.1	63.1
NK S49-F5X	Xtend	4.9	88.6	75.3	65.7	76.6	66.5	65.6	61.5
Pioneer P47A64X	Xtend	4.7	83.0	81.4	61.7	88.8	69.2	75.0	57.5
Pioneer P48A60X	Xtend	4.8	83.4	80.4	66.6	78.9	64.3	72.6	68.5
Progeny P4604XFS	XtendFlex	4.6	84.4	82.4	57.3	72.6	65.4	72.9	61.7
Progeny P4806XFS	XtendFlex	4.8	82.6	75.2	58.1	68.4	68.9	64.0	62.5
Progeny P4816RX	Xtend	4.8	86.2	78.8	60.0	75.2	72.3	71.0	62.6
Progeny P4821RX	Xtend	4.8	85.1	72.1	64.0	74.7	73.4	75.4	60.5
Progeny P4921XFS	XtendFlex	4.9	76.3	90.2	53.7	73.0	57.8	69.5	62.8
Progeny P4970RX	Xtend	4.9	81.8	82.9	56.5	74.3	72.3	73.3	60.8
USG 7461XFS	XtendFlex	4.6	83.4	80.4	60.9	75.2	62.3	70.8	60.1
USG 7481XF	XtendFlex	4.8	82.0	74.2	62.3	72.6	60.4	69.9	62.5
USG 7489XT	Xtend	4.8	81.3	79.9	62.2	74.2	76.5	81.1	72.2
USG 7491XFS	XtendFlex	4.9	79.7	62.5	61.2	68.5	71.5	66.3	65.2
		Grand Mean	82.0	75.6	59.4	73.4	65.7	69.8	61.1
		LSD	3.5	7.5	4.2	6.4	4.8	6.1	7.5
		C.V.	3.2	7.6	5.2	6.4	5.5	6.4	9.1
		P-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000

[a] Keiser = Northeast Research and Extension Center, Keiser, Ark.; Kibler = Vegetable Research Station, Alma, Ark.; Marianna = Lon Mann Cotton Research Station, Marianna, Ark.; Pine Tree = Pine Tree Research Station, Colt, Ark.; Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.; Newport = Jackson County Extension Center, Newport, Ark.

[b] Soybean varieties with Xtend technologies were tested separately from varieties with all other herbicide technologies.

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

[d] The Rohwer location received 19.22 inches of rainfall 8–9 June.

Table 13. Yields of Maturity Group V Soybean Varieties and Strains in Arkansas Performance Tests, 2021.[a,b]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser Non-Xtend[b,c]	Keiser Xtend[b,c]	Kibler	Pine Tree[c]	Rohwer[c,d]	Stuttgart[c]	Newport[c]	Stuttgart Non-Irrigated	Rohwer Late-Planted	Irrigated Mean
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
Asgrow AG52XF0	XtendFlex	5.2	•	75.0	78.5	76.5	71.9	67.5	67.9	39.1	39.4	72.5
Asgrow AG53XF2	XtendFlex	5.3	•	78.8	74.0	79.0	76.9	75.6	67.6	38.8	54.6	74.6
Asgrow AG54XF0	XtendFlex	5.4	•	75.2	89.1	77.2	64.0	61.8	62.6	33.7	63.0	70.9
Asgrow AG55XF0	XtendFlex	5.5	•	74.9	76.7	57.7	58.5	63.7	56.7	31.8	53.3	62.7
Delta Grow DG50E10	Enlist E3	5.0	65.3	•	60.7	39.3	51.5	55.4	52.6	32.9	49.9	51.9
Delta Grow DG51E60	Enlist E3	5.1	74.2	•	71.3	68.5	74.6	71.3	60.9	33.8	56.3	69.3
Delta Grow DG52E80	Enlist E3	5.2	75.2	•	66.6	69.7	62.4	72.8	61.0	37.6	56.9	66.5
Delta Grow DG53E30	Enlist E3	5.3	71.3	•	71.0	66.5	67.3	70.5	56.8	35.3	55.0	66.4
Delta Grow DG54F20	XtendFlex	5.4	•	77.0	72.1	56.0	59.9	65.6	55.2	31.8	57.1	61.8
Dyna-Gro S52XT91	Xtend	5.2	•	79.8	78.4	73.0	65.8	70.6	62.7	36.6	62.1	70.1
Dyna-Gro S56XT99	Xtend	5.6	•	77.9	75.0	52.0	57.1	64.8	56.9	31.1	62.4	61.1
Local IS5067E3	Enlist E3	5.0	79.5	•	75.0	71.2	66.4	72.6	68.3	40.2	59.7	70.7
Local IS5232E3	Enlist E3	5.2	75.5	•	67.8	66.9	74.6	72.8	65.0	37.5	58.7	69.4
Local LS5009XS	Xtend	5.0	•	81.1	85.1	72.6	69.8	68.1	64.6	34.5	62.9	72.0
Local LS5119XF	XtendFlex	5.1	•	79.4	76.1	76.5	70.9	71.5	64.7	36.3	67.2	71.9
Local LS5418XFS	XtendFlex	5.4	•	61.9	83.4	63.6	56.7	62.7	65.7	41.0	54.9	66.4
Local LS5614XF	XtendFlex	5.6	•	68.0	80.5	65.9	61.5	61.4	54.9	32.4	51.4	64.8
NK S51-E3	Enlist	5.1	73.3	•	68.7	67.2	75.6	71.0	62.7	35.0	56.9	69.0
Progeny P5003XF	XtendFlex	5.0	•	78.4	79.0	67.6	64.3	71.9	61.2	42.7	67.4	68.8
Progeny P5121E3S	Enlist	5.1	77.9	•	75.0	51.0	61.2	69.9	60.3	38.8	58.6	63.5
Progeny P5411XF	XtendFlex	5.4	•	74.5	66.0	55.0	59.8	62.4	54.3	30.3	54.6	59.5
Progeny P5521E3	Enlist E3	5.5	65.6	•	87.9	70.0	67.2	72.9	69.5	33.3	64.6	73.5
R13-13997	Conv.	5.6	82.8	•	78.6	64.2	70.2	71.4	55.9	38.0	65.4	68.1
R14-1422	Conv.	5.0	78.3	•	81.1	70.9	77.4	79.0	60.3	38.4	67.0	73.7
R15-1587	Conv.	5.3	81.2	•	79.6	67.4	67.9	74.8	58.9	33.2	58.8	69.7
R15-5695	Conv.	5.5	76.6	•	80.5	51.8	64.2	67.2	57.8	35.9	56.3	64.3
R16-1445	Conv.	5.5	81.4	•	71.2	46.8	70.6	64.6	58.0	35.9	63.3	62.2
R17-283F	Conv.	5.3	70.7	•	76.2	64.3	63.0	67.9	48.1	34.5	57.5	63.9
R17-3488	Conv.	5.5	70.2	•	75.1	57.8	62.0	67.5	56.1	37.1	55.6	63.7
R17-4177	Conv.	5.6	71.8	•	74.6	56.2	63.1	64.4	57.3	35.2	56.7	63.1

Continued

Table 13. Yields of Maturity Group V Soybean Varieties and Strains in Arkansas Performance Tests, 2021, continued.[a,b]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser Non-Xtend[b,c] (bu./ac)	Keiser Xtend[b,c] (bu./ac)	Kibler (bu./ac)	Pine Tree[c] (bu./ac)	Rohwer[c,d] (bu./ac)	Stuttgart[c] (bu./ac)	Newport[c] (bu./ac)	Non-Irrigated (bu./ac)	Late-Planted (bu./ac)	Irrigated Mean (bu./ac)
R18-3048	Conv.	5.3	73.8	•	76.5	57.8	61.5	60.7	53.6	35.3	52.4	62.0
R18-3250	Conv.	5.3	62.9	•	82.9	61.6	62.0	65.7	61.9	28.8	56.5	66.8
S16-14801C	Conv.	5.0	80.5	•	77.0	76.8	77.4	75.9	56.7	42.0	66.0	72.8
UA54i19GT	RR1	5.4	73.4	•	84.2	64.1	69.3	69.3	60.0	34.1	65.8	69.9
		Grand Mean	74.4	74.8	76.3	64.1	65.9	68.2	59.8	35.6	57.9	66.9
		LSD (5%)	6.0	6.4	5.8	6.7	5.8	4.7	6.5	4.0	6.9	•
		C.V.	5.9	6.2	5.6	7.6	6.4	5.0	8.0	8.3	8.7	•
		LSD (Non-Xtend)[e]	•	•	6.0	7.0	6.1	4.8	6.6	•	•	•
		LSD (Xtend)[f]	•	•	5.0	5.9	5.3	4.6	6.5	•	•	•

[a] Keiser = Northeast Research and Extension Center, Keiser, Ark.; Kibler = Vegetable Research Station, Alma, Ark.; Marianna = Lon Mann Cotton Research Station, Marianna, Ark.; Pine Tree = Pine Tree Research Station, Colt, Ark.; Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.; Newport = Jackson County Extension Center, Newport, Ark.; Stuttgart Non-Irrigated = Rice Research and Extension Center, Stuttgart, Ark.; Rohwer Late Planted = Rohwer Research Station, Rohwer, Ark.

[b] Soybean varieties with Xtend technologies were tested separately from varieties with all other herbicide technologies.

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

[d] The Rohwer location received 19.22 inches of rainfall 8–9 June.

[d] ANOVA of Non-Xtend varieties (Conv., RR1, Enlist E3).

[e] ANOVA of Xtend varieties (Xtend, XtendFlex).

Table 14. Yields of Non-Xtend Maturity Group V Soybean Cultivars in Arkansas Performance Tests, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser[b,c]***	Kibler***	Pine Tree[c]***	Rohwer[c,d]***	Stuttgart[c]***	Newport[c]***
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
Delta Grow DG50E10	Enlist E3	5.0	65.3	60.7	39.3	51.5	55.4	52.6
Delta Grow DG51E60	Enlist E3	5.1	74.2	71.3	68.5	74.6	71.3	60.9
Delta Grow DG52E80	Enlist E3	5.2	75.2	66.6	69.7	62.4	72.8	61.0
Delta Grow DG53E30	Enlist E3	5.3	71.3	71.0	66.5	67.3	70.5	56.8
Local IS5067E3	Enlist E3	5.0	79.5	75.0	71.2	66.4	72.6	68.3
Local IS5232E3	Enlist E3	5.2	75.5	67.8	66.9	74.6	72.8	65.0
NK S51-E3	Enlist	5.1	73.3	68.7	67.2	75.6	71.0	62.7
Progeny P5121E3S	Enlist	5.1	77.9	75.0	51.0	61.2	69.9	60.3
Progeny P5521E3	Enlist E3	5.5	65.6	87.9	70.0	67.2	72.9	69.5
R13-13997	Conv.	5.6	82.8	78.6	64.2	70.2	71.4	55.9
R14-1422	Conv.	5.0	78.3	81.1	70.9	77.4	79.0	60.3
R15-1587	Conv.	5.3	81.2	79.6	67.4	67.9	74.8	58.9
R15-5695	Conv.	5.5	76.6	80.5	51.8	64.2	67.2	57.8
R16-1445	Conv.	5.5	81.4	71.2	46.8	70.6	64.6	58.0
R17-283F	Conv.	5.3	70.7	76.2	64.3	63.0	67.9	48.1
R17-3488	Conv.	5.5	70.2	75.1	57.8	62.0	67.5	56.1
R17-4177	Conv.	5.6	71.8	74.6	56.2	63.1	64.4	57.3
R18-3048	Conv.	5.3	73.8	76.5	57.8	61.5	60.7	53.6
R18-3250	Conv.	5.3	62.9	82.9	61.6	62.0	65.7	61.9
S16-14801C	Conv.	5.0	80.5	77.0	76.8	77.4	75.9	56.7
UA54i19GT	RR1	5.4	73.4	84.2	64.1	69.3	69.3	62.8
		Grand Mean	74.4	75.3	62.5	67.0	69.1	59.2
		LSD	6.0	6.0	7.0	6.1	4.8	6.6
		C.V.	5.9	5.9	8.1	6.6	5.1	8.1
		P-value	0.000	0.000	0.000	0.000	0.000	0.000

[a] Keiser = Northeast Research and Extension Center, Keiser, Ark.; Kibler = Vegetable Research Station, Alma, Ark.; Marianna = Lon Mann Cotton Research Station, Marianna, Ark.; Pine Tree = Pine Tree Research Station, Colt, Ark.; Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.; Newport = Jackson County Extension Center, Newport, Ark.

[b] Soybean varieties with Xtend technologies were tested separately from varieties with all other herbicide technologies.

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

[d] The Rohwer location received 19.22 inches of rainfall 8–9 June.

*** Significant at the 0.001 probablity level.

Table 15. Yields of Xtend Maturity Group V Soybean Cultivars in Arkansas Performance Tests, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Keiser[b,c]***	Kibler***	Pine Tree[c]***	Rohwer[c,d]***	Stuttgart[c]***	Newport[c]**
			(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)
Asgrow AG52XF0	XtendFlex	5.2	75.0	78.5	76.5	71.9	67.5	67.9
Asgrow AG53XF2	XtendFlex	5.3	78.8	74.0	79.0	76.9	75.6	67.6
Asgrow AG54XF0	XtendFlex	5.4	75.2	89.1	77.2	64.0	61.8	62.6
Asgrow AG55XF0	XtendFlex	5.5	74.9	76.7	57.7	58.5	63.7	56.7
Delta Grow DG54F20	Xtend Flex	5.4	77.0	72.1	56.0	59.9	65.6	55.2
Dyna-Gro S52XT91	Xtend	5.2	79.8	78.4	73.0	65.8	70.6	62.7
Dyna-Gro S56XT99	Xtend	5.6	77.9	75.0	52.0	57.1	64.8	56.9
Local LS5009XS	Xtend	5.0	81.1	85.1	72.6	69.8	68.1	64.6
Local LS5119XF	XtendFlex	5.1	79.4	76.1	76.5	70.9	71.5	64.7
Local LS5418XFS	XtendFlex	5.4	61.9	83.4	63.6	56.7	62.7	65.7
Local LS5614XF	XtendFlex	5.6	68.0	80.5	65.9	61.5	61.4	54.9
Progeny P5003XF	XtendFlex	5.0	78.4	79.0	67.6	64.3	71.9	61.2
Progeny P5411XF	XtendFlex	5.4	74.5	66.0	55.0	59.8	62.4	54.3
		Grand Mean	74.8	77.9	67.0	64.1	66.7	60.7
		LSD	6.4	5.0	5.9	5.3	4.6	6.5
		C.V.	6.2	4.6	6.3	5.9	4.9	7.7
		P-value	0.000	0.000	0.000	0.000	0.000	0.003

[a] Keiser = Northeast Research and Extension Center, Keiser, Ark.; Kibler = Vegetable Research Station, Alma, Ark.; Marianna = Lon Mann Cotton Research Station, Marianna, Ark.; Pine Tree = Pine Tree Research Station, Colt, Ark.; Rohwer = Rohwer Research Station, Rohwer, Ark.; Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.; Newport = Jackson County Extension Center, Newport, Ark.

[b] Soybean varieties with Xtend technologies were tested separately from varieties with all other herbicide technologies.

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

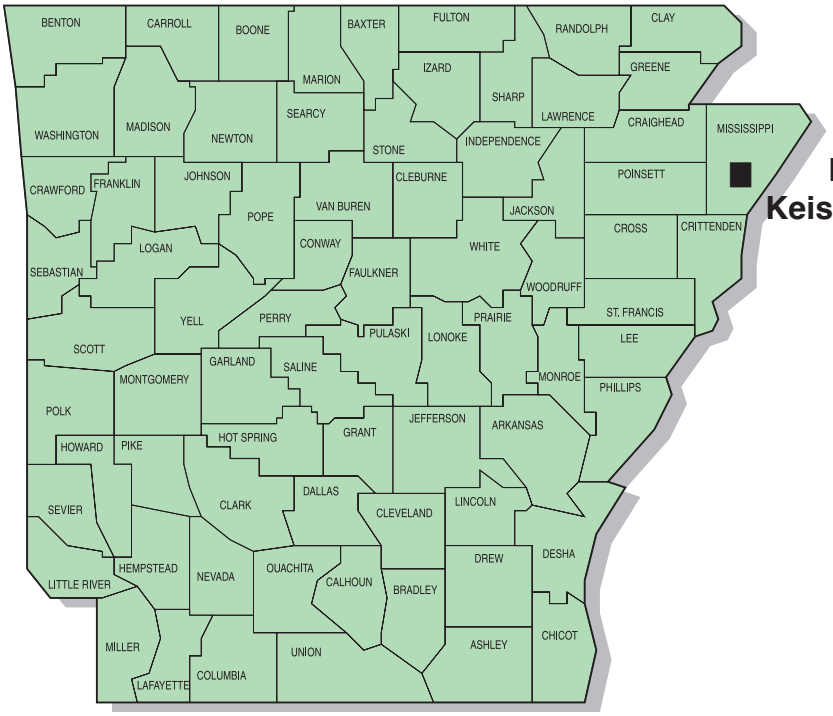
[d] The Rohwer location received 19.22 inches of rainfall 8–9 June.

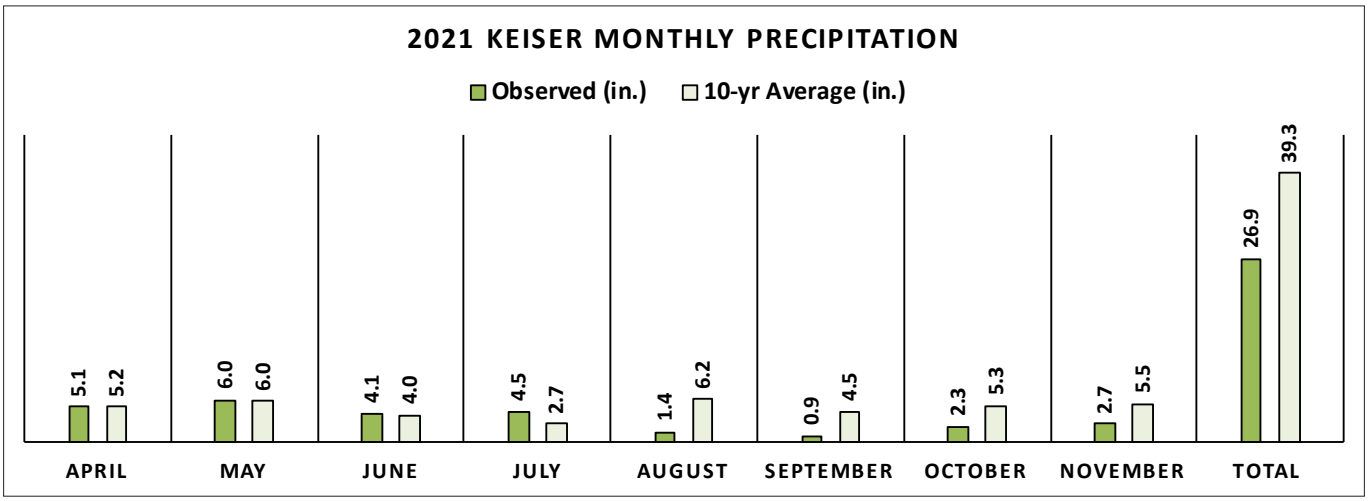
** Significant at the 0.01 probablity level.

*** Significant at the 0.001 probablity level.

Keiser: Northeast Research and Extension Cente (NEREC)

Irrigated Soybean Varieties and Strains, 2021





Soil Series
Sharkey, silty clay
Previous Crop
Corn
Row Spacing
38 in.
Planting Date
May 21
Irrigation Dates
July 20; Aug. 10; Sept. 13

Harvest: Xtend	**Date**
Relative Maturity (RM) (4.0-4.5), RM (4.6-4.9), RM (5.0-5.9)	Oct. 9, 21, 21
Harvest: Non-Xtend	**Date**
RM (4.0-4.5), RM (4.6-4.9), RM (5.0-5.9)	Oct. 9, 21, 21
Herbicide Application(s)	**Date**
Gramoxone® 32 oz Panther® 2 oz Zidua® 2 oz Prefix® 2 oz	May 21 June 14
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on June 16.	

Table 16. Performance of Irrigated Soybean Varieties and Strains, Northeast Research and Extension Center, Keiser, Ark., 2021.[a]

Variety/Experimental Line	2021	2-Year Average[b]	3-Year Average[c]	Maturity Date	Lodging Score[d]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.0–4.5						
Non-Xtend Cultivars						
Local IS4324E3	84.3	•	•	9/28	1	31
Delta Grow DG45E10	82.2	74.2	•	9/28	2	35
NK 45-V9E3	81.6	•	•	9/28	2	32
Progeny P4541E3S	76.4	•	•	9/30	2	38
S17-2243C	73.7	•	•	9/28	2	39
Dyna-Gro S45ES10	73.3	69.2	•	9/30	2	36
Progeny P4431E3	71.9	•	•	9/27	2	33
R18-14229	69.2	•	•	9/27	2	40
R18-14147	64.6	•	•	9/27	2	43
R18-14287	61.5	•	•	9/29	3	43
R18C-1450	•	•	•	•	•	•
Grand Mean	74.8	•	•	9/28	2	36
LSD (5%)	4.0	•	•	•	1	3
C.V.	3.8	•	•	•	•	•
Xtend Cultivars						
Progeny P4505RXS	92.3	82.5	•	9/27	2	39
Armor 44-D49	91.8	86.5	•	9/30	2	43
NK 45-P9XF	90.7	•	•	9/28	1	33
Dyna-Gro S43XS70	89.5	85.0	•	9/28	2	39
Armor 45-F81	89.2	•	•	9/28	2	36
Local LS4415XF	89.0	•	•	9/29	1	36
Progeny P4521XFS	89.0	•	•	10/2	2	40
NK S44-C7X	88.6	89.7	•	9/29	1	36
DONMARIO DM45X61	88.4	•	•	9/27	2	44
NK 42-T5XF	87.0	•	•	9/27	1	31
Amp 4448X	86.9	•	•	9/25	1	38
Asgrow AG45XF0	86.9	•	•	9/28	2	36
Local LS4506XS	86.0	•	•	9/27	1	34
Progeny P4501XFS	85.9	•	•	9/29	2	46
Axis 4522XF	85.9	•	•	9/29	1	34
Local LS4517XFS	85.4	•	•	9/28	2	39
Integra 74551NS	85.3	•	•	9/29	2	42
Asgrow AG43XF2	84.9	•	•	9/27	1	33
NK 44-J4XFS	84.8	•	•	9/27	1	35
NK S45-J3X	84.8	•	•	9/27	1	32
NK 43-V8XF	84.7	•	•	9/28	1	36
Asgrow AG42XF0	80.6	•	•	9/27	1	38
Grand Mean	85.7	•	•	9/28	2	37
LSD (5%)	3.9	•	•	•	0	3
C.V.	3.3	•	•	•	•	•

Continued

Table 16. Performance of Irrigated Soybean Varieties and Strains, Northeast Research and Extension Center, Keiser, Ark., 2021, continued.[a]

Variety/Experimental Line	2021	2-Year Average[b]	3-Year Average[c]	Maturity Date	Lodging Score[d]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.6–4.9						
Non-Xtend Cultivars						
S16-7922C	83.8	•	•	10/4	4	35
Armor 47-E03	83.3	•	•	10/5	3	33
Delta Grow DG48E59	81.9	•	•	10/4	2	32
NK S48-2E3S	81.2	•	•	9/29	2	34
Progeny P4775E3S	81.0	70.8	73.9	10/2	2	40
Axis 4611ES	80.4	•	•	9/30	2	42
R18C-13283	79.9	•	•	9/29	2	37
Delta Grow DG47E20/STS	79.2	69.2	•	9/29	3	42
Dyna-Gro S46ES91	78.9	70.7	•	9/28	2	42
NK S46-E3S	78.5	•	•	9/28	2	41
DONMARIO DM46E62	78.3	•	•	9/29	3	33
Armor 48-E82	78.1	•	•	10/5	4	38
Delta Grow DG48E49/STS	78.0	68.0	•	10/4	2	37
R13- 14635RR:0010	77.8	67.5	•	10/4	2	36
Local IS4684E3S	77.7	•	•	9/28	2	37
UA46i20C	77.6	68.6	70.7	9/29	1	35
Delta Grow DG49E20	77.1	•	•	10/5	4	37
Progeny P4931E3S	77.0	•	•	10/4	4	34
Delta Grow DG49E90	76.1	•	•	9/30	2	34
R18-14753	74.9	•	•	9/28	3	35
R18-14502	74.7	•	•	9/29	3	43
DONMARIO DM48E62S	73.1	•	•	10/4	3	33
R18-14272	72.7	•	•	9/30	3	44
R16-253	72.2	64.9	67.7	9/29	2	38
Delta Grow DG46E10	71.6	•	•	9/27	2	34
R18-14142	67.6	•	•	9/30	3	35
R15-2422	66.3	63.9	67.7	9/29	4	39
Grand Mean	77.1	•	•	9/30	2.5	37.1
LSD (5%)	4.4	•	•	•	0.8	3.8
C.V.	4.2	•	•	•	•	•
Xtend Cultivars						
Local LS4795XS	88.7	80.6	82.0	•	2	37
NK S49-F5X	88.6	•	•	•	2	38
Local LS4606XFS	88.0	•	•	•	2	39
Integra 54660NS	87.7	83.7	•	•	2	35
Delta Grow DG46X65/STS	87.4	81.7	•	•	2	38
Axis 4641XFS	87.4	•	•	•	2	41
Integra 74621NS	86.8	•	•	•	2	41
Dyna-Gro S46XF31S	86.6	•	•	•	2	39
Armor 46-F13	86.5	•	•	•	2	39
Armor 46-D09	86.3	81.8	•	•	2	35
Progeny P4816RX	86.2	80.8	84.1	•	2	34
Delta Grow DG48X45	85.7	79.3	•	•	2	35
Amp 4690XF	85.3	•	•	•	2	40
AgriGold G4615XF	85.2	•	•	•	2	39
Integra 54606NS	85.1	79.9	•	•	2	41

Continued

Table 16. Performance of Irrigated Soybean Varieties and Strains, Northeast Research and Extension Center, Keiser, Ark., 2021, continued.[a]

Variety/Experimental Line	2021	2-Year Average[b]	3-Year Average[c]	Maturity Date	Lodging Score[d]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Xtend Cultivars, continued						
Progeny P4821RX	85.1	79.4	81.5	•	2	38
Dyna-Gro S46XS60	84.7	78.8	80.6	•	2	35
NK S47-Y9X	84.4	•	•	•	1	35
Progeny P4604XFS	84.4	•	•	•	2	40
Integra 54891NS	83.8	80.6	•	•	2	40
Amp 4850XF	83.5	•	•	•	2	33
USG 7461XFS	83.4	•	•	•	2	41
Pioneer P48A60X	83.4	80.5	83.2	•	2	35
Armor 48-D03	83.1	•	•	•	2	40
Pioneer P47A64X	83.0	•	•	•	2	40
Dyna-Gro S48XF61S	83.0	•	•	•	2	36
ES4875XF	82.9	•	•	•	2	37
Integra 54816N	82.9	78.8	•	•	2	37
Progeny P4806XFS	82.6	•	•	•	2	37
Dyna-Gro S48XT90	82.3	78.5	•	•	2	38
AgriGold G4820RX	82.3	81.9	•	•	2	34
Armor 48-D25	82.2	80.1	•	•	2	38
USG 7481XF	82.0	•	•	•	2	38
Local LS4806XS	81.9	77.3	•	•	2	40
Progeny P4970RX	81.8	78.1	•	•	3	38
Amp 4950X	81.8	•	•	•	2	44
Dyna-Gro S48XT40	81.5	76.5	•	•	2	40
Armor 48-F22	81.4	•	•	•	2	37
USG 7489XT	81.3	81.6	81.9	•	2	35
Asgrow AG48XF0	81.2	•	•	•	2	38
Delta Grow DG48F20	81.0	•	•	•	2	36
AgriGold G4813XF	80.5	•	•	•	2	36
Asgrow AG48XF2	80.5	•	•	•	2	37
Integra 74731NS	80.5	•	•	•	1	36
Local LS4805XFS	80.2	•	•	•	1	36
Asgrow AG47XF0	80.1	•	•	•	1	37
USG 7491XFS	79.7	•	•	•	2	35
AgriGold G4900XF	79.3	•	•	•	2	36
DONMARIO DM46F62	78.9	•	•	•	2	39
Delta Grow DG46F17/STS	78.2	•	•	•	2	38
Local LS4919XFS	78.0	•	•	•	2	37
Integra 74852NS	77.8	•	•	•	2	35
Delta Grow DG49F22/STS	77.2	•	•	•	2	36
Progeny P4921XFS	76.3	•	•	•	2	37
Armor 48-F01	76.0	•	•	•	3	43
DONMARIO DM48F61	73.1	•	•	•	1	41
Local LS4707XF	•	•	•	•	•	•
Grand Mean	82.0	•	•	•	1.9	37.9
LSD	3.5	•	•	•	0.5	3.0
C.V.	3.2	•	•	•	•	•

Continued

Table 16. Performance of Irrigated Soybean Varieties and Strains, Northeast Research and Extension Center, Keiser, Ark., 2021, continued.[a]

Variety/Experimental Line	2021 (bu./ac)	2-Year Average[b] (bu./ac)	3-Year Average[c] (bu./ac)	Maturity Date	Lodging Score[d]	Plant Height (in.)
Relative Maturity 5.0–5.9						
Non-Xtend Cultivars						
R13-13997	82.8	69.3	74.1	10/11	2	29
R16-1445	81.4	66.6	71.7	10/12	2	28
R15-1587	81.2	72.4	74.5	10/6	2	26
S16-14801C	80.5	•	•	10/6	3	27
Local IS5067E3	79.5	•	•	10/7	3	33
R14-1422	78.3	68.8	72.6	10/6	3	31
Progeny P5121E3S	77.9	•	•	10/5	3	31
R15-5695	76.6	•	•	10/11	2	29
Local IS5232E3	75.5	•	•	10/6	3	35
Delta Grow DG52E80	75.2	•	•	10/6	3	32
Delta Grow DG51E60	74.2	67.5	•	10/6	3	32
R18-3048	73.8	•	•	10/6	3	41
UA54i19GT	73.4	65.2	68.3	10/12	3	44
NK S51-E3	73.3	•	•	10/12	2	33
R17-4177	71.8	•	•	10/11	4	34
Delta Grow DG53E30	71.3	•	•	10/6	2	33
R17-283F	70.7	•	•	10/12	3	31
R17-3488	70.2	•	•	10/6	3	29
Progeny P5521E3	65.6	•	•	10/12	4	42
Delta Grow DG50E10	65.3	60.0	•	10/5	3	38
R18-3250	62.9	•	•	10/11	3	36
Grand Mean	74.4	•	•	10/8	2.8	33.2
LSD	6.0	•	•	•	0.6	4.9
C.V.	5.9	•	•	•	•	•
Xtend Cultivars						
Local LS5009XS	81.1	75.4	•	10/6	3	40
Dyna-Gro S52XT91	79.8	•	•	10/5	2	36
Local LS5119XF	79.4	•	•	10/5	2	36
Asgrow AG53XF2	78.8	•	•	10/6	2	38
Progeny P5003XF	78.4	•	•	10/3	2	37
Dyna-Gro S56XT99	77.9	•	•	10/11	2	33
Delta Grow DG54F20	77.0	•	•	10/7	2	31
Asgrow AG54XF0	75.2	•	•	10/12	3	45
Asgrow AG52XF0	75.0	•	•	10/6	2	39
Asgrow AG55XF0	74.9	•	•	10/12	2	32
Progeny P5411XF	74.5	•	•	10/6	2	28
Local LS5614XF	68.0	•	•	10/6	2	27
Local LS5418XFS	61.9	•	•	10/11	2	48
Grand Mean	74.8	•	•	10/7	2.3	37.0
LSD (5%)	6.4	•	•	•	0.6	2.8
C.V.	6.2	•	•	•	•	•

[a] At Keiser, non-Xtend soybean varieties showed symptoms consistent with injury attributed to off-target movement of dicamba.

[b] Average Yield from 2020 and 2021.

[c] Average Yield from 2019, 2020, 2021.

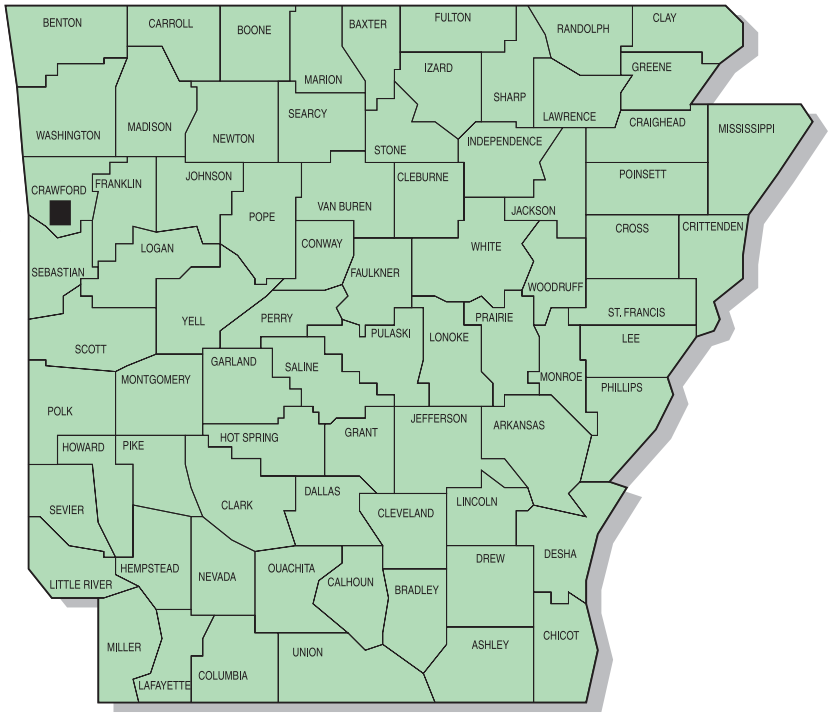
[d] 1 = Almost all plants erect; 2 = Either all plants leaning slightly, or a few plants down; 3 = Either all plants leaning moderately, or 25–50% of plants down; 4 = Either all plants leaning considerably, or 50–80% of plants down; 5 = All plants down badly.

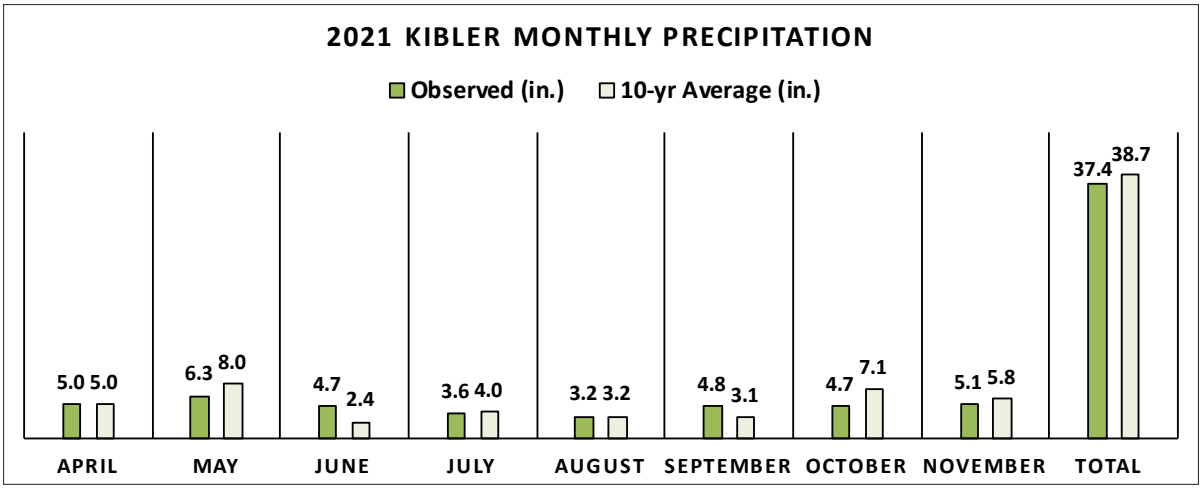
[e] 1 = No shattering; 2 = 1–3% shattered; 3 = 4–8% shattered; 4 = 9–19% shattered; 5 = 20% or more shattered.

Kibler: Vegetable Research Station (VRS)

Irrigated Soybean Varieties and Strains, 2021

VRS
Kibler, Arkansas





Soil Series
Dardanelle, silt loam
Previous Crop
Soybeans
Row Spacing
Twin, 36 in.
Planting Date
June 16
Irrigation Dates
Aug. 2, 6, 12, 23, 30; Sept. 16, 22

Harvest	Date
Relative Maturity (4.0–4.5)	Oct. 21
Relative Maturity (4.6–4.9)	Oct. 22
Relative Maturity (5.0–5.9)	Nov. 8
Herbicide Application(s)	**Date**
Charger Max® 20 oz	June 17
Pursuit® 4 oz	June 17
Reflex® 24 oz	July 9

Table 17. Performance of Irrigated Soybean Varieties and Strains, Vegetable Research Station, Kibler, Ark., 2021.

Variety/Experimental Line	2021	2-Year Average[a]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.0–4.5					
Armor 44-D49	79.0	79.6	10/12	0	44
Dyna-Gro S43XS70	78.1	77.2	10/13	0	41
Progeny P4521XFS	77.2	•	10/14	0	40
Local LS4415XF	77.2	•	10/15	0	40
DONMARIO DM45X61	77.1	•	10/13	0	38
S17-2243C	76.6	•	10/10	0	35
Progeny P4501XFS	74.2	•	10/9	0	37
Local LS4517XFS	74.0	•	10/16	0	34
Integra 74551NS	73.9	•	10/8	0	42
Progeny P4505RXS	73.4	73.4	10/15	0	40
Asgrow AG45XF0	73.1	•	10/14	0	43
NK 43-V8XF	73.0	•	10/18	1	44
Amp 4448X	72.7	•	10/15	0	37
Armor 45-F81	72.3	•	10/13	0	39
R18-14147	72.2	•	10/14	0	36
NK 44-J4XFS	72.1	•	10/16	0	39
NK S45-J3X	71.3	•	10/12	0	39
Axis 4522XF	71.3	•	10/13	0	38
NK 45-V9E3	70.3	•	10/12	0	38
NK 45-P9XF	69.8	•	10/7	0	37
NK 42-T5XF	69.2	•	10/14	0	40
Progeny P4541E3S	69.1	•	10/14	0	40
Asgrow AG43XF2	68.6	•	10/12	0	40
Local LS4506XS	68.1	•	10/13	0	38
Asgrow AG42XF0	66.4	•	10/13	0	42
NK S44-C7X	65.7	78.2	10/10	0	40
R18-14229	65.3	•	10/13	0	36
Delta Grow DG45E10	64.7	64.8	10/13	0	41
R18-14287	64.5	•	10/13	0	42
Dyna-Gro S45ES10	64.2	66.7	10/12	0	38
Progeny P4431E3	64.1	•	10/18	0	41
Local IS4324E3	62.6	•	10/18	0	40
R18C-1450	52.4	•	10/3	0	38
Grand Mean	70.0	•	10/14	•	39
LSD	7.8	•	6	•	5
C.V.	8.2	•	•	•	•
Relative Maturity 4.6–4.9					
Progeny P4921XFS	90.2	•	10/14	0	37
Local LS4806XS	89.9	78.6	10/11	0	38
Integra 54891NS	89.7	83.0	10/13	0	42
Integra 54816N	87.5	79.6	10/18	0	39
Delta Grow DG48E59	83.2	•	10/18	0	38
Progeny P4970RX	82.9	77.5	10/18	0	39
Progeny P4604XFS	82.4	•	10/14	0	40
Pioneer P47A64X	81.4	•	10/15	0	44
Pioneer P48A60X	80.4	78.1	10/15	0	41
USG 7461XFS	80.4	•	10/15	0	42

Continued

Table 17. Performance of Irrigated Soybean Varieties and Strains, Vegetable Research Station, Kibler, Ark., 2021, continued.

Variety/Experimental Line	2021 (bu./ac)	2-Year Average[a] (bu./ac)	Maturity Date	Lodging Score[c]	Plant Height (in.)
Relative Maturity 4.0–4.5, continued					
Delta Grow DG46X65/STS	80.3	76.5	10/11	0	39
USG 7489XT	79.9	75.8	10/19	0	39
AgriGold G4820RX	79.8	77.0	10/18	0	41
Dyna-Gro S46XF31S	79.6	•	10/15	0	40
NK S47-Y9X	79.5	•	10/13	0	39
DONMARIO DM46E62	79.0	•	10/12	2	38
Dyna-Gro S46XS60	79.0	74.6	10/16	0	41
Progeny P4816RX	78.8	76.2	10/17	0	39
Armor 46-D09	78.6	76.5	10/14	0	36
R13-14635RR:0010	78.2	70.9	10/18	0	43
Armor 48-E82	78.2	•	10/18	0	41
Integra 74852NS	77.8	•	10/14	0	37
Local IS4684E3S	77.7	•	10/7	0	39
Local LS4795XS	77.5	77.4	10/15	0	37
Delta Grow DG46F17/STS	77.5	•	10/14	0	42
Integra 54606NS	77.4	75.0	10/17	0	43
Integra 54660NS	77.3	76.2	10/11	0	38
Asgrow AG47XF0	77.2	•	10/15	0	37
DONMARIO DM48F61	77.1	•	10/11	0	40
Delta Grow DG48X45	77.1	75.9	10/18	0	37
Amp 4690XF	77.0	•	10/15	0	43
Armor 48-F01	76.0	•	10/14	0	45
Armor 48-F22	75.8	•	10/17	0	36
Dyna-Gro S48XF61S	75.8	•	10/17	0	37
DONMARIO DM46F62	75.7	•	10/10	0	43
Integra 74621NS	75.6	•	10/15	0	45
Dyna-Gro S48XT90	75.5	72.6	10/16	0	40
NK S49-F5X	75.3	•	10/16	0	38
Progeny P4806XFS	75.2	•	10/16	0	36
Armor 48-D25	75.2	73.7	10/17	0	39
Axis 4641XFS	75.1	•	10/9	0	41
Local LS4606XFS	74.7	•	10/13	0	42
Integra 74731NS	74.7	•	10/11	0	38
S16-7922C	74.3	•	10/20	0	41
Amp 4950X	74.2	•	10/17	0	42
Armor 47-E03	74.2	•	10/16	0	37
USG 7481XF	74.2	•	10/14	0	44
Axis 4611ES	74.1	•	10/8	0	42
Delta Grow DG48F20	74.0	•	10/15	0	38
Delta Grow DG49F22/STS	73.8	•	10/15	0	37
R18-14272	73.2	•	10/18	1	47
Dyna-Gro S48XT40	73.1	69.1	10/16	0	42
NK S46-E3S	73.0	•	10/8	0	39
R18-14502	72.8	•	10/16	1	46
Asgrow AG48XF2	72.6	•	10/13	0	36
R18C-13283	72.4	•	10/12	0	41
Progeny P4821RX	72.1	73.0	10/15	0	39
Delta Grow DG47E20/STS	71.9	67.4	10/8	0	39
AgriGold G4615XF	71.8	•	10/14	0	43

Continued

Table 17. Performance of Irrigated Soybean Varieties and Strains, Vegetable Research Station, Kibler, Ark., 2021, continued.

Variety/Experimental Line	2021 (bu./ac)	2-Year Average[a] (bu./ac)	Maturity Date	Lodging Score[c]	Plant Height (in.)
Relative Maturity 4.0–4.5, continued					
UA46i20C	71.8	66.4	10/10	0	39
Progeny P4775E3S	71.6	68.3	10/10	0	39
NK S48-2E3S	71.5	•	10/10	0	39
ES4875XF	71.4	•	10/14	0	39
Delta Grow DG48E49/STS	71.2	66.5	10/9	0	37
Armor 48-D03	70.6	•	10/18	0	39
Local LS4805XFS	70.2	•	10/14	0	37
AgriGold G4900XF	70.0	•	10/14	0	38
R18-14142	69.9	•	10/18	0	43
Dyna-Gro S46ES91	69.7	66.5	10/10	0	41
Delta Grow DG49E90	69.5	•	10/12	0	39
Local LS4919XFS	69.5	•	10/16	0	36
Amp 4850XF	69.1	•	10/14	0	37
DONMARIO DM48E62S	69.0	•	10/11	0	31
Asgrow AG48XF0	68.7	•	10/15	0	38
R18-14753	68.5	•	10/11	0	40
Armor 46-F13	68.4	•	10/16	0	43
Progeny P4931E3S	68.1	•	10/17	0	39
Delta Grow DG49E20	66.2	•	10/18	0	40
AgriGold G4813XF	65.3	•	10/16	0	36
Local LS4707XF	64.4	•	10/13	0	41
USG 7491XFS	62.5	•	10/15	0	35
Delta Grow DG46E10	61.0	•	10/6	0	36
R16-253	56.1	60.8	10/12	0	36
R15-2422	55.7	58.9	10/7	4	41
Grand Mean	74.0	•	10/14	0.1	39.5
LSD	7.9	•	0.4	3.6	3.8
C.V.	7.9	•	•	•	•
Relative Maturity 5.0–5.9					
Asgrow AG54XF0	89.1	•	10/15	0	40
Progeny P5521E3	87.9	•	10/17	0	37
Local LS5009XS	85.1	79.2	10/15	0	44
UA54i19GT	84.2	75.2	10/12	0	40
Local LS5418XFS	83.4	•	10/14	0	38
R18-3250	82.9	•	10/14	0	40
R14-1422	81.1	73.7	10/15	0	38
Local LS5614XF	80.5	•	10/13	0	39
R15-5695	80.5	•	10/11	0	41
R15-1587	79.6	74.3	10/15	0	42
Progeny P5003XF	79.0	•	10/14	0	40
R13-13997	78.6	76.5	10/11	0	41
Asgrow AG52XF0	78.5	•	10/13	0	40
Dyna-Gro S52XT91	78.4	•	10/14	0	40
S16-14801C	77.0	•	10/14	0	36
Asgrow AG55XF0	76.7	•	10/13	0	38
R18-3048	76.5	•	10/12	0	39
R17-283F	76.2	•	10/11	0	40
Local LS5119XF	76.1	•	10/10	0	40

Continued

Table 17. Performance of Irrigated Soybean Varieties and Strains, Vegetable Research Station, Kibler, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 5.0–5.9, continued					
R17-3488	75.1	•	10/10	0	37
Local IS5067E3	75.0	•	10/14	0	35
Progeny P5121E3S	75.0	•	10/15	0	38
Dyna-Gro S56XT99	75.0	•	10/14	0	38
R17-4177	74.6	•	10/14	0	38
Asgrow AG53XF2	74.0	•	10/13	0	40
Delta Grow DG54F20	72.1	•	10/14	0	37
Delta Grow DG51E60	71.3	77.1	10/13	0	36
R16-1445	71.2	66.0	10/9	0	40
Delta Grow DG53E30	71.0	•	10/12	0	38
NK S51-E3	68.7	•	10/14	0	39
Local IS5232E3	67.8	•	10/16	0	38
Delta Grow DG52E80	66.6	•	10/14	0	43
Progeny P5411XF	66.0	•	10/12	0	40
Delta Grow DG50E10	60.7	61.6	10/10	0	38
Grand Mean	76.3	•	10/13	0.0	39.4
LSD	5.8	•	6.0	0.4	5.1
C.V.	5.6	•	•	•	•

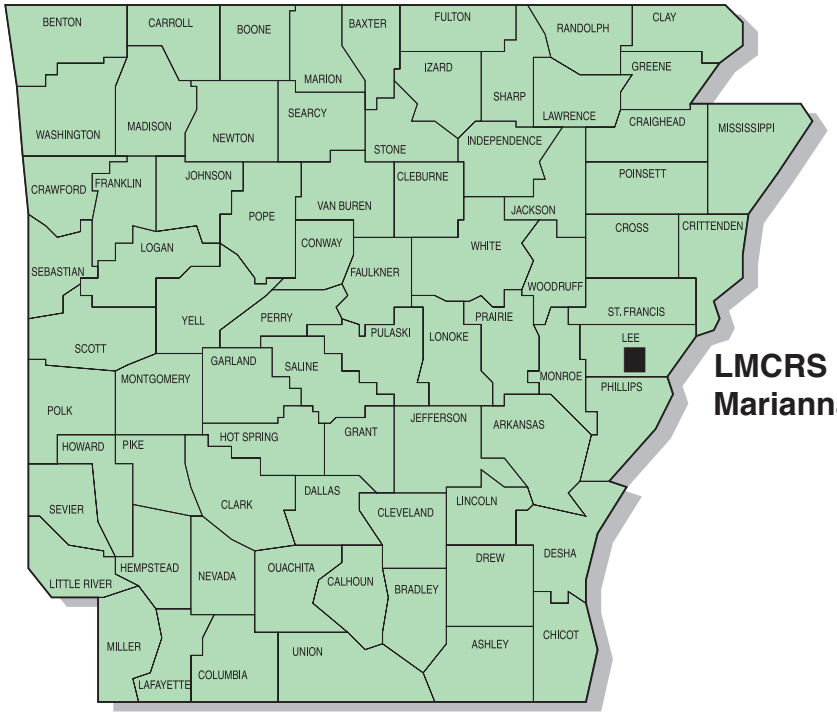
[a] Average yield from 2020 and 2021.

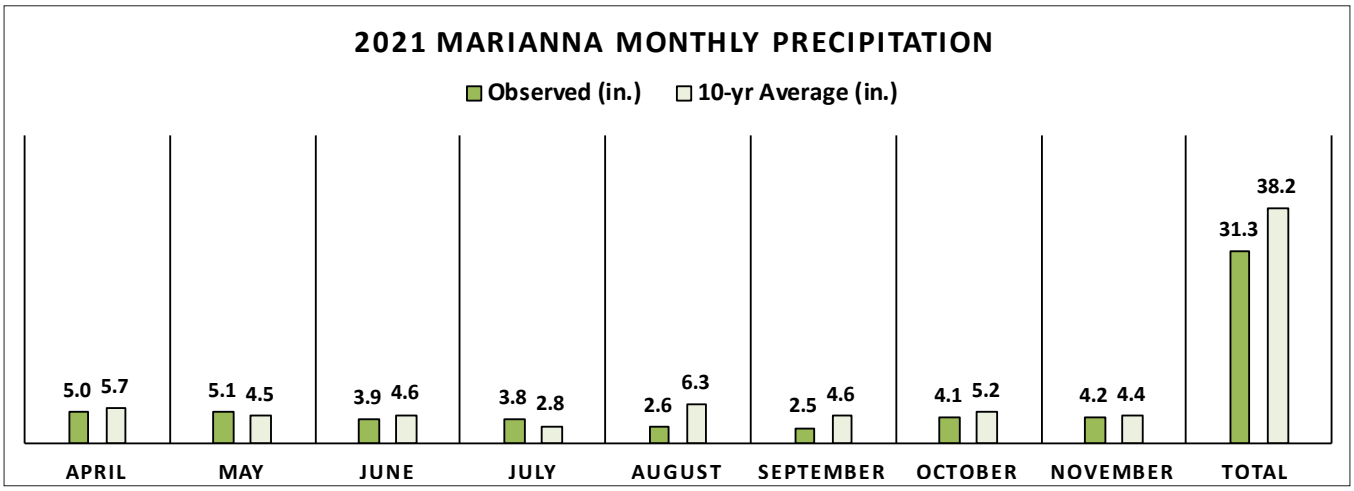
[c] 1 = Almost all plants erect; 2 = Either all plants leaning slightly, or a few plants down; 3 = Either all plants leaning moderately, or 25–50% of plants down; 4 = Either all plants leaning considerably, or 50–80% of plants down; 5 = All plants down badly.

[d] 1 = No shattering; 2 = 1–3% shattered; 3 = 4–8% shattered; 4 = 9–19% shattered; 5 = 20% or more shattered.

Marianna: Lon Mann Cotton Research Station (LMCRS)

Irrigated Soybean Varieties and Strains, 2021





Soil Series
Loring, silt loam
Previous Crop
Fallow
Row Spacing
38 in.
Planting Date
May 15
Irrigation Dates
June 30; July 27; Aug. 9; Sept. 7

Harvest	Date
Relative Maturity (RM) (4.0-4.5), RM (4.6-4.9)	Oct. 8
Fertilizer Application(s)	**Date**
62 lb K	April 22
Herbicide Application(s)	**Date**
Round-up® 3 pt, Liberty® 3 pt, Valor® 2 oz Storm® 1.5 pt; Flexstar® 1.5 pt, Dual® 1 pt; Prefix® 2 pt	May 16 June 18; July 14; 21
Insecticide Application(s)	**Date**
Intrepid® 5 oz; Acephate® 0.75 lb, Intrepid® 5 oz	July 25; Aug. 23
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on June 18.	

Table 18. Performance of Irrigated Soybean Varieties and Strains, Lon Mann Cotton Research Station, Marianna, Ark., 2021.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 4.0–4.5					
NK 44-J4XFS	68.7	•	•	1	40
Asgrow AG43XF2	66.4	•	•	2	40
Dyna-Gro S43XS70	65.3	67.3	•	1	41
Local IS4324E3	65.3	•	•	1	32
Asgrow AG45XF0	63.7	•	•	3	42
NK 42-T5XF	63.1	•	•	1	40
Armor 45-F81	62.5	•	•	2	40
NK 43-V8XF	62.0	•	•	3	44
NK 45-P9XF	61.6	•	•	1	40
NK S44-C7X	61.5	66.7	•	1	38
Asgrow AG42XF0	60.9	•	•	2	44
Local LS4517XFS	60.7	•	•	3	40
Progeny P4505RXS	60.2	57.7	•	4	43
Armor 44-D49	59.5	62.7	•	3	45
NK 45-V9E3	59.5	•	•	4	33
DONMARIO DM45X61	59.2	•	•	4	46
NK S45-J3X	58.9	•	•	2	38
Dyna-Gro S45ES10	58.8	62.4	•	1	34
Local LS4415XF	58.7	•	•	2	39
Local LS4506XS	58.2	•	•	2	40
Axis 4522XF	58.2	•	•	2	39
Integra 74551NS	58.0	•	•	5	43
Delta Grow DG45E10	57.8	56.8	•	1	31
Amp 4448X	57.0	•	•	4	41
Progeny P4541E3S	56.6	•	•	1	37
Progeny P4521XFS	54.2	•	•	4	43
Progeny P4501XFS	54.1	•	•	4	46
Progeny P4431E3	52.5	•	•	1	31
S17-2243C	52.1	•	•	1	38
R18C-1450	51.4	•	•	1	34
R18-14229	50.9	•	•	3	40
R18-14147	50.3	•	•	2	40
R18-14287	47.4	•	•	5	39
Grand Mean	58.7	•	•	2	39
LSD	4.2	•	•	1	2
C.V.	5.2	•	•	•	•
Relative Maturity 4.6–4.9					
Pioneer P48A60X	66.6	63.1	65.7	1	38
Asgrow AG48XF2	66.0	•	•	4	40
NK S49-F5X	65.7	•	•	1	38
NK S47-Y9X	65.3	•	•	1	38
Delta Grow DG48F20	64.5	•	•	1	39
Delta Grow DG48X45	64.4	67.4	•	1	38
Progeny P4821RX	64.0	65.6	67.9	2	39
Dyna-Gro S46XS60	63.3	69.6	69.2	2	39
Delta Grow DG46X65/STS	62.4	64.7	•	3	40
USG 7481XF	62.3	•	•	3	39

Continued

Table 18. Performance of Irrigated Soybean Varieties and Strains, Lon Mann Cotton Research Station, Marianna, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 4.6–4.9, continued					
USG 7489XT	62.2	61.2	65.3	1	38
Integra 74621NS	62.1	•	•	1	42
AgriGold G4820RX	62.0	63.7	•	2	43
Armor 48-D25	62.0	68.0	•	1	40
S16-7922C	61.9	•	•	1	28
Pioneer P47A64X	61.7	•	•	3	44
Integra 54816N	61.5	61.8	•	1	40
Local LS4805XFS	61.4	•	•	1	39
Local LS4806XS	61.4	65.9	•	1	40
Amp 4690XF	61.2	•	•	2	42
USG 7491XFS	61.2	•	•	1	39
Armor 48-F22	61.2	•	•	1	40
Asgrow AG47XF0	60.9	•	•	1	39
USG 7461XFS	60.9	•	•	2	42
Amp 4950X	60.8	•	•	1	42
Local LS4795XS	60.7	65.7	66.4	1	40
Integra 54660NS	60.6	61.7	•	1	38
Dyna-Gro S46XF31S	60.6	•	•	2	42
Local LS4707XF	60.5	•	•	3	40
Dyna-Gro S48XF61S	60.5	•	•	1	38
R18-14272	60.4	•	•	4	40
Delta Grow DG48E59	60.1	•	•	1	30
Progeny P4816RX	60.0	62.0	63.4	1	38
Integra 74731NS	59.9	•	•	1	38
Integra 54891NS	59.7	63.8	•	1	41
ES4875XF	59.6	•	•	1	38
Armor 46-D09	59.5	62.9	•	1	39
Local LS4606XFS	59.5	•	•	2	42
Armor 48-D03	59.4	•	•	1	42
Armor 48-F01	58.9	•	•	3	44
Armor 46-F13	58.8	•	•	3	42
Delta Grow DG46F17/STS	58.7	•	•	3	40
AgriGold G4813XF	58.7	•	•	1	39
Dyna-Gro S48XT90	58.6	65.3	•	2	40
NK S46-E3S	58.6	•	•	2	37
Delta Grow DG47E20/STS	58.6	61.3	•	2	38
AgriGold G4615XF	58.4	•	•	1	41
NK S48-2E3S	58.3	•	•	1	29
DONMARIO DM46F62	58.2	•	•	2	42
Progeny P4806XFS	58.1	•	•	2	40
Dyna-Gro S48XT40	57.7	64.8	•	2	41
Progeny P4604XFS	57.3	•	•	2	45
Delta Grow DG46E10	57.2	•	•	1	28
Integra 54606NS	56.9	59.9	•	4	44
Progeny P4970RX	56.5	59.9	•	1	41

Continued

Table 18. Performance of Irrigated Soybean Varieties and Strains, Lon Mann Cotton Research Station, Marianna, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 4.6–4.9, continued					
Axis 4611ES	56.5	•	•	2	37
Local IS4684E3S	56.5	•	•	2	35
Dyna-Gro S46ES91	56.5	62.6	•	1	38
Local LS4919XFS	56.4	•	•	2	40
Amp 4850XF	55.8	•	•	1	38
R18C-13283	55.6	•	•	1	31
Axis 4641XFS	55.3	•	•	2	40
Delta Grow DG48E49/STS	55.2	57.0	•	1	31
Delta Grow DG49E20	55.1	•	•	4	32
Armor 48-E82	55.1	•	•	4	31
UA46i20C	55.0	60.5	60.7	1	33
Progeny P4775E3S	54.5	61.2	64.5	3	38
R13- 14635RR:0010	54.3	58.6	•	1	37
R18-14502	53.9	•	•	3	38
Delta Grow DG49E90	53.7	•	•	1	31
Integra 74852NS	53.7	•	•	1	39
Progeny P4921XFS	53.7	•	•	2	40
Delta Grow DG49F22/STS	53.7	•	•	2	35
AgriGold G4900XF	53.4	•	•	2	40
Armor 47-E03	53.4	•	•	1	29
Asgrow AG48XF0	53.3	•	•	2	41
R18-14753	52.7	•	•	3	36
R16-253	52.7	53.3	57.0	1	34
Progeny P4931E3S	52.5	•	•	3	33
DONMARIO DM46E62	52.1	•	•	2	28
DONMARIO DM48F61	51.9	•	•	3	42
R18-14142	50.8	•	•	3	34
R15-2422	49.7	53.1	55.9	5	34
DONMARIO DM48E62S	48.9	•	•	2	30
Grand Mean	58.0	•	•	1.9	38.0
LSD	5.2	•	•	0.9	2.2
C.V.	6.7	•	•	•	•

[a] Average yield from 2020 and 2021.

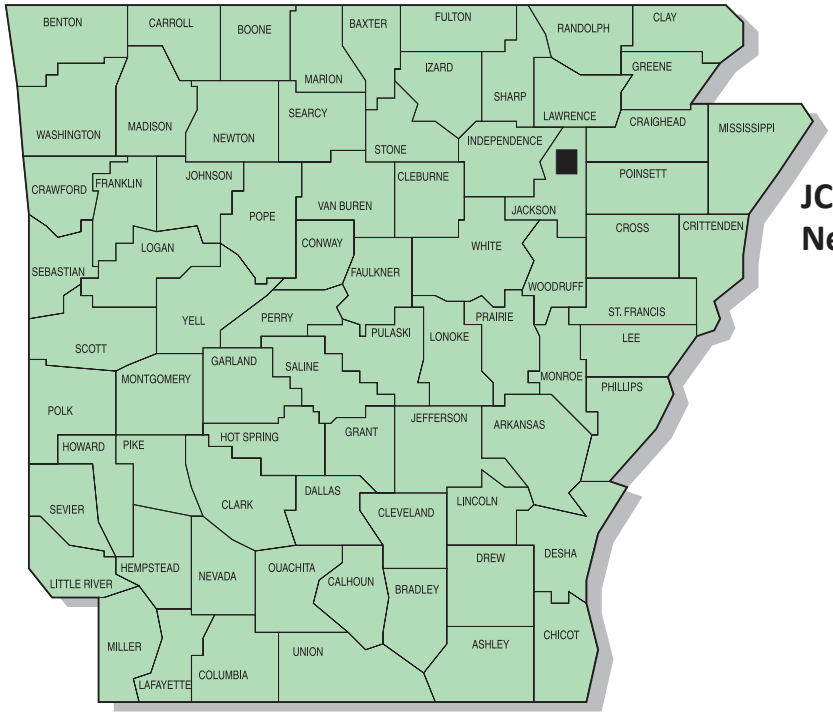
[b] Average yield from 2019, 2020, 2021.

[c] 1 = Almost all plants erect; 2 = Either all plants leaning slightly, or a few plants down; 3 = Either all plants leaning moderately, or 25–50% of plants down; 4 = Either all plants leaning considerably, or 50–80% of plants down; 5 = All plants down badly.

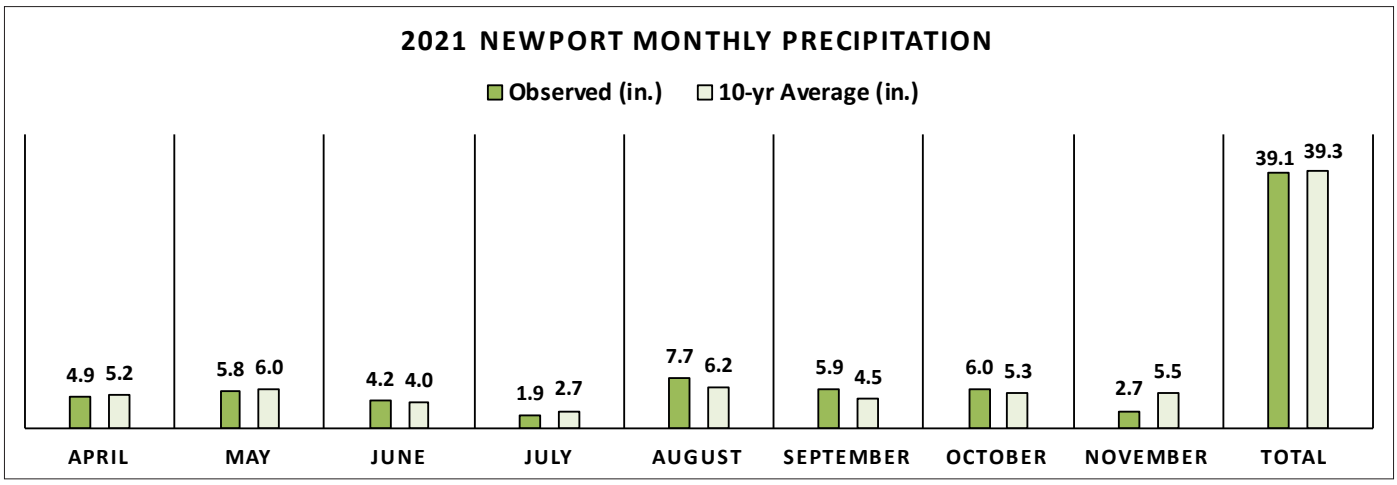
[d] 1 = No shattering; 2 = 1–3% shattered; 3 = 4–8% shattered; 4 = 9–19% shattered; 5 = 20% or more shattered.

Newport: Jackson County Extension Center (JCEC)

Irrigated Soybean Varieties and Strains, 2021



JCEC
Newport, Arkansas



Soil Series
Dexter, silt loam; Bosket, fine sandy loam
Previous Crop
Corn
Row Spacing/pH
30 in. twin row/6.8
Planting Date
May 25
Irrigation Dates
June 16, 24; July 15, 28; Aug. 4; Sept. 3, 13, 24

Harvest	**Date**
Relative Maturity (RM) (4.0–4.5), RM (4.6–4.9), RM (5.0–5.9)	Oct. 14, 19, 20
Fertilizer Application(s)	**Date**
74.4 lb K	
Herbicide Application(s)	**Date**
Fierce® 2 oz; Prefix® 2 oz Basagran® 2 pt, Assure® 10 oz, Pursuit® 1.45 oz	May 25; June 22 July 9
Insecticide Application(s)	**Date**
Besiege® 9 oz	July 13
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on July 9.	

Table 19. Performance of Irrigated Varieties and Strains, Jackson County Extension Center, Newport, Ark., 2021.

Variety/Experimental Line	2021	2-Year Average[a]	Lodging Score[b]	Shatter Score[c]	Plant Height
	(bu./ac)			(in.)	(in.)
Relative Maturity 4.0–4.5					
Local LS4415XF	63.9	•	1	1	27
Armor 45-F81	60.5	•	1	1	28
NK 45-V9E3	59.6	•	1	1	28
Local LS4506XS	58.3	•	1	1	29
Dyna-Gro S45ES10	58.0	•	1	1	29
Local IS4324E3	57.6	•	1	1	25
Progeny P4521XFS	56.9	•	1	1	29
Armor 44-D49	56.7	•	1	1	32
NK 42-T5XF	56.5	•	1	1	27
Dyna-Gro S43XS70	56.4	•	1	1	30
Axis 4522XF	56.3	•	1	1	26
Progeny P4501XFS	56.2	•	2	1	32
NK 44-J4XFS	55.5	•	1	1	28
NK S45-J3X	55.3	•	1	1	27
R18-14229	54.9	•	2	2	36
NK 45-P9XF	54.5	•	1	1	26
Local LS4517XFS	54.3	•	2	2	29
NK S44-C7X	54.1	•	1	1	26
S17-2243C	53.7	•	1	1	31
Amp 4448X	53.6	•	1	1	28
Delta Grow DG45E10	53.4	•	1	1	25
R18-14147	53.1	•	1	1	37
Asgrow AG42XF0	51.8	•	1	2	29
DONMARIO DM45X61	51.4	•	2	1	33
Integra 74551NS	50.7	•	1	1	31
Progeny P4541E3S	50.6	•	1	1	31
Asgrow AG43XF2	50.4	•	1	1	26
Asgrow AG45XF0	50.0	•	1	1	31
Progeny P4431E3	49.9	•	1	2	29
R18-14287	47.0	•	3	2	40
NK 43-V8XF	46.7	•	1	2	29
Progeny P4505RXS	46.3	•	1	1	29
R18C-1450	46.2	•	1	2	26
Grand Mean	53.8	•	1	1	29
LSD (5%)	6.0	•	0.5	0.4	2.6
C.V.	8.2	•	•	•	•
Relative Maturity 4.6–4.9					
USG 7489XT	72.2	•	1	2	30
Armor 48-D25	72.1	•	1	1	35
AgriGold G4615XF	70.5	•	1	2	34
Local LS4795XS	69.9	•	1	2	28
Armor 47-E03	69.7	•	1	2	32
Armor 48-D03	69.7	•	1	1	33
Pioneer P48A60X	68.5	•	1	2	31
Delta Grow DG46E10	67.6	•	1	2	22
Dyna-Gro S46XS60	67.4	•	1	2	31
Integra 54660NS	67.4	•	1	1	31

Continued

Table 19. Performance of Irrigated Varieties and Strains, Jackson County Extension Center, Newport, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	Lodging Score[b]	Shatter Score[c]	Plant Height
	(bu./ac)			(in.)	(in.)
Relative Maturity 4.6–4.9, continued					
Amp 4950X	67.1	•	1	2	38
Amp 4850XF	66.9	•	1	2	30
S16-7922C	66.7	•	2	2	36
AgriGold G4820RX	66.4	•	1	1	33
Delta Grow DG46F17/STS	66.4	•	1	2	33
Amp 4690XF	66.1	•	2	2	34
Delta Grow DG49E20	66.0	•	2	2	33
Local LS4806XS	66.0	•	1	1	29
Armor 46-F13	65.8	•	1	2	33
USG 7491XFS	65.2	•	1	2	29
Dyna-Gro S48XT90	64.7	•	1	2	30
Delta Grow DG48E59	64.6	•	1	2	31
R18-14272	64.1	•	2	2	42
Progeny P4775E3S	63.8	•	2	2	34
Integra 54891NS	63.8	•	1	1	32
Local LS4919XFS	63.1	•	1	2	30
NK S47-Y9X	63.1	•	1	2	29
Delta Grow DG49E90	62.9	•	1	1	31
Progeny P4921XFS	62.8	•	1	2	33
Delta Grow DG47E20/STS	62.8	•	2	2	34
NK S46-E3S	62.6	•	2	2	35
Progeny P4816RX	62.6	•	1	1	29
USG 7481XF	62.5	•	2	2	37
Asgrow AG48XF0	62.5	•	1	1	34
Progeny P4806XFS	62.5	•	1	2	29
R18-14502	62.3	•	2	2	41
DONMARIO DM46F62	62.2	•	1	1	33
Delta Grow DG48E49/STS	62.1	•	1	2	30
Armor 46-D09	61.9	•	1	1	28
Progeny P4604XFS	61.7	•	2	2	33
Integra 54606NS	61.7	•	2	1	33
NK S49-F5X	61.5	•	1	1	29
Axis 4611ES	61.5	•	1	2	35
R18-14142	61.4	•	2	2	36
Progeny P4970RX	60.8	•	1	1	31
Local LS4707XF	60.7	•	2	2	30
ES4875XF	60.6	•	1	2	29
Local LS4805XFS	60.6	•	1	2	28
Progeny P4821RX	60.5	•	2	1	34
Integra 74731NS	60.2	•	1	2	29
USG 7461XFS	60.1	•	1	2	31
Dyna-Gro S48XT40	60.0	•	1	2	30
R13- 14635RR:0010	60.0	•	1	1	38
Armor 48-F22	59.6	•	1	2	30
Progeny P4931E3S	59.4	•	1	2	32
Local LS4606XFS	59.3	•	2	2	31
Delta Grow DG46X65/STS	58.7	•	1	1	30
Local IS4684E3S	58.6	•	2	2	30
DONMARIO DM48E62S	58.5	•	1	2	28
NK S48-2E3S	57.9	•	2	2	29

Continued

Table 19. Performance of Irrigated Varieties and Strains, Jackson County Extension Center, Newport, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	Lodging Score[b]	Shatter Score[c]	Plant Height
	(bu./ac)			(in.)	(in.)
Relative Maturity 4.6–4.9, continued					
Dyna-Gro S46XF31S	57.8	•	1	2	31
Integra 74621NS	57.7	•	1	2	34
Axis 4641XFS	57.7	•	2	2	33
Pioneer P47A64X	57.5	•	1	2	35
Dyna-Gro S48XF61S	57.2	•	1	2	28
Asgrow AG47XF0	56.6	•	1	1	30
AgriGold G4813XF	56.2	•	1	2	31
AgriGold G4900XF	56.0	•	1	2	30
Delta Grow DG48F20	56.0	•	1	2	29
Dyna-Gro S46ES91	56.0	•	1	2	33
R18C-13283	55.9	•	1	2	31
Armor 48-F01	55.6	•	2	2	36
Integra 54816N	55.0	•	1	1	29
Armor 48-E82	54.9	•	2	2	33
DONMARIO DM46E62	54.5	•	1	2	26
DONMARIO DM48F61	54.1	•	1	2	33
R18-14753	53.8	•	2	2	35
Integra 74852NS	52.9	•	1	2	28
Delta Grow DG48X45	52.5	•	1	2	31
Asgrow AG48XF2	51.8	•	2	2	31
R15-2422	51.8	•	2	2	32
R16-253	51.7	•	1	2	30
UA46i20C	50.6	•	1	2	30
Delta Grow DG49F22/STS	46.4	•	1	2	30
Grand Mean	60.6	•	1.3	1.7	34.3
LSD (5%)	7.7	•	0.5	0.6	3.9
C.V.	9.4	•	•	•	•
Relative Maturity 5.0–5.9					
Progeny P5521E3	69.5	•	2	1	44
Local IS5067E3	68.3	•	2	1	30
Asgrow AG52XF0	67.9	•	1	2	37
Asgrow AG53XF2	67.6	•	1	1	35
Local LS5418XFS	65.7	•	2	1	43
Local IS5232E3	65.0	•	2	1	34
Local LS5119XF	64.7	•	1	1	31
Local LS5009XS	64.6	71.0	2	1	35
Dyna-Gro S52XT91	62.7	•	1	1	33
NK S51-E3	62.7	•	2	2	34
Asgrow AG54XF0	62.6	•	2	1	38
R18-3250	61.9	•	1	1	36
Progeny P5003XF	61.2	•	2	1	32
Delta Grow DG52E80	61.0	•	1	2	32
Delta Grow DG51E60	60.9	67.7	2	1	34
R14-1422	60.3	64.5	1	1	32
Progeny P5121E3S	60.3	•	1	1	30
UA54i19GT	60.0	65.0	1	2	38
R15-1587	58.9	67.4	2	2	30
R16-1445	58.0	63.8	3	1	35

Continued

Table 19. Performance of Irrigated Varieties and Strains, Jackson County Extension Center, Newport, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	Lodging Score[b]	Shatter Score[c]	Plant Height
	(bu./ac)			(in.)	(in.)
Relative Maturity 5.0–5.9, continued					
R15-5695	57.8	•	1	1	28
R17-4177	57.3	•	2	1	35
Dyna-Gro S56XT99	56.9	•	1	2	32
Delta Grow DG53E30	56.8	•	1	2	32
Asgrow AG55XF0	56.7	•	1	1	31
S16-14801C	56.7	•	3	2	34
R17-3488	56.1	•	2	2	30
R13-13997	55.9	60.4	2	2	33
Delta Grow DG54F20	55.2	•	1	2	28
Local LS5614XF	54.9	•	1	1	27
Progeny P5411XF	54.3	•	1	2	27
R18-3048	53.6	•	2	2	41
Delta Grow DG50E10	52.6	59.3	2	2	38
R17-283F	48.1	•	1	2	33
Grand Mean	59.8	•	1.5	1.5	33.6
LSD (5%)	6.5	•	0.6	0.6	2.8
C.V.	8.0	•	•	•	•

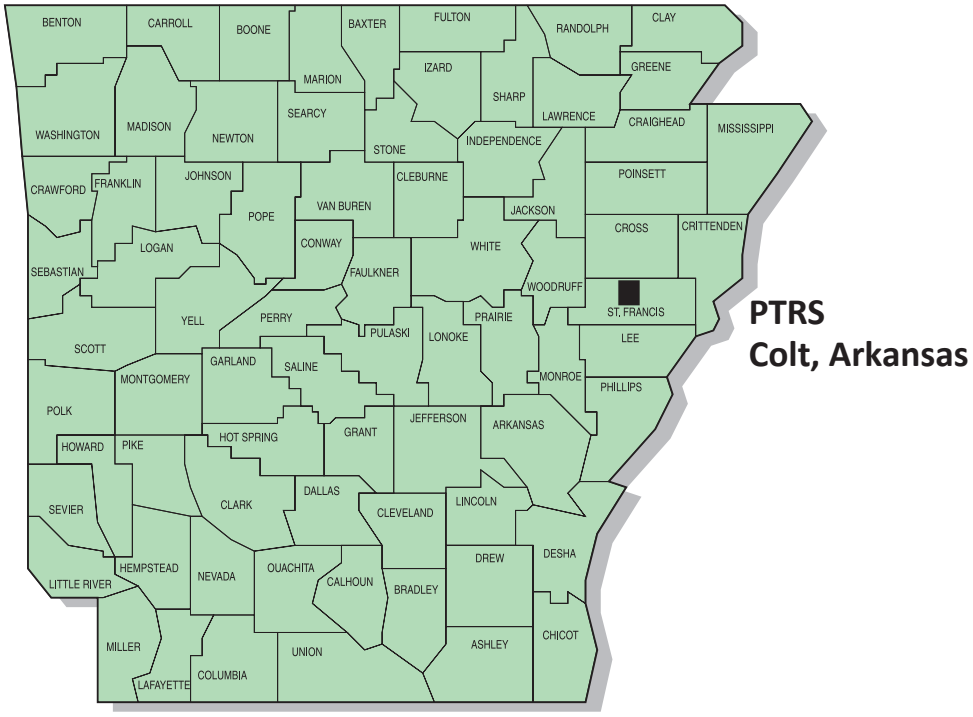
[a] Average yield from 2020 and 2021.

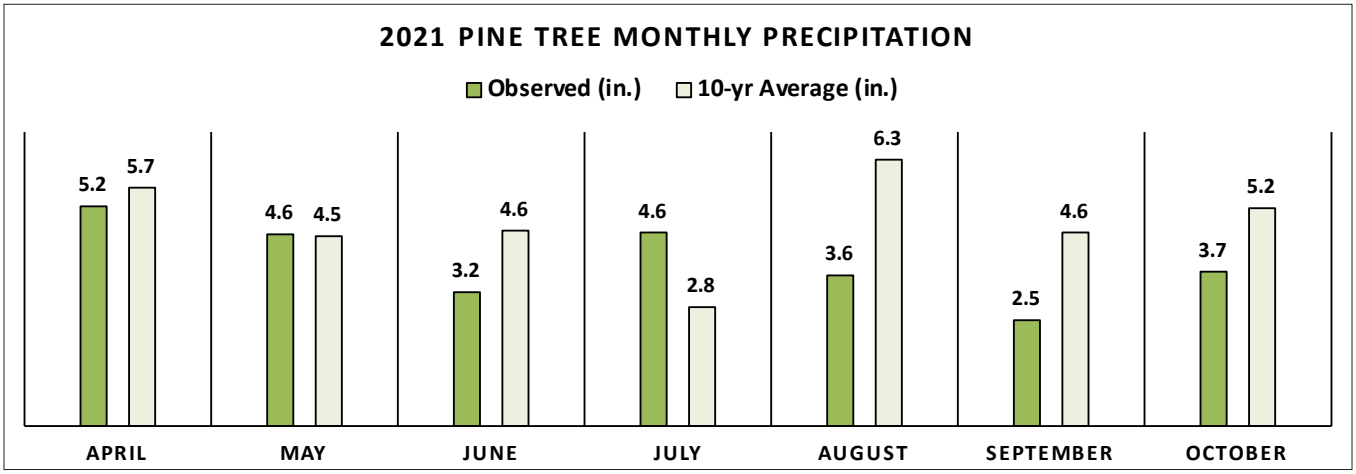
[b] 1 = Almost all plants erect; 2 = Either all plants leaning slightly, or a few plants down; 3 = Either all plants leaning moderately, or 25–50% of plants down; 4 = Either all plants leaning considerably, or 50–80% of plants down; 5 = All plants down badly.

[c] 1 = No shattering; 2 = 1–3% shattered; 3 = 4–8% shattered; 4 = 9–19% shattered; 5 = 20% or more shattered.

Colt: Pine Tree Research Station (PTRS)

Irrigated Soybean Varieties and Strains, 2021





Soil Series
Calloway, silt loam
Previous Crop
Fallow
Row Spacing
30 in.
Planting Date
May 14
Irrigation Dates
June 24; July 7, 29; Aug. 4, 11, 18, 25; Sept. 1

Harvest	**Date**
Relative Maturity (RM) (4.0–4.5), RM (4.6–4.9), RM (5.0–5.9)	Oct. 8, 9, 18
Fertilizer Application(s)	**Date**
20 lb P_2O_5, 80 lb K_2O 50 lb P_2O_5, 110 lb K_2O	April 6 April 19
Herbicide Application(s)	**Date**
Fierce® 2.8 oz; Clethodim 12 oz; Metolachlor 1.5 pt Fomesafen 1.5 pt, Clethodim 12 oz	May 15; May 29; June 9 June 19
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on July 13.	

Table 20. Performance of Irrigated Soybean Varieties and Strains, Pine Tree Research Station, Colt, Ark., 2021.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.0–4.5						
DONMARIO DM45X61	89.9	•	•	9/30	2	41
Integra 74551NS	85.9	•	•	9/28	2	39
Armor 44-D49	84.4	71.77	•	9/28	2	39
Progeny P4505RXS	82.8	79.92	•	9/30	2	38
Axis 4522XF	82.7	•	•	9/26	1	34
Progeny P4501XFS	82.5	•	•	9/27	2	39
NK 42-T5XF	81.4	•	•	9/27	1	35
NK 44-J4XFS	81.2	•	•	9/26	1	35
Asgrow AG45XF0	80.4	•	•	9/28	2	36
NK S44-C7X	79.7	66.56	•	9/27	2	36
Armor 45-F81	79.5	•	•	9/28	2	33
Local LS4415XF	79.1	•	•	9/27	2	34
NK 45-V9E3	78.7	•	•	9/29	2	35
Delta Grow DG45E10	78.3	74.26	•	9/28	1	32
Asgrow AG42XF0	78.2	•	•	9/23	2	40
Dyna-Gro S43XS70	77.2	71.67	•	9/30	1	36
NK 43-V8XF	76.8	•	•	9/29	2	39
Local LS4506XS	76.6	•	•	9/23	2	34
Asgrow AG43XF2	76.0	•	•	9/29	1	35
Local LS4517XFS	75.7	•	•	9/27	3	37
Local IS4324E3	75.6	•	•	9/23	2	35
Amp 4448X	75.4	•	•	9/26	2	34
NK 45-P9XF	73.9	•	•	9/27	1	34
Progeny P4521XFS	72.6	•	•	9/29	2	36
Progeny P4541E3S	71.7	•	•	9/30	2	37
NK S45-J3X	71.6	•	•	9/20	2	34
Dyna-Gro S45ES10	71.6	75.13	•	9/27	2	35
S17-2243C	71.4	•	•	9/28	2	37
R18-14229	71.3	•	•	9/29	3	39
R18-14147	68.9	•	•	9/27	2	38
R18-14287	65.5	•	•	9/28	3	39
Progeny P4431E3	61.1	•	•	9/17	2	33
R18C-1450	60.2	•	•	9/17	1	31
Grand Mean	75.9	•	•	9/26	1.9	36.0
LSD (5%)	7.1	•	•	•	0.7	2.2
C.V.	6.9	•	•	•	•	•
Relative Maturity 4.6–4.9						
Pioneer P47A64X	88.8	•	•	9/28	3	43
NK S47-Y9X	82.4	•	•	9/28	1	36
Integra 54891NS	82.0	79.6	•	9/28	2	39
Local LS4806XS	80.4	79.0	•	9/28	2	39
Armor 48-D03	80.3	•	•	9/28	2	39
Integra 54606NS	79.7	78.8	•	9/24	2	43
Integra 54660NS	79.5	81.2	•	9/28	2	35
Axis 4641XFS	79.2	•	•	9/28	2	39
Pioneer P48A60X	78.9	79.6	73.5	9/24	2	37
Integra 74621NS	78.7	•	•	9/24	2	40

Continued

Table 20. Performance of Irrigated Soybean Varieties and Strains, Pine Tree Research Station, Colt, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.6–4.9, continued						
Armor 48-D25	78.4	77.5	•	9/28	2	38
Amp 4690XF	77.4	•	•	9/27	2	40
Amp 4950X	77.2	•	•	10/2	2	38
Delta Grow DG48E59	77.1	•	•	9/28	2	35
Dyna-Gro S48XT40	77.0	76.3	•	9/28	2	41
Dyna-Gro S46XF31S	76.7	•	•	9/24	2	39
NK S49-F5X	76.6	•	•	9/28	2	36
AgriGold G4615XF	76.6	•	•	9/24	2	39
Delta Grow DG46X65/STS	76.5	73.3	•	9/28	2	36
Delta Grow DG49F22/STS	76.5	•	•	9/28	2	36
Delta Grow DG48X45	76.4	75.9	•	10/4	2	39
Dyna-Gro S48XT90	75.7	74.8	•	10/4	3	37
Asgrow AG48XF2	75.6	•	•	9/28	3	37
Armor 47-E03	75.3	•	•	9/28	2	36
Progeny P4816RX	75.2	77.6	69.3	9/28	2	39
USG 7461XFS	75.2	•	•	9/28	2	41
Local LS4795XS	75.1	77.1	71.0	9/24	2	37
Armor 46-F13	75.0	•	•	9/28	2	39
Delta Grow DG49E20	74.9	•	•	9/28	3	38
Progeny P4821RX	74.7	76.8	70.4	9/29	2	37
Progeny P4970RX	74.3	77.1	•	10/4	2	39
Armor 46-D09	74.2	77.8	•	9/23	2	37
USG 7489XT	74.2	77.6	70.0	9/28	2	38
Dyna-Gro S46XS60	74.0	75.8	69.1	9/28	2	37
Local LS4707XF	73.5	•	•	9/28	2	40
Asgrow AG47XF0	73.3	•	•	9/27	2	36
DONMARIO DM48F61	73.3	•	•	9/28	2	39
Integra 54816N	73.2	76.6	•	10/2	2	37
Progeny P4921XFS	73.0	•	•	9/28	2	38
Progeny P4604XFS	72.6	•	•	9/24	2	40
USG 7481XF	72.6	•	•	9/28	2	41
S16-7922C	72.5	•	•	9/28	3	37
Delta Grow DG48F20	71.8	•	•	9/28	2	38
Progeny P4931E3S	71.6	•	•	10/2	3	37
Local LS4606XFS	71.3	•	•	9/24	2	40
R18-14272	71.1	•	•	10/2	4	40
AgriGold G4900XF	70.8	•	•	9/28	2	37
Local LS4919XFS	70.7	•	•	9/28	2	37
AgriGold G4820RX	70.5	76.5	•	10/2	2	40
Delta Grow DG48E49/STS	69.7	67.8	•	9/28	2	36
DONMARIO DM46F62	69.4	•	•	9/23	2	40
Delta Grow DG46F17/STS	69.4	•	•	9/24	3	38
Amp 4850XF	69.4	•	•	9/28	2	37
Local LS4805XFS	69.3	•	•	10/2	1	36
Dyna-Gro S48XF61S	69.1	•	•	9/28	2	37
AgriGold G4813XF	68.8	•	•	9/29	2	38
Delta Grow DG47E20/STS	68.7	69.2	•	9/24	2	38
Integra 74852NS	68.6	•	•	9/28	2	38

Continued

Table 20. Performance of Irrigated Soybean Varieties and Strains, Pine Tree Research Station, Colt, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.6–4.9, continued						
USG 7491XFS	68.5	•	•	9/29	2	37
Integra 74731NS	68.5	•	•	9/28	2	37
Progeny P4806XFS	68.4	•	•	9/28	2	38
Axis 4611ES	68.4	•	•	9/28	2	39
Armor 48-F01	68.3	•	•	9/28	3	41
ES4875XF	68.1	•	•	10/2	2	35
DONMARIO DM48E62S	68.1	•	•	9/29	2	33
Armor 48-E82	67.9	•	•	9/28	3	37
Armor 48-F22	67.8	•	•	9/29	2	36
NK S48-2E3S	67.8	•	•	9/24	2	35
Local IS4684E3S	67.2	•	•	9/22	2	36
R18-14502	66.9	•	•	10/2	4	39
Dyna-Gro S46ES91	66.8	69.5	•	9/23	2	39
Progeny P4775E3S	66.3	69.6	66.6	9/27	2	39
R18-14142	66.1	•	•	10/2	4	37
UA46i20C	65.6	66.5	62.9	9/28	3	37
R18C-13283	65.1	•	•	9/24	2	36
NK S46-E3S	64.7	•	•	9/23	2	37
R13- 14635RR:0010	64.7	67.1	•	9/29	2	43
DONMARIO DM46E62	63.9	•	•	9/28	3	36
Asgrow AG48XF0	63.8	•	•	9/28	2	39
Delta Grow DG49E90	62.4	•	•	9/28	2	37
R16-253	61.4	62.0	59.5	9/28	2	37
R18-14753	61.2	•	•	9/24	3	39
Delta Grow DG46E10	56.2	•	•	9/20	2	36
R15-2422	45.5	54.0	52.9	9/28	4	39
Grand Mean	71.2	•	•	9/27	2.2	38.0
LSD (5%)	6.0	•	•	•	0.4	1.8
C.V.	6.3	•	•	•	•	•
Relative Maturity 5.0–5.9						
Asgrow AG53XF2	79.0	•	•	10/3	2	39
Asgrow AG54XF0	77.2	•	•	10/12	2	41
S16-14801C	76.8	•	•	9/29	3	33
Local LS5119XF	76.5	•	•	10/3	2	39
Asgrow AG52XF0	76.5	•	•	10/3	2	38
Dyna-Gro S52XT91	73.0	•	•	9/28	2	39
Local LS5009XS	72.6	72.8	72.8	9/29	3	40
Local IS5067E3	71.2	•	•	9/28	2	34
R14-1422	70.9	65.7	65.4	10/7	2	32
Progeny P5521E3	70.0	•	•	10/8	3	42
Delta Grow DG52E80	69.7	•	•	9/29	2	36
Delta Grow DG51E60	68.5	67.7	67.7	10/3	2	35
Progeny P5003XF	67.6	•	•	9/28	3	37
R15-1587	67.4	66.3	66.7	9/29	2	31
NK S51-E3	67.2	•	•	9/29	2	36
Local IS5232E3	66.9	•	•	10/3	2	35
Delta Grow DG53E30	66.5	•	•	10/5	2	36
Local LS5614XF	65.9	•	•	10/2	1	31

Continued

Table 20. Performance of Irrigated Soybean Varieties and Strains, Pine Tree Research Station, Colt, Ark., 2021, continued.

Variety/Experimental Line	2021 (bu./ac)	2-Year Average[a] (bu./ac)	3-Year Average[b] (bu./ac)	Maturity Date	Lodging Score[c]	Plant Height (in.)
Relative Maturity 5.0–5.9, continued						
R17-283F	64.3	•	•	10/6	2	32
R13-13997	64.2	62.8	64.2	10/8	3	33
UA54i19GT	64.1	63.9	64.1	10/4	3	41
Local LS5418XFS	63.6	•	•	10/12	2	42
R18-3250	61.6	•	•	10/8	2	39
R17-3488	57.8	•	•	10/2	2	34
R18-3048	57.8	•	•	9/28	2	42
Asgrow AG55XF0	57.7	•	•	10/3	2	35
R17-4177	56.2	•	•	10/3	3	35
Delta Grow DG54F20	56.0	•	•	9/29	2	35
Progeny P5411XF	55.0	•	•	9/28	2	32
Dyna-Gro S56XT99	52.0	•	•	9/28	3	33
R15-5695	51.8	•	•	10/2	2	31
Progeny P5121E3S	51.0	•	•	9/28	4	35
R16-1445	46.8	54.1	57.7	10/2	4	35
Delta Grow DG50E10	39.3	47.7	47.7	9/28	3	38
Grand Mean	64.1	•	•	10/2	2.3	36.3
LSD (5%)	6.7	•	•	•	0.3	1.9
C.V.	7.6	•	•	•	•	•

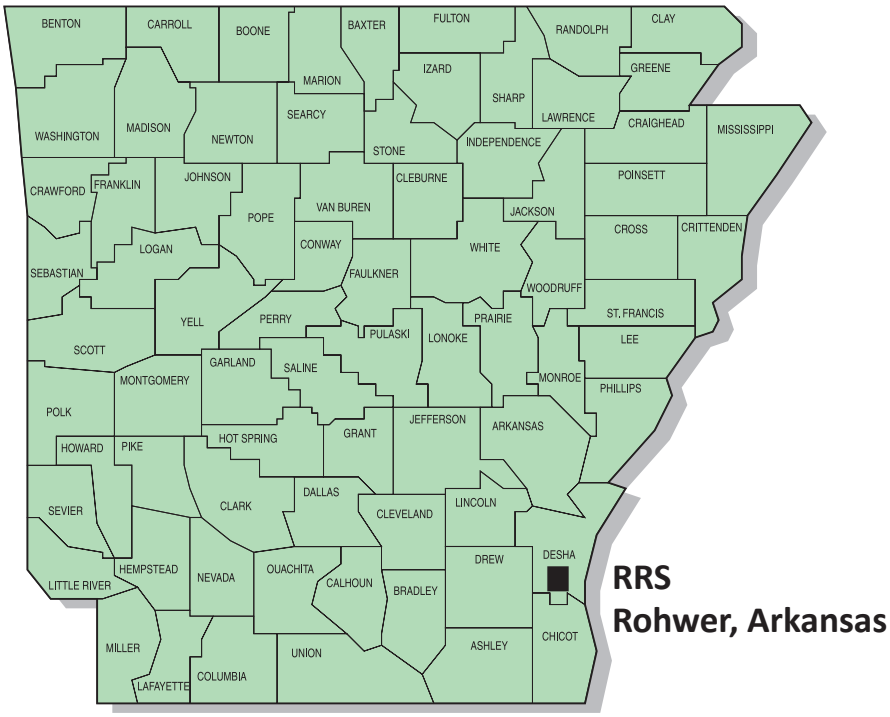
[a] Average yield from 2020 and 2021.

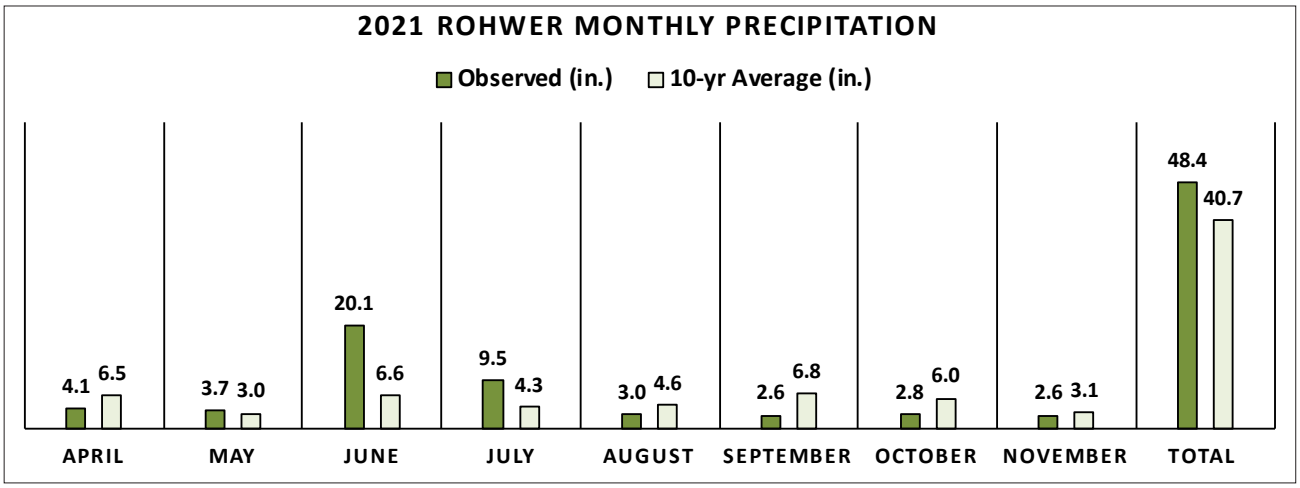
[b] Average yield from 2019, 2020 and 2021.

[c] 1 = Almost all plants erect; 2 = Either all plants leaning slightly, or a few plants down; 3 = Either all plants leaning moderately, or 25–50% of plants down; 4 = Either all plants leaning considerably, or 50–80% of plants down; 5 = All plants down badly.

Rohwer: Rohwer Research Center (RRS)

Irrigated Soybean Varieties and Strains, 2021





Soil Series
Sharkey clay, desha silt loam
Previous Crop
Corn
Row Spacing
38 in.
Planting Date
May 7
Irrigation Dates
June 25; July 6; Aug. 6, 17

Harvest	Date
Relative Maturity (RM) (4.0–4.5), RM (4.6–4.9), RM (5.0–5.9)	Sept. 27, Oct. 4, 12
Fertilizer Application(s)	**Date**
66 lb K_2O	April 20
Herbicide Application(s)	**Date**
2,4-D 1 qt, Roundup® 1 qt Dual® 1.33 pt, Liberty® 1 qt, Valor® 2 oz Fomesafen 1.5 pt, Dual® 1 pt; Zidua® 3 oz Blazer® 2 pt, Basagran® 1 pt, Select® 1 pt; Storm® 1.5 pt	March 7 May 7 June 2; June 17 June 22; July 14
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on 15 May. The Rohwer location received 19.22 inches of rainfall between 8–9 June.	

Table 21. Performance of Irrigated Soybean Varieties and Strains, Rohwer Research Station, Rohwer, Ark., 2021.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 4.0–4.5						
NK 42-T5XF	73.6	•	•	9/17	2	35
NK 44-J4XFS	73.0	•	•	9/16	3	37
Asgrow AG43XF2	71.9	•	•	9/21	2	36
Progeny P4505RXS	69.4	69.3	•	9/26	5	37
Axis 4522XF	69.1	•	•	9/26	4	35
Armor 45-F81	68.5	•	•	9/23	5	34
NK 45-P9XF	68.4	•	•	9/23	5	36
Delta Grow DG45E10	68.1	67.6	•	9/18	1	30
DONMARIO DM45X61	67.8	•	•	9/26	7	38
Asgrow AG45XF0	66.8	•	•	9/15	7	37
NK S44-C7X	66.8	70.5	•	9/21	5	34
Armor 44-D49	66.6	67.5	•	9/28	6	39
Dyna-Gro S43XS70	66.6	68.0	•	9/21	3	39
Local LS4415XF	66.2	•	•	9/21	5	36
NK 43-V8XF	66.0	•	•	9/21	5	38
Asgrow AG42XF0	65.7	•	•	9/15	3	38
Local LS4517XFS	65.0	•	•	9/21	5	36
NK 45-V9E3	64.9	•	•	9/21	8	34
Dyna-Gro S45ES10	63.8	68.5	•	9/22	2	36
Local IS4324E3	63.0	•	•	9/13	5	34
S17-2243C	63.0	•	•	9/23	3	41
Progeny P4521XFS	62.6	•	•	9/26	6	37
R18-14229	62.1	•	•	9/21	4	38
Progeny P4431E3	61.1	•	•	9/15	6	36
Amp 4448X	61.0	•	•	9/21	7	33
Progeny P4541E3S	60.6	•	•	9/26	3	36
R18C-1450	60.5	•	•	9/13	3	36
Progeny P4501XFS	60.4	•	•	9/26	8	38
Integra 74551NS	60.0	•	•	9/28	8	40
NK S45-J3X	59.9	•	•	9/15	5	35
Local LS4506XS	59.8	•	•	9/21	6	36
R18-14147	58.6	•	•	9/21	2	43
R18-14287	56.7	•	•	9/21	6	44
Grand Mean	64.7	•	•	9/20	4.8	36.8
LSD (5%)	4.9	•	•	•	1.7	3.4
C.V.	5.5	•	•	•	•	•
Relative Maturity 4.6–4.9						
USG 7489XT	76.5	75.6	77.7	9/30	•	39
Delta Grow DG49E20	74.6	•	•	9/30	•	38
Progeny P4821RX	73.4	74.7	75.7	10/2	•	38
Asgrow AG48XF2	73.0	•	•	9/26	•	40
Integra 54816N	72.8	74.9	•	9/26	•	37
Progeny P4816RX	72.3	74.7	75.5	9/30	•	39
Progeny P4970RX	72.3	72.1	•	10/2	•	42
NK S47-Y9X	72.3	•	•	9/28	•	38
Delta Grow DG48X45	72.2	68.6	•	9/28	•	36
USG 7491XFS	71.5	•	•	9/30	•	38

Continued

Table 21. Performance of Irrigated Soybean Varieties and Strains, Rohwer Research Station, Rohwer, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 4.6–4.9, continued						
Integra 54891NS	70.7	70.6	•	9/30	•	40
Progeny P4931E3S	70.5	•	•	9/28	•	39
Integra 54660NS	70.3	76.2	•	9/26	•	40
Armor 48-D25	69.3	69.1	•	9/26	•	41
Dyna-Gro S48XT90	69.2	70.6	•	9/30	•	40
Pioneer P47A64X	69.2	•	•	9/26	•	43
Asgrow AG47XF0	69.1	•	•	9/26	•	39
Dyna-Gro S46ES91	68.9	69.0	•	9/23	•	44
Progeny P4806XFS	68.9	•	•	9/30	•	38
Local LS4806XS	68.8	72.7	•	9/26	•	41
AgriGold G4820RX	68.6	70.9	•	9/28	•	43
Local LS4805XFS	68.6	•	•	9/30	•	36
Local IS4684E3S	67.6	•	•	9/28	•	42
Dyna-Gro S46XS60	67.4	71.0	72.8	9/21	•	40
Armor 48-F22	67.4	•	•	9/21	•	39
AgriGold G4813XF	67.2	•	•	9/26	•	38
ES4875XF	67.1	•	•	9/30	•	38
Amp 4690XF	67.0	•	•	9/28	•	42
Dyna-Gro S46XF31S	67.0	•	•	9/23	•	40
Amp 4950X	66.7	•	•	9/28	•	40
NK S49-F5X	66.5	•	•	9/21	•	38
NK S46-E3S	66.3	•	•	9/26	•	44
Armor 46-F13	66.3	•	•	9/28	•	42
Amp 4850XF	66.2	•	•	9/30	•	36
Armor 48-E82	66.2	•	•	9/30	•	37
Dyna-Gro S48XT40	66.1	68.6	•	9/27	•	42
Progeny P4775E3S	66.1	70.7	72.6	9/27	•	44
Delta Grow DG48E59	65.9	•	•	9/30	•	34
Local LS4795XS	65.8	70.3	71.6	9/21	•	37
Delta Grow DG48F20	65.7	•	•	9/30	•	39
Local LS4606XFS	65.6	•	•	9/28	•	44
Integra 74731NS	65.6	•	•	9/27	•	38
Armor 48-D03	65.5	•	•	9/28	•	43
Axis 4641XFS	65.5	•	•	9/26	•	43
Progeny P4604XFS	65.4	•	•	9/26	•	44
R18-14142	65.4	•	•	9/28	•	42
Delta Grow DG46F17/STS	65.3	•	•	9/24	•	42
R18-14753	65.2	•	•	9/30	•	41
Delta Grow DG47E20/STS	65.0	67.0	•	9/27	•	42
Integra 54606NS	64.7	67.2	•	9/30	•	40
Integra 74621NS	64.7	•	•	9/21	•	41
AgriGold G4615XF	64.6	•	•	9/26	•	42
S16-7922C	64.5	•	•	9/26	•	34
Armor 47-E03	64.4	•	•	9/27	•	36
Pioneer P48A60X	64.3	72.4	74.9	9/21	•	37
DONMARIO DM48F61	64.2	•	•	9/28	•	42
Dyna-Gro S48XF61S	64.1	•	•	9/30	•	38
Armor 46-D09	64.0	69.4	•	9/26	•	39

Continued

Table 21. Performance of Irrigated Soybean Varieties and Strains, Rohwer Research Station, Rohwer, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 4.6–4.9, continued						
Delta Grow DG48E49/STS	63.4	66.6	•	9/23	•	38
R18-14272	63.1	•	•	10/1	•	46
R18-14502	62.9	•	•	9/30	•	46
USG 7461XFS	62.3	•	•	9/21	•	46
Axis 4611ES	62.2	•	•	9/24	•	43
NK S48-2E3S	62.0	•	•	9/21	•	34
R13- 14635RR:0010	61.9	59.3	•	9/30	•	45
Delta Grow DG46X65/STS	61.6	66.5	•	9/26	•	40
Delta Grow DG46E10	61.5	•	•	9/21	•	38
DONMARIO DM46F62	61.2	•	•	9/21	•	41
Local LS4707XF	61.1	•	•	9/21	•	41
R18C-13283	60.5	•	•	9/26	•	40
USG 7481XF	60.4	•	•	9/23	•	39
UA46i20C	58.3	57.8	61.5	9/26	•	41
DONMARIO DM48E62S	58.1	•	•	9/24	•	34
Delta Grow DG49E90	58.1	•	•	9/30	•	39
R16-253	58.0	52.8	59.4	9/27	•	36
Asgrow AG48XF0	57.9	•	•	9/27	•	42
Progeny P4921XFS	57.8	•	•	9/30	•	41
Armor 48-F01	57.8	•	•	9/26	•	42
DONMARIO DM46E62	57.4	•	•	9/23	•	36
Local LS4919XFS	56.8	•	•	9/30	•	39
Delta Grow DG49F22/STS	53.9	•	•	9/30	•	37
AgriGold G4900XF	53.4	•	•	9/26	•	38
R15-2422	52.6	57.5	59.3	9/27	•	42
Integra 74852NS	•	•	•	•	•	•
Grand Mean	64.9	•	•	9/26	•	40.0
LSD (5%)	4.8	•	•	•	•	2.8
C.V.	5.5	•	•	•	•	•
Relative Maturity 5.0–5.9						
S16-14801C	77.4	•	•	9/30	4	33
R14-1422	77.4	71.0	68.0	10/2	4	33
Asgrow AG53XF2	76.9	•	•	9/28	5	43
NK S51-E3	75.6	•	•	9/30	6	41
Delta Grow DG51E60	74.6	73.5	73.5	10/1	7	40
Local IS5232E3	74.6	•	•	9/30	7	41
Asgrow AG52XF0	71.9	•	•	9/30	4	43
Local LS5119XF	70.9	•	•	9/26	5	42
R16-1445	70.6	68.2	65.6	10/2	6	35
R13-13997	70.2	68.7	67.4	9/28	5	40
Local LS5009XS	69.8	69.2	69.2	9/30	7	43
UA54i19GT	69.3	67.0	66.3	10/1	7	48
R15-1587	67.9	67.2	66.9	9/30	3	32
Delta Grow DG53E30	67.3	•	•	9/30	1	44
Progeny P5521E3	67.2	•	•	10/7	7	51
Local IS5067E3	66.4	•	•	9/30	9	35
Dyna-Gro S52XT91	65.8	•	•	9/26	4	41
Progeny P5003XF	64.3	•	•	9/28	7	42

Continued

Table 21. Performance of Irrigated Soybean Varieties and Strains, Rohwer Research Station, Rohwer, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 5.0–5.9, continued						
R15-5695	64.2	•	•	10/2	4	30
Asgrow AG54XF0	64.0	•	•	10/11	3	47
R17-4177	63.1	•	•	9/30	6	37
R17-283F	63.0	•	•	10/2	3	33
Delta Grow DG52E80	62.4	•	•	9/26	3	41
R17-3488	62.0	•	•	9/30	3	35
R18-3250	62.0	•	•	10/5	2	43
Local LS5614XF	61.5	•	•	9/30	1	28
R18-3048	61.5	•	•	10/1	7	52
Progeny P5121E3S	61.2	•	•	10/1	9	36
Delta Grow DG54F20	59.9	•	•	9/26	3	32
Progeny P5411XF	59.8	•	•	9/26	2	33
Asgrow AG55XF0	58.5	•	•	9/30	3	33
Dyna-Gro S56XT99	57.1	•	•	9/28	3	31
Local LS5418XFS	56.7	•	•	10/2	5	50
Delta Grow DG50E10	51.5	50.6	50.6	9/30	8	43
Grand Mean	65.9	•	•	9/30	4.8	39.4
LSD (5%)	5.8	•	•	•	1.2	2.7
C.V.	6.4	•	•	•	•	•

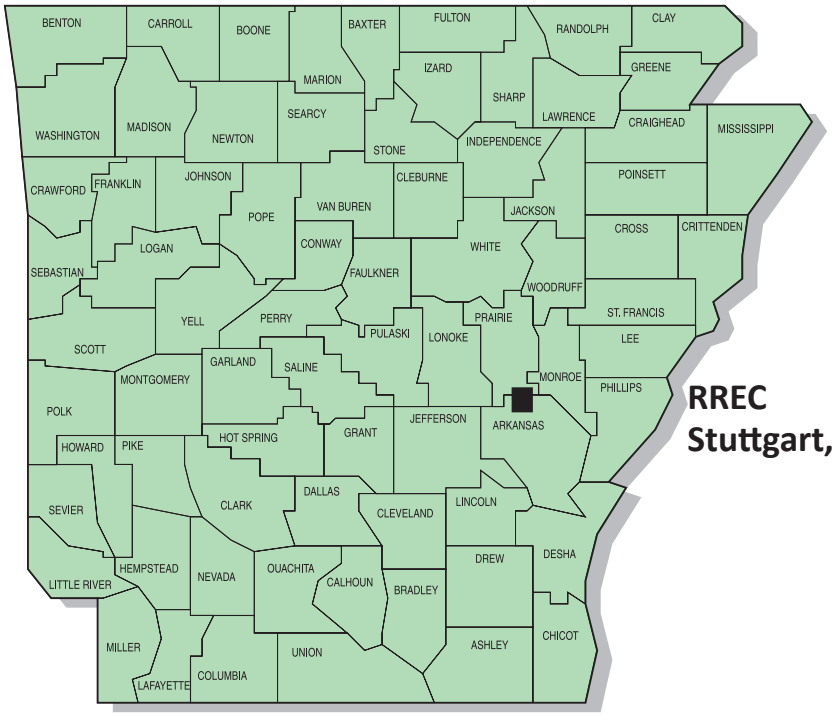
[a] Average yield from 2020 and 2021.

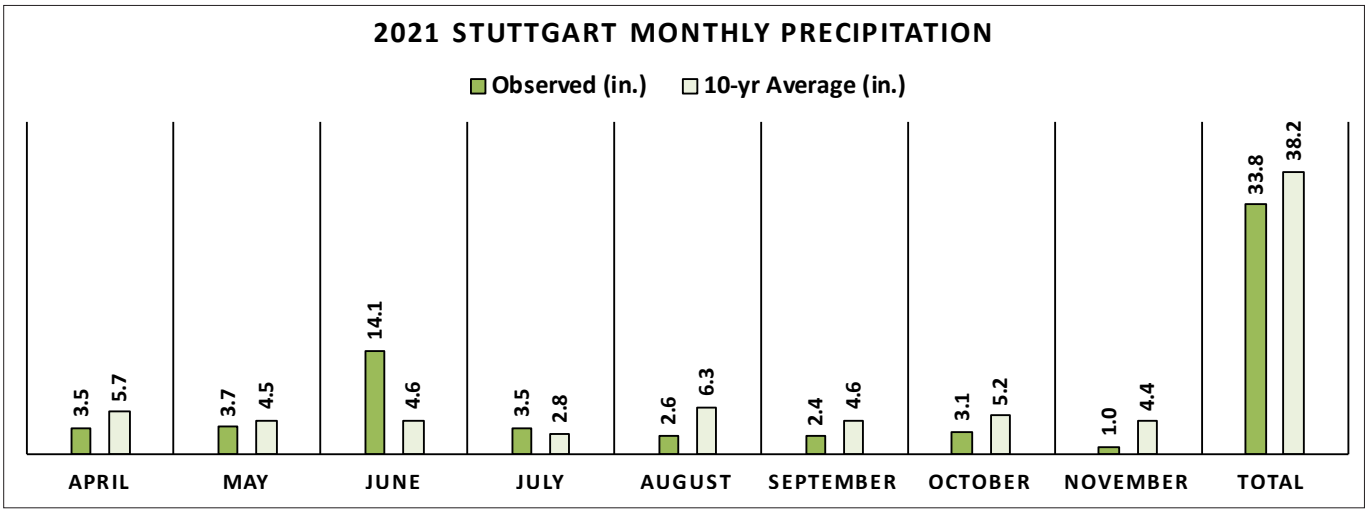
[b] Average yield from 2019, 2020 and 2021.

[c] 1 = 10° angle; 2 = 11–20° angle; 3 = 21–30° angle; 4 = 31–40° angle; 5 = 41–50° angle; 6 = 51–60° angle; 7 = 61–70° angle; 8 = 71–80° angle; 9 = 81–90° angle.

Stuttgart: Rice Research and Extension Center (RREC)

Irrigated Soybean Varieties and Strains, 2021





Soil Series
Dewitt silt loam
Previous Crop
Soybean
Row Spacing/pH
30 in./5.9
Planting Date
May 14
Irrigation Dates
June 27; July 9, 30; Aug. 12; Sept. 3

Harvest	**Date**
Relative Maturity (RM) (4.0–4.5), RM (4.6–4.9), RM (5.0–5.9)	Oct. 12
Fertilizer Application(s)	**Date**
54 lb P_2O_5 33 lb K_2O	May 10
Herbicide Application(s)	**Date**
Roundup® 1 qt, Dual® 1.5 pt Storm® 1.5 pt Select® 1 pt	May 16 July 7 July 15
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on July 2.	

Table 22. Performance of Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.0–4.5						
NK S44-C7X	75.0	66.2	•	9/18	0	32
Progeny P4505RXS	74.3	77.2	•	9/21	1	38
Armor 44-D49	74.2	75.0	•	9/23	2	39
NK 45-P9XF	73.1	•	•	9/20	0	33
Local LS4415XF	73.1	•	•	9/24	0	34
DONMARIO DM45X61	73.0	•	•	9/24	2	39
Dyna-Gro S45ES10	72.9	79.1	•	9/20	0	34
Integra 74551NS	72.3	•	•	9/22	2	41
NK 44-J4XFS	72.3	•	•	9/15	0	34
Armor 45-F81	71.6	•	•	9/24	0	34
Asgrow AG43XF2	71.6	•	•	9/16	0	34
Axis 4522XF	71.1	•	•	9/22	0	29
Local LS4506XS	71.1	•	•	9/17	1	35
Asgrow AG45XF0	70.8	•	•	9/23	0	32
Progeny P4521XFS	70.7	•	•	9/25	1	36
NK S45-J3X	70.6	•	•	9/18	0	32
Progeny P4501XFS	70.0	•	•	9/22	2	39
Amp 4448X	69.9	•	•	9/18	1	32
Local LS4517XFS	69.8	•	•	9/19	1	35
NK 42-T5XF	68.9	•	•	9/19	0	33
Dyna-Gro S43XS70	68.5	74.7	•	9/25	0	34
Delta Grow DG45E10	68.4	74.5	•	9/21	1	34
NK 45-V9E3	68.2	•	•	9/17	3	35
S17-2243C	68.1	•	•	9/24	0	37
Progeny P4541E3S	67.4	•	•	9/22	0	35
Asgrow AG42XF0	67.0	•	•	9/18	0	37
Local IS4324E3	66.5	•	•	9/13	1	33
Progeny P4431E3	64.7	•	•	9/20	0	32
R18-14147	64.7	•	•	9/24	0	38
R18-14229	64.3	•	•	9/22	1	38
NK 43-V8XF	63.5	•	•	9/12	1	37
R18-14287	59.9	•	•	9/22	4	39
R18C-1450	55.9	•	•	9/12	1	32
Grand Mean	68.8	•	•	9/20	0.8	34.9
LSD (5%)	4.0	•	•	•	1.0	2.3
C.V.	4.2	•	•	•	•	•
Relative Maturity 4.6–4.9						
USG 7489XT	81.1	82.7	76.8	9/26	0	34
Asgrow AG48XF2	77.0	•	•	9/26	1	35
Armor 46-D09	76.9	78.7	•	9/25	0	37
Integra 54660NS	76.7	76.5	•	9/25	0	35
Local LS4795XS	76.6	79.8	73.9	9/24	0	37
Delta Grow DG48X45	76.5	82.1	•	9/27	0	36
Progeny P4821RX	75.4	78.4	73.9	9/28	1	35
NK S47-Y9X	75.1	•	•	9/24	0	35
Pioneer P47A64X	75.0	•	•	9/24	0	38
Delta Grow DG46X65/STS	74.8	80.1	•	9/26	0	36

Continued

Table 22. Performance of Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021, continued.

Variety/Experimental Line	2021 (bu./ac)	2-Year Average[a] (bu./ac)	3-Year Average[b] (bu./ac)	Maturity Date	Lodging Score[c]	Plant Height (in.)
Relative Maturity 4.6–4.9, continued						
Integra 54606NS	73.6	77.1	•	9/27	1	39
S16-7922C	73.5	•	•	9/28	2	27
Armor 48-D25	73.4	78.7	•	9/27	0	36
Progeny P4970RX	73.3	79.2	•	10/2	0	36
Progeny P4604XFS	72.9	•	•	9/26	0	39
Dyna-Gro S46XS60	72.8	78.8	74.2	9/24	0	34
Pioneer P48A60X	72.6	72.9	69.5	9/25	0	35
Dyna-Gro S48XT90	72.3	75.3	•	9/27	1	36
Armor 46-F13	72.3	•	•	9/25	0	40
Integra 74621NS	72.1	•	•	9/26	1	40
AgriGold G4820RX	72.1	77.5	•	9/27	0	39
Delta Grow DG49E20	71.9	•	•	9/29	0	35
Delta Grow DG48E59	71.7	•	•	9/26	0	33
Amp 4950X	71.4	•	•	9/28	0	38
Armor 47-E03	71.2	•	•	9/25	1	34
Progeny P4931E3S	71.2	•	•	9/29	1	34
Axis 4641XFS	71.2	•	•	9/25	0	37
Amp 4690XF	71.0	•	•	9/25	0	37
Progeny P4816RX	71.0	76.0	69.8	9/27	0	34
Integra 54816N	70.9	77.9	•	9/28	0	34
Local LS4606XFS	70.9	•	•	9/27	0	36
NK S48-2E3S	70.9	•	•	9/22	1	32
USG 7461XFS	70.8	•	•	9/25	0	39
R13- 14635RR:0010	70.6	73.1	•	9/29	0	40
Armor 48-D03	70.1	•	•	9/27	0	37
R18C-13283	70.1	•	•	9/25	1	35
Delta Grow DG46F17/STS	70.0	•	•	9/23	0	36
Armor 48-E82	69.9	•	•	9/28	1	36
USG 7481XF	69.9	•	•	9/26	0	38
Integra 54891NS	69.6	73.5	•	9/26	0	38
R18-14502	69.6	•	•	9/27	2	39
Dyna-Gro S46XF31S	69.6	•	•	9/25	0	37
Progeny P4921XFS	69.5	•	•	9/25	0	33
AgriGold G4615XF	69.3	•	•	9/25	0	39
Delta Grow DG49F22/STS	68.7	•	•	9/26	0	33
DONMARIO DM48E62S	68.4	•	•	9/27	0	34
Local LS4806XS	68.4	74.4	•	9/28	0	36
R18-14753	68.4	•	•	9/25	2	35
Axis 4611ES	68.2	•	•	9/24	0	38
Local LS4707XF	68.2	•	•	9/25	1	37
Local LS4919XFS	68.1	•	•	9/28	0	34
Local IS4684E3S	68.0	•	•	9/25	0	36
Delta Grow DG48F20	67.8	•	•	9/26	0	34
Delta Grow DG47E20/STS	67.7	68.4	•	9/23	0	39
Dyna-Gro S46ES91	67.6	70.2	•	9/25	0	38
Integra 74852NS	67.6	•	•	9/27	0	36
Asgrow AG47XF0	67.6	•	•	9/28	0	35
Delta Grow DG48E49/STS	67.4	71.8	•	9/24	0	33

Continued

Table 22. Performance of Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021, continued.

Variety/Experimental Line	2021 (bu./ac)	2-Year Average[a] (bu./ac)	3-Year Average[b] (bu./ac)	Maturity Date	Lodging Score[c]	Plant Height (in.)
Relative Maturity 4.6–4.9, continued						
Progeny P4775E3S	67.1	70.0	66.7	9/25	0	38
DONMARIO DM48F61	66.9	•	•	9/23	0	39
R18-14142	66.9	•	•	9/28	3	34
DONMARIO DM46E62	66.9	•	•	9/24	3	34
AgriGold G4900XF	66.7	•	•	9/27	0	34
Asgrow AG48XF0	66.6	•	•	9/25	0	38
R18-14272	66.5	•	•	9/27	3	40
USG 7491XFS	66.3	•	•	9/26	0	34
NK S46-E3S	66.2	•	•	9/25	0	35
Dyna-Gro S48XT40	66.1	70.1	•	9/25	0	38
AgriGold G4813XF	65.9	•	•	9/24	0	35
ES4875XF	65.8	•	•	9/27	0	35
Local LS4805XFS	65.7	•	•	9/26	0	36
NK S49-F5X	65.6	•	•	9/26	0	35
Armor 48-F22	65.4	•	•	9/27	0	37
Amp 4850XF	65.2	•	•	9/27	0	36
Integra 74731NS	65.1	•	•	9/29	0	35
DONMARIO DM46F62	64.7	•	•	9/23	0	37
UA46i20C	64.4	67.2	64.4	9/25	0	33
Dyna-Gro S48XF61S	64.3	•	•	9/25	0	34
Progeny P4806XFS	64.0	•	•	9/26	0	35
R16-253	63.8	67.6	64.7	9/25	0	35
Delta Grow DG49E90	63.8	•	•	9/26	0	37
Armor 48-F01	63.1	•	•	9/29	1	40
R15-2422	57.7	64.1	62.1	9/24	4	36
Delta Grow DG46E10	57.7	•	•	9/22	0	34
Grand Mean	69.1	•	•	9/25	0.4	36.1
LSD (5%)	5.7	•	•	•	0.6	2.8
C.V.	6.1	•	•	•	•	•
Relative Maturity 5.0–5.9						
R14-1422	79.0	80.1	75.9	9/28	1	25
S16-14801C	75.9	•	•	9/24	2	25
Asgrow AG53XF2	75.6	•	•	9/28	0	39
R15-1587	74.8	74.6	71.1	9/24	0	25
Progeny P5521E3	72.9	•	•	10/3	2	42
Local IS5232E3	72.8	•	•	9/29	1	35
Delta Grow DG52E80	72.8	•	•	9/29	0	35
Local IS5067E3	72.6	•	•	9/26	1	33
Progeny P5003XF	71.9	•	•	9/27	3	35
Local LS5119XF	71.5	•	•	9/27	0	36
R13-13997	71.4	72.9	70.7	9/25	1	28
Delta Grow DG51E60	71.3	70.9	•	9/28	1	34
NK S51-E3	71.0	•	•	9/27	1	37
Dyna-Gro S52XT91	70.6	•	•	9/25	0	35
Delta Grow DG53E30	70.5	•	•	9/29	0	35
Progeny P5121E3S	69.9	•	•	9/26	3	33
UA54i19GT	69.3	72.1	68.8	10/3	2	46
Local LS5009XS	68.1	75.2	•	9/28	2	40

Continued

Table 22. Performance of Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021, continued.

Variety/Experimental Line	2021 (bu./ac)	2-Year Average[a] (bu./ac)	3-Year Average[b] (bu./ac)	Maturity Date	Lodging Score[c]	Plant Height (in.)
Relative Maturity 5.0–5.9, continued						
R17-283F	67.9	•	•	10/2	0	28
Asgrow AG52XF0	67.5	•	•	9/28	0	42
R17-3488	67.5	•	•	9/26	2	28
R15-5695	67.2	•	•	10/4	0	27
R18-3250	65.7	•	•	10/3	0	39
Delta Grow DG54F20	65.6	•	•	9/26	0	30
Dyna-Gro S56XT99	64.8	•	•	9/27	0	31
R16-1445	64.6	72.0	69.1	9/28	3	28
R17-4177	64.4	•	•	10/2	1	30
Asgrow AG55XF0	63.7	•	•	9/29	0	29
Local LS5418XFS	62.7	•	•	10/6	0	43
Progeny P5411XF	62.4	•	•	9/25	0	27
Asgrow AG54XF0	61.8	•	•	10/10	0	44
Local LS5614XF	61.4	•	•	10/1	0	26
R18-3048	60.7	•	•	9/28	2	46
Delta Grow DG50E10	55.4	59.4	•	9/27	1	40
Grand Mean	68.2	•	•	9/28	0.8	34.2
LSD (5%)	4.7	•	•	•	0.9	2.7
C.V.	5.0	•	•	•	•	•

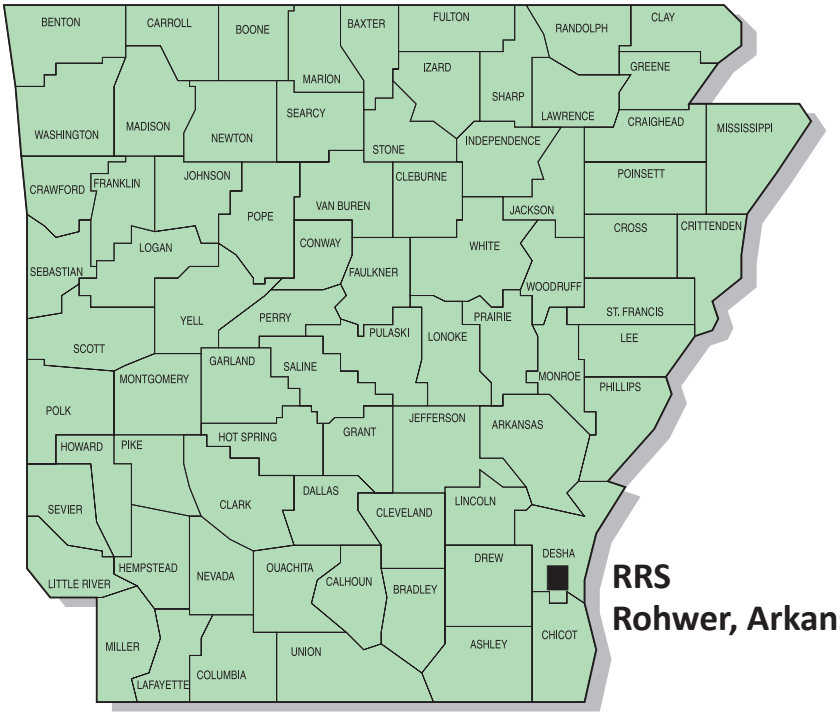
[a] Average yield from 2020 and 2021.

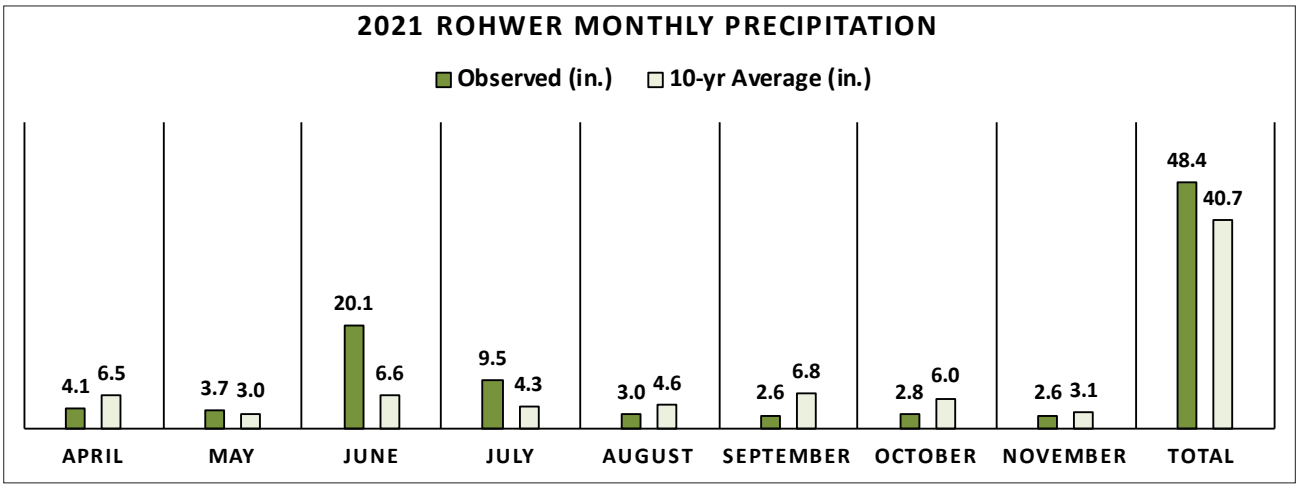
[b] Average yield from 2019, 2020 and 2021.

[c] 1 = Almost all plants erect; 2 = Either all plants leaning slightly, or a few plants down; 3 = Either all plants leaning moderately, or 25–50% of plants down; 4 = Either all plants leaning considerably, or 50–80% of plants down; 5 = All plants down badly.

Rohwer: Rohwer Research Center (RRS)

Irrigated, Late Planted Soybean Varieties and Strains, 2021





Soil Series
Sharkey clay, desha silt loam
Previous Crop
Corn
Row Spacing
38 in.
Planting Date
May 27
Irrigation Dates
June 25; July 6; Aug. 6, 17

Harvest	Date
Relative Maturity (RM) (4.0–4.5), RM (4.6–4.9), RM (5.0–5.9)	Oct. 5, Oct. 8, Oct. 14
Fertilizer Application(s)	**Date**
66 lb K_2O	April 20
Herbicide Application(s)	**Date**
2,4-D 1 qt, Roundup® 1 qt Dual® 1.33 pt, Roundup® 1 qt, Valor® 2 oz Zidua® 3 oz; Prefix® 2 pt; Storm® 1.5 pt	March 7 May 27 June 17; June 22; July 14
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on 15 May. The Rohwer location received 19.22 inches of rainfall between 8–9 June.	

Table 23. Performance of Irrigated Soybean Varieties and Strains, Late-Planted Rohwer Research Station, Rohwer, Ark., 2021.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.0–4.5						
Armor 45-F81	65.7	•	•	10/1	1	25
Dyna-Gro S43XS70	59.2	•	•	9/30	1	30
Armor 44-D49	58.5	•	•	9/30	1	33
Integra 74551NS	56.2	•	•	9/30	2	31
NK S44-C7X	55.6	•	•	9/26	1	28
DONMARIO DM45X61	54.8	•	•	9/30	2	35
R18-14229	53.5	•	•	9/28	1	34
Local LS4415XF	53.3	•	•	9/28	1	27
Progeny P4505RXS	53.2	•	•	9/28	2	31
S17-2243C	53.0	•	•	9/28	1	34
Axis 4522XF	52.1	•	•	10/1	1	27
Amp 4448X	52.0	•	•	9/26	1	27
Dyna-Gro S45ES10	50.8	•	•	9/30	1	30
NK 45-V9E3	50.3	•	•	9/26	2	30
Progeny P4501XFS	49.9	•	•	9/28	2	37
Progeny P4521XFS	49.9	•	•	9/30	1	29
NK 42-T5XF	49.7	•	•	9/26	1	27
NK 45-P9XF	49.6	•	•	9/26	1	27
NK 43-V8XF	48.6	•	•	9/26	1	29
NK 44-J4XFS	48.4	•	•	9/26	1	27
Local LS4506XS	47.3	•	•	9/26	1	28
R18-14287	47.0	•	•	9/28	3	35
Asgrow AG42XF0	46.0	•	•	9/26	1	31
Asgrow AG43XF2	45.9	•	•	9/26	1	25
R18-14147	45.2	•	•	9/26	1	30
Progeny P4431E3	44.7	•	•	9/26	2	24
Local LS4517XFS	43.0	•	•	9/23	1	28
Delta Grow DG45E10	41.9	•	•	9/26	1	22
Asgrow AG45XF0	41.8	•	•	9/30	1	27
Local IS4324E3	37.6	•	•	9/26	1	25
Progeny P4541E3S	35.6	•	•	9/26	2	27
NK S45-J3X	29.1	•	•	9/21	1	22
R18C-1450	27.9	•	•	9/21	1	25
Grand Mean	47.9	•	•	9/27	1.3	29
LSD (5%)	6.2	•	•	•	0.5	3.7
C.V.	9.4	•	•	•	•	•
Relative Maturity 4.6–4.9						
Pioneer P47A64X	70.5	•	•	9/26	2	40
Local LS4795XS	69.4	65.4	•	10/1	1	36
Armor 48-D25	67.6	67.6	•	10/1	2	36
Dyna-Gro S48XT90	67.5	•	•	10/2	2	38
Integra 54660NS	67.3	•	•	9/30	1	33
Armor 46-F13	67.3	67.3	•	9/26	1	40
S16-7922C	66.7	•	•	10/5	3	32
Progeny P4821RX	66.6	•	•	10/2	2	35
Dyna-Gro S48XT40	66.4	•	•	10/2	2	39
Delta Grow DG46X65/STS	66.2	•	•	9/28	2	34

Continued

Table 23. Performance of Irrigated Soybean Varieties and Strains, Late-Planted Rohwer Research Station, Rohwer, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.6–4.9, continued						
Progeny P4816RX	65.6	61.6	64.4	10/5	1	35
Delta Grow DG49E20	65.5	•	•	10/2	3	37
Delta Grow DG48X45	65.2	•	•	10/2	1	36
Progeny P4604XFS	64.7	•	•	10/1	1	38
Local LS4806XS	64.6	•	•	10/2	2	35
Armor 46-D09	64.6	64.6	•	9/30	1	34
Dyna-Gro S46XF31S	64.1	•	•	9/26	1	37
Dyna-Gro S46XS60	63.9	63.7	•	10/1	1	35
Delta Grow DG47E20/STS	63.8	•	•	9/28	1	39
AgriGold G4615XF	63.6	63.6	•	9/30	1	38
Integra 54891NS	63.1	•	•	9/26	1	40
Armor 47-E03	63.0	63.0	•	10/1	3	31
Pioneer P48A60X	63.0	64.7	66.9	9/30	1	33
Progeny P4970RX	62.8	•	•	10/5	2	36
Local LS4606XFS	62.5	•	•	9/30	1	36
R18-14272	62.4	•	•	10/5	3	40
Progeny P4931E3S	62.2	•	•	10/5	3	35
NK S47-Y9X	62.2	•	•	9/30	1	31
NK S49-F5X	62.1	•	•	9/28	1	33
Progeny P4921XFS	61.8	•	•	10/4	1	35
R18-14502	61.8	•	•	10/5	3	42
DONMARIO DM48F61	61.1	•	•	9/28	1	39
Integra 74852NS	61.0	•	•	9/30	1	33
Armor 48-E82	60.8	60.8	•	9/26	2	35
AgriGold G4900XF	60.8	60.8	•	9/30	1	35
Local LS4707XF	60.3	•	•	9/28	2	35
Integra 54816N	60.2	•	•	10/2	1	32
Delta Grow DG46F17/STS	60.1	•	•	9/26	1	35
Local LS4919XFS	60.0	•	•	10/4	1	32
Delta Grow DG49F22/STS	60.0	•	•	10/2	1	36
Integra 54606NS	60.0	•	•	10/2	2	36
AgriGold G4820RX	59.6	59.6	•	9/30	1	39
USG 7481XF	59.6	•	•	9/30	3	37
Armor 48-F01	59.3	59.3	•	9/30	3	41
USG 7489XT	59.1	61.1	68.8	10/1	1	32
Delta Grow DG48E49/STS	59.0	•	•	9/28	1	33
Integra 74621NS	59.0	•	•	10/2	2	36
Axis 4641XFS	58.8	•	•	10/1	1	35
NK S48-2E3S	58.6	•	•	9/26	1	30
Armor 48-D03	58.3	58.3	•	10/2	1	36
Progeny P4775E3S	58.2	61.7	•	9/30	1	36
NK S46-E3S	58.2	•	•	9/26	1	37
Amp 4690XF	58.0	58.0	•	9/30	1	37
R18C-13283	57.9	•	•	9/28	2	35
Axis 4611ES	57.9	•	•	9/26	1	35
R13- 14635RR:0010	57.8	•	•	10/2	2	38
Delta Grow DG48F20	57.7	•	•	10/1	1	32
R18-14142	57.7	•	•	9/30	2	37

Continued

Table 23. Performance of Irrigated Soybean Varieties and Strains, Late-Planted Rohwer Research Station, Rohwer, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Lodging Score[c]	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)			(in.)
Relative Maturity 4.6–4.9, continued						
Amp 4950X	57.5	57.5	•	10/1	2	37
Progeny P4806XFS	57.5	•	•	9/28	1	35
Asgrow AG48XF2	57.4	57.4	•	10/1	2	31
UA46i20C	57.3	57.2	•	9/28	2	34
Delta Grow DG48E59	57.0	•	•	10/1	1	30
Armor 48-F22	56.9	56.9	•	9/26	1	34
DONMARIO DM46F62	56.8	•	•	9/26	2	37
Local IS4684E3S	56.6	•	•	9/26	1	36
R18-14753	56.2	•	•	10/1	2	32
DONMARIO DM46E62	55.6	•	•	9/28	3	31
Amp 4850XF	55.2	55.2	•	9/30	1	31
Dyna-Gro S48XF61S	54.9	•	•	10/1	1	32
R16-253	54.5	58.1	•	9/30	1	34
Delta Grow DG49E90	54.5	•	•	10/1	1	32
Asgrow AG48XF0	54.2	54.2	•	9/30	1	33
USG 7461XFS	53.7	•	•	9/28	2	35
Dyna-Gro S46ES91	53.1	•	•	9/26	1	33
ES4875XF	53.0	•	•	9/30	1	30
Asgrow AG47XF0	52.2	52.2	•	10/2	1	31
Delta Grow DG46E10	51.0	•	•	9/26	3	30
DONMARIO DM48E62S	50.4	•	•	10/1	1	27
USG 7491XFS	49.2	•	•	10/2	1	32
Local LS4805XFS	48.8	•	•	10/1	1	30
Integra 74731NS	48.1	•	•	9/30	1	30
AgriGold G4813XF	47.2	47.2	•	10/1	1	31
R15-2422	43.7	45.2	45.0	9/30	3	33
Grand Mean	59.3	•	•	9/30	1.6	34.7
LSD (5%)	8.0	•	•	•	0.8	3.9
C.V.	10.0	•	•	•	•	•
Relative Maturity 5.0–5.9						
Progeny P5003XF	67.4	•	•	10/6	5	38
Local LS5119XF	67.2	•	•	10/4	4	36
R14-1422	67.0	63.7	•	10/6	4	30
S16-14801C	66.0	•	•	10/2	3	29
UA54i19GT	65.8	63.5	•	10/15	5	45
R13-13997	65.4	62.6	•	10/6	2	30
Progeny P5521E3	64.6	•	•	10/11	3	48
R16-1445	63.3	66.4	•	10/5	3	35
Asgrow AG54XF0	63.0	•	•	10/15	2	42
Local LS5009XS	62.9	•	•	10/5	4	42
Dyna-Gro S56XT99	62.4	•	•	10/6	3	34
Dyna-Gro S52XT91	62.1	58.2	•	10/1	2	37
Local IS5067E3	59.7	•	•	9/30	3	32
R15-1587	58.8	63.5	•	10/2	2	29
Local IS5232E3	58.7	•	•	10/5	2	35
Progeny P5121E3S	58.6	•	•	10/1	6	35
R17-283F	57.5	•	•	10/6	2	31

Continued

Table 23. Performance of Irrigated Soybean Varieties and Strains, Late-Planted Rohwer Research Station, Rohwer, Ark., 2021, continued.

Variety/Experimental Line	2021 (bu./ac)	2-Year Average[a] (bu./ac)	3-Year Average[b] (bu./ac)	Maturity Date	Lodging Score[c]	Plant Height (in.)
Relative Maturity 5.0–5.9, continued						
Delta Grow DG54F20	57.1	•	•	10/4	1	32
NK S51-E3	56.9	•	•	10/6	1	34
Delta Grow DG52E80	56.9	•	•	10/5	1	36
R17-4177	56.7	•	•	10/6	4	35
R18-3250	56.5	•	•	10/6	1	38
R15-5695	56.3	•	•	10/9	2	29
Delta Grow DG51E60	56.3	•	•	10/4	3	36
R17-3488	55.6	•	•	10/5	3	30
Delta Grow DG53E30	55.0	•	•	10/2	1	37
Local LS5418XFS	54.9	•	•	10/11	3	45
Asgrow AG53XF2	54.6	•	•	10/5	1	35
Progeny P5411XF	54.6	•	•	10/5	1	29
Asgrow AG55XF0	53.3	•	•	10/6	1	34
R18-3048	52.4	•	•	10/6	3	45
Local LS5614XF	51.4	•	•	10/6	1	29
Delta Grow DG50E10	49.9	•	•	10/1	3	37
Asgrow AG52XF0	39.4	•	•	10/2	2	35
Grand Mean	57.9	•	•	10/5	2.5	35.7
LSD (5%)	6.9	•	•	•	1.4	3.4
C.V.	8.7	•	•	•	•	•

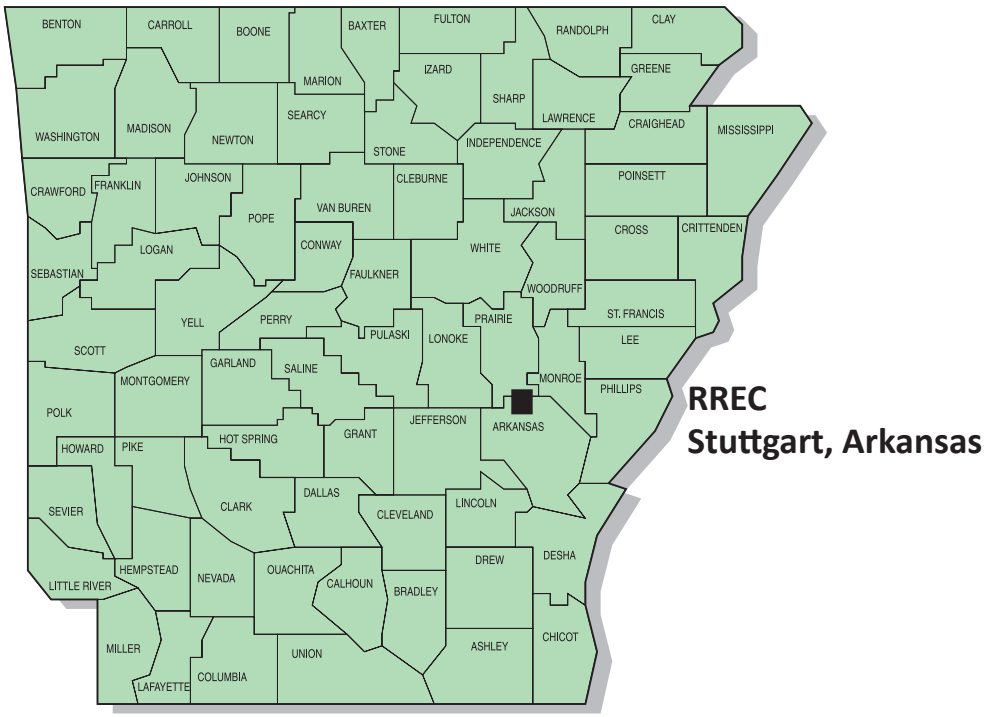
[a] Average yield from 2019 and 2021.

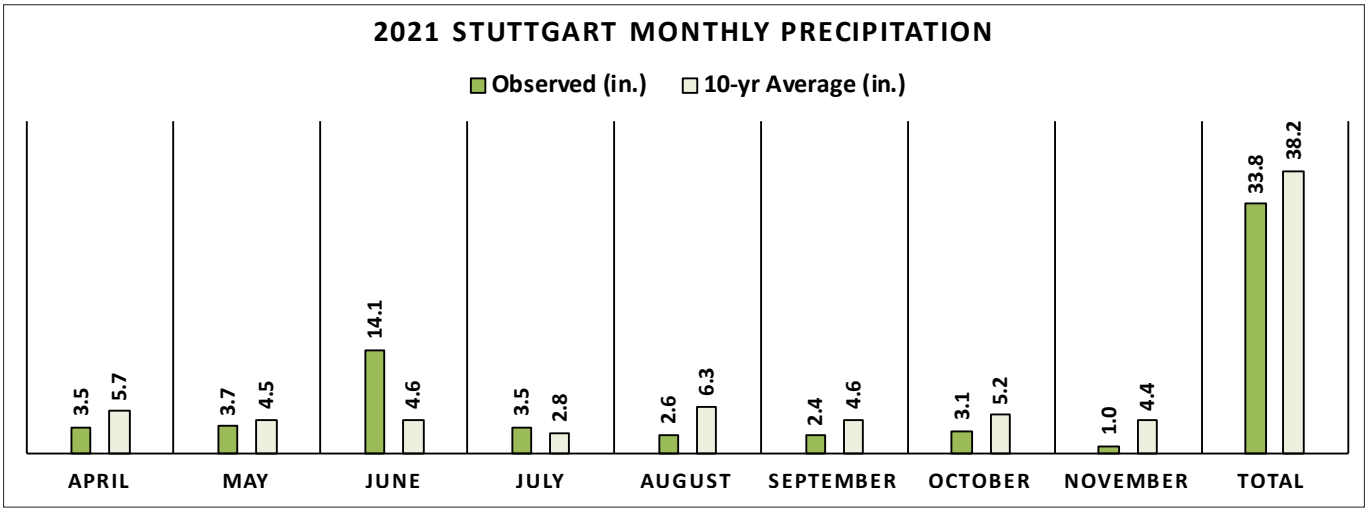
[b] Average yield from 2018, 2019, 2021.

[c] 1 = 10° angle; 2 = 11–20° angle; 3 = 21–30° angle; 4 = 31–40° angle; 5 = 41–50° angle; 6 = 51–60° angle; 7 = 61–70° angle; 8 = 71–80° angle; 9 = 81–90° angle.

Stuttgart: Rice Research and Extension Center (RREC)

Non-Irrigated Soybean Varieties and Strains, 2021





Soil Series
Dewitt silt loam
Previous Crop
Rice
Row Spacing
30 in.
pH
6.2
Planting Date
May 15

Harvest	**Date**
Relative Maturity (RM) (4.0–4.5), RM (4.6–4.9), RM (5.0–5.9)	Oct. 14
Fertilizer Application(s)	**Date**
54 lb P_2O_5 33 lb K_2O	April 22
Herbicide Application(s)	**Date**
Dual® 1.5 pt Fomesafen 1 pt, Python® 0.5 oz; Select® 1 pt Storm® 1.5 pt, First Rate® 0.3 oz	May 16 June 26; June 29 Juy 15
Trial Comments: Non-Xtend soybean varieties repeatedly showed symptoms consistent with injury attributed to off-target movement of dicamba. Symptoms were first documented on July 2.	

Table 24. Performance of Non-Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 4.0–4.5					
Progeny P4501XFS	48.0	•	•	9/17	33
NK 45-V9E3	47.2	•	•	9/14	28
Integra 74551NS	45.7	•	•	9/16	30
NK S45-J3X	44.5	•	•	9/16	26
Amp 4448X	44.4	•	•	9/14	27
Dyna-Gro S43XS70	44.1	51.0	•	9/12	28
Local IS4324E3	44.0	•	•	9/14	28
NK 44-J4XFS	43.9	•	•	9/15	27
NK S44-C7X	43.9	44.5	•	9/13	25
Axis 4522XF	43.7	•	•	9/14	26
S17-2243C	43.7	•	•	9/18	31
DONMARIO DM45X61	42.3	•	•	9/14	31
Progeny P4505RXS	42.2	51.5	•	9/16	31
Armor 44-D49	42.1	53.3	•	9/14	30
Delta Grow DG45E10	42.0	48.2	•	9/15	23
Progeny P4521XFS	41.5	•	•	9/18	26
Asgrow AG42XF0	41.3	•	•	9/14	30
Local LS4415XF	41.3	•	•	9/17	25
NK 45-P9XF	41.2	•	•	9/12	24
Dyna-Gro S45ES10	41.1	50.5	•	9/15	27
R18-14229	41.0	•	•	9/13	33
Local LS4517XFS	40.8	•	•	9/14	27
Armor 45-F81	40.8	•	•	9/15	25
Asgrow AG45XF0	40.1	•	•	9/15	28
Progeny P4541E3S	39.8	•	•	9/14	27
Progeny P4431E3	39.6	•	•	9/13	29
Asgrow AG43XF2	38.7	•	•	9/14	26
NK 42-T5XF	38.5	•	•	9/14	25
R18-14287	36.5	•	•	9/15	34
Local LS4506XS	36.0	•	•	9/14	27
R18-14147	34.1	•	•	9/13	31
R18C-1450	33.5	•	•	9/15	24
NK 43-V8XF	31.2	•	•	9/13	28
Grand Mean	41.1	•	•	9/14	27.9
LSD (5%)	4.0	•	•	•	2.3
C.V.	7.2	•	•	•	•
Relative Maturity 4.6–4.9					
Amp 4690XF	48.4	•	•	9/17	•
Progeny P4821RX	48.1	55.2	51.2	9/22	•
Local LS4795XS	47.7	53.7	49.5	9/19	•
Integra 54816N	47.4	55.0	•	9/19	•
Pioneer P47A64X	46.6	•	•	9/20	•
Delta Grow DG46F17/STS	46.3	•	•	9/15	•
Delta Grow DG46X65/STS	46.2	52.3	•	9/18	•
Armor 48-F22	46.2	•	•	9/17	•
Asgrow AG48XF2	46.2	•	•	9/19	•
Dyna-Gro S46XF31S	46.0	•	•	9/21	•

Continued

Table 24. Performance of Non-Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 4.6–4.9, continued					
USG 7461XFS	45.9	•	•	9/17	•
Delta Grow DG48X45	45.9	51.2	•	9/21	•
NK S47-Y9X	45.8	•	•	9/18	•
R18-14272	45.8	•	•	9/20	•
Integra 54660NS	45.6	53.2	•	9/18	•
Armor 46-F13	45.4	•	•	9/19	•
Progeny P4604XFS	45.1	•	•	9/17	•
Progeny P4816RX	45.0	52.9	49.3	9/24	•
Asgrow AG47XF0	45.0	•	•	9/20	•
Dyna-Gro S46ES91	44.8	47.1	•	9/16	•
Local LS4805XFS	44.7	•	•	9/20	•
Integra 74731NS	44.7	•	•	9/20	•
Integra 74621NS	44.7	•	•	9/17	•
Integra 54606NS	44.6	51.4	•	9/19	•
USG 7489XT	44.3	51.7	49.7	9/22	•
AgriGold G4615XF	43.8	•	•	9/16	•
Armor 48-F01	43.7	•	•	9/18	•
Progeny P4806XFS	43.7	•	•	9/19	•
Axis 4641XFS	43.6	•	•	9/17	•
Axis 4611ES	43.6	•	•	9/16	•
AgriGold G4813XF	43.2	•	•	9/18	•
R18-14753	43.1	•	•	9/19	•
AgriGold G4820RX	43.0	52.7	•	9/21	•
Armor 46-D09	43.0	50.8	•	9/17	•
Delta Grow DG49E20	42.9	•	•	9/21	•
NK S49-F5X	42.7	•	•	9/18	•
S16-7922C	42.5	•	•	9/20	•
Delta Grow DG47E20/STS	42.5	46.7	•	9/14	•
NK S46-E3S	42.3	•	•	9/16	•
ES4875XF	42.2	•	•	9/17	•
Local LS4606XFS	42.2	•	•	9/17	•
Dyna-Gro S46XS60	41.9	50.5	46.3	9/17	•
Progeny P4931E3S	41.9	•	•	9/19	•
Dyna-Gro S48XF61S	41.8	•	•	9/17	•
Delta Grow DG48E49/STS	41.8	47.6	•	9/14	•
Local LS4806XS	41.8	50.2	•	9/19	•
Delta Grow DG48F20	41.7	•	•	9/20	•
R18-14502	41.7	•	•	9/21	•
Armor 48-D25	41.6	51.3	•	9/18	•
Dyna-Gro S48XT90	41.6	49.2	•	9/22	•
USG 7491XFS	41.6	•	•	9/19	•
Progeny P4775E3S	41.5	47.1	46.1	9/15	•
Pioneer P48A60X	41.1	48.7	45.6	9/16	•
Delta Grow DG49F22/STS	41.0	•	•	9/21	•
Local LS4707XF	41.0	•	•	9/17	•
NK S48-2E3S	40.9	•	•	9/16	•
Armor 48-D03	40.8	•	•	9/18	•
R16-253	40.7	47.0	44.7	9/18	•

Continued

Table 24. Performance of Non-Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 4.6–4.9, continued					
Local IS4684E3S	40.7	•	•	9/14	•
Progeny P4921XFS	40.7	•	•	9/19	•
Armor 48-E82	40.7	•	•	9/21	•
R13- 14635RR:0010	40.5	46.2	•	9/22	•
Integra 74852NS	40.4	•	•	9/19	•
Asgrow AG48XF0	40.2	•	•	9/17	•
Amp 4850XF	40.2	•	•	9/19	•
Local LS4919XFS	39.8	•	•	9/19	•
Delta Grow DG48E59	39.7	•	•	9/17	•
Armor 47-E03	39.3	•	•	9/16	•
R18C-13283	39.2	•	•	9/17	•
USG 7481XF	39.2	•	•	9/18	•
AgriGold G4900XF	39.2	•	•	9/18	•
DONMARIO DM46F62	39.0	•	•	9/20	•
R15-2422	38.8	46.0	43.1	9/22	•
DONMARIO DM46E62	38.7	•	•	9/17	•
UA46i20C	38.3	44.6	44.2	9/17	•
DONMARIO DM48F61	38.2	•	•	9/15	•
Delta Grow DG46E10	37.5	•	•	9/15	•
Dyna-Gro S48XT40	37.4	45.4	•	9/22	•
Progeny P4970RX	37.2	47.6	•	9/22	•
DONMARIO DM48E62S	36.5	•	•	9/17	•
Amp 4950X	35.7	•	•	9/18	•
Integra 54891NS	35.7	47.1	•	9/17	•
R18-14142	34.6	•	•	9/21	•
Delta Grow DG49E90	32.7	•	•	9/18	•
Grand Mean	42.0	•	•	9/18	•
LSD (5%)	4.1	•	•	•	•
C.V.	7.3	•	•	•	•
Relative Maturity 5.0–5.9					
Progeny P5003XF	42.7	•	•	9/21	•
S16-14801C	42.0	•	•	9/20	•
Local LS5418XFS	41.0	•	•	10/12	•
Local IS5067E3	40.2	•	•	9/16	•
Asgrow AG52XF0	39.1	•	•	9/25	•
Asgrow AG53XF2	38.8	•	•	9/21	•
Progeny P5121E3S	38.8	•	•	9/19	•
R14-1422	38.4	44.8	43.6	9/27	•
R13-13997	38.0	46.6	44.8	9/21	•
Delta Grow DG52E80	37.6	•	•	9/21	•
Local IS5232E3	37.5	•	•	9/18	•
R17-3488	37.1	•	•	9/27	•
Dyna-Gro S52XT91	36.6	•	•	9/20	•
Local LS5119XF	36.3	•	•	9/18	•
R15-5695	35.9	•	•	9/29	•
R16-1445	35.9	47.3	45.6	9/25	•
Delta Grow DG53E30	35.3	•	•	9/25	•

Continued

Table 24. Performance of Non-Irrigated Soybean Varieties and Strains, Rice Research and Extension Center, Stuttgart, Ark., 2021, continued.

Variety/Experimental Line	2021	2-Year Average[a]	3-Year Average[b]	Maturity Date	Plant Height
	(bu./ac)	(bu./ac)	(bu./ac)		(in.)
Relative Maturity 5.0–5.9, continued					
R18-3048	35.3	•	•	9/22	•
R17-4177	35.2	•	•	9/27	•
NK S51-E3	35.0	•	•	9/17	•
R17-283F	34.5	•	•	9/26	•
Local LS5009XS	34.5	49.0	•	9/27	•
UA54i19GT	34.1	44.8	43.9	9/29	•
Delta Grow DG51E60	33.8	36.8	•	9/17	•
Asgrow AG54XF0	33.7	•	•	10/11	•
Progeny P5521E3	33.3	•	•	9/26	•
R15-1587	33.2	45.1	43.4	9/20	•
Delta Grow DG50E10	32.9	41.7	•	9/22	•
Local LS5614XF	32.4	•	•	9/27	•
Asgrow AG55XF0	31.8	•	•	9/24	•
Delta Grow DG54F20	31.8	•	•	9/27	•
Dyna-Gro S56XT99	31.1	•	•	9/24	•
Progeny P5411XF	30.3	•	•	9/26	•
R18-3250	28.8	•	•	9/25	•
Grand Mean	35.6	•	•	9/24	•
LSD (5%)	4.0	•	•	•	•
C.V.	8.3	•	•	•	•

[a] Average yield from 2020 and 2021.

[b] Average yield from 2019, 2020, and 2021.

Table 25. Yields of Select Soybean Cultivars in Arkansas Performance Trial under Flooded vs. Non-Flooded Conditions at Stuttgart, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Non-Flooded[b]		Flooded[b] (5 Days at V2)	
			Yield* (bu./ac)	Plant Ht.* (in.)	Yield* (bu./ac)	Plant Ht.* (in.)
Asgrow AG43XF2	XtendFlex	4.3	53.8	27	35.4	21
Asgrow AG45XF0	Xtend	4.5	56.9	33	34.6	22
Asgrow AG47XF0	XtendFlex	4.7	53.0	30	40.2	26
Asgrow AG48XF0	XtendFlex	4.8	56.0	33	44.4	26
Asgrow AG48XF2	XtendFlex	4.8	62.3	31	49.9	23
Dyna-Gro S45ES10	Enlist E3	4.5	55.1	25	44.5	24
Dyna-Gro S46ES91	Enlist E3	4.6	60.8	32	44.4	26
Dyna-Gro S46XF31S	XtendFlex	4.6	60.6	31	49.9	24
Dyna-Gro S46XS60	Xtend	4.6	58.1	28	40.8	21
Dyna-Gro S48XF61S	XtendFlex	4.8	55.0	30	41.1	23
Dyna-Gro S48XT90	Xtend	4.8	65.2	31	56.7	23
Integra 54606NS	Xtend	4.6	58.3	32	47.1	29
Integra 54660NS	Xtend	4.6	58.4	29	36.6	22
Integra 54816N	Xtend	4.8	59.1	28	34.9	21
Integra 54891NS	Xtend	4.8	60.4	33	52.5	24
Integra 74551NS	XtendFlex	4.5	60.2	35	50.9	27
Integra 74621NS	XtendFlex	4.6	61.1	33	53.8	22
Integra 74731NS	XtendFlex	4.7	52.5	30	36.9	23
Integra 74852NS	XtendFlex	4.8	63.0	30	49.3	23
Local IS4324E3	Enlist E3	4.3	50.1	27	40.3	21
Local IS4684E3S	Enlist E3	4.6	52.9	29	45.6	23
Local LS4707XF	XtendFlex	4.7	53.1	30	38.6	25
Local LS4415XF	XtendFlex	4.4	59.7	29	39.1	21
Local LS4506XS	Xtend	4.5	56.0	29	44.5	22
Local LS4517XFS	XtendFlex	4.5	52.6	27	42.1	22
Local LS4606XFS	XtendFlex	4.6	62.1	33	47.7	25
Local LS4795XS	Xtend	4.7	62.0	30	47.0	25
Local LS4805XFS	XtendFlex	4.8	56.7	31	30.0	22
Local LS4806XS	Xtend	4.8	60.2	31	48.8	24
Local LS4918XFS	XtendFlex	4.9	60.2	28	31.1	21
Progeny P4431E3	Enlist E3	4.4	44.2	27	23.1	17
Progeny P4505RXS	Xtend	4.5	61.8	35	45.6	28
Progeny P4541E3S	Enlist E3	4.5	51.4	30	32.9	23
Progeny P4604XFS	XtendFlex	4.6	58.6	32	52.8	24
Progeny P4806XFS	XtendFlex	4.8	57.7	30	41.8	23
Progeny P4816RX	Xtend	4.8	59.9	28	38.2	22
Progeny P4821RX	Xtend	4.8	61.4	31	46.3	25
Progeny P4921XFS	XtendFlex	4.9	57.1	30	43.2	23
Progeny P4931E3S	Enlist E3	4.9	62.1	30	48.5	25
Progeny P4970RX	Xtend	4.9	60.4	30	49.6	25
R13-14635RR:0010	RR1	4.6	63.3	32	52.5	23
R15-2422	Conv.	4.7	56.0	32	31.0	23
R16-253	Conv.	4.6	57.0	31	35.0	20
R18-14142	Conv.	4.6	58.5	34	40.9	26
R18-14147	Conv.	4.3	60.9	37	48.5	26

Continued

Table 25. Yields of Select Soybean Cultivars in Arkansas Performance Trial under Flooded vs. Non-Flooded Conditions at Stuttgart, 2021, continued.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Non-Flooded[b]		Flooded[b] (5 Days at V2)	
			Yield* (bu./ac)	Plant Ht.* (in.)	Yield* (bu./ac)	Plant Ht.* (in.)
R18-14229	Conv.	4.3	58.7	35	45.5	26
R18-14272	Conv.	4.6	61.0	38	53.8	28
R18-14287	Conv.	4.3	57.6	35	44.2	28
R18-14502	Conv.	4.9	60.1	36	45.9	31
R18-14753	Conv.	4.6	61.6	36	45.6	24
R18C-13283	Conv.	4.6	55.2	32	48.5	26
R18C-1450	Conv.	4.3	39.3	24	22.9	20
UA46i20C	Conv.	4.6	56.1	32	46.8	24
Grand Mean			57.4	31	43.1	24
LSD			6.0	2.9	9.9	3.3

[a] Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.

[b] Treatments (Flooded vs. Non-Flooded) were significantly different $P = 0.0032$.

*Significant at the 0.05 probability level.

Table 26. Yields of Select Soybean Cultivars in Arkansas Performance Trial under Flooded vs. Non-Flooded Conditions at Pine Tree, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Non-Flooded[b]		Flooded[b] (5 Days at V2)	
			Yield***	Plant Ht.***	Yield***	Plant Ht.***
			(bu./ac)	(in.)	(bu./ac)	(in.)
Asgrow AG43XF2	XtendFlex	4.3	66.2	33	45.2	21
Asgrow AG45XF0	Xtend	4.5	65.1	35	44.4	23
Asgrow AG47XF0	XtendFlex	4.7	63.4	33	46.9	25
Asgrow AG48XF0	XtendFlex	4.8	66.7	36	42.2	21
Asgrow AG48XF2	XtendFlex	4.8	71.9	35	55.2	25
Dyna-Gro S45ES10	Enlist E3	4.5	68.7	35	49.7	22
Dyna-Gro S46ES91	Enlist E3	4.6	65.9	37	56.4	28
Dyna-Gro S46XF31S	XtendFlex	4.6	68.2	37	56.2	25
Dyna-Gro S46XS60	Xtend	4.6	73.3	34	52.5	23
Dyna-Gro S48XF61S	XtendFlex	4.8	64.4	33	41.0	23
Dyna-Gro S48XT90	Xtend	4.8	69.7	35	59.7	26
Integra 54606NS	Xtend	4.6	69.9	39	56.9	30
Integra 54660NS	Xtend	4.6	73.3	33	50.5	25
Integra 54816N	Xtend	4.8	71.7	35	56.9	23
Integra 54891NS	Xtend	4.8	71.8	37	58.2	27
Integra 74551NS	XtendFlex	4.5	60.8	37	58.1	31
Integra 74621NS	XtendFlex	4.6	70.9	37	57.6	27
Integra 74731NS	XtendFlex	4.7	66.4	34	43.2	23
Integra 74852NS	XtendFlex	4.8	68.5	33	48.5	24
Local IS4324E3	Enlist E3	4.3	68.1	35	47.1	23
Local IS4684E3S	Enlist E3	4.6	64.0	36	47.3	25
Local LS4707XF	XtendFlex	4.7	61.5	35	48.3	27
Local LS4415XF	XtendFlex	4.4	70.3	33	53.1	21
Local LS4506XS	Xtend	4.5	66.4	33	45.8	22
Local LS4517XFS	XtendFlex	4.5	67.5	35	50.7	25
Local LS4606XFS	XtendFlex	4.6	70.8	38	57.2	27
Local LS4795XS	Xtend	4.7	73.2	34	54.7	25
Local LS4805XFS	XtendFlex	4.8	64.3	34	41.9	23
Local LS4806XS	Xtend	4.8	70.4	35	51.5	25
Local LS4918XFS	XtendFlex	4.9	70.5	35	53.4	26
Progeny P4431E3	Enlist E3	4.4	64.0	33	36.6	23
Progeny P4505RXS	Xtend	4.5	64.0	36	58.5	30
Progeny P4541E3S	Enlist E3	4.5	63.1	36	50.6	28
Progeny P4604XFS	XtendFlex	4.6	71.3	37	54.5	29
Progeny P4806XFS	XtendFlex	4.8	67.5	35	47.7	26
Progeny P4816RX	Xtend	4.8	69.7	35	49.6	22
Progeny P4821RX	Xtend	4.8	64.7	35	54.1	26
Progeny P4921XFS	XtendFlex	4.9	71.3	33	47.5	24
Progeny P4931E3S	Enlist E3	4.9	63.4	35	54.8	29
Progeny P4970RX	Xtend	4.9	68.3	35	63.6	29
R13-14635RR:0010	RR1	4.6	60.8	39	49.7	27
R15-2422	Conv.	4.7	52.4	37	43.9	27
R16-253	Conv.	4.6	60.2	35	52.0	25
R18-14142	Conv.	4.6	56.1	35	51.0	27
R18-14147	Conv.	4.3	56.5	41	47.6	32

Continued

Table 26. Yields of Select Soybean Cultivars in Arkansas Performance Trial under Flooded vs. Non-Flooded Conditions at Pine Tree, 2021, continued.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Non-Flooded[b]		Flooded[b] (5 Days at V2)	
			Yield***	Plant Ht.***	Yield***	Plant Ht.***
			(bu./ac)	(in.)	(bu./ac)	(in.)
R18-14229	Conv.	4.3	59.3	39	50.1	31
R18-14272	Conv.	4.6	58.5	40	57.4	31
R18-14287	Conv.	4.3	57.0	41	46.9	31
R18-14502	Conv.	4.9	69.6	38	60.1	30
R18-14753	Conv.	4.6	60.4	36	52.0	27
R18C-13283	Conv.	4.6	61.9	36	51.8	27
R18C-1450	Conv.	4.3	53.7	31	35.9	20
UA46i20C	Conv.	4.6	63.1	35	48.7	26
Grand Mean			65.3	35	50.6	26
LSD			6.1	4.0	6.2	2.2

[a] Pine Tree = Pine Tree Research Station, Colt, Ark.

[b] Treatments (Flooded vs. Non-Flooded) were significantly different $P = 0.0001$.

*** Significant at the 0.001 probability level.

Table 27. Yields of Select Soybean Cultivars in Arkansas Performance Trial under Flooded vs. Non-Flooded Conditions at Stuttgart, 2021.[a]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Non-Flooded[b]		Flooded[b] (5 Days at V2)	
			Yield	Plant Ht.	Yield	Plant Ht.
			(bu./ac)	(in.)	(bu./ac)	(in.)
Asgrow AG52XF0	XtendFlex	5.2	57.4	33	37.4	24
Asgrow AG53XF2	XtendFlex	5.3	55.0	30	39.8	23
Local IS5067E3	Enlist E3	5.0	52.2	29	25.2	20
Local IS5232E3	Enlist E3	5.2	54.3	28	33.7	22
Local LS5009XS	Xtend	5.0	64.6	38	39.1	25
Local LS5119XF	XtendFlex	5.1	60.7	31	41.3	21
Local LS5418XFS	XtendFlex	5.4	61.8	37	45.0	26
Local LS5614XF	XtendFlex	5.6	57.0	23	47.1	17
Progeny P5121E3S	Enlist	5.1	56.2	30	37.6	21
R13-13997	Conv.	5.6	59.5	28	46.4	20
R15-1587	Conv.	5.3	58.3	26	38.9	18
R15-5695	Conv.	5.5	61.7	22	34.6	17
R16-1445	Conv.	5.5	62.1	30	37.7	22
R17-283F	Conv.	5.3	58.4	30	39.7	19
R17-3488	Conv.	5.5	56.2	27	39.6	18
R17-4177	Conv.	5.6	59.2	29	50.6	23
R18-3048	Conv.	5.3	55.9	36	38.6	27
R18-3250	Conv.	5.3	60.7	29	46.3	24
UA54i19GT	Conv.	5.4	62.6	31	48.2	24
Grand Mean			57.7	30	39.6	22

[a] Stuttgart = Rice Research and Extension Center, Stuttgart, Ark.

[b] The variety by treatment interaction was not significant.

Table 28. Yields of Select Soybean Cultivars in Arkansas Performance Trial under Flooded vs. Non-Flooded Conditions at Pine Tree, 2021.[a,b]

Variety/ Experimental Line	Herbicide Technology	Relative Maturity	Non-Flooded[b]		Flooded[b] (5 Days at V2)	
			Yield	Plant Ht.	Yield	Plant Ht.
			(bu./ac)	(in.)	(bu./ac)	(in.)
Asgrow AG52XF0	XtendFlex	5.2	59.9	35	54.7	29
Asgrow AG53XF2	XtendFlex	5.3	57.2	34	51.1	27
Local IS5067E3	Enlist E3	5.0	55.3	31	55.3	23
Local IS5232E3	Enlist E3	5.2	61.7	33	50.4	25
Local LS5009XS	Xtend	5.0	56.0	35	57.0	29
Local LS5119XF	XtendFlex	5.1	57.7	32	52.7	25
Local LS5418XFS	XtendFlex	5.4	57.2	39	55.1	33
Local LS5614XF	XtendFlex	5.6	57.2	27	63.2	21
Progeny P5121E3S	Enlist	5.1	57.7	30	47.8	24
R13-13997	Conv.	5.6	55.0	32	60.8	23
R15-1587	Conv.	5.3	57.5	29	54.9	22
R15-5695	Conv.	5.5	56.0	29	51.4	21
R16-1445	Conv.	5.5	56.5	32	55.5	25
R17-283F	Conv.	5.3	59.5	32	60.3	22
R17-3488	Conv.	5.5	55.2	31	52.4	20
R17-4177	Conv.	5.6	52.9	34	57.3	25
R18-3048	Conv.	5.3	46.2	38	51.7	32
R18-3250	Conv.	5.3	59.2	35	52.6	27
UA54i19GT	Conv.	5.4	59.4	36	53.2	29
Grand Mean			56.6	33	54.6	27

[a] Pine Tree = Pine Tree Research Station, Colt, Ark.

[b] The variety by treatment interaction was not significant.

Appendix Table A1. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Root Knot Nematode.[a]

Variety Name[b]	Herbicide Technology	Maturity	Avg. Field Gall Rating[c]	Avg. GH Gall Rating[d]
AgriGold G4615XF	XtendFlex	4.6	81.7	5.0
AgriGold G4813XF	XtendFlex	4.8	55.0	4.7
AgriGold G4820RX	Xtend	4.8	58.3	5.0
AgriGold G4900XF	XtendFlex	4.9	63.3	5.0
Amp 4448X	Xtend	4.4	41.7	3.8
Amp 4690XF	XtendFlex	4.6	81.7	5.0
Amp 4850XF	XtendFlex	4.8	41.7	3.3
Amp 4950X	Xtend	4.9	73.3	4.7
Armor 44-D49	Xtend	4.4	70.0	5.0
Armor 45-F81	XtendFlex	4.5	63.3	4.7
Armor 46-D09	Xtend	4.6	73.3	5.0
Armor 46-F13	XtendFlex	4.6	61.7	5.0
Armor 47-E03	Enlist	4.7	63.3	5.0
Armor 48-D03	Xtend	4.8	81.7	5.0
Armor 48-D25	Xtend	4.8	65.0	5.0
Armor 48-E82	Enlist	4.8	65.0	5.0
Armor 48-F01	XtendFlex	4.8	55.0	5.0
Armor 48-F22	XtendFlex	4.8	41.7	4.2
Asgrow AG42XF0	XtendFlex	4.2	60.0	3.7
Asgrow AG43XF2	XtendFlex	4.3	68.3	3.0
Asgrow AG45XF0	XF/SR	4.5	46.7	2.8
Asgrow AG47XF0	XF/SR	4.7	46.7	1.0
Asgrow AG48XF0	XF/SR	4.8	53.3	3.5
Asgrow AG48XF2	XtendFlex	4.8	61.7	1.5
Asgrow AG52XF0	XF/SR	5.2	56.7	3.0
Asgrow AG53XF2	XtendFlex	5.3	46.7	2.3
Asgrow AG54XF0	XF/SR	5.4	34.3	2.3
Asgrow AG55XF0	XtendFlex	5.5	19.7	2.2
Axis 4522XF	Xtend RR/LL/Dicamba	4.5	68.3	4.2
Axis 4611ES	RR/LL/2,4-D/STS	4.6	55.0	4.0
Axis 4641XFS	Xtend RR/LL/Dicamba/ STS	4.6	65.0	5.0
Delta Grow DG45E10	Enlist E3	4.4	45.0	3.8
Delta Grow DG46E10	Enlist E3	4.6	12.7	3.3
Delta Grow DG46F17/STS	XtendFlex	4.6	65.0	4.2
Delta Grow DG46X65/STS	Xtend	4.6	53.3	5.0
Delta Grow DG47E20/STS	E3	4.7	31.7	4.3
Delta Grow DG48E49/STS	Enlist E3	4.8	58.3	4.7
Delta Grow DG48E59	Enlist E3	4.8	56.7	5.0
Delta Grow DG48F20	XtendFlex	4.8	68.3	3.5
Delta Grow DG48X45	Xtend	4.8	55.0	4.8
Delta Grow DG49E20	Enlist E3	4.9	66.7	5.0
Delta Grow DG49E90	Enlist E3	4.9	34.3	4.3
Delta Grow DG49F22/STS	XtendFlex	4.8	65.0	5.0
Delta Grow DG50E10	Enlist E3	5.0	38.3	3.5
Delta Grow DG51E60	E-3	5.1	56.7	4.8
Delta Grow DG53E30	Enlist E3	5.3	63.3	5.0
Delta Grow DG52E80	Enlist E3	5.2	55.0	5.0
Delta Grow DG54F20	Xtend Flex	5.4	28.3	3.8
DONMARIO DM45X61	Xtend	4.5	66.7	5.0

Continued

Appendix Table A1. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Root Knot Nematode, continued.[a]

Variety Name[b]	Herbicide Technology	Maturity	Avg. Field Gall Rating[c]	Avg. GH Gall Rating[d]
DONMARIO DM46E62	Enlist	4.6	61.7	4.7
DONMARIO DM46F62	XtendFlex	4.6	70.0	5.0
DONMARIO DM48E62S	Enlist	4.8	48.3	4.8
DONMARIO DM48F61	XtendFlex	4.8	50.0	4.8
Dyna-Gro S43XS70	Xtend RXT	4.3	68.3	5.0
Dyna-Gro S45ES10	E3	4.5	71.7	5.0
Dyna-Gro S46ES91	E3	4.6	55.0	4.5
Dyna-Gro S46XF31S	XtendFlex	4.6	73.3	5.0
Dyna-Gro S46XS60	Xtend RXT	4.6	66.7	5.0
Dyna-Gro S48XF61S	XtendFlex	4.8	68.3	4.5
Dyna-Gro S48XT40	Xtend RXT	4.8	44.7	4.0
Dyna-Gro S48XT90	Xtend RXT	4.8	38.3	4.2
Dyna-Gro S52XT91	Xtend RXT	5.2	75.0	5.0
Dyna-Gro S56XT99	Xtend RXT	5.6	28.7	3.2
ES4890XF	XtendFlex	4.8	45.3	3.7
Integra 54606NS	Xtend	4.6	51.0	5.0
Integra 54660NS	Xtend	4.6	55.0	5.0
Integra 54816N	Xtend	4.8	71.7	5.0
Integra 54891NS	Xtend	4.8	71.7	5.0
Integra 74551NS	XtendFlex	4.5	65.0	5.0
Integra 74621NS	XtendFlex	4.6	41.7	5.0
Integra 74731NS	XtendFlex	4.7	55.0	4.2
Integra 74852NS	XtendFlex	4.8	66.7	.
Local IS4324E3	Enlist E3	4.3	66.7	5.0
Local IS4684E3S	Enlist E3 STS	4.6	42.0	4.7
Local IS5067E3	Enlist E3	5.0	63.3	5.0
Local IS5232E3	Enlist E3	5.2	60.0	4.0
Local LS4415XF	XtendFlex	4.4	41.7	4.2
Local LS4506XS	Xtend STS	4.5	26.0	3.8
Local LS4517XFS	XtendFlex STS	4.5	70.0	5.0
Local LS4606XFS	XtendFlex STS	4.6	53.3	5.0
Local LS4707XF	XtendFlex	4.7	51.7	5.0
Local LS4795XS	Xtend STS	4.7	70.0	5.0
Local LS4805XFS	XtendFlex STS	4.8	45.0	4.5
Local LS4806XS	Xtend STS	4.8	41.7	5.0
Local LS4919XFS	XtendFlex STS	4.9	51.7	5.0
Local LS5009XS	Xtend STS	5.0	54.3	5.0
Local LS5119XF	XtendFlex	5.1	23.3	3.8
Local LS5418XFS	XtendFlex STS	5.4	37.0	3.0
Local LS5614XF	XtendFlex	5.6	56.7	5.0
NK 42-T5XF	XtendFlex	4.2	61.7	5.0
NK 43-V8XF	XtendFlex	4.3	63.3	5.0
NK 44-J4XFS	XtendFlex	4.4	58.3	4.8
NK 45-P9XF	XtendFlex	4.5	38.3	5.0
NK 45-V9E3	Enlist	4.5	38.3	4.5
NK S44-C7X	Xtend	4.4	61.7	5.0
NK S45-J3X	Xtend	4.5	51.7	3.2
NK S46-E3S	Enlist	4.6	55.0	4.3
NK S47-Y9X	Xtend	4.7	51.7	5.0
NK S48-2E3S	Enlist	4.8	53.3	4.5

Continued

Appendix Table A1. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Root Knot Nematode, continued.[a]

Variety Name[b]	Herbicide Technology	Maturity	Avg. Field Gall Rating[c]	Avg. GH Gall Rating[d]
NK S49-F5X	Xtend	4.9	78.3	5.0
NK S51-E3	Enlist	5.1	56.7	3.0
Pioneer P47A64X	Xtend	4.7	55.0	5.0
Pioneer P48A60X	Xtend	4.8	71.7	5.0
Progeny P4431E3	Enlist	4.4	52.3	3.7
Progeny P4501XFS	XtendFlex	4.5	66.7	5.0
Progeny P4505RXS	Xtend	4.5	66.7	5.0
Progeny P4521XFS	XtendFlex	4.5	71.7	5.0
Progeny P4541E3S	Enlist	4.5	79.3	5.0
Progeny P4604XFS	XtendFlex	4.6	70.0	5.0
Progeny P4775E3S	Enlist	4.7	28.3	4.3
Progeny P4806XFS	XtendFlex	4.8	58.3	4.3
Progeny P4816RX	Xtend	4.8	63.3	5.0
Progeny P4821RX	Xtend	4.8	65.0	5.0
Progeny P4921XFS	XtendFlex	4.9	61.7	5.0
Progeny P4931E3S	Enlist	4.9	63.3	5.0
Progeny P4970RX	Xtend	4.9	46.7	4.0
Progeny P5003XF	Xtend	5.0	66.7	5.0
Progeny P5121E3S	Enlist	5.1	50.0	4.3
Progeny P5411XF	XtendFlex	5.4	20.3	3.0
Progeny P5521E3	Enlist	5.5	41.7	2.8
R13-14635RR:0010	RR1	4.6	60.0	4.7
R13-13997	Conv.	5.6	2.3	3.5
R14-1422	Conv.	5.0	1.0	4.2
R15-1587	Conv.	5.3	26.7	4.5
R15-2422	Conv.	4.7	51.7	5.0
R15-5695	Conv.	5.5	5.7	3.2
R16-1445	Conv.	5.5	15.0	4.3
R16-253	Conv.	4.6	18.3	5.0
R17-283F	Conv.	5.3	53.3	5.0
R17-3488	Conv.	5.5	25.0	4.8
R17-4177	Conv.	5.6	18.3	5.0
R18-14142	Conv.	4.6	1.3	4.5
R18-14147	Conv.	4.3	30.0	5.0
R18-14229	Conv.	4.3	33.3	5.0
R18-14272	Conv.	4.6	31.7	5.0
R18-14287	Conv.	4.3	8.7	4.3
R18-14502	Conv.	4.9	40.0	5.0
R18-14753	Conv.	4.6	41.7	5.0
R18-3048	Conv.	5.3	55.0	5.0
R18-3250	Conv.	5.3	18.3	4.7
R18C-13283	Conv.	4.6	35.0	5.0
R18C-1450	Conv.	4.3	23.3	4.3
S16-14801C	Conv.	5.0	3.0	3.3
S16-7922C	Conv.	4.9	1.7	3.0

Continued

Appendix Table A1. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Root Knot Nematode, continued.[a]

Variety Name[b]	Herbicide Technology	Maturity	Avg. Field Gall Rating[c]	Avg. GH Gall Rating[d]
S17-2243C	Conv.	4.5	36.7	5.0
UA46i20C	Conv.	4.6	40.0	5.0
UA54i19GT	RR1	5.4	60.0	4.7
USG 7461XFS	XtendFlex/STS	4.6	75.0	5.0
USG 7481XF	XtendFlex	4.8	56.7	5.0
USG 7489XT	Xtend	4.8	65.0	4.2
USG 7491XFS	XtendFlex STS	4.9	40.0	4.7

[a] Evaluation 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.

[b] Each cultivar was replicated 3 times.

[c] Greenhouse trials were conducted at the Southwest Research and Extension Center, Hope, Ark. Greenhouse root gall ratings were a visual assessment using an 0-5 index scale (0 = VR, 0.1–0.9 = R, 1–1.9 = MR, 2–2.9 = MS, 3–3.9 = S, 4–5 = VS) at 60 days after planting.

[d] Field trials were conducted in a growers field near Kerr, Ark. Field root gall ratings were a visual assessment of the percentage root system galled using an 0–100 scale (0–1.0 = VR, 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 the R5 growh stage.

This data collected by Michael Emerson, John Barhan, Amanda Greer, Dr. Travis Faske, and Jesse Kelly.

Appendix Table A2. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Frogeye Leaf Spot conducted in a grower's field near Kerr, Arkansas.[a]

Variety Name[b]	Herbicide Technology	Maturity	Avg. Frogeye Leaf Spot Rating[c]
AgriGold G4615XF	XtendFlex	4.6	0.7
AgriGold G4813XF	XtendFlex	4.8	3.0
AgriGold G4820RX	Xtend	4.8	0.7
AgriGold G4900XF	XtendFlex	4.9	0.3
Amp 4448X	Xtend	4.4	0.0
Amp 4690XF	XtendFlex	4.6	0.3
Amp 4850XF	XtendFlex	4.8	4.0
Amp 4950X	Xtend	4.9	1.0
Armor 44-D49	Xtend	4.4	0.0
Armor 45-F81	XtendFlex	4.5	0.0
Armor 46-D09	Xtend	4.6	0.3
Armor 46-F13	XtendFlex	4.6	1.7
Armor 47-E03	Enlist	4.7	0.0
Armor 48-D03	Xtend	4.8	1.7
Armor 48-D25	Xtend	4.8	0.7
Armor 48-E82	Enlist	4.8	0.0
Armor 48-F01	XtendFlex	4.8	1.3
Armor 48-F22	XtendFlex	4.8	3.0
Asgrow AG42XF0	XtendFlex	4.2	1.7
Asgrow AG43XF2	XtendFlex	4.3	3.0
Asgrow AG45XF0	XF/SR	4.5	0.0
Asgrow AG47XF0	XF/SR	4.7	4.7
Asgrow AG48XF0	XF/SR	4.8	1.7
Asgrow AG48XF2	XtendFlex	4.8	1.3
Asgrow AG52XF0	XF/SR	5.2	5.0
Asgrow AG53XF2	XtendFlex	5.3	0.0
Asgrow AG54XF0	XF/SR	5.4	3.0
Asgrow AG55XF0	XtendFlex	5.5	0.0
Axis 4522XF	Xtend RR/LL/Dicamba	4.5	0.0
Axis 4611ES	RR/LL/2,4-D/STS	4.6	2.7
Axis 4641XFS	Xtend RR/LL/Dicamba/ STS	4.6	0.3
Delta Grow DG45E10	Enlist E3	4.4	0.0
Delta Grow DG46E10	Enlist E3	4.6	2.3
Delta Grow DG46F17/STS	XtendFlex	4.6	0.7
Delta Grow DG46X65/STS	Xtend	4.6	1.7
Delta Grow DG47E20/STS	E3	4.7	3.7
Delta Grow DG48E49/STS	Enlist E3	4.8	0.3
Delta Grow DG48E59	Enlist E3	4.8	0.3
Delta Grow DG48F20	XtendFlex	4.8	3.3
Delta Grow DG48X45	Xtend	4.8	1.3
Delta Grow DG49E20	Enlist E3	4.9	0.3
Delta Grow DG49E90	Enlist E3	4.9	0.7
Delta Grow DG49F22/STS	XtendFlex	4.8	1.7
Delta Grow DG50E10	Enlist E3	5.0	0.3
Delta Grow DG51E60	E-3	5.1	0.0
Delta Grow DG53E30	Enlist E3	5.3	1.3
Delta Grow DG52E80	Enlist E3	5.2	4.3
Delta Grow DG54F20	Xtend Flex	5.4	0.0

Continued

Appendix Table A2. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Frogeye Leaf Spot conducted in a grower's field near Kerr, Arkansas, continued.[a]

Variety Name[b]	Herbicide Technology	Maturity	Avg. Frogeye Leaf Spot Rating[c]
DONMARIO DM45X61	Xtend	4.5	0.0
DONMARIO DM46E62	Enlist	4.6	0.0
DONMARIO DM46F62	XtendFlex	4.6	0.7
DONMARIO DM48E62S	Enlist	4.8	2.7
DONMARIO DM48F61	XtendFlex	4.8	0.3
Dyna-Gro S43XS70	Xtend RXT	4.3	0.3
Dyna-Gro S45ES10	E3	4.5	0.3
Dyna-Gro S46ES91	E3	4.6	2.0
Dyna-Gro S46XF31S	XtendFlex	4.6	0.7
Dyna-Gro S46XS60	Xtend RXT	4.6	1.3
Dyna-Gro S48XF61S	XtendFlex	4.8	4.0
Dyna-Gro S48XT40	Xtend RXT	4.8	1.0
Dyna-Gro S48XT90	Xtend RXT	4.8	0.0
Dyna-Gro S52XT91	Xtend RXT	5.2	1.0
Dyna-Gro S56XT99	Xtend RXT	5.6	0.0
ES4890XF	XtendFlex	4.8	2.7
Integra 54606NS	Xtend	4.6	0.3
Integra 54660NS	Xtend	4.6	2.0
Integra 54816N	Xtend	4.8	0.7
Integra 54891NS	Xtend	4.8	0.7
Integra 74551NS	XtendFlex	4.5	0.0
Integra 74621NS	XtendFlex	4.6	0.3
Integra 74731NS	XtendFlex	4.7	4.0
Integra 74852NS	XtendFlex	4.8	2.0
Local IS4324E3	Enlist E3	4.3	0.0
Local IS4684E3S	Enlist E3 STS	4.6	2.0
Local IS5067E3	Enlist E3	5.0	0.0
Local IS5232E3	Enlist E3	5.2	0.0
Local LS4415XF	XtendFlex	4.4	0.0
Local LS4506XS	Xtend STS	4.5	0.0
Local LS4517XFS	XtendFlex STS	4.5	0.7
Local LS4606XFS	XtendFlex STS	4.6	1.0
Local LS4707XF	XtendFlex	4.7	0.0
Local LS4795XS	Xtend STS	4.7	1.3
Local LS4805XFS	XtendFlex STS	4.8	4.0
Local LS4806XS	Xtend STS	4.8	0.7
Local LS4919XFS	XtendFlex STS	4.9	1.7
Local LS5009XS	Xtend STS	5.0	2.7
Local LS5119XF	XtendFlex	5.1	0.0
Local LS5418XFS	XtendFlex STS	5.4	4.0
Local LS5614XF	XtendFlex	5.6	3.0
NK 42-T5XF	XtendFlex	4.2	1.3
NK 43-V8XF	XtendFlex	4.3	0.0
NK 44-J4XFS	XtendFlex	4.4	2.3
NK 45-P9XF	XtendFlex	4.5	0.0
NK 45-V9E3	Enlist	4.5	0.0
NK S44-C7X	Xtend	4.4	0.0
NK S45-J3X	Xtend	4.5	0.0

Continued

Appendix Table A2. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Frogeye Leaf Spot conducted in a grower's field near Kerr, Arkansas, continued.[a]

Variety Name[b]	Herbicide Technology	Maturity	Avg. Frogeye Leaf Spot Rating[c]
NK S46-E3S	Enlist	4.6	3.7
NK S47-Y9X	Xtend	4.7	0.3
NK S48-2E3S	Enlist	4.8	0.0
NK S49-F5X	Xtend	4.9	1.0
NK S51-E3	Enlist	5.1	0.0
Pioneer P47A64X	Xtend	4.7	0.0
Pioneer P48A60X	Xtend	4.8	1.7
Progeny P4431E3	Enlist	4.4	2.3
Progeny P4501XFS	XtendFlex	4.5	0.0
Progeny P4505RXS	Xtend	4.5	0.0
Progeny P4521XFS	XtendFlex	4.5	1.3
Progeny P4541E3S	Enlist	4.5	0.3
Progeny P4604XFS	XtendFlex	4.6	0.7
Progeny P4775E3S	Enlist	4.7	4.0
Progeny P4806XFS	XtendFlex	4.8	4.7
Progeny P4816RX	Xtend	4.8	1.0
Progeny P4821RX	Xtend	4.8	0.7
Progeny P4921XFS	XtendFlex	4.9	2.3
Progeny P4931E3S	Enlist	4.9	0.0
Progeny P4970RX	Xtend	4.9	0.7
Progeny P5003XF	Xtend	5.0	2.7
Progeny P5121E3S	Enlist	5.1	3.7
Progeny P5411XF	XtendFlex	5.4	0.0
Progeny P5521E3	Enlist	5.5	0.0
R13-14635RR:0010	RR1	4.6	0.3
R13-13997	Conv.	5.6	0.3
R14-1422	Conv.	5.0	0.3
R15-1587	Conv.	5.3	0.0
R15-2422	Conv.	4.7	3.3
R15-5695	Conv.	5.5	0.0
R16-1445	Conv.	5.5	0.0
R16-253	Conv.	4.6	3.7
R17-283F	Conv.	5.3	0.0
R17-3488	Conv.	5.5	1.0
R17-4177	Conv.	5.6	0.0
R18-14142	Conv.	4.6	3.3
R18-14147	Conv.	4.3	4.0
R18-14229	Conv.	4.3	0.7
R18-14272	Conv.	4.6	3.3
R18-14287	Conv.	4.3	2.0
R18-14502	Conv.	4.9	2.3
R18-14753	Conv.	4.6	3.0
R18-3048	Conv.	5.3	1.7
R18-3250	Conv.	5.3	2.0
R18C-13283	Conv.	4.6	0.0
R18C-1450	Conv.	4.3	1.3
S16-14801C	Conv.	5.0	0.0
S16-7922C	Conv.	4.9	0.7

Continued

Appendix Table A2. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Frogeye Leaf Spot conducted in a grower's field near Kerr, Arkansas, continued.[a]

Variety Name[b]	Herbicide Technology	Maturity	Avg. Frogeye Leaf Spot Rating[c]
S17-2243C	Conv.	4.5	3.3
UA46i20C	Conv.	4.6	0.7
UA54i19GT	RR1	5.4	0.7
USG 7461XFS	XtendFlex/STS	4.6	0.3
USG 7481XF	XtendFlex	4.8	0.0
USG 7489XT	Xtend	4.8	1.3
USG 7491XFS	XtendFlex STS	4.9	3.3

[a] Evaluation of soybean cultivars for reaction to frogeye leaf spot was conducted in a field test using a natural infestation of *Cercospora sojina* .

[b] Each cultivar was replicated 3 times in a randomized complet block design.

[c] Field trials were conducted in a growers field near Kerr, Ark. Frogeye Leaf Spot values represent a visual estimate of the disease severity based on a 0-9 scale (0 = no disease and 9 = severe disease). By using the average level of disease reported during the year tested, a standardized designation system for all foliar disease screenings is as follows: 0 = Resistant, 1–3 = Moderately Resistant, 4–5 = Moderately Susceptible, 6–7 = Susceptible, 8–9 = Very Susceptible.

This data was collected by Michael Emerson and Dr. Travis Faske.

Appendix Table A3. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Stem Canker, Frogeye Leaf Spot, Septoria Brown Spot, Cercospora Leaf Blight, Target Spot, and Green Stem conducted at the University of Arkansas System Division of Agriculture's Rohwer Research Station, Rohwer, Arkansas.

Variety Name[a]	Herbicide Technology	Maturity	Stem Canker[b]	Frogeye Leaf Spot[c]	Septoria Brown Spot[d]	Cercospora Leaf Blight[e]	Target Leaf Spot[f]	Green Stem[g]
AgriGold G4615XF	XF	4.6	S	1	0	1	0	5
AgriGold G4813XF	XF	4.8	R	2	0	3	0	2
AgriGold G4820RX	Xtend	4.8	S	1	1	3	0	4
AgriGold G4900XF	XF	4.9	R	2	0	3	0	1
Amp 4448X	Xtend	4.4	R	2	0	2	0	3
Amp 4690XF	XF	4.6	S	1	0	1	0	4
Amp 4850XF	XF	4.8	S	2	0	3	0	3
Amp 4950X	Xtend	4.9	R	2	0	2	0	6
Armor 44-D49	Xtend	4.4	R	1	1	2	2	0
Armor 45-F81	XF	4.5	R	1	0	1	0	2
Armor 46-D09	Xtend	4.6	S	1	1	1	0	4
Armor 46-F13	XF	4.6	R	2	1	2	0	0
Armor 47-E03	Enlist	4.7	R	1	¡	2	0	5
Armor 48-D03	Xtend	4.8	S	2	0	3	0	3
Armor 48-D25	Xtend	4.8	R	2	0	3	0	2
Armor 48-E82	Enlist	4.8	R	1	1	2	0	8
Armor 48-F01	XF	4.8	R	2	0	3	0	1
Armor 48-F22	XF	4.8	R	1	1	4	0	1
Asgrow AG42XF0	XF	4.2	R	2	2	2	1	1
Asgrow AG43XF2	XF	4.3	R	2	0	1	1	1
Asgrow AG45XF0	XF/SR	4.5	R	1	1	1	1	1
Asgrow AG47XF0	XF/SR	4.7	R	1	1	2	0	3
Asgrow AG48XF0	XF/SR	4.8	R	2	1	3	0	3
Asgrow AG48XF2	XF	4.8	R	2	0	3	0	1
Asgrow AG52XF0	XF/SR	5.2	R	2	0	2	0	6
Asgrow AG53XF2	XF	5.3	R	2	1	3	0	5
Asgrow AG54XF0	XF/SR	5.4	R	2	0	3	1	6
Asgrow AG55XF0	XF	5.5	R	2	0	3	0	1
Axis 4522XF	XF	4.5	S	1	0	0	0	2
Axis 4611ES	E3	4.6	R	2	1	3	1	2
Axis 4641XFS	XF/SR	4.6	S	1	0	1	0	3
Delta Grow DG45E10	E3	4.4	R	1	2	2	1	0
Delta Grow DG46E10	E3	4.6	R	1	0	3	0	2
Delta Grow DG46F17/STS	XF	4.6	R	2	1	2	1	1
Delta Grow DG46X65/STS	Xtend	4.6	R	2	1	1	1	3
Delta Grow DG47E20/STS	E3	4.7	R	1	1	1	0	5
Delta Grow DG48E49/STS	E3	4.8	R	2	0	3	0	2
Delta Grow DG48E59	E3	4.8	R	2	1	2	0	2
Delta Grow DG48F20	XF	4.8	R	2	0	3	0	7
Delta Grow DG48X45	Xtend	4.8	R	1	0	1	0	7
Delta Grow DG49E20	E3	4.9	R	1	0	2	0	6
Delta Grow DG49E90	E3	4.9	R	1	1	3	0	1
Delta Grow DG49F22/STS	XF	4.8	R	2	0	2	0	3
Delta Grow DG50E10	E3	5.0	R	1	1	1	0	1
Delta Grow DG51E60	E3	5.1	R	2	0	1	0	7

Continued

Appendix Table A3. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Stem Canker, Frogeye Leaf Spot, Septoria Brown Spot, Cercospora Leaf Blight, Target Spot, and Green Stem conducted at the University of Arkansas System Division of Agriculture's Rohwer Research Station, Rohwer, Arkansas, continued.

Variety Name[a]	Herbicide Technology	Maturity	Stem Canker[b]	Frogeye Leaf Spot[c]	Septoria Brown Spot[d]	Cercospora Leaf Blight[e]	Target Leaf Spot[f]	Green Stem[g]
Delta Grow DG53E30	E3	5.3	R	2	0	2	0	3
Delta Grow DG52E80	E3	5.2	R	2	0	1	1	5
Delta Grow DG54F20	XF	5.4	R	2	0	2	0	5
DONMARIO DM45X61	Xtend	4.5	R	1	0	1	0	2
DONMARIO DM46E62	Enlist	4.6	S	1	2	1	0	1
DONMARIO DM46F62	XF	4.6	R	1	1	2	0	2
DONMARIO DM48E62S	Enlist	4.8	R	1	0	4	0	3
DONMARIO DM48F61	XF	4.8	R	1	0	3	0	1
Dyna-Gro S43XS70	Xtend/RXT	4.3	R	3	0	2	1	2
Dyna-Gro S45ES10	E3	4.5	R	1	1	2	0	2
Dyna-Gro S46ES91	E3	4.6	R	1	1	2	0	4
Dyna-Gro S46XF31S	XF	4.6	R	1	1	2	0	0
Dyna-Gro S46XS60	Xtend/RXT	4.6	R	1	2	1	0	0
Dyna-Gro S48XF61S	XF	4.8	R	1	0	4	0	1
Dyna-Gro S48XT40	Xtend/RXT	4.8	R	2	1	3	0	5
Dyna-Gro S48XT90	Xtend/RXT	4.8	R	2	0	3	0	7
Dyna-Gro S52XT91	Xtend/RXT	5.2	R	3	0	4	0	5
Dyna-Gro S56XT99	Xtend/RXT	5.6	S	2	0	3	0	4
ES4890XF	XF	4.8	R	2	1	4	0	1
Integra 54606NS	Xtend	4.6	R	1	1	1	1	1
Integra 54660NS	Xtend	4.6	S	2	1	1	1	2
Integra 54816N	Xtend	4.8	R	1	0	2	0	1
Integra 54891NS	Xtend	4.8	S	2	0	4	0	0
Integra 74551NS	XF	4.5	R	1	0	1	0	2
Integra 74621NS	XF	4.6	S	1	1	2	0	1
Integra 74731NS	XF	4.7	S	1	1	2	0	1
Integra 74852NS	XF	4.8	R	2	0	2	0	2
Local LS4324E3	E3	4.3	R	1	1	1	0	1
Local LS4415XF	E3	5.2	R	2	3	2	2	1
Local LS4506XS	XF	4.4	R	1	1	1	1	0
Local LS4517XFS	Xtend/STS	4.5	R	2	1	0	2	4
Local LS4606XFS	XF/STS	4.5	R	1	1	1	0	4
Local LS4684E3S	E3/STS	4.6	R	2	1	1	0	0
Local LS4707XF	XF/STS	4.6	R	1	1	2	0	1
Local LS4795XS	XF	4.7	R	1	1	1	0	0
Local LS4805XFS	Xtend/STS	4.7	R	2	0	3	0	4
Local LS4806XS	Xtend/STS	4.8	R	1	1	4	0	1
Local LS4919XFS	XF/STS	4.9	R	2	1	3	0	2
Local LS5009XS	Xtend/STS	5.0	R	2	0	2	0	6
Local LS5067E3	E3	5.0	R	1	0	3	0	7
Local LS5119XF	XF	5.1	R	2	0	2	0	4
Local LS5232E3	E3	5.0	R	2	0	2	0	2
Local LS5418XFS	XF/STS	5.4	R	3	0	3	0	5
Local LS5614XF	XF	5.6	R	3	2	4	0	5
NK 42-T5XF	XF	4.2	R	2	1	1	0	1

Continued

Appendix Table A3. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Stem Canker, Frogeye Leaf Spot, Septoria Brown Spot, Cercospora Leaf Blight, Target Spot, and Green Stem conducted at the University of Arkansas System Division of Agriculture's Rohwer Research Station, Rohwer, Arkansas, continued.

Variety Name[a]	Herbicide Technology	Maturity	Stem Canker[b]	Frogeye Leaf Spot[c]	Septoria Brown Spot[d]	Cercospora Leaf Blight[e]	Target Leaf Spot[f]	Green Stem[g]
NK 43-V8XF	XF	4.3	R	1	0	2	1	0
NK 44-J4XFS	XF	4.4	R	2	1	1	3	1
NK 45-P9XF	XF	4.5	R	2	0	0	1	5
NK 45-V9E3	Enlist	4.5	R	1	1	1	0	0
NK S44-C7X	Xtend	4.4	R	1	2	2	0	1
NK S45-J3X	Xtend	4.5	R	1	1	1	0	0
NK S46-E3S	Enlist	4.6	S	1	1	1	0	4
NK S47-Y9X	Xtend	4.7	R	1	1	2	0	1
NK S48-2E3S	Enlist	4.8	R	2	0	3	0	3
NK S49-F5X	Xtend	4.9	R	2	0	3	0	0
NK S51-E3	Enlist	5.1	R	3	0	3	0	3
Pioneer P47A64X	Xtend	4.7	R	1	1	2	0	6
Pioneer P48A60X	Xtend	4.8	R	2	0	3	0	0
Progeny P4431E3	Enlist	4.4	R	2	1	1	1	0
Progeny P4501XFS	XF	4.5	R	1	1	2	0	4
Progeny P4505RXS	Xtend	4.5	R	2	1	2	1	2
Progeny P4521XFS	XF	4.5	R	2	0	1	0	2
Progeny P4541E3S	Enlist	4.5	R	2	1	1	0	3
Progeny P4604XFS	XF	4.6	R	1	0	1	1	2
Progeny P4775E3S	Enlist	4.7	S	1	1	2	0	1
Progeny P4806XFS	XF	4.8	S	2	0	4	0	1
Progeny P4816RX	Xtend	4.8	R	2	1	3	0	2
Progeny P4821RX	Xtend	4.8	S	1	0	3	0	3
Progeny P4921XFS	XF	4.9	R	1	0	4	1	1
Progeny P4931E3S	Enlist	4.9	R	2	1	2	0	6
Progeny P4970RX	Xtend	4.9	R	2	0	2	0	5
Progeny P5003XF	Xtend	5.0	R	3	0	3	0	3
Progeny P5121E3S	Enlist	5.1	R	2	0	3	0	1
Progeny P5411XF	XF	5.4	R	1	1	4	0	0
Progeny P5521E3	Enlist	5.5	R	1	0	0	0	10
R13-13997	RR	5.6	R	2	0	3	0	1
R13- 14635RR:0010	RR	4.6	R	2	0	3	0	7
R14-1422	Conv.	5.0	R	2	0	3	0	6
R15-1587	Conv.	5.3	R	1	0	3	0	1
R15-2422	Conv.	4.7	S	2	1	1	1	2
R15-5695	Conv.	5.5	R	2	0	4	0	1
R16-1445	Conv.	5.5	R	1	0	3	0	2
R16-253	Conv.	4.6	R	1	0	2	1	1
R17-283F	Conv.	5.3	R	1	0	3	0	1
R17-3488	Conv.	5.5	R	3	0	3	0	1
R17-4177	Conv.	5.6	R	2	0	2	0	3
R18-14142	Conv.	4.6	R	1	0	2	0	3
R18-14147	Conv.	4.3	R	2	2	1	0	1
R18-14229	Conv.	4.3	R	1	0	2	0	0
R18-14272	Conv.	4.6	R	2	0	3	0	5

Continued

Appendix Table A3. 2021 Evaluation of 151 Soybean Cultivars for Reaction to Stem Canker, Frogeye Leaf Spot, Septoria Brown Spot, Cercospora Leaf Blight, Target Spot, and Green Stem conducted at the University of Arkansas System Division of Agriculture's Rohwer Research Station, Rohwer, Arkansas, continued.

Variety Name[a]	Herbicide Technology	Maturity	Stem Canker[b]	Frogeye Leaf Spot[c]	Septoria Brown Spot[d]	Cercospora Leaf Blight[e]	Target Leaf Spot[f]	Green Stem[g]
R18-14287	Conv.	4.3	R	2	1	2	0	1
R18-14502	Conv.	4.9	R	2	0	3	0	0
R18-14753	Conv.	4.6	R	2	0	3	0	0
R18-3048	Conv.	5.3	R	2	1	1	0	5
R18-3250	Conv.	5.3	R	1	0	0	0	0
R18C-13283	Conv.	4.6	R	1	0	1	0	2
R18C-1450	Conv.	4.3	R	1	2	3	1	0
S16-14801C	Conv.	5.0	R	3	0	3	0	0
S16-7922C	Conv.	4.9	R	2	0	2	0	1
S17-2243C	Conv.	4.5	R	1	0	1	0	4
UA46i20C	Conv.	4.6	R	1	2	2	1	4
UA54i19GT	RR	5.4	R	3	1	3	1	3
USG 7461XFS	XF/STS	4.6	R	1	1	1	1	3
USG 7481XF	XF	4.8	R	2	0	4	0	0
USG 7489XT	Xtend	4.8	R	2	1	2	0	7
USG 7491XFS	XF/STS	4.9	R	2	0	4	0	1

[a] Each cultivar was repeated 3 times arranged in a randomized complete block design.

[b] Stem 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.

[c] Frogeye Leaf Spot, Septoria Brown Spot, Cercospora Leaf Blight, and Target Spot values represent a visual estimate of the disease severity based on a 0-9 scale (0 = no disease and 9 = severe disease).

[g] Green Stem ratings were a visual estimate of the percentage of green stems on plants just prior to harvest where 0 = no green stems and 9 = greater than 90% stems were green.

This data was collected by Dr. Terry Spurlock, Mandy Tolbert, and Rob Hoyle.

Appendix Table A4. Soybean Leaf Tissue Chloride Reaction for Select Varieties and Strains, 2021.

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Reaction[a]
Relative Maturity 4.0–4.5			
Amp 4448X	Xtend	4.4	Mixed
Armor 45-F81	XtendFlex	4.5	Strong Includer
Asgrow AG42XF0	XtendFlex	4.2	Moderate Includer
Asgrow AG43XF2	XtendFlex	4.3	Moderate Includer
Asgrow AG45XF0	XtendFlex	4.5	Mixed
Axis 4522XF	XtendFlex	4.5	Mixed
Delta Grow DG45E10	Enlist E3	4.4	Moderate Includer
DONMARIO DM45X61	Xtend	4.5	Mixed
Dyna-Gro S43XS70	Xtend	4.3	Strong Excluder
Dyna-Gro S45ES10	Enlist E3	4.5	Strong Excluder
Integra 74551NS	XtendFlex	4.5	Mixed
Local IS4324E3	Enlist E3	4.3	Mixed
Local LS4415XF	XtendFlex	4.4	Mixed
Local LS4506XS	Xtend	4.5	Mixed
Local LS4517XFS	XtendFlex	4.5	Moderate Includer
NK 42-T5XF	XtendFlex	4.2	Moderate Includer
NK 43-V8XF	XtendFlex	4.3	Moderate Includer
NK 44-J4XFS	XtendFlex	4.4	Strong Includer
NK 45-P9XF	XtendFlex	4.5	Mixed
NK 45-V9E3	Enlist E3	4.5	Strong Includer
NK S44-C7X	Xtend	4.4	Strong Includer
NK S45-J3X	Xtend	4.5	Mixed
Progeny P4431E3	Enlist E3	4.4	Moderate Excluder
Progeny P4501XFS	XtendFlex	4.5	Moderate Includer
Progeny P4505RXS	Xtend	4.5	Moderate Includer
Progeny P4521XFS	XtendFlex	4.5	Moderate Includer
Progeny P4541E3S	Enlist E3	4.5	Moderate Includer
R18-14147	Conv.	4.3	Moderate Excluder
R18-14229	Conv.	4.3	Mixed
R18-14287	Conv.	4.3	Mixed
R18C-1450	Conv.	4.3	Strong Includer
S17-2243C	Conv.	4.5	Strong Excluder
Armor 44-D49	Xtend	4.4	Mixed
Relative Maturity 4.6–4.9			
AgriGold G4615XF	XtendFlex	4.6	Moderate Includer
AgriGold G4813XF	XtendFlex	4.8	Moderate Includer
AgriGold G4820RX	Xtend	4.8	Moderate Excluder
AgriGold G4900XF	XtendFlex	4.9	Moderate Includer
Amp 4690XF	XtendFlex	4.6	Moderate Includer
Amp 4850XF	XtendFlex	4.8	Strong Includer
Amp 4950X	Xtend	4.9	Moderate Includer
Armor 46-D09	Xtend	4.6	Strong Excluder
Armor 46-F13	XtendFlex	4.6	Mixed
Armor 47-E03	Enlist	4.7	Strong Excluder
Armor 48-D03	Xtend	4.8	Moderate Includer
Armor 48-D25	Xtend	4.8	Strong Excluder
Armor 48-E82	Enlist	4.8	Strong Excluder
Armor 48-F01	XtendFlex	4.8	Moderate Includer
Armor 48-F22	XtendFlex	4.8	Moderate Includer

Continued

Appendix Table A4. Soybean Leaf Tissue Chloride Reaction for Select Varieties and Strains, 2021, continued.

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Reaction[a]
Relative Maturity 4.6–4.9, continued			
Asgrow AG47XF0	XtendFlex	4.7	Moderate Includer
Asgrow AG48XF0	XtendFlex	4.8	Moderate Includer
Asgrow AG48XF2	XtendFlex	4.8	Strong Excluder
Axis 4611ES	Enlist	4.6	Strong Excluder
Axis 4641XFS	XtendFlex	4.6	Strong Includer
Delta Grow DG46E10	Enlist E3	4.6	Strong Excluder
Delta Grow DG46F17/STS	XtendFlex	4.6	Moderate Includer
Delta Grow DG46X65/STS	Xtend	4.6	Strong Excluder
Delta Grow DG48E49/STS	Enlist E3	4.8	Strong Excluder
Delta Grow DG48E59	Enlist E3	4.8	Strong Excluder
Delta Grow DG48F20	XtendFlex	4.8	Moderate Includer
Delta Grow DG48X45	Xtend	4.8	Strong Excluder
Delta Grow DG49E20	Enlist E3	4.9	Strong Excluder
Delta Grow DG49E90	Enlist E3	4.9	Moderate Includer
Delta Grow DG49F22/STS	XtendFlex	4.8	Mixed
DONMARIO DM46E62	Enlist	4.6	Strong Excluder
DONMARIO DM46F62	XtendFlex	4.6	Moderate Excluder
DONMARIO DM48E62S	Enlist	4.8	Moderate Excluder
DONMARIO DM48F61	XtendFlex	4.8	Moderate Includer
Dyna-Gro S46ES91	Enlist E3	4.6	Strong Excluder
Dyna-Gro S46XF31S	XtendFlex	4.6	Moderate Includer
Dyna-Gro S46XS60	Xtend	4.6	Strong Excluder
Dyna-Gro S48XF61S	XtendFlex	4.8	Moderate Includer
Dyna-Gro S48XT40	Xtend	4.8	Strong Includer
Dyna-Gro S48XT90	Xtend	4.8	Mixed
Integra 54606NS	Xtend	4.6	Mixed
Integra 54660NS	Xtend	4.6	Strong Excluder
Integra 54816N	Xtend	4.8	Strong Excluder
Integra 54891NS	Xtend	4.8	Moderate Excluder
Integra 74621NS	XtendFlex	4.6	Strong Includer
Integra 74731NS	XtendFlex	4.7	Moderate Includer
Integra 74852NS	XtendFlex	4.8	•
Local IS4684E3S	Enlist E3	4.6	Strong Excluder
Local LS4707XF	XtendFlex	4.9	Strong Includer
Local LS4606XFS	XtendFlex	4.6	Moderate Includer
Local LS4795XS	Xtend	4.7	Strong Excluder
Local LS4805XFS	XtendFlex	4.8	Moderate Includer
Local LS4806XS	Xtend	4.8	Strong Excluder
Local LS4919XFS	XtendFlex	4.9	Moderate Excluder
NK S46-E3S	Enlist E3	4.6	Strong Excluder
NK S47-Y9X	Xtend	4.7	Strong Excluder
NK S48-2E3S	Enlist E3	4.8	Strong Includer
NK S49-F5X	Xtend	4.9	Strong Excluder
Pioneer P47A64X	Xtend	4.7	Strong Excluder
Pioneer P48A60X	Xtend	4.8	Strong Excluder
Progeny P4604XFS	XtendFlex	4.6	Moderate Includer
Progeny P4775E3S	Enlist E3	4.7	Strong Excluder
Progeny P4806XFS	XtendFlex	4.8	Moderate Includer
Progeny P4816RX	Xtend	4.8	Strong Excluder
Progeny P4821RX	Xtend	4.8	Strong Excluder

Continued

Appendix Table A4. Soybean Leaf Tissue Chloride Reaction for Select Varieties and Strains, 2021, continued.

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Reaction[a]
Relative Maturity 4.6–4.9, continued			
Progeny P4921XFS	XtendFlex	4.9	Mixed
Progeny P4931E3S	Enlist E3	4.9	Strong Excluder
Progeny P4970RX	Xtend	4.9	Moderate Includer
R13- 14635RR:0010	RR1	4.6	Mixed
R15-2422	Conv.	4.7	Moderate Includer
R16-253	Conv.	4.6	Moderate Includer
R18-14142	Conv.	4.6	Strong Excluder
R18-14272	Conv.	4.6	Moderate Includer
R18-14502	Conv.	4.9	Moderate Includer
R18-14753	Conv.	4.6	Strong Excluder
R18C-13283	Conv.	4.6	Moderate Excluder
S16-7922C	Conv.	4.9	Strong Excluder
UA46i20C	Conv.	4.6	Moderate Includer
USG 7461XFS	XtendFlex	4.6	Strong Includer
USG 7481XF	XtendFlex	4.8	Strong Includer
USG 7489XT	Xtend	4.8	Strong Excluder
USG 7491XFS	XtendFlex	4.9	Mixed
ES4890XF	XtendFlex	4.8	Mixed
Delta Grow DG47E20/STS	Enlist E3	4.7	Strong Excluder
Relative Maturity 5.0–5.9			
Asgrow AG52XF0	XtendFlex	5.2	Mixed
Asgrow AG53XF2	XtendFlex	5.3	Moderate Includer
Asgrow AG54XF0	XtendFlex	5.4	Mixed
Asgrow AG55XF0	XtendFlex	5.5	Strong Excluder
Delta Grow DG50E10	Enlist E3	5.0	Moderate Excluder
Delta Grow DG51E60	Enlist E3	5.1	Strong Excluder
Delta Grow DG52E80	Enlist E3	5.2	Moderate Excluder
Delta Grow DG53E30	Enlist E3	5.3	Moderate Excluder
Delta Grow DG54F20	XtendFlex	5.4	Strong Excluder
Dyna-Gro S52XT91	Xtend	5.2	Mixed
Dyna-Gro S56XT99	Xtend	5.6	Strong Excluder
Local IS5067E3	Enlist E3	5.0	Mixed
Local IS5232E3	Enlist E3	5.2	Strong Excluder
Local LS5009XS	Xtend	5.0	Strong Excluder
Local LS5119XF	XtendFlex	5.1	Mixed
Local LS5418XFS	XtendFlex	5.4	Mixed
Local LS5614XF	XtendFlex	5.6	Moderate Includer
NK S51-E3	Enlist	5.1	Strong Excluder
Progeny P5003XF	XtendFlex	5.0	Moderate Includer
Progeny P5121E3S	Enlist	5.1	Strong Excluder
Progeny P5411XF	XtendFlex	5.4	Strong Excluder
Progeny P5521E3	Enlist E3	5.5	Mixed
R13-13997	Conv.	5.6	Strong Excluder
R15-1587	Conv.	5.3	Strong Excluder
R15-5695	Conv.	5.5	Strong Includer

Continued

Appendix Table A4. Soybean Leaf Tissue Chloride Reaction for Select Varieties and Strains, 2021, continued.

Variety/Experimental Line	Herbicide Technology	Relative Maturity	Reaction[a]
Relative Maturity 5.0–5.9, continued			
R16-1445	Conv.	5.5	Strong Excluder
R17-283F	Conv.	5.3	Strong Excluder
R17-3488	Conv.	5.5	Strong Includer
R17-4177	Conv.	5.6	Strong Excluder
R18-3048	Conv.	5.3	Mixed
R18-3250	Conv.	5.3	Mixed
S16-14801C	Conv.	5.0	Strong Excluder
UA54i19GT	RR1	5.4	Mixed
R14-1422	Conv.	5.0	Strong Excluder

[a] Chloride sensitivity in soybean is categorized by the plant's genetic and metabolic ability to deal with elevated concentrations of chloride in the soil profile. Excluder soybean varieties have multiple mechanisms that allow them to restrict chloride accumulation in the aboveground plant tissues; whereas, Includer varieties accumulate chloride indiscriminately. Varieties with Mixed ratings have populations with varying ratios of Includers and Excluders that result in a wide range of chloride accumulation in the tissues and a wide range of reactions to high levels of chloride.

This data was collected by Dr. Trent Roberts and Alden Smartt.

Early Planted Tests, Participants and Entries
2021 Soybean Performance Tests

Company/Institute	Variety/Experimental Line	Relative Maturity	Herbicide Technology	Seed Treatment
AgriGold Hybrids	AgriGold G4615XF	4.6	XtendFlex	AgriShield+ Saltro
5381 Akin Rd.	AgriGold G4813XF	4.8	XtendFlex	AgriShield+ Saltro
St. Francisville, IL 62460	AgriGold G4820RX	4.8	Xtend	AgriShield+ Saltro
Bayer CropScience	Asgrow AG42XF0	4.2	XtendFlex	F/I/Ilevo
2 TW Alexander Dr.	Asgrow AG43XF2	4.3	XtendFlex	F/I/Ilevo
Research Triangle Park, NC 27709	Asgrow AG45XF0	4.5	Xtend	F/I/Ilevo
	Asgrow AG47XF0	4.7	XtendFlex	F/I/Ilevo
	Asgrow AG48XF0	4.8	XtendFlex	F/I/Ilevo
	Asgrow AG48XF2	4.8	XtendFlex	F/I/Ilevo
Delta Grow Seed	Delta Grow DG45E10	4.4	Enlist E3	Cruiser Maxx
220 NW 2nd	Delta Grow DG46E10	4.6	Enlist E3	Cruiser Maxx
England, AR 72046	Delta Grow DG46X65/STS	4.6	Xtend	Cruiser Maxx
	Delta Grow DG47E20/STS	4.7	Enlist E3	Cruiser Maxx
	Delta Grow DG48E49/STS	4.8	Enlist E3	Cruiser Maxx
	Delta Grow DG48E59	4.8	Enlist E3	Cruiser Maxx
	Delta Grow DG48F20	4.8	XtendFlex	Cruiser Maxx
	Delta Grow DG48X45	4.8	Xtend	Cruiser Maxx
	Delta Grow DG49E20	4.9	Enlist E3	Cruiser Maxx
	Delta Grow DG49E90	4.9	Enlist E3	Cruiser Maxx
Innvictis Seed Solutions	Amp 4448X	4.4	Xtend	
1880 Fall River Drive	Amp 4690XF	4.6	XtendFlex	
Loveland, CO 80538	Amp 4850XF	4.8	XtendFlex	
	Amp 4950X	4.9	Xtend	
Local Seed Co.	Local IS4324E3	4.3	Enlist E3	Radius Premium
802 Rozelle St.	Local IS4684E3S	4.6	Enlist E3	Radius Premium
Memphis, TN 38104	Local LS4506XS	4.5	Xtend	Radius Premium
	Local LS4606XFS	4.6	XtendFlex	Radius Premium
	Local LS4795XS	4.7	Xtend	Radius Premium
	Local LS4805XFS	4.8	XtendFlex	Radius Premium
	Local LS4806XS	4.8	Xtend	Radius Premium
Mayberry Seed Co.	Axis 4611ES	4.6	Enlist	Revolve
22985 State Hwy. D	Axis 4641XFS	4.6	XtendFlex	Revolve
Essex, MO 63846				
Nutrien Ag Solutions	Dyna-Gro S43XS70	4.3	Xtend	Saltro
3005 Rocky Mountain Ave.	Dyna-Gro S45ES10	4.5	Enlist E3	Saltro
Loveland, CO 80538	Dyna-Gro S46ES91	4.6	Enlist E3	Saltro
	Dyna-Gro S46XF31S	4.6	XtendFlex	Saltro
	Dyna-Gro S46XS60	4.6	Xtend	Saltro
	Dyna-Gro S48XF61S	4.8	XtendFlex	Saltro
	Dyna-Gro S48XT40	4.8	Xtend	Saltro
	Dyna-Gro S48XT90	4.8	Xtend	Saltro
Pioneer Hi-Bred Int.	Pioneer P47A64X	4.7	Xtend	FST/IST
7300 NW 62nd Ave.	Pioneer P48A60X	4.4	Xtend	FST/IST
Johnston, IA 50131				

Continued

Early Planted Tests, Participants and Entries
2021 Soybean Performance Tests, Continued

Company/Institute	Variety/Experimental Line	Relative Maturity	Herbicide Technology	Seed Treatment
Progeny Ag Products	Progeny P4431E3	4.4	Enlist E3	Poncho Votivo Obvius Plus
1529 Hwy 193	Progeny P4501XFS	4.5	XtendFlex	Poncho Votivo Obvius Plus
Wynne, AR 72396	Progeny P4505RXS	4.5	Xtend	Poncho Votivo Obvius Plus
	Progeny P4604XFS	4.6	XtendFlex	Poncho Votivo Obvius Plus
	Progeny P4775E3S	4.7	Enlist	Poncho Votivo Obvius Plus
	Progeny P4806XFS	4.8	XtendFlex	Poncho Votivo Obvius Plus
	Progeny P4816RX	4.8	Xtend	Poncho Votivo Obvius Plus
	Progeny P4821RX	4.8	Xtend	Poncho Votivo Obvius Plus
Syngenta Crop Protection	NK 42-T5XF	4.2	XtendFlex	Cruisermaxx Beans +
3411 Silverside Rd, Suite. 100	NK 43-V8XF	4.3	XtendFlex	Cruisermaxx Beans +
Shipley Bldg.	NK 44-J4XFS	4.4	XtendFlex	Cruisermaxx Beans +
Wilmington, DE 19810	NK 45-P9XF	4.5	XtendFlex	Cruisermaxx Beans +
	NK 45-V9E3	4.5	Enlist	Cruisermaxx Beans +
	NK S44-C7X	4.4	Xtend	Cruisermaxx Beans +
	NK S45-J3X	4.5	Xtend	Cruisermaxx Beans +
	NK S46-E3S	4.6	Enlist	Cruisermaxx Beans +
	NK S47-Y9X	4.7	Xtend	Cruisermaxx Beans +
	NK S48-2E3S	4.8	Enlist	Cruisermaxx Beans +
	NK S49-F5X	4.9	Xtend	Cruisermaxx Beans +
UniSouth Genetics, Inc.	USG 7461XFS	4.6	XtendFlex	ipconazole/metaxyl/imidicl
3205-C HWY 46 S	USG 7481XF	4.8	XtendFlex	ipconazole/metaxyl/imidicl
Dickson, TN 37055	USG 7489XT	4.8	Xtend	ipconazole/metaxyl/imidicl
	USG 7491XFS	4.9	XtendFlex	ipconazole/metaxyl/imidicl
Arkansas Agricultural Experiment	R13- 14635RR:0010	4.6	RR1	Intego Suite + Aveo EZ
Station, University of Arkansas	R15-2422	4.7	Conv.	Intego Suite + Aveo EZ
System Division of Agriculture	R16-253	4.6	Conv.	Intego Suite + Aveo EZ
115 Plant Science Building	R18-14142	4.6	Conv.	Intego Suite + Aveo EZ
Fayetteville, AR 72701	R18-14147	4.3	Conv.	Intego Suite + Aveo EZ
	R18-14229	4.3	Conv.	Intego Suite + Aveo EZ
	R18-14272	4.6	Conv.	Intego Suite + Aveo EZ
	R18-14287	4.3	Conv.	Intego Suite + Aveo EZ
	R18-14502	4.9	Conv.	Intego Suite + Aveo EZ
	R18-14753	4.6	Conv.	Intego Suite + Aveo EZ
	R18C-13283	4.6	Conv.	Intego Suite + Aveo EZ
	R18C-1450	4.3	Conv.	Intego Suite + Aveo EZ
	S16-7922C	4.9	Conv.	Intego Suite + Aveo EZ
	S17-2243C	4.5	Conv.	Intego Suite + Aveo EZ
	UA46i20C	4.6	Conv.	Intego Suite + Aveo EZ
WinField United	Armor 44-D49	4.4	Xtend	Warden CX
2532 Alexander Dr.	Armor 46-D09	4.6	Xtend	Warden CX
Jonesboro, AR 72401	Armor 46-F13	4.6	XtendFlex	Warden CX
	Armor 48-D03	4.8	Xtend	Warden CX
	Armor 48-D25	4.8	Xtend	Warden CX
	Armor 48-F22	4.8	XtendFlex	Warden CX

Full-Season Tests, Participants and Entries
2021 Soybean Performance Tests

Company/Institute	Variety/Experimental Line	Relative Maturity	Herbicide Technology	Seed Treatment
AgriGold Hybrids	AgriGold G4615XF	4.6	XtendFlex	AgriShield+ Saltro
5381 Akin Rd.	AgriGold G4813XF	4.8	XtendFlex	AgriShield+ Saltro
St. Francisville, IL 62460	AgriGold G4820RX	4.8	Xtend	AgriShield+ Saltro
	AgriGold G4900XF	4.9	XtendFlex	AgriShield+ Saltro
Bayer CropScience	Asgrow AG42XF0	4.2	XtendFlex	F/I/Ilevo
2 TW Alexander Dr.	Asgrow AG43XF2	4.3	XtendFlex	F/I/Ilevo
Research Triangle Park, NC 27709	Asgrow AG45XF0	4.5	XtendFlex	F/I/Ilevo
	Asgrow AG47XF0	4.7	XtendFlex	F/I/Ilevo
	Asgrow AG48XF0	4.8	XtendFlex	F/I/Ilevo
	Asgrow AG48XF2	4.8	XtendFlex	F/I/Ilevo
	Asgrow AG52XF0	5.2	XtendFlex	F/I/Ilevo
	Asgrow AG53XF2	5.3	XtendFlex	F/I/Ilevo
	Asgrow AG54XF0	5.4	XtendFlex	F/I/Ilevo
	Asgrow AG55XF0	5.5	XtendFlex	F/I/Ilevo
Delta Grow Seed	Delta Grow DG45E10	4.4	Enlist E3	Cruiser Maxx
220 NW 2nd	Delta Grow DG46E10	4.6	Enlist E3	Cruiser Maxx
England, AR 72046	Delta Grow DG46F17/STS	4.6	XtendFlex	Cruiser Maxx
	Delta Grow DG46X65/STS	4.6	Xtend	Cruiser Maxx
	Delta Grow DG47E20/STS	4.7	Enlist E3	Cruiser Maxx
	Delta Grow DG48E49/STS	4.8	Enlist E3	Cruiser Maxx
	Delta Grow DG48E59	4.8	Enlist E3	Cruiser Maxx
	Delta Grow DG48F20	4.8	XtendFlex	Cruiser Maxx
	Delta Grow DG48X45	4.8	Xtend	Cruiser Maxx
	Delta Grow DG49E20	4.9	Enlist E3	Cruiser Maxx
	Delta Grow DG49E90	4.9	Enlist E3	Cruiser Maxx
	Delta Grow DG49F22/STS	4.8	XtendFlex	Cruiser Maxx
	Delta Grow DG50E10	5.0	Enlist E3	Cruiser Maxx
	Delta Grow DG51E60	5.1	Enlist E3	Cruiser Maxx
	Delta Grow DG52E80	5.2	Enlist E3	Cruiser Maxx
	Delta Grow DG53E30	5.3	Enlist E3	Cruiser Maxx
	Delta Grow DG54F20	5.4	XtendFlex	Cruiser Maxx
Eagle Seed Company	ES4875XF	4.8	XtendFlex	Cruiser Maxx
P.O. Box 308				
Weiner, AR 72479				
GDM Seeds Inc.	DONMARIO DM45X61	4.5	Xtend	Cruisermaxx Vibrance
4003 Commercial Center Dr.	DONMARIO DM46E62	4.6	Enlist	Cruisermaxx Vibrance
Marion, AR 72364	DONMARIO DM46F62	4.6	XtendFlex	Cruisermaxx Vibrance
	DONMARIO DM48E62S	4.8	Enlist	Cruisermaxx Vibrance
	DONMARIO DM48F61	4.8	XtendFlex	Cruisermaxx Vibrance
Innvictis Seed Solutions	Amp 4448X	4.4	Xtend	
1880 Fall River Drive	Amp 4690XF	4.6	XtendFlex	
Loveland, CO 80538	Amp 4850XF	4.8	XtendFlex	
	Amp 4950X	4.9	Xtend	

Continued

Full-Season Tests, Participants and Entries
2021 Soybean Performance Tests, Continued

Company/Institute	Variety/Experimental Line	Relative Maturity	Herbicide Technology	Seed Treatment
Local Seed Co.	Local IS4324E3	4.3	Enlist E3	Radius Premium
802 Rozelle St.	Local IS4684E3S	4.6	Enlist E3	Radius Premium
Memphis, TN 38104	Local IS5067E3	5.0	Enlist E3	Radius Premium
	Local IS5232E3	5.2	Enlist E3	Radius Premium
	Local LS4415XF	4.4	XtendFlex	Radius Premium
	Local LS4506XS	4.5	Xtend	Radius Premium
	Local LS4517XFS	4.5	XtendFlex	Radius Premium
	Local LS4606XFS	4.6	XtendFlex	Radius Premium
	Local LS4707XF	4.9	XtendFlex	Radius Premium
	Local LS4795XS	4.7	Xtend	Radius Premium
	Local LS4805XFS	4.8	XtendFlex	Radius Premium
	Local LS4806XS	4.8	Xtend	Radius Premium
	Local LS4919XFS	4.9	XtendFlex	Radius Premium
	Local LS5009XS	5.0	Xtend	Radius Premium
	Local LS5119XF	5.1	XtendFlex	Radius Premium
	Local LS5418XFS	5.4	XtendFlex	Radius Premium
	Local LS5614XF	5.6	XtendFlex	Radius Premium
Mayberry Seed Co.	Axis 4522XF	4.5	XtendFlex	Revolve
22985 State Hwy. D	Axis 4611ES	4.6	Enlist	Revolve
Essex, MO 63846	Axis 4641XFS	4.6	XtendFlex	Revolve
Nutrien Ag Solutions	Dyna-Gro S43XS70	4.3	Xtend	Saltro
3005 Rocky Mountain Ave.	Dyna-Gro S45ES10	4.5	Enlist E3	Saltro
Loveland, CO 80538	Dyna-Gro S46ES91	4.6	Enlist E3	Saltro
	Dyna-Gro S46XF31S	4.6	XtendFlex	Saltro
	Dyna-Gro S46XS60	4.6	Xtend	Saltro
	Dyna-Gro S48XF61S	4.8	XtendFlex	Saltro
	Dyna-Gro S48XT40	4.8	Xtend	Saltro
	Dyna-Gro S48XT90	4.8	Xtend	Saltro
	Dyna-Gro S52XT91	5.2	Xtend	Saltro
	Dyna-Gro S56XT99	5.6	Xtend	Saltro
Pioneer Hi-Bred Int.	Pioneer P47A64X	4.7	Xtend	FST/IST
7300 NW 62nd Ave.	Pioneer P48A60X	4.8	Xtend	FST/IST
Johnston, IA 50131				
Progeny Ag Products	Progeny P4431E3	4.4	Enlist E3	Poncho Votivo Obvius Plus
1529 Hwy 193	Progeny P4501XFS	4.5	XtendFlex	Poncho Votivo Obvius Plus
Wynne, AR 72396	Progeny P4505RXS	4.5	Xtend	Poncho Votivo Obvius Plus
	Progeny P4521XFS	4.5	XtendFlex	Poncho Votivo Obvius Plus
	Progeny P4541E3S	4.5	Enlist E3	Poncho Votivo Obvius Plus
	Progeny P4604XFS	4.6	XtendFlex	Poncho Votivo Obvius Plus
	Progeny P4775E3S	4.7	Enlist E3	Poncho Votivo Obvius Plus
	Progeny P4806XFS	4.8	XtendFlex	Poncho Votivo Obvius Plus
	Progeny P4816RX	4.8	Xtend	Poncho Votivo Obvius Plus
	Progeny P4821RX	4.8	Xtend	Poncho Votivo Obvius Plus
	Progeny P4921XFS	4.9	XtendFlex	Poncho Votivo Obvius Plus

Continued

Full-Season Tests, Participants and Entries
2021 Soybean Performance Tests, Continued

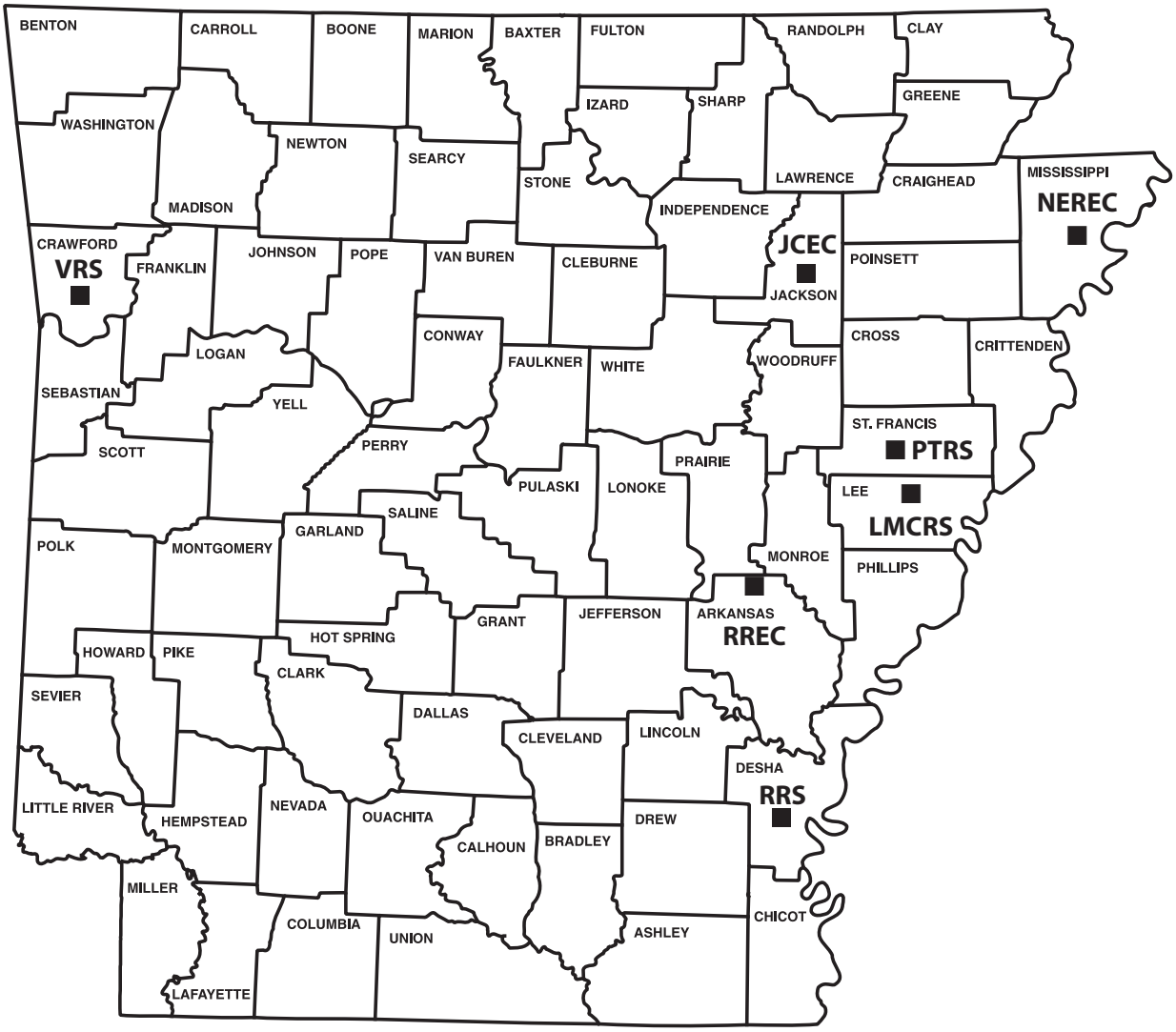
Company/Institute	Variety/Experimental Line	Relative Maturity	Herbicide Technology	Seed Treatment
Progeny Ag Products, continued	Progeny P4931E3S	4.9	Enlist E3	Poncho Votivo Obvius Plus
	Progeny P4970RX	4.9	Xtend	Poncho Votivo Obvius Plus
	Progeny P5003XF	5.0	XtendFlex	Poncho Votivo Obvius Plus
	Progeny P5121E3S	5.1	Enlist	Poncho Votivo Obvius Plus
	Progeny P5411XF	5.4	XtendFlex	Poncho Votivo Obvius Plus
	Progeny P5521E3	5.5	Enlist E3	Poncho Votivo Obvius Plus
Syngenta Crop Protection	NK 42-T5XF	4.2	XtendFlex	Cruisermaxx + Vibrance + Saltro
3411 Silverside Rd, Suite. 100	NK 43-V8XF	4.3	XtendFlex	Cruisermaxx + Vibrance + Saltro
Shipley Bldg.	NK 44-J4XFS	4.4	XtendFlex	Cruisermaxx + Vibrance + Saltro
Wilmington, DE 19810	NK 45-P9XF	4.5	XtendFlex	Cruisermaxx + Vibrance + Saltro
	NK 45-V9E3	4.5	Enlist E3	Cruisermaxx + Vibrance + Saltro
	NK S44-C7X	4.4	Xtend	Cruisermaxx + Vibrance + Saltro
	NK S45-J3X	4.5	Xtend	Cruisermaxx + Vibrance + Saltro
	NK S46-E3S	4.6	Enlist E3	Cruisermaxx + Vibrance + Saltro
	NK S47-Y9X	4.7	Xtend	Cruisermaxx + Vibrance + Saltro
	NK S48-2E3S	4.8	Enlist E3	Cruisermaxx + Vibrance + Saltro
	NK S49-F5X	4.9	Xtend	Cruisermaxx + Vibrance + Saltro
	NK S51-E3	5.1	Enlist	Cruisermaxx + Vibrance + Saltro
UniSouth Genetics, Inc.	USG 7461XFS	4.6	XtendFlex	ipconazole/metaxyl/imidicloprid
3205-C HWY 46 S	USG 7481XF	4.8	XtendFlex	ipconazole/metaxyl/imidicloprid
Dickson, TN 37055	USG 7489XT	4.8	Xtend	ipconazole/metaxyl/imidicloprid
	USG 7491XFS	4.9	XtendFlex	ipconazole/metaxyl/imidicloprid
Arkansas Agricultural Experiment	R13- 14635RR:0010	4.6	RR1	Intego Suite + Aveo EZ
Station, University of Arkansas	R13-13997	5.6	Conv.	Intego Suite + Aveo EZ
System Division of Agriculture	R14-1422	5.0	Conv.	Intego Suite + Aveo EZ
115 Plant Science Building	R15-1587	5.3	Conv.	Intego Suite + Aveo EZ
Fayetteville, AR 72701	R15-2422	4.7	Conv.	Intego Suite + Aveo EZ
	R15-5695	5.5	Conv.	Intego Suite + Aveo EZ
	R16-1445	5.5	Conv.	Intego Suite + Aveo EZ
	R16-253	4.6	Conv.	Intego Suite + Aveo EZ
	R17-283F	5.3	Conv.	Intego Suite + Aveo EZ
	R17-3488	5.5	Conv.	Intego Suite + Aveo EZ
	R17-4177	5.6	Conv.	Intego Suite + Aveo EZ
	R18-14142	4.6	Conv.	Intego Suite + Aveo EZ
	R18-14147	4.3	Conv.	Intego Suite + Aveo EZ
	R18-14229	4.3	Conv.	Intego Suite + Aveo EZ
	R18-14272	4.6	Conv.	Intego Suite + Aveo EZ
	R18-14287	4.3	Conv.	Intego Suite + Aveo EZ
	R18-14502	4.9	Conv.	Intego Suite + Aveo EZ
	R18-14753	4.6	Conv.	Intego Suite + Aveo EZ
	R18-3048	5.3	Conv.	Intego Suite + Aveo EZ
	R18-3250	5.3	Conv.	Intego Suite + Aveo EZ
	R18C-13283	4.6	Conv.	Intego Suite + Aveo EZ
	R18C-1450	4.3	Conv.	Intego Suite + Aveo EZ
	UA46i20C	4.6	Conv.	Intego Suite + Aveo EZ
	UA54i19GT	5.4	RR1	Intego Suite + Aveo EZ

Continued

Full-Season Tests, Participants and Entries
2021 Soybean Performance Tests, Continued

Company/Institute	Variety/Experimental Line	Relative Maturity	Herbicide Technology	Seed Treatment
University of Missouri	S16-14801C	5.0	Conv.	Warden CX
147 State Hwy T	S16-7922C	4.9	Conv.	Warden CX
Portageville, MO 63873	S17-2243C	4.5	Conv.	Warden CX
Wilbur-Ellis	Integra 54606NS	4.6	Xtend	WECO20
2219 229th Pl	Integra 54660NS	4.6	Xtend	WECO21
Ames, IA 50014	Integra 54816N	4.8	Xtend	WECO22
	Integra 54891NS	4.8	Xtend	WECO23
	Integra 74551NS	4.5	XtendFlex	WECO24
	Integra 74621NS	4.6	XtendFlex	WECO25
	Integra 74731NS	4.7	XtendFlex	WECO26
	Integra 74852NS	4.8	XtendFlex	WECO27
WinField United	Armor 44-D49	4.4	Xtend	Warden CX
2532 Alexander Dr.	Armor 45-F81	4.5	XtendFlex	Warden CX
Jonesboro, AR 72401	Armor 46-D09	4.6	Xtend	Warden CX
	Armor 46-F13	4.6	XtendFlex	Warden CX
	Armor 47-E03	4.7	Enlist	Warden CX
	Armor 48-D03	4.8	Xtend	Warden CX
	Armor 48-D25	4.8	Xtend	Warden CX
	Armor 48-E82	4.8	Enlist	Warden CX
	Armor 48-F01	4.8	XtendFlex	Warden CX
	Armor 48-F22	4.8	XtendFlex	Warden CX

SOYBEAN TEST LOCATIONS



JCEC - Jackson County Extension Center, Newport, Arkansas
LMCRS - Lon Mann Cotton Research Station, Marianna
NEREC - Northeast Research and Extension Center, Keiser, Arkansas
PTRS - Pine Tree Research Station, Colt, Arkansas
RREC - Rice Research and Extension Center, Stuttgart, Arkansas
RRS - Rohwer Research Station, Rohwer, Arkansas
VRS - Vegetable Research Station, Kibler, Arkansas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