MISSISSIPPI SOYBEAN VARIETY TRIALS, 2022

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MISSISSIPPI'S OFFICIAL VARIETY TRIALS

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NOTE TO USER

This Mississippi Agricultural and Forestry Experiment Station information bulletin is a summary of research conducted under project number MIS 1414 at locations shown on the map on the second page. It is intended for colleagues, cooperators, and sponsors. The interpretation of data presented in this report may change after additional experimentation. Information included is not to be construed as a recommendation for use or as an endorsement of a specific product by Mississippi State University or the Mississippi Agricultural and Forestry Experiment Station.

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Trade names of commercial products used in this report are included only for clarity and understanding. All available names (i.e., trade names, chemical names, etc.) of products used in this research project are listed on pages 66–68.

MISSISSIPPI STATE UNIVERSITY™

MS AGRICULTURAL AND FORESTRY EXPERIMENT STATION

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Scott Willard, Director **www.mafes.msstate.edu**

Mississippi Soybean Variety Trials, 2022

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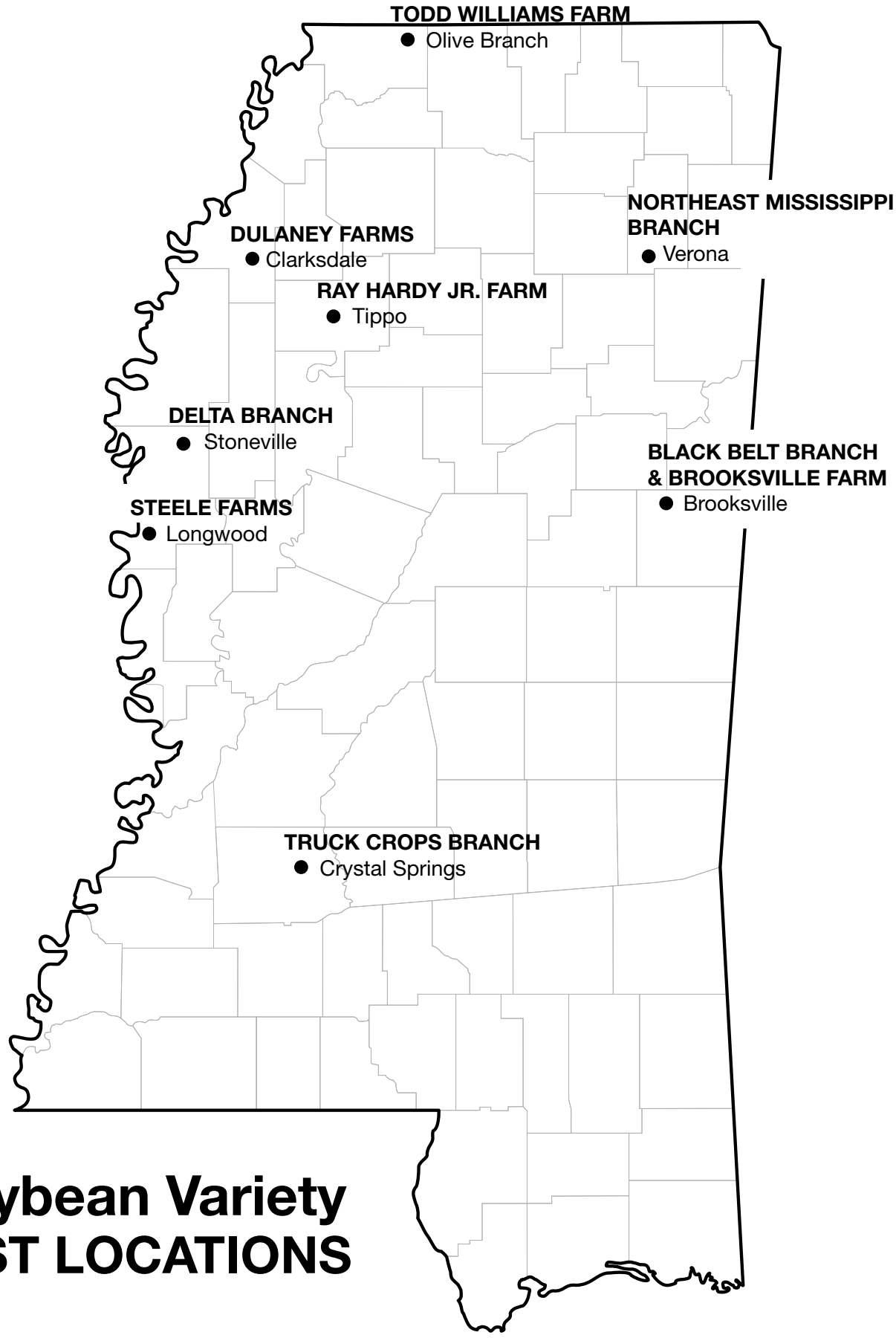
Find variety trial information online at ***mafes.msstate.edu/variety-trials***.



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INTRODUCTION

Procedures

There has been a proliferation of soybean varieties in recent years, and many good varieties are available to Mississippi producers. No single variety is superior, but in some situations, there are varieties that are more specifically adapted than others. Selecting a variety for planting requires knowledge of disease, nematode, and herbicide reactions, as well as the yield performance of each variety on a particular soil type. In many cases, planting the proper varieties will make substantial differences in yield and profitability on a farm. Proper management, including adequate lime, fertilizer, and weed control, is required to produce high yields of any variety, but yields may be limited, even under good management, unless the proper varieties are planted.

Soybean variety trials were conducted at eight locations in 2022 (see map). Commercial seed companies were given the opportunity to enter varieties for testing. Seed of all private entries were supplied by the participating companies. Public varieties were selected by the Technical Advisory Committee for evaluation at each location. The experimental design at each location for each maturity group was a randomized complete block, with three replications of each entry.

Seeding Rate. All seeds were packaged for planting at the rate of nine seeds per foot of row for 30-inch row spacing and at the rate of six seeds per foot for 19-inch row spacing. Plots were planted with a cone planter or vacuum planter, depending on the location. Irrigated plots had four rows, spaced 30 inches apart; nonirrigated plots had three rows, spaced 19 inches apart. All irrigated plots were planted to a plot length of 15 feet by using a planter with a cable trip system. All nonirrigated plots were planted to a length of 18 feet. Plot ends were trimmed to a uniform length 3 to 4 weeks after emergence.

Cultural Practices. Cultural and pest control practices for optimum yields were followed. Plots were limed and fertilized on the basis of an annual soil test. All seeds were treated with an insecticide/fungicide before planting. Only herbicides currently registered for use on soybean with strict adherence to all label instructions were used in these studies.

Maturity Date. Maturity is considered to be the date when the pods are dry and most of the leaves have dropped. Under most conditions, the stems are also dry.

Yield. An Almaco plot combine was used to harvest each plot. Harvested seed were allowed to dry at ambient temperature to a uniform moisture content before weighing. Weights were converted to yield in bushels per acre (60 pounds per bushel) at 13% moisture.

Plant Height. Plants were measured from the soil to the top extremity, at maturity, and plant height was recorded as the average of the height of plants measured.

Lodging. Lodging was rated and recorded on a scale of 1 = almost all plants erect, 2 = all plants leaning slightly or only a few plants down, 3 = all plants leaning moderately or 25 to 50 percent of plants down, 4 = all plants leaning considerably or 50 to 80 percent of plants down, and 5 = all plants down.

How to Select Varieties

In Problem or Difficult Fields

(1) Identify fields that have had problems in the past. Problems to consider may include diseases, nematodes, or fields that make planting or harvest difficult because of extremely dry or wet conditions. The Mississippi State University Extension Service offers a disease diagnostic service and nematode analysis free of charge.

(2) Use Tables 83 to 90 to select varieties for fields that need disease resistance.

(3) Select varieties using multiyear averages from all available locations. Identify those varieties that have desired pest resistance along with a high yield potential. Use data from a test site or sites with a soil type similar to that where the soybeans will be grown. Consider planting dates and maturity dates that may allow you to avoid historical field problems.

In Nonproblem Fields

(1) Identify the farm's highest yielding fields that have no specific disease problems.

(2) Select varieties with the best yield potential using multiyear averages from all available locations. Use data from a test site or sites with a soil type similar to that where the soybeans will be grown.

(3) Try new varieties on a limited number of acres. Don't abandon older, consistent-performing varieties that are yielding well unless research and experience show an advantage for newer varieties.

Planting Date and Maturity Date

(1) Varieties in Maturity Groups IV and V are recommended. Earlier maturing varieties should be considered for planting where fall seedbed preparation was done the previous year and in fields that are subject to drought stress during the growing season and/or wet soils during the usual harvest period. Later maturing varieties should be considered for planting in fields that are not as prone to drought stress, where irrigation will be used to alleviate drought stress, and for later planting. However, early planting of all acreage is encouraged to reduce risk from drought and obtain higher yields.

(2) Early-season production is a practice that has been quite successful and consistent for several years. Cool, wet soils at planting may justify the use of a seed treatment that has activity against Pythium, since no varieties have resistance to infection and resulting damage from this organism. Most Maturity Group IV soybeans have a narrow growth habit. Given their growth, habit narrow rows are quite advantageous. Early April to early May planting is recommended for early-season production of Group IV varieties. Irrigation allows later planting of early-maturing soybeans; however, the full yield potential may not be realized when planted late. Timely harvest is crucial with early-maturing varieties because dry weather at maturity may promote shattering. There is a wide range in maturity within Group IV soybeans. Determine if an early Group IV or a late Group IV variety, or some acreage of both, will fit into your operation.

(3) Timely planting is crucial for optimum production of all maturity groups of soybeans. An attempt should be made to complete soybean planting as early as possible. Planting of Group V and Group VI can be made in April. Delays in planting will result in reduced yield potential for almost all varieties in all maturity groups.

Herbicide-Resistant Varieties

(1) Evaluate overall performance characteristics of the variety — including yield potential, disease and nematode resistance, maturity date, lodging, etc. — as you would any variety.

(2) Compare these characteristics to other varieties, conventional and herbicide-resistant.

(3) Consider seed premiums, technology fees, and specific weed problems. Determine total cost of conventional and herbicide-resistant-crop weed control programs, and combine this information with factors listed above in choosing a variety.

General Characteristics of Varieties

Soybean varieties differ in significant characteristics that may not affect their performance. Tables 91 to 98 give the general characteristics of most varieties grown in Mississippi.

Pubescence and Hilum Color. Brown (tawny) and gray are the basic pubescence (hair) colors found among varieties. Varying pod-wall colors result in different intensities of mature pod colors. The "eye" of the seed is called a hilum, or point of attachment to the pod, and it differs in color by variety.

Seed Size. There is no relationship between inherited seed size and seed yield. A small-seeded variety may yield as much as or more than a large-seeded variety. The average seed per pound for different varieties is shown in Tables 91 to 98, but this is subject to seasonal variation. Knowing the number of seed per pound is important in determining the amount of seed needed for planting. Fewer pounds are required for small-seeded varieties than for large-seeded varieties. Your county Extension office has a publication (Information Sheet 1194) that deals with seeding rates and plant populations.

Flowering. Varieties of Maturity Group IV generally display an indeterminate growth habit. This means that a large portion of their vegetative growth occurs after the onset of flowering begins. In contrast, varieties of Groups V and VI display a determinate growth habit, where most of the vegetative growth occurs before flowering. The date of first flower will be determined by the time of planting and maturity. For example, a mid-Group IV variety may bloom 3 weeks earlier than a Group V variety, whereas a late Group IV variety may bloom only 1 week earlier than a Group V variety. Soybean flower petals are purple or white. The flower color is controlled strictly by genetics, and only one flower color occurs in a pure variety.

Maturity Group. Within the Maturity Group IV trials, the wide variation in maturity dates is attributed to lack of rigid standards for classifying varieties within a group. It was decided to subdivide both the Group IV and Group V trials into two maturity groups. All maturity groups were assigned an early- and late-maturity check.

Use of Data Tables and Summary Statistics

The yield potential of a given variety cannot be measured with complete accuracy. Consequently, replicated plots of all varieties are evaluated for yield, and the yield of a given variety is estimated as the mean of all replicated plots of that variety. Yields may vary from one plot to another, which introduces a certain degree of error to the estimation of yield potential. This natural variation is often responsible for yield differences seen among different varieties. Thus, even if the mean yield of two varieties is numerically different, they are not necessarily significantly different in terms of yield potential. In other words, the ability to measure yield is not precise enough to determine whether such small differences are observed purely by chance or because of superior performance.

The least significant difference (LSD) is an estimate of the smallest difference between two varieties that can be declared to be the result of something other than random variation in a particular trial. Consider the following example for a given trial:

Variety	Yield
Abe	40 bu/A
Bill	35 bu/A
Charlie	31 bu/A
LSD	7 bu/A

The difference between variety Abe and variety Bill is 5 bushels per acre (40 - 35 = 5). This difference is smaller than the LSD (7 bushels per acre). Consequently, it is concluded that variety Abe and variety Bill have the same yield potential, since the observed difference occurred purely due to chance.

The difference between variety Abe and variety Charlie is 9 bushels per acre (40 - 31 = 9), which is larger than the LSD (7 bushels per acre). Therefore, it is concluded that the yield potential of variety Abe is superior to that of variety Charlie, since the difference is larger than would be expected purely by chance.

The coefficient of variation (CV) is a measure of the relative precision of a given trial and is used to compare the relative precision of different trials. The CV is generally considered to be an estimate of the amount of unexplained variation in a given trial. This unexplained variation could be the result of variation between plots, with respect to soil type, fertility, insects, diseases, drought stress, etc. In general, the higher the CV, the less precise a given trial is.

The coefficient of determination (R^2) is another measure of the level of precision in a trial and is also used to compare the relative precision of different trials. The R^2 is a measure of the amount of variation that is explained, or accounted for, in a given trial. For example, an R^2 value of 90 percent indicates that 90 percent of the observed variation in the trial has been accounted for, with the remaining 10 percent being unaccounted for. The higher the R^2 value, the more precise the trial. The R^2 is generally considered to be a better measure of precision than is the CV, for comparison of different trials.

Table 1. 2022 Soybean planting and harvest dates.

Location	Planting dates	Harvest dates	Soil type	Row spacing	Irrigation
Brooksville (Not Irrigated), Black Belt Branch Experiment Station	4/26	9/30	Brooksville silty clay	19”	No
Brooksville (Irrigated)	4/26	10/4	Brooksville silty clay	30”	Yes
Clarksdale (Irrigated)	4/28	9/29	Sharkey clay & Forestdale silty clay	30”	Yes
Crystal Springs (Not Irrigated)	4/27	10/5	Providence silt loam	19”	No
Olive Branch (Not Irrigated)	5/19	10/11	Collins silt loam	19”	No
Stoneville - loam (Not Irrigated), Delta Branch Experiment Station	4/29	9/20	Bosket very fine sandy loam	19”	No
Stoneville - clay (Irrigated), Delta Branch Experiment Station	4/28	9/20	Sharkey clay	30”	Yes
Stoneville - loam (Irrigated), Delta Branch Experiment Station	5/9	9/28	Bosket very fine sandy loam	30”	Yes
Tippo (Not Irrigated)	4/29	9/27	Dundee & Tensas silt loam	19”	No
Verona (Not Irrigated), Northeast MS Branch ExperimentStation	4/22	10/6	Leeper silty clay	19”	No

Table 2. Summary of Yield for Maturity Group IV Early Roundup Ready Xtend and Xtendflex for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Clarksdale irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Irrigated avg.	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Stoneville not irr. (loam)	Tippo not irr (loam)	Verona not irr. (clay)	Not irr. avg.	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Armor	44-D49	67.9	95.8	84.3	71.6	79.9	18.8	84.2	94.0	95.8	43.3	69.3	67.6	72.5
Armor	45-F02	78.6	91.0	90.1	83.9	85.9	17.0	86.7	100.0	98.6	44.8	67.5	69.1	75.8
Armor	46-F13	79.2	91.7	80.8	77.6	82.3	17.9	71.9	86.0	86.1	52.4	67.9	63.7	71.2
Armor	46-F96	73.9	93.2	86.1	84.2	84.3	15.8	75.9	91.2	96.6	34.4	77.5	65.2	72.9
Asgrow	AG42XF2	71.9	94.1	83.5	73.5	80.8	23.0	51.5	81.4	98.3	36.9	53.7	57.5	66.8
Asgrow	AG45XF3	80.9	93.9	86.0	84.2	86.2	25.2	58.6	94.0	98.4	50.0	69.6	65.9	74.0
Asgrow	AG46XF3	75.4	101.3	82.2	89.0	87.0	31.4	88.2	91.7	104.0	54.4	73.8	73.9	79.1
Beck's Hybrids	4553XF	76.6	95.5	73.4	81.1	81.6	18.0	73.2	89.3	97.5	38.9	65.8	63.8	70.9
Delta Grow	44XF41	62.6	78.1	78.5	71.5	72.7	14.9	53.4	82.7	80.8	38.6	41.0	51.9	60.2
Delta Grow	46X65/STS	68.8	96.6	70.7	79.6	78.9	23.2	68.8	87.6	97.8	50.5	75.6	67.3	71.9
Delta Grow	46XF18	70.6	83.1	83.6	82.0	79.8	29.8	64.8	98.3	96.1	39.7	71.7	66.7	72.0
Dyna-Gro	S43XS70	63.0	92.2	84.7	76.6	79.1	17.9	70.9	94.3	97.6	47.0	63.7	65.2	70.8
Dyna-Gro	S45XF02	76.6	96.8	87.0	79.9	85.1	27.0	88.1	97.8	98.8	46.6	63.0	70.2	76.2
Dyna-Gro	S46XF31S	72.0	96.4	82.4	76.8	81.9	17.0	71.1	86.5	91.9	40.7	67.0	62.4	70.2
Dyna-Gro	S46XS60	73.2	100.3	92.6	83.4	87.4	25.1	64.0	92.9	98.2	47.5	71.3	66.5	74.8
Gateway Seed	453RXS	72.9	100.4	84.8	77.7	84.0	20.4	85.2	89.2	96.6	39.2	62.4	65.5	72.9
Gateway Seed	465RXS	74.7	100.7	79.9	79.5	83.7	15.8	76.2	89.0	89.3	43.6	66.9	63.5	71.6
Gateway Seed	469XF	75.3	102.8	86.8	83.3	87.0	15.8	87.4	89.6	93.9	37.8	70.2	65.8	74.3
Great Heart	GT-4255XS	59.1	94.5	77.0	71.8	75.6	21.3	57.5	83.4	88.4	42.3	50.5	57.2	64.6
Great Heart	GT-4677XS	71.7	99.2	86.4	84.1	85.3	24.3	69.8	93.0	95.8	46.2	66.8	66.0	73.7
Great Heart	GT-4344XF	64.2	92.0	76.4	80.6	78.3	19.3	65.0	81.8	86.7	40.6	55.9	58.2	66.3
Great Heart	GT-4681XFS	74.9	97.8	83.6	83.6	85.0	20.4	73.8	85.5	99.1	46.7	64.8	65.0	73.0
Innvictis	A 4690XF	72.5	100.3	80.9	82.4	84.0	17.7	71.5	95.8	99.5	46.1	63.2	65.6	73.0
Innvictis	A4632XF	74.2	98.5	80.5	77.5	82.7	23.6	86.3	93.1	90.0	43.1	66.8	67.2	73.4
Innvictis	A4642XF	65.3	105.0	79.3	85.7	83.8	21.0	58.6	102.7	99.0	39.7	58.6	63.3	71.5
Innvictis	A4662XF	66.0	100.1	86.3	83.3	83.9	16.7	69.5	98.2	98.8	36.2	70.5	65.0	72.6
MorSoy	MS 4681 RXT	73.5	111.1	92.8	85.5	90.7	18.4	90.0	86.8	97.1	47.4	70.1	68.3	77.3
NK Brand	NK42-T5XF	62.8	92.5	86.8	77.1	79.8	14.7	69.2	93.3	99.7	43.3	59.6	63.3	69.9
NK Brand	NK43-V8XF	65.6	90.7	96.3	82.1	83.7	19.6	65.4	97.2	92.0	34.2	48.9	59.5	69.2
NK Brand	NK43-Y9XFS	58.7	83.5	80.2	71.7	73.5	17.6	71.0	91.1	88.9	36.0	55.5	60.0	65.4
NK Brand	NK44-J4XFS	56.9	83.6	88.0	75.7	76.0	11.2	58.9	87.5	90.6	37.4	48.0	55.6	63.8
NK Brand	NK45-P9XF	74.8	91.5	87.1	81.3	83.7	24.3	72.9	85.2	89.1	43.4	49.0	60.6	69.8
Progeny	P 4200XS	74.9	101.3	89.8	83.9	87.5	21.3	78.9	97.4	103.1	40.0	65.2	67.6	75.6
Progeny	P 4202XFS	76.2	102.0	77.5	75.9	82.9	19.3	91.5	86.4	80.0	36.7	71.2	64.2	71.7
Progeny	P 4444RXS	73.0	88.8	80.2	75.5	79.4	22.1	71.6	94.8	89.7	42.4	63.6	64.0	70.2
Progeny	P 4505RXS	70.1	110.9	84.8	85.0	87.7	21.8	86.1	90.8	102.1	41.0	65.5	67.9	75.8
Progeny	P 4521XFS	71.5	99.0	84.5	79.7	83.7	15.4	80.4	86.9	95.8	41.0	66.0	64.3	72.0
Progeny	P 4604XFS	73.3	101.5	77.9	86.0	84.7	13.8	80.0	91.7	103.1	46.0	67.7	67.0	74.1
Progeny	P 4691XFS	72.2	105.6	82.5	85.8	86.5	17.8	62.6	88.8	100.3	39.9	61.8	61.9	71.7
Revere	4128XFS	63.0	105.7	87.4	89.3	86.4	18.6	53.5	81.4	104.6	46.8	49.9	59.1	70.0
Revere	4415XF	72.6	97.3	94.3	91.0	88.8	26.9	88.0	100.1	105.3	54.4	72.2	74.5	80.2
Revere	4526XFS	82.9	90.6	83.4	85.6	85.6	29.3	62.7	94.1	99.6	51.7	66.9	67.4	74.7
Revere	4606XFS	79.7	97.4	83.5	86.2	86.7	18.7	66.8	96.9	100.2	51.5	73.8	68.0	75.5
Mean		71.2	96.4	83.8	81.0	83.1	20.2	72.6	91.1	95.7	43.2	63.9	64.5	71.9
CV		8.8	7.5	6.2	5.1		50.0	17.0	7.8	9.0	13.0	12.3		
R^2		59.0	69.0	70.0	70.0		30.0	54.0	48.0	59.0	63.0	63.0		
LSD (0.05)		10.3	11.8	8.4	6.6		9.9	20.0	11.6	14.0	9.3	12.8		

Table 3. Summary of 2-Year Yields for Maturity Group IV Early Xtend and Xtendflex for the 2021 and 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Clarksdale irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Stoneville not irr. (loam)	Tippo not irr. (loam)	Verona not irr. (clay)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Armor	44-D49	70.3	88.9	84.5	78.6	105.3	95.8	94.4	47.6	74.4	82.2
Armor	46-F13	73.5	80.6	82.6	82.1	91.1	89.1	91.2	49.2	71.0	78.9
Delta Grow	46X65/STS	71.2	82.8	78.2	82.0	93.7	90.9	102.0	44.3	79.6	80.5
Dyna-Gro	S43XS70	59.0	81.6	85.7	75.0	86.9	89.9	93.3	47.2	65.3	76.0
Dyna-Gro	S46XF31S	70.8	81.9	85.6	77.7	89.7	92.8	96.8	43.2	71.0	78.8
Dyna-Gro	S46XS60	72.1	82.0	90.7	78.5	90.2	94.4	90.8	44.6	79.6	80.3
Great Heart	GT-4255XS	52.4	82.6	82.6	70.2	83.8	81.8	85.3	42.4	59.0	71.1
Great Heart	GT-4677XS	71.8	84.9	82.2	79.6	90.6	91.8	88.7	43.8	78.3	79.1
Great Heart	GT-4344XF	64.2	79.7	80.0	82.2	87.8	84.2	85.4	43.3	67.7	74.9
Great Heart	GT-4681XFS	69.8	82.7	83.8	77.1	97.1	91.0	94.0	46.1	68.6	78.9
Innvictis	A 4690XF	71.1	85.9	85.0	84.8	90.4	95.9	97.1	47.6	73.8	81.3
MorSoy	MS 4681 RXT	69.3	92.8	88.4	86.9	101.6	88.2	94.4	47.8	75.2	82.7
NK Brand	NK43-V8XF	66.5	78.9	90.8	79.9	91.5	90.6	98.7	35.0	56.1	76.5
NK Brand	NK45-P9XF	70.4	80.1	83.8	81.7	88.4	86.4	91.7	47.6	60.9	76.8
Progeny	P 4505RXS	70.3	93.5	85.2	87.0	101.6	94.0	102.2	45.7	76.1	84.0
Progeny	P 4521XFS	71.8	84.4	84.0	79.5	96.0	88.4	97.2	40.9	75.9	79.8
Progeny	P 4604XFS	72.4	84.7	85.7	86.4	97.6	92.6	105.3	46.7	73.6	82.8
Revere	4415XF	70.0	84.8	87.5	86.5	97.0	94.6	101.5	53.8	76.0	83.5
Revere	4606XFS	74.0	82.6	84.9	83.0	90.6	96.2	94.0	48.2	81.8	81.7
Overall Mean		69.0	84.0	84.8	81.0	93.2	91.0	95.0	45.5	71.8	79.5

Table 4. Summary of 3-Year Yields for Maturity Group IV Early Xtend and Xtendflex for the 2020, 2021, and 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Clarksdale irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Raymond not irr.	Olive Branch not irr. (loam)	Stoneville not irr. (loam)	Tippo not irr. (loam)	Verona not irr. (clay)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Armor	44-D49	73.0	90.7	88.5	76.1	88.7	95.8	84.5	48.7	78.4	80.5
Delta Grow	46X65/STS	76.4	86.5	83.9	77.7	76.0	89.7	92.4	46.1	75.2	78.2
Dyna-Gro	S46XS60	74.3	85.7	88.1	74.6	76.3	94.0	82.6	45.3	82.0	78.1
Great Heart	GT-4677XS	75.0	89.0	87.4	78.2	75.1	87.0	78.2	47.4	79.2	77.4
Progeny	P 4505RXS	71.3	94.9	87.2	80.2	83.9	90.6	92.7	48.4	78.5	80.9
Overall Mean		74.0	89.4	87.0	77.4	80.0	91.4	86.1	47.2	78.7	79.0

Table 5. Summary of Yield for Group IV Late Roundup Ready Xtend and Xtendflex for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooks-ville irr. (clay)	Clarks-dale irr. (clay)	Stone-ville irr. (loam)	Stone-ville irr. (clay)	Irrigated avg.	Brooks-ville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Stone-ville not irr. (loam)	Tippo not irr (loam)	Verona not irr. (clay)	Not irr. avg.	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Armor	48-D25	82.4	94.3	79.9	73.7	82.6	18.2	78.1	85.4	90.7	46.4	80.4	66.5	72.9
Armor	48-F22	74.4	92.3	76.4	75.4	79.6	14.6	74.3	82.0	83.6	47.8	69.8	62.0	69.1
Armor	49-F37	67.1	93.4	80.4	71.0	78.0	20.1	78.7	79.9	78.9	46.6	69.4	62.3	68.5
Asgrow	AG47XF3	78.7	93.5	69.3	78.0	79.9	18.3	83.1	90.6	90.4	47.4	81.9	68.6	73.1
Asgrow	AG48XF3	71.7	94.5	83.2	79.3	82.2	25.5	72.5	84.6	97.2	48.1	75.3	67.2	73.2
Asgrow	AG49XF3	72.3	85.3	76.9	72.6	76.8	12.1	55.9	85.9	93.1	47.4	73.6	61.3	67.5
Beck's Hybrids	4885XF	65.2	98.9	78.8	82.8	81.4	13.9	67.9	86.1	86.8	41.5	62.5	59.8	68.4
Delta Grow	48X45	66.2	93.8	72.5	77.8	77.6	22.0	72.0	85.5	80.5	43.1	69.9	62.2	68.3
Delta Grow	48XF33/STS	68.0	90.0	71.0	66.4	73.8	18.5	87.3	84.9	82.9	45.9	60.7	63.4	67.5
Delta Grow	49XF29/STS	75.6	89.6	74.2	75.5	78.7	23.7	90.8	86.0	72.4	41.7	71.8	64.4	70.1
Dyna-Gro	S47XF23S	71.6	102.1	86.6	83.1	85.8	24.8	68.9	89.4	97.0	43.7	62.5	64.4	73.0
Dyna-Gro	S47XF52	78.6	85.1	71.5	75.5	77.7	25.8	82.7	85.0	74.9	44.5	56.4	61.6	68.0
Dyna-Gro	S48XF61S	61.5	100.4	84.3	84.3	82.6	19.8	76.8	86.9	104.3	45.1	52.1	64.2	71.5
Dyna-Gro	S48XT90	69.2	94.5	84.1	84.6	83.1	16.8	85.8	84.6	94.5	49.9	57.9	64.9	72.2
Dyna-Gro	S49XF82S	85.1	93.7	78.4	77.4	83.6	33.5	86.4	75.8	79.7	39.1	63.5	63.0	71.3
Dyna-Gro	S49XT70	84.8	94.1	72.8	78.7	82.6	16.2	88.3	85.4	78.0	51.3	74.2	65.6	72.4
Gateway Seed	471XF	63.3	93.3	75.4	80.2	78.1	18.3	71.5	87.7	88.2	47.1	66.2	63.2	69.1
Great Heart	GT-4979X	70.7	86.8	73.7	80.7	78.0	12.9	80.9	93.0	92.4	49.3	70.5	66.5	71.1
Great Heart	GT-4756XF	77.1	105.4	83.6	80.6	86.7	22.4	68.1	91.3	97.4	43.9	63.8	64.5	73.4
Great Heart	GT-4762XF	79.6	102.0	82.7	78.8	85.8	29.0	92.4	84.1	93.4	41.9	79.6	70.1	76.4
Great Heart	GT-4828X	75.1	96.8	77.1	72.5	80.4	15.9	64.0	78.8	77.1	50.8	61.6	58.0	67.0
Innvictis	A 4742XF	77.4	97.7	80.4	77.4	83.2	26.6	84.2	83.5	96.6	40.0	59.9	65.2	72.4
Innvictis	A 4850XF	51.9	92.4	84.7	75.8	76.2	20.1	72.6	82.9	91.8	38.3	46.3	58.7	65.7
Innvictis	A 4950X	75.1	93.7	73.9	73.7	79.1	14.7	84.8	83.5	83.3	40.8	75.3	63.7	69.9
MorSoy	MS 4846 RXT	71.3	100.8	84.5	86.1	85.6	23.0	76.2	95.2	95.5	42.1	67.5	66.6	74.2
MorSoy	MS 4852	64.4	97.7	82.1	81.7	81.5	22.8	80.9	89.5	87.7	43.2	71.5	65.9	72.1
NK Brand	NK47-Z1XF	89.6	89.0	77.5	78.3	83.6	22.0	79.9	83.7	89.4	48.3	76.5	66.6	73.4
Progeny	P 4732XF	68.9	103.0	83.1	79.1	83.5	26.9	75.9	94.4	103.1	39.0	61.6	66.8	73.5
Progeny	P 4798XF	82.3	92.3	82.2	82.5	84.8	19.7	79.1	87.0	96.2	52.3	74.6	68.1	74.8
Progeny	P 4806XFS	56.2	97.5	87.0	80.9	80.4	20.5	75.2	85.9	105.0	35.6	50.7	62.1	69.5
Progeny	P 4821RX	59.7	103.1	87.5	84.5	83.7	20.5	76.7	88.8	96.8	41.6	53.2	62.9	71.2
Progeny	P 4844XFS	76.5	100.0	75.1	78.5	82.5	28.2	80.3	85.5	91.9	42.7	64.0	65.4	72.3
Progeny	P 4951XFS	78.2	94.1	75.0	68.4	78.9	22.1	74.2	84.4	86.2	35.0	72.2	62.4	69.0
Revere	4727XFS	73.4	102.6	83.0	75.9	83.7	27.9	82.4	82.2	85.0	43.2	61.9	63.8	71.7
Revere	4795XS	70.3	94.7	85.9	81.1	83.0	20.9	83.0	92.8	94.8	50.5	68.0	68.3	74.2
Revere	4806XS	78.4	95.2	85.5	79.0	84.5	20.6	74.3	83.1	95.8	46.3	70.9	65.2	72.9
Revere	4826XF	75.0	102.6	77.7	81.5	84.2	26.0	82.2	88.6	91.3	41.5	70.4	66.7	73.7
Revere	4925XFS	75.1	98.2	76.6	79.0	82.2	25.8	76.0	84.0	90.9	45.4	72.6	65.8	72.4
Mean		72.7	95.6	79.3	78.2	81.5	21.3	78.0	86.0	89.9	44.4	66.9	64.4	71.2
CV		9.4	7.0	9.3	6.1		24.0	10.0	9.1	9.7	10.6	12.8		
R^2		67.0	61.0	46.0	58.0		57.0	58.0	30.0	74.0	59.0	62.0		
LSD (0.05)		11.2	11.0	NS	7.8		8.4	13.7	NS	14.2	7.7	13.9		
Error DF		74	74	74	74		74	74	74	74	74	74		

Table 6. Summary of 2-Year Yields for Maturity Group IV Late Xtend and Xtendflex for the 2021 and 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Clarksdale irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Stoneville not irr. (loam)	Tippo not irr (loam)	Verona not irr. (clay)	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Armor	48-D25	74.6	80.5	82.4	74.4	52.5	93.9	93.0	84.0	44.8	80.0	76.0
Armor	48-F22	70.0	81.1	81.1	80.5	49.6	91.1	87.9	89.9	47.9	75.4	75.5
Beck's Hybrids	4885XF	61.2	85.1	81.4	80.6	39.4	90.6	89.9	92.8	44.1	65.0	73.0
Delta Grow	48X45	65.5	82.2	80.3	80.7	52.0	90.1	88.0	89.6	46.0	72.3	74.7
Dyna-Gro	S48XT90	72.5	83.6	84.3	85.5	43.4	103.0	88.8	99.1	51.7	68.8	78.1
Dyna-Gro	S49XT70	79.4	82.2	75.8	79.7	42.3	102.1	87.6	83.6	51.1	80.7	76.5
Great Heart	GT-4979X	70.3	78.7	78.6	81.3	47.3	102.2	88.4	92.1	51.8	79.6	77.0
Great Heart	GT-4828X	69.2	85.1	72.5	73.3	43.9	93.3	82.7	84.2	48.3	68.4	72.1
Innvictis	A 4850XF	57.4	80.5	84.2	80.5	46.1	87.5	80.3	93.2	43.9	61.8	71.5
Innvictis	A 4950X	72.0	81.6	76.5	77.3	47.6	102.8	89.6	90.7	47.1	82.7	76.8
Progeny	P 4806XFS	60.9	84.9	87.0	86.3	48.2	97.3	87.0	96.8	44.3	64.6	75.7
Progeny	P 4821RX	61.0	87.6	86.7	80.4	41.0	95.1	87.8	102.0	44.6	63.3	74.9
Revere	4795XS	67.1	82.3	85.7	81.7	50.5	104.0	94.5	92.4	49.8	68.8	77.7
Revere	4806XS	78.0	81.4	84.6	80.3	53.7	92.1	87.8	92.5	46.4	73.4	77.0
Overall Mean		68.5	82.6	81.5	80.2	47.0	96.1	88.1	91.6	47.3	71.8	75.5

Table 7. Summary of 3-Year Yields for Maturity Group IV Late Xtend and Xtendflex for the 2020, 2021, and 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Clarksdale irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Stoneville not irr. (loam)	Tippo not irr (loam)	Verona not irr. (clay)	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Armor	48-D25	79.1	85.4	83.9	76.7	53.9	78.1	94.1	75.5	48.0	80.1	75.5
Delta Grow	48X45	72.7	85.5	81.5	79.9	53.4	76.1	85.8	79.1	48.3	71.6	73.4
Dyna-Gro	S48XT90	75.7	87.9	85.4	84.8	43.6	85.3	87.5	85.1	49.8	70.8	75.6
Dyna-Gro	S49XT70	80.8	86.3	76.0	80.1	45.1	82.2	83.2	73.8	49.1	78.7	73.5
Great Heart	GT-4979X	74.4	86.3	83.3	82.4	47.3	83.1	85.0	79.3	50.6	81.9	75.4
Great Heart	GT-4828X	73.5	86.8	76.2	76.1	46.8	77.1	80.4	73.8	48.3	72.2	71.1
Innvictis	A 4950X	75.4	85.0	77.6	78.9	46.6	85.7	84.3	80.1	49.5	81.9	74.5
Progeny	P 4821RX	65.9	90.4	87.0	81.7	43.9	78.7	82.3	86.5	49.5	64.2	73.0
Revere	4795XS	72.4	86.4	85.9	80.3	50.7	86.8	88.5	81.9	48.0	70.6	75.1
Revere	4806XS	80.2	86.0	87.6	80.6	51.4	80.6	87.7	80.0	50.5	74.1	75.9
Overall Mean		75.0	86.6	82.4	80.2	48.3	81.4	85.9	79.5	49.1	74.6	74.3

Table 8. Summary of Yields for Group IV Enlist for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Irr. avg.	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Stoneville not irr. (loam)	Verona not irr. (clay)	Not irr. avg.	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Delta Grow	45E33	43.2	76.1	61.8	60.4	15.8	82.2	70.4	89.6	63.8	64.4	62.9
Delta Grow	46E10	50.7	63.4	58.1	57.4	14.6	80.9	70.6	70.9	55.7	58.6	58.1
Delta Grow	48E59	54.3	78.0	65.3	65.9	15.6	76.8	76.1	80.5	71.2	64.0	64.7
Delta Grow	48E60	66.8	83.9	75.8	75.5	22.2	101.4	83.7	90.6	69.9	73.6	74.3
Revere	Innotech 4737E3	77.2	79.2	62.8	73.0	21.5	79.3	82.7	84.1	62.6	66.1	68.7
Progeny	4775E3S	71.7	58.0	63.8	64.5	23.6	95.8	67.8	75.9	79.0	68.4	67.0
Mean		60.6	73.1	64.6	66.1	18.9	86.1	75.2	81.9	67.0	65.8	65.9
CV		6.9	9.4	6.4		13.0	15.0	8.9	4.0	8.3		
R^2		93.0	76.0	77.0		80.0	51`	63.0	92.0	87.0		
LSD (0.05)		7.7	12.6	7.5		4.8	NS	12.0	6.5	10.2		
Error DF		10	10	10		10	10	10	10	10		

Table 9. Summary of 2-Year Yields for Maturity Group IV Enlist for the 2021 and 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Stoneville not irr. (loam)	Verona not irr. (clay)	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Delta Grow	46E10	55.7	71.5	59.6	41.4	86.8	76.5	73.9	55.5	65.1
Delta Grow	48E59	53.9	82.9	68.8	43.6	93.9	79.4	85.2	69.2	72.1
Progeny	4775E3S	66.9	67.9	68.7	47.3	101.4	73.7	84.8	75.7	73.3
Overall Mean		58.8	74.1	65.7	44.1	94.0	76.5	81.3	66.8	70.2

Table 10. Summary of 3-Year Yields for Maturity Group IV Enlist for the 2020, 2021, and 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Stoneville not irr. (loam)	Verona not irr. (clay)	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Progeny	4775E3S	69.2	76.8	74.0	89.2	76.0	77.6	72.5	76.5
Overall Mean		69.2	76.8	74.0	89.2	76.0	77.6	72.5	76.5

Table 11. Summary of Yield for Maturity Group V Roundup Ready Xtend and Xtendflex for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooks-ville irr. (clay)	Clarks-dale irr. (clay)	Stone-ville irr. (loam)	Stone-ville irr. (clay)	Irr. avg.	Brooks-ville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Verona not irr. (clay)	Not irr. avg.	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Armor	51-F88	51.2	98.3	88.0	76.5	78.5	22.0	87.4	89.1	85.6	71.0	74.7
Asgrow	AG53XF2	57.1	96.6	77.4	71.0	75.5	23.8	73.0	81.3	70.2	62.1	68.8
Asgrow	AG56XF2	83.4	85.8	82.9	76.0	82.0	31.3	84.1	88.6	82.3	71.6	76.8
Delta Grow	52XF22/STS	52.2	104.1	83.4	80.1	79.9	20.3	83.4	72.1	81.4	64.3	72.1
Delta Grow	54XF20	76.8	76.1	73.9	65.6	73.1	30.8	85.0	74.3	66.8	64.2	68.7
Dyna-Gro	S52XT91	70.7	94.9	87.2	77.3	82.5	29.8	73.7	92.2	72.9	67.1	74.8
Great Heart	GT-5214X	98.9	73.7	68.6	54.2	73.9	32.3	87.2	79.4	79.2	69.5	71.7
Innvictis	A5451XF	76.6	80.0	76.6	69.0	75.5	32.5	83.2	78.8	71.3	66.4	71.0
Revere	5029XF	75.6	102.5	75.6	82.0	83.9	23.7	85.0	91.4	82.4	70.6	77.3
Revere	5386X	79.5	91.1	76.0	68.0	78.7	18.3	84.1	77.7	75.3	63.8	71.2
Revere	5588X	95.5	80.2	76.3	67.0	79.8	36.5	82.5	81.7	88.8	72.4	76.1
Revere	5614XF	81.5	79.8	72.3	62.1	73.9	37.4	66.1	78.2	75.4	64.3	69.1
NK Brand	NK55-T2XF	70.4	63.0	62.5	46.9	60.7	28.2	42.9	67.7	57.3	49.0	54.9
Progeny	P 5056XFS	79.6	102.2	78.8	78.9	84.9	26.6	81.8	88.7	80.9	69.5	77.2
Progeny	P 5554RX	85.4	86.3	80.5	68.6	80.2	33.5	86.3	80.2	76.9	69.2	74.7
Progeny	P5016RXS	78.4	101.2	68.2	66.4	78.5	16.6	68.7	77.6	66.8	57.4	68.0
Progeny	P5150XFS	90.3	104.5	81.5	76.6	88.2	33.7	85.1	83.2	74.4	69.1	78.7
Progeny	P5252RX	84.8	83.4	69.2	71.6	77.2	37.0	105.6	79.1	88.4	77.5	77.4
Mean		77.1	89.1	76.6	69.9	78.2	28.6	80.3	81.2	76.5	66.6	72.4
CV		14.0	5.6	9.0	5.0		20.0	11.0	11.0	12.0		
R^2		67.0	90.0	59.0	91.0		66.0	78.0	45.0	63.0		
LSD (0.05)		18.5	8.3	11.6	5.7		9.6	15.0	NS	15.5		
Error DF		34	34	34	34		34	34	34	34		

Table 12. Summary of 2-Year Yields for Maturity Group V Roundup Ready Xtend and Xtendflex for the 2021 and 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Clarksdale irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Verona not irr. (clay) (loam)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Asgrow	AG53XF2	59.6	81.6	75.6	66.8	47.3	88.4	83.5	69.3	71.5
Asgrow	AG56XF2	81.6	69.3	81.3	71.4	63.2	103.1	86.0	89.8	80.7
Delta Grow	54XF20	74.5	67.2	73.6	67.9	57.2	102.6	81.2	71.6	74.5
Dyna-Gro	S52XT91	75.5	77.7	84.1	71.0	50.0	94.4	93.0	73.1	77.3
Great Heart	GT-5214X	88.5	63.9	64.5	58.5	56.8	99.5	72.4	82.5	73.3
Progeny	P 5554RX	81.2	70.5	76.3	67.2	59.5	106.1	83.1	81.6	78.2
Progeny	P5016RXS	70.0	79.6	69.9	61.3	48.1	87.5	84.4	73.1	71.7
Revere	5386X	74.5	79.1	74.5	69.6	48.7	105.0	80.7	77.1	76.1
Revere	5614XF	75.2	68.2	69.0	61.4	55.8	86.9	81.8	77.0	71.9
Overall Mean		75.6	73.0	74.3	66.1	54.1	97.0	82.9	77.2	75.0

Table 13. Summary of 3-Year Yields for Maturity Group V Roundup Ready Xtend and Xtendflex for the 2020, 2021, and 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Clarksdale irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Verona not irr. (clay)	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Great Heart	GT-5214X	84.1	70.4	72.4	67.3	54.0	79.9	69.6	84.1	72.7
Progeny	P 5554RX	78.9	77.9	81.5	74.3	53.7	82.9	84.0	79.3	76.6
Progeny	P5016RXS	69.7	80.5	75.4	66.5	46.1	73.4	79.1	68.6	69.9
Revere	5386X	75.6	82.1	79.5	74.8	41.9	88.7	80.7	72.9	74.5
Overall Mean		77.1	77.7	77.2	70.7	48.9	81.2	78.4	76.2	73.4

Table 14. Summary of Yield for Group V Enlist for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Irrigated avg.	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Verona not irr. (clay)	Not irr. avg.	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Delta Grow	53E30	85	63.2	66.5	71.6	20.5	87.1	71.8	78.9	64.6	67.6
Delta Grow	52E80	81	69.2	71.3	73.8	19.2	87.7	75.4	78.3	65.2	68.9
Mean		83	66.2	68.9		19.85	87.4	73.6	78.6		
CV		2.4	5.7	2.5		31	5	6.9	9.19		
R^2		95	71	86		59	87	72	79.8		
LSD (0.05)		NS	NS	NS		NS	NS	NS	NS		
Error DF		2	2	2		2	2	2	2		

Table 15. Summary of Yield for Group IV Conventional for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Brooksville irr. (clay)	Stoneville irr. (loam)	Stoneville irr. (clay)	Brooksville Not irr. (clay)	Crystal Springs not irr. (loam)	Olive Branch not irr. (loam)	Verona not irr. (clay)	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Delta Grow	53E30	77.8	65.3	63.5	51.5	91.3	74.1	76.4	71.4
Overall Mean		77.8	65.3	63.5	51.5	91.3	74.1	76.4	71.4

Table 16. Summary of 2-Year Yields for Maturity Group IV Conventional for the 2021 and 2022 Mississippi Soybean Variety Trials.

Brand	Variety	Stoneville irr. (clay)	Irrigated avg.	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Verona not irr. (clay)	Not irr. avg.	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Univ. of Missouri	S19-3530RY	57.2	57.2	13.4	35.5	38.4	29.1	36.1
Univ. of Missouri	S16-13165C	77.9	77.9	28.9	66.8	89.7	61.8	65.8
Univ. of Missouri	S17-2066C	68.8	68.8	27.3	25.7	75.0	42.7	49.2
Mean		68.0	68.0	23.2	42.7	67.7	44.5	50.4
CV		8.0		20.0	30.0	19.0		
R^2		87.0		83.0	73.0	87.0		
LSD (0.05)		11.0		10.0	25.0	28.0		
Error DF		4		4	4	4		

Table 17. Summary of 3-Year Yields for Maturity Group IV Conventional for the 2020, 2021, and 2022 Mississippi Soybean Variety Trials.

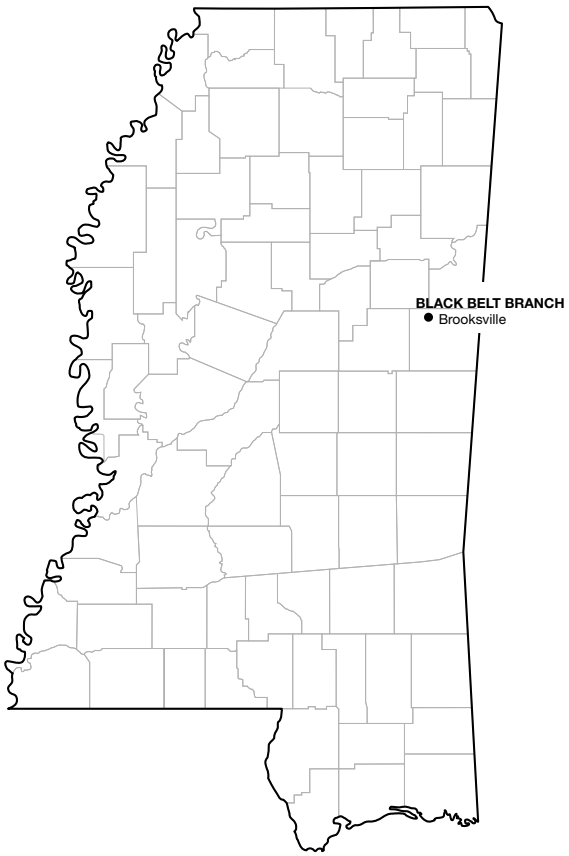
Brand	Variety	Stoneville irr. (clay)	Irrigated avg.	Brooksville not irr. (clay)	Crystal Springs not irr. (loam)	Verona not irr. (clay)	Not irr. avg.	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
Univ. of Missouri	S18-6097C	60.7	60.7	15.4	64.7	80.0	53.4	55.2
Univ. of Missouri	S17-2509C	76.3	76.3	17.0	36.6	78.6	44.1	52.1
Univ. of Missouri	S18-6328C	71.7	71.7	22.0	60.1	84.1	55.4	59.5
Mean		69.6	69.6	18.1	53.8	80.9	50.9	55.6
CV		11.0		44.0	25.0	22.0		
R^2		62.0		22.0	54.0	25.0		
LSD (0.05)		NS		NS	27.0	NS		
Error DF		4		4	4	4		

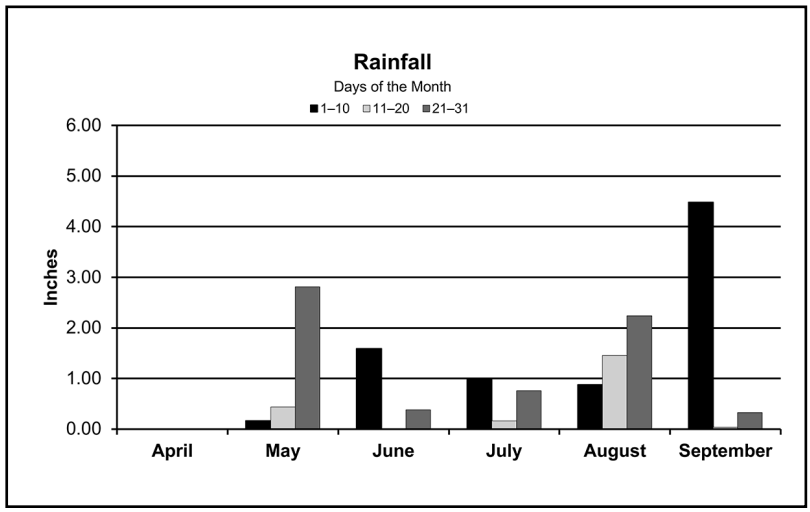
BROOKSVILLE (NOT IRRIGATED), BLACK BELT BRANCH

Crop Summary

The soybean plots were planted into a stale seedbed that had adequate soil moisture at planting to ensure good germination. All plots emerged to a good stand. Below average rainfall and high temperatures contributed to poor yields at this location. Harvest was completed in a timely manner, but poor yields were recorded.

Planting date . . . .April 26
Harvest date . . . .September 30
Soil type . . . . . .Brooksville silty clay
Soil pH 6.4
Soil fertility . . . . .P=M, K=L
Previous crop . . .Soybean
Herbicide . . . . . .Preemergence — Authority Edge @ 7 oz/A, Dual II Magnum @ 32 oz/A, and Gramoxone @ 32 oz/A on April 26
Postemergence — SelectMax @ 16 oz/A, FirstRate @ 0.3 oz/A, and Prefix @ 32 oz/A on June 16
Fertilizer . . . . . .Preplant — 0-20-20 @ 250 lb/A





Rainfall Summary

	Inches
April	0.00
May	3.41
June	1.97
July	1.92
August	4.58
September	4.85
Total	16.73

Table 18. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Black Belt Branch, Brooksville).

Brand	Variety	Yield[1]			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Asgrow	AG46XF3	31.4	—	—	28	1
Delta Grow	46XF18	29.8	—	—	29	1
Revere	4526XFS	29.3	—	—	30	1
Dyna-Gro	S45XF02	27.0	—	—	27	1
Revere	4415XF	26.9	—	—	24	1
Asgrow	AG45XF3	25.2	—	—	31	1
Dyna-Gro	S46XS60	25.1	—	—	27	1
Great Heart	GT-4677XS	24.3	—	—	27	1
NK Brand	NK45-P9XF	24.3	—	—	32	1
Innvictis	A4632XF	23.6	—	—	26	1
Delta Grow	46X65/STS	23.2	—	—	28	1
Asgrow	AG42XF2	23.0	—	—	32	1
Progeny	P 4444RXS	22.1	—	—	28	1
Progeny	P 4505RXS	21.8	—	—	27	1
Great Heart	GT-4255XS	21.3	—	—	25	1
Progeny	P 4200XS	21.3	—	—	26	1
Innvictis	A4642XF	21.0	—	—	31	1
Gateway Seed	453RXS	20.4	—	—	32	1
Great Heart	GT-4681XFS	20.4	—	—	30	1
NK Brand	NK43-V8XF	19.6	—	—	33	1
Progeny	P 4202XFS	19.3	—	—	27	1
Great Heart	GT-4344XF	19.3	—	—	31	1
Armor	44-D49	18.8	—	—	26	1
Revere	4606XFS	18.7	—	—	33	1
Revere	4128XFS	18.6	—	—	31	1
MorSoy	MS 4681 RXT	18.4	—	—	25	1
Beck's Hybrids	4553XF	18.0	—	—	19	1
Dyna-Gro	S43XS70	17.9	—	—	27	1
Armor	46-F13	17.9	—	—	31	1
Progeny	P 4691XFS	17.8	—	—	29	1
Innvictis	A 4690XF	17.7	—	—	31	1
NK Brand	NK43-Y9XFS	17.6	—	—	23	1
Armor	45-F02	17.0	—	—	27	1
Dyna-Gro	S46XF31S	17.0	—	—	31	1
Innvictis	A4662XF	16.7	—	—	28	1
Armor	46-F96	15.8	—	—	32	1
Gateway Seed	469XF	15.8	—	—	31	1
Gateway Seed	465RXS	15.8	—	—	29	1
Progeny	P 4521XFS	15.4	—	—	24	1
Delta Grow	44XF41	14.9	—	—	29	1
NK Brand	NK42-T5XF	14.7	—	—	22	1
Progeny	P 4604XFS	13.8	—	—	27	1
NK Brand	NK44-J4XFS	11.2	—	—	25	1
Mean		20.2				
CV		50.0				
R^2		30.0				
LSD (0.05)		9.9				
Error DF		84.0				

[1]No 2- or 3-year average.

Table 19. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Black Belt Branch, Brooksville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Dyna-Gro	S49XF82S	33.5	—	—	28	1
Great Heart	GT-4762XF	29.0	—	—	28	1
Progeny	P 4844XFS	28.2	—	—	24	1
Revere	4727XFS	27.9	—	—	28	1
Progeny	P 4732XF	26.9	—	—	25	1
Innvictis	A 4742XF	26.6	—	—	24	1
Revere	4826XF	26.0	—	—	26	1
Revere	4925XFS	25.8	—	—	28	1
Dyna-Gro	S47XF52	25.8	—	—	29	1
Asgrow	AG48XF3	25.5	—	—	30	1
Dyna-Gro	S47XF23S	24.8	—	—	25	1
Delta Grow	49XF29/STS	23.7	—	—	28	1
MorSoy	MS 4846 RXT	23.0	—	—	27	1
MorSoy	MS 4852	22.8	—	—	28	1
Great Heart	GT-4756XF	22.4	—	—	26	1
Progeny	P 4951XFS	22.1	—	—	24	1
Delta Grow	48X45	22.0	52.0	53.4	27	1
NK Brand	NK47-Z1XF	22.0	—	—	29	1
Revere	4795XS	20.9	50.5	50.7	30	1
Revere	4806XS	20.6	53.7	51.4	25	1
Progeny	P 4821RX	20.5	41.0	43.9	25	1
Progeny	P 4806XFS	20.5	48.2	—	27	1
Innvictis	A 4850XF	20.1	46.1	—	27	1
Armor	49-F37	20.1	—	—	26	1
Dyna-Gro	S48XF61S	19.8	—	—	25	1
Progeny	P 4798XF	19.7	—	—	27	1
Delta Grow	48XF33/STS	18.5	—	—	32	1
Asgrow	AG47XF3	18.3	—	—	30	1
Gateway Seed	471XF	18.3	—	—	27	1
Armor	48-D25	18.2	52.5	53.9	26	1
Dyna-Gro	S48XT90	16.8	43.4	43.6	29	1
Dyna-Gro	S49XT70	16.2	42.3	45.1	30	1
Great Heart	GT-4828X	15.9	43.9	46.8	31	1
Innvictis	A 4950X	14.7	47.6	46.6	26	1
Armor	48-F22	14.6	49.6	—	29	1
Beck's Hybrids	4885XF	13.9	39.4	—	31	1
Great Heart	GT-4979X	12.9	47.3	47.3	34	1
Asgrow	AG49XF3	12.1	—	—	29	1
Mean		21.3				
CV		24.0				
R^2		57.0				
LSD (0.05)		8.4				
Error DF		74				

Table 20. Maturity Group V Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Black Belt Branch, Brooksville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Revere	5614XF	37.4	55.8	—	21	1
Progeny	P5252RX	37.0	—	—	30	1
Revere	5588X	36.5	—	—	24	1
Progeny	P5150XFS	33.7	—	—	25	1
Progeny	P 5554RX	33.5	59.5	53.7	26	1
Innvictis	A5451XF	32.5	—	—	23	1
Great Heart	GT-5214X	32.3	56.8	54.0	30	1
Asgrow	AG56XF2	31.3	63.2	—	28	1
Delta Grow	54XF20	30.8	57.2	—	22	1
Dyna-Gro	S52XT91	29.8	50.0	—	26	1
NK Brand	NK55-T2XF	28.2	—	—	16	1
Progeny	P 5056XFS	26.6	—	—	28	1
Asgrow	AG53XF2	23.8	47.3	—	28	1
Revere	5029XF	23.7	—	—	30	1
Armor	51-F88	22.0	—	—	31	1
Delta Grow	52XF22/STS	20.3	—	—	30	1
Revere	5386X	18.3	48.7	41.9	30	1
Progeny	P5016RXS	16.6	48.1	46.1	34	1
Mean		28.6				
CV		20.0				
R^2		66.0				
LSD (0.05)		9.6				
Error DF		34				

Table 21. Maturity Group IV Enlist Nonirrigated Soybean Varieties (Black Belt Branch, Brooksville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.[1]		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Progeny	4775E3S	23.6	47.3	—	22	1
Delta Grow	48E60	22.2	—	—	28	1
Revere	Innotech 4737E3	21.5	—	—	30	1
Delta Grow	45E33	15.8	—	—	31	1
Delta Grow	48E59	15.6	43.6	—	25	1
Delta Grow	46E10	14.6	41.4	—	27	1
Mean		18.9				
CV		13.0				
R^2		80.0				
LSD (0.05)		4.8				
Error DF		10				

[1]No 3-year average.

Table 22. Maturity Group V Enlist Nonirrigated Soybean Varieties (Black Belt Station, Brooksville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.[1]		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	53E30	20.5	51.5	—	30	1
Delta Grow	52E80	19.2	—	—	27	1
Mean		19.85				
CV		31				
R^2		59				
LSD (0.05)		NS				
Error DF		2				

[1]No 3-year average.

Table 23. Maturity Group IV Conventional Nonirrigated Soybean Varieties (Black Belt Station, Brooksville).

Brand	Variety	Yield[1]			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*)
Univ. of Missouri	S16-13165C	28.9	—	—	31	1
Univ. of Missouri	S17-2066C	27.3	—	—	26	1
Univ. of Missouri	S19-3530RY	13.4	—	—	20	1
Mean		23.2				
CV		20.0				
R^2		83.0				
LSD (0.05)		10.0				
Error DF		4				

[1]No 2- or 3-year average.

Table 24. Maturity Group V Conventional Nonirrigated Soybean Varieties (Black Belt Station, Brooksville).

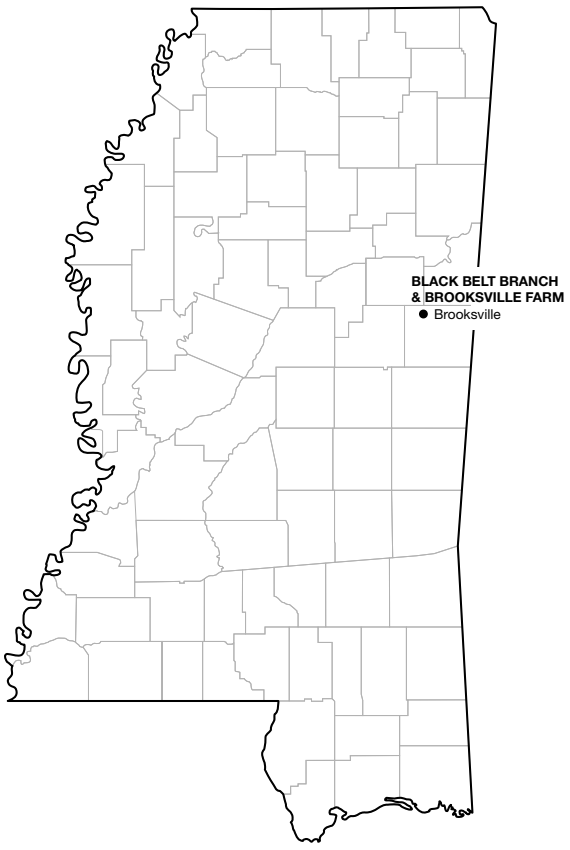
Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Univ. of Missouri	S18-6328C	22.0	—	—	22	1
Univ. of Missouri	S17-2509C	17.0	—	—	20	1
Univ. of Missouri	S18-6097C	15.4	—	—	24	1
Mean		18.1				
CV		44.0				
R^2		22.0				
LSD (0.05)		NS				
Error DF		4				

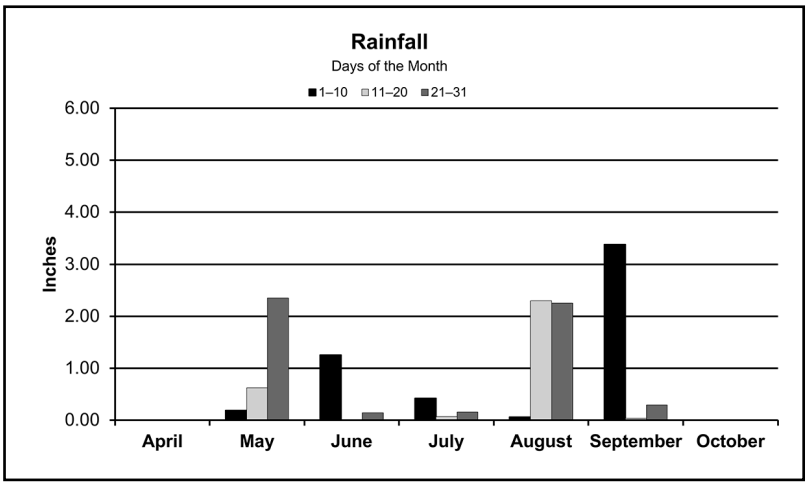
BROOKSVILLE, BROOKSVILLE FARM

Crop Summary

The soybean plots were planted no-till into a stale seedbed the previous year's cotton crop. Soil moisture at planting was adequate for germination, and all plots quickly emerged to a good stand. Timely rainfall, in combination with irrigation, allowed for good soil moisture throughout the growing season. Harvest was completed in a timely manner.

Planting date . . .April 26
Harvest date . . . .October 4
Soil type . . . . . .Brooksville silty clay
Soil pH 6.8
Soil fertility . . . .P=H, K=H
Previous crop . . .Cotton
Fertilizer . . . . . .Broiler litter @ 2 tons/A, K @ 100 units, S @ 22 units, and Mg @ 11 units
Herbicide . . . . . .Preemergence — Authority Edge @ 7 oz/A and Gramoxone @ 32 oz/A on April 26
Postemergence — Roundup PowerMAX @ 32 oz/A and Prefix @ 32 oz/A on May 29
Dessicant — Gramoxone @ 24 oz/A on September 27
Insecticide . . . . .Bifenthrin @ 4.3 oz/A and Acephate @ 0.5 lb/A on August 26
Irrigation . . . . . .Center pivot irrigation as needed





Rainfall Summary

	Inches
April	0.00
May	3.16
June	1.39
July	0.65
August	4.61
September	3.71
October	0.00
Total	13.52

Table 25. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Brooksville Farm, Brooksville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Revere	4526XFS	82.9	—	—	36	1
Asgrow	AG45XF3	80.9	—	—	33	1
Revere	4606XFS	79.7	74.0	—	36	1
Armor	46-F13	79.2	73.5	—	33	1
Armor	45-F02	78.6	—	—	37	1
Dyna-Gro	S45XF02	76.6	—	—	27	1
Beck's Hybrids	4553XF	76.6	—	—	30	1
Progeny	P 4202XFS	76.2	—	—	30	1
Asgrow	AG46XF3	75.4	—	—	36	1
Gateway Seed	469XF	75.3	—	—	33	1
Progeny	P 4200XS	74.9	—	—	35	1
Great Heart	GT-4681XFS	74.9	69.8	—	36	1
NK Brand	NK45-P9XF	74.8	70.4	—	32	1
Gateway Seed	465RXS	74.7	—	—	35	1
Innvictis	A4632XF	74.2	—	—	35	1
Armor	46-F96	73.9	—	—	38	1
MorSoy	MS 4681 RXT	73.5	69.3	—	33	1
Progeny	P 4604XFS	73.3	72.4	—	35	1
Dyna-Gro	S46XS60	73.2	72.1	74.3	35	1
Progeny	P 4444RXS	73.0	—	—	30	1
Gateway Seed	453RXS	72.9	—	—	36	1
Revere	4415XF	72.6	70.0	—	31	1
Innvictis	A 4690XF	72.5	71.1	—	35	1
Progeny	P 4691XFS	72.2	—	—	31	1
Dyna-Gro	S46XF31S	72.0	70.8	—	36	1
Asgrow	AG42XF2	71.9	—	—	38	1
Great Heart	GT-4677XS	71.7	71.8	75.0	31	1
Progeny	P 4521XFS	71.5	71.8	—	31	1
Delta Grow	46XF18	70.6	—	—	33	1
Progeny	P 4505RXS	70.1	70.3	71.3	36	1
Delta Grow	46X65/STS	68.8	71.2	76.4	31	1
Armor	44-D49	67.9	70.3	73.0	30	1
Innvictis	A4662XF	66.0	—	—	32	1
NK Brand	NK43-V8XF	65.6	66.5	—	36	1
Innvictis	A4642XF	65.3	—	—	34	1
Great Heart	GT-4344XF	64.2	64.2	—	35	1
Dyna-Gro	S43XS70	63.0	59.0	—	35	1
Revere	4128XFS	63.0	—	—	36	1
NK Brand	NK42-T5XF	62.8	—	—	28	1
Delta Grow	44XF41	62.6	—	—	28	1
Great Heart	GT-4255XS	59.1	52.4	—	28	1
NK Brand	NK43-Y9XFS	58.7	—	—	26	1
NK Brand	NK44-J4XFS	56.9	—	—	28	1
Mean		71.2				
CV		8.8				
R^2		59.0				
LSD (0.05)		10.3				
Error DF		84.0				

Table 26. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Brooksville Farm, Brooksville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
NK Brand	NK47-Z1XF	89.6	—	—	35	1
Dyna-Gro	S49XF82S	85.1	—	—	34	1
Dyna-Gro	S49XT70	84.8	79.4	80.8	36	1
Armor	48-D25	82.4	74.6	79.1	35	1
Progeny	P 4798XF	82.3	—	—	36	1
Great Heart	GT-4762XF	79.6	—	—	33	1
Asgrow	AG47XF3	78.7	—	—	35	1
Dyna-Gro	S47XF52	78.6	—	—	40	1
Revere	4806XS	78.4	78.0	80.2	30	1
Progeny	P 4951XFS	78.2	—	—	29	1
Innvictis	A 4742XF	77.4	—	—	27	1
Great Heart	GT-4756XF	77.1	—	—	30	1
Progeny	P 4844XFS	76.5	—	—	33	1
Delta Grow	49XF29/STS	75.6	—	—	32	1
Innvictis	A 4950X	75.1	72.0	75.4	43	1
Revere	4925XFS	75.1	—	—	35	1
Great Heart	GT-4828X	75.1	69.2	73.5	34	1
Revere	4826XF	75.0	—	—	30	1
Armor	48-F22	74.4	70.0	—	36	1
Revere	4727XFS	73.4	—	—	32	1
Asgrow	AG49XF3	72.3	—	—	38	1
Asgrow	AG48XF3	71.7	—	—	35	1
Dyna-Gro	S47XF23S	71.6	—	—	32	1
MorSoy	MS 4846 RXT	71.3	—	—	32	1
Great Heart	GT-4979X	70.7	70.3	74.4	40	1
Revere	4795XS	70.3	67.1	72.4	31	1
Dyna-Gro	S48XT90	69.2	72.5	75.7	41	1
Progeny	P 4732XF	68.9	—	—	34	1
Delta Grow	48XF33/STS	68.0	—	—	31	1
Armor	49-F37	67.1	—	—	24	1
Delta Grow	48X45	66.2	65.5	72.7	29	1
Beck's Hybrids	4885XF	65.2	61.2	—	36	1
MorSoy	MS 4852	64.4	—	—	37	1
Gateway Seed	471XF	63.3	—	—	34	1
Dyna-Gro	S48XF61S	61.5	—	—	30	1
Progeny	P 4821RX	59.7	61.0	65.9	33	1
Progeny	P 4806XFS	56.2	60.9	—	29	1
Innvictis	A 4850XF	51.9	57.4	—	25	1
Mean		72.7				
CV		9.4				
R^2		67.0				
LSD (0.05)		11.2				
Error DF		74				

Table 27. Maturity Group V Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Brooksville Farm, Brooksville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Great Heart	GT-5214X	98.9	88.5	84.1	43	1
Revere	5588X	95.5	—	—	27	1
Progeny	P5150XFS	90.3	—	—	27	1
Progeny	P 5554RX	85.4	81.2	78.9	29	1
Progeny	P5252RX	84.8	—	—	44	1
Asgrow	AG56XF2	83.4	81.6	—	26	1
Revere	5614XF	81.5	75.2	—	26	1
Progeny	P 5056XFS	79.6	—	—	41	1
Revere	5386X	79.5	74.5	75.6	42	1
Progeny	P5016RXS	78.4	70.0	69.7	34	1
Delta Grow	54XF20	76.8	74.5	—	24	1
Innvictis	A5451XF	76.6	—	—	21	1
Revere	5029XF	75.6	—	—	42	1
Dyna-Gro	S52XT91	70.7	75.5	—	35	1
NK Brand	NK55-T2XF	70.4	—	—	18	1
Asgrow	AG53XF2	57.1	59.6	—	40	1
Delta Grow	52XF22/STS	52.2	—	—	35	1
Armor	51-F88	51.2	—	—	36	1
Mean		77.1				
CV		14.0				
R^2		67.0				
LSD (0.05)		18.5				
Error DF		34				

Table 28. Maturity Group IV Enlist Irrigated Soybean Varieties (Brooksville Farm, Brooksville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Revere	Innotech 4737E3	77.2	—	—	26	1
Progeny	4775E3S	71.7	66.9	69.2	38	1
Delta Grow	48E60	66.8	—	—	32	1
Delta Grow	48E59	54.3	53.9	—	31	1
Delta Grow	46E10	50.7	55.7	—	31	1
Delta Grow	45E33	43.2	—	—	32	1
Mean		60.6				
CV		6.9				
R^2		93.0				
LSD (0.05)		7.7				
Error DF		10				

Table 29. Maturity Group V Enlist Irrigated Soybean Varieties (Brooksville Farm, Brooksville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	53E30	85	77.8	—	39	1
Delta Grow	52E80	81	—	—	28	1
Mean		83				
CV		2.4				
R^2		95				
LSD (0.05)		NS				
Error DF		2				

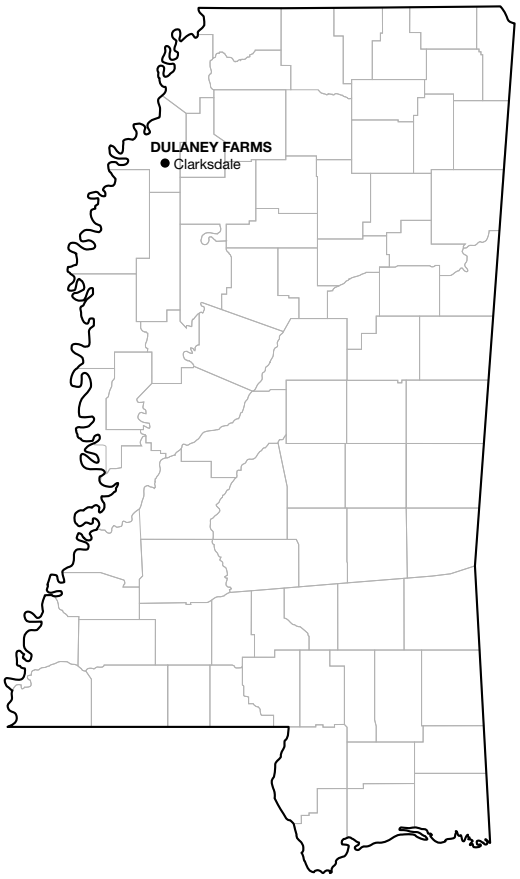
[1]No 3-year average.

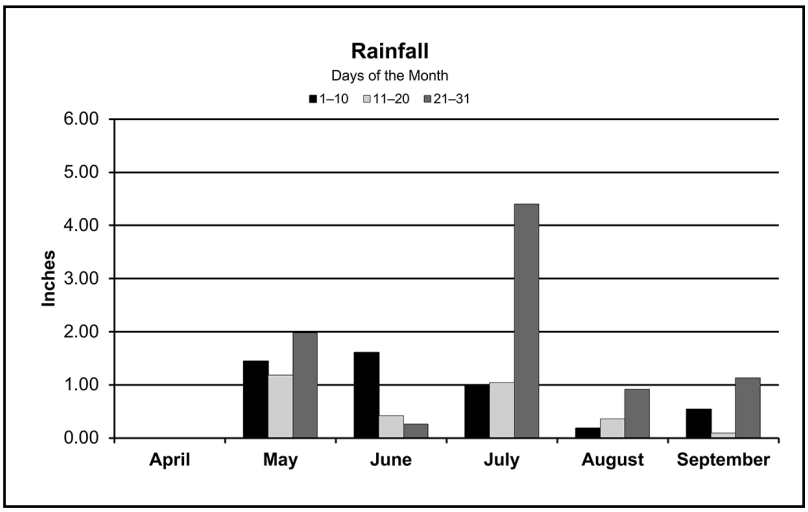
CLARKSDALE IRRIGATED, DULANEY FARMS

Crop Summary

The soybean plots were planted in late April into a stale seedbed with adequate moisture for germination. All plots quickly emerged to a good stand. Timely rains and furrow irrigation supplied the plants with good soil moisture throughout the growing season. Harvest was completed in a timely manner, and good yields were recorded at this location.

Planting date . . . .April 28
Harvest date . . . .September 29
Soil type . . . . . .Sharkey clay and Forestdale silty clay
Soil pH 6.8
Soil fertility . . . . .P=H, K=H
Previous crop . . .Rice
Herbicide . . . . . .Preemergence — Boundary @ 32 oz/A, Spartan @ 5 oz/A, and Gramoxone @ 3 pt/A
Irrigation . . . . . .Furrow irrigated as needed





Rainfall Summary

	Inches
April	0.00
May	4.60
June	2.29
July	6.44
August	1.46
September	1.76
Total	16.55

Table 30. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Dulaney Farms, Clarksdale).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
MorSoy	MS 4681 RXT	111.1	92.8	—	32	1
Progeny	P 4505RXS	110.9	93.5	94.9	30	1
Revere	4128XFS	105.7	—	—	31	1
Progeny	P 4691XFS	105.6	—	—	33	1
Innvictis	A4642XF	105.0	—	—	23	1
Gateway Seed	469XF	102.8	—	—	28	1
Progeny	P 4202XFS	102.0	—	—	33	1
Progeny	P 4604XFS	101.5	84.7	—	35	1
Progeny	P 4200XS	101.3	—	—	32	1
Asgrow	AG46XF3	101.3	—	—	26	1
Gateway Seed	465RXS	100.7	—	—	28	1
Gateway Seed	453RXS	100.4	—	—	29	1
Dyna-Gro	S46XS60	100.3	82.0	85.7	28	1
Innvictis	A 4690XF	100.3	85.9	—	33	1
Innvictis	A4662XF	100.1	—	—	28	1
Great Heart	GT-4677XS	99.2	84.9	89.0	26	1
Progeny	P 4521XFS	99.0	84.4	—	28	1
Innvictis	A4632XF	98.5	—	—	25	1
Great Heart	GT-4681XFS	97.8	82.7	—	32	1
Revere	4606XFS	97.4	82.6	—	30	1
Revere	4415XF	97.3	84.8	—	25	1
Dyna-Gro	S45XF02	96.8	—	—	29	1
Delta Grow	46X65/STS	96.6	82.8	86.5	27	1
Dyna-Gro	S46XF31S	96.4	81.9	—	31	1
Armor	44-D49	95.8	88.9	90.7	31	1
Beck's Hybrids	4553XF	95.5	—	—	26	1
Great Heart	GT-4255XS	94.5	82.6	—	30	1
Asgrow	AG42XF2	94.1	—	—	36	1
Asgrow	AG45XF3	93.9	—	—	28	1
Armor	46-F96	93.2	—	—	27	1
NK Brand	NK42-T5XF	92.5	—	—	25	1
Dyna-Gro	S43XS70	92.2	81.6	—	30	1
Great Heart	GT-4344XF	92.0	79.7	—	29	1
Armor	46-F13	91.7	80.6	—	36	1
NK Brand	NK45-P9XF	91.5	80.1	—	31	1
Armor	45-F02	91.0	—	—	31	1
NK Brand	NK43-V8XF	90.7	78.9	—	31	1
Revere	4526XFS	90.6	—	—	36	1
Progeny	P 4444RXS	88.8	—	—	26	1
NK Brand	NK44-J4XFS	83.6	—	—	25	1
NK Brand	NK43-Y9XFS	83.5	—	—	26	1
Delta Grow	46XF18	83.1	—	—	31	1
Delta Grow	44XF41	78.1	—	—	28	1
Mean		96.4				
CV		7.5				
R^2		69.0				
LSD (0.05)		11.8				
Error DF		84.0				

Table 31. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Dulaney Farms, Clarksdale).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Great Heart	GT-4756XF	105.4	—	—	32	1
Progeny	P 4821RX	103.1	87.6	90.4	33	1
Progeny	P 4732XF	103.0	—	—	30	1
Revere	4826XF	102.6	—	—	32	1
Revere	4727XFS	102.6	—	—	25	1
Dyna-Gro	S47XF23S	102.1	—	—	30	1
Great Heart	GT-4762XF	102.0	—	—	37	1
MorSoy	MS 4846 RXT	100.8	—	—	30	1
Dyna-Gro	S48XF61S	100.4	—	—	27	1
Progeny	P 4844XFS	100.0	—	—	28	1
Beck's Hybrids	4885XF	98.9	85.1	—	28	1
Revere	4925XFS	98.2	—	—	31	1
Innvictis	A 4742XF	97.7	—	—	25	1
MorSoy	MS 4852	97.7	—	—	36	1
Progeny	P 4806XFS	97.5	84.9	—	27	1
Great Heart	GT-4828X	96.8	85.1	86.8	27	1
Revere	4806XS	95.2	81.4	86.0	29	1
Revere	4795XS	94.7	82.3	86.4	27	1
Asgrow	AG48XF3	94.5	—	—	35	1
Dyna-Gro	S48XT90	94.5	83.6	87.9	33	1
Armor	48-D25	94.3	80.5	85.4	26	1
Dyna-Gro	S49XT70	94.1	82.2	86.3	35	1
Progeny	P 4951XFS	94.1	—	—	28	1
Delta Grow	48X45	93.8	82.2	85.5	29	1
Innvictis	A 4950X	93.7	81.6	85.0	38	1
Dyna-Gro	S49XF82S	93.7	—	—	33	1
Asgrow	AG47XF3	93.5	—	—	38	1
Armor	49-F37	93.4	—	—	28	2
Gateway Seed	471XF	93.3	—	—	35	1
Innvictis	A 4850XF	92.4	80.5	—	32	1
Progeny	P 4798XF	92.3	—	—	31	1
Armor	48-F22	92.3	81.1	—	32	1
Delta Grow	48XF33/STS	90.0	—	—	31	1
Delta Grow	49XF29/STS	89.6	—	—	27	1
NK Brand	NK47-Z1XF	89.0	—	—	33	1
Great Heart	GT-4979X	86.8	78.7	86.3	31	1
Asgrow	AG49XF3	85.3	—	—	33	1
Dyna-Gro	S47XF52	85.1	—	—	36	1
Mean		95.6				
CV		7.0				
R^2		61.0				
LSD (0.05)		11.0				
Error DF		74				

Table 32. Maturity Group V Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Dulaney Farms, Clarksdale).

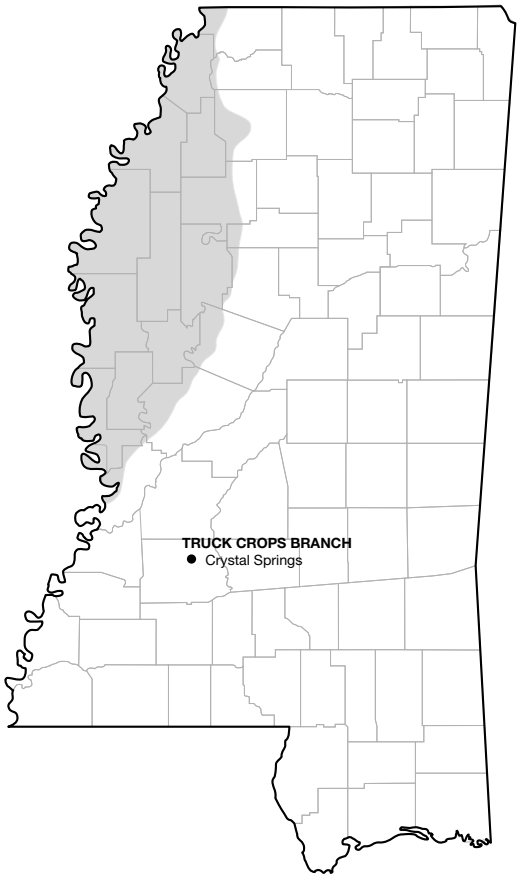
Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Progeny	P5150XFS	104.5	—	—	30	1
Delta Grow	52XF22/STS	104.1	—	—	34	1
Revere	5029XF	102.5	—	—	30	1
Progeny	P 5056XFS	102.2	—	—	37	1
Progeny	P5016RXS	101.2	79.6	80.5	31	1
Armor	51-F88	98.3	—	—	31	1
Asgrow	AG53XF2	96.6	81.6	—	30	1
Dyna-Gro	S52XT91	94.9	77.7	—	33	1
Revere	5386X	91.1	79.1	82.1	30	1
Progeny	P 5554RX	86.3	70.5	77.9	22	1
Asgrow	AG56XF2	85.8	69.3	—	25	1
Progeny	P5252RX	83.4	—	—	46	1
Revere	5588X	80.2	—	—	22	1
Innvictis	A5451XF	80.0	—	—	23	1
Revere	5614XF	79.8	68.2	—	18	1
Delta Grow	54XF20	76.1	67.2	—	25	1
Great Heart	GT-5214X	73.7	63.9	70.4	44	1
NK Brand	NK55-T2XF	63.0	—	—	18	1
Mean		89.1				
CV		5.6				
R^2		90.0				
LSD (0.05)		8.3				
Error DF		34				

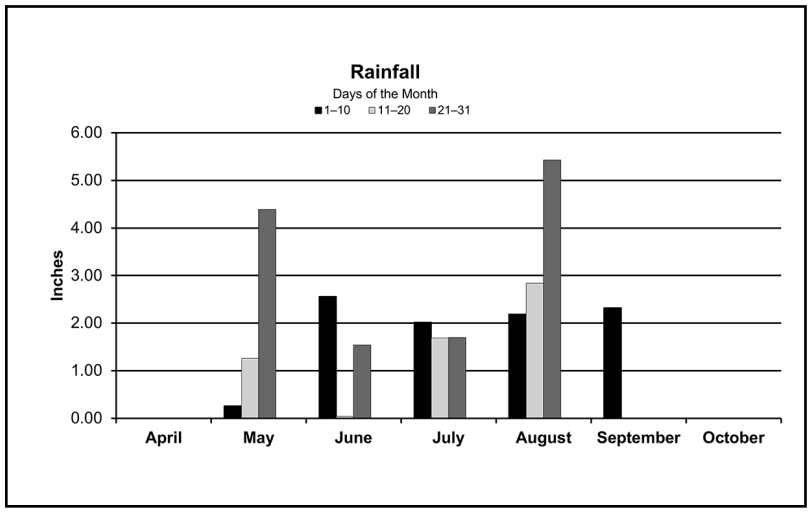
CRYSTAL SPRINGS, TRUCK CROPS BRANCH

Crop Summary

The plots were planted flat into a stale seedbed that was soybeans the previous year. Adequate soil moisture was present at planting to allow for quick germination and emergence. All plots quickly emerged to a good stand. Timely rainfall occurred throughout the entire growing season, allowing for more than adequate soil moisture throughout, which resulted in the plots never being stressed for water. Harvest was completed in a timely manner, and good yields were observed at this dryland location.

Planting date . . .April 27
Harvest date . . .October 5
Soil type . . . . . .Providence silt loam
Soil pH 6.4
Soil fertility . . . .P=H, K=H
Previous crop . . .Soybean
Herbicide **Preemergence — Authority Edge @ 7 oz/A, Dual II Magnum @ 24 oz/A, and Gramoxone @ 32 oz/A on April 27**
Postemergence — (Xtend & Enlist) Roundup PowerMax @ 24 oz/A, Select Max @ 12 oz/A, and Prefix @ 24 oz/A on June 17; Roundup PowerMax @ 24 oz/A on July 15; Assure II @ 10 oz/A on August 4
(Conventional) Select Max @ 12 oz/A and Prefix @ 24 oz/A on June 17; Assure II @ 10 oz/A on August 4
Insecticide . . . . .Acephate at 0.75 lb/A and Bifenthrin @ 6.4 oz/A on August 4





Rainfall Summary

	Inches
April	0.00
May	5.91
June	4.14
July	5.41
August	10.46
September	2.32
October	0.00
Total	28.24

Table 33. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (MAFES Truck Crop Branch, Crystal Springs).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Progeny	P 4202XFS	91.5	—	—	38	1
MorSoy	MS 4681 RXT	90.0	101.6	—	36	2
Asgrow	AG46XF3	88.2	—	—	35	1
Dyna-Gro	S45XF02	88.1	—	—	41	1
Revere	4415XF	88.0	97.0	—	32	1
Gateway Seed	469XF	87.4	—	—	35	1
Armor	45-F02	86.7	—	—	43	2
Innvictis	A4632XF	86.3	—	—	33	1
Progeny	P 4505RXS	86.1	101.6	83.9	38	2
Gateway Seed	453RXS	85.2	—	—	38	2
Armor	44-D49	84.2	105.3	88.7	45	1
Progeny	P 4521XFS	80.4	96.0	—	35	1
Progeny	P 4604XFS	80.0	97.6	—	43	1
Progeny	P 4200XS	78.9	—	—	37	2
Gateway Seed	465RXS	76.2	—	—	40	2
Armor	46-F96	75.9	—	—	41	1
Great Heart	GT-4681XFS	73.8	97.1	—	44	1
Beck's Hybrids	4553XF	73.2	—	—	31	1
NK Brand	NK45-P9XF	72.9	88.4	—	32	1
Armor	46-F13	71.9	91.1	—	38	1
Progeny	P 4444RXS	71.6	—	—	41	1
Innvictis	A 4690XF	71.5	90.4	—	45	1
Dyna-Gro	S46XF31S	71.1	89.7	—	36	1
NK Brand	NK43-Y9XFS	71.0	—	—	32	1
Dyna-Gro	S43XS70	70.9	86.9	—	35	1
Great Heart	GT-4677XS	69.8	90.6	75.1	34	1
Innvictis	A4662XF	69.5	—	—	34	1
NK Brand	NK42-T5XF	69.2	—	—	33	1
Delta Grow	46X65/STS	68.8	93.7	76.0	37	1
Revere	4606XFS	66.8	90.6	—	46	1
NK Brand	NK43-V8XF	65.4	91.5	—	35	3
Great Heart	GT-4344XF	65.0	87.8	—	40	2
Delta Grow	46XF18	64.8	—	—	35	1
Dyna-Gro	S46XS60	64.0	90.2	76.3	34	1
Revere	4526XFS	62.7	—	—	44	2
Progeny	P 4691XFS	62.6	—	—	38	1
NK Brand	NK44-J4XFS	58.9	—	—	33	1
Asgrow	AG45XF3	58.6	—	—	36	1
Innvictis	A4642XF	58.6	—	—	37	1
Great Heart	GT-4255XS	57.5	83.8	—	34	1
Revere	4128XFS	53.5	—	—	42	2
Delta Grow	44XF41	53.4	—	—	35	1
Asgrow	AG42XF2	51.5	—	—	42	1
Mean		72.6				
CV		17.0				
R^2		54.0				
LSD (0.05)		20.0				
Error DF		84.0				

Table 34. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (MAFES Truck Crop Branch, Crystal Springs).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Great Heart	GT-4762XF	92.4	—	—	39	1
Delta Grow	49XF29/STS	90.8	—	—	36	1
Dyna-Gro	S49XT70	88.3	102.1	82.2	43	1
Delta Grow	48XF33/STS	87.3	—	—	38	1
Dyna-Gro	S49XF82S	86.4	—	—	38	1
Dyna-Gro	S48XT90	85.8	103.0	85.3	42	2
Innvictis	A 4950X	84.8	102.8	85.7	41	1
Innvictis	A 4742XF	84.2	—	—	39	1
Asgrow	AG47XF3	83.1	—	—	44	1
Revere	4795XS	83.0	104.0	86.8	35	1
Dyna-Gro	S47XF52	82.7	—	—	42	1
Revere	4727XFS	82.4	—	—	35	1
Revere	4826XF	82.2	—	—	28	1
MorSoy	MS 4852	80.9	—	—	40	1
Great Heart	GT-4979X	80.9	102.2	83.1	38	1
Progeny	P 4844XFS	80.3	—	—	35	1
NK Brand	NK47-Z1XF	79.9	—	—	34	1
Progeny	P 4798XF	79.1	—	—	35	1
Armor	49-F37	78.7	—	—	40	1
Armor	48-D25	78.1	93.9	78.1	39	1
Dyna-Gro	S48XF61S	76.8	—	—	37	1
Progeny	P 4821RX	76.7	95.1	78.7	39	1
MorSoy	MS 4846 RXT	76.2	—	—	34	1
Revere	4925XFS	76.0	—	—	42	1
Progeny	P 4732XF	75.9	—	—	39	1
Progeny	P 4806XFS	75.2	97.3	—	38	1
Revere	4806XS	74.3	92.1	80.6	33	1
Armor	48-F22	74.3	91.1	—	38	1
Progeny	P 4951XFS	74.2	—	—	33	1
Innvictis	A 4850XF	72.6	87.5	—	36	1
Asgrow	AG48XF3	72.5	—	—	37	1
Delta Grow	48X45	72.0	90.1	76.1	31	1
Gateway Seed	471XF	71.5	—	—	41	1
Dyna-Gro	S47XF23S	68.9	—	—	35	1
Great Heart	GT-4756XF	68.1	—	—	37	1
Beck's Hybrids	4885XF	67.9	90.6	—	36	1
Great Heart	GT-4828X	64.0	93.3	77.1	36	2
Asgrow	AG49XF3	55.9	—	—	42	1
Mean		78.0				
CV		10.0				
R^2		58.0				
LSD (0.05)		13.7				
Error DF		74				

Table 35. Maturity Group V Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (MAFES Truck Crop Branch, Crystal Springs).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Progeny	P5252RX	105.6	—	—	42	1
Armor	51-F88	87.4	—	—	42	1
Great Heart	GT-5214X	87.2	99.5	79.9	41	1
Progeny	P 5554RX	86.3	106.1	82.9	31	1
Progeny	P5150XFS	85.1	—	—	30	1
Revere	5029XF	85.0	—	—	37	2
Delta Grow	54XF20	85.0	102.6	—	22	1
Asgrow	AG56XF2	84.1	103.1	—	32	1
Revere	5386X	84.1	105.0	88.7	41	1
Delta Grow	52XF22/STS	83.4	—	—	40	1
Innvictis	A5451XF	83.2	—	—	24	1
Revere	5588X	82.5	—	—	25	1
Progeny	P 5056XFS	81.8	—	—	35	1
Dyna-Gro	S52XT91	73.7	94.4	—	38	1
Asgrow	AG53XF2	73.0	88.4	—	38	1
Progeny	P5016RXS	68.7	87.5	73.4	38	1
Revere	5614XF	66.1	86.9	—	22	1
NK Brand	NK55-T2XF	42.9	—	—	17	1
Mean		80.3				
CV		11.0				
R^2		78.0				
LSD (0.05)		15.0				
Error DF		34				

Table 36. Maturity Group IV Enlist Nonirrigated Soybean Varieties (MAFES Truck Crop Branch, Crystal Springs).

BBrand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	48E60	101.4	—	—	36	1
Progeny	4775E3S	95.8	101.4	89.2	43	1
Delta Grow	45E33	82.2	—	—	38	1
Delta Grow	46E10	80.9	86.8	—	42	1
Revere	Innotech 4737E3	79.3	—	—	31	1
Delta Grow	48E59	76.8	93.9	—	37	1
Mean		86.1				
CV		15.0				
R^2		51				
LSD (0.05)		NS				
Error DF		10				

Table 37. Maturity Group V Enlist Nonirrigated Soybean Varieties (MAFES Truck Crops Branch, Crystal Springs).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	52E80	87.7	—	—	38	1
Delta Grow	53E30	87.1	91.3	—	41	1
Mean		87.4				
CV		5				
R^2		87				
LSD (0.05)		NS				
Error DF		2				

[1]No 2- or 3-year average.

Table 38. Maturity Group IV Conventional Nonirrigated Soybean Varieties (MAFES Truck Crops Branch, Crystal Springs).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Univ. of Missouri	S16-13165C	66.8	—	—	44	1
Univ. of Missouri	S19-3530RY	35.5	—	—	36	1
Univ. of Missouri	S17-2066C	25.7	—	—	34	1
Mean		42.7				
CV		30.0				
R^2		73.0				
LSD (0.05)		25.0				
Error DF		4				

[1]No 2- or 3-year average.

Table 39. Maturity Group V Conventional Nonirrigated Soybean Varieties (MAFES Truck Crops Branch, Crystal Springs).

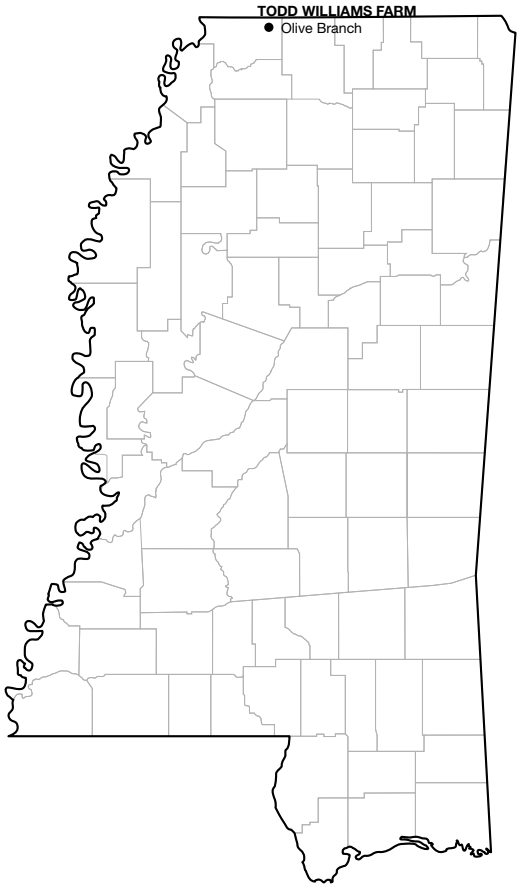
Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Univ. of Missouri	S18-6097C	64.7	—	—	31	1
Univ. of Missouri	S18-6328C	60.1	—	—	29	1
Univ. of Missouri	S17-2509C	36.6	—	—	34	1
Mean		53.8				
CV		25.0				
R^2		54.0				
LSD (0.05)		27.0				
Error DF		4				

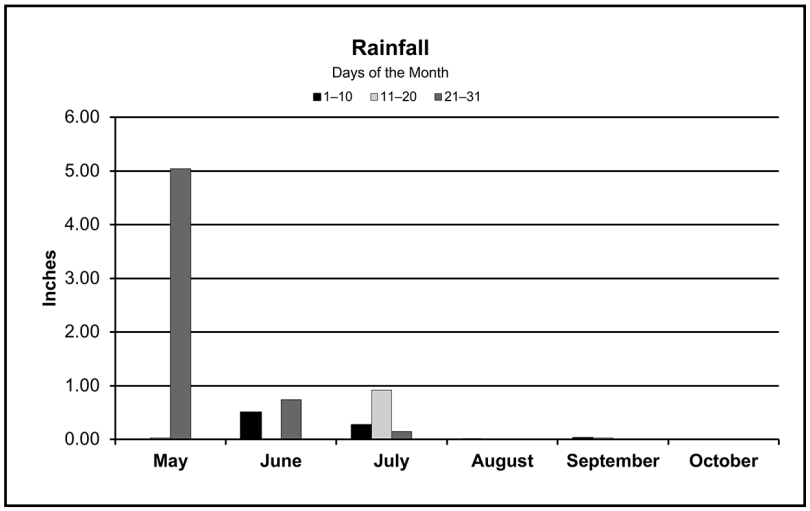
OLIVE BRANCH, TODD WILLIAMS FARM

Crop Summary

The soybean plots were planted late May into soil with moisture optimum for germination and emergence. All plots quickly emerged to a good stand. Rainfall was infrequent but timely, supplying enough soil moisture to provide what the plants needed throughout the season. Harvest was completed in a timely manner, and good yields were recorded at this location.

Planting date . . .May 19
Harvest date . . . .October 11
Soil type . . . . . .Collins silt loam
Soil pH 6.2
Soil fertility . . . . .P=H, K=H
Previous crop . . .Corn
Fertilizer . . . . . .Preplant — 0-30-90-15S-1B
Herbicide . . . . . .Preemergence — Valor @ 1.6 oz/A and Anthem Max @ 2 oz/A on May 19
Postemergence — Roundup PowerMax @ 24 oz/A, FirstRate @ 0.3 oz/A, and Prefix @ 24 oz/A on June 20





Rainfall Summary

	Inches
May	5.07
June	1.25
July	1.34
August	0.02
September	0.06
October	0.00
Total	7.74

Table 40. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Todd Williams Farm, Olive Branch).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Innvictis	A4642XF	102.7	—	—	41	1
Revere	4415XF	100.1	94.6	—	37	1
Armor	45-F02	100.0	—	—	45	1
Delta Grow	46XF18	98.3	—	—	43	1
Innvictis	A4662XF	98.2	—	—	49	1
Dyna-Gro	S45XF02	97.8	—	—	37	1
Progeny	P 4200XS	97.4	—	—	45	1
NK Brand	NK43-V8XF	97.2	90.6	—	43	1
Revere	4606XFS	96.9	96.2	—	43	1
Innvictis	A 4690XF	95.8	95.9	—	43	1
Progeny	P 4444RXS	94.8	—	—	45	1
Dyna-Gro	S43XS70	94.3	89.9	—	38	1
Revere	4526XFS	94.1	—	—	40	1
Armor	44-D49	94.0	95.8	95.8	37	1
Asgrow	AG45XF3	94.0	—	—	40	1
NK Brand	NK42-T5XF	93.3	—	—	38	1
Innvictis	A4632XF	93.1	—	—	47	1
Great Heart	GT-4677XS	93.0	91.8	87.0	41	1
Dyna-Gro	S46XS60	92.9	94.4	94.0	41	1
Asgrow	AG46XF3	91.7	—	—	41	1
Progeny	P 4604XFS	91.7	92.6	—	46	1
Armor	46-F96	91.2	—	—	39	1
NK Brand	NK43-Y9XFS	91.1	—	—	33	1
Progeny	P 4505RXS	90.8	94.0	90.6	44	1
Gateway Seed	469XF	89.6	—	—	45	1
Beck's Hybrids	4553XF	89.3	—	—	36	1
Gateway Seed	453RXS	89.2	—	—	47	1
Gateway Seed	465RXS	89.0	—	—	39	1
Progeny	P 4691XFS	88.8	—	—	40	1
Delta Grow	46X65/STS	87.6	90.9	89.7	37	1
NK Brand	NK44-J4XFS	87.5	—	—	34	1
Progeny	P 4521XFS	86.9	88.4	—	45	1
MorSoy	MS 4681 RXT	86.8	88.2	—	38	2
Dyna-Gro	S46XF31S	86.5	92.8	—	46	1
Progeny	P 4202XFS	86.4	—	—	42	1
Armor	46-F13	86.0	89.1	—	44	1
Great Heart	GT-4681XFS	85.5	91.0	—	47	1
NK Brand	NK45-P9XF	85.2	86.4	—	46	1
Great Heart	GT-4255XS	83.4	81.8	—	43	1
Delta Grow	44XF41	82.7	—	—	44	1
Great Heart	GT-4344XF	81.8	84.2	—	44	1
Asgrow	AG42XF2	81.4	—	—	37	1
Revere	4128XFS	81.4	—	—	41	2
Mean		91.1				
CV		7.8				
R^2		48.0				
LSD (0.05)		11.6				
Error DF		84.0				

Table 41. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Todd Williams Farm, Olive Branch).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
MorSoy	MS 4846 RXT	95.2	—	—	41	1
Progeny	P 4732XF	94.4	—	—	39	1
Great Heart	GT-4979X	93.0	88.4	85.0	43	1
Revere	4795XS	92.8	94.5	88.5	40	1
Great Heart	GT-4756XF	91.3	—	—	38	1
Asgrow	AG47XF3	90.6	—	—	41	1
MorSoy	MS 4852	89.5	—	—	42	1
Dyna-Gro	S47XF23S	89.4	—	—	38	1
Progeny	P 4821RX	88.8	87.8	82.3	45	1
Revere	4826XF	88.6	—	—	38	1
Gateway Seed	471XF	87.7	—	—	40	1
Progeny	P 4798XF	87.0	—	—	42	1
Dyna-Gro	S48XF61S	86.9	—	—	36	1
Beck's Hybrids	4885XF	86.1	89.9	—	45	1
Delta Grow	49XF29/STS	86.0	—	—	35	1
Asgrow	AG49XF3	85.9	—	—	43	1
Progeny	P 4806XFS	85.9	87.0	—	37	1
Delta Grow	48X45	85.5	88.0	85.8	37	1
Progeny	P 4844XFS	85.5	—	—	38	1
Armor	48-D25	85.4	93.0	94.1	39	1
Dyna-Gro	S49XT70	85.4	87.6	83.2	42	1
Dyna-Gro	S47XF52	85.0	—	—	42	1
Delta Grow	48XF33/STS	84.9	—	—	39	1
Asgrow	AG48XF3	84.6	—	—	37	1
Dyna-Gro	S48XT90	84.6	88.8	87.5	37	2
Progeny	P 4951XFS	84.4	—	—	38	1
Great Heart	GT-4762XF	84.1	—	—	37	1
Revere	4925XFS	84.0	—	—	44	1
NK Brand	NK47-Z1XF	83.7	—	—	41	1
Innvictis	A 4742XF	83.5	—	—	38	1
Innvictis	A 4950X	83.5	89.6	84.3	47	1
Revere	4806XS	83.1	87.8	87.7	37	1
Innvictis	A 4850XF	82.9	80.3	—	41	1
Revere	4727XFS	82.2	—	—	39	1
Armor	48-F22	82.0	87.9	—	36	1
Armor	49-F37	79.9	—	—	39	1
Great Heart	GT-4828X	78.8	82.7	80.4	46	2
Dyna-Gro	S49XF82S	75.8	—	—	40	1
Mean		86.0				
CV		9.1				
R^2		30.0				
LSD (0.05)		NS				
Error DF		74				

Table 42. Maturity Group V Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Todd Williams Farm, Olive Branch).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Dyna-Gro	S52XT91	92.2	93.0	—	32	1
Revere	5029XF	91.4	—	—	37	1
Armor	51-F88	89.1	—	—	32	1
Progeny	P 5056XFS	88.7	—	—	26	1
Asgrow	AG56XF2	88.6	86.0	—	36	1
Progeny	P5150XFS	83.2	—	—	41	1
Revere	5588X	81.7	—	—	38	1
Asgrow	AG53XF2	81.3	83.5	—	40	1
Progeny	P 5554RX	80.2	83.1	84.0	35	1
Great Heart	GT-5214X	79.4	72.4	69.6	33	1
Progeny	P5252RX	79.1	—	—	41	1
Innvictis	A5451XF	78.8	—	—	22	1
Revere	5614XF	78.2	81.8	—	35	1
Revere	5386X	77.7	80.7	80.7	29	1
Progeny	P5016RXS	77.6	84.4	79.1	38	1
Delta Grow	54XF20	74.3	81.2	—	25	1
Delta Grow	52XF22/STS	72.1	—	—	34	1
NK Brand	NK55-T2XF	67.7	—	—	32	1
Mean		81.2				
CV		11.0				
R^2		45.0				
LSD (0.05)		NS				
Error DF		34				

Table 43. Maturity Group IV Enlist Nonirrigated Soybean Varieties (Todd Williams Farm, Olive Branch).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	48E60	83.7	—	—	36	1
Revere	Innotech 4737E3	82.7	—	—	36	1
Delta Grow	48E59	76.1	79.4	—	33	1
Delta Grow	46E10	70.6	76.5	—	40	1
Delta Grow	45E33	70.4	—	—	36	1
Progeny	4775E3S	67.8	73.7	76.0	40	1
Mean		75.2				
CV		8.9				
R^2		63.0				
LSD (0.05)		12.0				
Error DF		10				

Table 44. Maturity Group V Enlist Nonirrigated Soybean Varieties (Todd Williams Farm, Olive Branch).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	52E80	75.4	—	—	38	1
Delta Grow	53E30	71.8	74.1	—	39	1
Mean		73.6				
CV		6.9				
R^2		72				
LSD (0.05)		NS				
Error DF		2				

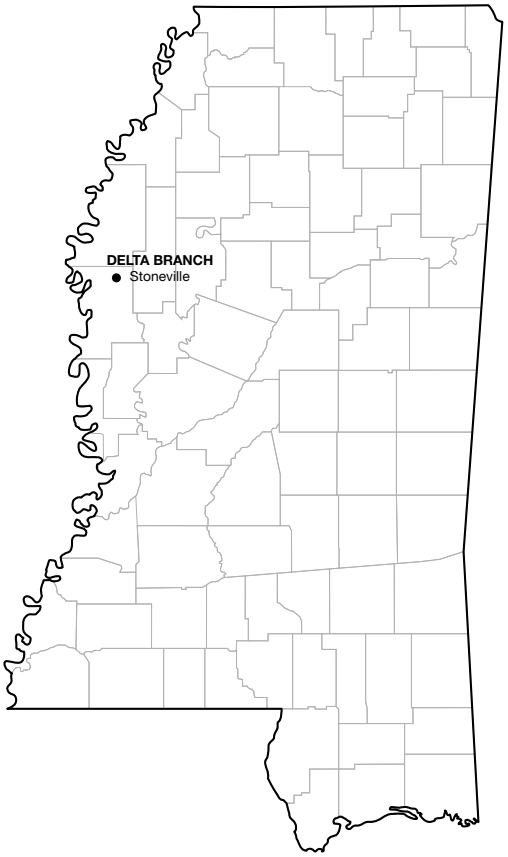
[1]No 2- or 3-year average.

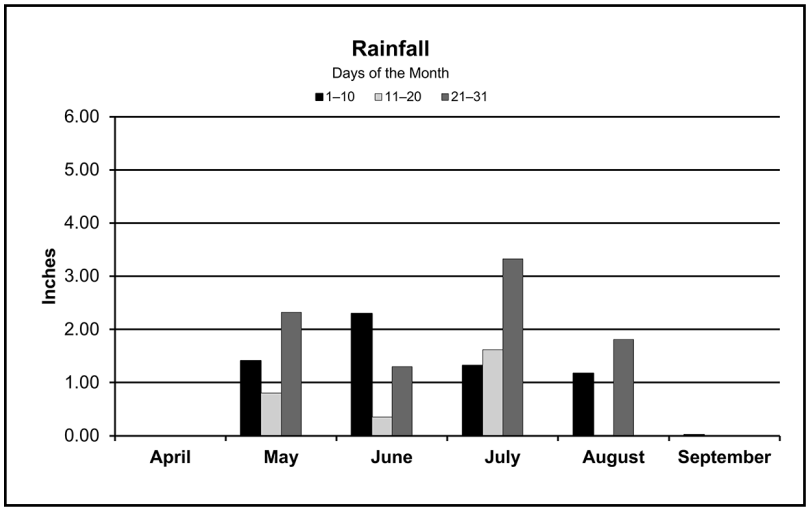
STONEVILLE (clay) IRRIGATED, DELTA BRANCH

Crop Summary

The soybean plots were planted into 30-inch beds that were do-alled just prior to planting to help break up clods. All plots quickly emerged to a good stand. Rainfall, in combination with irrigation at necessary times during the growing season, allowed for adequate soil moisture throughout the season. Harvest was completed in a timely manner without difficulty.

Planting date . . . .April 28
Harvest date . . . .September 20
Soil type . . . . . .Sharkey clay
Soil pH 7.0
Soil fertility . . . . .P=H ; K=H
Previous crop . . .Soybeans
Irrigation . . . . . .Furrow irrigated as needed
Herbicide . . . . . .Preemergence — Authority Edge @ 7 oz/A, Dual II Magnum @ 32 oz/A, and Gramoxone @ 32 oz/A on April 28
Postemergence — (Enlist/Xtend) FirstRate @ 0.3 oz/A, Prefix @ 24 oz/A, and Roundup PowerMax @ 32 oz/A on June 23.
(Conventional) FirstRate @ 0.6 oz/A, Prefix @ 24 oz/A, and Select Max @ 16 oz/A on June 23





Rainfall Summary

	Inches
April	0.00
May	4.53
June	3.95
July	6.27
August	2.99
September	0.02
Total	17.76

Table 45. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Delta Branch Station, Stoneville clay, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Revere	4415XF	91.0	86.5	—	32	1
Revere	4128XFS	89.3	—	—	36	1
Asgrow	AG46XF3	89.0	—	—	32	1
Revere	4606XFS	86.2	83.0	—	36	1
Progeny	P 4604XFS	86.0	86.4	—	38	1
Progeny	P 4691XFS	85.8	—	—	30	1
Innvictis	A4642XF	85.7	—	—	36	1
Revere	4526XFS	85.6	—	—	34	1
MorSoy	MS 4681 RXT	85.5	86.9	—	37	1
Progeny	P 4505RXS	85.0	87.0	80.2	37	1
Armor	46-F96	84.2	—	—	36	1
Asgrow	AG45XF3	84.2	—	—	35	1
Great Heart	GT-4677XS	84.1	79.6	78.2	29	1
Armor	45-F02	83.9	—	—	33	1
Progeny	P 4200XS	83.9	—	—	31	1
Great Heart	GT-4681XFS	83.6	77.1	—	39	1
Dyna-Gro	S46XS60	83.4	78.5	74.6	32	1
Gateway Seed	469XF	83.3	—	—	32	1
Innvictis	A4662XF	83.3	—	—	32	1
Innvictis	A 4690XF	82.4	84.8	—	38	1
NK Brand	NK43-V8XF	82.1	79.9	—	35	1
Delta Grow	46XF18	82.0	—	—	31	1
NK Brand	NK45-P9XF	81.3	81.7	—	34	1
Beck's Hybrids	4553XF	81.1	—	—	27	1
Great Heart	GT-4344XF	80.6	82.2	—	31	1
Dyna-Gro	S45XF02	79.9	—	—	32	1
Progeny	P 4521XFS	79.7	79.5	—	35	1
Delta Grow	46X65/STS	79.6	82.0	77.7	32	1
Gateway Seed	465RXS	79.5	—	—	35	1
Gateway Seed	453RXS	77.7	—	—	32	1
Armor	46-F13	77.6	82.1	—	34	1
Innvictis	A4632XF	77.5	—	—	35	1
NK Brand	NK42-T5XF	77.1	—	—	29	1
Dyna-Gro	S46XF31S	76.8	77.7	—	38	1
Dyna-Gro	S43XS70	76.6	75.0	—	34	1
Progeny	P 4202XFS	75.9	—	—	35	1
NK Brand	NK44-J4XFS	75.7	—	—	30	1
Progeny	P 4444RXS	75.5	—	—	36	1
Asgrow	AG42XF2	73.5	—	—	40	1
Great Heart	GT-4255XS	71.8	70.2	—	28	1
NK Brand	NK43-Y9XFS	71.7	—	—	32	1
Armor	44-D49	71.6	78.6	76.1	33	1
Delta Grow	44XF41	71.5	—	—	34	1
Mean		81.0				
CV		5.1				
R^2		70.0				
LSD (0.05)		6.6				
Error DF		84.0				

Table 46. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Delta Branch, Stoneville clay, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
MorSoy	MS 4846 RXT	86.1	—	—	35	1
Dyna-Gro	S48XT90	84.6	85.5	84.8	37	1
Progeny	P 4821RX	84.5	80.4	81.7	33	1
Dyna-Gro	S48XF61S	84.3	—	—	34	1
Dyna-Gro	S47XF23S	83.1	—	—	33	1
Beck's Hybrids	4885XF	82.8	80.6	—	33	1
Progeny	P 4798XF	82.5	—	—	32	1
MorSoy	MS 4852	81.7	—	—	37	1
Revere	4826XF	81.5	—	—	35	1
Revere	4795XS	81.1	81.7	80.3	32	1
Progeny	P 4806XFS	80.9	86.3	—	32	1
Great Heart	GT-4979X	80.7	81.3	82.4	36	1
Great Heart	GT-4756XF	80.6	—	—	33	1
Gateway Seed	471XF	80.2	—	—	36	1
Asgrow	AG48XF3	79.3	—	—	36	1
Progeny	P 4732XF	79.1	—	—	31	1
Revere	4925XFS	79.0	—	—	37	1
Revere	4806XS	79.0	80.3	80.6	35	1
Great Heart	GT-4762XF	78.8	—	—	35	1
Dyna-Gro	S49XT70	78.7	79.7	80.1	35	1
Progeny	P 4844XFS	78.5	—	—	30	1
NK Brand	NK47-Z1XF	78.3	—	—	37	1
Asgrow	AG47XF3	78.0	—	—	37	1
Delta Grow	48X45	77.8	80.7	79.9	28	1
Innvictis	A 4742XF	77.4	—	—	30	1
Dyna-Gro	S49XF82S	77.4	—	—	33	1
Revere	4727XFS	75.9	—	—	33	1
Innvictis	A 4850XF	75.8	80.5	—	32	1
Dyna-Gro	S47XF52	75.5	—	—	35	1
Delta Grow	49XF29/STS	75.5	—	—	34	1
Armor	48-F22	75.4	80.5	—	37	1
Armor	48-D25	73.7	74.4	76.7	36	1
Innvictis	A 4950X	73.7	77.3	78.9	39	1
Asgrow	AG49XF3	72.6	—	—	36	1
Great Heart	GT-4828X	72.5	73.3	76.1	35	1
Armor	49-F37	71.0	—	—	36	1
Progeny	P 4951XFS	68.4	—	—	29	1
Delta Grow	48XF33/STS	66.4	—	—	31	1
Mean		78.2				
CV		6.1				
R^2		58.0				
LSD (0.05)		7.8				
Error DF		74				

Table 47. Maturity Group V Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Delta Branch, Stoneville clay, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Revere	5029XF	82.0	—	—	42	1
Delta Grow	52XF22/STS	80.1	—	—	38	1
Progeny	P 5056XFS	78.9	—	—	37	1
Dyna-Gro	S52XT91	77.3	71.0	—	38	1
Progeny	P5150XFS	76.6	—	—	32	1
Armor	51-F88	76.5	—	—	37	1
Asgrow	AG56XF2	76.0	71.4	—	37	1
Progeny	P5252RX	71.6	—	—	44	1
Asgrow	AG53XF2	71.0	66.8	—	36	1
Innvictis	A5451XF	69.0	—	—	28	1
Progeny	P 5554RX	68.6	67.2	74.3	29	1
Revere	5386X	68.0	69.6	74.8	38	1
Revere	5588X	67.0	—	—	36	1
Progeny	P5016RXS	66.4	61.3	66.5	37	1
Delta Grow	54XF20	65.6	67.9	—	23	1
Revere	5614XF	62.1	61.4	—	27	1
Great Heart	GT-5214X	54.2	58.5	67.3	42	1
NK Brand	NK55-T2XF	46.9	—	—	24	1
Mean		69.9				
CV		5.0				
R^2		91.0				
LSD (0.05)		5.7				
Error DF		34				

Table 48. Maturity Group IV Enlist Irrigated Soybean Varieties (Delta Branch, Stoneville clay, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	48E60	75.8	—	—	33	1
Delta Grow	48E59	65.3	68.8	—	29	1
Progeny	4775E3S	63.8	68.7	74.0	39	1
Revere	Innotech 4737E3	62.8	—	—	28	1
Delta Grow	45E33	61.8	—	—	31	1
Delta Grow	46E10	58.1	59.6	—	30	1
Mean		64.6				
CV		6.4				
R^2		77.0				
LSD (0.05)		7.5				
Error DF		10				

Table 49. Maturity Group V Enlist Irrigated Soybean Varieties (Delta Branch, Stoneville clay, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg[1]		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	52E80	71.3	—	—	37	1
Delta Grow	53E30	66.5	63.5	—	39	1
Mean		68.9				
CV		2.5				
R^2		86				
LSD (0.05)		NS				
Error DF		2				

[1]No 3-year average.

Table 50. Maturity Group IV Conventional Irrigated Soybean Varieties (Delta Branch, Stoneville clay, Stoneville).

Brand	Variety	Yield[1]			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Univ. of Missouri	S16-13165C	77.9	—	—	49	1
Univ. of Missouri	S17-2066C	68.8	—	—	29	1
Univ. of Missouri	S19-3530RY	57.2	—	—	34	1
Mean		68.0				
CV		8.0				
R^2		87.0				
LSD (0.05)		11.0				
Error DF		4				

[1]No 2 or 3-year average.

Table 51. Maturity Group V Conventional Irrigated Soybean Varieties (Delta Branch, Stoneville clay, Stoneville).

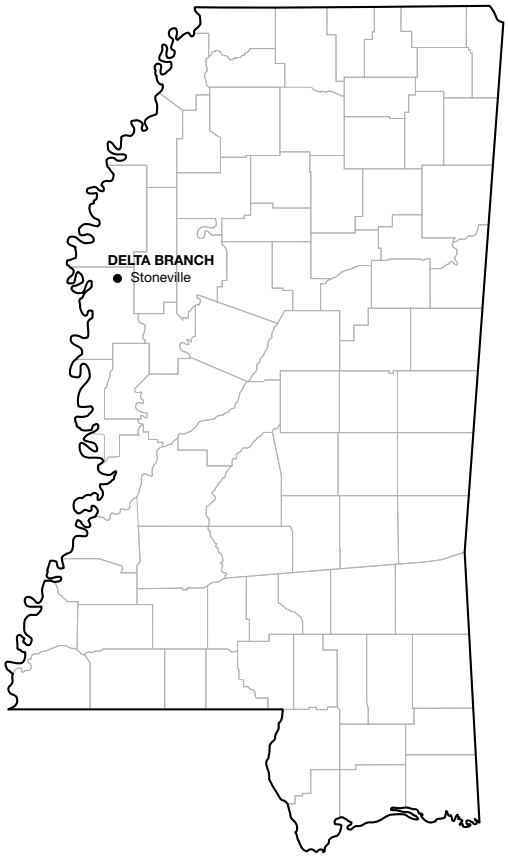
Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Univ. of Missouri	S17-2509C	76.3	—	—	30	1
Univ. of Missouri	S18-6328C	71.7	—	—	27	1
Univ. of Missouri	S18-6097C	60.7	—	—	24	1
Mean		69.6				
CV		11.0				
R^2		62.0				
LSD (0.05)		NS				
Error DF		4				

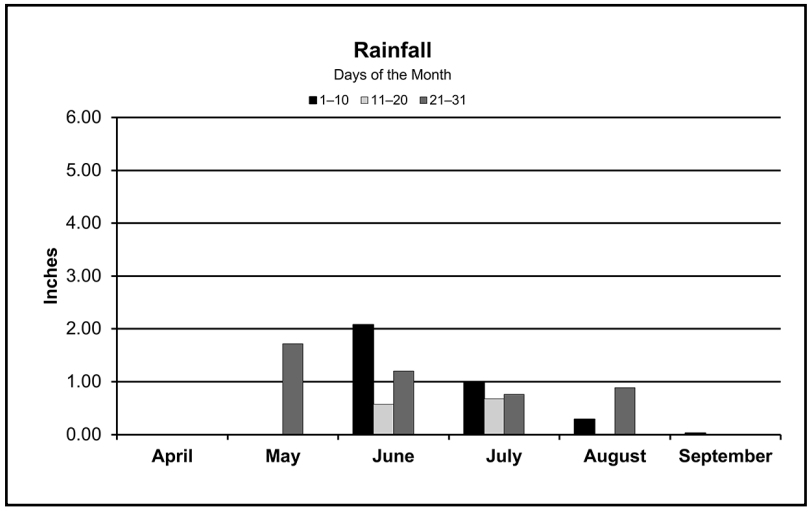
STONEVILLE (loam) NONIRRIGATED, DELTA BRANCH

Crop Summary

The soybean plots were planted flat into a stale seedbed with adequate soil moisture. All plots quickly germinated and emerged to a good stand. Timely rainfall throughout the season allowed for the plots to never stress for moisture. Harvest was completed in a timely manner, and excellent dryland yields were recorded.

Planting date . . .April 29
Harvest date . . . .September 20
Soil type . . . . . .Bosket very fine sandy loam
Soil pH 6.7
Soil fertility . . . .P=H, K=H
Previous crop . . .Soybean
Herbicide . . . . . .Preemergence — Authority Edge @ 7 oz/A, Dual II Magnum @ 24 oz/A, and Gramoxone @ 32 oz/A on April 29
Postemergence — Roundup PowerMax @ 24 oz/A and Prefix @ 24 oz/A on June 13





Rainfall Summary

	Inches
April	0.00
May	1.72
June	3.85
July	2.42
August	1.19
September	0.03
Total	9.21

Table 52. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Delta Branch, Stoneville loam, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Revere	4415XF	105.3	101.5	—	35	1
Revere	4128XFS	104.6	—	—	41	1
Asgrow	AG46XF3	104.0	—	—	39	1
Progeny	P 4604XFS	103.1	105.3	—	48	1
Progeny	P 4200XS	103.1	—	—	43	1
Progeny	P 4505RXS	102.1	102.2	92.7	43	1
Progeny	P 4691XFS	100.3	—	—	42	1
Revere	4606XFS	100.2	94.0	—	37	1
NK Brand	NK42-T5XF	99.7	—	—	37	1
Revere	4526XFS	99.6	—	—	40	1
Innvictis	A 4690XF	99.5	97.1	—	43	1
Great Heart	GT-4681XFS	99.1	94.0	—	41	1
Innvictis	A4642XF	99.0	—	—	42	1
Innvictis	A4662XF	98.8	—	—	40	1
Dyna-Gro	S45XF02	98.8	—	—	40	2
Armor	45-F02	98.6	—	—	43	1
Asgrow	AG45XF3	98.4	—	—	41	1
Asgrow	AG42XF2	98.3	—	—	46	3
Dyna-Gro	S46XS60	98.2	90.8	82.6	41	1
Delta Grow	46X65/STS	97.8	102.0	92.4	42	1
Dyna-Gro	S43XS70	97.6	93.3	—	37	1
Beck's Hybrids	4553XF	97.5	—	—	35	1
MorSoy	MS 4681 RXT	97.1	94.4	—	42	1
Gateway Seed	453RXS	96.6	—	—	47	1
Armor	46-F96	96.6	—	—	39	1
Delta Grow	46XF18	96.1	—	—	38	1
Great Heart	GT-4677XS	95.8	88.7	78.2	40	1
Progeny	P 4521XFS	95.8	97.2	—	37	1
Armor	44-D49	95.8	94.4	84.5	45	1
Gateway Seed	469XF	93.9	—	—	34	1
NK Brand	NK43-V8XF	92.0	98.7	—	42	2
Dyna-Gro	S46XF31S	91.9	96.8	—	38	1
NK Brand	NK44-J4XFS	90.6	—	—	37	1
Innvictis	A4632XF	90.0	—	—	38	1
Progeny	P 4444RXS	89.7	—	—	38	1
Gateway Seed	465RXS	89.3	—	—	42	1
NK Brand	NK45-P9XF	89.1	91.7	—	42	1
NK Brand	NK43-Y9XFS	88.9	—	—	43	1
Great Heart	GT-4255XS	88.4	85.3	—	34	1
Great Heart	GT-4344XF	86.7	85.4	—	41	1
Armor	46-F13	86.1	91.2	—	44	1
Delta Grow	44XF41	80.8	—	—	41	1
Progeny	P 4202XFS	80.0	—	—	36	1
Mean		95.7				
CV		9.0				
R^2		59.0				
LSD (0.05)		14.0				
Error DF		84.0				

Table 53. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Delta Branch, Stoneville loam, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Progeny	P 4806XFS	105.0	96.8	—	39	1
Dyna-Gro	S48XF61S	104.3	—	—	38	1
Progeny	P 4732XF	103.1	—	—	43	1
Great Heart	GT-4756XF	97.4	—	—	33	1
Asgrow	AG48XF3	97.2	—	—	43	1
Dyna-Gro	S47XF23S	97.0	—	—	36	1
Progeny	P 4821RX	96.8	102.0	86.5	44	1
Innvictis	A 4742XF	96.6	—	—	36	1
Progeny	P 4798XF	96.2	—	—	42	1
Revere	4806XS	95.8	92.5	80.0	41	1
MorSoy	MS 4846 RXT	95.5	—	—	35	1
Revere	4795XS	94.8	92.4	81.9	34	1
Dyna-Gro	S48XT90	94.5	99.1	85.1	40	1
Great Heart	GT-4762XF	93.4	—	—	43	1
Asgrow	AG49XF3	93.1	—	—	43	1
Great Heart	GT-4979X	92.4	92.1	79.3	43	1
Progeny	P 4844XFS	91.9	—	—	37	1
Innvictis	A 4850XF	91.8	93.2	—	39	1
Revere	4826XF	91.3	—	—	38	1
Revere	4925XFS	90.9	—	—	46	1
Armor	48-D25	90.7	84.0	75.5	36	1
Asgrow	AG47XF3	90.4	—	—	43	1
NK Brand	NK47-Z1XF	89.4	—	—	39	1
Gateway Seed	471XF	88.2	—	—	38	1
MorSoy	MS 4852	87.7	—	—	52	1
Beck's Hybrids	4885XF	86.8	92.8	—	36	1
Progeny	P 4951XFS	86.2	—	—	38	1
Revere	4727XFS	85.0	—	—	35	1
Armor	48-F22	83.6	89.9	—	36	1
Innvictis	A 4950X	83.3	90.7	80.1	42	1
Delta Grow	48XF33/STS	82.9	—	—	44	1
Delta Grow	48X45	80.5	89.6	79.1	38	1
Dyna-Gro	S49XF82S	79.7	—	—	39	1
Armor	49-F37	78.9	—	—	33	1
Dyna-Gro	S49XT70	78.0	83.6	73.8	44	1
Great Heart	GT-4828X	77.1	84.2	73.8	44	1
Dyna-Gro	S47XF52	74.9	—	—	46	1
Delta Grow	49XF29/STS	72.4	—	—	38	1
Mean		89.9				
CV		9.7				
R^2		74.0				
LSD (0.05)		14.2				
Error DF		74				

Table 54. Maturity Group IV Enlist Nonirrigated Soybean Varieties (Delta Branch, Stoneville loam, Stoneville).

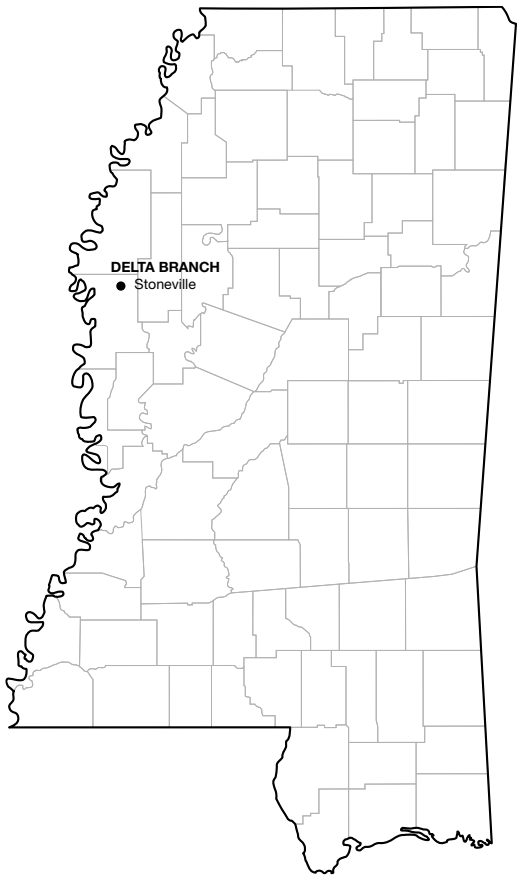
Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	48E60	90.6	—	—	39	1
Delta Grow	45E33	89.6	—	—	35	1
Revere	Innotech 4737E3	84.1	—	—	30	1
Delta Grow	48E59	80.5	85.2	—	38	1
Progeny	4775E3S	75.9	84.8	77.6	42	1
Delta Grow	46E10	70.9	73.9	—	37	1
Mean		81.9				
CV		4.0				
R^2		92.0				
LSD (0.05)		6.5				
Error DF		10				

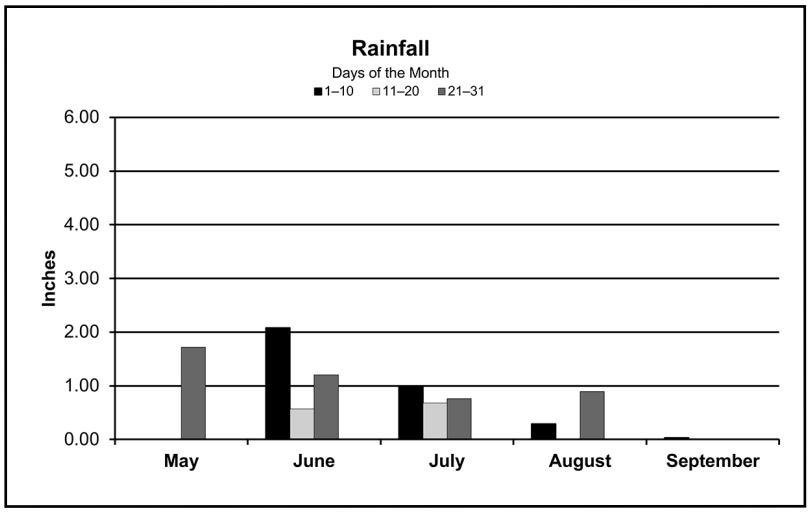
STONEVILLE (loam) IRRIGATED, DELTA BRANCH

Crop Summary

The soybean plots were planted into a seedbed that was hipped and do-alled just prior to planting. Sufficient soil moisture was present at planting for all plots to germinate and emerge to a good stand. The growing season was hot and dry, but furrow irrigation was able to make the difference and supply ample soil moisture throughout the growing season. Harvest was completed in a timely manner, and good yields were recorded at this location.

Planting date . . . .May 9
Harvest date . . . .September 28
Soil type . . . . . .Bosket very fine sandy loam
Soil pH 6.7
Soil fertility . . . . .P=H, K=H
Previous crop . . .Corn
Herbicide . . . . . .Preemergence — Authority Edge @ 7 oz/A, Dual II Magnum @ 24 oz/A, and Gramoxone @ 32 oz/A on May 9
Postemergence — Roundup PowerMax @ 32 oz/A, Prefix @ 24 oz/A, and FirstRate @ 0.3 oz/A on June 23
Irrigation . . . . . .Furrow irrigation as needed





Rainfall Summary

	Inches
May	1.72
June	3.85
July	2.42
August	1.19
September	0.03
Total	9.21

Table 55. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Delta Branch, Stoneville loam, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
NK Brand	NK43-V8XF	96.3	90.8	—	43	1
Revere	4415XF	94.3	87.5	—	34	1
MorSoy	MS 4681 RXT	92.8	88.4	—	38	1
Dyna-Gro	S46XS60	92.6	90.7	88.1	36	1
Armor	45-F02	90.1	—	—	44	1
Progeny	P 4200XS	89.8	—	—	45	1
NK Brand	NK44-J4XFS	88.0	—	—	38	1
Revere	4128XFS	87.4	—	—	39	1
NK Brand	NK45-P9XF	87.1	83.8	—	46	2
Dyna-Gro	S45XF02	87.0	—	—	35	1
NK Brand	NK42-T5XF	86.8	—	—	36	1
Gateway Seed	469XF	86.8	—	—	41	2
Great Heart	GT-4677XS	86.4	82.2	87.4	33	1
Innvictis	A4662XF	86.3	—	—	38	1
Armor	46-F96	86.1	—	—	43	1
Asgrow	AG45XF3	86.0	—	—	41	1
Progeny	P 4505RXS	84.8	85.2	87.2	48	2
Gateway Seed	453RXS	84.8	—	—	41	1
Dyna-Gro	S43XS70	84.7	85.7	—	47	1
Progeny	P 4521XFS	84.5	84.0	—	44	1
Armor	44-D49	84.3	84.5	88.5	44	1
Delta Grow	46XF18	83.6	—	—	40	1
Great Heart	GT-4681XFS	83.6	83.8	—	41	1
Asgrow	AG42XF2	83.5	—	—	40	1
Revere	4606XFS	83.5	84.9	—	39	1
Revere	4526XFS	83.4	—	—	40	1
Progeny	P 4691XFS	82.5	—	—	44	1
Dyna-Gro	S46XF31S	82.4	85.6	—	40	1
Asgrow	AG46XF3	82.2	—	—	35	1
Innvictis	A 4690XF	80.9	85.0	—	36	1
Armor	46-F13	80.8	82.6	—	43	1
Innvictis	A4632XF	80.5	—	—	33	1
NK Brand	NK43-Y9XFS	80.2	—	—	35	1
Progeny	P 4444RXS	80.2	—	—	38	1
Gateway Seed	465RXS	79.9	—	—	40	1
Innvictis	A4642XF	79.3	—	—	40	1
Delta Grow	44XF41	78.5	—	—	42	1
Progeny	P 4604XFS	77.9	85.7	—	42	1
Progeny	P 4202XFS	77.5	—	—	37	1
Great Heart	GT-4255XS	77.0	82.6	—	38	1
Great Heart	GT-4344XF	76.4	80.0	—	44	1
Beck's Hybrids	4553XF	73.4	—	—	32	1
Delta Grow	46X65/STS	70.7	78.2	83.9	39	1
Mean		83.8				
CV		6.2				
R^2		70.0				
LSD (0.05)		8.4				
Error DF		84.0				

Table 56. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Delta Branch, Stoneville loam, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Progeny	P 4821RX	87.5	86.7	87.0	40	1
Progeny	P 4806XFS	87.0	87.0	—	39	1
Dyna-Gro	S47XF23S	86.6	—	—	43	1
Revere	4795XS	85.9	85.7	85.9	39	1
Revere	4806XS	85.5	84.6	87.6	43	1
Innvictis	A 4850XF	84.7	84.2	—	41	1
MorSoy	MS 4846 RXT	84.5	—	—	38	1
Dyna-Gro	S48XF61S	84.3	—	—	44	1
Dyna-Gro	S48XT90	84.1	84.3	85.4	48	1
Great Heart	GT-4756XF	83.6	—	—	35	1
Asgrow	AG48XF3	83.2	—	—	40	1
Progeny	P 4732XF	83.1	—	—	43	1
Revere	4727XFS	83.0	—	—	35	1
Great Heart	GT-4762XF	82.7	—	—	40	1
Progeny	P 4798XF	82.2	—	—	44	1
MorSoy	MS 4852	82.1	—	—	44	1
Armor	49-F37	80.4	—	—	37	1
Innvictis	A 4742XF	80.4	—	—	39	1
Armor	48-D25	79.9	82.4	83.9	39	1
Beck's Hybrids	4885XF	78.8	81.4	—	41	1
Dyna-Gro	S49XF82S	78.4	—	—	38	1
Revere	4826XF	77.7	—	—	41	1
NK Brand	NK47-Z1XF	77.5	—	—	36	1
Great Heart	GT-4828X	77.1	72.5	76.2	37	1
Asgrow	AG49XF3	76.9	—	—	46	1
Revere	4925XFS	76.6	—	—	44	1
Armor	48-F22	76.4	81.1	—	37	1
Gateway Seed	471XF	75.4	—	—	45	1
Progeny	P 4844XFS	75.1	—	—	37	1
Progeny	P 4951XFS	75.0	—	—	33	1
Delta Grow	49XF29/STS	74.2	—	—	41	1
Innvictis	A 4950X	73.9	76.5	77.6	43	1
Great Heart	GT-4979X	73.7	78.6	83.3	45	1
Dyna-Gro	S49XT70	72.8	75.8	76.0	43	1
Delta Grow	48X45	72.5	80.3	81.5	35	1
Dyna-Gro	S47XF52	71.5	—	—	46	1
Delta Grow	48XF33/STS	71.0	—	—	37	1
Asgrow	AG47XF3	69.3	—	—	44	1
Mean		79.3				
CV		9.3				
R^2		46.0				
LSD (0.05)		NS				
Error DF		74				

Table 57. Maturity Group V Roundup Ready Xtend and XtendFlex Irrigated Soybean Varieties (Delta Branch, Stoneville loam, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Armor	51-F88	88.0	—	—	38	1
Dyna-Gro	S52XT91	87.2	84.1	—	35	1
Delta Grow	52XF22/STS	83.4	—	—	40	1
Asgrow	AG56XF2	82.9	81.3	—	32	1
Progeny	P5150XFS	81.5	—	—	38	1
Progeny	P 5554RX	80.5	76.3	81.5	28	1
Progeny	P 5056XFS	78.8	—	—	40	1
Asgrow	AG53XF2	77.4	75.6	—	42	1
Innvictis	A5451XF	76.6	—	—	32	1
Revere	5588X	76.3	—	—	32	1
Revere	5386X	76.0	74.5	79.5	36	1
Revere	5029XF	75.6	—	—	42	1
Delta Grow	54XF20	73.9	73.6	—	18	1
Revere	5614XF	72.3	69.0	—	24	1
Progeny	P5252RX	69.2	—	—	42	1
Great Heart	GT-5214X	68.6	64.5	72.4	36	1
Progeny	P5016RXS	68.2	69.9	75.4	41	1
NK Brand	NK55-T2XF	62.5	—	—	25	1
Mean		76.6				
CV		9.0				
R^2		59.0				
LSD (0.05)		11.6				
Error DF		34				

Table 58. Maturity Group IV Enlist Irrigated Soybean Varieties (Delta Branch, Stoneville loam, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	48E60	83.9	—	—	40	1
Revere	Innotech 4737E3	79.2	—	—	31	1
Delta Grow	48E59	78.0	82.9	—	30	1
Delta Grow	45E33	76.1	—	—	32	1
Delta Grow	46E10	63.4	71.5	—	37	1
Progeny	4775E3S	58.0	67.9	76.8	48	1
Mean		73.1				
CV		9.4				
R^2		76.0				
LSD (0.05)		12.6				
Error DF		10				

Table 59. Maturity Group V Enlist Irrigated Soybean Varieties (Delta Branch, Stoneville loam, Stoneville).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.[1]		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	52E80	69.2	—	—	37	1
Delta Grow	53E30	63.2	65.3	—	38	1
Mean		66.2				
CV		5.7				
R^2		71				
LSD (0.05)		NS				
Error DF		2				

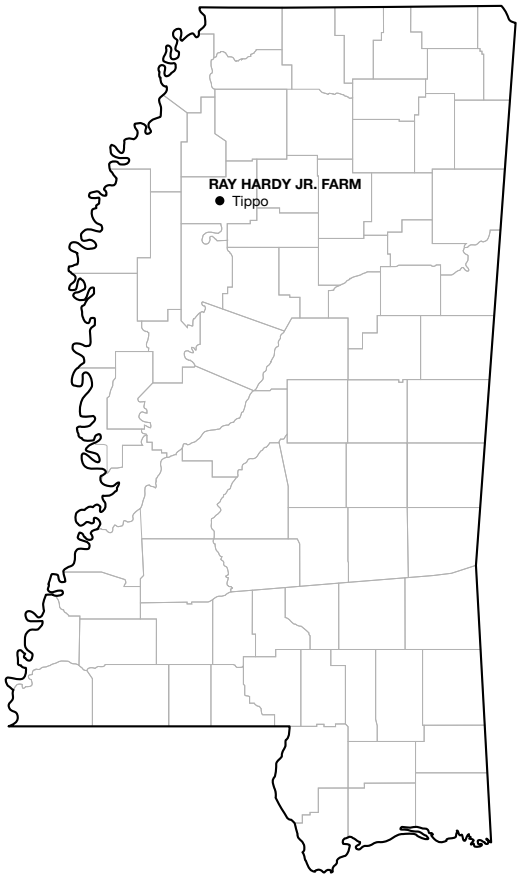
[1]No 3-year average.

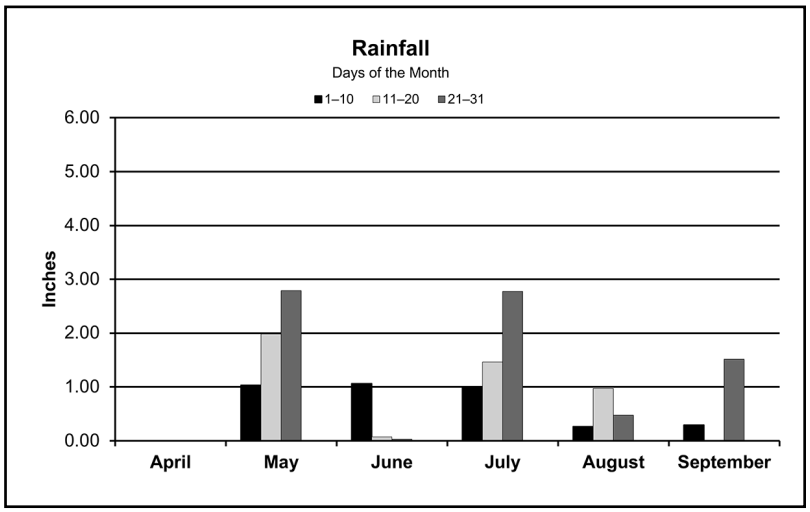
TIPPO, RAY HARDY JR. FARM

Crop Summary

The plots were planted flat into a stale seedbed with good soil moisture, adequate for speedy germination. All plots quickly emerged to a good stand. Rainfall events were sporadic throughout the growing season. This locations experienced periods of extremely hot and dry weather. Harvest was completed in a timely manner.

Planting date . . .April 29
Harvest date . . . .September 27
Soil type . . . . . .Dundee & Tensas silt loam
Soil pH 6.3
Soil fertility . . . . .P=H, K=H
Previous crop . . .Soybean
Herbicide . . . . . .Preemergence — Authority Edge @ 7 oz/A, Gramoxone @ 32 oz/A, and Dual II Magnum @ 24 oz/A on April 29





Rainfall Summary

	Inches
April	0.00
May	5.80
June	1.16
July	5.22
August	1.70
September	1.80
Total	15.68

Table 60. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Ray Hardy Jr. Farm, Tippo).

Brand	Variety	Yield			Plant height	Stalk lodging	Shattering
		2022	2-year avg.	3-year avg.			
		bu/A	*bu/A*	*bu/A*	*in*	*(1-5)*	*%*
Asgrow	AG46XF3	54.4	—	—	34	1	—
Revere	4415XF	54.4	53.8	—	28	1	—
Armor	46-F13	52.4	49.2	—	33	1	—
Revere	4526XFS	51.7	—	—	29	1	—
Revere	4606XFS	51.5	48.2	—	31	1	—
Delta Grow	46X65/STS	50.5	44.3	46.1	33	1	—
Asgrow	AG45XF3	50.0	—	—	33	1	—
Dyna-Gro	S46XS60	47.5	44.6	45.3	31	1	—
MorSoy	MS 4681 RXT	47.4	47.8	—	32	1	—
Dyna-Gro	S43XS70	47.0	47.2	—	33	1	—
Revere	4128XFS	46.8	—	—	31	1	5
Great Heart	GT-4681XFS	46.7	46.1	—	30	1	—
Dyna-Gro	S45XF02	46.6	—	—	26	1	—
Great Heart	GT-4677XS	46.2	43.8	47.4	32	1	—
Innvictis	A 4690XF	46.1	47.6	—	29	1	—
Progeny	P 4604XFS	46.0	46.7	—	32	1	—
Armor	45-F02	44.8	—	—	29	1	—
Gateway Seed	465RXS	43.6	—	—	29	1	—
NK Brand	NK45-P9XF	43.4	47.6	—	35	1	—
NK Brand	NK42-T5XF	43.3	—	—	26	1	—
Armor	44-D49	43.3	47.6	48.7	31	1	—
Innvictis	A4632XF	43.1	—	—	26	1	5
Progeny	P 4444RXS	42.4	—	—	26	1	—
Great Heart	GT-4255XS	42.3	42.4	—	31	1	—
Progeny	P 4521XFS	41.0	40.9	—	26	1	5
Progeny	P 4505RXS	41.0	45.7	48.4	29	1	—
Dyna-Gro	S46XF31S	40.7	43.2	—	32	1	—
Great Heart	GT-4344XF	40.6	43.3	—	29	1	—
Progeny	P 4200XS	40.0	—	—	30	1	—
Progeny	P 4691XFS	39.9	—	—	31	1	10
Innvictis	A4642XF	39.7	—	—	28	1	5
Delta Grow	46XF18	39.7	—	—	31	1	—
Gateway Seed	453RXS	39.2	—	—	31	1	—
Beck's Hybrids	4553XF	38.9	—	—	26	1	—
Delta Grow	44XF41	38.6	—	—	35	1	—
Gateway Seed	469XF	37.8	—	—	30	1	—
NK Brand	NK44-J4XFS	37.4	—	—	30	1	—
Asgrow	AG42XF2	36.9	—	—	30	1	10
Progeny	P 4202XFS	36.7	—	—	29	1	10
Innvictis	A4662XF	36.2	—	—	29	1	—
NK Brand	NK43-Y9XFS	36.0	—	—	29	1	—
Armor	46-F96	34.4	—	—	30	1	—
NK Brand	NK43-V8XF	34.2	35.0	—	29	1	40
Mean		43.2					
CV		13.0					
R^2		63.0					
LSD (0.05)		9.3					
Error DF		84.0					

Table 61. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Ray Hardy Jr. Farm, Tippo).

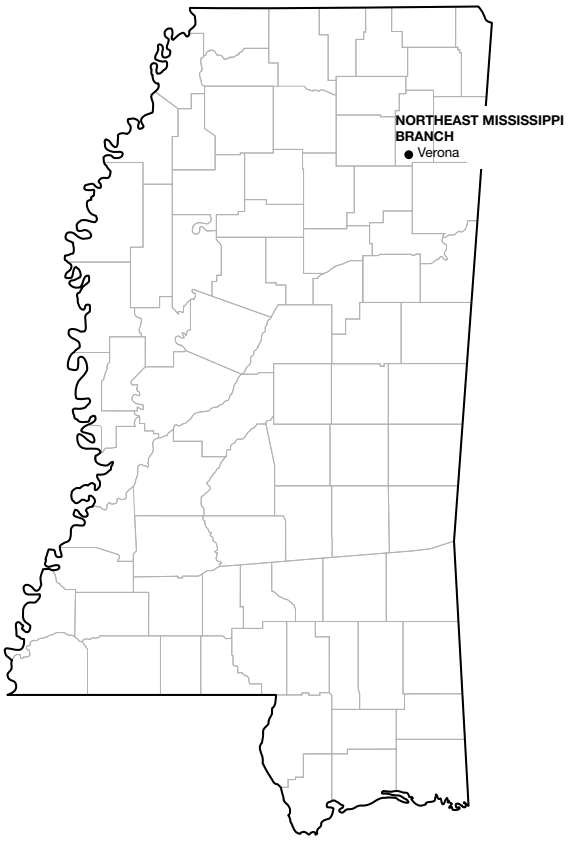
Brand	Variety	Yield			Plant height	Stalk lodging	Shattering
		2022	2-year avg.	3-year avg.			
		bu/A	*bu/A*	*bu/A*	*in*	*(1-5)*	*%*
Progeny	P 4798XF	52.3	—	—	26	1	—
Dyna-Gro	S49XT70	51.3	51.1	49.1	30	1	—
Great Heart	GT-4828X	50.8	48.3	48.3	34	1	5
Revere	4795XS	50.5	49.8	48.0	26	1	—
Dyna-Gro	S48XT90	49.9	51.7	49.8	32	1	—
Great Heart	GT-4979X	49.3	51.8	50.6	30	1	—
NK Brand	NK47-Z1XF	48.3	—	—	31	1	—
Asgrow	AG48XF3	48.1	—	—	30	1	—
Armor	48-F22	47.8	47.9	—	32	1	5
Asgrow	AG49XF3	47.4	—	—	31	1	—
Asgrow	AG47XF3	47.4	—	—	31	1	—
Gateway Seed	471XF	47.1	—	—	35	1	—
Armor	49-F37	46.6	—	—	35	1	—
Armor	48-D25	46.4	44.8	48.0	28	1	—
Revere	4806XS	46.3	46.4	50.5	32	1	—
Delta Grow	48XF33/STS	45.9	—	—	31	1	—
Revere	4925XFS	45.4	—	—	31	1	—
Dyna-Gro	S48XF61S	45.1	—	—	24	1	—
Dyna-Gro	S47XF52	44.5	—	—	36	1	5
Great Heart	GT-4756XF	43.9	—	—	26	1	—
Dyna-Gro	S47XF23S	43.7	—	—	26	1	—
Revere	4727XFS	43.2	—	—	26	1	—
MorSoy	MS 4852	43.2	—	—	27	1	—
Delta Grow	48X45	43.1	46.0	48.3	29	1	—
Progeny	P 4844XFS	42.7	—	—	28	1	—
MorSoy	MS 4846 RXT	42.1	—	—	25	1	—
Great Heart	GT-4762XF	41.9	—	—	29	1	—
Delta Grow	49XF29/STS	41.7	—	—	28	1	—
Progeny	P 4821RX	41.6	44.6	49.5	29	1	5
Beck's Hybrids	4885XF	41.5	44.1	—	27	1	—
Revere	4826XF	41.5	—	—	27	1	—
Innvictis	A 4950X	40.8	47.1	49.5	29	1	—
Innvictis	A 4742XF	40.0	—	—	23	1	—
Dyna-Gro	S49XF82S	39.1	—	—	28	1	—
Progeny	P 4732XF	39.0	—	—	27	1	—
Innvictis	A 4850XF	38.3	43.9	—	27	1	—
Progeny	P 4806XFS	35.6	44.3	—	28	1	—
Progeny	P 4951XFS	35.0	—	—	26	1	—
Mean		44.4					
CV		10.6					
R^2		59.0					
LSD (0.05)		7.7					
Error DF		74					

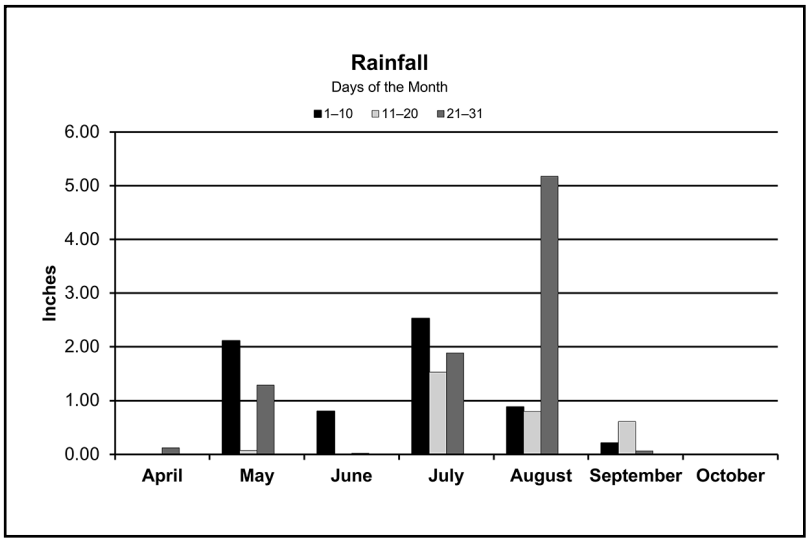
VERONA, NORTHEAST MISSISSIPPI BRANCH

Crop Summary

The soybean plots were planted into a raised seedbed that had been prepared the previous fall. The tops of the beds were do-alled just prior to planting. Soil moisture at planting was adequate for germination. All plots emerged to a stand. Rainfall was below average for the season, but it occurred at crucial times. Harvest was completed in a timely manner, and good yields were observed.

Planting date . . .April 22
Harvest date . . . .October 6
Soil type . . . . . .Leeper silty clay loam
Soil pH 6.5
Soil fertility . . . . .P=H, K=M
Previous crop . . .Soybeans
Herbicide . . . . . .Preemergence — Authority Edge @ 7 oz/A & Gramoxone @ 32 oz/A on April 22
Postemergence — Prefix at 24 oz/A, FirstRate @ 0.3 oz/A, and Select Max @ 16 oz/A on June 16; Assure II @ 10 oz/A on August 18
Insecticide . . . . .Acephate @ 0.75 lb/A, Prevathon @ 14 oz/A, and Bifenthrin @ 6.4 oz/A on August 29





Rainfall Summary

	Inches
April	0.12
May	3.47
June	0.82
July	5.95
August	6.86
September	0.88
October	0.00
Total	18.10

Table 62. Maturity Group IV Early Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Northeast Mississippi Branch, Verona).

Brand	Variety	Yield			Plant height	Stalk lodging	Shattering
		2022	2-year avg.	3-year avg.			
		bu/A	*bu/A*	*bu/A*	*in*	*(1-5)*	*%*
Armor	46-F96	77.5	—	—	31	—	0
Delta Grow	46X65/STS	75.6	79.6	75.2	21	—	0
Revere	4606XFS	73.8	81.8	—	35	—	0
Asgrow	AG46XF3	73.8	—	—	26	—	0
Revere	4415XF	72.2	76.0	—	28	—	0
Delta Grow	46XF18	71.7	—	—	37	—	0
Dyna-Gro	S46XS60	71.3	79.6	82.0	30	—	0
Progeny	P 4202XFS	71.2	—	—	32	—	0
Innvictis	A4662XF	70.5	—	—	30	—	0
Gateway Seed	469XF	70.2	—	—	29	—	0
MorSoy	MS 4681 RXT	70.1	75.2	—	25	—	0
Asgrow	AG45XF3	69.6	—	—	27	—	0
Armor	44-D49	69.3	74.4	78.4	33	—	0
Armor	46-F13	67.9	71.0	—	34	—	0
Progeny	P 4604XFS	67.7	73.6	—	30	—	0
Armor	45-F02	67.5	—	—	30	—	0
Dyna-Gro	S46XF31S	67.0	71.0	—	33	—	0
Gateway Seed	465RXS	66.9	—	—	27	—	0
Revere	4526XFS	66.9	—	—	32	—	0
Innvictis	A4632XF	66.8	—	—	32	—	0
Great Heart	GT-4677XS	66.8	78.3	79.2	29	—	0
Progeny	P 4521XFS	66.0	75.9	—	27	—	0
Beck's Hybrids	4553XF	65.8	—	—	20	—	0
Progeny	P 4505RXS	65.5	76.1	78.5	28	—	0
Progeny	P 4200XS	65.2	—	—	31	—	0
Great Heart	GT-4681XFS	64.8	68.6	—	31	—	0
Dyna-Gro	S43XS70	63.7	65.3	—	28	—	0
Progeny	P 4444RXS	63.6	—	—	23	—	0
Innvictis	A 4690XF	63.2	73.8	—	33	—	0
Dyna-Gro	S45XF02	63.0	—	—	26	—	0
Gateway Seed	453RXS	62.4	—	—	31	—	0
Progeny	P 4691XFS	61.8	—	—	33	—	10
NK Brand	NK42-T5XF	59.6	—	—	27	—	0
Innvictis	A4642XF	58.6	—	—	31	—	0
Great Heart	GT-4344XF	55.9	67.7	—	28	—	0
NK Brand	NK43-Y9XFS	55.5	—	—	25	—	0
Asgrow	AG42XF2	53.7	—	—	31	—	10
Great Heart	GT-4255XS	50.5	59.0	—	22	—	0
Revere	4128XFS	49.9	—	—	26	—	0
NK Brand	NK45-P9XF	49.0	60.9	—	28	—	0
NK Brand	NK43-V8XF	48.9	56.1	—	27	—	5
NK Brand	NK44-J4XFS	48.0	—	—	26	—	0
Delta Grow	44XF41	41.0	—	—	32	—	0
Mean		63.9					
CV		12.3					
R^2		63.0					
LSD (0.05)		12.8					
Error DF		84.0					

Table 63. Maturity Group IV Late Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Northeast Mississippi Branch, Verona).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Asgrow	AG47XF3	81.9	—	—	33	1
Armor	48-D25	80.4	80.0	80.1	27	1
Great Heart	GT-4762XF	79.6	—	—	29	1
NK Brand	NK47-Z1XF	76.5	—	—	32	1
Asgrow	AG48XF3	75.3	—	—	32	1
Innvictis	A 4950X	75.3	82.7	81.9	33	1
Progeny	P 4798XF	74.6	—	—	27	1
Dyna-Gro	S49XT70	74.2	80.7	78.7	30	1
Asgrow	AG49XF3	73.6	—	—	34	1
Revere	4925XFS	72.6	—	—	30	1
Progeny	P 4951XFS	72.2	—	—	29	1
Delta Grow	49XF29/STS	71.8	—	—	29	1
MorSoy	MS 4852	71.5	—	—	29	1
Revere	4806XS	70.9	73.4	74.1	30	1
Great Heart	GT-4979X	70.5	79.6	81.9	31	1
Revere	4826XF	70.4	—	—	26	1
Delta Grow	48X45	69.9	72.3	71.6	21	1
Armor	48-F22	69.8	75.4	—	30	1
Armor	49-F37	69.4	—	—	29	1
Revere	4795XS	68.0	68.8	70.6	28	1
MorSoy	MS 4846 RXT	67.5	—	—	29	1
Gateway Seed	471XF	66.2	—	—	28	1
Progeny	P 4844XFS	64.0	—	—	25	1
Great Heart	GT-4756XF	63.8	—	—	23	1
Dyna-Gro	S49XF82S	63.5	—	—	26	1
Beck's Hybrids	4885XF	62.5	65.0	—	31	1
Dyna-Gro	S47XF23S	62.5	—	—	24	1
Revere	4727XFS	61.9	—	—	26	1
Progeny	P 4732XF	61.6	—	—	30	1
Great Heart	GT-4828X	61.6	68.4	72.2	28	1
Delta Grow	48XF33/STS	60.7	—	—	27	1
Innvictis	A 4742XF	59.9	—	—	6	1
Dyna-Gro	S48XT90	57.9	68.8	70.8	26	1
Dyna-Gro	S47XF52	56.4	—	—	27	1
Progeny	P 4821RX	53.2	63.3	64.2	27	1
Dyna-Gro	S48XF61S	52.1	—	—	27	1
Progeny	P 4806XFS	50.7	64.6	—	19	1
Innvictis	A 4850XF	46.3	61.8	—	23	1
Mean		66.9				
CV		12.8				
R^2		62.0				
LSD (0.05)		13.9				
Error DF		74				

Table 64. Maturity Group V Roundup Ready Xtend and XtendFlex Nonirrigated Soybean Varieties (Northeast Mississippi Branch, Verona).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Revere	5588X	88.8	—	—	28	1
Progeny	P5252RX	88.4	—	—	30	1
Armor	51-F88	85.6	—	—	31	1
Revere	5029XF	82.4	—	—	34	1
Asgrow	AG56XF2	82.3	89.8	—	30	1
Delta Grow	52XF22/STS	81.4	—	—	30	1
Progeny	P 5056XFS	80.9	—	—	33	1
Great Heart	GT-5214X	79.2	82.5	84.1	41	1
Progeny	P 5554RX	76.9	81.6	79.3	25	1
Revere	5614XF	75.4	77.0	—	25	1
Revere	5386X	75.3	77.1	72.9	33	1
Progeny	P5150XFS	74.4	—	—	27	1
Dyna-Gro	S52XT91	72.9	73.1	—	33	1
Innvictis	A5451XF	71.3	—	—	26	1
Asgrow	AG53XF2	70.2	69.3	—	33	1
Delta Grow	54XF20	66.8	71.6	—	23	1
Progeny	P5016RXS	66.8	73.1	68.6	31	1
NK Brand	NK55-T2XF	57.3	—	—	21	1
Mean		76.5				
CV		12.0				
R^2		63.0				
LSD (0.05)		15.5				
Error DF		34				

Table 65. Maturity Group IV Enlist Nonirrigated Soybean Varieties (Northeast Mississippi Branch, Verona).

Brand	Variety	Yield			Plant height	Stalk lodging	Shattering
		2022	2-year avg.	3-year avg.			
		bu/A	*bu/A*	*bu/A*	*in*	*(1-5)*	*%*
Progeny	4775E3S	79.0	75.7	72.5	32	1	5
Delta Grow	48E59	71.2	69.2	—	29	1	0
Delta Grow	48E60	69.9	—	—	25	1	0
Delta Grow	45E33	63.8	—	—	30	1	0
Revere	Innotech 4737E3	62.6	—	—	26	1	0
Delta Grow	46E10	55.7	55.5	—	29	1	10
Mean		67.0					
CV		8.3					
R^2		87.0					
LSD (0.05)		10.2					
Error DF		10					

Table 66. Maturity Group V Enlist Nonirrigated Soybean Varieties (Northeast Mississippi Branch, Verona).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Delta Grow	53E30	78.9	76.4	—	30	1
Delta Grow	52E80	78.3	—	—	26	1
Mean		78.6				
CV		9.19				
R^2		79.8				
LSD (0.05)		NS				
Error DF		2				

[1]No 3-year average.

Table 67. Maturity Group IV Conventional Nonirrigated Soybean Varieties (Northeast Mississippi Branch, Verona).

Brand	Variety	Yield			Plant height	Stalk lodging	Shattering
		2022	2-year avg.	3-year avg.			
		bu/A	*bu/A*	*bu/A*	*in*	*(1-5)*	*%*
Univ. of Missouri	S16-13165C	89.7	—	—	47	1	0
Univ. of Missouri	S17-2066C	75.0	—	—	24	1	0
Univ. of Missouri	S19-3530RY	38.4	—	—	25	1	5
Mean		67.7					
CV		19.0					
R^2		87.0					
LSD (0.05)		28.0					
Error DF		4					

[1]No 2 or 3-year average.

Table 68. Maturity Group V Conventional Nonirrigated Soybean Varieties (Northeast Mississippi Branch, Verona).

Brand	Variety	Yield			Plant height	Lodging score
		2022	2-yr. avg.	3-yr. avg.		
		bu/A	*bu/A*	*bu/A*	*in*	*1-5*
Univ. of Missouri	S18-6328C	84.1	—	—	28	1
Univ. of Missouri	S18-6097C	80.0	—	—	20	1
Univ. of Missouri	S17-2509C	78.6	—	—	27	1
Mean		80.9				
CV		22.0				
R^2		25.0				
LSD (0.05)		NS				
Error DF		4				

[1]No 2 or 3-year average.

PLANT CHARACTERISTICS

Table 69 . Plant Characteristics of Maturity Group IV Early Xtend Soybeans

Brand	Variety	Color				Seeds[1]	Growth	
		Bloom	Pubescence	Pod wall	Hilum		D/I[2]	RM
Armor	46-F13	Brown	L. Tawny	Purple	Black	2673	4.6	I
Armor	46-F96	Brown	Gray	Purple	Buff	2748	4.6	I
Armor	44-D49	Brown	L. Tawny	Purple	Black	3350	4.4	I
Armor	45-F02	Tan	L. Tawny	Purple	Black	3070	4.5	I
Asgrow	AG45XF3	—	—	—	—	2830	4.5	—
Asgrow	AG46XF3	Tan	L. Tawny	Purple	Black	2780	4.3	I
Asgrow	AG42XF2	—	—	—	—	2540	4.2	I
Beck's Hybrids	4553XF	—	—	—	—	2670	4.5	—
Delta Grow	46X65STS	Tan	L. Tawny	Purple	Black	2716	4.6	—
Delta Grow	44XF41	Brown	L. Tawny	White	Black	3118	4.4	—
Delta Grow	46XF18	Brown	Gray	Purple	Brown	2669	4.6	—
Dyna-Gro	S43XS70	Brown	L. Tawny	Purple	Black	2914	4.3	I
Dyna-Gro	S46XF31S	Brown	L. Tawny	Purple	Black	2265	4.6	I
Dyna-Gro	S46XS60	Tan	L. Tawny	Purple	Black	2568	4.6	I
Dyna-Gro	S45XF02	Brown	L. Tawny	Purple	Black	2367	4.5	—
Gateway Seed	453RXS	Brown	L. Tawny	Purple	Black	2958	4.5	—
Gateway Seed	465RXS	Brown	L. Tawny	Purple	Black	3346	4.6	—
Gateway Seed	469XF	Brown	Gray	Purple	Buff	2745	4.6	—
Great Heart	GT-4255XS	Tan	L. Tawny	Purple	Black	2650	4.2	I
Great Heart	GT-4344XF	Brown	Gray	Purple	Imp. Black	3100	4.3	I
Great Heart	GT-4677XS	Tan	L. Tawny	Purple	Black	3160	4.6	I
Great Heart	GT-4681XFS	Brown	L. Tawny	Purple		2620	4.6	I
Innvictis	A4632XF	Brown	Gray	White	Buff	2850	4.6	—
Innvictis	A4642XF	Brown	Gray	Purple	Imp. Black	2850	4.6	—
Innvictis	A4662XF	Brown	Gray	Purple	Buff	2850	4.6	—
Innvictis	A4690XF	Brown	L. Tawny	Purple	Black	2850	4.6	—
Revere Seed	4128XFS	—	—	—	—	2646	4.1	—
Revere Seed	4415XF	—	—	—	—	2554	4.4	—
Revere Seed	4526XF	—	—	—	—	3050	4.5	—
Revere Seed	4606XFS	—	—	—	—	2225	4.6	—
MorSoy	MS 4681	Brown	L. Tawny	Purple	Black	2650	4.6	—
NK	NK42-T5XF	Brown	L. Tawny	Purple	Black	2905	4.2	—
NK	NK43-Y9XFS	—	—	—	—	3044	4.3	—
NK	NK44-J4XFS	Brown	Gray	White	Buff	2892	4.4	—
NK	NK45-P9XF	Brown	L. Tawny	Purple	Black	2720	4.5	—
NK	NK43-V8XF	Brown	L. Tawny	Purple	Black	2432	4.3	—
Progeny	P 4200XS	Brown	L. Tawny	Purple	Black	2963	4.2	—
Progeny	P 4202XFS	Brown	Gray	White	Buff	2458	4.2	—
Progeny	P 4691XFS	Brown	Gray	Purple	Imp. Black	2865	4.6	—
Progeny	P 4444RXS	Brown	L. Tawny	Purple	Black	2582	4.4	—
Progeny	P 4505RXS	Brown	L. Tawny	Purple	Black	2930	4.5	—
Progeny	P 4521XFS	Brown	Gray	White	Buff	2440	4.5	—
Progeny	P 4604XFS	Brown	L. Tawny	Purple	Black	2490	4.6	—

[1]Represents an average number of seed per pound; seed may vary according to season and location.
[2]D = determinate; I = indeterminate.
[3]Relative Maturity is an indicator of how this variety or line matures in relationship to other varieties or lines. The whole number refers to Maturity Groups IV and V. The decimal numbers convey the relative earliness or lateness. For example, 4.0 is very early in Group IV, while 4.9 is very late in Group IV.

Table 70. Plant Characteristics of Maturity Group IV Late Xtend Soybeans

Brand	Variety	Color				Seeds[1]	Growth	
		Bloom	Pubescence	Pod wall	Hilum		D/I[2]	RM
Armor	48-F22	Tan	Tawny	White	Black	2630	4.8	I
Armor	49-F37	Brown	L. Tawny	Purple	Black	2895	4.9	I
Armor	48-D25	Tan	L. Tawny	Purple	Black	2890	4.8	I
Asgrow	AG47XF3	Brown	L. Tawny	White	Black	3300	4.7	I
Asgrow	AG49XF3	Brown	L. Tawny	Purple	Black	3120	4.9	I
Asgrow	AG48XF3	Tan	L. Tawny	Purple	Black	2890	4.8	I
Beck's Hybrids	4885XF	—	—	—	—	2575	4.8	—
Delta Grow	48X45	Tan	L. Tawny	Purple	Black	2581	4.8	—
Delta Grow	48XF33/STS	—	—	—	—	2926	4.8	—
Delta Grow	49XF29/STS	Brown	Gray	White	—	2900	4.9	—
Dyna-Gro	S47XF52	Tan	Tawny	White	Black	2526	4.7	I
Dyna-Gro	S48XT90	Tan	L. Tawny	Purple	Black	2480	4.8	I
Dyna-Gro	S49XF82S	Brown	L. Tawny	White	Black	2676	4.9	I
Dyna-Gro	S49XT70	Tan	L. Tawny	White	Black	2481	4.9	I
Dyna-Gro	S47XF23S	Tan	L. Tawny	Purple	Black	2780	4.7	I
Dyna-Gro	S48XF61S	Brown	Tawny	White	Black	2301	4.8	I
Gateway Seed	471XF	Brown	Gray	Purple	Imp. Black	2800	4.7	—
Great Heart	GT-4979X	Tan	L. Tawny	Purple	Black	3050	4.9	I
Great Heart	GT-4828X	Tan	L. Tawny	White	Black	3000	4.8	I
Great Heart	GT-4756XF	Tan	Tawny	Purple	Black	2800	4.7	I
Great Heart	GT-4762XF	Brown	Tawny	Purple	Black	2475	4.7	I
Innvictis	A4742XF	Brown	L. Tawny	White	Black	2850	4.7	—
Innvictis	A4850XF	Brown	Tawny	White	Black	2850	4.8	—
Innvictis	A4950X	Brown	L. Tawny	Purple	Black	2850	4.9	—
Revere Seed	4727XF	—	—	—	—	2736	4.7	—
Revere Seed	4795XS	—	—	—	—	2747	4.7	—
Revere Seed	4806XS	—	—	—	—	2420	4.8	—
Revere Seed	4925XF	—	—	—	—	2933	4.9	—
Revere Seed	4826XFS	—	—	—	—	2685	4.8	—
MorSoy	MS 4846	Brown	L. Tawny	Purple	Black	4846	4.8	—
MorSoy	MS 4852	Brown	L. Tawny	Purple	Black	3050	4.8	—
NK	NK47-Z1XF	—	—	—	—	2875	4.7	—
Progeny	P 4732XF	Brown	Gray	Purple	Buff	2750	4.7	—
Progeny	P 4798XF	Tan	Tawny	Purple	Black	2115	4.7	—
Progeny	P 4844XFS	Brown	L. Tawny	White	Black	2683	4.8	—
Progeny	P 4951XFS	Brown	Gray	White	Buff	2700	4.9	—
Progeny	P 4821RX	Brown	Tawny	Purple	Black	2125	4.8	—
Progeny	P 4806XFS	Brown	L. Tawny	White	Black	2330	4.8	—

[1]Represents an average number of seed per pound; seed may vary according to season and location.
[2]D = determinate; I = indeterminate.
[3]Relative Maturity is an indicator of how this variety or line matures in relationship to other varieties or lines. The whole number refers to Maturity Groups IV and V. The decimal numbers convey the relative earliness or lateness. For example, 4.0 is very early in Group IV, while 4.9 is very late in Group IV.

Table 71. Plant Characteristics of Maturity Group V Early Xtend Soybeans

Brand	Variety	Color				Seeds[1]	Growth	
		Bloom	Pubescence	Pod wall	Hilum		D/I[2]	RM
Armor	51-F88	Tan	L. Tawny	Purple	Black	3170	5.1	I
Asgrow	AG56XF2	Brown	Tawny	White	Black	2720	5.6	D
Asgrow	AG53XF2	Tan	L. Tawny	Purple	Black	2790	5.3	I
Delta Grow	54XF20	Brown	Tawny	Purple	Black	3102	5.4	—
Delta Grow	52XF22/STS	—	—	—	—	3126	5.2	—
Dyna-Gro	S52XT91	Tan	Tawny	Purple	Black	2412	5.2	I
Great Heart	GT-5214X	Brown	Tawny	Purple	Black	2640	5.2	I
Innvictis	A5451XF	Brown	Tawny	Purple	Black	2850	5.4	—
Revere Seed	5029XF	—	—	—	—	2428	5	—
Revere Seed	5386X	—	—	—	—	2397	5.3	—
Revere Seed	5588X	—	—	—	—	2950	5.5	—
Revere Seed	5614XF	—	—	—	—	2838	5.6	—
NK	NK55-T2XF	Brown	Tawny	White	Black	2701	5.5	—
Progeny	P 5056XFS	Brown	L. Tawny	White	Buff	2350	5.0	—
Progeny	P 5150XFS	Brown	L. Tawny	Purple	Black	2764	5.1	—
Progeny	P 5016RXS	Brown	L. Tawny	Purple	Black	2635	5.0	—
Progeny	P 5252RX	Tan	Gray	White	Buff	3100	5.2	—
Progeny	P 5554RX	Tan	Tawny	White	Black	2463	5.5	—

[1]Represents an average number of seed per pound; seed may vary according to season and location.
[2]D = determinate; I = indeterminate.
[3]Relative Maturity is an indicator of how this variety or line matures in relationship to other varieties or lines. The whole number refers to Maturity Groups IV and V. The decimal numbers convey the relative earliness or lateness. For example, 4.0 is very early in Group IV, while 4.9 is very late in Group IV.

Table 72. Plant Characteristics of Maturity Group IV Enlist Soybeans

Brand	Variety	Color				Seeds[1]	Growth	
		Bloom	Pubescence	Pod wall	Hilum		D/I[2]	RM
Delta Grow	45E33	Brown	L. Tawny	White	Brown	2933	4.5	—
Delta Grow	46E10	Brown	Gray	White	Buff	2848	4.6	—
Delta Grow	48E59	Brown	Gray	White	Buff	2897	4.8	—
Delta Grow	48E60	—	—	—	—	2849	4.8	—
Revere Seed	Innotech 4773E3	—	—	—	—	3200	4.7	—
Progeny	P 4775E3S	Brown	Gray	Purple	Imp. Black	2452	4.7	—

[1]Represents an average number of seed per pound; seed may vary according to season and location.
[2]D = determinate; I = indeterminate.
[3]Relative Maturity is an indicator of how this variety or line matures in relationship to other varieties or lines. The whole number refers to Maturity Groups IV and V. The decimal numbers convey the relative earliness or lateness. For example, 4.0 is very early in Group IV, while 4.9 is very late in Group IV.

Table 73. Plant Characteristics of Maturity Group V Enlist Soybeans

Brand	Variety	Color				Seeds[1]	Growth	
		Bloom	Pubescence	Pod wall	Hilum		D/I[2]	RM
Delta Grow	53E30	—	—	—	—	3126	5.3	—
Delta Grow	52E80	—	—	—	—	2734	5.2	—

[1]Represents an average number of seed per pound; seed may vary according to season and location.
[2]D = determinate; I = indeterminate.
[3]Relative Maturity is an indicator of how this variety or line matures in relationship to other varieties or lines. The whole number refers to Maturity Groups IV and V. The decimal numbers convey the relative earliness or lateness. For example, 4.0 is very early in Group IV, while 4.9 is very late in Group IV.

Table 74. Plant Characteristics of Maturity Group IV Liberty Link, Roundup Ready and Conventional Soybeans

Brand	Variety	Color				Seeds[1]	Growth	
		Bloom	Pubescence	Pod wall	Hilum		D/I[2]	RM
Uni. Of Missouri	S19-3530RY	—	—	—	Brown	3150	4.3	I
Uni. Of Missouri	S16-13165C	—	—	—	Imp. Black	2696	4.7	I
Uni. Of Missouri	S17-2066C	—	—	—	Black	3240	4.9	I

[1]Represents an average number of seed per pound; seed may vary according to season and location.
[2]D = determinate; I = indeterminate.
[3]Relative Maturity is an indicator of how this variety or line matures in relationship to other varieties or lines. The whole number refers to Maturity Groups IV and V. The decimal numbers convey the relative earliness or lateness. For example, 4.0 is very early in Group IV, while 4.9 is very late in Group IV.

Table 75. Plant Characteristics of Maturity Group V Liberty Link, Roundup Ready and Conventional Soybeans

Brand	Variety	Color				Seeds[1]	Growth	
		Bloom	Pubescence	Pod wall	Hilum		D/I[2]	RM
Uni. Of Missouri	S18-6097C	—	—	—	Black	3360	5	SD
Uni. Of Missouri	S17-2509C	—	—	—	Black	2636	5	SD
Uni. Of Missouri	S18-6328C	—	—	—	Black	3065	5.1	SD

[1]Represents an average number of seed per pound; seed may vary according to season and location.
[2]D = determinate; I = indeterminate.
[3]Relative Maturity is an indicator of how this variety or line matures in relationship to other varieties or lines. The whole number refers to Maturity Groups IV and V. The decimal numbers convey the relative earliness or lateness. For example, 4.0 is very early in Group IV, while 4.9 is very late in Group IV.

2022 SOYBEAN VARIETY TRIAL STEM CANKER REPORT

All of the soybean entries in the 2022 variety trials were evaluated for their reaction to the stem canker fungus (*Diaporthe aspalathi*). Trials consisted of single rows containing each cultivar planted in 10-foot plots and replicated four times in Stoneville, Mississippi. Within each row, 10 plants were inoculated with a single toothpick infested with the fungus that causes stem canker. Plants were inoculated approximately 5–6 weeks after planting, between the V5 and V6 growth stages. Evaluations of stem canker severity were conducted between R6 and R6.5 by observing the stem of each inoculated plant for the presence of a canker. Observations of stem canker severity on each variety were conducted using a modified 0–9 scale. Information in each of the following tables contains the analyzed stem canker rating as an average of the response of the inoculated plants for each entry (n=40 observations/entry, 10 plants each plot [variety], replicated four times). In addition, each cultivar includes a stem canker designation: R = resistant. (0.0–2.9), MR = moderately resistant (3.0–4.9), MS = moderately susceptible (5.0–6.9), and S = susceptible (7.0–9.0). In field situations where stem canker has been observed in the past, plant cultivars that have been tested in our production system and observed to contain resistance to stem canker to reduce the potential yield losses associated with stem canker. In addition, keep in mind that observations of stem canker tend to be more obvious when the environment is conducive to disease development (e.g., see the Clarksdale yield response from 2017). Therefore, over time, and in years when the environment may not be conducive to the development of stem canker, it is possible that the response of a given variety to stem canker could be different between years. As one example to the potential environment, consider the response of the "checks," which are included to verify that inoculation did in fact work.

Note: Some entries were added to the stem canker inoculation trials that may not be included in the official variety trial reports from a standpoint of yield or disease response from the specific OVT locations throughout the state. Varieties that were added to each set are noted in each corresponding table.

Table 76. Response of Maturity Group IV Early Xtend Soybean Cultivars to Stem Canker, 2022.

Cultivar[1]	Stem canker rating[2,3]	Cultivar designation[4]
J77-339 (check)	4.9 a	MR/MS
Petrus 4916GT (check)	5.1 a	MS
Armor 44-D49	0.0 b	R
Armor 45-F02	0.4 b	R
Armor 46-F13	0.0 b	R
Armor 46-F96	0.0 b	R
Asgrow AG42XF2	0.1 b	R
*Asgrow AG43X0	0.0 b	R
*Asgrow AG43XF2	0.0 b	R
Asgrow AG45XF3	0.0 b	R
Asgrow AG46X0	0.0 b	R
Asgrow AG46XF3	7.8 a	S
*Beck's Hybrids 4443XF	0.0 b	R
Beck's Hybrids 4553XF	0.0 b	R
Delta Grow 44XF41	0.0 b	R
Delta Grow 46X65STS	0.0 b	R
Delta Grow 46XF18	0.0 b	R
Dyna-Gro S43XS70	0.0 b	R
Dyna-Gro S45XF02	0.2 b	R
Dyna-Gro S46XF31S	0.0 b	R
Dyna-Gro S46XS60	0.1 b	R
Gateway Seed 453RXS	0.0 b	R
Gateway Seed 465RXS	0.2 b	R
Gateway Seed 469XF	0.0 b	R
Great Heart Seed GT-4255XS	0.0 b	R
Great Heart Seed GT-4344XF	0.2 b	R
Great Heart Seed GT-4677XS	0.0 b	R
Great Heart Seed GT-4681XFS	0.0 b	R
Innvictis A4632XF	5.4 a	MS
Innvictis A4642XF	0.1 b	R
Innvictis A4662XF	0.0 b	R
Innvictis A4690XF	0.0 b	R
*Local Seed LS4299XS	0.0 b	R
Local Seed LS4128XFS	0.0 b	R
Local Seed LS4415XF	0.0 b	R
Local Seed LS4526XF	0.0 b	R
Local Seed LS4606XFS	0.0 b	R
MorSoy MS 4681	0.0 b	R
*NK NK39-T5E3S	0.0 b	R
NK NK42-T5XF	0.0 b	R
NK NK43-V8XF	0.0 b	R
NK NK43-Y9XFS	0.0 b	R
NK NK44-J4XFS	0.0 b	R
NK NK45-P9XF	0.0 b	R
NK 46-B4XFS	0.3 b	R
Progeny P 4200XS	0.0 b	R
Progeny P 4202XFS	0.0 b	R
Progeny P 4444RXS	0.2 b	R
Progeny P 4505RXS	0.0 b	R
Progeny P 4521XFS	0.0 b	R
Progeny P 4604XFS	0.0 b	R
Progeny P 4691XFS	0.0 b	R
MSE	531.2	—
CV (%)	22.2	—
P-value for F-statistic	<0.0001	—

[1]An asterisk denotes an entry that was added to supplement the set of entries evaluated through toothpick inoculation. Information from the given entry will only be included in these data tables and may not represent the greater set of data generated by the Mississippi State University Official Variety Testing Program, as this entry was not provided for comparison in the greater 2022 soybean OVT program conducted throughout Mississippi.
[2]Stem Canker Reaction — Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0–9 scale based on lesion severity and are presented as the average for the 10 plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant's length received a score of 9.
[3]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (*P*=0.05).
[4]By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible, and 7 = Susceptible.

Table 77. Response of Maturity Group IV Late Xtend Soybean Cultivars to Stem Canker, 2022.

Cultivar[1]	Stem canker rating[2,3]	Cultivar designation[4]
J77-339 (check)	4.9 a	MR/MS
Petrus 4916 GT (check)	6.9 a	MS/S
Armor 48-D25	0.2 bc	R
Armor 48-F22	0.2 bc	R
Armor 49-F37	0.0 c	R
Asgrow AG47XF3	0.0 c	R
Asgrow AG48XF3	0.0 c	R
Asgrow AG48X9	0.0 c	R
Asgrow AG49XF3	0.2 bc	R
Beck's Hybrids 4885XF	0.0 c	R
Delta Grow 48X45	0.0 c	R
Delta Grow 48XF33/STS	0.0 c	R
Delta Grow 49XF29/STS	0.0 c	R
Dyna-Gro S47XF23S	0.0 c	R
Dyna-Gro S47XF52	0.0 c	R
Dyna-Gro S48XF61S	0.0 c	R
Dyna-Gro S48XT90	0.2 bc	R
Dyna-Gro S49XF43S	0.0 c	R
Dyna-Gro S49XF82S	6.0 a	MS
Dyna-Gro S49XT70	0.3 b	R
Gateway Seed 471XF	0.0 c	R
Great Heart Seed GT-4756XF	0.0 c	R
Great Heart Seed GT-4762XF	0.0 c	R
Great Heart Seed GT-4828X	0.1 bc	R
Great Heart Seed GT-4979X	0.0 c	R
Innvictis A4742XF	0.0 c	R
Innvictis A4850XF	0.0 c	R
Innvictis A4950X	0.0 c	R
Local Seed LS4727XF	0.0 c	R
Local Seed LS4795XS	0.0 c	R
*Local Seed LS4805 XFS	0.0 c	R
Local Seed LS4806XS	0.0 c	R
Local Seed LS4826XFS	0.0 c	R
Local Seed LS4925XF	0.0 c	R
MorSoy MS 4846	0.1 bc	R
MorSoy MS 4852	5.3 a	MS
NK NK47-Z1XF	0.0 c	R
NK 48-H3XFS	0.0 c	R
*NK S49-F5X	0.0 c	R
Pioneer P47A64X	0.0 c	R
*Pioneer P48A32X	0.0 bc	R
Progeny P 4732XF	0.0 c	R
Progeny P 4798XF	0.0 c	R
Progeny P 4806XFS	0.0 bc	R
Progeny P 4821RX	0.0 c	R
Progeny P 4844XFS	0.0 c	R
Progeny P 4951XFS	0.0 c	R
MSE	364.6	—
CV (%)	20.6	—
P-value for F-statistic	<0.0001	—

[1]An asterisk denotes an entry that was added to supplement the set of entries evaluated through toothpick inoculation. Information from the given entry will only be included in these data tables and may not represent the greater set of data generated by the Mississippi State University Official Variety Testing Program, as this entry was not provided for comparison in the greater 2022 soybean OVT program conducted throughout Mississippi.
[2]Stem Canker Reaction — Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0–9 scale based on lesion severity and are presented as the average for the 10 plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant's length received a score of 9.
[3]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (*P*=0.05).
[4]By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible, and 7 = Susceptible.

Table 78. Response of Maturity Group IV Enlist Soybean Cultivars to Stem Canker, 2022.

Cultivar[1]	Stem canker rating[2,3]	Cultivar designation[4]
J77-339 (check)	5.7 a	MS
Petrus 4916 GT (check)	5.3 a	MS
Delta Grow 45E33	0.0 b	R
Delta Grow 46E10	0.0 b	R
*Delta Grow 47E20	0.0 b	R
Delta Grow 48E59	0.0 b	R
Delta Grow 48E60	0.1 b	R
*Dyna-Gro S46ES91	0.0 b	R
*Dyna-Gro S49EN12	0.0 b	R
Local Seed LS4737E3	0.2 b	R
*NK39-T5E3S	0.0 b	R
*NK40-P5E3	0.0 b	R
*NK44-Q5E3S	0.0 b	R
*NK 45-V9ES	0.0 b	R
*NK49-T6E3S	0.0 b	R
*Pioneer 42A84E	0.0 b	R
*Pioneer 44A91E	0.0 b	R
*Pioneer 45A79E	0.0 b	R
*Pioneer 46A09E	0.0 b	R
*Pioneer 46A67E	2.3 a	R
*Pioneer 48A14E	0.4 b	R
Progeny P 4775E3S	0.0 b	R
*Stine 46EB22	0.0 b	R
*Stine 46EE20	0.0 b	R
*Stine 47EB23	0.0 b	R
*Stine 47EB32	0.0 b	R
*Stine 48EE20	0.0 b	R
MSE	89.1	—
CV (%)	17.5	—
P-value for F-statistic	<0.0001	—

[1]An asterisk denotes an entry that was added to supplement the set of entries evaluated through toothpick inoculation. Information from the given entry will only be included in these data tables and may not represent the greater set of data generated by the Mississippi State University Official Variety Testing Program, as this entry was not provided for comparison in the greater 2022 soybean OVT program conducted throughout Mississippi.
[2]Stem Canker Reaction — Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0–9 scale based on lesion severity and are presented as the average for the 10 plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant's length received a score of 9.
[3]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (*P*=0.05).
[4]By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible, and 7 = Susceptible.

Table 79. Response of Maturity Group IV Early Conventional and RoundUp Ready Soybean Cultivars to Stem Canker, 2022.

Cultivar[1]	Stem canker rating[2,3]	Cultivar designation[4]
J77-339 (check)	6.5 b	MS
Petrus 4916GT (check)	7.1 ab	S
R18-10379 (check)	7.6 a	S
R18-10376 (check)	7.7 a	S
Univ. of Missouri S19-3530RY	2.7 c	R
Univ. of Missouri S16-13165C	0.0 d	R
Univ. of Missouri S17-2066C	0.0 d	R
MSE	13.0	—
CV (%)	24.8	—
P-value for F-statistic	<0.0001	—

[1]An asterisk denotes an entry that was added to supplement the set of entries evaluated through toothpick inoculation. Information from the given entry will only be included in these data tables and may not represent the greater set of data generated by the Mississippi State University Official Variety Testing Program, as this entry was not provided for comparison in the greater 2022 soybean OVT program conducted throughout Mississippi.
[2]Stem Canker Reaction — Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0–9 scale based on lesion severity and are presented as the average for the 10 plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant's length received a score of 9.
[3]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (*P*=0.05).
[4]By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible, and 7 = Susceptible.

Table 80. Response of Maturity Group V Early Xtend Soybean Cultivars to Stem Canker, 2022.

Cultivar[1]	Stem canker rating[2,3]	Cultivar designation[4]
J77-339 (check)	5.1 a	MS
Petrus 4916GT (check)	5.7 a	MS
Armor 51-F88	0.2 bc	R
Asgrow AG53XF2	0.0 c	R
Asgrow AG56XF2	0.0 c	R
Delta Grow 52XF22/STS	0.0 c	R
Delta Grow 54XF20	0.2 bc	R
Dyna-Gro S52XT91	0.0 c	R
*Dyna-Gro S56XT99	0.0 c	R
Great Heart GT-5214X	0.0 c	R
Innvictis A5451XF	0.0 c	R
Local Seed LS5029XF	0.0 c	R
Local Seed LS5119XF	0.0 c	R
Local Seed LS5386X	0.0 c	R
Local Seed LS5588X	0.0 c	R
Local Seed LS5614XF	0.0 c	R
*NK NKS53-F7X	0.0 c	R
NK NK55-T2XF	0.0 c	R
*Pioneer P53A67X	0.7 b	R
Progeny P 5016RXS	0.4 bc	R
Progeny P 5056XFS	0.0 c	R
Progeny P 5150XFS	0.0 c	R
Progeny P 5252RX	0.0 c	R
Progeny P 5554RX	0.0 c	R
MSE	83.3	—
CV (%)	18.8	—
P-value for F-statistic	<0.0001	—

[1]An asterisk denotes an entry that was added to supplement the set of entries evaluated through toothpick inoculation. Information from the given entry will only be included in these data tables and may not represent the greater set of data generated by the Mississippi State University Official Variety Testing Program, as this entry was not provided for comparison in the greater 2022 soybean OVT program conducted throughout Mississippi.
[2]Stem Canker Reaction — Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0–9 scale based on lesion severity and are presented as the average for the 10 plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant's length received a score of 9.
[3]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (*P*=0.05).
[4]By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible, and 7 = Susceptible.

Table 81. Response of Maturity Group V Enlist Soybean Cultivars to Stem Canker, 2022.

Cultivar[1]	Stem canker rating[2,3]	Cultivar designation[4]
J77-339 (check)	6.0 a	MS
Petrus 4916GT (check)	6.3 a	MS
Delta Grow 52E80	0.0 b	R
Delta Grow 53E30	0.0 b	R
*NK NK52-D6E3	0.0 b	R
*Pioneer P52A14SE	0.0 b	R
*Pioneer 53T90E	0.0 b	R
Pioneer 56A71E	0.0 b	R
*Progeny Ag P 5521 E3	0.0 b	R
MSE	1.6	—
CV (%)	6.8	—
P-value for F-statistic	<0.0001	—

[1]An asterisk denotes an entry that was added to supplement the set of entries evaluated through toothpick inoculation. Information from the given entry will only be included in these data tables and may not represent the greater set of data generated by the Mississippi State University Official Variety Testing Program, as this entry was not provided for comparison in the greater 2022 soybean OVT program conducted throughout Mississippi.
[2]Stem Canker Reaction — Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0–9 scale based on lesion severity and are presented as the average for the 10 plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant's length received a score of 9.
[3]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (*P*=0.05).
[4]By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible, and 7 = Susceptible.

Table 82. Response of Maturity Group V Conventional Soybean Cultivars to Stem Canker, 2022.

Cultivar[1]	Stem canker rating[2,3]	Cultivar designation[4]
J77-339 (check)	4.7 a	MR
Petrus 4916GT (check)	6.5 a	MS
Univ. of Missouri S18-6097C	0.2 b	R
Univ. of Missouri S17-2509C	0.0 b	R
Univ. of Missouri S18-6328C	0.2 b	R
MSE	4.4	—
CV (%)	19.9	—
P-value for F-statistic	<0.0001	—

[1]An asterisk denotes an entry that was added to supplement the set of entries evaluated through toothpick inoculation. Information from the given entry will only be included in these data tables and may not represent the greater set of data generated by the Mississippi State University Official Variety Testing Program, as this entry was not provided for comparison in the greater 2022 soybean OVT program conducted throughout Mississippi.
[2]Stem Canker Reaction — Ten plants per plot were inoculated with fungus-infested toothpicks. Ratings were given by individual plant reaction using a modified 0–9 scale based on lesion severity and are presented as the average for the 10 plants. Where a lesion did not appear, a rating of 0 (Resistant) was assessed. Ratings were assessed based on the presence of a lesion whereby a reaction that produced a visible lesion that did not expand up the length of the stem was assessed as a 1. Dead plants with lesions that extended up most of the plant's length received a score of 9.
[3]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (*P*=0.05).
[4]By using the Mean Disease Rating, a standardized designation system is as follows: 1 = Resistant, 3 = Moderately Resistant, 5 = Moderately Susceptible, and 7 = Susceptible.

SUMMARY OF DAMAGED KERNEL TOTALS

Table 83. Summary of Damage Kernel Total (DKT) by Variety for MG IV Enlist for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	MG	Tech.	Cystal Springs (not irrigated)			Stoneville, loam (Irrigated)			Verona (not irrigated)			Average
				Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	DKT %
Delta Grow	45E33	IV	IV Enlist	4/27	10/5	7.0	5/9	9/28	2.3	4/22	10/6	3.3	4.2
Delta Grow	48E60	IV	IV Enlist	4/27	10/5	3.6	5/9	9/28	2.1	4/22	10/6	5.9	3.9
Revere Seed	Innotech 4773E3	IV	IV Enlist	4/27	10/5	8.6	5/9	9/28	2.5	4/22	10/6	3.0	4.7
Delta Grow	46E10	IV	IV Enlist	4/27	10/5	7.4	5/9	9/28	3.0	4/22	10/6	5.2	5.2
Delta Grow	48E59	IV	IV Enlist	4/27	10/5	2.3	5/9	9/28	1.6	4/22	10/6	4.7	2.9
Progeny Ag	4775E3S	IV	IV Enlist	4/27	10/5	4.0	5/9	9/28	3.1	4/22	10/6	2.4	3.2

Table 84. Summary of Damage Kernel Total (DKT) by Variety for MG V Enlist for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	MG	Tech.	Cystal Springs (not irrigated)			Stoneville, loam (Irrigated)			Verona (not irrigated)			Average
				Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	DKT %
Delta Grow	52E80	V	V Enlist	4/27	10/5	2.8	5/9	9/28	3.1	4/22	10/6	2.7	2.9
Delta Grow	53E30	V	V Enlist	4/27	10/5	6.9	5/9	9/28	5.7	4/22	10/6	2.7	5.1

Table 85. Summary of Damage Kernel Total (DKT) by Variety for MG IV Early Xtend/XtendFlex for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	MG	Tech.	Cystal Springs (not irrigated)			Stoneville, loam (Irrigated)			Verona (not irrigated)			Average
				Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	DKT %
				date	date	%	date	date	%	date	date	%	%
Armor	44-D49	IV Early	Xtend/XtendFlex	4/27	10/5	7.8	5/9	9/28	1.6	4/22	10/6	7.6	5.7
Armor	45-F02	IV Early	Xtend/XtendFlex	4/27	10/5	3.4	5/9	9/28	1.3	4/22	10/6	4.1	2.9
Armor	46-F13	IV Early	Xtend/XtendFlex	4/27	10/5	9.3	5/9	9/28	1.8	4/22	10/6	4.0	5.0
Armor	46-F96	IV Early	Xtend/XtendFlex	4/27	10/5	6.5	5/9	9/28	1.4	4/22	10/6	9.1	5.7
Asgrow	AG42XF2	IV Early	Xtend/XtendFlex	4/27	10/5	9.3	5/9	9/28	1.1	4/22	10/6	7.0	5.8
Asgrow	AG45XF3	IV Early	Xtend/XtendFlex	4/27	10/5	6.4	5/9	9/28	0.9	4/22	10/6	3.1	3.5
Asgrow	AG46XF3	IV Early	Xtend/XtendFlex	4/27	10/5	5.2	5/9	9/28	1.0	4/22	10/6	4.4	3.5
Beck's Hybrids	4553XF	IV Early	Xtend/XtendFlex	4/27	10/5	6.3	5/9	9/28	1.1	4/22	10/6	3.4	3.6
Delta Grow	44XF41	IV Early	Xtend/XtendFlex	4/27	10/5	8.6	5/9	9/28	0.9	4/22	10/6	9.0	6.2
Delta Grow	46XF18	IV Early	Xtend/XtendFlex	4/27	10/5	6.5	5/9	9/28	1.9	4/22	10/6	12.9	7.1
Dyna-Gro	S43XS70	IV Early	Xtend/XtendFlex	4/27	10/5	5.8	5/9	9/28	1.4	4/22	10/6	5.0	4.1
Dyna-Gro	S45XF02	IV Early	Xtend/XtendFlex	4/27	10/5	4.7	5/9	9/28	0.3	4/22	10/6	3.6	2.9
Dyna-Gro	S46XF31S	IV Early	Xtend/XtendFlex	4/27	10/5	7.7	5/9	9/28	0.6	4/22	10/6	5.5	4.6
Gateway Seed	453RXS	IV Early	Xtend/XtendFlex	4/27	10/5	7.1	5/9	9/28	1.5	4/22	10/6	7.4	5.3
Gateway Seed	465RXS	IV Early	Xtend/XtendFlex	4/27	10/5	5.3	5/9	9/28	1.6	4/22	10/6	3.3	3.4
Gateway Seed	469XF	IV Early	Xtend/XtendFlex	4/27	10/5	6.1	5/9	9/28	1.4	4/22	10/6	7.3	4.9
Great Heart Seed	GT-4344XF	IV Early	Xtend/XtendFlex	4/27	10/5	6.4	5/9	9/28	0.6	4/22	10/6	6.1	4.4
Great Heart Seed	GT-4681XFS	IV Early	Xtend/XtendFlex	4/27	10/5	14.4	5/9	9/28	0.6	4/22	10/6	9.2	8.1
Innvictis	A4632XF	IV Early	Xtend/XtendFlex	4/27	10/5	8.5	5/9	9/28	0.7	4/22	10/6	8.7	6.0
Innvictis	A4642XF	IV Early	Xtend/XtendFlex	4/27	10/5	6.9	5/9	9/28	1.5	4/22	10/6	4.6	4.3
Innvictis	A4662XF	IV Early	Xtend/XtendFlex	4/27	10/5	4.8	5/9	9/28	0.9	4/22	10/6	5.3	3.7
Innvictis Seed	A 4690XF	IV Early	Xtend/XtendFlex	4/27	10/5	6.9	5/9	9/28	0.6	4/22	10/6	5.6	4.4
Revere Seed	4128XFS	IV Early	Xtend/XtendFlex	4/27	10/5	8.5	5/9	9/28	1.7	4/22	10/6	3.7	4.6
Revere Seed	4526XF	IV Early	Xtend/XtendFlex	4/27	10/5	4.9	5/9	9/28	1.3	4/22	10/6	2.7	3.0
Revere Seed	4415XF	IV Early	Xtend/XtendFlex	4/27	10/5	6.6	5/9	9/28	0.6	4/22	10/6	2.9	3.4
Revere Seed	4606XFS	IV Early	Xtend/XtendFlex	4/27	10/5	10.3	5/9	9/28	1.0	4/22	10/6	5.6	5.6
MorSoy	MS 4681 RXT	IV Early	Xtend/XtendFlex	4/27	10/5	4.9	5/9	9/28	1.9	4/22	10/6	4.3	3.7
NK Brand	NK42-T5XF	IV Early	Xtend/XtendFlex	4/27	10/5	10.0	5/9	9/28	3.5	4/22	10/6	7.1	6.9
NK Brand	NK43-V8XF	IV Early	Xtend/XtendFlex	4/27	10/5	9.5	5/9	9/28	2.5	4/22	10/6	15.0	9.0
NK Brand	NK43-Y9XFS	IV Early	Xtend/XtendFlex	4/27	10/5	10.9	5/9	9/28	0.7	4/22	10/6	11.4	7.7
NK Brand	NK44-J4XFS	IV Early	Xtend/XtendFlex	4/27	10/5	10.6	5/9	9/28	1.0	4/22	10/6	15.7	9.1
NK Brand	NK45-P9XF	IV Early	Xtend/XtendFlex	4/27	10/5	8.3	5/9	9/28	1.2	4/22	10/6	6.3	5.3
Progeny	P 4200XS	IV Early	Xtend/XtendFlex	4/27	10/5	7.7	5/9	9/28	1.5	4/22	10/6	10.3	6.5
Progeny	P 4202XFS	IV Early	Xtend/XtendFlex	4/27	10/5	4.4	5/9	9/28	1.4	4/22	10/6	4.0	3.3
Progeny	P 4505RXS	IV Early	Xtend/XtendFlex	4/27	10/5	8.3	5/9	9/28	1.4	4/22	10/6	6.0	5.2
Progeny	P 4604XFS	IV Early	Xtend/XtendFlex	4/27	10/5	6.3	5/9	9/28	1.6	4/22	10/6	4.1	4.0
Progeny	P 4691XFS	IV Early	Xtend/XtendFlex	4/27	10/5	5.0	5/9	9/28	1.3	4/22	10/6	7.4	4.6
Progeny	P4444RXS	IV Early	Xtend/XtendFlex	4/27	10/5	6.4	5/9	9/28	1.0	4/22	10/6	4.7	4.0
Progeny	P4521XFS	IV Early	Xtend/XtendFlex	4/27	10/5	6.1	5/9	9/28	1.0	4/22	10/6	2.0	3.0

Table 86. Summary of Damage Kernel Total (DKT) by Variety for MG IV Late Xtend/XtendFlex for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	MG	Tech.	Cystal Springs (not irrigated)			Stoneville, loam (Irrigated)			Verona (not irrigated)			Average
				Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	DKT %
Armor	48-D25	IV Late	Xtend/XtendFlex	4/27	10/5	6.4	5/9	9/28	1.1	4/22	10/6	2.0	3.2
Armor	48-F22	IV Late	Xtend/XtendFlex	4/27	10/5	8.1	5/9	9/28	3.1	4/22	10/6	6.2	5.8
Armor	49-F37	IV Late	Xtend/XtendFlex	4/27	10/5	7.6	5/9	9/28	2.1	4/22	10/6	5.5	5.1
Asgrow	AG47XF3	IV Late	Xtend/XtendFlex	4/27	10/5	7.1	5/9	9/28	1.8	4/22	10/6	2.7	3.9
Asgrow	AG48XF3	IV Late	Xtend/XtendFlex	4/27	10/5	4.0	5/9	9/28	0.9	4/22	10/6	2.4	2.4
Asgrow	AG49XF3	IV Late	Xtend/XtendFlex	4/27	10/5	9.3	5/9	9/28	1.5	4/22	10/6	4.6	5.1
Beck's Hybrids	4885XF	IV Late	Xtend/XtendFlex	4/27	10/5	13.5	5/9	9/28	0.6	4/22	10/6	6.1	6.7
Delta Grow	46X65/STS	IV Late	Xtend/XtendFlex	4/27	10/5	6.7	5/9	9/28	0.7	4/22	10/6	2.6	3.3
Delta Grow	48X45	IV Late	Xtend/XtendFlex	4/27	10/5	13.0	5/9	9/28	4.4	4/22	10/6	3.5	7.0
Delta Grow	48X45	IV Late	Xtend/XtendFlex	4/27	10/5	9.0	5/9	9/28	1.8	4/22	10/6	4.2	5.0
Delta Grow	49XF29/STS	IV Late	Xtend/XtendFlex	4/27	10/5	5.6	5/9	9/28	2.3	4/22	10/6	3.5	3.8
Dyna-Gro	S46XS60	IV Late	Xtend/XtendFlex	4/27	10/5	5.4	5/9	9/28	1.3	4/22	10/6	3.7	3.5
Dyna-Gro	S47XF23S	IV Late	Xtend/XtendFlex	4/27	10/5	6.9	5/9	9/28	0.5	4/22	10/6	2.1	3.2
Dyna-Gro	S47XF52	IV Late	Xtend/XtendFlex	4/27	10/5	6.1	5/9	9/28	2.2	4/22	10/6	1.8	3.4
Dyna-Gro	S48XF61S	IV Late	Xtend/XtendFlex	4/27	10/5	7.5	5/9	9/28	2.2	4/22	10/6	6.3	5.3
Dyna-Gro	S48XT90	IV Late	Xtend/XtendFlex	4/27	10/5	8.3	5/9	9/28	1.0	4/22	10/6	3.4	4.2
Dyna-Gro	S49XF82S	IV Late	Xtend/XtendFlex	4/27	10/5	1.9	5/9	9/28	3.2	4/22	10/6	2.7	2.6
Dyna-Gro	S49XT70	IV Late	Xtend/XtendFlex	4/27	10/5	2.0	5/9	9/28	1.9	4/22	10/6	1.6	1.8
Gateway Seed	471XF	IV Late	Xtend/XtendFlex	4/27	10/5	10.1	5/9	9/28	1.6	4/22	10/6	4.5	5.4
Great Heart	GT-4255XS	IV Late	Xtend/XtendFlex	4/27	10/5	6.5	5/9	9/28	1.2	4/22	10/6	10.4	6.0
Great Heart	GT-4677XS	IV Late	Xtend/XtendFlex	4/27	10/5	10.8	5/9	9/28	0.5	4/22	10/6	6.3	5.9
Great Heart	GT-4979X	IV Late	Xtend/XtendFlex	4/27	10/5	3.7	5/9	9/28	2.6	4/22	10/6	3.0	3.1
Great Heart Seed	GT-4756XF	IV Late	Xtend/XtendFlex	4/27	10/5	6.2	5/9	9/28	1.1	4/22	10/6	2.3	3.2
Great Heart Seed	GT-4762XF	IV Late	Xtend/XtendFlex	4/27	10/5	5.7	5/9	9/28	1.8	4/22	10/6	5.4	4.3
Great Heart Seed	GT-4828X	IV Late	Xtend/XtendFlex	4/27	10/5	10.0	5/9	9/28	1.9	4/22	10/6	5.5	5.8
Innvictis	A4742XF	IV Late	Xtend/XtendFlex	4/27	10/5	6.9	5/9	9/28	0.5	4/22	10/6	3.9	3.8
Innvictis Seed	A 4850XF	IV Late	Xtend/XtendFlex	4/27	10/5	7.6	5/9	9/28	3.2	4/22	10/6	5.5	5.4
Innvictis Seed	A 4950X	IV Late	Xtend/XtendFlex	4/27	10/5	5.8	5/9	9/28	1.7	4/22	10/6	4.3	3.9
Revere Seed	4727XF	IV Late	Xtend/XtendFlex	4/27	10/5	7.5	5/9	9/28	1.4	4/22	10/6	3.2	4.0
Revere Seed	4795XS	IV Late	Xtend/XtendFlex	4/27	10/5	8.7	5/9	9/28	1.1	4/22	10/6	3.0	4.3
Revere Seed	4826XFS	IV Late	Xtend/XtendFlex	4/27	10/5	7.4	5/9	9/28	0.6	4/22	10/6	3.0	3.7
Revere Seed	4925XF	IV Late	Xtend/XtendFlex	4/27	10/5	5.4	5/9	9/28	3.0	4/22	10/6	1.2	3.2
Revere Seed	4806XS	IV Late	Xtend/XtendFlex	4/27	10/5	5.2	5/9	9/28	2.3	4/22	10/6	2.6	3.4
MorSoy	MS 4846 RXT	IV Late	Xtend/XtendFlex	4/27	10/5	6.0	5/9	9/28	1.2	4/22	10/6	3.4	3.5
MorSoy	MS 4852	IV Late	Xtend/XtendFlex	4/27	10/5	5.3	5/9	9/28	1.8	4/22	10/6	2.4	3.2
NK Brand	NK47-Z1XF	IV Late	Xtend/XtendFlex	4/27	10/5	5.5	5/9	9/28	2.4	4/22	10/6	1.9	3.3
Progeny	P 4732XF	IV Late	Xtend/XtendFlex	4/27	10/5	6.1	5/9	9/28	1.8	4/22	10/6	14.0	7.3
Progeny	P 4798XF	IV Late	Xtend/XtendFlex	4/27	10/5	4.4	5/9	9/28	1.9	4/22	10/6	2.8	3.0
Progeny	P 4806XFS	IV Late	Xtend/XtendFlex	4/27	10/5	9.2	5/9	9/28	1.5	4/22	10/6	5.8	5.5
Progeny	P 4821RX	IV Late	Xtend/XtendFlex	4/27	10/5	8.8	5/9	9/28	1.8	4/22	10/6	6.6	5.7
Progeny	P 4844XFS	IV Late	Xtend/XtendFlex	4/27	10/5	5.1	5/9	9/28	0.9	4/22	10/6	4.2	3.4
Progeny	P 4951XFS	IV Late	Xtend/XtendFlex	4/27	10/5	5.3	5/9	9/28	1.1	4/22	10/6	4.1	3.5

Table 87. Summary of Damage Kernel Total (DKT) by Variety for MG V Early Xtend/XtendFlex for the 2022 Mississippi Soybean Variety Trials.

Brand	Variety	MG	Tech.	Cystal Springs (not irrigated)			Stoneville, loam (Irrigated)			Verona (not irrigated)			Average
				Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	Planting date	Harvest date	DKT %	DKT %
Armor	51-F88	V Early	Xtend/XtendFlex	4/27	10/5	5.6	5/9	9/28	2.6	4/22	10/6	4.4	4.2
Asgrow	AG53XF2	V Early	Xtend/XtendFlex	4/27	10/5	5.2	5/9	9/28	3.4	4/22	10/6	3.1	3.9
Asgrow	AG56XF2	V Early	Xtend/XtendFlex	4/27	10/5	3.2	5/9	9/28	1.4	4/22	10/6	1.0	1.9
Delta Grow	52XF22/STS	V Early	Xtend/XtendFlex	4/27	10/5	7.6	5/9	9/28	3.9	4/22	10/6	4.4	5.3
Delta Grow	54XF20	V Early	Xtend/XtendFlex	4/27	10/5	1.2	5/9	9/28	0.9	4/22	10/6	0.3	0.8
Dyna-Gro	S52XT91	V Early	Xtend/XtendFlex	4/27	10/5	6.5	5/9	9/28	2.0	4/22	10/6	1.5	3.3
Great Heart Seed	GT-5214X	V Early	Xtend/XtendFlex	4/27	10/5	5.0	5/9	9/28	8.6	4/22	10/6	1.0	4.9
Innvictis	A5451XF	V Early	Xtend/XtendFlex	4/27	10/5	1.0	5/9	9/28	0.9	4/22	10/6	1.9	1.3
Revere Seed	5029XF	V Early	Xtend/XtendFlex	4/27	10/5	8.2	5/9	9/28	1.4	4/22	10/6	3.4	4.3
Revere Seed	5386X	V Early	Xtend/XtendFlex	4/27	10/5	5.1	5/9	9/28	7.1	4/22	10/6	2.2	4.8
Revere Seed	5588X	V Early	Xtend/XtendFlex	4/27	10/5	1.9	5/9	9/28	0.9	4/22	10/6	0.5	1.1
Revere Seed	5614XF	V Early	Xtend/XtendFlex	4/27	10/5	3.2	5/9	9/28	1.5	4/22	10/6	0.3	1.7
NK Brand	NK55-T2XF	V Early	Xtend/XtendFlex	4/27	10/5	7.3	5/9	9/28	1.3	4/22	10/6	1.6	3.4
Progeny	P 5056XFS	V Early	Xtend/XtendFlex	4/27	10/5	2.6	5/9	9/28	6.2	4/22	10/6	2.9	3.9
Progeny	P 5554RX	V Early	Xtend/XtendFlex	4/27	10/5	1.2	5/9	9/28	0.4	4/22	10/6	0.9	0.8
Progeny	P5016RXS	V Early	Xtend/XtendFlex	4/27	10/5	20.2	5/9	9/28	3.5	4/22	10/6	7.0	10.2
Progeny	P5150XFS	V Early	Xtend/XtendFlex	4/27	10/5	5.0	5/9	9/28	1.9	4/22	10/6	2.8	3.2
Progeny	P5252RX	V Early	Xtend/XtendFlex	4/27	10/5	0.9	5/9	9/28	1.2	4/22	10/6	0.0	0.7

Public Varieties Entered

University of Missouri

S19-3530RY
S16-13165C
S17-2066C
S18-6097C
S17-2509C
S18-6328C

Commercial Varieties Entered

Company	Variety		Seed treatment
Armor Seed 183 Pennsylvania Ave. Waldenburg, AR 72475	Armor 48-F22 Armor 49-F37 Armor 48-D25 Armor 46-F13 Armor 46-F96 Armor 44-D49	Armor 45-F02 Armor 51-F88	Acceleron+Insect+ilevo
Gateway Seed	Gateway Seed 471XF Gateway Seed 453RXS	Gateway Seed 465RXS Gateway Seed 469XF	
Delta Grow Seed P.O. Box 219 England, AR 72046	Delta Grow 48X45 Delta Grow 48XF33/STS Delta Grow 49XF29/STS Delta Grow 45E33 Delta Grow 46E10 Delta Grow 48E59 Delta Grow 48E60 Delta Grow 46X65STS Delta Grow 44XF41 Delta Grow 46XF18	Delta Grow 54XF20 Delta Grow 52XF22/STS Delta Grow 53E30 Delta Grow 52E80	CruiserMaxx
Nutrien Ag Solutions/Dyna-Gro Seed 254 U.S. Hwy. 72 West Collierville, TN 38014	Dyna-Gro S47XF52 Dyna-Gro S48XT90 Dyna-Gro S49XF82S Dyna-Gro S49XT70 Dyna-Gro S47XF23S Dyna-Gro S48XF61S Dyna-Gro S43XS70 Dyna-Gro S46XF31S	Dyna-Gro S46XS60 Dyna-Gro S45XF02 Dyna-Gro S52XT91	Equity Vip/Saltro
Great Heart 220 West Washington St. Paris, IL 61944	Great Heart GT-5214X Great Heart GT-4979X Great Heart GT-4828X Great Heart GT-4756XF Great Heart GT-4762XF Great Heart GT-4255XS	Great Heart GT-4344XF Great Heart GT-4677XS Great Heart GT-4681XFS	Great Start Max
Bayer Crop Science 800 N. Lindbergh Blvd. St. Louis, MO 63167	Asgrow AG47XF3 Asgrow AG49XF3 Asgrow AG48XF3 Asgrow AG45XF3	Asgrow AG46XF3 Asgrow AG42XF2 Asgrow AG56XF2 Asgrow AG53XF2	Acceleron+Insect+ilevo
Progeny Ag Products 1529 Hwy. 193 Wynne, AR 72396	Progeny P 4775E3S Progeny P 5056XFS Progeny P 5150XFS Progeny P 5016RXS Progeny P 5252RX Progeny P 5554RX Progeny P 4732XF Progeny P 4798XF Progeny P 4844XFS Progeny P 4951XFS Progeny P 4821RX	Progeny P 4806XFS Progeny P 4200XS Progeny P 4202XFS Progeny P 4691XFS Progeny P 4444RXS Progeny P 4505RXS Progeny P 4521XFS Progeny P 4604XFS	Poncho/Votivo/Obvius Plus
SeedKoz 1725 Windward Conc. Suite 410 Alpharetta, GA 30005	MorSoy MS 4846 MorSoy MS 4852 MorSoy MS 4681		Avicta Complete+Innoculant

Commercial Varieties Entered

Company	Variety		Seed treatment
Revere Seed	4727XF 4795XS 4806XS 4925XF 4826XFS Innotech 4773E3 4128XFS 4415XF 4526XF	4606XFS 5029XF 5386X 5588X 5614XF	Radius Premium
NK Seeds 5210 State Rd. 945 Hickory, KY 42051	NK Seeds NK47-Z1XF NK Seeds NK42-T5XF NK Seeds NK43-Y9XFS NK Seeds NK44-J4XFS NK Seeds NK45-P9XF	NK Seeds NK43-V8XF NK Seeds NK55-T2XF	CruiserMaxx Beans+Vibrance+Saltro
Innvictis Seed	Innvictis Seed A4742XF Innvictis Seed A4850XF Innvictis Seed A4950X Innvictis Seed A4632XF	Innvictis Seed A4642XF Innvictis Seed A4662XF Innvictis Seed A4690XF Innvictis Seed A5451XF	
Beck's Hybrids	Beck's Hybrids 4885XF	Beck's Hybrids 4553XF	