MISSISSIPPI SOYBEAN PROMOTION BOARD
PROJECT NO. 36-2016 (CONT.)
2016 ANNUAL REPORT

Title: 2016 Soybean Management by Application of Research and Technology (SMART)

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BACKGROUND AND OBJECTIVES

The SMART program coordinated by the Mississippi State University Extension Service and supported by the Mississippi Soybean Promotion Board is designed to assist with implementing best management practices (BMP) and technologies into the farm level. In doing so, the latest research-proven practices can be demonstrated on a farm scale to assist with improving soybean yield and ultimately profitability.

Soybean is an integral component of Mississippi's agriculture production systems. Currently, soybean is third on the list of Mississippi's agricultural commodities in terms of farm gate value. Approximately 2 million acres of soybeans were harvested in Mississippi in 2016, with an average yield of 48 bu/acre.

Soybean productivity has increased over the last 20 years due to a multitude of reasons, including but not limited to improved management, technology, and seed options. However, potential for improvement of our production systems remain.

During the 2016 production season, the SMART program consisted of demonstration and training events that promoted BMP's to Mississippi's soybean producers. This portion of the program is intended to provide soybean growers, crop consultants, and other agricultural professionals with the latest information to assist throughout the growing season.

Objective 1: Identify and apply key management practices that may increase profitability in soybean production.

Decisions regarding variety selection, soil nutrient management, seeding rate, iron deficiency chlorosis (IDC), and disease, nematode, and insect pests must be made by Mississippi soybean producers each year. Management practices to address these and other issues are important for soybean production to remain successful. In 2016, demonstration locations designed to address these management practices were established in various locations around Mississippi.

Objective 2: Provide a hands-on educational opportunity for utilizing profitable technologies and the latest results from soybean research.

During 2016, 29 soybean variety demonstration locations were harvested across Mississippi, with participation by MSU-ES county and area agents. Soybean varieties planted at each location were selected to be a part of a specific set suitable for the region where each demonstration was located. Specifically, a total of 8 varieties were included in the Roundup Ready (RR) MG Early IV sets, 15 varieties were included in the RR MG IV sets, 16 varieties in the RR MG V sets, 11 varieties in the LibertyLink (LL) MG IV sets, and 9 varieties in the LL MG V sets. Of the 29 locations harvested, the variety demonstrations included:

- 1 irrigated RR MG Early IV location
- 6 irrigated RR MG IV locations
- 2 irrigated RR MG V locations
- 4 nonirrigated RR MG IV locations
- 8 nonirrigated RR MG V locations
- 4 irrigated LL MG IV locations
- 4 irrigated LL MG V locations

These locations effectively covered targeted regions of the Mississippi Delta, the Mississippi Prairies (Black Prairie and/or Jackson Prairie), the Mississippi Coastal Plains, and the Mississippi Valley Silty Uplands. These locations also contained 5 different row spacings, 3 tillage systems, 14 soil series, and irrigated and nonirrigated systems ranging through 6 weeks of planting dates. This information is summarized in the 2016 MSU-ES Soybean Variety Demonstration Program Summary publication (appended below). Beyond this publication, the variety demonstration results were used to supplement data from small plot variety testing to develop the MSU-ES Soybean Variety Suggestions for 2017 publication (appended below). These fields provided Extension personnel the ability to host producers for local demonstrations in a number of locations as well.

In addition, 2 nematode demonstration fields, 3 fungicide demonstration fields, 2 fertility demonstration fields, and 1 IDC variety tolerance evaluation set (appended below) containing 28 different varieties were demonstrated in 2016.

Objective 3: Collect long-term data that can be used to determine specific management programs for sustaining or improving yield and profits.

During the 2016 season, all variety demonstration locations were monitored closely to identify differences among varieties. In the early season, crop vigor and emergence ratings were recorded. Disease tolerance was visually rated and final plant height was measured at each location for each variety. Once the plots had reached maturity, green stem, lodging, and shattering ratings were recorded before harvest. These data were used in conjunction with harvested yield data for comparisons among varieties. Significant differences were seen in height and yield when comparing varieties. Detailed data are provided in the MSU-ES On-Farm Soybean Variety Demonstration Program publication (appended below.

Soybean yield was measured at all demonstrations of fungicide applications, fertility additions, and nematicide seed treatments. Plant height and IDC varietal tolerance scores were recorded at the IDC location. These data are provided in detail in the attached SMART program annual summary.

Objective 4: Promote profitable and sustainable practices that will benefit current and future Mississippi soybean producers.

Many factors were evaluated for the promotion of profitable and sustainable practices in Mississippi soybean production. A total of 37 locations were implemented in 2016 for demonstration of various soybean management practices. These demonstrations and the data generated through them provided opportunities for promoting BMP's through hands-on learning, field days, short courses, turn row talks,

grower meetings, Extension publications, and online materials. The use of demonstration programs and related events will allow the promotion of these ideal practices to Mississippi's soybean producers.

IMPACTS AND BENEFITS TO MISSISSIPPI SOYBEAN PRODUCERS

This program has the ability to impact every soybean producer in Mississippi by effectively demonstrating proven management practices so that all producers are able to observe differences firsthand. Not only do the data provide potential benefits through observations on yield, but other crop factors or questions growers often ask can be addressed through these large plot demonstrations.

END PRODUCTS (ALL APPENDED BELOW)

- Soybean Variety Demonstration Program Summary publication
- MSU-ES Variety Suggestions – Short List
- MSU-ES Soybean Variety Response to Iron Deficiency Chlorosis
- 2016 Soybean Management by Application of Research and Technology (SMART) Program Annual Summary

2016 MSU-ES Soybean Variety Demonstration Program

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During the 2016 growing season, a total of 29 on-farm soybean variety demonstration plots were successfully conducted. The following information is intended to complement data generated through small-plot OVT testing programs.

2016 Locations

County	Demonstration Type	Irrigation Method
Bolivar	MG IV RR	Furrow
Calhoun	MG IV RR	None
Calhoun	MG V RR	None
Covington	MG IV RR	None
Franklin	MG V RR	None
Hinds	MG V RR	None
Humphreys	MG IV RR	Furrow
Itawamba	MG V RR	None
Leflore	MG IV RR	Furrow
Leflore	MG V RR	Furrow
Lowndes	MG V RR	None
Madison	MG V RR	None
Marion	MG V RR	None
Monroe	MG IV RR	None
Monroe	MG V RR	None
Quitman	MG IV LL	Furrow
Quitman	MG V LL	Furrow
Rankin	MG IV RR	None
Sharkey	MG IV RR	Furrow
Sharkey	MG V RR	Furrow
Sharkey	MG IV LL	None
Sharkey	MG V LL	None
Sunflower	Early MG IV RR	Furrow
Sunflower	MG IV RR	Furrow
Tunica	MG IV LL	None
Tunica	MG V LL	None
Washington	MG IV RR	Furrow
Washington	MG IV LL	Furrow
Washington	MG V LL	Furrow

MSU Extension Participants

Program Coordinator: Dr. Trent Irby, Extension Soybean Specialist

Dr. Tom Allen	Dr. Ernie Flint	Mr. Don Respess
Mr. Preston Aust	Mr. Greg Flint	Mrs. Alanna Scholtes
Mr. Andy Braswell	Mr. Craig Hankins	Dr. Randy Smith
Dr. Bill Burdine	Mr. Kyle Lewis	Mr. Lester Stephens
Mr. Jon Carson	Mr. Reid Nevins	Mr. Charlie Stokes
Mr. Alex Deason	Dr. Dennis Reginelli	

Mississippi State University Extension wishes to express special thanks to the many producers who cooperated with this year's on-farm soybean variety demonstration program as well as to the Mississippi Soybean Promotion Board for their continued support of these efforts. In addition, the seed companies and their representatives are sincerely appreciated for providing the seed used at each location. The relationships among participating individuals are critical for the continued success of this program.

Assistance in the conduct of this program provided by: Shane Carver, Nick Bateman, Chase Floyd, Tanner Dinsmore, Zachary Treadway, Tristan Knight, Chase Kasper, and Drew Page

County	Plot Type	Planting Date	Seeding Rate	Plot Width	Row Spacing	Tillage System	Soil Series	Irrigation Method	Harvest Date
Bolivar	MG IV RR	11-May	135,000	6 twin rows	38”	Conv.	Forestdale silty clay	Furrow	27-Sep
Calhoun	MG IV RR	25- Apr	110,000	8 twin rows	38”	Conv.	Chastain silt loam	None	9-Sep
Calhoun	MG V RR	25- Apr	110,000	8 twin rows	38”	Conv.	Falaya silt loam	None	21-Sep
Covington	MG IV RR	7-May	90,000	8 rows	36”	Strip-Till	Chaba fine sandy loam	None	29-Sep
Franklin	MG V RR	9-May	130,000	6 rows	38”	Conv.	Providence silt loam	None	26-Oct
Hinds	MG V RR	7-May	120,000	16 rows	30”	Conv.	Oaklimeter silt loam	None	3-Oct
Humphreys	MG IV RR	17-May	140,000	16 twin rows	38”	Conv.	Alligator-Dowling clays	Furrow	27-Sep
Itawamba	MG V RR	17-May	110,000	8 rows	38"	Conv.	Marietta loam	None	24-Oct
Leflore	MG IV RR	6-May	117,000	8 rows	38”	Conv.	Alligator clay	Furrow	23-Sep
Leflore	MG V RR	6-May	135,000	6 rows	38”	Conv.	Alligator clay	Furrow	3-Oct
Lowndes	MG V RR	11-May	110,000	6 rows	30”	Conv.	Catalpa silty clay	None	30-Sep
Madison	MG V RR	5-May	120,000	8 rows	30”	No-Till	Calloway silt loam	None	26-Sep
Marion	MG V RR	4-May	105,000	12 rows	30”	Strip-Till	McLaurin fine sandy loam	None	16-Oct
Monroe	MG IV RR	17-May	130,000	6 rows	30”	No-Till	Vaiden silty clay	None	30-Sep
Monroe	MG V RR	16-May	100,000	6 rows	30”	Conv.	Prentiss fine sandy loam	None	11-Oct
Quitman	MG IV LL	18-May	130,000	16 twin rows	38”	Conv.	Dowling clay	Furrow	29-Sep
Quitman	MG V LL	18-May	130,000	16 twin rows	38”	Conv.	Dowling clay	Furrow	29-Sep
Rankin	MG IV RR	7-May	110,000	5 rows	30”	Conv.	Kipling silt loam	None	23-Sep
Sharkey	MG IV RR	17-May	140,000	6 rows	38”	Conv.	Sharkey clay	Furrow	4-Oct
Sharkey	MG V RR	17-May	140,000	6 rows	38”	Conv.	Sharkey clay	Furrow	4-Oct
Sharkey	MG IV LL	17-May	130,000	8 twin rows	38”	Conv.	Commerce silty clay	None	6-Oct
Sharkey	MG V LL	17-May	130,000	8 twin rows	38”	Conv.	Commerce silty clay	None	6-Oct
Sunflower	Early MG IV RR	7-May	120,000	16 twin rows	38”	Conv.	Alligator clay	Furrow	15-Sep
Sunflower	MG IV RR	7-May	150,000	15 rows	15”	Conv.	Alligator clay	Furrow	20-Sep
Tunica	MG IV LL	25-May	140,000	8 rows	30”	Conv.	Dubbs silt loam	None	19-Oct
Tunica	MG V LL	25-May	140,000	8 rows	30”	Conv.	Dubbs silt loam	None	19-Oct
Washington	MG IV RR	10-Jun	144,000	6 rows	30”	Conv.	Sharkey clay	Furrow	26-Oct
Washington	MG IV LL	5-May	143,000	6 twin rows	40”	Conv.	Sharkey clay	Furrow	28-Sep
Washington	MG V LL	5-May	143,000	6 twin rows	40”	Conv.	Sharkey clay	Furrow	28-Sep

Soybean Variety Characteristics

Maturity Group IV Roundup Ready Varieties

Brand	Variety	Relative Maturity	Herbicide Package[1]	Growth Habit[2]	Canopy Width[3]	Plant Height[4]	Plant Color[5]
Armor	44-R08	4.4	RR2Y	I	B	MT	G
Armor	47-R70	4.7	RR2Y	I	M	MT	LT
Asgrow	AG4632	4.6	RR2Y/STS	I	MB	T	LT
Asgrow	AG46X6	4.6	RR2X	I	MB	MT	T
Asgrow	AG47X6	4.7	RR2X/STS	I	M	T	LT
Credenz	CZ 4181 RY	4.1	RR2Y	I	MB	MT	LT
Credenz	CZ 4656 RY	4.6	RR2Y	I	MB	MT	G
Croplan	R2C4345	4.3	RR2Y	I	M	T	LT
Croplan	R2C4775	4.7	RR2Y	I	M	MT	LT
Delta Grow	DG 4790RY	4.7	RR2Y	I	MB	MT	T
Dyna-Gro	S43RY95	4.3	RR2Y	I	MB	T	T
Dyna-Gro	31RY45	4.5	RR2Y	I	M	T	LT
Mycogen	5N433R2	4.3	RR2Y	I	MB	MT	T
Mycogen	5N452R2	4.5	RR2Y	I	MB	M	LT
Mycogen	5N490R2	4.9	RR2Y/STS	I	M	M	LT
NK	NK42-P6	4.2	RR2Y	I	M	MT	LT
NK	S47-K5	4.7	RR2Y	I	MB	MT	LT
Pioneer	P41T33R	4.1	RR	I	MB	M	LT
Pioneer	P47T36R	4.7	RR	I	M	M	LT
Pioneer	P47T89R	4.7	RR	I	M	M	LT
Progeny	P 4211 RY	4.2	RR2Y	I	M	M	G
Progeny	P 4788 RY	4.7	RR2Y	I	MB	T	LT
Progeny	P 4900 RY	4.9	RR2Y	I	M	M	LT
Terral	REV 45A46	4.5	RR	I	MB	M	LT
Terral	REV 47R34	4.7	RR	I	MB	MT	LT
Terral	REV 48A26	4.8	RR	I	MB	M	T

[1] – RR = Roundup Ready; RR2Y = Roundup Ready 2 Yield; RR2X = Roundup Ready 2 Xtend; STS = sulfonylurea tolerant soybean

[2] – I = indeterminate; D = determinate

[3] – T = thin; M = medium; MB = medium-bushy; B = bushy

[4] – S = short; M = medium; MT = medium-tall; T = tall

[5] – G = gray; LT = light tawny; T = tawny

Soybean Variety Characteristics (cont.)

Maturity Group V Roundup Ready Varieties

Brand	Variety	Relative Maturity	Herbicide Package[1]	Growth Habit[2]	Canopy Width[3]	Plant Height[4]	Plant Color[5]
Armor	55-R68	5.5	RR2Y	D	MB	MT	LT
Asgrow	AG53X6	5.3	RR2X	D	MB	M	LT
Asgrow	AG54X6	5.4	RR2X	I	MB	T	T
Credenz	CZ 5375 RY	5.3	RR2Y	D	M	M	G
Croplan	R2C5225S	5.2	RR2Y/STS	I	M	MT	LT
Delta Grow	DG 5230RY	5.2	RR2Y	D	M	MT	T
Dyna-Gro	S52RY75	5.2	RR2Y	D	MB	MT	LT
Dyna-Gro	S56RY84	5.6	RR2Y	D	M	MT	T
Mycogen	5N522R2	5.2	RR2Y	D	MB	MT	LT
Mycogen	5N550R2	5.5	RR2Y	D	M	MT	T
NK	S52-Y2	5.2	RR2Y	I	M	MT	LT
NK	S56-M8	5.6	RR2Y	D	M	M	T
Pioneer	P52T50R	5.2	RR	D	M	M	T
Pioneer	P55T81R	5.5	RR	D	MB	MT	T
Progeny	P 5226 RYS	5.3	RR2Y/STS	I	MB	MT	LT
Terral	REV 51A56	5.1	RR/STS	D	MB	MT	LT
Terral	REV 56R63	5.6	RR	D	MB	MT	G

[1] – RR = Roundup Ready; RR2Y = Roundup Ready 2 Yield; RR2X = Roundup Ready 2 Xtend; STS = sulfonylurea tolerant soybean

[2] – I = indeterminate; D = determinate

[3] – T = thin; M = medium; MB = medium-bushy; B = bushy

[4] – S = short; M = medium; MT = medium-tall; T = tall

[5] – G = gray; LT = light tawny; T = tawny

Soybean Variety Characteristics (cont.)

Maturity Group IV LibertyLink Varieties

Brand	Variety	Relative Maturity	Herbicide Package[1]	Growth Habit[2]	Canopy Width[3]	Plant Height[4]	Plant Color[5]
Armor	47-L10	4.7	LL	I	MB	MT	LT
Credenz	CZ 4748 LL	4.7	LL	I	B	MT	LT
Credenz	HBK LL4953	4.9	LL	I	MB	MT	G
Delta Grow	DG 4587LL/STS	4.5	LL/STS	I	MB	T	LT
Delta Grow	DG 4781LL	4.7	LL	I	MB	T	T
Delta Grow	DG 4967LL	4.9	LL	I	MB	T	T
Dyna-Gro	S45LL97	4.5	LL	I	M	T	G
Dyna-Gro	S49LL34	4.9	LL	I	M	T	G
GoSoy	4912LL	4.9	LL	I	MB	T	G
Progeny	P 4247 LL	4.2	LL	I	T	M	LT
Progeny	P 4930 LL	4.9	LL	I	MB	T	G

Maturity Group V LibertyLink Varieties

Brand	Variety	Relative Maturity	Herbicide Package[1]	Growth Habit[2]	Canopy Width[3]	Plant Height[4]	Plant Color[5]
Armor	53-L55	5.3	LL/STS	D	MB	M	T
Credenz	CZ 5150 LL	5.1	LL	Semi-D	B	MT	G
Credenz	CZ 5242 LL	5.2	LL	Semi-D	B	MT	G
Delta Grow	DG 5067LL	5.0	LL	D	M	MT	LT
Dyna-Gro	S52LL66	5.2	LL	I	MB	T	T
Dyna-Gro	S55LS75	5.5	LL/STS	D	B	T	T
GoSoy	5115LL	5.1	LL	I	MB	MT	T
Progeny	P 5414 LLS	5.4	LL/STS	D	M	T	T
Progeny	P 5460 LL	5.4	LL	D	MB	MT	LT

[1] – LL = LibertyLink; STS = sulfonylurea tolerant soybean
[2] – I = indeterminate; D = determinate
[3] – T = thin; M = medium; MB = medium-bushy; B = bushy
[4] – S = short; M = medium; MT = medium-tall; T = tall
[5] – G = gray; LT = light tawny; T = tawny

Maturity Group IV RR Varieties Summarized across Irrigated Locations							
Total number of locations:		**6**					
Planting date range:		**6-May-16 to 10-June-16**					
Brand	**Variety**	**Avg. Plant Height**	**Avg. Lodging Score[1]**	**Avg. Shattering Score[1]**	**Avg. Green Stem Score[1]**	**Avg. Seed Moisture**	**Average Yield[2]**
		Inches	**0 to 10**	**0 to 10**	**0 to 10**	**%**	**bu/acre**
Armor	47-R70	43	4	0	1	10.1	63.2
Asgrow	AG4632	40	3	0	1	10.2	60.5
Asgrow	AG46X6	40	3	1	1	10.4	67.9
Asgrow	AG47X6	45	3	0	3	9.7	60.6
Credenz	CZ 4656 RY	44	3	1	1	9.9	44.2
Croplan	R2C4775	39	3	0	2	10.3	61.1
Delta Grow	DG 4790 RY	42	4	0	2	10.3	61.6
Dyna-Gro	31RY45	41	4	0	1	10.3	58.7
Mycogen	5N452R2	40	4	0	1	10.3	59.8
Mycogen	5N490R2	42	3	0	3	10.3	64.0
NK	S47-K5	37	2	0	2	10.5	62.5
Pioneer	P47T89R[3]	-	-	-	-	-	-
Pioneer	P47T36R[3]	-	-	-	-	-	-
Progeny	P 4788 RY	45	3	0	1	9.9	57.3
Progeny	P 4900 RY	36	2	0	2	10.4	60.6
Terral	REV 47R34	41	4	0	1	10.2	60.0
Terral	REV 48A26	41	3	0	2	10.0	64.7
Average across all irr. locations:						**10.2**	**61.2**

[1]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[2]- Soybean yield adjusted to standard moisture content of 13.0%.
[3]- Variety not planted/harvested at all locations. See individual location tables for complete data.

Maturity Group IV RR Varieties Summarized across Non-irrigated Locations							
Total number of locations:		**4**					
Planting date range:		**25-April-16 to 17-May-16**					
Brand	**Variety**	**Avg. Plant Height**	**Avg. Lodging Score[1]**	**Avg. Shattering Score[1]**	**Avg. Green Stem Score[1]**	**Avg. Seed Moisture**	**Average Yield[2]**
		Inches	**0 to 10**	**0 to 10**	**0 to 10**	**%**	**bu/acre**
Armor	47-R70	39	1	2	1	12.7	52.1
Asgrow	AG4632	36	1	1	2	12.7	47.9
Asgrow	AG46X6	35	1	2	3	12.5	49.8
Asgrow	AG47X6[3]	-	-	-	-	-	-
Credenz	CZ 4656 RY	40	2	0	1	12.5	49.1
Croplan	R2C4775	36	2	1	2	12.4	47.5
Delta Grow	DG 4790 RY	38	3	2	2	12.4	48.5
Dyan-Gro	31RY45	35	1	1	1	12.4	50.5
Mycogen	5N452R2	37	1	1	3	12.3	53.0
Mycogen	5N490R2	36	1	1	2	12.8	46.9
NK	S47-K5	32	1	1	3	12.3	42.6
Pioneer	P47T36R[3]	-	-	-	-	-	-
Progeny	P 4788 RY[3]	-	-	-	-	-	-
Progeny	P 4900 RY	33	1	2	3	13.4	42.5
Terral	REV 47R34	37	3	2	2	12.8	44.4
Terral	REV 48A26	37	1	2	3	12.7	44.4
Average across all non-irr. locations:						**13.0**	**43.7**

[1]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[2]- Soybean yield adjusted to standard moisture content of 13.0%.
[3]- Variety not planted/harvested at all locations. See individual location tables for complete data.

Maturity Group V RR Varieties Summarized across Irrigated Locations							
Total number of locations:		**2**					
Planting date range:		**6-May-16 to 17-May-16**					
Brand	**Variety**	**Avg. Plant Height**	**Avg. Lodging Score[1]**	**Avg. Shattering Score[1]**	**Avg. Green Stem Score[1]**	**Avg. Seed Moisture**	**Average Yield[2]**
		Inches	**0 to 10**	**0 to 10**	**0 to 10**	**%**	**bu/acre**
Armor	55-R68	32	1	1	2	12	60.0
Asgrow	AG53X6	36	1	1	2	10	61.2
Asgrow	AG54X6	49	3	0	6	13	50.0
Credenz	CZ 5375	31	1	0	5	10	58.8
Croplan	R2C5225S	48	4	0	4	11	58.7
Delta Grow	DG 5230RY	37	1	0	1	10	61.9
Dyna-Gro	S52RY75	40	2	0	1	10	64.3
Dyna-Gro	S56RY84	40	2	1	4	11	57.8
Mycogen	5N550R2	36	2	1	1	9	64.0
NK	S56-M8	43	3	1	1	10	51.5
Pioneer	P55T81R	34	1	1	2	10	59.6
Progeny	P 5226 RYS	47	3	0	4	11	59.6
Terral	REV 51A56	43	2	0	3	10	62.3
Terral	REV 56R63	39	4	0	4	11	56.8
Average across all irr. locations:						**10.6**	**59.0**

[1]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.

[2]- Soybean yield adjusted to standard moisture content of 13.0%.

Maturity Group V RR Varieties Summarized across Non-irrigated Locations							
Total number of locations:		**8**					
Planting date range:		**25-April-16 to 17-May-16**					
Brand	**Variety**	**Avg. Plant Height**	**Avg. Lodging Score[1]**	**Avg. Shattering Score[1]**	**Avg. Green Stem Score[1]**	**Avg. Seed Moisture**	**Average Yield[2]**
		Inches	**0 to 10**	**0 to 10**	**0 to 10**	**%**	**bu/acre**
Armor	55-R68	31	2	0	1	11.3	55.7
Asgrow	AG53X6	32	1	1	1	11.0	52.6
Asgrow	AG54X6	39	3	1	2	12.1	53.6
Credenz	CZ 5375 RY	29	2	1	1	10.9	52.6
Croplan	R2C5225S	41	2	1	2	12.4	51.2
Delta Grow	DG 5230RY[3]	-	-	-	-	-	-
Dyna-Gro	S52RY75	38	2	1	2	11.6	54.1
Dyna-Gro	S56RY84	36	1	1	1	11.1	51.0
Mycogen	5N550R2	36	1	1	1	11.5	54.8
NK	S56-M8[3]	-	-	-	-	-	-
Pioneer	P55T81R	31	1	1	1	11.3	51.0
Progeny	P 5226 RYS	39	2	1	2	12.2	55.4
Terral	REV 51A56	35	2	1	3	12.1	53.4
Terral	REV 56R63	32	1	1	1	11.6	52.2
Average across all non-irr. locations:						**11.7**	**53.3**

[1]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[2]- Soybean yield adjusted to standard moisture content of 13.0%.
[3]- Variety not planted/harvested at all locations. See individual location tables for complete data.

Maturity Group IV LL Varieties Summarized across Irrigated Locations							
Total number of locations:		**2**					
Planting date range:		**5-May-2016 to 18-May-2016**					
Brand	**Variety**	**Avg. Plant Height**	**Avg. Lodging Score[1]**	**Avg. Shattering Score[1]**	**Avg. Green Stem Score[1]**	**Avg. Seed Moisture**	**Average Yield[2]**
		Inches	**0 to 10**	**0 to 10**	**0 to 10**	**%**	**bu/acre**
Armor	47-L10	45	1	1	1	11.3	54.8
Credenz	CZ 4748 LL	44	2	1	1	10.1	54.2
Credenz	HBK LL4953	48	3	0	2	10.4	57.7
Delta Grow	DG 4587LL/STS	40	1	1	1	10.9	61.5
Delta Grow	DG 4781LL	45	2	0	1	10.6	57.0
Delta Grow	DG 4967LL	51	3	0	2	11.0	56.9
Dyna-Gro	S45LL97	43	2	0	2	10.8	61.2
Dyna-Gro	S49LL34	47	2	0	3	10.2	58.0
Go Soy	4912LL	50	3	0	3	11.2	56.1
Progeny	P 4247 LL	38	1	0	2	11.1	62.1
Progeny	P 4930 LL	47	3	0	2	10.7	57.0
Average across all irr. locations:						**10.7**	**57.9**

[1]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[2]- Soybean yield adjusted to standard moisture content of 13.0%.

Maturity Group IV LL Varieties Summarized across Non-irrigated Locations							
Total number of locations:		**2**					
Planting date range:		**17-May-2016 to 25-May-2016**					
Brand	**Variety**	**Avg. Plant Height**	**Avg. Lodging Score[1]**	**Avg. Shattering Score[1]**	**Avg. Green Stem Score[1]**	**Avg. Seed Moisture**	**Average Yield[2]**
		Inches	**0 to 10**	**0 to 10**	**0 to 10**	**%**	**bu/acre**
Armor	47-L10	41	1	1	0	12	50.1
Credenz	CZ 4748 LL[3]	-	-	-	-	-	-
Credenz	HBK LL4953[3]	-	-	-	-	-	-
Delta Grow	DG 4587LL/STS	34	1	1	0	12.3	51.1
Delta Grow	DG 4781LL	38	1	2	0	11.9	51.4
Delta Grow	DG 4967LL	44	3	1	0	12.3	48.0
Dyna-Gro	S45LL97	41	1	1	0	12.4	52.9
Dyna-Gro	S49LL34	40	2	1	0	12.4	49.9
Go Soy	4912LL	47	2	2	1	13.4	46.9
Progeny	P 4247 LL	32	0	2	0	12.3	47.5
Progeny	P 4930 LL	41	3	1	1	11.9	50.9
Average across all non-irr. locations:						**12.0**	**49.9**

[1]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[2]- Soybean yield adjusted to standard moisture content of 13.0%.
[3]- Variety not planted/harvested at all locations. See individual location tables for complete data.

Maturity Group V LL Varieties Summarized across Irrigated Locations							
Total number of locations:		**2**					
Planting date range:		**5-May-2016 to 18-May-2016**					
Brand	**Variety**	**Avg. Plant Height**	**Avg. Lodging Score[1]**	**Avg. Shattering Score[1]**	**Avg. Green Stem Score[1]**	**Avg. Seed Moisture**	**Average Yield[2]**
		Inches	**0 to 10**	**0 to 10**	**0 to 10**	**%**	**bu/acre**
Armor	53-L55	42	1	0	5	10.4	55.2
Credenz	CZ 5150 LL	50	2	0	4	10.6	59.1
Credenz	CZ 5242 LL[3]	-	-	-	-	-	-
Delta Grow	DG 5067L	48	2	0	2	11.7	54.9
Dyna-Gro	S52LL66	49	2	0	2	10.7	55.9
Dyna-Gro	S55LS75	41	1	0	5	12.1	54.9
GoSoy	5115LL	48	3	0	2	11.3	58.2
Progeny	P 5414 LLS	38	1	0	6	13.3	56.7
Progeny	P 5460 LL	47	2	0	4	10.2	55.3
Average across all irr. locations:						**11.3**	**56.3**

[1]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[2]- Soybean yield adjusted to standard moisture content of 13.0%.
[3]- Variety not planted/harvested at all locations. See individual location tables for complete data.

Maturity Group V LL Varieties Summarized across Non-irrigated Locations							
Total number of locations:		**2**					
Planting date range:		**17-May-2016 to 25-May-2016**					
Brand	**Variety**	**Avg. Plant Height**	**Avg. Lodging Score[1]**	**Avg. Shattering Score[1]**	**Avg. Green Stem Score[1]**	**Avg. Seed Moisture**	**Average Yield[2]**
		Inches	**0 to 10**	**0 to 10**	**0 to 10**	**%**	**bu/acre**
Armor	53-L55	40	1	1	0	12.6	48.1
Credenz	CZ 5150 LL[3]	-	-	-	-	-	-
Credenz	CZ 5242 LL	42	4	1	2	12.5	48.8
Delta Grow	DG 5067L	44	4	1	2	11.9	47.5
Dyna-Gro	S52LL66	41	4	1	1	12.2	49.4
Dyna-Gro	S55LS75	33	1	1	1	11.5	47.4
GoSoy	5115LL	39	1	1	1	11.7	50.5
Progeny	P 5414 LLS	40	2	1	0	11.9	45.5
Progeny	P 5460 LL[3]	-	-	-	-	-	-
Average across all non-irr. locations:						**12.0**	**48.2**

[1]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[2]- Soybean yield adjusted to standard moisture content of 13.0%.
[3]- Variety not planted/harvested at all locations. See individual location tables for complete data

Bolivar County – Irrigated Maturity Group IV Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	47-R70	53	7	0	0	7	1	9	8	10.0	62.6
Asgrow	AG4632	51	6	0	0	7	0	9	9	10.0	57.8
Asgrow	AG46X6	49	6	0	0	7	2	8	8	10.2	66.9
Asgrow	AG47X6	52	5	0	0	7	1	9	8	9.9	64.1
Credenz	CZ 4656 RY	52	8	0	0	7	-	-	-	9.8	40.4
Croplan	R2C4775	50	8	0	0	7	4	8	8	10.0	60.0
Delta Grow	DG 4790RY	52	7	0	0	7	2	9	9	10.2	58.9
Dyna-Gro	31RY45	50	8	0	0	7	3	8	8	10.0	58.7
Mycogen	5N452R2	48	8	0	0	7	2	8	8	10.4	59.0
Mycogen	5N490R2	49	3	0	1	7	4	9	9	11.1	60.5
NK	S47-K5	48	4	0	3	6	3	7	7	10.8	63.8
Pioneer	P47T36R	-	3	0	0	-	-	-	-	10.4	69.0
Progeny	P 4788 RY	54	6	0	1	7	2	8	8	10.4	55.5
Progeny	P 4900 RY	41	2	0	0	7	6	8	8	10.9	64.1
Terral	REV 47R34	53	5	0	0	7	2	8	9	10.4	61.9
Terral	REV 48A26	47	6	0	0	7	5	8	8	10.8	65.0
Plot Average:										**10.3**	**60.5**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Calhoun County – Non-Irrigated Maturity Group IV Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	47-R70	30	-	-	-	-	-	-	-	14.6	32.5
Asgrow	AG4632	29	-	-	-	-	-	-	-	12.4	32.5
Asgrow	AG46X6	26	-	-	-	-	-	-	-	13.2	33.1
Asgrow	AG47X6	30	-	-	-	-	-	-	-	11.8	28.4
Credenz	CZ 4656 RY	37	-	-	-	-	-	-	-	14.0	31.2
Croplan	R2C4775	25	-	-	-	-	-	-	-	13.1	30.3
Delta Grow	DG 4790RY	28	-	-	-	-	-	-	-	13.8	29.4
Dyna-Gro	31RY45	31	-	-	-	-	-	-	-	13.1	31.8
Mycogen	5N452R2	32	-	-	-	-	-	-	-	13.2	34.5
Mycogen	5N490R2	30	-	-	-	-	-	-	-	14.3	25.3
NK	S47-K5	24	-	-	-	-	-	-	-	12.3	24.5
Pioneer	P47T36R	27	-	-	-	-	-	-	-	21.7	22.0
Progeny	P 4900 RY	26	-	-	-	-	-	-	-	15.5	27.0
Terral	REV 47R34	25	-	-	-	-	-	-	-	14.1	24.3
Terral	REV 48A26	29	-	-	-	-	-	-	-	14.8	26.6
Plot Average:										**14.1**	**28.9**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Calhoun County – Non-Irrigated Maturity Group V Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	55-R68	29	3	0	1	7	1	8	7	13.0	65.0
Asgrow	AG53X6	42	3	0	0	7	7	7	5	12.1	63.2
Asgrow	AG54X6	36	6	0	4	7	1	7	7	13.6	65.5
Credenz	CZ 5375 RY	29	6	0	2	6	1	7	6	12.0	61.9
Croplan	R2C5225S	37	5	0	0	7	0	8	-	13.2	54.7
Delta Grow	DG 5230RY	38	5	0	1	6	0	7	-	12.3	64.0
Dyna-Gro	S52RY75	40	4	0	1	7	0	8	-	12.6	62.0
Dyna-Gro	S56RY84	27	1	1	0	7	2	8	6	13.0	55.7
Mycogen	5N550R2	35	4	0	3	7	1	8	7	13.3	58.9
NK	S56-M8	30	0	0	8	6	1	8	7	17.6	48.0
Pioneer	P55T81R	28	2	0	0	6	0	8	6	13.1	51.7
Progeny	P 5226 RYS	37	6	1	0	6	0	8	-	12.2	56.1
Terral	REV 51A56	41	5	0	1	8	7	6	-	12.6	61.9
Terral	REV 56R63	26	1	0	0	7	0	8	8	13.7	52.0
Plot Average:										**13.2**	**58.6**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Covington County – Non-Irrigated Maturity Group IV Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	47-R70	-	2	3	3	-	-	-	-	14.7	48.1
Asgrow	AG4632	-	2	2	3	-	-	-	-	16.6	35.1
Asgrow	AG46X6	-	1	3	5	-	-	-	-	14.5	43.9
Asgrow	AG47X6	-	3	2	3	-	-	-	-	14.5	47.6
Credenz	CZ 4656 RY	-	3	1	3	-	-	-	-	14.9	39.9
Croplan	R2C4775	-	2	2	3	-	-	-	-	14.8	42.8
Delta Grow	DG 4790RY	-	3	2	4	-	-	-	-	14.5	48.2
Dyna-Gro	31RY45	-	1	2	3	-	-	-	-	14.6	42.0
Mycogen	5N452R2	-	1	2	5	-	-	-	-	14.4	47.9
Mycogen	5N490R2	-	2	2	4	-	-	-	-	14.7	49.7
NK	S47-K5	-	2	2	4	-	-	-	-	14.7	41.6
Pioneer	P47T36R	-	1	2	5	-	-	-	-	14.3	47.8
Progeny	P 4900 RY	-	2	3	4	-	-	-	-	15.4	36.2
Terral	REV 47R34	-	4	2	4	-	-	-	-	14.7	39.6
Terral	REV 48A26	-	1	3	3	-	-	-	-	14.1	40.7
Plot Average:										**14.8**	**43.4**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe

Franklin County – Non-Irrigated Maturity Group V Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	55-R68	40	0	0	4	6	0	5	5	14.0	40.2
Asgrow	AG53X6	26	0	0	1	6	0	4	4	12.5	28.7
Asgrow	AG54X6	40	0	0	3	6	0	3	6	13.2	45.4
Credenz	CZ 5375 RY	27	2	2	1	6	0	4	4	13.0	36.2
Croplan	R2C5225S	43	0	0	3	5	2	4	4	13.1	42.0
Delta Grow	DG 5230RY	29	2	3	1	5	0	5	4	13.0	35.2
Dyna-Gro	S52RY75	25	0	0	5	6	0	4	5	13.3	39.5
Dyna-Gro	S56RY84	43	0	0	1	5	0	4	4	12.8	44.8
Mycogen	5N550R2	32	0	0	1	5	0	4	4	13.2	45.8
NK	S56-M8	30	0	0	2	6	0	5	4	13.0	48.9
Pioneer	P55T81R	32	0	1	4	5	0	4	4	13.3	44.5
Progeny	P 5226 RYS	30	0	0	4	5	4	3	4	13.7	48.3
Terral	REV 51A56	33	0	0	5	5	0	4	3	14.1	41.3
Terral	REV 56R63	29	0	0	2	6	0	4	5	13.3	46.8
Plot Average:										**13.3**	**42.0**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Hinds County – Non-Irrigated Maturity Group V Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	55-R68	28	-	-	-	6	0	8	8	12.2	63.3
Asgrow	AG53X6	29	-	-	-	7	0	8	8	12.6	55.2
Asgrow	AG54X6	32	-	-	-	7	0	8	7	13.0	64.5
Credenz	CZ 5375 RY	30	-	-	-	6	7	7	6	12.1	59.6
Croplan	R2C5225S	39	-	-	-	7	6	7	8	13.4	60.7
Delta Grow	DG 5230RY	33	-	-	-	6	3	8	8	13.4	59.0
Dyna-Gro	S52RY75	43	-	-	-	6	0	9	8	13.4	56.8
Dyna-Gro	S56RY84	40	-	-	-	7	0	8	7	12.6	59.5
Mycogen	5N550R2	39	-	-	-	7	1	7	7	12.6	60.0
NK	S56-M8	29	-	-	-	7	0	7	7	12.1	60.3
Pioneer	P55T81R	27	-	-	-	7	5	7	6	12.4	64.5
Progeny	P 5226 RYS	44	-	-	-	7	0	8	7	13.4	64.6
Terral	REV 51A56	29	-	-	-	7	6	7	6	14.2	60.1
Terral	REV 56R63	28	-	-	-	7	0	8	8	12.9	63.4
Plot Average:										**12.9**	**60.8**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Humphreys County – Irrigated Maturity Group IV Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	47-R70	46	5	1	0	7	0	6	6	11.1	63.1
Asgrow	AG4632	42	5	0	1	7	0	7	8	10.5	60.0
Asgrow	AG46X6	40	3	0	1	6	0	8	8	11.6	69.1
Asgrow	AG47X6	47	5	0	0	7	1	7	7	9.9	59.6
Credenz	CZ 4656 RY	45	4	0	1	7	1	7	7	10.6	40.6
Croplan	R2C4775	44	4	0	0	7	1	7	7	10.9	61.4
Delta Grow	DG 4790RY	45	4	1	0	8	1	8	8	10.9	65.1
Dyna-Gro	31RY45	47	3	0	1	8	0	7	8	10.5	55.6
Mycogen	5N452R2	39	4	1	0	7	1	8	8	10.4	60.3
Mycogen	5N490R2	46	4	0	0	6	0	7	8	10.7	67.4
NK	S47-K5	40	4	0	0	7	1	8	8	10.5	66.5
Pioneer	P47T89R	45	3	1	0	7	1	7	8	10.7	63.2
Progeny	P 4788 RY	48	3	0	0	6	1	6	6	10.9	60.7
Progeny	P 4900 RY	41	3	0	0	6	2	8	9	10.9	65.6
Terral	REV 47R34	42	5	0	0	7	1	7	7	10.5	62.5
Terral	REV 48A26	46	4	0	0	7	1	7	8	10.4	66.7
Plot Average:										**10.7**	**61.7**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Itawamba County – Non-Irrigated Maturity Group V Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	55-R68	33	1	0	1	6	0	6	6	10.3	58.1
Asgrow	AG53X6	34	1	1	0	6	0	6	6	10.3	52.1
Asgrow	AG54X6	38	2	2	1	6	1	7	5	10.3	51.3
Credenz	CZ 5375 RY	33	1	1	1	5	0	6	6	10.3	49.0
Croplan	R2C5225S	48	3	1	1	6	6	5	6	11.0	51.5
Dyna-Gro	S52RY75	45	3	2	0	6	0	8	4	10.7	55.5
Dyna-Gro	S56RY84	35	3	2	1	6	1	7	6	10.3	52.0
Mycogen	5N550R2	43	1	1	0	6	0	7	7	10.5	55.6
Pioneer	P55T81R	33	1	1	0	6	0	5	5	9.7	45.0
Progeny	P 5226 RYS	44	3	1	0	6	6	5	5	10.7	49.8
Terral	REV 51A56	44	2	3	0	6	2	6	5	11.0	53.6
Plot Average:										**10.5**	**52.1**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Leflore County – Irrigated Maturity Group IV Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	47-R70	44	4	0	0	8	0	8	8	8.8	69.8
Asgrow	AG4632	40	2	1	0	8	1	7	7	8.8	68.5
Asgrow	AG46X6	42	2	0	0	8	1	8	8	9.2	77.8
Asgrow	AG47X6	47	2	0	0	8	1	7	6	8.2	67.3
Credenz	CZ 4656 RY	39	2	1	0	7	3	7	6	8.6	55.0
Croplan	R2C4775	28	3	0	0	8	1	8	9	8.7	68.6
Delta Grow	DG 4790RY	43	4	0	0	8	1	8	8	8.8	74.0
Dyna-Gro	31RY45	42	2	0	0	7	1	7	4	8.7	70.5
Mycogen	5N452R2	43	3	0	0	7	1	6	6	8.6	69.6
Mycogen	5N490R2	43	2	0	0	7	5	7	7	8.6	77.0
NK	S47-K5	37	2	0	0	7	1	7	7	8.6	70.2
Pioneer	P47T89R	43	4	0	0	8	1	8	7	8.4	74.8
Progeny	P 4788 RY	41	2	0	0	8	1	8	7	8.4	64.0
Progeny	P 4900 RY	36	2	0	0	7	1	8	7	9.1	72.3
Terral	REV 47R34	45	4	0	0	8	0	7	7	8.5	71.4
Terral	REV 48A26	41	4	0	0	8	1	8	7	8.1	72.8
Plot Average:										**8.6**	**70.2**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Leflore County – Irrigated Maturity Group V Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	55-R68	30	1	0	0	6	1	7	8	10.0	70.1
Asgrow	AG53X6	37	1	0	1	6	1	7	6	9.9	67.5
Asgrow	AG54X6	47	3	0	2	6	0	8	7	11.8	55.8
Credenz	CZ 5375 RY	30	0	0	1	6	1	6	6	11.5	65.9
Croplan	R2C5225S	48	3	0	0	6	8	7	7	10.0	63.2
Delta Grow	DG 5230RY	33	0	0	0	6	1	6	6	9.6	67.4
Dyna-Gro	S52RY75	35	1	0	0	6	1	6	6	9.4	67.3
Dyna-Gro	S56RY84	37	0	0	1	6	2	6	7	10.4	63.0
Mycogen	5N550R2	33	1	0	0	6	1	7	6	9.1	71.4
NK	S56-M8	41	2	0	0	7	8	6	6	9.3	57.3
Pioneer	P55T81R	31	0	0	1	6	7	6	7	9.8	64.5
Progeny	P 5226 RYS	44	3	0	0	6	7	7	6	9.3	61.3
Terral	REV 51A56	40	2	0	1	7	1	6	6	9.1	68.8
Terral	REV 56R63	38	0	0	0	6	1	6	6	10.7	64.7
Plot Average:										**10.0**	**64.9**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Lowndes County – Non-Irrigated Maturity Group V Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	55-R68	28	2	1	3	6	1	5	5	10.0	66.8
Asgrow	AG53X6	28	2	0	1	7	0	5	5	9.5	62.4
Asgrow	AG54X6	39	3	1	4	7	1	5	5	12.3	60.7
Credenz	CZ 5375 RY	27	0	1	1	6	0	6	5	9.3	60.6
Croplan	R2C5225S	38	0	5	3	6	7	6	5	10.4	65.2
Delta Grow	DG 5230RY	30	0	0	1	7	0	8	7	10.1	61.5
Dyna-Gro	S52RY75	32	0	0	2	7	1	7	7	10.0	58.8
Dyna-Gro	S56RY84	37	2	1	2	7	1	7	8	9.5	55.2
Mycogen	5N550R2	33	1	1	2	7	1	7	6	9.8	62.5
NK	S56-M8	34	0	1	3	6	1	6	5	10.9	59.7
Pioneer	P55T81R	29	2	0	1	6	1	7	7	10.0	56.2
Progeny	P 5226 RYS	33	1	2	3	6	5	7	6	10.3	68.1
Terral	REV 51A56	29	2	1	2	8	0	5	5	10.5	58.5
Terral	REV 56R63	38	1	3	1	6	1	7	7	9.8	61.4
Plot Average:										**10.2**	**61.3**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Madison County – Non-Irrigated Maturity Group V Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	55-R68	32	3	0	1	7	0	7	6	12.0	67.1
Asgrow	AG53X6	29	2	0	2	6	1	7	7	12.1	73.0
Asgrow	AG54X6	53	6	0	3	7	1	8	6	13.9	63.5
Credenz	CZ 5375 RY	30	2	2	2	7	0	7	6	11.9	70.0
Croplan	R2C5225S	49	6	0	6	7	3	7	7	16.5	48.5
Delta Grow	DG 5230RY	35	2	0	4	6	1	8	5	12.6	75.6
Dyna-Gro	S52RY75	43	3	0	3	7	3	7	5	12.8	69.2
Dyna-Gro	S56RY84	37	3	0	2	7	0	8	7	11.8	59.9
Mycogen	5N550R2	36	2	0	3	6	1	7	7	12.8	69.7
NK	S56-M8	35	1	0	3	6	1	8	7	13.0	53.9
Pioneer	P55T81R	37	2	0	1	6	1	7	7	12.0	67.9
Progeny	P 5226 RYS	50	6	0	5	6	5	8	6	16.1	64.2
Terral	REV 51A56	45	7	0	7	7	1	7	6	13.7	64.5
Terral	REV 56R63	36	2	0	2	7	1	7	6	12.2	54.4
Plot Average:										**13.1**	**64.4**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Marion County – Non-Irrigated Maturity Group V Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	55-R68	-	2	1	2	-	-	-	-	15.0	51.2
Asgrow	AG53X6	-	1	1	4	-	-	-	-	17.3	36.7
Asgrow	AG54X6	-	2	1	4	-	-	-	-	17.0	45.1
Credenz	CZ 5375 RY	-	1	1	5	-	-	-	-	-	-
Croplan	R2C5225S	-	2	1	2	-	-	-	-	15.9	48.7
Delta Grow	DG 5230RY	-	1	1	3	-	-	-	-	-	-
Dyna-Gro	S52RY75	-	1	1	5	-	-	-	-	15.4	38.6
Dyna-Gro	S56RY84	-	2	1	4	-	-	-	-	17.3	37.5
Mycogen	5N550R2	-	1	1	4	-	-	-	-	17.5	53.7
NK	S56-M8	-	1	1	2	-	-	-	-	17.2	53.0
Pioneer	P55T81R	-	1	1	4	-	-	-	-	17.3	60.4
Progeny	P 5226 RYS	-	3	1	5	-	-	-	-	17.3	37.2
Terral	REV 51A56	-	5	1	5	-	-	-	-	-	-
Terral	REV 56R63	-	3	1	5	-	-	-	-	17.6	40.6
Plot Average:										**16.8**	**45.7**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Monroe County – Non-Irrigated Maturity Group IV Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	47-R70	41	1	1	1	8	1	8	7	8.6	52.4
Asgrow	AG4632	38	2	1	2	8	0	8	8	8.7	49.6
Asgrow	AG46X6	35	3	2	1	8	1	7	7	8.9	48.3
Asgrow	AG47X6	45	1	2	1	8	1	8	6	8.4	50.2
Credenz	CZ 4656 RY	39	2	0	0	8	2	8	6	8.6	47.5
Croplan	R2C4775	40	4	2	1	8	1	8	6	8.8	52.5
Delta Grow	DG 4790RY	40	5	2	1	8	1	8	6	8.8	51.7
Dyna-Gro	31RY45	37	2	0	1	8	0	7	6	8.7	49.6
Mycogen	5N452R2	38	2	1	1	8	0	7	8	8.7	50.2
Mycogen	5N490R2	40	1	1	1	7	4	8	6	9.5	54.6
NK	S47-K5	34	1	0	1	7	1	8	8	9.2	48.5
Progeny	P 4788 RY	40	2	0	0	8	0	8	7	8.6	48.7
Progeny	P 4900 RY	35	1	1	1	7	3	8	7	9.6	52.4
Terral	REV 47R34	40	4	3	0	8	1	7	6	9.5	54.9
Terral	REV 48A26	43	3	2	5	8	1	8	7	9.2	54.2
Plot Average:										**8.9**	**51.1**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Monroe County – Non-Irrigated Maturity Group V Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	55-R68	25	2	2	0	6	0	6	6	7.9	29.7
Asgrow	AG53X6	34	1	3	0	6	0	6	7	7.7	33.9
Asgrow	AG54X6	37	2	4	0	7	0	6	6	8.5	24.5
Credenz	CZ 5375 RY	28	1	2	0	7	1	7	6	7.6	31.0
Croplan	R2C5225S	36	3	3	1	7	1	6	6	9.2	36.0
Dyna-Gro	S52RY75	36	1	3	0	7	1	6	6	8.1	36.8
Dyna-Gro	S56RY84	31	1	3	0	6	0	5	6	7.9	30.0
Mycogen	5N550R2	31	1	4	0	6	0	6	6	8.4	30.9
NK	S56-M8	27	1	2	1	6	0	7	6	7.7	28.4
Pioneer	P55T81R	28	0	3	0	6	0	6	6	8.6	27.3
Progeny	P 5226 RYS	35	3	2	0	7	1	6	7	8.7	36.7
Terral	REV 51A56	38	1	3	3	7	0	6	6	9.5	32.7
Terral	REV 56R63	25	1	1	0	6	0	6	5	8.4	34.0
Plot Average:										**8.3**	**31.7**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Quitman County – Irrigated Maturity Group IV LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	47-L10	50	1	1	1	7	1	9	8	8.5	52.1
Credenz	CZ 4748 LL	46	1	1	1	7	1	9	9	9.0	51.8
Credenz	HBK LL4953	48	3	0	2	6	1	6	6	9.5	51.9
Delta Grow	DG 4587LL/STS	43	1	1	2	7	1	7	7	8.7	57.6
Delta Grow	DG 4781LL	49	1	0	1	7	1	9	9	8.5	53.6
Delta Grow	DG 4967LL	56	2	0	2	7	1	7	8	9.5	51.2
Dyna-Gro	S45LL97	48	2	0	2	7	2	5	5	9.2	57.8
Dyna-Gro	S49LL34	48	2	0	2	6	0	8	7	9.0	51.9
Go Soy	4912LL	53	2	0	2	6	0	8	9	10.6	51.4
Progeny	P 4247 LL	45	1	0	3	7	1	7	6	8.9	58.6
Progeny	P 4930 LL	47	4	0	2	6	1	8	8	9.4	51.4
Plot Average:										**9.2**	**53.6**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Quitman County – Irrigated Maturity Group V LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	53-L55	45	1	0	3	6	1	8	8	10.3	50.5
Credenz	CZ 5150 LL	53	3	0	3	6	1	6	6	10.4	54.7
Delta Grow	DG 5067LL	48	1	0	2	6	0	8	8	12.1	48.9
Dyna-Gro	S52LL66	50	1	0	3	6	1	6	6	10.7	51.9
Dyna-Gro	S55LS75	44	0	0	4	6	1	8	7	12.1	49.0
Go Soy	5115LL	49	3	0	1	6	0	8	8	11.6	53.5
Progeny	P 5414 LLS	40	1	0	4	6	1	8	8	15.0	51.7
Progeny	P 5460 LL	48	2	0	4	6	2	8	8	10.4	48.2
Plot Average:										**11.6**	**51.1**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Rankin County – Non-Irrigated Maturity Group IV Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	47-R70	46	0	1	0	7	1	-	-	13.0	75.3
Asgrow	AG4632	42	0	0	1	7	0	8	7	13.5	74.3
Asgrow	AG46X6	43	0	0	2	7	2	8	7	13.0	73.8
Asgrow	AG47X6	40	0	2	4	7	1	7	7	-	-
Credenz	CZ 4656 RY	45	0	0	1	7	-	-	-	12.5	77.6
Croplan	R2C4775	44	0	0	1	7	-	-	-	13.0	64.4
Delta Grow	DG 4790RY	45	0	1	1	7	-	-	-	12.7	64.8
Dyna-Gro	31RY45	37	0	0	0	-	-	-	-	13.0	78.4
Mycogen	5N452R2	42	0	0	2	-	-	-	-	13.1	79.5
Mycogen	5N490R2	39	0	0	2	6	2	7	7	12.9	58.1
NK	S47-K5	38	0	2	3	7	2	-	-	12.7	55.9
Pioneer	P47T36R	43	0	0	2	7	3	7	7	12.2	63.0
Progeny	P 4900 RY	38	0	2	5	7	3	8	7	12.6	54.5
Terral	REV 47R34	45	0	0	2	7	-	-	-	13.0	58.8
Terral	REV 48A26	40	0	0	1	8	1	7	7	13.0	56.1
Plot Average:										**12.9**	**67.7**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.

Sharkey County – Irrigated Maturity Group IV Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	47-R70	46	3	0	2	7	1	7	7	10.3	54.8
Asgrow	AG4632	40	4	0	1	7	0	7	8	10.4	51.4
Asgrow	AG46X6	41	3	0	1	6	3	8	8	10.0	57.1
Asgrow	AG47X6	48	2	0	6	7	1	7	9	10.0	52.1
Credenz	CZ 4656 RY	46	2	0	0	7	4	7	8	9.9	35.2
Croplan	R2C4775	45	2	0	2	7	0	7	8	10.0	52.2
Delta Grow	DG 4790RY	46	1	0	3	6	1	6	9	10.3	51.1
Dyna-Gro	31RY45	42	4	0	1	7	2	7	7	10.6	47.5
Mycogen	5N452R2	42	3	0	1	6	1	7	7	10.4	51.2
Mycogen	5N490R2	43	4	0	4	6	5	7	9	10.1	53.8
NK	S47-K5	38	1	0	2	6	1	6	8	10.4	56.1
Pioneer	P47T89R	46	3	0	3	7	1	7	7	9.8	56.1
Progeny	P 4788 RY	47	3	0	1	7	1	8	8	9.7	49.1
Progeny	P 4900 RY	38	1	0	3	6	3	7	7	9.4	40.1
Terral	REV 47R34	43	3	0	0	8	1	8	8	10.2	55.3
Terral	REV 48A26	43	2	0	2	7	1	7	7	10.4	55.8
Plot Average:										**10.1**	**51.2**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Sharkey County – Irrigated Maturity Group V Roundup Ready											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	55-R68	34	1	1	3	6	0	8	8	14.2	49.8
Asgrow	AG53X6	34	1	1	2	6	0	9	8	9.5	54.8
Asgrow	AG54X6	51	2	0	9	6	0	7	8	14.9	44.1
Credenz	CZ 5375 RY	32	1	0	8	6	0	7	7	9.4	51.6
Croplan	R2C5225S	47	4	0	7	6	4	7	6	12.4	54.1
Delta Grow	DG 5230RY	41	1	0	2	7	3	8	8	9.9	56.4
Dyna-Gro	S52RY75	44	2	0	1	6	0	6	6	9.6	61.2
Dyna-Gro	S56RY84	42	3	1	7	6	1	7	7	11.2	52.6
Mycogen	5N550R2	39	2	1	2	6	0	8	8	9.8	56.6
NK	S56-M8	44	3	1	2	6	4	7	7	10.2	45.7
Pioneer	P55T81R	37	1	1	2	6	3	7	7	10.0	54.6
Progeny	P 5226 RYS	50	2	0	7	6	6	7	6	11.9	57.9
Terral	REV 51A56	45	2	0	4	7	0	6	7	11.2	55.7
Terral	REV 56R63	39	7	0	8	6	1	7	7	10.3	48.8
Plot Average:										**11.0**	**53.1**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Sharkey County – Non-irrigated Maturity Group IV LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	47-L10	42	1	0	0	7	2	9	8	9.1	50.7
Credenz	CZ 4748 LL	37	1	1	0	7	2	7	8	8.4	50.3
Credenz	HBK LL4953	36	1	0	1	6	1	8	8	9.1	51.6
Delta Grow	DG 4587LL/STS	32	1	1	0	6	1	8	8	8.6	51.2
Delta Grow	DG 4781LL	38	0	2	0	7	4	8	7	8.8	52.8
Delta Grow	DG 4967LL	43	2	1	0	6	2	8	8	9.5	50.4
Dyna-Gro	S45LL97	42	1	1	0	7	1	8	9	9.0	54.3
Dyna-Gro	S49LL34	39	1	0	0	6	1	8	9	9.7	52.2
Go Soy	4912LL	44	1	2	1	6	2	8	7	11.3	47.5
Progeny	P 4247 LL	31	0	0	0	7	1	7	7	8.8	51.2
Progeny	P 4930 LL	40	2	0	1	6	1	7	8	8.9	52.6
Plot Average:										**9.2**	**51.4**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Sharkey County – Non-irrigated Maturity Group V LibertyLink											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	53-L55	41	1	0	0	6	2	9	8	11.2	48.9
Credenz	CZ 5150 LL	38	1	0	1	6	2	8	8	9.4	50.7
Credenz	CZ 5442 LL	41	1	1	3	6	2	8	8	10.8	50.5
Delta Grow	DG 5067LL	39	1	1	3	6	1	7	7	9.8	50.1
Dyna-Gro	S52LL66	37	1	1	2	6	1	7	7	9.8	51.9
Dyna-Gro	S55LS75	25	0	0	1	6	1	8	8	9.4	50.0
Go Soy	5115LL	30	0	1	1	6	1	9	8	9.3	49.4
Progeny	P 5414 LLS	39	1	0	0	7	3	8	7	10.0	47.9
Progeny	P 5460 LL	37	-	-	-	6	2	7	8	-	-
Plot Average:										**10.0**	**49.9**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Sunflower County – Irrigated Early Maturity Group IV Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	44-R08	37	1	0	1	2	7	6	6	11.3	70.9
Credenz	CZ 4181 RY	39	2	0	3	1	6	6	7	10.7	71.0
Croplan	R2C4345	40	3	0	1	4	8	7	6	10.1	74.0
Dyna-Gro	S43RY95	45	3	0	2	4	7	6	7	11.8	73.2
Mycogen	5N433R2	43	3	0	1	3	8	7	7	11.5	75.5
Pioneer	P41T33R	44	4	0	3	0	8	6	7	10.1	71.4
Progeny	P 4211 RY	34	1	0	1	4	8	8	7	10.9	74.7
Terral	REV 45A46	86	3	0	1	4	7	5	6	10.5	70.8
Plot Average:										**10.9**	**72.7**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Sunflower County – Irrigated Maturity Group IV Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	47-R70	39	4	0	1	7	1	7	7	10.9	82.0
Asgrow	AG4632	45	3	0	0	7	0	7	6	10.7	83.0
Asgrow	AG46X6	38	3	1	2	7	1	6	6	11.0	87.1
Asgrow	AG47X6	49	3	0	0	8	2	6	5	10.6	81.5
Credenz	CZ 4656 RY	51	4	0	1	7	1	6	6	10.7	58.0
Croplan	R2C4775	44	3	0	0	8	2	6	5	10.9	80.7
Delta Grow	DG 4790RY	42	6	0	0	8	1	7	6	11.0	82.5
Dyna-Gro	31RY45	42	4	0	0	7	2	6	6	10.7	77.0
Mycogen	5N452R2	46	4	0	0	7	1	7	7	10.6	77.8
Mycogen	5N490R2	41	3	1	1	7	3	5	5	11.6	82.0
NK	S47-K5	32	2	0	1	7	1	6	5	11.6	75.2
Pioneer	P47T89R	37	5	0	0	7	1	6	6	10.6	79.8
Progeny	P 4788 RY	47	6	0	0	8	2	7	6	11.0	74.8
Progeny	P 4900 RY	31	3	2	3	7	2	7	7	11.9	78.5
Terral	REV 47R34	43	4	0	0	7	1	7	6	10.6	75.7
Terral	REV 48A26	38	3	0	1	7	1	5	5	11.2	84.1
Plot Average:										**11.0**	**78.7**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Tunica County – Non-irrigated Maturity Group IV LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	47-L10	41	1	1	0	6	0	6	6	14.9	49.6
Delta Grow	DG 4587LL/STS	37	1	1	0	6	0	7	5	16.0	51.0
Delta Grow	DG 4781LL	38	2	1	0	6	0	7	7	15.0	50.1
Delta Grow	DG 4967LL	46	4	1	0	6	0	6	5	15.1	45.6
Dyna-Gro	S45LL97	40	1	1	0	6	0	7	5	15.7	51.4
Dyna-Gro	S49LL34	41	2	1	0	6	0	6	6	15.0	47.7
Go Soy	4912LL	49	2	1	0	6	0	5	5	15.4	46.2
Progeny	P 4247 LL	34	0	3	0	6	0	7	5	15.7	43.7
Progeny	P 4930 LL	42	3	1	0	5	0	5	4	14.8	49.1
Plot Average:										**15.3**	**48.3**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Tunica County – Non-irrigated Maturity Group V LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	53-L55	38	1	1	0	6	1	7	7	13.9	47.3
Credenz	CZ 5442 LL	44	7	1	0	6	1	5	5	14.2	47.1
Delta Grow	DG 5067LL	48	6	1	0	6	0	7	7	14.0	44.8
Dyna-Gro	S52LL66	44	6	1	0	6	1	5	5	14.6	46.9
Dyna-Gro	S55LS75	40	2	1	1	6	1	6	5	13.6	44.8
Go Soy	5115LL	47	2	1	0	6	0	6	6	14.1	51.6
Progeny	P 5414 LLS	41	2	1	0	6	0	5	5	13.8	43.1
Progeny	P 5460 LL	43	2	2	0	6	1	6	5	13.6	43.5
Plot Average:										**14.0**	**46.1**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Washington County – Irrigated Maturity Group IV Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	47-R70	27	0	0	2	8	1	7	8	9.3	46.6
Asgrow	AG4632	23	0	0	6	8	1	7	8	10.9	42.4
Asgrow	AG46X6	29	0	3	2	8	1	6	8	10.6	49.3
Asgrow	AG47X6	29	1	0	9	7	1	7	6	9.8	39.2
Credenz	CZ 4656 RY	31	0	2	1	8	1	7	9	9.5	36.1
Croplan	R2C4775	23	0	0	7	8	2	7	8	11.2	43.4
Delta Grow	DG 4790RY	24	0	0	9	8	1	6	8	10.3	38.0
Dyna-Gro	31RY45	24	0	0	1	7	1	6	8	11.5	42.8
Mycogen	5N452R2	22	0	0	4	7	1	6	7	11.4	40.9
Mycogen	5N490R2	28	0	0	9	7	3	6	6	9.5	43.4
NK	S47-K5	26	0	0	8	7	1	7	5	10.9	43.2
Pioneer	P47T89R	29	0	0	9	8	1	7	7	11.6	43.6
Progeny	P 4788 RY	32	0	0	3	8	1	6	7	9.0	39.8
Progeny	P 4900 RY	27	0	0	8	7	1	7	6	9.9	43.0
Terral	REV 47R34	20	0	0	8	8	1	7	6	10.9	32.9
Terral	REV 48A26	30	0	0	7	8	1	5	8	9.3	44.0
Plot Average:										**10.4**	**41.8**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Washington County – Irrigated Maturity Group IV LibertyLink											
Brand	**Variety**	**Final Height**	**Lodging Score**	**Shattering Score**	**Green Stem Score**	**Disease Ratings**				**Seed Moisture**	**Yield[5]**
						CLB[1]	**FLS[2]**	**SBS[3]**	**TS[4]**		
		Inches	**0 to 10[6]**	**0 to 10[6]**	**0 to 10[6]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**0 to 9[7]**	**%**	**bu/acre**
Armor	47-L10	40	1	0	1	7	2	7	6	14.0	57.4
Credenz	CZ 4748 LL	42	2	0	1	6	-	-	-	11.2	56.7
Credenz	HBK LL4953	47	3	0	2	7	2	7	6	11.2	63.5
Delta Grow	DG 4587LL/STS	37	1	0	0	7	2	7	7	13.0	65.5
Delta Grow	DG 4781LL	42	2	0	0	7	3	-	-	12.6	60.3
Delta Grow	DG 4967LL	47	3	0	2	6	1	7	7	12.5	62.3
Dyna-Gro	S45LL97	39	1	0	1	6	2	6	6	12.4	64.6
Dyna-Gro	S49LL34	47	2	0	3	7	2	7	7	11.3	64.0
Go Soy	4912LL	48	3	0	3	7	5	7	6	11.8	60.8
Progeny	P 4247 LL	31	1	0	0	7	3	7	7	13.3	65.5
Progeny	P 4930 LL	47	2	0	2	7	3	6	6	12.0	62.6
Plot Average:										**12.3**	**62.1**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

Washington County – Irrigated Maturity Group V LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield[5]
						CLB[1]	FLS[2]	SBS[3]	TS[4]		
		Inches	0 to 10[6]	0 to 10[6]	0 to 10[6]	0 to 9[7]	0 to 9[7]	0 to 9[7]	0 to 9[7]	%	bu/acre
Armor	53-L55	40	0	0	7	6	2	8	8	10.5	59.9
Credenz	CZ 5150 LL	48	2	0	2	7	4	6	6	10.7	63.4
Credenz	CZ 5442 LL	47	1	0	4	7	3	6	7	10.7	59.6
Delta Grow	DG 5067LL	48	2	0	1	6	2	7	7	11.3	60.8
Dyna-Gro	S52LL66	49	2	0	1	7	1	8	8	10.7	59.9
Dyna-Gro	S55LS75	38	1	0	6	7	1	7	8	12.0	60.8
Go Soy	5115LL	47	2	0	3	7	2	7	7	11.0	62.9
Progeny	P 5414 LLS	36	0	0	7	6	1	7	6	11.6	61.7
Progeny	P 5460 LL	45	2	0	4	7	1	6	6	10.0	62.5
Plot Average:										**10.9**	**61.3**

[1]- Cercospora leaf blight severity ratings based on progression of disease from leaf tissue (0-5), to petioles (6), and to pods and main stems (7-9).
[2]- Frogeye leaf spot severity ratings.
[3]- Septoria brown spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[4]- Target spot severity ratings based on progression of disease from the lower canopy (0-3), to mid-canopy (4-6), to upper-canopy (7-9).
[5]- Soybean yield adjusted to standard moisture content of 13.0%.
[6]- Scores rated on scale of 0-10 with 0 being excellent and 10 being poor at harvest.
[7]- Scores rated on scale of 0-9 with 0 being excellent and 9 being most severe.

2017 Soybean Variety Suggestions

Maturity Group IV – Roundup Ready / Roundup Ready 2 Yield / Roundup Ready 2 Xtend (Early)

AGS GS45R216 *	Asgrow AG4632	Asgrow AG46X6 **	Asgrow AG46X7 **	Delta Grow DG4680RR2 *
Dyna-Gro 31RY45	Dyna-Gro S43RY95	Dyna-Gro S45XS66 **	Great Heart Seed GT-4540XS **	Mycogen 5N433R2
Mycogen 5N452R2	Progeny P 4516 RXS **	Progeny P 4613 RYS	Terral REV 45A46 *	

Maturity Group IV – Roundup Ready / Roundup Ready 2 Yield / Roundup Ready 2 Xtend (Late)

Armor 47-D17 **	Armor 47-R70	Croplan R2C4775 *	Delta Grow DG4790R2Y	Delta Grow DGX4845RR2 **
Great Heart Seed GT-477CR2	NK S47-K5	Pioneer P47T36R	Pioneer P47T89R	Progeny P 4757 RY
Progeny P 4788 RY	Progeny P 4900 RY	Terral REV 47R34	Terral REV 48A26 *	Terral REV 48A76 *
Terral REV 49A75	Terral REV 49R94	USG 7496XT **		

Maturity Group V – Roundup Ready / Roundup Ready 2 Yield / Roundup Ready 2 Xtend

Armor 55-R68	Croplan R2C5225S *	Delta Grow DG5170RR2/STS	Delta Grow DG5230RR2	Delta Grow DG5580RR2 *
Dyna-Gro S52RY75	Dyna-Gro S57RY26	Mycogen 5N523R2 *	NK S55-Q3	Progeny P 5226 RYS
Progeny P 5555 RY	Progeny P 5752 RY	Terral REV 51A56	Terral REV 52A94	USG 7506XTS **
USG 75B75R				

Maturity Group IV – LibertyLink

Credenz CZ 4540LL	Credenz HBK LL4953	Delta Grow DG4781LL	Delta Grow DG4967LL	Dyna-Gro S49LL34
GoSoy 4714LL	GoSoy 4913LL *	Progeny P 4814 LLS	Progeny P 4930 LL	

Maturity Group V – LibertyLink

Credenz CZ 5150 LL	Delta Grow DG5067LL	Dyna-Gro S52LL66	GoSoy 5115LL	GoSoy 5215LL

Maturity Group IV – Conventional

GoSoy 483C	GoSoy Ireane	USG Ellis

Maturity Group V – Conventional

GoSoy Leland	Univ. of Arkansas UA 5612

Suggestions are based upon overall consistency and performance in Mississippi Soybean Official Variety Trials. This list is intended to serve as an additional resource for variety selection. Consult other sources such as results from Official Variety Trials and Demonstration Programs for detailed information regarding variety performance.

* Indicates that a variety is a “Promising Variety” and was selected based on excellent yield performance in MSU Official Variety Trials with minimal field testing in production settings.

** Indicates that a variety contains the new Roundup Ready 2 Xtend trait and is a “Promising Variety” and was selected based on excellent yield performance in MSU Official Variety Trials with minimal field testing in production settings.

2016 Soybean Variety Response to Iron Deficiency Chlorosis

Brand	Variety	IDC Tolerance Rating Date & Score						Avg. IDC Tolerance Score	Yield (bu/A)
		7/6	7/13	7/22	7/27	8/6	8/17		
Dyna-Gro	S52RY75	2	2	2	2	2	2	2	46.1
Delta Grow	DG5230RR2Y	7	2	2	3	3	2	3	46.0
Univ. of Arkansas	UA 5414RR	2	1	2	2	2	1	2	43.3
Terral	REV 56R63	4	3	3	3	3	2	3	43.2
Terral	REV 52A94	4	4	3	3	3	2	3	39.3
Croplan	R2C5265	2	2	2	3	3	2	2	39.1
Croplan	R2C5225S	5	5	4	4	3	2	4	38.8
Delta Grow	DG5625RR2Y	5	5	4	4	3	2	4	38.5
Pioneer	P52T50R	3	3	3	3	2	2	3	36.4
NK	S55-Q3	4	5	4	6	4	2	4	36.3
Pioneer	P55T81R	4	4	4	5	3	3	4	35.8
Mycogen	5N523R2	5	4	4	5	4	3	4	35.8
Dyna-Gro	S57RY26	6	5	4	5	4	3	5	35.3
Delta Grow	DG5170RR2Y/STS	5	4	4	5	4	3	4	33.9
Progeny	P 5752 RY	5	4	4	5	4	3	4	33.2
Progeny	P 5226 RYS	5	6	5	5	4	3	5	32.7
NK	S56-M8	5	4	5	6	5	4	5	32.2
Terral	REV 57R21	4	4	4	5	4	3	4	29.7
USG	75B75R	6	5	5	6	5	4	5	28.5
Delta Grow	DG5555RR	5	5	6	6	5	4	5	21.7
Dyna-Gro	S56RY84	7	8	7	7	6	6	7	16.7
Credenz	CZ 5375 RY	6	6	6	7	5	5	6	16.1
Terral	REV 51A56	7	8	8	9	9	8	8	7.4
Progeny	P 5555 RY	7	8	7	7	7	6	7	6.0
Delta Grow	DG5580RR2Y	3	7	8	8	8	7	7	5.6
GoSoy	5214GTS	7	6	7	7	7	7	7	3.7
Armor	55-R68	8	8	8	8	8	7	8	0.9
NK	S58-Z4	7	8	8	8	7	7	8	0.8

Tolerance scores were assigned on a scale of 1 to 10 with 1 being completely tolerant and 10 being completely susceptible. These data are intended to serve as an additional resource for variety selection specifically for soils with a history of problems associated with iron deficiency chlorosis. Consult other sources such as results from Official Variety Trials and Demonstration Programs for detailed information regarding variety performance.

2016 Soybean Management by Application of Research and Technology (SMART) Program Summary

MSBP Project Number: 36-2016
Principal Investigator: Dr. Trent Irby (trent.irby@msstate.edu), Extension Soybean Specialist

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The SMART program coordinated by Mississippi State University Extension and supported by the Mississippi Soybean Promotion Board is designed to assist with implementing best management practices and technologies into the farm level. In doing so, the latest research-proven practices can be demonstrated on the farm scale to assist with improving soybean yield and ultimately profitability.

Soybean is an integral component of Mississippi's agriculture production systems. Currently, soybean is third on the list of Mississippi's agricultural commodities. Approximately 2 million acres of soybeans were harvested in Mississippi during 2016 with an average yield of 48 bushels per acre. Soybean productivity has increased over the last 20 years due to a multitude of reasons including, but not limited to, improved management, technology, and seed options. However, potential for improvement of our production systems still remain.

During the 2016 production season, the SMART program consisted of demonstration and training events that promoted ideal practices to Mississippi's soybean producers. This portion of the program is intended to provide you as soybean growers, crop consultants, and other agriculture professionals with the latest information to assist throughout the growing season.

MISSISSIPPI STATE UNIVERSITY EXTENSION

MSPB MISSISSIPPI SOYBEAN PROMOTION BOARD

SOYBEAN VARIETY DEMONSTRATIONS

Purpose: These demonstration fields were designed to determine the performance of the latest, proven soybean varieties across multiple environments and production systems in Mississippi.

Procedure: During 2016, 29 soybean variety demonstration locations were harvested across Mississippi with participation by MSU-ES county and area agents. Soybean varieties planted at each location were selected to be a part of a specific set suitable for the region where the demonstration was located. Specifically, a total of 8 varieties were included in the Roundup Ready (RR) MG Early IV sets, 15 varieties were included in RR MG IV sets, 16 varieties in RR MG V sets, 11 varieties in LibertyLink (LL) MG IV sets, and 9 varieties in LL MG V sets. Of the 29 locations harvested, the variety demonstrations include:

- 1 irrigated RR MG Early IV location
- 6 irrigated RR MG IV locations
- 2 irrigated RR MG V locations
- 4 non-irrigated RR MG IV locations
- 8 non-irrigated RR MG V locations
- 4 irrigated LL MG IV locations
- 4 irrigated LL MG V locations

These locations successfully covered targeted regions of the Mississippi Delta, the Mississippi Prairies (Black Prairie and/or Jackson Prairie), Mississippi Coastal Plains, and the Mississippi Valley Silty Uplands. These locations also represented 5 different row spacings, 3 tillage systems, 14 soil series, and irrigated and non-irrigated production systems ranging through 6 weeks of planting dates.

Results: This information is summarized in the 2016 MSU-ES Soybean Variety Demonstration Program Summary publication. Beyond this publication, the variety demonstration results were used to supplement data from small plot variety testing to develop the MSU-ES Soybean Variety Suggestions for 2017 publication.

SOYBEAN VARIETY SCREENING FOR IRON DEFICIENCY CHLOROSIS (IDC) TOLERANCE

Purpose: Iron deficiency chlorosis (IDC) is an extreme problem in certain soybean production regions of Mississippi. One aspect of management for IDC is through variety selection. However, little data exists with respect to variety tolerance to IDC. Therefore, during 2016 a total of 28 maturity group V varieties were screened for tolerance to IDC.

Procedure: Varieties were planted in a producer field with historic IDC problems. Tolerance scores were assigned to each variety on a scale of 1 to 10 with 1 being completely tolerant and 10 being completely susceptible. The planting of each variety to be screened was replicated three times throughout the test area. Machine harvested yield was collected in order to determine soybean yield for each variety grown in this IDC environment.

Figure 1. Illustration of Tolerance Levels to IDC.

Results: The following table summarizes the IDC Tolerance score and soybean yield in this problem field for the varieties evaluated during 2016. These data are intended to serve as an additional resource for variety selection for soils with a history of problems associated with IDC.

2016 Soybean Variety Response to Iron Deficiency Chlorosis

Brand	Variety	IDC Tolerance Rating Date & Score						Avg. IDC Tolerance Score	Yield (bu/A)
		7/6	7/13	7/22	7/27	8/6	8/17		
Dyna-Gro	S52RY75	2	2	2	2	2	2	2	46.1
Delta Grow	DG5230RR2Y	7	2	2	3	3	2	3	46.0
Univ. of Arkansas	UA 5414RR	2	1	2	2	2	1	2	43.3
Terral	REV 56R63	4	3	3	3	3	2	3	43.2
Terral	REV 52A94	4	4	3	3	3	2	3	39.3
Croplan	R2C5265	2	2	2	3	3	2	2	39.1
Croplan	R2C5225S	5	5	4	4	3	2	4	38.8
Delta Grow	DG5625RR2Y	5	5	4	4	3	2	4	38.5
Pioneer	P52T50R	3	3	3	3	2	2	3	36.4
NK	S55-Q3	4	5	4	6	4	2	4	36.3
Pioneer	P55T81R	4	4	4	5	3	3	4	35.8
Mycogen	5N523R2	5	4	4	5	4	3	4	35.8
Dyna-Gro	S57RY26	6	5	4	5	4	3	5	35.3
Delta Grow	DG5170RR2Y/STS	5	4	4	5	4	3	4	33.9
Progeny	P 5752 RY	5	4	4	5	4	3	4	33.2
Progeny	P 5226 RYS	5	6	5	5	4	3	5	32.7
NK	S56-M8	5	4	5	6	5	4	5	32.2
Terral	REV 57R21	4	4	4	5	4	3	4	29.7
USG	75B75R	6	5	5	6	5	4	5	28.5
Delta Grow	DG5555RR	5	5	6	6	5	4	5	21.7
Dyna-Gro	S56RY84	7	8	7	7	6	6	7	16.7
Credenz	CZ 5375 RY	6	6	6	7	5	5	6	16.1
Terral	REV 51A56	7	8	8	9	9	8	8	7.4
Progeny	P 5555 RY	7	8	7	7	7	6	7	6.0
Delta Grow	DG5580RR2Y	3	7	8	8	8	7	7	5.6
GoSoy	5214GTS	7	6	7	7	7	7	7	3.7
Armor	55-R68	8	8	8	8	8	7	8	0.9
NK	S58-Z4	7	8	8	8	7	7	8	0.8

Tolerance scores were assigned on a scale of 1 to 10 with 1 being completely tolerant and 10 being completely susceptible. These data are intended to serve as an additional resource for variety selection specifically for soils with a history of problems associated with iron deficiency chlorosis. Consult other sources such as results from Official Variety Trials and Demonstration Programs for detailed information regarding variety performance.

SOYBEAN FUNGICIDE DEMONSTRATIONS

Purpose: These demonstration fields were designed to evaluate the effect of a foliar fungicide application on soybean disease management and yield during the 2016 growing season.

Procedure: A single application of Quadris at 6 fl oz/A, Quadris Top SBX at 7 fl oz/A, and Aproach Prima at 6.4 fl oz/A were applied in large field scale plots. All fungicide treatments included a non-ionic surfactant at a rate of 0.25% v/v. All fungicide applications were applied by airplane at the R3/R4 growth stage. Additionally, all fungicide treatments were compared to an untreated control for comparison. This trial was conducted at three locations in Mississippi during the 2016 growing season. The locations consisted of the following: Hollandale, MS (Washington County), Leland, MS (Washington County), and Canton, MS (Madison County). Both the Hollandale and Leland, MS locations were irrigated, while the Canton, MS location was non-irrigated. Final plant heights along with green stem, shattering, and lodging scores were collected prior to harvest. Soybean yield was collected from each treatment and measured in bushels per acre at all locations.

Figure 1. Trial layout at each location.

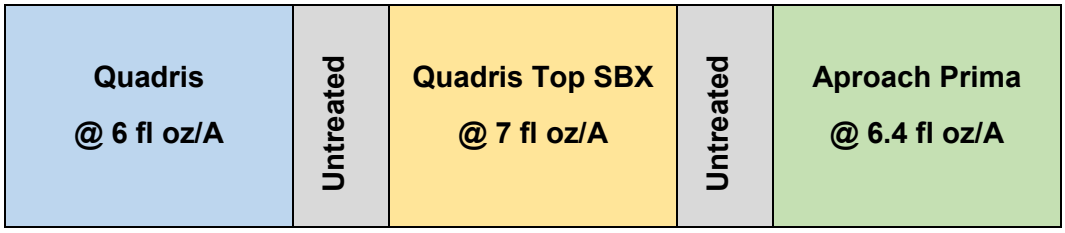
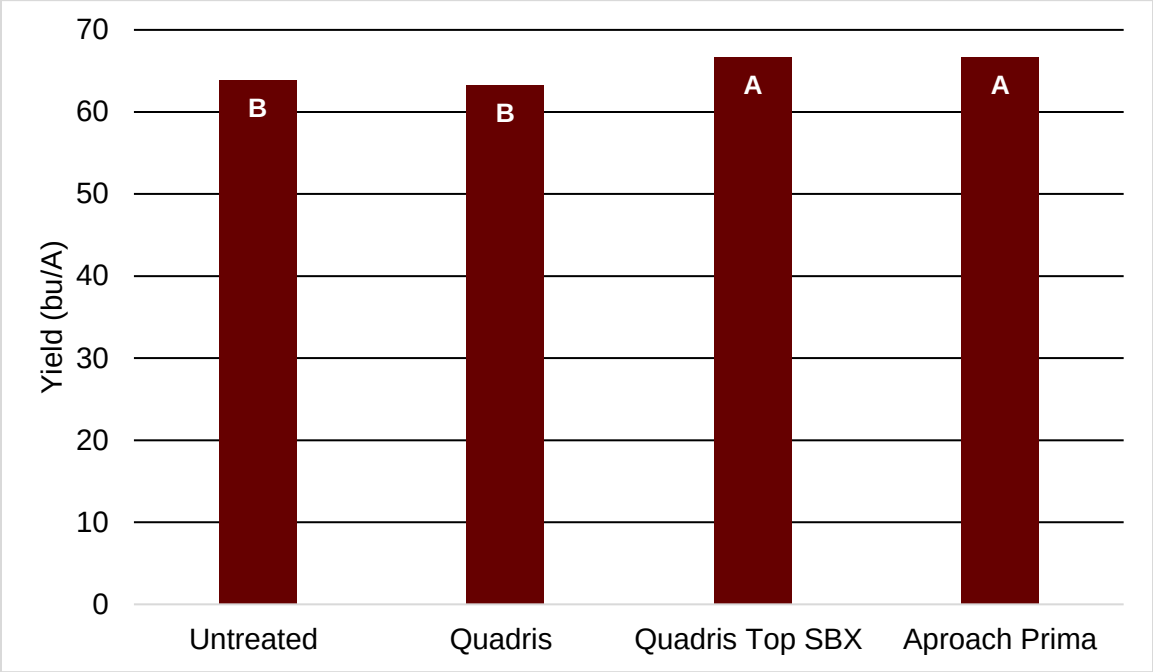


Table 1: Soybean yield following fungicide application at the R3/R4 growth stage at each individual location.

Treatment	Hollandale, MS	Leland, MS	Canton, MS
	----------Yield (bu/ac) ----------		
Untreated	71.8	66.0	53.4
Quadris	71.8	66.0	52.1
Quadris Top SBX	74.2	71.0	55.0
Aproach Prima	75.4	70.0	54.7

Figure 2. Yield differences between fungicide products and the untreated control averaged across all locations



Results: It was observed when all locations were combined that an application of Quadris at 6 fl oz/A provided no yield benefit compared to the untreated check where no fungicide was applied. However, with an application of Quadris Top SBX at 7 fl oz/A or Approach Prima at 6.4 fl oz/A, nearly a four bushel per acre increase in yield was observed. Plant heights, green stem, shattering, and lodging scores were not significant when combined over all locations, therefore these data were not displayed.

NEMATICIDE SEED TREATMENT DEMONSTRATIONS

Purpose: These demonstration fields were designed to evaluate the effect of nematicide seed treatments on soybean cyst nematode management and soybean yield during the 2016 growing season.

Procedure: In 2016, three seed treatments, Clariva Complete Beans, ILeVo seed treatment, and CruiserMaxx Vibrance Beans, were applied to a soybean variety with tolerance to soybean cyst nematode (SCN) (NK S55-Q3). Treatments were planted at two locations in Prentiss County, Mississippi in fields that have historically had soybean cyst nematode populations. Treatments were replicated 4 times at one location and 2 times at the other Prentiss County location. Nematode samples collected at both locations confirmed that fields had exceeded threshold levels of soybean cyst nematodes at the time of planting. Currently, the threshold level for soybean cyst nematode is 1 per pint of soil. Nematode samples and yield were collected at the end of the growing season to determine the effectiveness of each seed treatment.

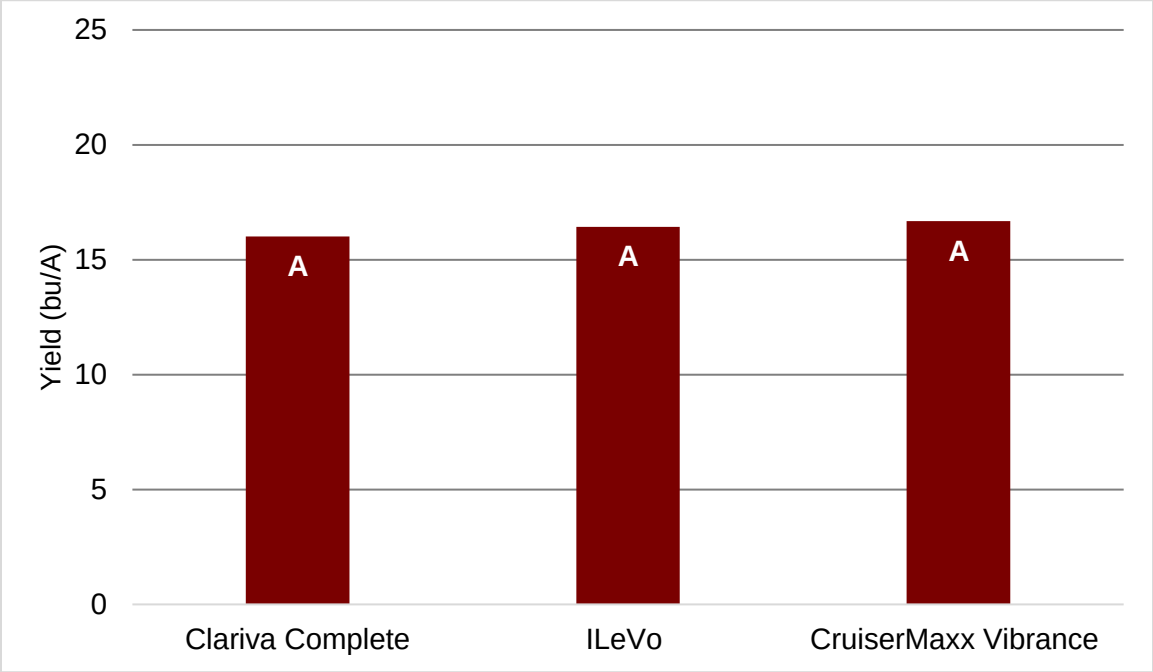
Table 1. Seed treatments used at each Prentiss County location.

Seed Treatment	**Active Ingredient**
Clariva Complete	*Pasteuria nishizawae* + thiamethoxam + mefenoxam + fludioxonil + sedaxane
ILeVo	fluopyram
CruiserMaxx Vibrance	thiamethoxam + mefenoxam + fludioxonil + sedaxane

Table 2. Soybean Cyst Nematode (SCN) populations at planting and after harvest.

Location	**SCN Population At Planting**			**SCN Population after Harvest**		
	Clariva Complete Beans	Illevo Seed Treatment	CruiseMaxx Vibrance	Clariva Complete Beans	Illevo Seed Treatment	CruiseMaxx Vibrance
	---------- encysted female SCN per pint of soil ----------					
Field 1	47	47	47	89	61	101
Field 2	39	39	39	32	36	32

Figure 1. Yield differences observed between nematicide seed treatments.



Results: Yield collected was low across all treatments due to shattering caused by a delayed harvest (equipment malfunction delay). No yield benefit was observed with the addition of a nematicide seed treatment to a soybean variety containing tolerance to this pest. Additionally, no nematicide seed treatment affected SCN development at both locations, as population levels remained well above threshold (Table 2). These seed treatment options will be further evaluated during 2017 when applied to a soybean variety not containing tolerance to SCN.

FERTILITY DEMONSTRATIONS – PHOSPHOROUS

Purpose: This demonstration field was designed to evaluate the effect of phosphorous fertilizer (0-46-0) on soybean yield when applied at various rates.

Procedure: This demonstration was conducted in Cleveland, MS during the 2016 growing season on 38 inch twin row planted soybeans. Phosphorous (0-46-0) was applied at three different rates (Table 1) with an untreated check where no phosphorous was applied included for comparison. Rates were structured to represent a low application rate (87 pounds per acre), a maintenance application rate (174 pounds per acre) and a build application rate (261 pounds per acre). Soil samples were collected at both the beginning of the growing season and at harvest, along with soybean yield to determine the effectiveness of the phosphorous applications.

Table 1. Amount of P_2O_5 applied in the form of 0-46-0 fertilizer for each treatment.

Rates (lb/A):	**P_2O_5**	**0-46-0**
Check	0	0
Low	40	87
Maintenance	80	174
Build	120	261

Figure 1. Trial layout.

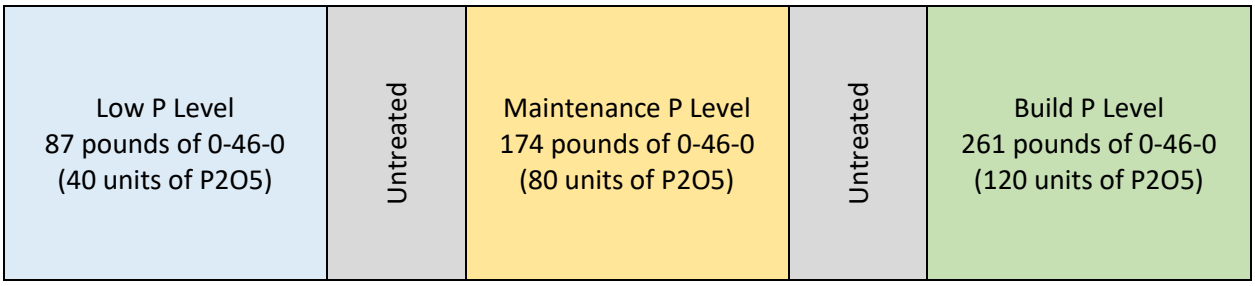


Table 2. Plant heights and yield collected.

Rates (lb/A):	Plant Heights (cm)	Yield (bu/A)
Check	76.2	76.9
Low	73.7	62.8
Maintenance	81.3	78.2
Build	86.4	75.6

Table 3. Soil sample results from samples collected prior to planting and samples collected at harvest.

Rates (lb/A):	Initial Soil Samples (field avg)	Harvest Soil Samples
	----------Nutrient Availability Index (lb/A)----------	
Check	36	34
Low	36	30
Maintenance	36	43
Build	36	139

Results: Plant height and yield (Table 2) were inconclusive, likely due to variabilities in the field. The untreated areas of the field were selected at random and it would seem that the untreated areas contained more available P than did the treated area for the Low level treatment. Soil sample results (Table 3) did show that the greater the rate of phosphorus applied the greater the amount that remained in the soil at harvest, as expected. Similar demonstrations will be conducted in 2017 to add to this data set in order to have more conclusive data in the future.

FERTILITY DEMONSTRATIONS – POTASSIUM

Purpose: This demonstration field was designed to evaluate the effect of potassium fertilizer (0-0-60) on soybean yield when applied at various rates.

Procedure: This demonstration trial was conducted during the 2016 growing season in Prentiss County near Baldwyn, Mississippi on 38 inch single row planted soybeans. Potassium (0-0-60) was applied at three rates (Table 1) along with an untreated check where no potassium was applied for comparison. Rates were structured to represent a low application rate (100 pounds per acre), a maintenance application rate (150 pounds per acre) and a build application rate (200 pounds per acre). Soil samples were collected prior to planting and at harvest. Soybean yield was collected to determine the effectiveness of the potassium applications.

Table 1. Amount of K_2O applied in the form of 0-0-60 fertilizer for each treatment.

Rates (lb/A):	K_2O	0-46-0
Check	0	0
Low	60	100
Maintenance	90	150
Build	120	200

Figure 1. Trial layout.

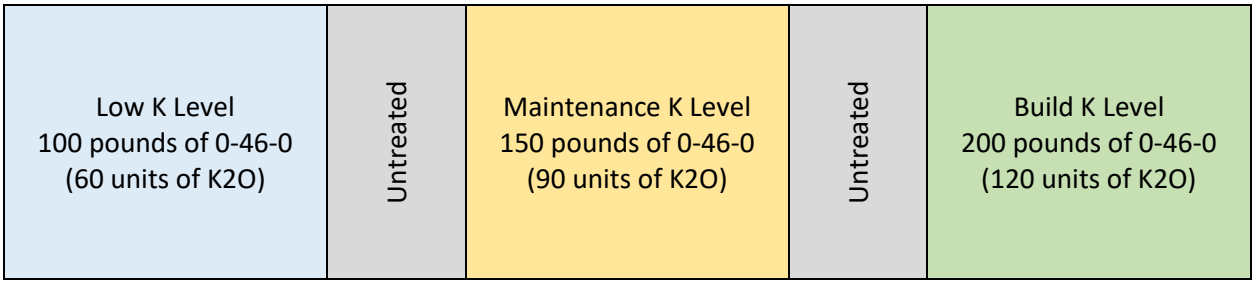


Figure 2. Yield differences observed among different application rates of potassium fertilizer.

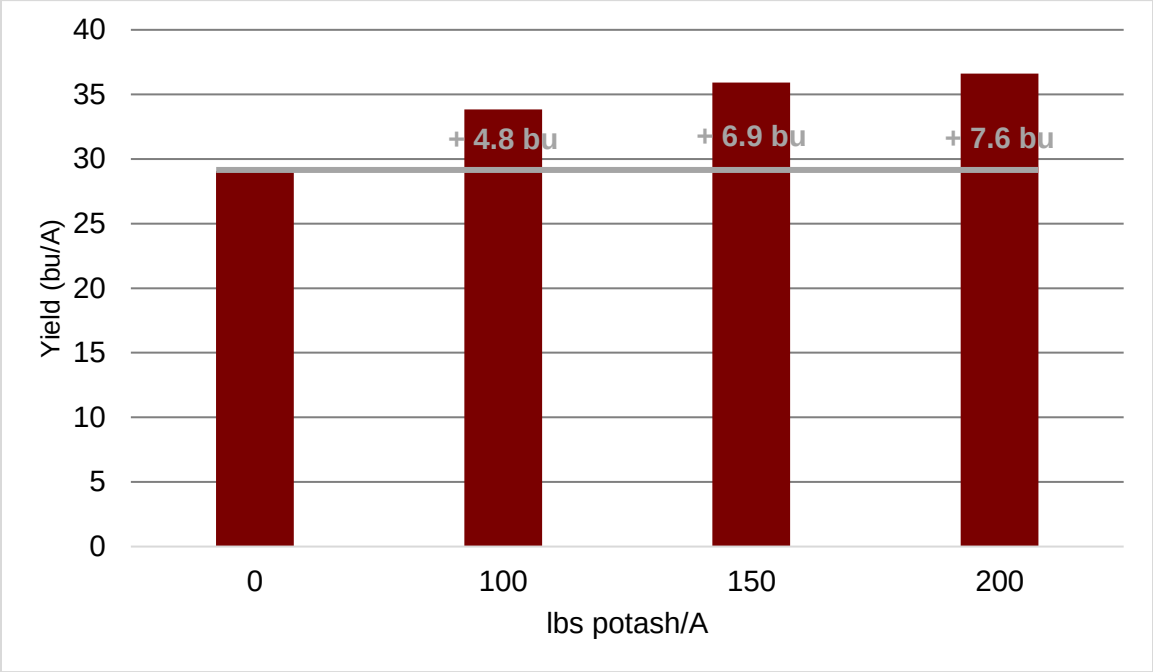


Table 2. Soil sample results from initial soil samples prior to planting and soil samples collected at harvest.

Rates (lb/A):	Initial Soil Samples (field avg)	Harvest Soil Samples
	----------Nutrient Availability Index (lb/A)----------	
Check	96	48
Low	96	63
Maintenance	96	74
Build	96	100

Results: In 2016, the addition of potassium fertilizer (0-0-60) produced greater yields compared to treatments that received no potassium fertilizer at the demonstration trial location in Prentiss County. Soybean yield increased as the application rate of potassium increased (Figure 2). Where 200 pounds of potassium was applied, there was a 7.6 bushel yield increase. Additionally, the amount of potassium that remained in the soil also increased with increasing application rates of potassium, as expected. This demonstration will be conducted in the same location in Prentiss County during the 2017 growing season for further observation.

EVALUATION OF PLANTING DATE, ROW SPACING AND SEEDING RATE ON SOYBEAN DEVELOPMENT AND YIELD (STUDENT PROJECT)

Purpose: To evaluate the effects of row spacing, planting date and seeding rate on non-irrigated soybean growth, development and yield.

Procedure: Experiments were conducted at two locations in Mississippi during the 2016 growing season. These locations were the R.R. Foil Plant Science Research Center near Starkville, MS and the Delta Research and Extension Center in Stoneville, MS. These sites were planted with an indeterminate maturity group 4 soybean variety. The seed was planted with a plot planter using 5 different seeding rates. These seeding rates were 80K; 100K; 120K; 140K; and 160K seeds per acre. Seeding rates were planted across 3 planting dates with targeted plantings during April, May, and June to represent early-, mid-, and late-season planting dates. Row spacings consisted of 15 (ultra-narrow), 30 (narrow), and 38 (wide) inch rows planted in 40 foot plot lengths. Data collection included stand counts, weekly growth stages, canopy closure dates, plant heights, and yield. Stand counts were recorded after emergence and again at harvest to monitor the plant population. Plant heights were recorded at canopy closure and again at the R5.5 growth stage. In addition, final node counts were recorded prior to harvest. The center two rows of each plot were machine harvested to determine final soybean yield.

Figure 1: Pictures that illustrate the different row spacings and planting dates at 120,000 seeds/ac.

Ultra-narrow row spacing, planted in mid-April at 120,000 seeds/A.

Ultra-narrow row spacing, planted in mid-May at 120,000 seeds/A.

Ultra-narrow row spacing, planted in mid-June at 120,000 seeds/A.

Narrow row spacing, planted in mid-April at 120,000 seeds/A.

Narrow row spacing, planted in mid-May at 120,000 seeds/A.

Narrow row spacing, planted in mid-June at 120,000 seeds/A.

Wide row spacing, planted in mid-April at 120,000 seeds/A.

Wide row spacing, planted in mid-May at 120,000 seeds/A.

Wide row spacing, planted in mid-June at 120,000 seeds/A.

Figure 2: Soybean yield by row spacing averaged across planting date and seeding rate at all locations.

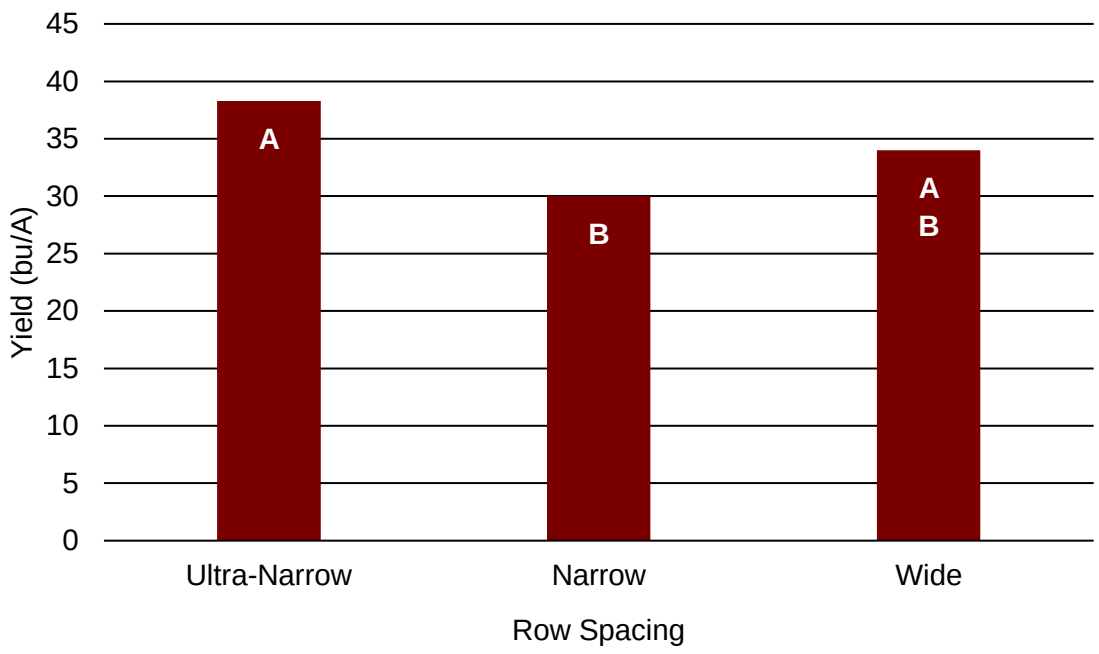


Figure 3: Soybean yield by seeding rate averaged across row spacing and planting date at all locations.

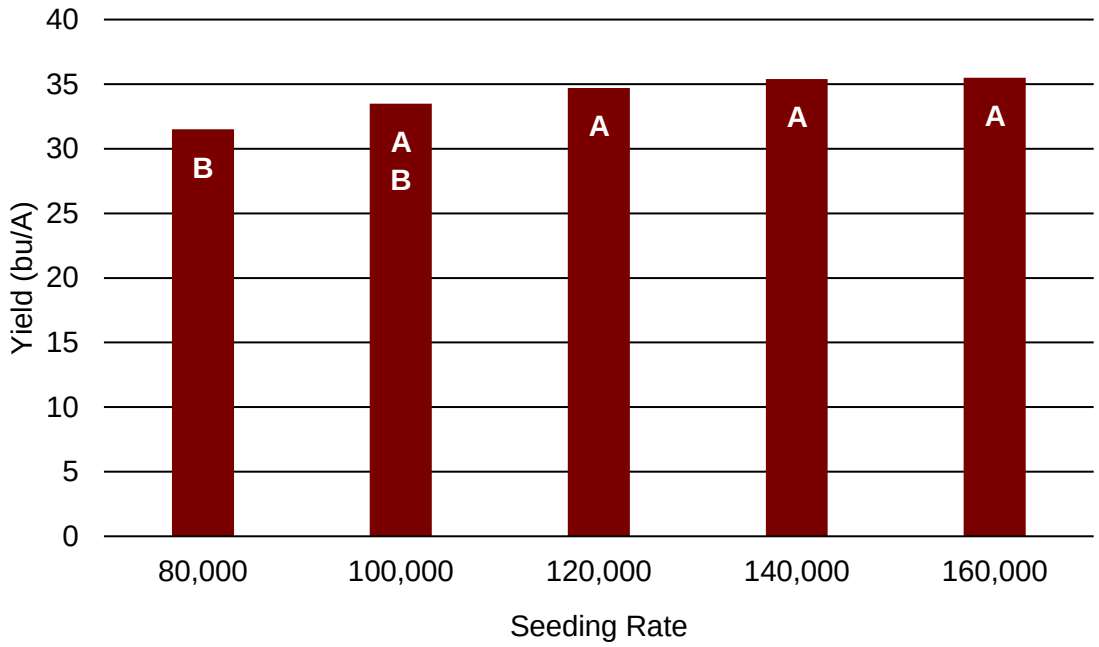
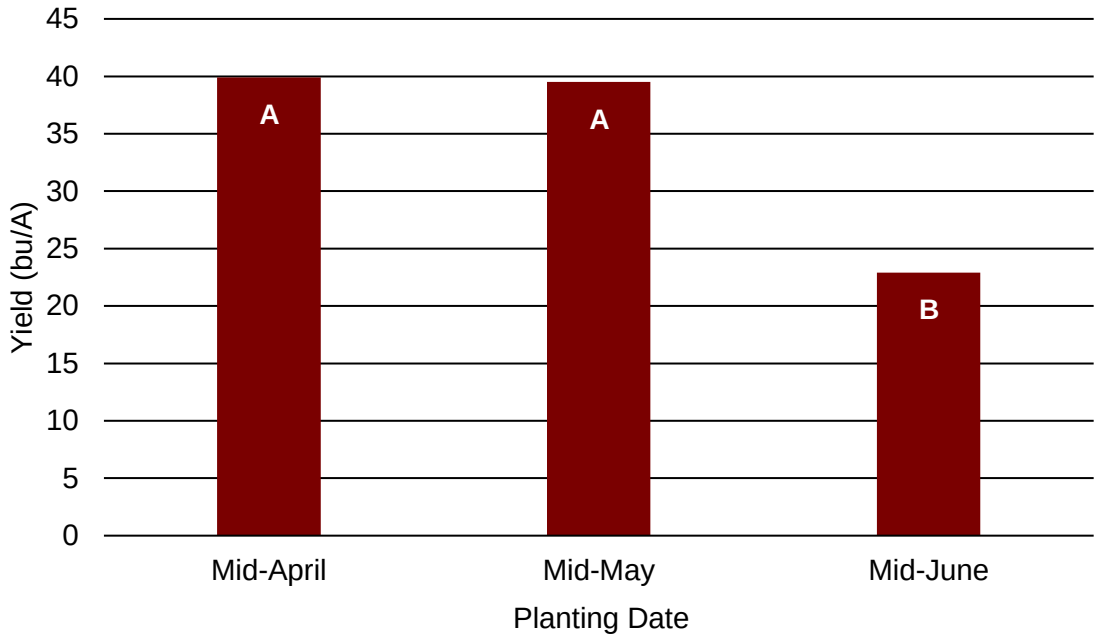


Figure 4: Soybean yield by planting date averaged across row spacing and seeding rate at all locations.



Results: No differences, with respect to soybean yield, were observed between ultra-narrow and wide row spacings while soybean planted in ultra-narrow rows yielded greater than narrow row spacings (Figure 2). Soybean planted in Mid-May and mid-April resulted in greater yields than soybean planted in mid-June (Figure 3). Soybean yields were greater for seeding rates of 120,000 to 160,000 seeds/A, when compared to 80,000 seeds/A (Figure 4). This study will be conducted during the 2017 growing season as well in order to further evaluate these management strategies in non-irrigated soybean production.

EVALUATION OF OPTIMAL SEEDING RATE AND PLANTING APPROACH FOR REPLANT SITUATIONS IN SOYBEAN (STUDENT PROJECT)

Purpose: To determine the optimal replant seeding rate for various levels of reduced soybean populations.

Procedure: Experiments were conducted at two locations in Mississippi during 2016. These locations were the R.R. Foil Plant Science Research Center near Starkville, MS and the Delta Research and Extension Center in Stoneville, MS. The seed was planted with a plot planter at a seeding rate of 130,000 seeds/A using an indeterminate maturity group 4 variety. Treatments at the initial planting date included combinations of Roundup Ready 2 Xtend and LibertyLink soybean seed. Percentages of RR2X/LL were as follows 100/0, 75/25, 50/50, 25/75 and 0/100 (Table 1), with the 100/0 representing a successful initial stand establishment and the 0/100 representing removal of a failed stand with complete replanting. Therefore, treatments represented a successful initial stand establishment, a complete replant, and combinations of replanting into sub-optimal stands ("spot" planting). In order to simulate a failed stand, plots were sprayed with glyphosate, at the V1 growth stage to eliminate the LL variety, which were randomly distributed throughout the row. Plots were replanted approximately 2 weeks after the initial planting date. The replant percentages of RR2X were 100, 75, 50, 25 and 0, resulting in 25 total treatments with all replants being planted into the existing plots from the initial planting. Test plots measured four, 38 inch rows wide by 40 feet in length. All treatments were irrigated as needed and replicated 4 times. Data collection included stand counts, weekly growth stages, canopy closure dates, plant heights, and yield. Stand counts were recorded after emergence and again at harvest to monitor the plant population. Plant heights were recorded at canopy closure and again at the R5.5 growth stage. In addition, final node counts were recorded prior to harvest. The center two rows of each plot were machine harvested to determine final soybean yield.

Table 1. Treatments further described.

Initial RR2X/LL %	Replant Percentage %				
	0	25	50	75	100
100/0	100/0	100/25	100/50	100/75	100/100
75/25	75/0	75/25	75/50	75/75	75/100
50/50	50/0	50/25	50/50	50/75	50/100
25/75	25/0	25/25	25/50	25/75	25/100
0/100	0/0	0/25	0/50	0/75	0/100

Figure 1. Pictures illustrating the sub-optimal stands following the different percentages of removal from the initial planting.

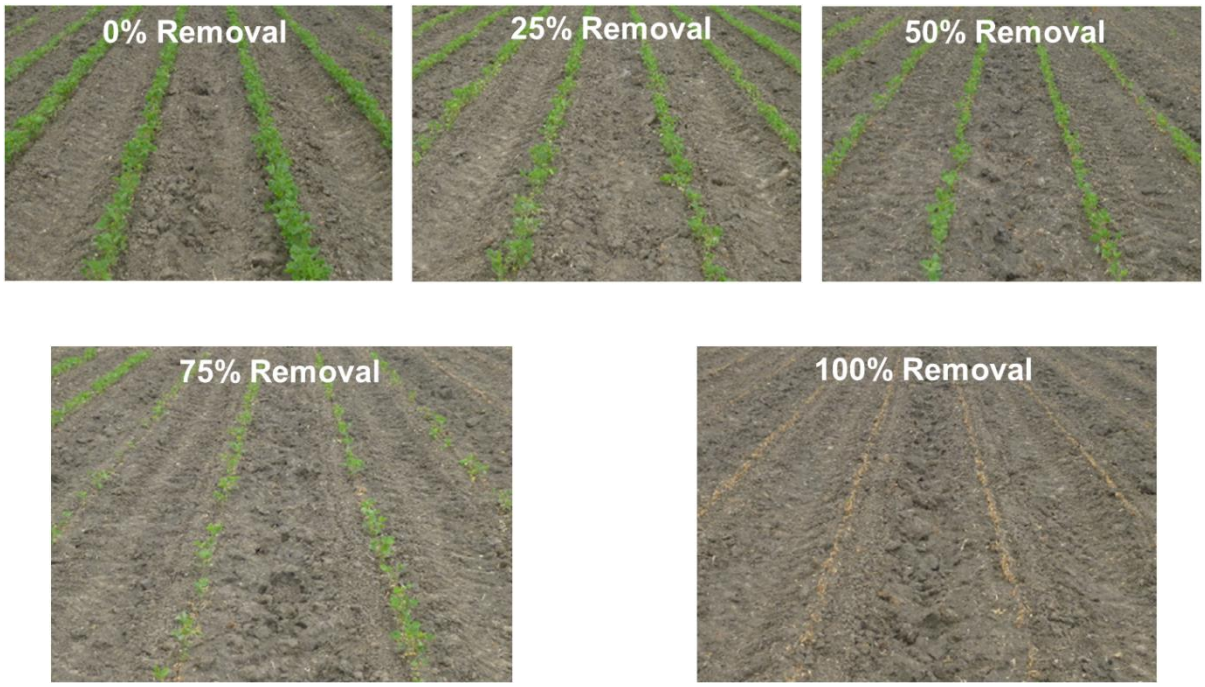
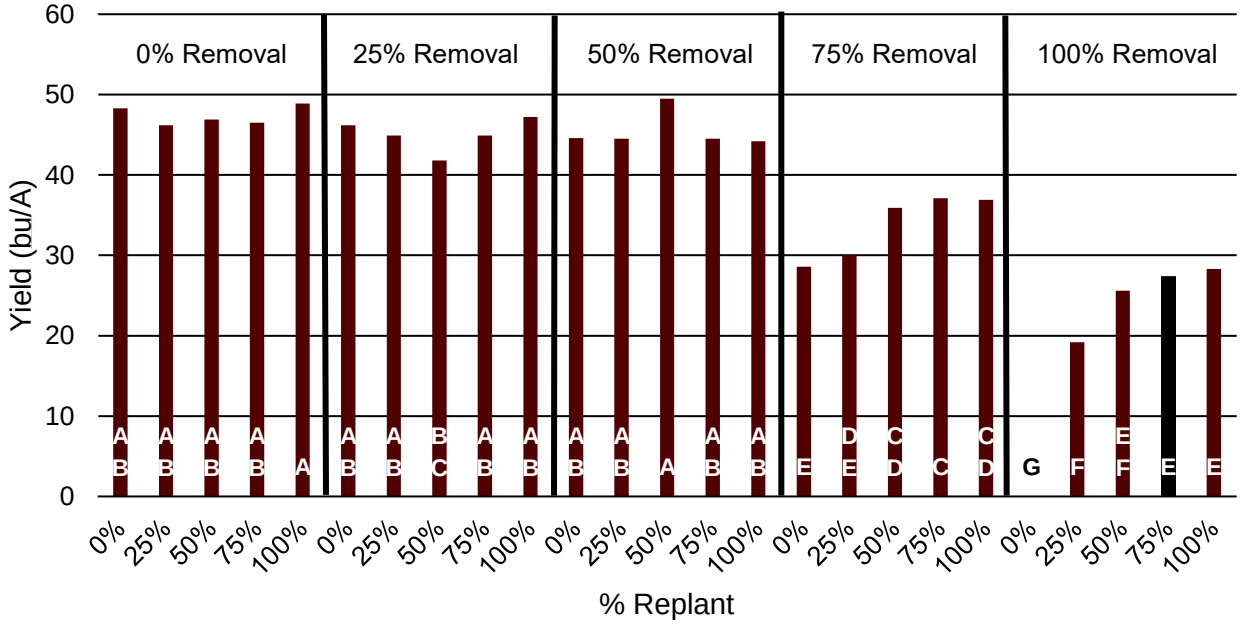


Figure 2: Soybean yield averaged across locations.



Results: Removal of 50% or less of soybean plants, over all replanting percentages, resulted in greater soybean yields, when compared to greater than 50% of plants being removed over all planting percentages. In other words, “spot” planting into reduced stands where no more than ½ of the initial stand was lost provided no yield benefit. Soybean yield for the treatment representing a successful initial stand establishment was greater than the treatment with complete removal and replant, demonstrating the value of planting date with respect to soybean yield. This study will be conducted again during the 2017 growing season to further evaluate considerations for replant decisions.

EVALUATION OF MANAGEMENT STRATEGIES FOR IRON DEFICIENCY CHLOROSIS (IDC) IN SOYBEAN (STUDENT PROJECT)

Purpose: To evaluate management strategies for Iron Deficiency Chlorosis (IDC) on non-irrigated soybean growth, development and yield.

Figure 1. Common symptoms of Iron Deficiency Chlorosis

Procedure: Experiments were conducted at two locations in Mississippi during the 2016 growing season. These locations were the Black Belt Experiment Station near Brooksville, MS and an off station location near Prairie, MS. These sites were planted with an indeterminate maturity group 5 soybean variety with known vulnerability to Iron Deficiency Chlorosis (IDC). Plots were planted at a seeding rate of 120,000 seeds per acre on 30 inch rows. Plots were 4 rows wide by 40 feet long. The center two rows were treated while leaving running checks on rows 1 & 4. Treatments included 3 products, 3 application timings, and 4 rates. The products were: Iron Plus (5% Iron) by Delta Ag, Sequestar 13.2% EDTA by Brandt, and Sequestar 6% EDDHA by Brandt. Each product was applied at a rate of 0.6, 0.12, 0.18, and 0.24 lb ai/A. Each rate was applied foliar, in-furrow and as a split application. Each timing was treated as a separate experiment. Data collected included: stand counts, weekly IDC ratings, canopy closure dates, plant heights/nodes, and yield. Stand counts were recorded after emergence and again at harvest to monitor the plant population. Plant heights and node counts were recorded at the R5.5 growth stage. The center two rows of each plot were machine harvested to determine final soybean yield.

Figure 2. Visual differences between treated rows and untreated rows when EDDHA is applied in-furrow.

Table 1. Yield response to foliar applied iron products

	Sequestar 6%	Sequestar 13.2%	Iron Plus	Untreated
Rate (lb ai/A)	----------Yield bu/A----------			
0.06	15.5 AB	12.2 B	15.9 AB	16.2 AB
0.12	15.2 AB	13.8 AB	17.8 A	
0.18	15.1 AB	16.1 AB	18.8 A	
0.24	16.3 AB	16.9 AB	17.5 A	

Table 2. Yield response to in-furrow iron products

	Sequestar 6%	Sequestar 13.2%	Iron Plus	Untreated
Rate (lb ai/A)	----------Yield bu/A----------			
0.06	11.1 BCD	11.7 BCD	10.2 D	14.7 ABCD
0.12	18.8 A	16.9 AB	13.3 ABCD	
0.18	12.4 BCD	10.8 D	11.1 CD	
0.24	13.11 ABCD	16.8 ABC	11.2 BCD	

Table 3. Yield response to split applied iron products

	Sequestar 6%	Sequestar 13.2%	Iron Plus	Untreated
Rate (lb ai/A)	----------Yield bu/A----------			
0.06	22.8 ABC	20.5 C	23.4 ABC	22.5 ABC
0.12	24.3 A	22.5 ABC	20.8 BC	
0.18	24.8 A	22.5 ABC	22.4 ABC	
0.24	24.1 ABC	22.9 ABC	24.9 AB	

Results: Results show no difference in soybean yield for any treatment. While separation of means were present, they did not occur at a significant level. These experiments will be further evaluated and replicated to examine these treatments. While IDC can be variable from year to year and field to field, it is important to get a large dataset for conclusive results.