



2017 Soybean Management by Application of Research and Technology (SMART) Annual Summary

MSBP Project Number: 36-2017

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INTRODUCTION

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 (BMPs) 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 2.17 million acres of soybeans were harvested in Mississippi in 2017 with an average yield of 53 bushels per acre. Soybean productivity has considerably increased in recent 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 2017 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.

AUTOMATIC FUNGICIDE APPLICATION DEMONSTRATION TRIAL

Purpose: This demonstration field was designed to evaluate the effect of an automatic foliar fungicide application on soybean growth and yield.

Procedure: A single application of Quadris Top SBX at 7 fl oz/A or Stratego YLD at 4 fl oz/A was applied in large field scale plots. All fungicide treatments included a non-ionic surfactant at a rate of 0.25% v/v. This demonstration trial was conducted in three locations during the 2017 growing season: Washington County near Leland, MS, Madison County near Canton, MS and Quitman County near Marks, MS. The Washington County and Quitman County locations fungicide applications were both applied by airplane at 5 GPA; however, Washington County was applied at the R3 growth stage and the Quitman County location was applied at the R4 growth stage. The Madison County fungicide applications were applied by a ground spray rig at 10 GPA at the R4 growth stage. Additionally, all fungicide treatments were compared to an untreated control for comparison at each location. Final plant height along with lodging, shattering and green stem scores were collected. Soybean yield was collected and measured in bushels per acre.

Figure 1. Demonstration trial layout.

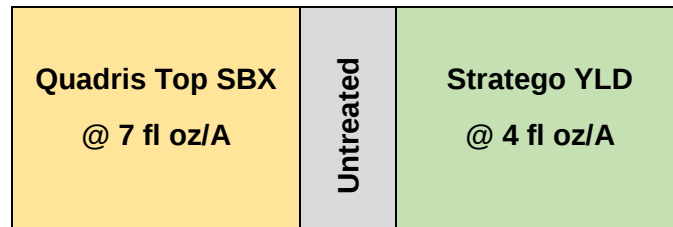
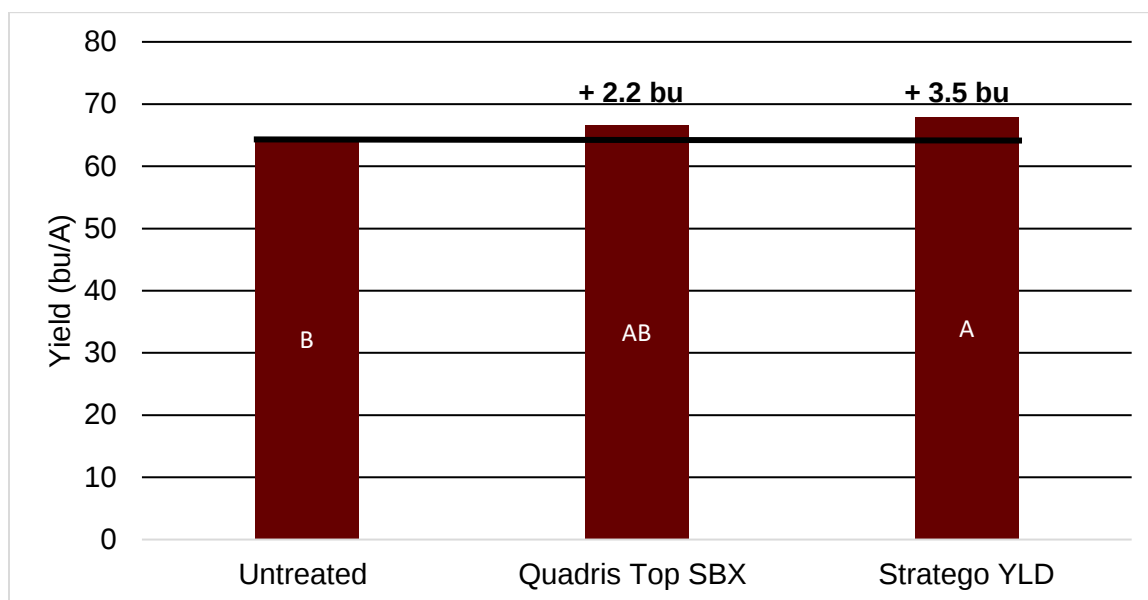


Table 1. Plant height measurement along with Lodging, Shattering and Green Stem scores¹.

UNTREATED	Quadris Top SBX	Stratego YLD
----- Plant Height (in) -----		
39	40	41
----- Lodging (0-10) -----		
2	2	2
----- Shattering (0-10) -----		
1	1	1
----- Green Stem (0-10) -----		
2	3	3

¹Data collected is averaged across all demonstration locations

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



Results:

It was observed in this trial that a fungicide application, no matter which product, resulted in greater yield compared to the untreated control. Quadris Top SBX resulted in a 2.2 bushel increase while Stratego YLD resulted in a 3.5 bushel per acre yield increase when compared to the untreated plots (Figure 2). No differences were observed in plant heights, lodging, shattering, and green stem scores (Table 1).

FUNGICIDE APPLICATION FOR SEED QUALITY DEMONSTRATION

Purpose: This fungicide demonstration was designed to evaluate the effect a late-season fungicide application has on soybean seed quality and yield.

Procedure: A single application of Quadris at 6 fl oz/ac and Quadris Top SBX at 7 fl oz/ac were applied in a large field scale plot. It should be noted that this late-season demonstration was in addition to an automatic fungicide application applied at R3 to the entire field. All late-season fungicide treatments included a non-ionic surfactant at a rate of 0.25% v/v and were replicated twice within each field. Late-season fungicides were applied by ground at the R5.5 growth stage. An untreated control was also included in each field for comparison purposes. This demonstration was located in Yazoo County, near Patosi, MS. *Septoria glycines* (Soybean Brown Spot) and *Phytophthora sp./spp.* (Crown and Root Rot) were detected throughout the entire field and was verified through plant tissue sampling and analysis provided by Mississippi State's Plant Diagnostics Lab. Final plant height along with green stem, lodging, and shattering scores were collected at harvest. Soybean yield was collected and measured in bushels per acre. Seed quality analysis from samples collected at harvest was performed by Mid-South Grain Inspection Services.

Figure 1. Yazoo County trial layout.

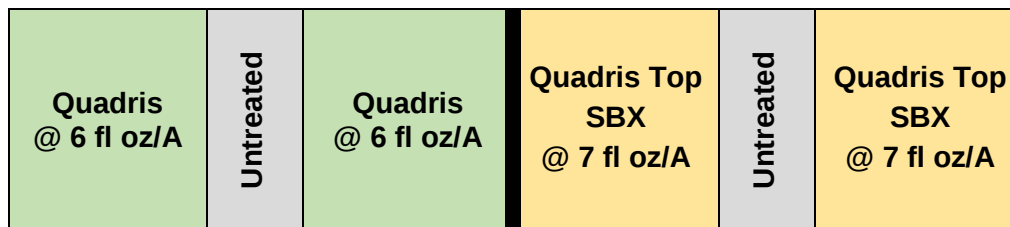


Table 1. Plant height measurement along with Lodging, Shattering and Green Stem scores

No Quadris	Quadris	No Quadris Top SBX	Quadris Top SBX
----- Plant Height (in) -----			
27	29	24	27
----- Lodging (0-10) -----			
0	0	0	0
----- Shattering (0-10) -----			
0	0	2	0
----- Green Stem (0-10) -----			
0	1.5	0	3

Figure 2. Yield differences between fungicide products compared to the untreated control

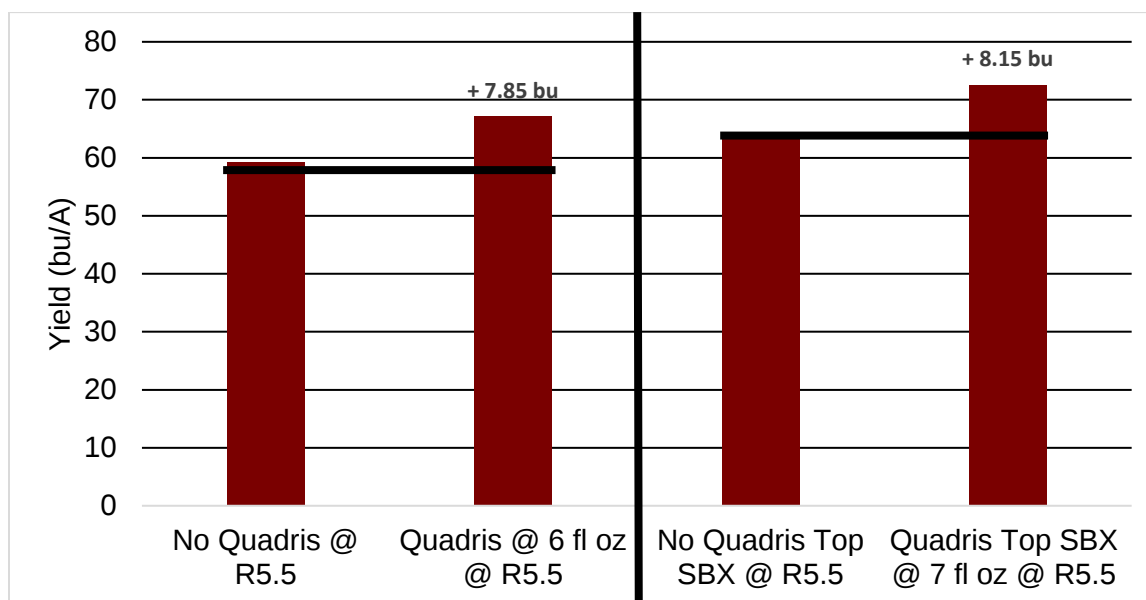


Table 2. Average total damaged kernels and heat damage CCC discounts by treatment.

No Quadris	Quadris	No Quadris TOP SBX	Quadris Top SBX
----- \$ discount per Bu -----			
0.28	0.28	0.32	0.30

Table 3. Partial budget results for fungicide treatment study.

No Quadris	Quadris	No Quadris TOP SBX	Quadris Top SBX
----- \$ product cost per treatment -----			
0.0	13.84	0.0	20.25
----- \$ gross income (at \$9.90/bu less discount) -----			
570.46	645.98	616.95	696.48
----- \$ net return above treatment cost (gross income – product cost) -----			
570.46	632.14	616.95	676.23
----- \$ gain per acre over untreated -----			
0.0	61.68	0.0	59.28

Results: Weather conditions in the weeks following application included multiple days of cloudy and rainy conditions resulting in an ideal environment for disease development. It was observed that there were no differences in soybean plant height, lodging or shattering (Table 1). Green stem was observed to be greater in the plots that received an application of Quadris Top SBX when compared to Quadris or the untreated. Soybean treated with Quadris Top SBX or Quadris at the R5.5 growth stage resulted in ~ 8 bushels per acre increase in yield compared to the untreated control. Total damaged kernels and heat damage discounts are listed in Table 2. These discounts were calculated using the 2017 Crop USDA CCC Premium and Discount Schedule. The discount for the both Quadris treated soybean and its paired untreated soybean was \$0.28 per bushel. The discount for the Quadris Top SBX treated soybean was \$0.30 per bushel, while the discount for its paired untreated was \$0.32 per bushel. Partial budget results for this study are shown in Table 3. It should be noted that these partial budget figures do not include the cost of application, only the cost for the fungicide and surfactant. Application cost would vary depending on method of application. When compared to the paired untreated alternative, the Quadris treatment is estimated to increase profitability by \$61.68 per acre. When compared to the paired untreated alternative, the Quadris Top SBX treatment is estimated to increase profitability by \$59.28 per acre. This demonstration will be repeated across multiple locations in 2018 to investigate soybean yield and seed quality response to late season fungicide application.

HIGH YIELD DEMONSTRATION TRIAL

Purpose: This demonstration was designed to evaluate the effect of multiple fungicide and fertilizer applications in an attempt to enhance soybean yield above that of current Best Management Practices (BMPs).

Procedure: This demonstration was conducted during the 2017 growing season in Sunflower County near Indianola, Mississippi on 38 inch twin row planted soybeans. Four treatments were replicated twice in the producer's field. Treatments were the following (Figure 1): (1) a producer standard of current BMPs, (2) a two-pass fungicide application made at the R3 and R5.5 growth stages in addition to the BMPs implemented in the producer standard, (3) a two-pass supplemental nitrogen application made at the V3 and R2 growth stages in addition to the BMPs implemented in the producer standard and (4) a single nitrogen application made at the R3 growth stage in addition to the BMPs implemented in the producer standard. The two-pass nitrogen application treatment received an application of 171 pounds of urea at the V2 and R3 (foliar) growth stages, while the single nitrogen application treatment received a single foliar application of 171 pounds of urea at the R3 growth stage. All treatments received a harvest aid at the end of the growing season to improve harvestability. Final plant height and soybean yield were collected to determine the effectiveness of treatments. Soybean yield was measured in bushels per acre. Seed quality analysis from samples collected at harvest was performed by Mid-South Grain Inspection Services.

Figure 1. Layout of High Yield Demonstration trial.

Producer Standard	2-Pass Fungicide Application @ R3 & R5.5	2 Pass – Nitrogen Application @ V3 & R2	Single Nitrogen Application @ R3	Border Rows	Producer Standard	2-Pass Fungicide Application @ R3 & R5.5	2 Pass – Nitrogen Application @ V3 & R2	Single Nitrogen Application @ R3
16 Rows	16 Rows	16 Rows	16 Rows	-----	16 Rows	16 Rows	16 Rows	16 Rows

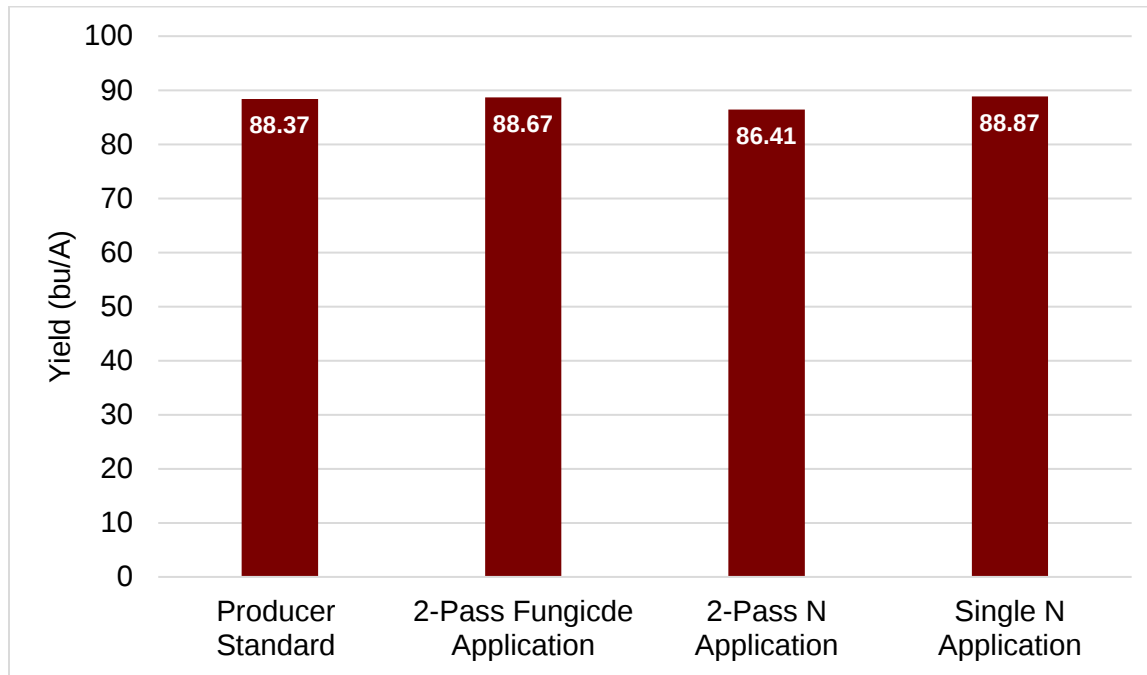
Table 1. Total damaged kernels and heat damage scores and CCC loan discounts for each replication.

Treatment	Total Damaged Kernels	Heat Damage	Total Damaged Kernels	Heat Damage	Total Discount
-----Discount (\$ per bushel)-----					
Producer Standard	8.3%	0.0%	\$ 0.20	\$ -	\$ 0.20
2-Pass Fungicide	6.8%	0.0%	\$ 0.14	\$ -	\$ 0.14
2-Pass N	8.4%	0.0%	\$ 0.20	\$ -	\$ 0.20
Single N	0.0%	0.3%	\$ -	\$ 0.03	\$ 0.03
Producer Standard	9.0%	0.4%	\$ 0.22	\$ 0.03	\$ 0.25
Producer Standard	8.3%	0.1%	\$ 0.20	\$ -	\$ 0.20
2-Pass Fungicide	5.9%	0.6%	\$ 0.10	\$ 0.06	\$ 0.16
2-Pass N	9.5%	0.0%	\$ 0.24	\$ -	\$ 0.24
Single N	7.1%	0.2%	\$ 0.16	\$ -	\$ 0.16
Producer Standard	6.6%	0.1%	\$ 0.14	\$ -	\$ 0.14

Table 2. Average CCC loan discounts for total damaged kernels and heat damage by treatment.

Producer Standard	2-Pass Fungicide Application	2-Pass N Application	Single N Application
----- \$ discount per Bu -----			
0.20	0.15	0.22	0.10
----- \$ loss per treatment (acre) -----			
17.67	13.30	19.01	8.89

Figure 2. Yield differences observed among treatments.



Results: In 2017, it was found that yields were not increased with the addition of a two-pass fungicide application, a two-pass nitrogen application or a single application of nitrogen when compared to the producer standard receiving all current BMPs for maximizing soybean yield and profitability. In addition to yield, plant heights and seed quality were also measured and no differences were observed. Although seed quality showed no differences in seed grade, differences were observed when total damaged kernels and heat damage discounts were calculated based on samples using the 2017 USDA CCC loam premium and discount schedule (Table 2).

The percentage of total damaged kernels for all replications in all treatments was consistently large with the exception of one replication in the Single N Application treatment. The median value over all replications for total damaged kernels was 7.7%. The average discount for total damaged kernels and heat damage was \$0.20 per bushel for the Producer Standard, \$0.15 per bushel for the two-pass Fungicide Application, \$0.22 per bushel for the 2-pass N Application and \$0.10 per bushel for the Single N Application treatment.

It was found that the two-pass nitrogen application treatment had the largest discount (\$19.01 per acre), while the single N application treatment had the smallest discount (\$8.89 per acre). This study or one of similar nature will be conducted during the growing season of 2018 to evaluate various management techniques that when added to current BMPs may influence soybean yield and profitability in Mississippi.

FERTILITY DEMONSTRATION TRIAL – 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 to soils with known potassium deficiency.

Procedure: This demonstration was conducted during the 2017 growing season in Prentiss County near Baldwin, Mississippi on 38 inch single row planted soybeans. Potassium (0-0-60) was applied at three rates. An untreated check where no potassium was applied was included in this demonstration 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 again at harvest to measure nutrient levels both at the beginning and end of the growing season. Yield was collected to determine the effectiveness of the potassium applications. Soybean yield was measured in bushels per acre.

Table 1. Amount of K₂O applied in the form of 0-0-60 fertilizer for each treatment.

Rates (lb/A):	K₂O	0-0-60
Check	0	0
Low	60	100
Maintenance	90	150
Build	120	200

Figure 1. Layout of trial located in Prentiss County, Mississippi. +

Low K Level 100 pounds of 0-46-0 (60 units of K₂O)	Untreated	Maintenance K Level 150 pounds of 0-46-0 (90 units of K₂O)	Untreated	Build K Level 200 pounds of 0-46-0 (120 units of K₂O)
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Figure 2. Yield differences observed among different application rates of potassium fertilizer.

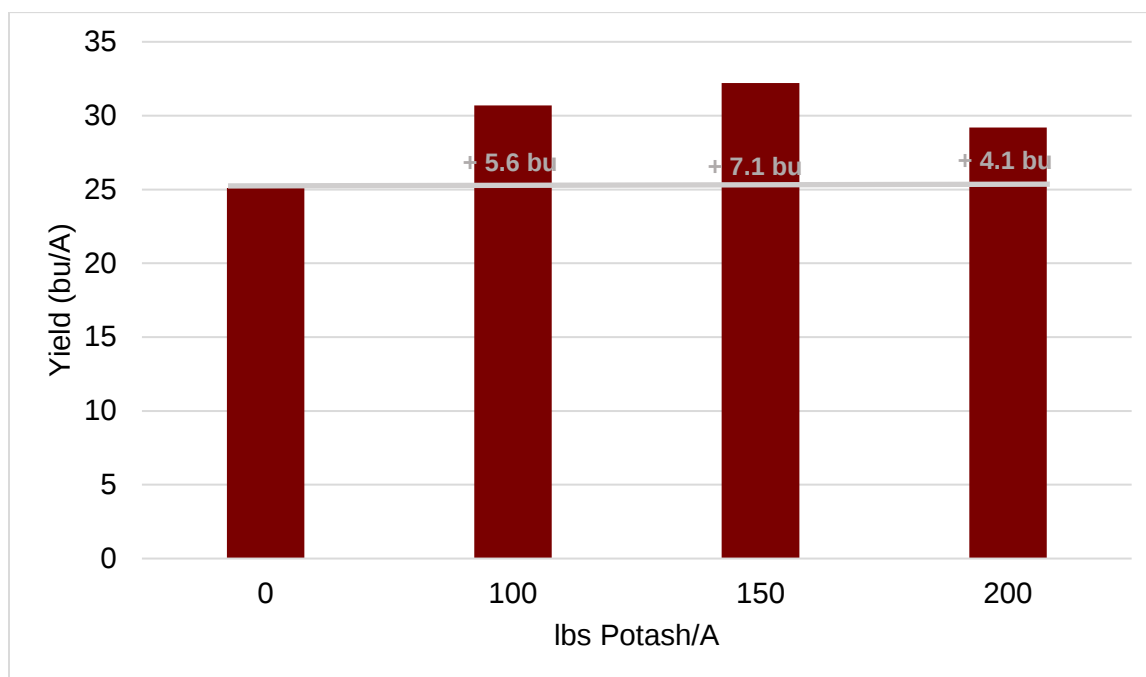


Table 2. Soil sample results from initial soil samples prior to planting and soil samples collected at harvest during the 2017 growing season.

Rates (lb/A):	Initial Soil Samples	Harvest Soil Samples
	----- Nutrient Availability Index (lb/A) -----	
Check (0)	60	62
Low (100)	76	135
Maintenance (150)	135	165
Build (200)	107	164

Figure 3. Potassium deficiency observed at this demonstration trial.



Results: In 2017, the addition of potassium fertilizer (0-0-60) resulted in greater yields compared to treatments that received no potassium fertilizer at this demonstration located in Prentiss County. Where 150 pounds of potassium was applied, there was a 7.1 bushel yield increase (Figure 2). Additionally, the amount of potassium that remained in the soil increased with increasing application rates of potassium. These demonstration results should serve as an example how the benefit of proper soil fertility management improves soybean yield where nutrient deficiencies often result in lower yield potential.

EXPLOITING SEEDING RATES, ROW SPACINGS, AND PLANTING DATES TO MAXIMIZE SOYBEAN PROFITABILITY IN NON-IRRIGATED SYSTEMS (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 5 locations in Mississippi during the 2016 and 2017 growing seasons. These locations were the R.R. Foil Plant Science Research Center near Starkville, MS in 2016 and 2017, the Delta Research and Extension Center in Stoneville, MS in 2016 and the Black Belt Experiment Station near Brooksville, MS in 2016 and 2017. These sites were planted with an indeterminate maturity group IV soybean variety. The seed was planted with a plot planter at seeding rates of: 80K, 100K, 120K, 140K and 160K seeds/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 collected included plant heights, nodes per plant and yield. Net returns above seed cost were also calculated for the seeding rate component. 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. The experimental design is a split-split plot with the main factor being row spacing, the sub-factor being planting date, and the sub-sub-factor being seeding rate

Figure 1. Soybean yield by seeding rate averaged across row spacing and planting date for all site years.

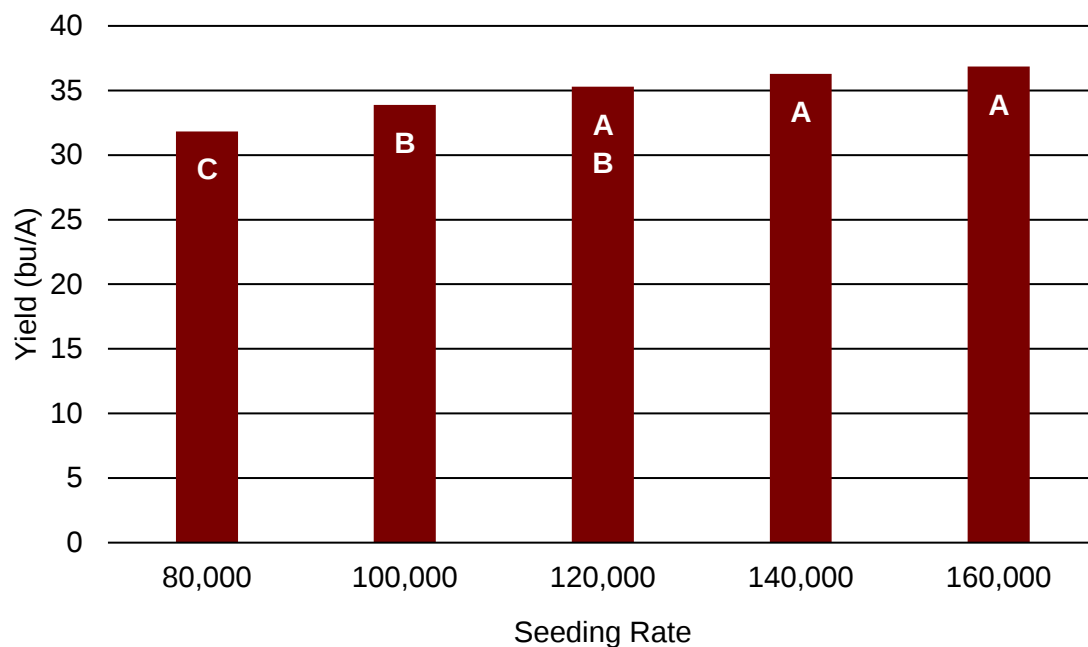


Figure 2. Soybean yield by row spacing and planting date averaged across seeding rate for all site years.

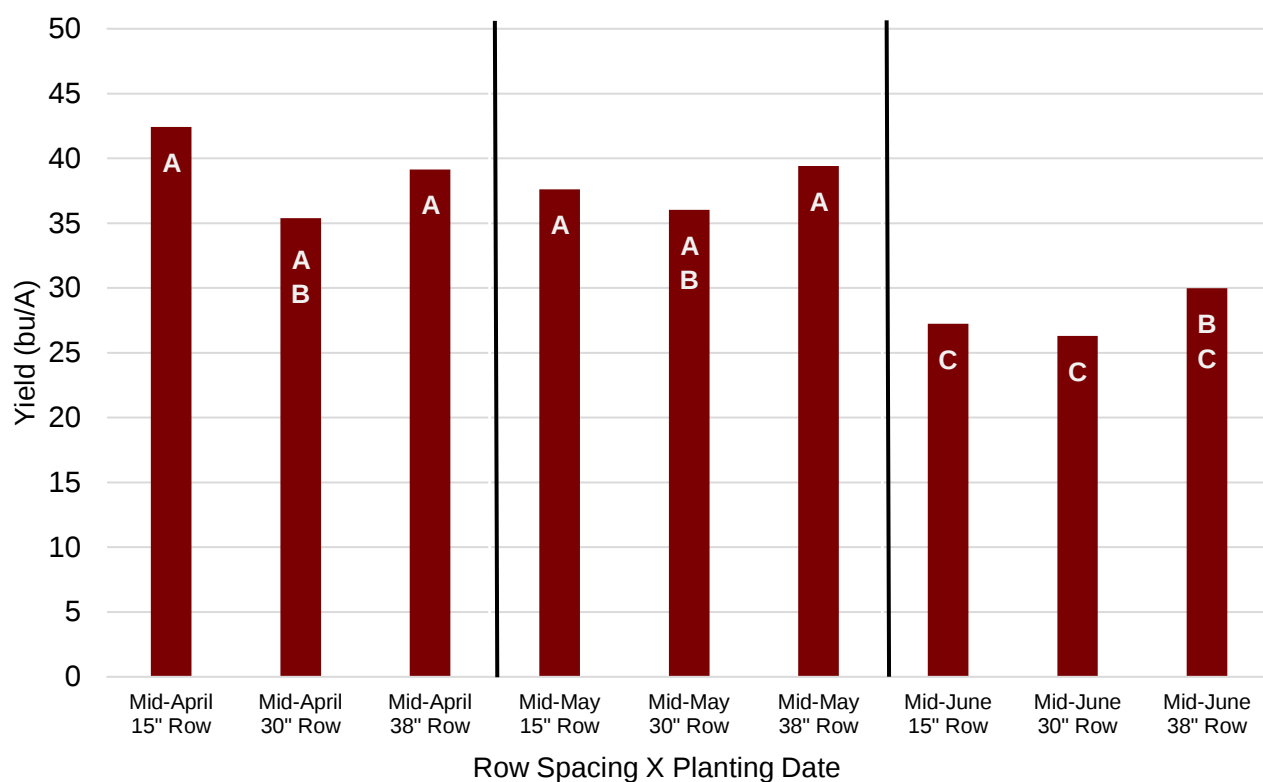


Table 1. Net returns above seed cost for seeding rates pooled across all site-years.

Seeding Rate -----seeds ac ⁻¹ -----	Seed Cost ^a US\$ ac ⁻¹	Gross Return ^b US\$ ac ⁻¹	Net Return ^c US\$ ac ⁻¹
80,000	42.86	310.19	267.33
100,000	53.57	330.07	276.50
120,000	64.28	343.82	279.54
140,000	75.00	353.70	278.70
160,000	85.71	359.03	273.32

^a Seed cost prorated from \$75.00 per 140,000 seeds

^b Soybean value of \$9.75 bu⁻¹, from Mississippi October 2017.

^c Net return above seed costs = gross return – seed cost.

Results: When referring to yield of soybean, the independent factor of seeding rate was significant as well as the combination of row spacing and planting date, when averaged across years and locations. Soybean seeding rates of 160,000 seeds/A resulted in the greatest soybean yield, but no significant difference was observed with a seeding rate of 120,000 seeds/A compared to the 160,000 seeds/A rate. When evaluating the interaction of row spacing and planting date, 30 and 38 inch row spacings planted across the 90 day window were more stable when compared to 15 inch row spacings. Additionally, net returns above seed cost were maximized at \$279.54 for the 120,000 seeds/A seeding rate. These data suggest that in Mississippi, soybean yield and net return in non-irrigated systems are maximized and stabilized by planting in mid-April on either 38 or 30 inch rows at ~120,000 seeds/acre.

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

Purpose: This study was conducted in order to determine the optimal replant approach for various levels of reduced soybean populations.

Procedure: Experiments were conducted at five locations in Mississippi during the 2016 and 2017 growing seasons. These locations were the R.R. Foil Plant Science Research Center near Starkville, MS in 2016 and 2017, the Black Belt Experiment Station near Brooksville, MS in 2017 and the Delta Research and Extension Center in Stoneville, MS in 2016 and 2017. The seed was planted with a plot planter at a seeding rate of 130,000 seeds/A using an indeterminate maturity group IV variety. Treatments at the initial planting date included combinations of Roundup Ready 2 Xtend (RR2X) and LibertyLink (LL) soybean seed. Percentages of RR2X/LL were as follows 100/0, 75/25, 50/50, 25/75 and 0/100 (Table 1). 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 and these were 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 collected 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. The experimental design is a randomized complete block with a factorial arrangement of treatments with factor A being planting date, factor B being seed treatment and factor C being seeding rate.

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 following the glufosinate application.



Figure 2. Soybean Plant Heights averaged across all years and locations.

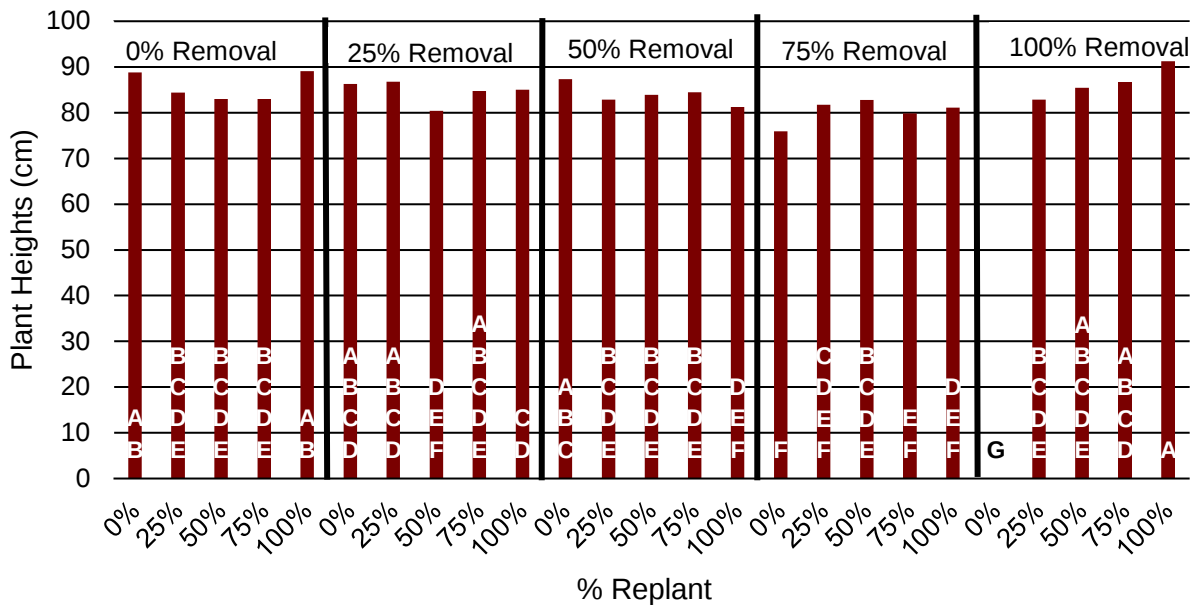


Figure 3. Soybean node counts averaged across all years and locations.

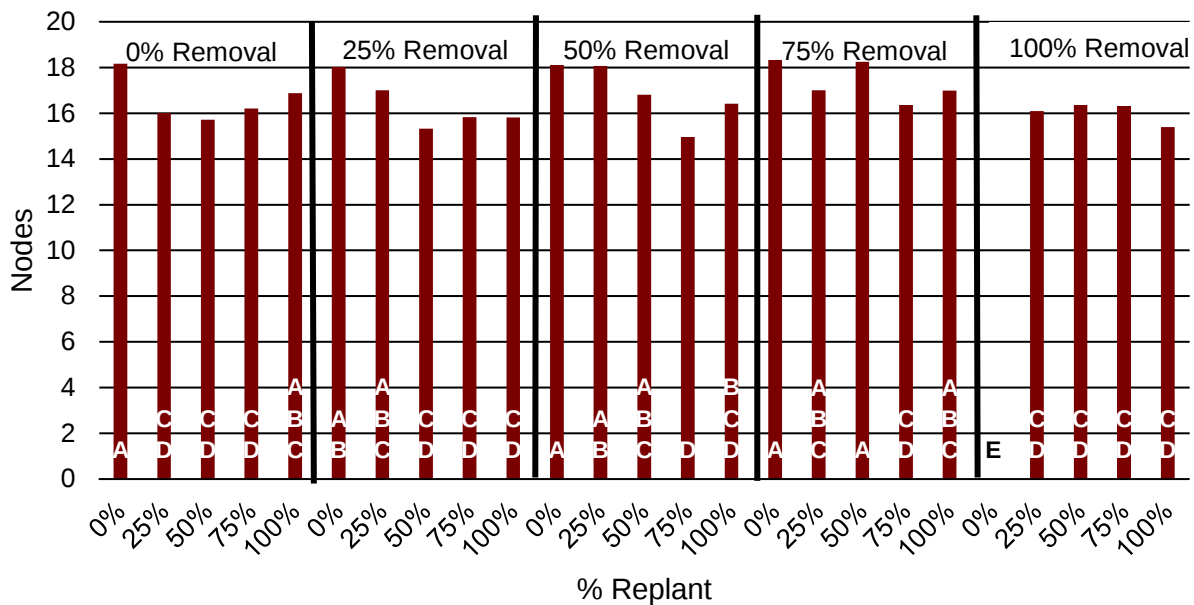
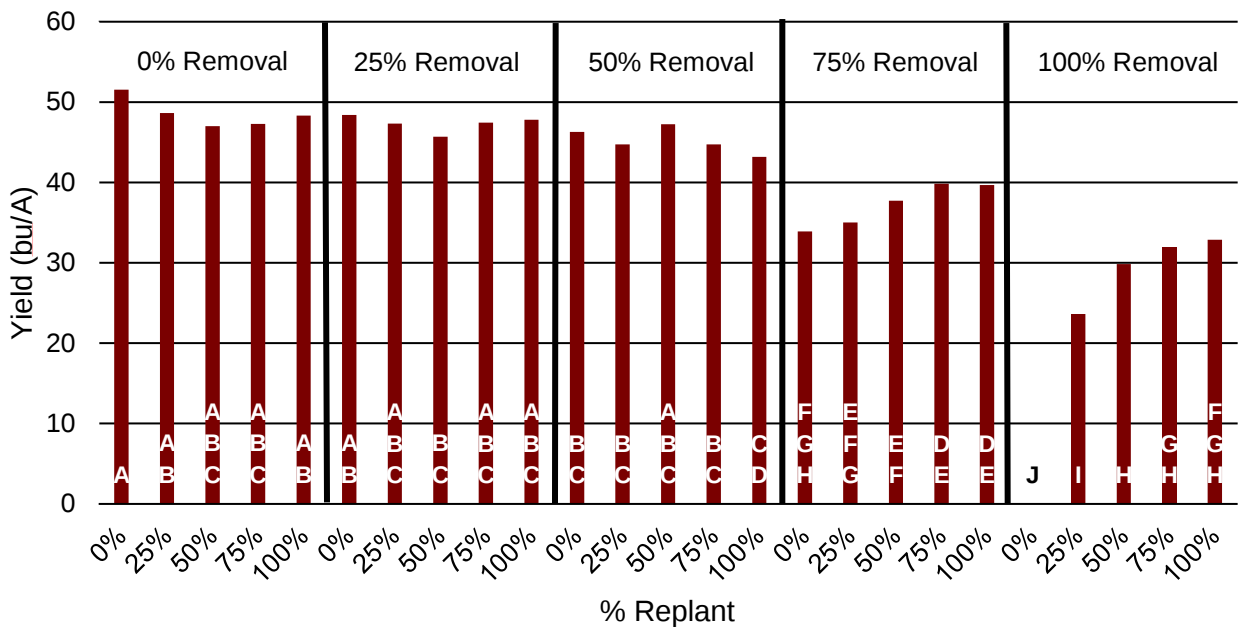


Figure 4. Soybean yield averaged across all years and locations.



Results: The interaction of soybean stand removal and replant resulted in significant differences among soybean yield, as well as, node and plant heights. Soybean yield for the treatment of 0/0% removal/replant was greater than that of the 100/100% removal/replant. These data suggest not replanting a stand reduced by 25%. No soybean yield difference was observed for treatments of 50/50% removal/replant and 0/0% removal/replant. When 75% of the initial population was removed, soybean yield was maximized by replanting at least 50% in the existing stand. No plant height difference was observed for the treatments of 0/0% removal/replant and 100/100% removal/replant. Final node count indicated a difference among the 0/0% removal/replant and 100/100% removal/replant. These data suggest that replanting is not necessary unless soybean stands are reduced by at least 50%.

EVALUATION OF IRON DEFICIENCY CHLOROSIS (IDC) ON SOYBEAN DEVELOPMENT AND YIELD (STUDENT PROJECT)

Purpose: This study was conducted in order to evaluate the effects of Iron Deficiency Chlorosis (IDC) on non-irrigated soybean growth, development and yield.

Figure 1. Common symptoms of Iron Deficiency Chlorosis on soybean.



Procedure: Experiments were conducted at two locations in Mississippi during the 2016 growing season and three locations in the 2017 growing season. These locations were the Black Belt Experiment Station near Brooksville, MS and off-station locations near Prairie, MS and Okolona, MS. These sites were planted with an indeterminate maturity group V 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 (30 inch beds) by 40 feet long. The middle two rows were treated while leaving running checks on rows 1 & 4 for comparison purposes. Treatments included 3 products, 3 application timings, and 4 application rates. In 2016, these products were: Iron Plus (5% Fe) by Delta Ag, Sequestar 13.2% EDTA by Brandt, and Sequestar 6% EDDHA by Brandt. In 2017, Iron Plus was replaced by F227-G (40% Fe) by Frit Industries at rates of 0.5, 1.0, 1.5, 2.0 lbs ai/ac for the 2017 locations. Sequester 13.2% EDTA and Sequester 6% EDDHA were applied at a rate of 0.6, 0.12, 0.18, and 0.24 lb ai/A. Each product was applied foliar, in-furrow and a split application except for the F227-G; which was always applied in-furrow at planting due the products composition. Foliar applications were made when the soybeans reached V3 growth stage. Each timing was treated as a separate experiment. Data collected included: stand counts, weekly IDC ratings (1- completely tolerant, 9- completely susceptible), plant heights/nodes and yield. Stand counts were recorded after emergence and again at harvest to monitor the plant population. Plant heights and nodes were recorded at R5.5 growth stage. The center two rows of each plot were machine harvested to determine final soybean yield. Soybean yield was measured in bushels per acre. The experimental design is a randomized complete block design.

Figure 2. Visual differences between treated rows and untreated rows when Sequestar 6% EDDHA is applied in-furrow.



Table 1. Yield response to foliar applied iron products.

	Sequestar 6%	Sequestar 13.2%	Iron Plus	F227-G	Untreated
Rate ¹	Yield bu/A				
1	13.3 bc	11.2 c	14.3 abc	14.4 abc	13.8 abc
2	13.6 bc	13.1 bc	16.1 ab	12.9 bc	
3	13.5 bc	15.0 ab	17.1 a	14.6 abc	
4	14.0 abc	14.4 abc	15.9 ab	12.8 bc	

¹Rates labeled 1, 2, 3, 4 are 0.06, 0.12, 0.18, and 0.24 lb ai/ac, respectively for Sequestar 6%, Sequestar 13.2%, and Iron Plus. Rates labeled 1, 2, 3, 4 are 0.5, 1.0, 1.5, and 2.0 lb ai/ac, respectively for F227G.

Table 2. Yield response to in-furrow iron products.

	Sequestar 6%	Sequestar 13.2%	Iron Plus	F227-G	Untreated
Rate ¹	Yield bu/A				
1	6.5 abcd	5.0 bcd	2.5 cd	5.7 abcd	8.2 abc
2	12.3 a	10.0 ab	6.0 abcd	6.5 abcd	
3	5.1 bcd	5.1 bcd	1.4 d	5.6 abcd	
4	9.2 ab	10.4 ab	4.2 bcd	5.7 abcd	

¹Rates labeled 1, 2, 3, 4 are 0.06, 0.12, 0.18, and 0.24 lb ai/ac, respectively for Sequestar 6%, Sequestar 13.2%, and Iron Plus. Rates labeled 1, 2, 3, 4 are 0.5, 1.0, 1.5, and 2.0 lb ai/ac, respectively for F227G.

Table 3. Yield response to split applied iron products.

	Sequestar 6%	Sequestar 13.2%	Iron Plus	F227-G	Untreated
Rate ¹	Yield bu/A				
1	15.2 b	15.8 ab	16.1 ab	15.5 ab	
2	16.7 ab	15.8 ab	12.5 b	12.1 b	
3	20.0 a	13.7 b	16.0 ab	11.7 b	13.6 b
4	20.6 a	16.3 ab	16.5 ab	11.9 b	

¹Rates labeled 1, 2, 3, 4 are 0.06, 0.12, 0.18, and 0.24 lb ai/ac, respectively for Sequestar 6%, Sequestar 13.2%, and Iron Plus. Rates labeled 1, 2, 3, 4 are 0.5, 1.0, 1.5, and 2.0 lb ai/ac, respectively for F227G.

Results: These results only include data generated from locations in which IDC symptoms were present. These data revealed that yield was not significant in the foliar and in-furrow experiments. Visual symptoms of IDC were significantly lower when Sequestar 6% was applied at rates of 0.12, 0.18, and 0.24 ai/ac when compared to the untreated check 28 and 42 DAP (not shown). Sequestar 6% applied at rates of 0.18 and 0.24 lb ai/ac resulted in greater yields compared to the untreated check in the split application experiment. This is likely due to the in-furrow portion of this application. No additional visual advantage was noted after the foliar application was made (not shown). 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, thus these experiments will be conducted again during the 2018 growing season.

IDC VARIETAL SCREENING - MATURITY GROUP IV

 2017 Soybean Maturity Group IV RR / RR2 / RR2X Variety Response to Iron Deficiency Chlorosis 						
Brand	Variety	IDC Tolerance Score				Avg. IDC Tolerance Score
Asgrow	AG47X6	1	4	4	3	3
Dyna-Gro	S49XS88	4	5	4	4	4
AgriGold	G4990RX	2	6	5	5	5
Terral	REV 48A26	4	6	6	6	5
AGS	GS48R216	5	7	6	8	6
Asgrow	AG48X8	4	5	7	7	6
Pioneer	P48T27X	5	7	5	6	6
USG	7487XTS	5	7	7	8	6
AgriGold	G4835RX	6	7	7	9	7
Delta Grow	DG4790 RR2	6	8	8	8	7
Delta Grow	DG4845 RR2X	6	7	7	7	7
Go Soy	49G16	7	7	7	8	7
Great Heart Seed	GT-4721X	6	7	7	7	7
Great Heart Seed	GT-4817XS	6	7	7	8	7
NK	S48-R2X	6	7	6	8	7
Petrus Seed	PSG 479 GTS	5	7	8	7	7
Progeny	P 4816 RX	6	8	8	8	7
Progeny	P 4996 RXS	5	8	7	8	7
USG	74K95RS	5	8	7	7	7
Croplan	R2C4775	7	8	7	8	8
Delta Grow	DG4825 RR2/STS	7	8	8	8	8
Delta Grow	DG4835 RR2X	6	7	8	9	8
Delta Grow	DG4880 RR	7	8	8	9	8
Delta Grow	DG4970 RR	7	8	9	9	8
Delta Grow	DG4995 RR	7	7	8	9	8
Dyna-Gro	S48XT56	8	7	7	8	8
Great Heart Seed	GT-477CR2	8	8	8	8	8
MorSoy	MS 4846 RXT	7	7	8	9	8
Petrus Seed	PSG 4916 GT	8	7	8	8	8
Progeny	P 4757 RY	7	8	9	9	8
Progeny	P 4851 RX	7	8	8	9	8
Terral	REV 47R34	7	8	8	9	8
USG	7496XTS	7	7	8	9	8
USG	7497XT	7	7	8	8	8
Croplan	RX4825	8	9	9	9	9
Terral	REV 48A76	8	9	9	9	9
Terral	REV 49R94	9	9	9	9	9

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.

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IDC VARIETAL SCREENING - MATURITY GROUP V

 2017 Soybean Maturity Group V RR / RR2 / RR2X Variety Response to Iron Deficiency Chlorosis 						
Brand	Variety	IDC Tolerance Score				Avg. IDC Tolerance Score
Asgrow	AG51X8	2	3	3	3	3
Great Heart Seed	GT-5324X	2	3	3	5	3
Delta Grow	DG5170 RR2/STS	2	5	4	4	4
Progeny	P 5016 RXS	3	5	4	5	4
Progeny	P 5157 RXS	2	5	5	4	4
Progeny	P 5376 RX	3	5	4	5	4
Terral	REV 56R63	3	5	5	4	4
USG	75B75R	3	4	3	5	4
Asgrow	AG59X7	3	4	5	6	5
Delta Grow	DG5555 RR	4	5	6	6	5
Great Heart Seed	GT-5022XS	4	5	6	6	5
U of A	UA 5414RR	4	5	5	5	5
U of A	UA 5715GT	5	5	5	5	5
Asgrow	AG55X7	5	6	6	6	6
Dyna-Gro	S56XT98	5	7	7	6	6
Go Soy	54G16	4	5	6	6	6
Pioneer	P54A54X	4	6	6	7	6
Pioneer	P55A49X	6	6	6	7	6
Progeny	P 5752 RY	5	6	7	6	6
Terral	REV 50A47	6	6	7	7	6
USG	7547XTS	5	6	6	6	6
Armor	53-D04	6	7	8	8	7
Credenz	CZ 5375 RY	5	7	8	8	7
Dyna-Gro	S56RY84	6	7	8	8	7
MorSoy	MS 5607 RXT	6	7	7	8	7
NK	S52-Y7X	7	8	7	8	7
Progeny	P 5417 RX	6	7	7	7	7
Progeny	P 5688 RX	6	7	7	8	7
Terral	REV 51A56	6	8	8	8	7
USG	7568XT	6	7	7	7	7
AgriGold	G5000RX	7	7	8	9	8
Delta Grow	DG5580 RR2	6	7	8	9	8
Pioneer	P50T56X	7	8	8	8	8
Terral	REV 56A58	8	8	8	9	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.

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2017 MSU Extension Soybean Variety Demonstration Program



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During the 2017 growing season, a total of 32 on-farm soybean variety demonstration plots were successfully conducted. The following information is intended to complement data generated through small-plot OVT testing programs.

2017 Locations

County	Demonstration Type	Irrigation Method
Bolivar	MG IV RR	Furrow
Bolivar	MG IV RR2X	Furrow
Bolivar	MG IV RR2X	Furrow
Clay	MG IV RR	None
Clay	MG V RR	None
Hinds	MG V RR2X	None
Humphreys	MG IV RR2X	Furrow
Itawamba	MG V RR2X	None
Lee	MG V LL	None
Leflore	MG IV RR	Furrow
Leflore	MG IV RR2X	Furrow
Lowndes	MG V RR	None
Madison	MG V RR2X	None
Oktibbeha	Early MG IV RR	Furrow
Oktibbeha	MG IV RR	Furrow
Oktibbeha	MG V RR	Furrow
Oktibbeha	MG IV RR2X	Furrow
Oktibbeha	MG V RR2X	Furrow
Pontotoc	MG IV RR	None
Quitman	MG IV RR2X	Furrow
Rankin	MG IV RR	None
Sharkey	MG IV RR2X	Furrow
Sharkey	MG IV LL	Furrow
Sharkey	MG V LL	Furrow
Sunflower	Early MG IV RR	Furrow
Sunflower	MG IV RR	Furrow
Sunflower	MG IV RR2X	Furrow
Tunica	MG IV LL	Furrow
Tunica	MG V LL	Furrow
Washington	MG IV RR2X	Furrow
Washington	MG IV LL	Furrow
Washington	MG V LL	Furrow

MSU Extension Participants

Program Coordinator: Dr. Trent Irby, Extension Soybean Specialist

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Mr. Preston Aust
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Mr. Jon Carson
Mr. Alex Deason

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Mr. Dan Haire
Mr. Craig Hankins
Mr. Kyle Lewis
Mr. Reid Nevins

Dr. Dennis Reginelli
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Dr. Mark Shankle
Mr. Charlie Stokes
Mr. Drew Wilson

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, Chase Floyd, Tanner Dinsmore, Chase Kasper, Tristan Knight and Zachary Treadway

County	Plot Type	Planting Date	Seeding Rate	Plot Width	Row Spacing	Tillage System	Soil Series	Irrigation Method	Harvest Date
Bolivar	MG IV RR	13-Apr	130,000	8 rows	38"	Conv.	Sharkey clay	Furrow	23-Sep
Bolivar	MG IV RR2X	15-Jun	135,000	8 twin rows	38"	Conv.	Forestdale silty clay	Furrow	12-Oct
Bolivar	MG IV RR2X	18-Apr	132,000	6 rows	38"	Conv.	Alligator silty clay	Furrow	28-Sep
Clay	MG IV RR	5-May	115,000	8 rows	30"	Conv.	Griffith silty clay	None	22-Sep
Clay	MG V RR	5-May	115,000	8 rows	30"	Conv.	Griffith silty clay	None	10-Oct
Hinds	MG V RR2X	24-Apr	120,000	4 rows	30"	Conv.	Grenada silt loam	None	13-Oct
Humphreys	MG IV RR2X	26-Apr	155,000	16 twin rows	38"	Conv.	Forestdale fine sandy loam	Furrow	25-Sep
Itawamba	MG V RR2X	20-Jun	110,000	8 rows	38"	Conv.	Marietta loam	None	31-Oct
Lee	MG V LL	14-Jun	140,000	8 rows	38"	Conv.	Ora fine sandy loam	None	31-Oct
Leflore	MG IV RR	17-Apr	135,000	6 rows	38"	Conv.	Alligator clay	Furrow	22-Sep
Leflore	MG IV RR2X	17-Apr	115,000	16 rows	38"	Conv.	Dundee silt loam	Furrow	21-Sep
Lowndes	MG V RR	9-May	110,000	6 rows	30"	Conv.	Leeper silt clay	None	5-Oct
Madison	MG V RR2X	9-May	120,000	6 rows	30"	Min.-Till	Loring silt loam	None	4-Oct
Oktibbeha	Early MG IV RR	20-Apr	130,000	2 rows	38"	Conv.	Marietta fine sandy loam	Furrow	29-Aug
Oktibbeha	MG IV RR	20-Apr	130,000	2 rows	38"	Conv.	Marietta fine sandy loam	Furrow	29-Aug
Oktibbeha	MG V RR	20-Apr	130,000	2 rows	38"	Conv.	Marietta fine sandy loam	Furrow	19-Sep
Oktibbeha	MG IV RR2X	20-Apr	130,000	2 rows	38"	Conv.	Marietta fine sandy loam	Furrow	29-Aug
Oktibbeha	MG V RR2X	20-Apr	130,000	2 rows	38"	Conv.	Marietta fine sandy loam	Furrow	20-Sep
Pontotoc	MG IV RR	15-May	140,000	4 rows	38"	Conv.	Providence silt loam	None	12-Oct
Quitman	MG IV RR2X	13-Jun	130,000	8 twin rows	38"	Conv.	Alligator clay	Furrow	17-Oct
Rankin	MG IV RR	9-May	125,000	5 rows	30"	No-Till	Pelahatchie silt loam	None	4-Oct
Sharkey	MG IV RR2X	17-May	130,000	6 rows	38"	Conv.	Sharkey clay	Furrow	19-Oct
Sharkey	MG IV LL	17-May	137,000	8 twin rows	38"	Conv.	Alligator clay	Furrow	28-Sep
Sharkey	MG V LL	17-May	137,000	8 twin rows	38"	Conv.	Alligator clay	Furrow	28-Sep
Sunflower	Early MG IV RR	11-May	135,000	16 twin rows	38"	Conv.	Alligator clay	Furrow	18-Sep
Sunflower	MG IV RR	1-Jun	150,000	15 rows	15"	Conv.	Alligator clay	Furrow	6-Oct
Sunflower	MG IV RR2X	13-Apr	140,000	8 twin rows	38"	Conv.	Dowling clay	Furrow	20-Sep
Tunica	MG IV LL	18-May	130,000	6 twin rows	38"	Conv.	Dundee silt loam/ Sharkey clay	Furrow	3-Oct
Tunica	MG V LL	18-May	130,000	6 twin rows	38"	Conv.	Dundee silt loam/ Sharkey clay	Furrow	3-Oct
Washington	MG IV RR2X	11-May	135,000	6 rows	30"	Conv.	Dowling clay	Furrow	5-Oct
Washington	MG IV LL	11-May	140,000	14 twin rows	40"	Conv.	Sharkey clay	Furrow	26-Sep
Washington	MG V LL	11-May	140,000	8 twin rows	40"	Conv.	Sharkey clay	Furrow	26-Sep

Soybean Variety Characteristics

Maturity Group IV Roundup Ready Set

Brand	Variety	Relative Maturity	Herbicide Package ¹	Growth Habit ²	Canopy Width ³	Plant Height ⁴	Plant Color ⁵
Armor	47-R70	4.7	RR2Y	I	M	MT	LT
Credenz	CZ 4181 RY	4.1	RR	I	MB	MT	LT
Credenz	CZ 4590 RY	4.5	RR	I	MT	MT	LT
Dyna-Gro	S43RY95	4.3	RR2Y	I	MB	T	T
Delta Grow	DG 4790RR2Y	4.7	RR2Y	I	MT	M	T
Dyna-Gro	31RY45	4.5	RR2Y	I	M	T	LT
Pioneer	P41T33R	4.1	RR	I	MB	MT	LT
Pioneer	P47T89R	4.7	RR	I	M	MT	LT
Pioneer	P46A16R	4.6	RR	I	M	MT	G
Progeny	P 4620 RXS	4.6	RR2X/STS	I	M	MT	T
Terral	REV 47R34	4.7	RR	I	MB	MT	LT
Terral	REV 48A26	4.8	RR	I	MB	MT	LT

Maturity Group V Roundup Ready Set

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	M	MT	LT
Credenz	CZ 5375 RY	5.3	RR2Y	D	MB	M	G
Delta Grow	DG 5580RR2Y	5.5	RR2Y	D	B	M	T
Dyna-Gro	S52RY75	5.2	RR2Y	D	M	MT	LT
Dyna-Gro	S57RY26	5.7	RR2Y	D	MB	MT	T
Pioneer	P52A26R	5.2	RR	I	M	MT	G
Progeny	P 5555 RY	5.5	RR2Y	D	M	T	T
Progeny	P 5752 RY	5.7	RR2Y	D	M	T	T
Terral	REV 51A56	5.1	RR	I	MB	MT	LT
Terral	REV 50A47	5.0	RR	I	MB	MT	LT

¹ – RR = Roundup Ready; RR2 = Roundup Ready 2; RR2Y = Roundup Ready 2 Yield;

STS = sulfonyleurea 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 Roundup Ready 2 Xtend Set

Brand	Variety	Relative Maturity	Herbicide Package ¹	Growth Habit ²	Canopy Width ³	Plant Height ⁴	Plant Color ⁵
Armor	48-D24	4.8	RR2X	I	M	S	LT
Asgrow	AG43X7	4.3	RR2X/SR	I	MB	T	LT
Asgrow	AG46X6	4.6	RR2X/SR	I	MB	MT	T
Asgrow	AG47X6	4.7	RR2X/SR	I	MB	T	LT
Dyna-Gro	S45XS66	4.5	RR2X/STS	I	MB	MT	LT
Dyna-Gro	S48XT56	4.8	RR2X	I	M	M	LT
NK	S41-A1X	4.1	RR2X	I	MB	T	LT
NK	S43-V3X	4.3	RR2X	I	M	MT	LT
NK	S45-K5X	4.5	RR2X	I	MB	MT	LT
NK	S48-R2X	4.8	RR2X	I	MB	T	LT
Pioneer	P45T74X	4.5	RR2X	I	T	MT	G
Progeny	P 4799 RXS	4.7	RR2X/STS	I	M	T	LT
Progeny	P 4816 RX	4.8	RR2X	I	MB	MT	LT
Terral	REV 4857X	4.8	RR2X	I	MB	MT	G
Terral	REV 4927X	4.9	RR2X	I	MB	MT	LT

Maturity Group V Roundup Ready 2 Xtend Set

Brand	Variety	Relative Maturity	Herbicide Package ¹	Growth Habit ²	Canopy Width ³	Plant Height ⁴	Plant Color ⁵
Armor	53-D04	5.3	RR2X	D	M	M	G
Asgrow	AG51X8	5.1	RR2X	I	MB	T	T
Asgrow	AG55X7	5.5	RR2X	D	B	M	T
Asgrow	AG55X8	5.5	RR2X	I	M	T	T
Dyna-Gro	S54XT17	5.4	RR2X	D	MT	M	G
NK	S52-Y7X	5.2	RR2X	I	M	MT	LT
Pioneer	P54A54X	5.4	RR2X	D	M	M	G
Pioneer	P55A49X	5.5	RR2X	D	MB	S	G
Progeny	P 5376 RX	5.3	RR2X	D	M	M	T
Progeny	P 5417 RX	5.4	RR2X	D	M	M	G

¹ –RR2X = Roundup Ready 2 Xtend; STS/SR = 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 Set							
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 4540 LL	4.5	LL	I	M	MT	LT
Credenz	CZ 4748 LL	4.7	LL	I	B	M	LT
Delta Grow	DG 4587LL/STS	4.5	LL/STS	I	SB	MT	T
Delta Grow	DG 4977LL/STS	4.9	LL/STS	I	M	MT	G
Dyna-Gro	S42LL63	4.2	LL	I	MB	MT	LT
GoSoy	4714LL	4.7	LL	I	MB	MT	LT
GoSoy	4912LL	4.9	LL	I	B	T	G

Maturity Group V LibertyLink Set							
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	D	M	M	T
Credenz	CZ 5147 LL	5.1	LL	D	MB	M	T
Delta Grow	DG 5067LL	5.0	LL	D	B	T	G
Dyna-Gro	S52LL66	5.2	LL	I	MB	T	G
Dyna-Gro	S55LS75	5.5	LL/STS	D	B	T	T
GoSoy	5115LL	5.1	LL	I	MB	MT	T

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 Roundup Ready Varieties Summarized across Irrigated Locations

Total number of locations:		4					
Planting date range:		13-April-17 to 1-June-17					
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
Pioneer	P46A16R	43	3	1	3	12.0	74.2
Terral	REV 48A26	42	3	1	2	12.4	71.1
Pioneer	P47T89R	41	3	1	2	12.3	69.9
Terral	REV 47R34	40	3	2	3	12.2	69.9
Delta Grow	DG 4790RR2Y	42	4	2	2	12.0	69.8
Progeny	P 4620 RXS	41	4	2	3	12.4	69.7
Armor	47-R70	42	4	1	2	12.7	69.6
Credenz	CZ 4590 RY	41	4	0	4	12.8	67.7
Dyan-Gro	31RY45	42	5	1	3	12.2	63.6
Average across all irr. locations:						12.3	69.5

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 Roundup Ready Varieties Summarized across Non-irrigated Locations

Total number of locations:		3					
Planting date range:		2-May-17 to 15-May-17					
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
Terral	REV 48A26	41	3	1	2	13.2	56.3
Pioneer	P46A16R	41	2	1	1	13.3	56.1
Armor	47-R70	41	2	1	3	13.9	54.9
Progeny	P 4620 RXS	41	2	1	4	13.1	54.2
Terral	REV 47R34	44	3	1	1	13.7	52.8
Delta Grow	DG 4790RR2Y	43	2	2	2	13.5	52.4
Pioneer	P47T89R	40	2	1	2	13.3	49.9
Credenz	CZ 4590 RY	39	1	0	1	14.2	49.0
Dyna-Gro	31RY45	38	2	1	2	12.8	45.6
Average across all non-irr. locations:						13.4	52.4

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 Roundup Ready 2 Xtend Varieties Summarized across Irrigated Locations							
Total number of locations:		9					
Planting date range:		13-April-17 to 15-May-17					
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
Dyna-Gro	S48XT56	33	2	0	4	14.0	67.7
Armor	48-D24	33	1	0	3	13.5	65.5
Progeny	P 4816 RX	33	1	0	3	13.8	65.4
Asgrow	AG46X6	34	2	0	2	13.1	62.1
Asgrow	AG47X6	40	2	1	3	13.4	62.1
Terral	REV 4857X	36	3	1	2	13.5	62.0
Pioneer	P45T74X	35	3	0	2	13.3	61.8
Dyna-Gro	S45XS66	38	4	0	2	13.5	60.3
NK	S48-R2X	34	2	0	2	13.1	60.1
Terral	REV 4927X	37	3	0	2	14.9	60.0
Progeny	P 4799 RXS	36	2	1	3	13.6	59.2
NK	S45-K5X	32	2	1	2	13.4	58.3
Average across all non-irr. locations:						13.6	62.0

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 Roundup Ready 2 Xtend Varieties Summarized across Non-irrigated Locations							
Total number of locations:		3					
Planting date range:		24-April-17 to 20-June-17					
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
Asgrow	AG55X8	43	3	0	2	12.6	72.9
Asgrow	AG51X8	39	2	0	1	12.4	69.5
Pioneer	P54A54X	27	1	0	1	12.2	68.8
Asgrow	AG55X7	26	0	0	3	12.6	68.5
Dyna-Gro	S54XT17	30	1	0	1	12.1	68.0
Pioneer	P55A49X	23	0	0	2	12.4	65.9
Progeny	P 5417 RX	29	1	0	3	12.3	64.0
Armor	53-D04	29	1	0	1	12.1	63.2
Progeny	P 5376 RX	28	0	0	1	12.0	58.6
NK	S52-Y7X	36	1	0	1	12.3	56.6
Average across all irr. locations:						12.3	65.6

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 LibertyLink Varieties Summarized across Irrigated Locations

Total number of locations:		3					
Planting date range:		11-May-17 to 18-May-17					
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
Dyna-Gro	S42LL63	40	2	0	1	12.9	66.7
Delta Grow	DG 4587LL/STS	40	1	0	0	11.7	58.3
Credenz	CZ 4540 LL	38	1	0	2	11.2	56.1
GoSoy	4912LL	44	3	0	1	12.2	54.9
Delta Grow	DG 4977LL/STS	45	2	0	1	11.5	54.0
GoSoy	4714LL	42	1	0	1	11.6	52.8
Armor	47-L10	42	1	0	1	11.6	52.4
Credenz	CZ 4748 LL	41	1	0	1	11.1	51.9
Average across all non-irr. locations:						11.7	55.9

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 V LibertyLink Varieties Summarized across Irrigated Locations

Total number of locations:		3					
Planting date range:		11-May-17 to 18-May-17					
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
Credenz	CZ 5147 LL	36	0	0	2	12.0	61.0
GoSoy	5115LL	41	1	0	2	11.4	59.4
Armor	53-L55	37	0	0	2	11.6	57.2
Dyna-Gro	S55LS75	38	2	0	3	13.0	56.2
Dyna-Gro	S52LL66	42	2	0	1	11.6	52.7
Delta Grow	DG 5067LL	43	2	0	1	12.4	52.4
Average across all irr. locations:						12.0	56.5

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%.

**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
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Pioneer	P46A16R	40	1	4	0	8	-	6	8	10.8	87.6
Pioneer	P47T89R	37	2	3	0	8	-	7	9	10.6	80.4
Progeny	P 4620 RXS	36	3	6	1	7	-	6	6	10.5	80.1
Terral	REV 48A26	36	3	4	0	8	-	8	8	10.5	79.3
Armor	47-R70	37	2	4	0	8	-	7	8	10.6	79.0
Delta Grow	DG 4790RR2Y	36	2	5	0	6	-	6	9	10.7	79.0
Terral	REV 47R34	37	3	7	6	8	-	7	7	10.8	78.0
Dyna-Gro	31RY45	38	4	1	0	8	-	8	9	10.6	77.9
Credenz	CZ 4590 RY	39	1	0	8	8	-	7	7	10.5	76.6
Plot Average:										10.6	79.8

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.

**Bolivar County – Irrigated
Maturity Group IV Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Dyna-Gro	S48XT56	35	0	-	-	6	-	7	8	12.8	59.3
Pioneer	P45T47X	37	0	-	-	7	-	8	9	14.4	58.5
Dyna-Gro	S45XS66	41	3	-	-	7	-	8	9	14.9	56.9
Terral	REV 4857X	28	2	-	-	7	-	7	8	13.0	56.9
Asgrow	AG47X6	36	1	-	-	7	-	8	9	13.3	56.1
Progeny	P 4816 RX	36	0	-	-	6	1	6	7	14.0	55.8
Asgrow	AG46X6	38	1	-	-	6	-	8	6	13.4	54.1
Armor	48-D24	28	1	-	-	6	-	6	9	12.6	52.9
NK	S45-K5X	29	0	-	-	6	-	8	9	16.1	52.7
Terral	REV 4927X	40	2	-	-	7	-	8	8	12.8	51.8
Progeny	P 4799 RXS	32	0	-	-	6	-	6	7	14.0	50.1
NK	S48-R2X	31	0	-	-	6	1	8	8	13.3	50.0
Plot Average:										13.7	54.6

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.

**Bolivar County – Irrigated
Maturity Group IV Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Dyna-Gro	S48XT56	31	1	0	6	6	-	9	7	10.9	54.4
Progeny	P 4816 RX	32	0	0	6	6	1	5	5	11.3	52.4
Aarmor	48-D24	36	0	0	2	6	1	6	6	10.7	51.1
Terral	REV 4927X	38	1	0	0	6	1	8	8	10.6	50.3
Dyna-Gro	S45XS66	38	2	0	3	6	-	7	7	11.5	49.6
Asgrow	AG46X6	31	1	1	4	6	-	7	8	11.5	47.5
NK	S48-R2X	37	0	0	0	7	3	8	8	10.8	47.5
Pioneer	P45T47X	35	2	0	2	8	-	8	8	11.5	46.7
Terral	REV 4857X	37	0	0	0	8	-	7	8	11.3	46.5
Asgrow	AG47X6	41	1	1	1	7	-	7	9	11.1	46.1
Progeny	P 4799 RXS	41	1	3	2	6	-	6	6	11.2	44.5
NK	S45-K5X	32	1	2	1	8	-	8	8	11.3	44.3
Plot Average:										11.1	48.4

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.

Clay 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
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Terral	REV 48A26	38	2	2	1	7	0	8	5	11.4	59.5
Armor	47-R70	43	2	1	5	6	0	6	7	11.6	53.3
Terral	REV 47R34	50	3	1	2	7	0	7	8	11.9	52.4
Delta Grow	DG 4790RR2Y	46	2	3	3	6	2	6	6	11.4	51.8
Progeny	P 4620 RXS	44	2	2	6	7	0	8	8	11.5	51.3
Pioneer	P46A16R	43	2	2	1	7	0	7	6	10.8	49.6
Pioneer	P47T89R	42	1	1	2	6	0	6	7	11.1	46.1
Dyna-Gro	31RY45	42	2	2	2	6	0	7	6	10.6	41.0
Plot Average:										11.2	50.2

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.

Clay 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
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Terral	REV 50A47	45	1	2	2	6	0	5	7	10.7	52.3
Terral	REV 51A56	42	1	1	2	6	0	8	7	10.8	51.2
Dyna-Gro	S52RY75	39	2	1	2	6	0	6	5	11.1	47.8
Delta Grow	DG 5580RR2Y	37	4	2	1	6	0	5	4	11.0	47.0
Armor	55-R68	40	3	2	2	6	0	5	8	10.7	45.6
Progeny	P 5555 RY	44	3	2	3	6	0	4	4	11.0	44.7
Credenz	CZ 5375 RY	36	3	2	2	6	0	5	5	10.2	43.7
Dyna-Gro	S57RY26	40	2	2	1	6	0	5	4	10.7	42.9
Pioneer	P52RY75	47	1	3	2	7	0	5	7	11.4	40.8
Progeny	P 5752 RY	38	2	2	2	6	0	5	6	10.4	40.5
Plot Average:										10.8	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.

**Hinds County – Non-Irrigated
Maturity Group V Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Asgrow	AG51X8	38	3	0	1	6	-	5	6	12.7	82.3
Asgrow	AG55X8	41	6	0	2	5	-	6	6	12.8	79.0
Pioneer	P54A54X	28	0	0	1	6	-	7	7	12.8	77.0
Asgrow	AG55X7	24	0	0	5	6	-	6	6	13.3	76.2
Pioneer	P55A49X	22	0	0	4	6	-	6	6	13.2	75.3
Dyna-Gro	S54XT17	24	1	0	1	6	-	5	5	12.9	74.7
Progeny	P 5417 RX	26	1	0	6	6	-	4	4	12.8	71.6
NK	S52-Y7X	39	1	0	0	6	-	7	8	12.9	68.0
Armor	53-D04	28	0	0	1	6	-	5	5	12.4	66.8
Progeny	P 5376 RX	28	0	0	0	6	-	7	7	12.6	63.4
Plot Average:										12.8	73.4

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.

**Humphreys County – Irrigated
Maturity Group IV Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Dyna-Gro	S48XT56	30	1	0	1	8	-	7	7	12.5	67.3
NK	S48-R2X	37	3	0	0	7	-	6	7	11.9	66.5
Progeny	P 4816 RX	29	1	0	0	7	-	8	7	12.0	64.0
Armor	48-D24	27	1	0	1	7	-	6	6	12.0	63.6
Asgrow	AG46X6	32	3	0	0	7	-	7	8	13.0	60.4
Terral	REV 4857X	36	2	1	0	7	-	7	6	12.4	60.0
Terral	REV 4927X	37	7	1	0	8	-	9	8	11.9	58.5
Dyna-Gro	S45XS66	39	6	1	0	7	1	8	8	13.1	56.4
NK	S45-K5X	29	1	0	0	8	-	9	8	13.3	56.4
Asgrow	AG47X6	39	1	2	0	8	-	6	6	12.7	55.8
Progeny	P 4799 RXS	33	3	0	1	7	-	6	6	12.6	55.7
Pioneer	P45T47X	33	2	1	0	8	-	8	8	13.4	53.4
Plot Average:										12.6	59.8

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.

**Itawamba County – Non-Irrigated
Maturity Group V Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Asgrow	AG55X8	41	1	0	0	6	4	7	7	11.2	54.4
Pioneer	P55A49X	24	1	0	0	8	4	8	7	11.8	53.9
Pioneer	P54A54X	21	2	0	0	7	-	9	7	11.9	52.6
Dyna-Gro	S54XT17	33	1	0	0	7	6	7	8	11.6	50.7
Armor	53-D04	32	2	0	0	7	-	8	6	11.7	49.5
Asgrow	AG55X7	30	0	0	0	7	7	6	6	11.6	49.4
Progeny	P 5417 RX	29	1	0	0	7	3	7	8	12.1	47.8
Progeny	P 5376 RX	29	1	0	0	8	-	7	5	11.7	43.8
Asgrow	AG51X8	33	1	0	0	7	-	9	2	12.0	42.9
NK	S52-Y7X	25	1	0	0	7	6	6	4	12.0	38.3
Plot Average:										11.8	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.

**Lee County – Non-Irrigated
Maturity Group V LibertyLink**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Delta Grow	DG 5067LL	28	1	0	0	0	-	6	3	11.9	38.3
Dyna-Gro	S55LS75	30	1	0	0	0	-	3	3	11.8	35.2
Credenz	CZ 5147 LL	27	1	0	0	0	-	3	3	11.6	35.1
Dyna-Gro	S52LL66	28	0	0	0	0	-	6	6	12.3	34.5
Armor	53-L55	33	0	0	0	0	1	4	4	12.3	32.7
GoSoy	5115LL	33	3	0	0	0	-	4	4	11.8	28.3
Plot Average:										12.0	34.0

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.

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
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Pioneer	P47T89R	40	1	0	1	8	-	8	7	11.3	83.9
Pioneer	P46A16R	41	1	0	1	8	-	8	8	12.1	82.3
Armor	47-R70	43	1	0	0	8	-	8	7	11.8	82.1
Delta Grow	DG 4790RR2Y	42	2	0	2	8	-	8	8	12.2	81.4
Terral	REV 48A26	43	1	0	1	8	-	9	8	11.7	81.1
Dyna-Gro	31RY45	43	1	0	1	7	-	8	7	11.7	80.2
Terral	REV 47R34	39	2	0	0	8	-	9	8	12.0	79.5
Progeny	P 4620 RXS	41	2	0	2	7	-	8	8	11.7	77.9
Credenz	CZ 4590 RY	40	1	0	1	7	-	9	8	12.7	77.7
Plot Average:										11.9	80.7

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.

Leflore County – Irrigated Maturity Group IV Roundup Ready 2 Xtend											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Dyna-Gro	S48XT56	34	1	0	6	6	-	6	7	14.1	90.3
Armor	48-D24	37	2	0	1	6	-	8	7	14.0	89.4
Progeny	P 4816 RX	34	2	0	4	7	-	8	8	13.6	88.8
Asgrow	AG46X6	35	3	0	1	6	-	8	8	12.7	86.7
Pioneer	P45T47X	34	5	0	1	-	-	-	-	13.2	85.3
Terral	REV 4857X	42	7	0	1	8	-	8	8	13.8	84.8
Dyna-Gro	S45XS66	39	7	0	1	6	-	8	7	12.7	84.7
NK	S45-K5X	33	1	0	1	-	-	8	8	13.3	83.3
Asgrow	AG47X6	42	6	0	3	8	-	7	9	13.2	81.8
Progeny	P 4799 RXS	41	6	0	3	7	-	8	8	13.5	79.6
NK	S48-R2X	31	1	0	1	7	-	6	6	14.1	77.9
Terral	REV 4927X	31	7	0	1	8	-	7	7	13.7	76.6
Plot Average:										13.5	84.1

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.

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
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Delta Grow	DG 5580RR2Y	32	0	0	1	6	-	6	8	13.4	73.0
Armor	55-R68	35	1	0	2	6	-	6	7	13.5	71.6
Terral	REV 50A47	37	0	2	3	7	-	6	6	12.9	69.7
Pioneer	P52RY75	39	0	2	3	7	-	6	4	12.9	66.9
Dyna-Gro	S57RY26	30	1	0	3	6	-	7	5	12.5	66.7
Dyna-Gro	S52RY75	35	0	1	2	6	-	6	5	12.5	65.3
Progeny	P 5555 RY	34	2	1	3	6	-	7	8	14.5	62.0
Terral	REV 51A56	36	2	0	5	7	-	6	6	12.9	61.3
Progeny	P 5752 RY	34	0	1	4	6	-	7	6	12.6	59.3
Credenz	CZ 5375 RY	27	2	1	4	6	-	6	5	12.3	56.9
Plot Average:										13.0	65.3

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 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Asgrow	AG55X8	46	3	0	2	5	-	5	5	13.7	85.1
Asgrow	AG51X8	46	2	0	2	6	-	5	5	12.5	83.4
Asgrow	AG55X7	24	0	0	3	6	-	4	4	12.8	80.0
Dyna-Gro	S54XT17	33	0	0	2	6	-	7	5	11.8	78.7
Pioneer	P54A54X	31	1	0	3	6	-	7	6	11.8	76.7
Armor	53-D04	27	0	0	3	6	-	6	5	12.1	73.5
Progeny	P 5417 RX	30	1	0	3	6	-	6	6	11.9	72.6
Progeny	P 5376 RX	29	0	0	3	6	-	6	6	11.8	68.7
Pioneer	P55A49X	24	0	0	5	6	-	4	4	12.3	68.5
NK	S52-Y7X	43	1	0	2	6	1	6	8	12.1	63.5
Plot Average:										12.3	75.1

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.

**Oktibbeha County – Irrigated
Maturity Group EARLY IV Roundup Ready**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
NK	S43-V3X	38	7	2	7	-	-	-	-	13.7	61.7
Credenz	CZ 4181 RY	41	6	2	6	-	-	-	-	14.0	60.1
Asgrow	AG43X7	40	6	2	6	-	-	-	-	14.0	58.4
Pioneer	P41T33R	36	9	2	8	-	-	-	-	13.6	58.4
NK	S41-A1X	35	7	2	8	-	-	-	-	14.8	57.5
Dyna-Gro	S43RY95	39	5	2	5	-	-	-	-	13.3	56.0
Plot Average:										13.9	58.7

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.

**Oktibbeha County – Irrigated
Maturity Group IV Roundup Ready**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Terral	REV 47R34	41	3	1	5	-	-	-	-	15.3	54.4
Pioneer	P46A16R	42	8	1	8	-	-	-	-	13.9	53.3
Terral	REV 48A26	42	4	1	6	-	-	-	-	17.1	53.0
Delta Grow	DG 4790RR2Y	43	6	1	5	-	-	-	-	14.2	49.8
Credenz	CZ 4590 RY	44	5	1	4	-	-	-	-	16.4	48.2
Progeny	P 4620 RXS	40	3	1	4	-	-	-	-	16.9	47.9
Armor	47-R70	43	6	1	6	-	-	-	-	17.9	47.1
Pioneer	P47T89R	42	5	1	4	-	-	-	-	16.4	42.7
Dyna-Gro	31RY45	42	7	2	7	-	-	-	-	14.9	42.6
Plot Average:										15.9	48.8

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.

Oktibbeha County – Irrigated Maturity Group V Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Terral	REV 50A47	42	-	-	-	-	-	-	-	19.3	52.3
Dyna-Gro	S52RY75	38	-	-	-	-	-	-	-	18.7	50.1
Terral	REV 51A56	40	-	-	-	-	-	-	-	18.1	49.6
Pioneer	P52RY75	41	-	-	-	-	-	-	-	17.1	46.7
Progeny	P 5752 RY	38	-	-	-	-	-	-	-	14.8	41.5
Dyna-Gro	S57RY26	42	-	-	-	-	-	-	-	14.5	40.8
Progeny	P 5555 RY	40	-	-	-	-	-	-	-	13.2	37.8
Credenz	CZ 5375 RY	36	-	-	-	-	-	-	-	11.6	33.8
Armor	55-R68	38	-	-	-	-	-	-	-	11.0	32.3
Delta Grow	DG 5580RR2Y	40	-	-	-	-	-	-	-	10.6	31.2
Plot Average:										14.9	41.6

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.

**Oktibbeha County – Irrigated
Maturity Group IV Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Dyna-Gro	S48XT56	37	7	2	3	-	-	-	-	22.8	58.0
Progeny	P 4799 RXS	45	6	2	4	-	-	-	-	20.8	54.3
Progeny	P 4816 RX	37	7	2	2	-	-	-	-	20.3	53.3
Asgrow	AG47X6	44	6	2	6	-	-	-	-	19.9	52.5
Armor	48-D24	36	6	2	2	-	-	-	-	19.8	52.3
Terral	REV 4857X	42	6	2	5	-	-	-	-	19.6	51.9
NK	S48-R2X	40	8	2	7	-	-	-	-	19.3	51.3
Asgrow	AG46X6	37	5	2	3	-	-	-	-	19.1	50.9
Dyna-Gro	S45XS66	42	5	2	6	-	-	-	-	17.6	47.8
NK	S45-K5X	36	7	2	7	-	-	-	-	16.9	46.3
Pioneer	P45T47X	38	7	2	7	-	-	-	-	16.9	46.3
Terral	REV 4927X	42	3	2	4	-	-	-	-	19.9	42.6
Plot Average:										19.4	50.6

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.

**Oktibbeha County – Irrigated
Maturity Group V Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Pioneer	P54A54X	37	0	0	0	-	-	-	-	16.7	53.2
Pioneer	P55A49X	32	0	0	2	-	-	-	-	16.8	52.4
Progeny	P 5417 RX	40	1	0	2	-	-	-	-	16.8	50.2
Dyna-Gro	S54XT17	40	0	0	1	-	-	-	-	16.7	49.4
Asgrow	AG55X7	35	0	0	2	-	-	-	-	16.5	46.8
Asgrow	AG55X8	45	1	0	5	-	-	-	-	22.3	46.8
Asgrow	AG51X8	44	0	0	0	-	-	-	-	17.1	44.0
Progeny	P 5376 RX	34	0	0	0	-	-	-	-	16.6	40.4
Armor	53-D04	41	0	0	1	-	-	-	-	16.7	40.1
NK	S52-Y7X	36	0	0	0	-	-	-	-	16.3	38.1
Plot Average:										17.3	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.

Pontotoc 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
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Delta Grow	DG 4790RR2Y	42	-	-	-	6	-	6	7	15.4	50.4
Pioneer	P46A16R	41	-	-	-	7	-	6	8	15.6	50.3
Armor	47-R70	39	-	-	-	7	-	6	7	16.1	49.5
Terral	REV 47R34	43	-	-	-	7	-	7	7	15.6	46.1
Progeny	P 4620 RXS	39	-	-	-	6	-	7	7	14.3	46.0
Pioneer	P47T89R	38	-	-	-	7	-	6	6	15.8	45.2
Terral	REV 48A26	43	-	-	-	7	-	6	6	15.2	44.7
Dyna-Gro	31RY45	37	-	-	-	6	-	7	7	14.3	44.3
Credenz	CZ 4590 RY	42	-	-	-	7	-	6	6	14.4	44.2
Plot Average:										15.2	46.7

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 Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Progeny	P 4816 RX	29	0	0	1	6	-	5	5	13.8	54.8
Armor	48-D24	31	0	0	1	6	1	5	5	14.2	54.7
Dyna-Gro	S48XT56	31	0	0	0	6	4	6	7	13.7	53.8
Asgrow	AG47X6	33	1	0	3	6	-	7	7	14.0	52.1
Terral	REV 4857X	28	1	0	1	6	1	5	5	14.6	51.2
Dyna-Gro	S45XS66	32	2	0	1	6	-	6	8	14.3	51.0
Asgrow	AG46X6	27	1	0	3	6	-	6	8	13.4	50.2
Pioneer	P45T47X	28	0	0	1	7	1	6	8	13.7	50.0
NK	S48-R2X	33	0	0	0	6	3	5	6	14.0	49.7
NK	S45-K5X	28	0	0	1	6	1	6	7	13.3	48.6
Progeny	P 4799 RXS	31	1	0	1	6	-	6	7	14.1	48.1
Terral	REV 4927X	34	1	0	2	6	-	6	6	-	-
Plot Average:										13.9	51.3

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.

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
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Pioneer	P46A16R	39	2	0	0	7	2	5	5	13.6	68.4
Progeny	P 4620 RXS	41	2	0	1	7	-	6	5	13.6	65.2
Terral	REV 48A26	41	3	0	2	8	-	7	5	13.1	64.8
Armor	47-R70	40	2	0	0	7	-	8	5	13.9	60.9
Terral	REV 47R34	38	2	0	0	7	-	7	5	13.7	59.8
Pioneer	P47T89R	39	2	0	1	7	-	6	6	12.9	58.3
Delta Grow	DG 4790RR2Y	40	1	0	0	7	-	7	6	13.6	55.1
Credenz	CZ 4590 RY	37	1	0	1	7	4	6	6	13.9	53.8
Dyna-Gro	31RY45	37	1	0	1	7	-	7	7	13.6	51.5
Plot Average:										13.5	59.8

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.

**Sharkey County – Irrigated
Maturity Group IV Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Dyna-Gro	S48XT56	37	4	0	4	6	-	6	8	11.9	67.2
Armor	48-D24	37	2	0	5	6	-	7	7	11.9	66.2
Pioneer	P45T47X	43	3	0	2	6	-	5	9	12.8	64.6
Progeny	P 4816 RX	39	1	0	5	6	-	8	8	12.1	64.4
Asgrow	AG47X6	39	2	0	4	5	-	4	7	12.2	63.7
Terral	REV 4857X	38	4	0	3	6	-	5	8	12.3	59.5
NK	S45-K5X	37	2	0	3	6	-	6	9	12.7	59.3
Progeny	P 4799 RXS	43	1	0	3	6	-	6	8	12.3	58.1
NK	S48-R2X	38	2	0	3	6	-	6	7	11.4	55.5
Asgrow	AG46X6	44	3	0	3	6	-	5	7	12.6	54.2
Terral	REV 4927X	41	7	0	7	6	-	5	7	12.0	51.1
Dyna-Gro	S45XS66	40	4	0	4	6	-	7	8	13.3	48.1
Plot Average:										12.3	59.3

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.

Sharkey County – Irrigated Maturity Group IV LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Credenz	CZ 4540 LL	34	1	1	1	6	-	7	6	11.1	53.6
Delta Grow	DG 4587LL/STS	37	0	0	0	6	-	5	7	11.2	52.2
GoSoy	4714LL	41	0	0	1	7	-	6	7	11.1	51.8
Armor	47-L10	41	0	0	0	7	-	6	8	11.1	50.9
Delta Grow	DG 4977LL/STS	45	2	2	1	6	-	7	6	11.2	50.6
GoSoy	4912LL	48	2	0	0	6	-	7	7	11.4	50.5
Credenz	CZ 4748 LL	38	1	1	0	6	-	5	6	11.0	49.1
Dyna-Gro	S42LL63	-	-	-	-	6	-	4	4	-	-
Plot Average:										11.2	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 LibertyLink**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Credenz	CZ 5147 LL	44	0	0	0	5	-	7	8	11.7	55.1
GoSoy	5115LL	43	1	0	1	6	-	7	7	11.4	51.8
Dyna-Gro	S55LS75	39	1	0	3	6	-	6	8	11.5	50.1
Armor	53-L55	39	0	0	1	6	-	7	8	11.4	47.4
Dyna-Gro	S52LL66	42	1	0	0	6	-	6	7	11.6	46.6
Delta Grow	DG 5067LL	43	1	0	3	6	-	6	6	11.1	46.5
Plot Average:										11.5	49.6

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.

Sunflower County – Irrigated Maturity Group EARLY IV Roundup Ready											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Pioneer	P41T33R	46	0	0	1	7	-	7	9	12.4	76.3
NK	S43-V3X	46	3	0	1	6	-	7	7	12.8	74.9
Dyna-Gro	S43RY95	48	3	0	3	7	-	7	8	12.6	70.3
Credenz	CZ 4181 RY	45	2	0	1	8	-	7	9	12.4	69.7
Asgrow	AG43X7	44	2	0	1	8	-	7	9	14.4	66.0
NK	S41-A1X	53	2	0	1	7	-	6	9	12.2	60.1
Plot Average:										12.8	69.6

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.

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
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Pioneer	P46A16R	50	2	0	3	6	2	7	6	11.0	73.5
Progeny	P 4620 RXS	46	8	0	3	6	5	6	6	10.4	73.0
Pioneer	P47T89R	44	4	0	3	7	-	7	7	10.8	72.5
Terral	REV 48A26	46	4	0	3	7	-	7	5	10.4	70.9
Armor	47-R70	43	6	0	2	6	-	8	8	10.6	70.1
Delta Grow	DG 4790RR2Y	46	7	0	1	6	2	8	7	10.9	69.0
Credenz	CZ 4590 RY	42	7	0	4	6	5	8	7	11.4	68.3
Terral	REV 47R34	44	5	0	0	6	1	7	5	10.8	67.8
Dyna-Gro	31RY45	43	8	0	4	6	-	8	9	11.4	53.6
Plot Average:										10.9	68.7

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 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Armor	48-D24	35	1	0	7	6	0	8	7	15.2	94.1
NK	S48-R2X	31	1	0	4	7	1	7	7	12.6	92.9
Dyna-Gro	S48XT56	34	1	0	7	7	1	7	6	15.3	92.1
Asgrow	AG46X6	33	2	0	3	7	0	8	9	11.7	91.7
Terral	REV 4927X	38	3	0	0	8	0	8	8	12.2	91.2
Pioneer	P45T47X	35	3	0	4	8	0	8	8	11.9	90.3
Progeny	P 4816 RX	28	1	0	5	6	0	5	5	14.7	90.2
Asgrow	AG47X6	41	3	1	4	8	1	8	8	12.2	89.8
Terral	REV 4857X	34	1	1	2	7	1	8	7	12.8	86.5
Progeny	P 4799 RXS	28	3	1	4	7	0	8	7	12.8	85.2
Dyna-Gro	S45XS66	33	3	0	1	8	0	8	8	11.7	83.9
NK	S45-K5X	33	3	0	4	8	1	9	8	12.1	82.0
Plot Average:										12.9	89.2

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.

Tunica County – Irrigated Maturity Group IV LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Credenz	CZ 4748 LL	37	1	0	1	-	-	-	-	11.0	54.7
Dyna-Gro	S42LL63	35	1	0	0	6	-	6	6	12.8	54.6
Delta Grow	DG 4587LL/STS	37	2	0	0	6	-	6	7	11.5	54.1
Armor	47-L10	38	2	0	0	6	-	6	8	11.2	53.3
GoSoy	4714LL	38	2	0	0	5	-	6	7	11.0	53.1
Delta Grow	DG 4977LL/STS	40	2	0	0	5	-	6	7	11.1	49.7
Credenz	CZ 4540 LL	37	1	0	1	-	-	-	-	10.9	49.2
GoSoy	4912LL	36	3	0	0	5	-	4	5	11.8	49.0
Plot Average:										11.4	52.2

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.

**Tunica County – Irrigated
Maturity Group V LibertyLink**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Credenz	CZ 5147 LL	32	0	0	2	-	-	-	-	11.8	59.5
Dyna-Gro	S55LS75	39	3	0	4	6	-	5	5	11.8	56.0
Armor	53-L55	34	1	0	1	6	-	5	6	11.4	54.3
GoSoy	5115LL	33	1	0	1	5	-	5	5	10.7	51.8
Dyna-Gro	S52LL66	33	3	0	1	6	-	5	5	11.4	51.4
Delta Grow	DG 5067LL	36	3	0	0	5	-	5	5	12.2	50.5
Plot Average:										11.6	53.9

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.

**Washington County – Irrigated
Maturity Group IV Roundup Ready 2 Xtend**

Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Dyna-Gro	S48XT56	30	0	0	2	5	1	5	8	11.8	66.9
Armor	48-D24	33	0	0	1	5	-	5	7	11.5	65.6
Progeny	P 4816 RX	30	0	0	2	5	-	5	7	12.1	64.6
Dyna-Gro	S45XS66	39	1	0	1	5	-	6	7	12.1	64.5
Asgrow	AG46X6	33	1	0	1	5	-	5	6	10.9	63.0
Pioneer	P45T47X	35	1	0	2	7	-	7	8	11.7	61.5
Terral	REV 4857X	35	0	0	1	6	-	5	8	11.4	60.8
Asgrow	AG47X6	41	0	0	3	7	-	6	9	11.9	60.4
Terral	REV 4927X	30	0	0	1	6	-	6	7	11.3	57.8
Progeny	P 4799 RXS	34	0	0	3	5	-	5	7	11.3	57.0
NK	S45-K5X	28	0	0	2	5	-	7	8	11.6	51.4
NK	S48-R2X	30	0	0	1	6	-	7	7	10.6	49.1
Plot Average:										11.5	60.2

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.

Washington County – Irrigated Maturity Group IV LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Dyna-Gro	S42LL63	44	3	0	1	7	1	6	6	12.9	78.9
Delta Grow	DG 4587LL/STS	47	2	0	1	6	-	7	6	12.5	68.6
Credenz	CZ 4540 LL	44	2	0	3	6	-	6	7	11.7	65.4
GoSoy	4912LL	49	3	0	3	5	-	6	7	13.3	65.1
Delta Grow	DG 4977LL/STS	49	2	0	3	6	-	6	7	12.2	61.6
GoSoy	4714LL	47	2	0	3	7	-	8	8	12.6	53.5
Armor	47-L10	49	2	0	3	7	-	8	8	12.4	52.9
Credenz	CZ 4748 LL	48	0	0	1	7	-	7	9	11.3	52.0
Plot Average:										12.4	62.2

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.

Washington County – Irrigated Maturity Group V LibertyLink											
Brand	Variety	Final Height	Lodging Score	Shattering Score	Green Stem Score	Disease Ratings				Seed Moisture	Yield ⁵
		Inches	0 to 10 ⁶	0 to 10 ⁶	0 to 10 ⁶	CLB ¹	FLS ²	SBS ³	TS ⁴	%	bu/acre
Armor	53-L55	38	0	0	3	6	-	6	9	11.9	69.9
Credenz	CZ 5147 LL	31	0	0	3	6	-	6	8	12.5	68.5
GoSoy	5115LL	47	1	0	3	-	-	-	-	12.2	67.0
Dyna-Gro	S55LS75	37	1	0	1	6	-	6	8	15.7	62.5
Dyna-Gro	S52LL66	51	1	0	1	6	-	6	8	11.9	60.2
Delta Grow	DG 5067LL	49	3	0	1	-	-	-	-	13.9	60.1
Plot Average:										13.0	64.7

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.