

Performance of Soybean Cultivars In Alabama, 2018



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“The mission of the Alabama Variety Testing Program is to provide research-based, unbiased results on the performance of various crop hybrids, cultivars, and varieties to the agricultural community in our state. We are intent on conducting these trials in a manner that will result in maximum biological yield through methods common to the top-producing farms in Alabama. We are committed to providing this information in a rapid, timely manner for its use during the decision-making process. The success of the program rests upon our ability to help Alabama producers provide a safe, dependable source of food and fiber for all families as well as economic sustainability for theirs.”

Methods

Cultivars were arranged in a randomized complete block experimental design with 4 replications. Plot size was 4 rows, 30- to 38-inches wide, and 20 to 22 feet long. Trials were managed according to the location and local practices (Tables 21, 22). All tests were fertilized according to soil test recommendations. Plots were harvested utilizing a small plot combine from the center 2 rows of each plot. Plot yields were adjusted to 13 percent moisture and converted to bushels (60 pounds/bushel) per acre.

Region	Ala. Exp. Station location and soil texture
North	Sand Mountain Research & Ext. Center Wynnvilve fine sandy loam
	Tennessee Valley Research & Ext. Center Decatur silt loam
Central	Black Belt REC Sumter and Vaiden soils
	E.V. Smith Field Crops Unit Marvyn sandy loam
	Plant Breeding Unit, E.V. Smith Res. Ctr. Cahaba fine sandy loam
Southern	Brewton Agricultural Research Unit Benndale fine loamy sand
	Gulf Coast Research & Ext. Center Malbis fine sandy loam

In 2018, soybean trials were treated with foliar fungicides.

Tables

**abbreviations: REC - Research & Extension Center; ARU - Agricultural Research Unit*

2018 Soybean Cultivar Yield Performance by Region, Maturity Group, and Location

Region	Table No.	Maturity Group	Location
Northern Region	1	Early Planted IV	Tennessee Valley REC - Belle Mina
	2	Early IV	Tennessee Valley REC - Belle Mina
	3	Late IV	Tennessee Valley REC - Belle Mina
	4	V & VI	Tennessee Valley REC - Belle Mina
	5	Early Planted IV	Sand Mountain REC - Crossville
	6	Early IV	Sand Mountain REC - Crossville
	7	Late IV	Sand Mountain REC - Crossville
	8	V & VI	Sand Mountain REC - Crossville
Central Region	9	IV - Sumter Soil	Black Belt REC - Marion Junction
	10	V & VI - Sumter Soil	Black Belt REC - Marion Junction
	11	IV - Vaiden Soil	Black Belt REC - Marion Junction
	12	V & VI - Vaiden Soil	Black Belt REC - Marion Junction
	13	Early Planted IV	EV Smith Plant Breeding Unit - Tallassee
	14	Mid to Late IV	EV Smith Field Crops Unit - Shorter
	15	V & VI	EV Smith Field Crops Unit - Shorter
Southern Region	16	Mid to Late IV	Brewton ARU - Brewton
	17	Mid to Late V	Brewton ARU - Brewton
	18	V & VI	Brewton ARU - Brewton
	19	Mid to Late IV & V	Gulf Coast REC - Fairhope
	20	Mid to Late VI & VII	Gulf Coast REC - Fairhope
	21	Cultural practices for soybean cultivar tests in 2018	
	22	Rainfall at trial locations during the 2018 growing season	
	23	Soybean entries and sources for 2018	

Table 1. Performance of Soybean Cultivars in North Alabama - 2018

Tennessee Valley REC - Belle Mina, AL			
Early Planted - Maturity Group IV			
Cultivars		Yield	
		(bu/Acre)	
AgriGold G 4835RX		90	
AgriGold G 4579RX		86	
Credenz CZ 4548LL		86	
Asgrow AG 49X9		85	
Asgrow AG 48X9		84	
NK S 48-R2X		83	
AGS GS 48X18		82	
S14-15138R		82	
Credenz CZ 4918LL		81	
Credenz CZ 4820LL		81	
AgriGold G 4190RX		81	
Credenz CZ 4748LL		81	
AgriGold G 4750RX		81	
AgriGold G 4685RX		81	
S14-15146R		79	
NK S 45-J3X		79	
Asgrow AG 47X9		78	
Dyna-Gro S48XT56		78	
NK S 43-V3X		76	
NK S 45-K5X		76	
AgriGold G 4440RX		75	
Dyna-Gro S49XT39		75	
AGS GS 46X17		75	
GoSoy 49G16		74	
Credenz CZ 4540LL		73	
Credenz CZ 4649LL		70	
S14-9051R		69	
Asgrow AG 42X9		68	
GoSoy Ireane		68	
Credenz CZ 4938LL		63	
Trial mean		78	
LSD (0.1)		5	
CV (%)		8	
Pr>F		0.0010	

Table 2. Performance of Soybean Cultivars in North Alabama - 2018			
	Tennessee Valley REC - Belle Mina, AL		
	Early - Maturity Group IV		
	Cultivars		Yield
			(bu/Acre)
	Local Seed LS 4583X		75
	Local Seed LS 4565XS		75
	Mission Seed A4447NSXR2		75
	USG 7447XTS		72
	AgriGold G 4440RX		71
	AgriGold G 4579RX		70
	NK S 45-K5X		69
	AgriGold G 4190RX		69
	NK S 43-V3X		68
	NK S 45-J3X		63
	Local Seed LS 4388XS		60
	Trial mean		70
	LSD (0.1)		5
	CV (%)		8
	Pr>F		0.0388

Table 3. Performance of Soybean Cultivars in North Alabama - 2018

Tennessee Valley REC - Belle Mina, AL			
Late - Maturity Group IV			
Cultivars		Yield	
		(bu/Acre)	
Local Seed LS 4968XS		76	
USG 7478XTS		75	
Credenz CZ 4820LL		75	
USG 7496XTS		74	
Credenz CZ 4748LL		74	
Local Seed AV 49W3X		74	
AgriGold G 4750RX		72	
Terral REV 4679X		72	
Credenz CZ 4918LL		72	
Local Seed AV 47W2X		71	
AgriGold G 4835RX		70	
Mission Seed A4637NSXR2		70	
AgriGold G 4685RX		69	
Local Seed LS 4889XS		69	
Local Seed LS 4677X		69	
USG 7489XTS		68	
Local Seed LS 4966X		68	
S14-9051R		67	
S14-15138R		67	
USG 74K95RS		66	
GoSoy 49G16		66	
AGS GS 48X18		65	
Local Seed LS 4988X		64	
AGS GS 46X17		64	
Local Seed LS 4689X		64	
NK S 48-R2X		64	
Mission Seed MEX 4908		63	
Mission Seed MEX 4608		60	
S14-15146R		60	
GoSoy Ireane		55	
Trial mean		68	
LSD (0.1)		4	
CV (%)		7	
Pr>F		0.0001	

Table 4. Performance of Soybean Cultivars in North Alabama - 2018			
	Tennessee Valley REC - Belle Mina, AL		
	Maturity Groups V & VI		
	Cultivars		Yield
	Group V		(bu/Acre)
	Asgrow AG 53X9		54
	GoSoy 51C17		53
	Asgrow AG 52X9		52
	Dyna-Gro S52XT08		52
	Credenz CZ 5225LL		49
	MO5201D Conv		49
	Dyna-Gro S54XT17		48
	Local Seed LS 5087X		48
	GoSoy 56C16		46
	GoSoy 50G17		45
	AGS GS51X18S		44
	AgriGold G5000RX		44
	S13-1955C		44
	Dyna-Gro SX18854XT		42
	Asgrow AG 58X9		42
	Credenz CZ 5150LL		41
	AgriGold G5288RX		41
	Credenz CZ 5147LL		41
	Asgrow AG 54X9		41
	S14-9017R		41
	USG 7568XT		39
	GoSoy Leland		37
	GoSoy 54G16		36
	S11-20242C		35
	S15-10434C		34
	Asgrow AG 59X9		31
	Dyna-Gro SX18652XS		30
	Group VI		
	GoSoy EXP GT 6.0		42
	Trial mean		43
	LSD (0.1)		4
	CV (%)		11
	Pr>F		0.0001

Table 5. Performance of Soybean Cultivars in North Alabama - 2018

Sand Mountain REC - Crossville, AL			
Early Planted - Maturity Group IV			
Cultivars		Yield	
		(bu/Acre)	
Asgrow AG 48X9		66	
Asgrow AG 49X9		64	
Credenz CZ 4938LL		64	
S14-9051R		64	
Credenz CZ 4918LL		63	
Credenz CZ 4748LL		63	
Credenz CZ 4820LL		63	
AgriGold G 4190RX		62	
AGS GS 46X17		62	
AgriGold G 4835RX		62	
AgriGold G 4750RX		61	
GoSoy 49G16		60	
AGS GS 48X18		60	
AgriGold G 4685RX		60	
Credenz CZ 4548LL		60	
NK S 45-J3X		60	
Credenz CZ 4649LL		59	
AgriGold G 4579RX		59	
Asgrow AG 47X9		57	
S14-15138R		56	
Asgrow AG 42X9		56	
NK S 48-R2X		56	
GoSoy Ireane		55	
Dyna-Gro S49XT39		55	
NK S 45-K5X		54	
S14-15146R		52	
AgriGold G 4440RX		50	
Dyna-Gro S48XT56		49	
NK S 43-V3X		49	
Credenz CZ 4540LL		48	
Trial mean		58	
LSD (0.1)		5	
CV (%)		11	
Pr>F		0.0009	

Table 6. Performance of Soybean Cultivars in North Alabama - 2018			
	Sand Mountain REC - Crossville, AL		
	Early - Maturity Group IV		
	Cultivars		Yield
			(bu/Acre)
	Local Seed LS 4583X		74
	NK S 45-J3X		70
	AgriGold G 4579RX		70
	NK S 45-K5X		68
	Local Seed LS 4565XS		65
	AgriGold G 4190RX		63
	Mission Seed A4447NSXR2		63
	AgriGold G 4440RX		60
	Local Seed LS 4388XS		59
	NK S 43-V3X		59
	USG 7447XTS		58
	Trial mean		65
	LSD (0.1)		2
	CV (%)		5
	Pr>F		0.0001

Table 7. Performance of Soybean Cultivars in North Alabama - 2018

Sand Mountain REC - Crossville, AL			
Late - Planted Maturity Group IV			
Cultivars		Yield	
		(bu/Acre)	
AgriGold G 4750RX		74	
USG 7478XTS		73	
AgriGold G 4835RX		72	
Local Seed LS 4968XS		72	
USG 7496XTS		71	
Mission Seed MEX 4908		71	
AgriGold G 4685RX		71	
USG 74K95RS		70	
Local Seed LS 4988X		69	
AGS GS 46X17		69	
S14-9051R		68	
Local Seed AV 49W3X		67	
Local Seed LS 4889XS		67	
Terral REV 4679X		67	
GoSoy Ireane		67	
Mission Seed MEX 4608		67	
Local Seed LS 4677X		67	
Credenz CZ 4918LL		66	
USG 7489XTS		66	
AGS GS 48X18		65	
NK S 48-R2X		65	
Local Seed LS 4966X		64	
Credenz CZ 4820LL		63	
S14-15138R		63	
Credenz CZ 4748LL		63	
GoSoy 49G16		63	
S14-15146R		62	
Local Seed LS 4689X		60	
Local Seed AV 47W2X		59	
Mission Seed A4637NSXR2		58	
Trial mean		67	
LSD (0.1)		3	
CV (%)		6	
Pr>F		0.0001	

Table 8. Performance of Soybean Cultivars in North Alabama - 2018

Sand Mountain REC - Crossville, AL			
Maturity Groups V & VI			
	Cultivars		Yield
	Group V		(bu/Acre)
	AGS GS51X18S		67
	Asgrow AG 52X9		65
	S14-9017R		64
	Credenz CZ 5147LL		62
	AgriGold G5288RX		62
	MO5201D Conv		59
	GoSoy 54G16		59
	Asgrow AG 53X9		58
	GoSoy 51C17		58
	AgriGold G5000RX		57
	Credenz CZ 5150LL		56
	Asgrow AG 59X9		56
	Dyna-Gro S52XT08		56
	Dyna-Gro SX18854XT		55
	Credenz CZ 5225LL		55
	Dyna-Gro SX18652XS		55
	Dyna-Gro S54XT17		54
	S13-1955C		54
	Local Seed LS 5087X		53
	Asgrow AG 58X9		53
	USG 7568XT		52
	GoSoy 56C16		51
	Asgrow AG 54X9		51
	GoSoy 50G17		48
	S15-10434C		46
	GoSoy Leland		45
	S11-20242C		44
	Group VI		
	GoSoy EXP GT 6.0		59
	Trial mean		55
	LSD (0.1)		5
	CV (%)		12
	Pr>F		0.0002

Table 9. Performance of Soybean Cultivars in Central Alabama - 2018

Black Belt REC - Marion Junction, AL			
Maturity Group IV - Sumter Soil			
Cultivars	Yield (bu/Acre)	Iron Chlorosis rating (Av 3 rep)	
Local Seed LS 4689X	30	5.2	
S14-15138R	27	6.8	
Local Seed AV 49W3X	25	4.7	
Local Seed LS 4966X	25	6.3	
Local Seed LS 4388XS	24	4.8	
Local Seed LS 4988X	23	6.8	
Credenz CZ 4918LL	23	6.3	
NK S 48-R2X	23	5.6	
Local Seed AV 47W2X	21	7.0	
Local Seed LS 4565XS	21	7.5	
Credenz CZ 4820LL	20	5.6	
Local Seed LS 4677X	20	8.3	
Dyna-Gro S49XT39	19	6.8	
Local Seed LS 4583X	19	6.9	
Local Seed LS 4889XS	18	7.2	
S14-9051R	18	6.9	
GoSoy 49G16	17	6.8	
AGS GS 46X17	16	8.6	
Credenz CZ 4748LL	14	7.1	
AGS GS 48X18	-	8.6	
GoSoy Ireane	-	6.8	
Local Seed LS 4968XS	-	7.9	
S14-15146R	-	8.1	
Trial mean	21		
LSD (0.1)	4		
CV (%)	24		
Pr>F	0.0519		

NOTE: Yields for all varieties in this trial were reduced due to iron chlorosis. 4 varieties in this test were unharvestable. Ratings made on July 25, 2018. 1 = no chlorosis; 10 = plants losing leaves due to necrotic spots on leaves.

Table 10. Performance of Soybean Cultivars in Central Alabama - 2018			
	Black Belt REC - Marion Junction, AL		
	Maturity Group V - Sumter Soil		
	Cultivars	Yield	Iron Chlorosis
	Group V	(bu/Acre)	rating (Av 3 rep)
	GoSoy Leland	33	6.0
	Dyna-Gro S54XT17	32	2.9
	Credeuz CZ 5147LL	32	2.8
	Credeuz CZ 5225LL	30	2.8
	Asgrow AG 58X9	29	3.3
	S15-10434C	29	4.3
	GoSoy 51C17	27	4.5
	Credeuz CZ 5150LL	27	7.2
	AGS GS51X18S	27	2.4
	Local Seed LS 5087X	27	4.3
	Syngenta NK S 52-Y7X	26	3.9
	GoSoy 50G17	26	5.2
	GoSoy 56C16	26	2.4
	Asgrow AG 59X9	25	4.5
	Dyna-Gro SX18652XS	24	3.3
	Dyna-Gro S56XT99	24	4.2
	Syngenta NK S 56-B7X	23	3.0
	Dyna-Gro SX18854XT	21	4.3
	GoSoy 54G16	21	4.8
	Syngenta NK S 50-G9X	21	6.7
	S11-20242C	18	7.9
	MO5201D Conv	14	7.9
	S13-1955C	-	9.0
	S14-9017R	-	9.8
	Group VI		
	GoSoy EXP GT 6.0	30	7.5
	Trial mean	26	
	LSD (0.1)	4	
	CV (%)	17	
	Pr>F	0.0011	

NOTE: Yields for all varieties in this trial were reduced due to iron chlorosis. 2 varieties in this test were unharvestable. Ratings made on July 25, 2018. 1 = no chlorosis; 10 = plants losing leaves due to necrotic spots on leaves.

Table 11. Performance of Soybean Cultivars in Central Alabama - 2018			
	Black Belt REC - Marion Junction, AL		
	Maturity Group IV - Vaiden Soil		
	Cultivars		Yield (bu/Acre)
	Credenz CZ 4820LL		61
	Local Seed LS 4583X		60
	Local Seed LS 4968XS		59
	Local Seed AV 49W3X		59
	Local Seed LS 4966X		58
	Local Seed LS 4889XS		58
	Local Seed LS 4565XS		58
	Local Seed LS 4689X		58
	Local Seed LS 4988X		57
	Credenz CZ 4748LL		57
	NK S 48-R2X		57
	Dyna-Gro S49XT39		56
	GoSoy Ireane		56
	Credenz CZ 4918LL		55
	S14-15138R		55
	GoSoy 49G16		53
	Local Seed AV 47W2X		52
	AGS GS 46X17		52
	AGS GS 48X18		52
	Local Seed LS 4677X		51
	Local Seed LS 4388XS		47
	S14-15146R		45
	S14-9051R		44
	Trial mean		55
	LSD (0.1)		3
	CV (%)		8
	Pr>F		0.0001

Table 12. Performance of Soybean Cultivars in Central Alabama - 2018

Black Belt REC - Marion Junction, AL			
Maturity Groups V & VI - Vaiden Soil			
Cultivars		Yield	
Group V		(bu/Acre)	
Credenz CZ 5147LL		62	
Local Seed LS 5087X		62	
S11-20242C		61	
Dyna-Gro S56XT99		61	
Dyna-Gro S54XT17		60	
Asgrow AG 58X9		59	
GoSoy Leland		59	
Credenz CZ 5150LL		58	
Syngenta NK S 50-G9X		58	
Asgrow AG 59X9		58	
AGS GS51X18S		57	
Dyna-Gro SX18652XS		57	
Credenz CZ 5225LL		57	
Syngenta NK S 52-Y7X		57	
S15-10434C		57	
Syngenta NK S 56-B7X		57	
S14-9017R		57	
GoSoy 56C16		56	
MO5201D Conv		56	
GoSoy 50G17		56	
S13-1955C		56	
GoSoy 51C17		55	
GoSoy 54G16		54	
Dyna-Gro SX18854XT		54	
Group VI			
GoSoy EXP GT 6.0		56	
Trial mean		56	
LSD (0.1)		N/S	
CV (%)		11	
Pr>F		0.9595	

Table 13. Performance of Soybean Cultivars in Central Alabama - 2018

E.V. Smith - Plant Breeding Unit - Tallassee, AL			
Early Planted - Maturity Group IV			
Cultivars		Yield	
		(bu/Acre)	
NK S 45-J3X		46	
AgriGold G 4750RX		46	
AGS GS 48X18		43	
Asgrow AG 48X9		42	
NK S 45-K5X		42	
Credenz CZ 4918LL		41	
S14-9051R		41	
AgriGold G 4190RX		41	
AgriGold G 4835RX		41	
AGS GS 46X17		39	
S14-15138R		39	
S14-15146R		39	
AgriGold G 4685RX		36	
Credenz CZ 4548LL		35	
Credenz CZ 4938LL		35	
Asgrow AG 49X9		34	
AgriGold G 4440RX		34	
AgriGold G 4579RX		34	
NK S 43-V3X		33	
Asgrow AG 47X9		32	
Credenz CZ 4748LL		32	
Asgrow AG 42X9		30	
Credenz CZ 4540LL		30	
GoSoy 49G16		29	
GoSoy Ireane		27	
Credenz CZ 4820LL		26	
NK S 48-R2X		26	
Credenz CZ 4649LL		24	
Trial mean		36	
LSD (0.1)		N/S	
CV (%)		37	
Pr>F		0.6230	

Table 14. Performance of Soybean Cultivars in Central Alabama - 2018

E.V. Smith REC - Field Crops Unit - Shorter, AL			
Mid to Late - Maturity Group IV			
Cultivars		Yield	
		(bu/Acre)	
Terral REV 4927X		35	
Local Seed LS 4677X		33	
Local Seed LS 4988X		33	
Local Seed AV 49W3X		32	
USG 7478XTS		31	
Local Seed LS 4889XS		31	
Credenz CZ 4820LL		30	
Local Seed LS 4968XS		30	
USG 74K95RS		29	
AGS GS 48X18		29	
USG 7496XTS		29	
Credenz CZ 4748LL		29	
Local Seed LS 4689X		28	
Local Seed LS 4583X		28	
Credenz CZ 4918LL		26	
GoSoy 49G16		26	
Local Seed AV 47W2X		26	
Terral REV 4857X		25	
Local Seed LS 4388XS		25	
Local Seed LS 4966X		25	
S14-15138R		25	
S14-15146R		24	
AGS GS 46X17		24	
GoSoy Ireane		24	
USG 7489XTS		24	
Local Seed LS 4565XS		24	
USG 7447XTS		23	
S14-9051R		22	
Trial mean		27	
LSD (0.1)		3	
CV (%)		17	
Pr>F		0.0014	

Table 15. Performance of Soybean Cultivars in Central Alabama - 2018

E.V Smith REC - Field Crops Unit - Shorter, AL			
Maturity Groups V & VI			
Cultivars		Yield	
Group V		(bu/Acre)	
Terral REV 56A58		52	
USG 7568XT		50	
Dyna-Gro S58RY78		48	
GoSoy 56C16		47	
GoSoy 50G17		47	
Credenz CZ 5147LL		45	
S15-10434C		45	
Credenz CZ 5150LL		44	
Dyna-Gro S56XT99		44	
AGS GS51X18S		44	
GoSoy 51C17		43	
GoSoy Leland		43	
Asgrow AG 54X9		43	
Terral REV 52A98		42	
Asgrow AG 52X9		42	
Credenz CZ 5225LL		41	
S11-20242C		40	
Terral REV 55A67		40	
GoSoy 54G16		40	
Local Seed LS 5087X		40	
S13-1955C		39	
Asgrow AG 53X9		38	
Asgrow AG 58X9		38	
MO5201D Conv		34	
S14-9017R		32	
Asgrow AG 59X9		32	
Group VI			
GoSoy EXP GT 6.0		44	
Dyna-Gro S67XT29		36	
Dyna-Gro S62XT09		34	
Dyna-Gro S64XT18		30	
Trial mean		41	
LSD (0.1)		4	
CV (%)		13	
Pr>F		0.0001	

Table 16. Performance of Soybean Cultivars in South Alabama - 2018			
	Brewton Agricultural Research Unit - Brewton, AL		
	Mid to Late - Maturity Group IV		
	Cultivars		Yield (bu/Acre)
	Local Seed LS 4966X		62
	GoSoy Ireane		55
	Local Seed AV 47W2X		51
	AGS GS 46X17		50
	Terral REV 4927X		49
	Local Seed LS 4565XS		49
	Local Seed LS 4988X		48
	Terral REV 4857X		48
	Local Seed LS 4968XS		47
	S14-15146R		47
	GoSoy 49G16		47
	Local Seed AV 49W3X		47
	AGS GS 48X18		45
	Local Seed LS 4889XS		45
	S14-9051R		45
	Local Seed LS 4677X		44
	Local Seed LS 4689X		44
	Local Seed LS 4583X		44
	S14-15138R		42
	Local Seed LS 4388XS		39
	Trial mean		47
	LSD (0.1)		6
	CV (%)		15
	Pr>F		0.1870

Table 17. Performance of Soybean Cultivars in South Alabama - 2018

Brewton Agricultural Research Unit - Brewton, AL			
Mid to Late - Marurity Group V			
Cultivars		Yield	
		(bu/Acre)	
Credenz CZ 5859LL		72	
MO5201D Conv		61	
Credenz CZ 5225LL		61	
GoSoy 51C17		60	
Credenz CZ 5147LL		60	
Credenz CZ 5445LL		59	
Terral REV 56A58		59	
Terral REV 55A67		58	
Local Seed LS 5087X		58	
AGS GS51X18S		56	
GoSoy 54G16		56	
GoSoy 56C16		55	
S15-10434C		55	
Credenz CZ 5947LL		53	
Terral REV 52A98		53	
S11-20242C		52	
GoSoy Leland		52	
Credenz CZ 5328LL		51	
Credenz CZ 5150LL		49	
S13-1955C		49	
GoSoy 50G17		48	
S14-9017R		48	
Credenz CZ 5515LL		47	
Trial mean		55	
LSD (0.1)		3	
CV (%)		7	
Pr>F		0.0001	

Table 18. Performance of Soybean Cultivars in South Alabama - 2018			
	Brewton Agricultural Research Unit - Brewton, AL		
	Maturity Groups VI & VII		
	Cultivars		Yield
	Group VI		(bu/Acre)
	Credenz CZ 6109 LL		64
	Credenz CZ 6316 LL		63
	Asgrow AG 64X8		61
	Credenz CZ 6515 LL		61
	Credenz CZ 6069 LL		59
	GoSoy EXP GT 6.0		57
	Group VII		
	Asgrow AG 79X9		62
	Credenz CZ 7007LL		51
	Credenz CZ 7008LL		50
	Trial mean		56
	LSD (0.1)		6
	CV (%)		12
	Pr>F		0.1927

Table 19. Performance of Soybean Cultivars in South Alabama - 2018

Gulf Coast REC - Fairhope, AL			
Mid to Late - Maturity Groups IV & V			
	Cultivars		Yield
	Group IV		(bu/Acre)
	GoSoy Ireane		67
	Local Seed LS 4966X		65
	Local Seed LS 4583X		63
	Local Seed AV 49W3X		62
	Local Seed LS 4988X		62
	AGS GS 48X18		61
	Local Seed AV 47W2X		61
	Local Seed LS 4689X		61
	Local Seed LS 4968XS		61
	AGS GS 46X17		60
	Local Seed LS 4677X		60
	S14-15138R		58
	Local Seed LS 4565XS		58
	GoSoy 49G16		58
	Local Seed LS 4889XS		57
	S14-9051R		55
	Local Seed LS 4388XS		55
	S14-15146R		53
	Group V		
	Credenz CZ 5859LL		68
	Credenz CZ 5147LL		67
	Local Seed LS 5087X		66
	AGS GS51X18S		65
	MO5201D Conv		65
	S15-10434C		63
	Credenz CZ 5150LL		63
	GoSoy Leland		62
	Credenz CZ 5328LL		61
	GoSoy 50G17		61
	Credenz CZ 5445LL		61
	GoSoy 51C17		61
	S11-20242C		60
	GoSoy 54G16		60
	Credenz CZ 5225LL		60
	GoSoy 56C16		60
	S14-9017R		59
	Credenz CZ 5947LL		58
	S13-1955C		55
	Credenz CZ 5515LL		50
	Trial mean		61
	LSD (0.1)		4
	CV (%)		8
	Pr>F		0.0002

Table 20. Performance of Soybean Cultivars in South Alabama - 2018			
	Gulf Coast REC - Fairhope, AL		
	Mid to late - Maturity Groups VI & VII		
	Cultivars		Yield
	Group VI		(bu/Acre)
	Asgrow AG 64X8		69
	Credenz CZ 6109 LL		69
	Credenz CZ 6316 LL		66
	Credenz CZ 6515 LL		64
	GoSoy EXP GT 6.0		60
	Credenz CZ 6069 LL		47
	Group VII		
	Dyna-Gro S77RY85		76
	Dyna-Gro S75XT26		67
	Asgrow AG 79X9		67
	Dyna-Gro S74XT59		66
	Credenz CZ 7008LL		64
	Credenz CZ 7007LL		63
	Trial mean		65
	LSD (0.1)		6
	CV (%)		12
	Pr>F		0.0110

Table 21. Cultural Practices for Soybean Variety Tests in 2018

	Type of test	Date planted	Row width - inches -	Herbicide used
Belle Mina	Early Planted Group IV	May 1	30	Section, Classic
	Early Group IV	May 10	30	Section, Classic
	Late Group IV	May 11	30	Section, Classic
	Group V-VI	May 22	30	Section, Classic
Crossville	Early Planted Group IV	May 10	30	First Rate
	Early Group IV	May 15	30	First Rate
	Late Group IV	May 15	30	First Rate
	Group V-VI	May 23	30	First Rate
Tallassee	Early Planted Group IV	May 1	30	Section, Storm
Shorter	Mid-Late IV	May 9	36	Intensity
	Group V-VI	May 23	36	Intensity
Marion Junction	Group IV-V (Sumter)	June 8	36	Surveil
	Group VI-VII (Sumter)	June 8	36	Surveil
	Group IV-V (Vaiden)	June 8	36	Surveil
	Group VI-VII (Vaiden)	June 8	36	Surveil
Brewton	Group IV-V	May 23	36	Reflex
	Group VI-VII	May 23	36	Reflex
Fairhope	Group IV-V	June 18	38	First Rate, Reflex
	Group VI-VII	June 18	38	First Rate, Reflex

Table 22. Rainfall at Test Locations During Growing Season, 2018

Month	Days	Belle Mina	Crossville	Shorter	Tallassee	Marion Junction	Brewton	Fairhope
		----- inches -----						
May	1-5	0.00	0.00	0.00	0.00	0.01	0.00	0.00
	6-10	0.31	0.15	0.00	0.00	0.11	0.00	0.02
	11-15	0.00	0.00	0.00	0.00	0.00	0.00	0.41
	16-20	0.32	0.38	0.02	0.02	1.18	0.58	2.56
	21-25	0.65	0.41	2.24	1.26	0.64	2.57	1.28
	26-31	2.51	1.43	2.42	2.79	4.63	2.87	2.17
June	1-5	0.17	0.51	0.14	0.52	0.19	1.51	1.47
	6-10	0.00	0.00	0.11	0.07	0.22	0.17	1.84
	11-15	0.19	1.52	0.85	0.05	0.68	5.15	1.66
	16-20	0.00	0.00	1.29	1.06	0.59	1.81	0.05
	21-25	3.60	2.53	1.29	0.92	0.10	0.21	0.17
	26-31	1.13	1.46	1.33	0.98	0.57	0.76	0.03
July	1-5	0.02	0.14	0.95	0.38	0.51	1.22	1.86
	6-10	1.14	2.90	0.55	0.00	1.07	1.56	1.31
	11-15	0.00	0.02	0.66	0.81	0.56	0.27	0.67
	16-20	1.10	0.02	0.03	0.08	1.48	3.00	2.45
	21-25	0.03	1.24	0.08	0.02	0.33	0.00	0.00
	26-31	0.18	0.00	0.86	3.33	0.04	0.17	0.44
August	1-5	1.23	2.74	0.65	0.84	1.00	1.82	0.51
	6-10	1.21	0.68	1.74	0.33	0.23	1.28	1.86
	11-15	0.12	0.00	0.57	0.02	0.43	2.50	0.70
	16-20	2.36	0.62	1.48	1.00	2.02	1.92	4.35
	21-25	0.05	0.05	0.12	0.00	0.70	0.89	2.20
	26-31	0.00	0.01	1.28	0.79	0.00	1.48	0.56
September	1-5	0.00	0.00	0.46	0.01	1.69	2.26	7.03
	6-10	0.97	0.66	0.21	0.18	0.75	1.29	1.59
	11-15	0.38	0.38	0.63	0.30	0.02	1.12	0.43
	16-20	0.00	0.00	0.00	0.00	0.00	1.50	0.00
	21-25	0.46	2.83	1.02	0.25	1.45	0.42	1.80
	26-31	1.70	2.35	3.19	0.85	2.55	1.34	1.88
October	1-5	0.08	0.00	0.10	0.10	1.31	0.90	0.19
	6-10	0.00	0.06	2.02	3.02	0.00	0.06	0.08
	11-15	0.18	0.23	0.88	0.00	0.24	0.90	0.01
	16-20	1.18	1.41	0.34	0.26	0.12	0.00	0.37
	21-25	0.07	0.04	0.27	0.25	0.00	0.04	0.42
	26-31	1.03	1.13	0.22	0.24	0.44	0.59	1.55

Table 23. Entries and Sources for 2018

Source	Entry
AgriGold Hybrids St. Francisville, Illinois	AgriGold brand varieties
BASF Spring Hope, North Carolina	Credenz CZ brand varieties
Crop Production Services Madison, Alabama	Dyna-Gro brand varieties
Local Seed Company Memphis, Tennessee	Local Seed brand varieties
Mission Seed Solutions Cleveland, Mississippi	Mission Seed brand varieties
Monsanto St. Louis, Missouri	Asgrow AG brand varieties
Stratton Seed Stuttgart, Arkansas	GoSoy brand varieties, AGS brand varieties
Syngenta Minnetonka, Minnesota	NK Seeds brand varieties
Terral Seed, Inc. Lake Providence, Louisiana	Terral REV brand varieties
UniSouth Genetics, Inc. Dickson, Tennessee	USG brand varieties
University of Missouri Portageville, Missouri	S13-1955C*, S14-9017R*, S14-9051R*, S14-15146C*, S14-15138R*, S11-20242C*, S15-10434C*, MO5201D CONV*,
* Experimental lines	

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