

# **Performance of Soybean Cultivars In Alabama, 2019**



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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 (Table 19). 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 2019, soybean trials were treated with foliar fungicides.

**Tables**

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

**2019 Soybean Cultivar Yield Performance by Region, Maturity Group, and Location**

<b>Region</b>	<b>Table No.</b>	<b>Maturity Group</b>	<b>Location</b>
<b>Northern Region</b>	<b>1</b>	<b>Early Planted IV</b>	<b>Tennessee Valley REC - Belle Mina</b>
	<b>2</b>	<b>Late IV</b>	<b>Tennessee Valley REC - Belle Mina</b>
	<b>3</b>	<b>V &amp; VI</b>	<b>Tennessee Valley REC - Belle Mina</b>
	<b>4</b>	<b>Early Planted IV</b>	<b>Sand Mountain REC - Crossville</b>
	<b>5</b>	<b>Late IV</b>	<b>Sand Mountain REC - Crossville</b>
	<b>6</b>	<b>V &amp; VI</b>	<b>Sand Mountain REC - Crossville</b>
<b>Central Region</b>	<b>7</b>	<b>IV - Sumter Soil</b>	<b>Black Belt REC - Marion Junction</b>
	<b>8</b>	<b>V &amp; VI - Sumter Soil</b>	<b>Black Belt REC - Marion Junction</b>
	<b>9</b>	<b>IV - Vaiden Soil</b>	<b>Black Belt REC - Marion Junction</b>
	<b>10</b>	<b>V &amp; VI - Vaiden Soil</b>	<b>Black Belt REC - Marion Junction</b>
	<b>11</b>	<b>Early Planted IV</b>	<b>EV Smith Plant Breeding Unit - Tallassee</b>
	<b>12</b>	<b>Mid to Late IV</b>	<b>EV Smith Field Crops Unit - Shorter</b>
	<b>13</b>	<b>V &amp; VI</b>	<b>EV Smith Field Crops Unit - Shorter</b>
<b>Southern Region</b>	<b>14</b>	<b>Mid to Late IV</b>	<b>Brewton ARU - Brewton</b>
	<b>15</b>	<b>Mid to Late V</b>	<b>Brewton ARU - Brewton</b>
	<b>16</b>	<b>V &amp; VI</b>	<b>Brewton ARU - Brewton</b>
	<b>17</b>	<b>Mid to Late IV &amp; V</b>	<b>Gulf Coast REC - Fairhope</b>
	<b>18</b>	<b>Mid to Late VI &amp; VII</b>	<b>Gulf Coast REC - Fairhope</b>
	<b>19</b>	<b>Cultural practices for soybean cultivar tests in 2019</b>	
	<b>20</b>	<b>Rainfall at trial locations during the 2019 growing season</b>	
	<b>21</b>	<b>Soybean entries and sources for 2019</b>	

<b>Table 1. Performance of Soybean Cultivars in North Alabama - 2019</b>			
	<b>Tennessee Valley Research &amp; Extension Center - Belle Mina, AL</b>		
	<b>Early-Planted Maturity Group IV</b>		
	<b>Cultivar</b>		<b>Yield</b>
			<b>(bu/Acre)</b>
	Local Seed LS 4889XS		54
	USG 7470XT		52
	Local Seed LSX 4901X		51
	Local Seed LS 4798X		51
	USG 7489XTS		50
	AgriGold G 4190RX		48
	Local Seed LSX 4601XS		47
	NK S 49-F5X		47
	S14-15146R		47
	Credenz CZ 4869X		46
	USG 7496XTS		46
	Dyna-Gro S46XT80		46
	USG 7480ET		45
	USG 7460ET		45
	Terral REV 4679X		45
	Terral REV 4927X		45
	Dyna-Gro S48XT56		45
	Terral REV 4940X		44
	AgriGold G 4605RX		43
	GoSoy 491E19S		43
	NK S 44-C7X		43
	AgriGold G 4579RX		42
	NK S 47-Y9X		42
	AgriGold G 4255RX		42
	Syngenta NK S39-G2X		41
	Asgrow AG 44X0		41
	Credenz CZ 4979X		41
	S14-15138R		41
	Asgrow AG 43X0		40
	Asgrow AG 46X0		38
	AgriGold G 4815RX		37
	Asgrow AG 49X0		37
	GoSoy Leland		33
	<b>Trial mean</b>		<b>44</b>
	<b>LSD (0.1)</b>		<b>5</b>
	<b>CV (%)</b>		<b>13</b>
	<b>Pr&gt;F</b>		<b>0.0186</b>

**Table 2. Performance of Soybean Cultivars in North Alabama - 2019**

<b>Tennessee Valley Research &amp; Extension Center - Belle Mina, AL</b>			
<b>Late-Planted Maturity Group IV</b>			
<b>Cultivar</b>		<b>Yield</b>	
		<b>(bu/Acre)</b>	
S14-15146R		40	
USG 7489XT		40	
Local Seed LSX 4901X		39	
Terral REV 4927X		38	
Terral REV 4679X		38	
USG 7470XT		38	
NK S 47-Y9X		37	
NK S 44-C7X		37	
NK S 49-F5X		36	
Local Seed LS 4889XS		36	
USG 7480ET		36	
Dyna-Gro S46XT80		35	
AgriGold G 4190RX		35	
USG 7460ET		35	
Local Seed LSX 4601XS		35	
Dyna-Gro S49XT39		35	
Credenz CZ 4979X		34	
AgriGold G 4579RX		34	
AgriGold G 4255RX		34	
S14-15138R		34	
AgriGold G 4605RX		34	
GoSoy Leland		33	
USG 7496XTS		33	
GoSoy 491E19S		33	
Local Seed LS 4798X		32	
Syngenta NK S39-G2X		32	
Terral REV 4940X		32	
AgriGold G 4815RX		31	
Credenz CZ 4869X		30	
Credenz CZ 4539GTLL		27	
<b>Trial mean</b>		<b>35</b>	
<b>LSD (0.1)</b>		<b>3</b>	
<b>CV (%)</b>		<b>12</b>	
<b>Pr&gt;F</b>		<b>0.0885</b>	

<b>Table 3. Performance of Soybean Cultivars in North Alabama - 2019</b>			
<b>Tennessee Valley Research &amp; Extension Center - Belle Mina, AL</b>			
<b>Maturity Groups V &amp; VI</b>			
	<b>Cultivar</b>		<b>Yield</b>
	<b>Maturity Group V</b>		<b>(bu/Acre)</b>
	S14-9017R		42
	Syngenta NK S 51-R3XS		40
	Dyna-Gro S52XT08		39
	Syngenta NK S 53-F7X		39
	AgriGold G5000RX		38
	Local Seed LS 5386X		38
	Asgrow AG 53X0		37
	GoSoy 512E18		37
	Dyna-Gro S54XT17		37
	Local Seed LS 5087X		36
	S13-1955C		35
	Local Seed LS 5588X		35
	S11-20242C		35
	Credenz CZ 5859LL		33
	USG 7568XT		31
	S15-10434C		30
	<b>Maturity Group VI</b>		
	Credenz CZ 6109 LL		31
	Credenz CZ 6260LL		31
	GoSoy 60G19		30
	Local Seed LSX6501XS		19
	Local Seed LSX6701XS		18
	<b>Trial mean</b>		<b>34</b>
	<b>LSD (0.1)</b>		<b>4</b>
	<b>CV (%)</b>		<b>13</b>
	<b>Pr&gt;F</b>		<b>0.0001</b>

**Table 4. Performance of Soybean Cultivars in Northeast Alabama - 2019**

<b>Sand Mountain Research &amp; Extension Center - Crossville, AL</b>			
<b>Early-Planted Maturity Group IV</b>			
<b>Cultivar</b>		<b>Yield</b>	
		<b>(bu/Acre)</b>	
Local Seed LS 4889XS		65	
Asgrow AG 46X0		64	
USG 7460ET		64	
USG 7496XTS		61	
GoSoy Leland		60	
Credenz CZ 4979X		59	
Dyna-Gro S48XT56		57	
GoSoy 491E19S		56	
Local Seed LS 4798X		56	
AgriGold G 4579RX		55	
Asgrow AG 49X0		55	
AgriGold G 4815RX		54	
Local Seed LSX 4901X		54	
AgriGold G 4190RX		54	
Terral REV 4927X		53	
USG 7480ET		53	
Terral REV 4940X		52	
NK S 47-Y9X		51	
Terral REV 4679X		51	
AgriGold G 4255RX		50	
Dyna-Gro S46XT80		50	
S14-15138R		49	
USG 7470XT		49	
Credenz CZ 4869X		48	
S14-15146R		48	
USG 7489XTS		47	
Local Seed LSX 4601XS		47	
Asgrow AG 43X0		46	
AgriGold G 4605RX		45	
NK S 44-C7X		45	
Asgrow AG 44X0		44	
Syngenta NK S39-G2X		43	
NK S 49-F5X		42	
<b>Trial mean</b>		<b>52</b>	
<b>LSD (0.1)</b>		<b>6</b>	
<b>CV (%)</b>		<b>15</b>	
<b>Pr&gt;F</b>		<b>0.0005</b>	

**Table 5. Performance of Soybean Cultivars in Northeast Alabama - 2019**

<b>Sand Mountain Research &amp; Extension Center - Crossville, AL</b>			
<b>Late-Planted Maturity Group IV</b>			
<b>Cultivar</b>		<b>Yield</b>	
		<b>(bu/Acre)</b>	
USG 7460ET		76	
Credenz CZ 4979X		76	
GoSoy 491E19S		76	
Credenz CZ 4869X		72	
Terral REV 4927X		72	
AgriGold G 4815RX		71	
NK S 47-Y9X		71	
Terral REV 4940X		71	
Terral REV 4679X		70	
AgriGold G 4255RX		70	
Local Seed LS 4889XS		69	
NK S 44-C7X		69	
Dyna-Gro S49XT39		69	
Local Seed LSX 4901X		69	
USG 7480ET		68	
USG 7470XT		68	
AgriGold G 4579RX		68	
Credenz CZ 4539GTLL		68	
NK S 49-F5X		66	
USG 7496XTS		66	
GoSoy Leland		65	
AgriGold G 4605RX		64	
USG 7489XTS		64	
Local Seed LS 4798X		64	
Local Seed LSX 4601XS		62	
AgriGold G 4190RX		62	
Syngenta NK S39-G2X		60	
Dyna-Gro S46XT80		60	
S14-15138R		59	
S14-15146R		57	
<b>Trial mean</b>		<b>67</b>	
<b>LSD (0.1)</b>		<b>5</b>	
<b>CV (%)</b>		<b>11</b>	
<b>Pr&gt;F</b>		<b>0.0397</b>	



**Table 6. Performance of Soybean Cultivars in Northeast Alabama - 2019**

<b>Sand Mountain Research &amp; Extension Center - Crossville, AL</b>			
<b>Maturity Groups V &amp; VI</b>			
<b>Cultivar</b>		<b>Yield</b>	
<b>Maturity Group V</b>		<b>(bu/Acre)</b>	
Dyna-Gro S54XT17		65	
S13-1955C		65	
Credenz CZ 5859LL		64	
Local Seed LS 5087X		63	
Local Seed LS 5386X		62	
Syngenta NK S 51-R3XS		62	
GoSoy 512E18		61	
S15-10434C		61	
Asgrow AG 53X0		60	
AgriGold G5000RX		60	
Local Seed LS 5588X		60	
Syngenta NK S 53-F7X		60	
USG 7568XT		59	
S11-20242C		58	
S14-9017R		57	
Dyna-Gro S52XT08		56	
<b>Maturity Group VI</b>			
Credenz CZ 6109 LL		60	
GoSoy 60G19		59	
Credenz CZ 6260LL		57	
Local Seed LSX6701XS		45	
Local Seed LSX6501XS		45	
<b>Trial mean</b>		<b>59</b>	
<b>LSD (0.1)</b>		<b>5</b>	
<b>CV (%)</b>		<b>13</b>	
<b>Pr&gt;F</b>		<b>0.0226</b>	

<b>Table 7. Performance of Soybean Cultivars in West Central Alabama - 2019</b>			
<b>Black Belt Research &amp; Extension Center - Marion Junction, AL</b>			
<b>Maturity Group IV - Sumter Soil*</b>			
	<b>Cultivar</b>	<b>Iron Chlorosis</b>	<b>Yield</b>
		<b>Rating**</b>	<b>(bu/Acre)</b>
	GoSoy 491E19S	4.4	15
	GoSoy Leland	3.1	14
	Credenz CZ 4979X	5.1	13
	Dyna-Gro S49XT39	3.8	12
	Local Seed LS 4798X	4.1	12
	Local Seed LSX 4601XS	5.4	12
	Local Seed LSX 4901X	5.9	11
	NK S 47-Y9X	2.1	11
	Local Seed LS 4889XS	3.7	9
	S14-15138R	4.2	9
	S14-15146R	2.0	9
	Credenz CZ 4539GTLL	3.3	9
	Credenz CZ 4869X	1.4	9
	NK S 49-F5X	2.9	7
	USG 7496XTS	3.1	6
	<b>Trial mean</b>		<b>11</b>
	<b>LSD (0.1)</b>		<b>2</b>
	<b>CV (%)</b>		<b>23</b>
	<b>Pr&gt;F</b>		<b>0.0001</b>

\* Yields severely affected by mid-late season drought

\*\* Iron chlorosis was rated on July 24, 2019 on a scale of 1 = no chlorosis to 10 = plants losing leaves due to necrotic spots in leaves.

<b>Table 8. Performance of Soybean Cultivars in West Central Alabama - 2019</b>				
<b>Black Belt Research &amp; Extension Center - Marion Junction, AL</b>				
<b>Maturity Groups V &amp; VI - Sumter Soil*</b>				
<b>Cultivar</b>	<b>Reps</b>	<b>Iron Chlorosis</b>	<b>Yield</b>	
<b>Maturity Group V</b>	<b>Harvested</b>	<b>Rating**</b>	<b>(bu/Acre)</b>	
Local Seed LS 5087X	3 reps	1.9	13	
Dyna-Gro S52XT08	2 reps	2.1	12	
USG 7568XT	2 reps	2.2	12	
S15-10434C	3 reps	3.1	11	
Dyna-Gro S54XT17	1 rep	2.9	11	
Dyna-Gro S56XT99	3 reps	2.5	11	
Terral REV 5659X	1 rep	3.7	11	
Local Seed LS 5386X	2 reps	2.6	10	
Syngenta NK S 53-F7X	3 reps	1.8	10	
Local Seed LS 5588X	3 reps	2.4	10	
S13-1955C	1 rep	5.5	7	
Credenz CZ 5859LL	1 rep	2.9	7	
S14-9017R	0 reps	6.8	0	
S11-20242C	0 reps	6.9	0	
Syngenta NK S 51-R3XS	0 reps	6.7	0	
Asgrow AG 53X0	0 reps	6.0	0	
GoSoy 512E18	0 reps	6.9	0	
<b>Maturity Group VI</b>				
Asgrow AG 69X0	1 rep	3.3	9	
Local Seed LSX6501XS	1 rep	2.8	9	
Credenz CZ 6260LL	3 reps	2.2	9	
GoSoy 60G19	0 reps	4.7	0	
Local Seed LSX6701XS	0 reps	3.3	0	
Credenz CZ 6109 LL	0 reps	2.1	0	
<b>Trial mean</b>			<b>5</b>	
<b>LSD (0.1)</b>			<b>3</b>	
<b>CV (%)</b>			<b>83</b>	
<b>Pr&gt;F</b>			<b>0.0001</b>	

\* Yields were severely affected by mid-late season drought.

\*\* Iron chlorosis was rated on July 24, 2019 on a scale of 1 = no chlorosis to 10 = plants losing leaves due to necrotic spots in leaves.

\*\*\* Only plots with adequate growth for combining were harvested.

<b>Table 9. Performance of Soybean Cultivars in West Central Alabama - 2019</b>			
	<b>Black Belt Research &amp; Extension Center - Marion Junction, AL</b>		
	<b>Maturity Group IV - Vaiden Soil</b>		
	<b>Cultivar</b>		<b>Yield</b>
			<b>(bu/Acre)</b>
	Local Seed LS 4889XS		51
	Local Seed LS 4798X		44
	Local Seed LSX 4601XS		44
	GoSoy 491E19S		40
	Local Seed LSX 4901X		39
	Dyna-Gro S49XT39		37
	Credenz CZ 4979X		37
	USG 7496XTS		34
	NK S 49-F5X		34
	GoSoy Leland		33
	NK S 47-Y9X		32
	Credenz CZ 4869X		31
	S14-15138R		31
	S14-15146R		24
	Credenz CZ 4539GTLL		22
	<b>Trial mean</b>		<b>35</b>
	<b>LSD (0.1)</b>		<b>4</b>
	<b>CV (%)</b>		<b>17</b>
	<b>Pr&gt;F</b>		<b>0.0001</b>

<b>Table 10. Performance of Soybean Cultivars in West Central Alabama - 2019</b>			
<b>Black Belt Research &amp; Extension Center - Marion Junction, AL</b>			
<b>Maturity Groups V &amp; VI - Vaiden Soil</b>			
	<b>Cultivar</b>		<b>Yield</b>
	<b>Maturity Group V</b>		<b>(bu/Acre)</b>
	Credenz CZ 5859LL		43
	Local Seed LS 5386X		41
	S13-1955C		40
	S15-10434C		40
	Dyna-Gro S54XT17		40
	Syngenta NK S 53-F7X		40
	S14-9017R		39
	Dyna-Gro S56XT99		39
	USG 7568XT		39
	Local Seed LS 5087X		37
	Asgrow AG 53X0		37
	Syngenta NK S 51-R3XS		36
	Local Seed LS 5588X		36
	Terral REV 5659X		32
	GoSoy 512E18		29
	Dyna-Gro S52XT08		29
	S11-20242C		24
	<b>Maturity Group VI</b>		
	Credenz CZ 6260LL		47
	Credenz CZ 6109 LL		42
	GoSoy 60G19		41
	Local Seed LSX6701XS		37
	Local Seed LSX6501XS		34
	Asgrow AG 69X0		29
	<b>Trial mean</b>		<b>37</b>
	<b>LSD (0.1)</b>		<b>6</b>
	<b>CV (%)</b>		<b>21</b>
	<b>Pr&gt;F</b>		<b>0.0256</b>

**Table 11. Performance of Soybean Cultivars in Central Alabama - 2019**

<b>E.V. Smith Plant Breeding Unit - Tallassee, AL</b>			
<b>Early Planted Maturity Group IV</b>			
<b>Cultivar</b>		<b>Yield</b>	
		<b>(bu/Acre)</b>	
Credenz CZ 4979X		42	
S14-15138R		41	
GoSoy 491E19S		40	
S14-15146R		38	
Local Seed LS 4889XS		36	
GoSoy Leland		36	
AgriGold G 4255RX		34	
Dyna-Gro S46XT80		34	
USG 7496XTS		33	
NK S 44-C7X		33	
USG 7480ET		32	
Local Seed LS 4798X		32	
USG 7460ET		31	
Local Seed LSX 4601XS		30	
USG 7489XTS		30	
USG 7470XT		29	
NK S 47-Y9X		28	
AgriGold G 4605RX		27	
AgriGold G 4579RX		27	
Dyna-Gro S48XT56		27	
Syngenta NK S39-G2X		26	
Local Seed LSX 4901X		25	
Credenz CZ 4869X		24	
AgriGold G 4190RX		22	
AgriGold G 4815RX		20	
NK S 49-F5X		19	
<b>Trial mean</b>		<b>31</b>	
<b>LSD (0.1)</b>		<b>NS</b>	
<b>CV (%)</b>		<b>40</b>	
<b>Pr&gt;F</b>		<b>0.4887</b>	

<b>Table 12. Performance of Soybean Cultivars in Central Alabama - 2019</b>			
	<b>E.V. Smith Field Crops Unit - Shorter, AL</b>		
	<b>Mid-to-Late Maturity Group IV*</b>		
	<b>Cultivar</b>		<b>Yield</b>
			<b>(bu/Acre)</b>
	Credenz CZ 4979X		14
	Dyna-Gro S49XT39		13
	Local Seed LS 4798X		13
	USG 7496XTS		12
	Local Seed LS 4889XS		12
	Local Seed LSX 4901X		12
	USG 7480ET		11
	NK S 49-F5X		11
	USG 7489XTS		11
	Local Seed LSX 4601XS		11
	GoSoy 491E19S		10
	GoSoy Leland		10
	NK S 47-Y9X		10
	Credenz CZ 4539GTLL		10
	Credenz CZ 4869X		10
	S14-15146R		9
	S14-15138R		9
	NK S 44-C7X		8
	Syngenta NK S39-G2X		7
	USG 7470XT		6
	USG 7460ET		6
	<b>Trial mean</b>		<b>10</b>
	<b>LSD (0.1)</b>		<b>1</b>
	<b>CV (%)</b>		<b>20</b>
	<b>Pr&gt;F</b>		<b>0.0001</b>
	* Yields were severely affected by mid-late season drought.		

**Table 13. Performance of Soybean Cultivars in Central Alabama - 2019**

<b>E.V. Smith Field Crops Unit - Shorter, AL</b>			
<b>Maturity Groups V &amp; VI*</b>			
<b>Cultivar</b>		<b>Yield</b>	
<b>Maturity Group V</b>		<b>(bu/Acre)</b>	
Dyna-Gro S56XT99		9	
Local Seed LS 5588X		8	
GoSoy 512E18		8	
S13-1955C		8	
Dyna-Gro S54XT17		7	
Credenz CZ 5859LL		7	
Syngenta NK S 53-F7X		7	
S14-9017R		6	
Dyna-Gro S52XT08		6	
S15-10434C		6	
Local Seed LS 5386X		6	
S11-20242C		6	
Local Seed LS 5087X		5	
USG 7568XT		5	
Syngenta NK S 51-R3XS		5	
Asgrow AG 53X0		5	
<b>Maturity Group VI</b>			
Local Seed LSX6501XS		2	
Local Seed LSX6701XS		2	
Credenz CZ 6109 LL		2	
Asgrow AG 69X0		2	
Credenz CZ 6260LL		1	
GoSoy 60G19		1	
<b>Trial mean</b>		<b>5</b>	
<b>LSD (0.1)</b>		<b>1</b>	
<b>CV (%)</b>		<b>38</b>	
<b>Pr&gt;F</b>		<b>0.0001</b>	

\* Yields were severely affected by mid-late season drought.



<b>Table 14. Performance of Soybean Cultivars in South Alabama - 2019</b>			
	<b>Brewton Agricultural Research Unit - Brewton, AL</b>		
	<b>Mid-to-Late Maturity Group IV</b>		
	<b>Cultivar</b>		<b>Yield</b>
			<b>(bu/Acre)</b>
	NK S 44-C7X		59
	Credenz CZ 4979X		59
	GoSoy Leland		58
	USG 7496XTS		55
	NK S 47-Y9X		55
	Local Seed LS 4889XS		55
	GoSoy 491E19S		54
	Local Seed LSX 4901X		53
	NK S 49-F5X		52
	Local Seed LSX 4601XS		51
	Local Seed LS 4798X		50
	S14-15138R		50
	Credenz CZ 4869X		47
	S14-15146R		47
	<b>Trial Mean</b>		<b>53</b>
	<b>LSD (0.1)</b>		<b>5</b>
	<b>CV (%)</b>		<b>10</b>
	<b>Pr&gt;F</b>		<b>0.1688</b>

<b>Table 15. Performance of Soybean Cultivars in South Alabama - 2019</b>			
	<b>Brewton Agricultural Research Unit - Brewton, AL</b>		
	<b>Maturity Group V</b>		
	<b>Cultivar</b>		<b>Yield (bu/Acre)</b>
	USG 7568XT		63
	Local Seed LS 5087X		63
	Local Seed LS 5588X		63
	Local Seed LS 5386X		61
	S15-10434C		58
	GoSoy 512E18		58
	Syngenta NK S 53-F7X		57
	Syngenta NK S 51-R3XS		57
	Credenz CZ 5859LL		57
	S11-20242C		56
	Terral REV 5659X		53
	S14-9017R		53
	S13-1955C		50
	<b>Trial mean</b>		<b>58</b>
	<b>LSD (0.1)</b>		<b>4</b>
	<b>CV (%)</b>		<b>9</b>
	<b>Pr&gt;F</b>		<b>0.0649</b>

<b>Table 16. Performance of Soybean Cultivars in South Alabama - 2019</b>			
	<b>Brewton Agricultural Research Unit - Brewton, AL</b>		
	<b>Maturity Groups VI, VII, &amp; VIII</b>		
	<b>Cultivar</b>		<b>Yield</b>
	<b>Maturity Group VI</b>		<b>(bu/Acre)</b>
	GoSoy 60G19		58
	Credenz CZ 6109 LL		58
	UGA G13-2842R2		56
	Credenz CZ 6260LL		56
	Local Seed LSX6701XS		55
	Local Seed LSX6501XS		54
	Credenz CZ 6730LL		53
	Credenz CZ 6515 LL		52
	Asgrow AG 69X0		51
	Credenz CZ 6520LL		51
	<b>Maturity Group VII</b>		
	UGA G12-2062R2		52
	NK S72-G6X		50
	Credenz CZ 7007LL		47
	Credenz CZ 7570LL		44
	<b>Maturity Group VIII</b>		
	UGA G13-2114R2		52
	<b>Trial mean</b>		<b>53</b>
	<b>LSD (0.1)</b>		<b>3</b>
	<b>CV (%)</b>		<b>6</b>
	<b>Pr&gt;F</b>		<b>0.0010</b>

**Table 17. Performance of Soybean Cultivars in South Alabama - 2019**

<b>Gulf Coast Research &amp; Extension Center - Fairhope, AL</b>			
<b>Maturity Groups IV &amp; V</b>			
<b>Cultivar</b>		<b>Yield</b>	
<b>Maturity Group IV</b>		<b>(bu/Acre)</b>	
NK S 47-Y9X		46	
NK S 44-C7X		46	
Local Seed LS 4798X		45	
Credeuz CZ 4979X		45	
GoSoy 491E19S		45	
Local Seed LSX 4901X		44	
Local Seed LSX 4601XS		44	
NK S 49-F5X		44	
Local Seed LS 4889XS		43	
Credeuz CZ 4869X		43	
S14-15138R		42	
USG 7496XTS		41	
S14-15146R		41	
<b>Maturity Group V</b>			
GoSoy 512E18		45	
Credeuz CZ 5859LL		45	
GoSoy Leland		45	
Local Seed LS 5386X		45	
Syngenta NK S 53-F7X		45	
S13-1955C		44	
Syngenta NK S 51-R3XS		44	
Local Seed LS 5087X		43	
Local Seed LS 5588X		43	
USG 7568XT		41	
S15-10434C		41	
Terral REV 5659X		39	
S14-9017R		39	
S11-20242C		37	
<b>Trial mean</b>		<b>43</b>	
<b>LSD (0.1)</b>		<b>2</b>	
<b>CV (%)</b>		<b>7</b>	
<b>Pr&gt;F</b>		<b>0.0019</b>	

<b>Table 18. Performance of Soybean Cultivars in South Alabama - 2019</b>			
<b>Gulf Coast Research &amp; Extension Center - Fairhope, AL</b>			
<b>Maturity Groups VI, VII, &amp; VIII</b>			
	<b>Cultivar</b>		<b>Yield</b>
	<b>Maturity Group VI</b>		<b>(bu/Acre)</b>
	GoSoy 60G19		48
	Credenz CZ 6109 LL		48
	Credenz CZ 6260LL		44
	Credenz CZ 6520LL		43
	UGA G13-2842R2		40
	Credenz CZ 6515 LL		39
	NK Brand S69-P9X		39
	Credenz CZ 6730LL		38
	Local Seed LSX6501XS		38
	Asgrow AG 69X0		37
	Local Seed LSX6701XS		36
	<b>Maturity Group VII</b>		
	NK S72-G6X		47
	Dyna-Gro S74XT59		41
	UGA G12-2062R2		40
	Credenz CZ 7570LL		39
	Credenz CZ 7007LL		38
	Dyna-Gro S75XT26		36
	Dyna-Gro S72XT80		34
	<b>Maturity Group VIII</b>		
	UGA G13-2114R2		44
	<b>Trial mean</b>		<b>41</b>
	<b>LSD (0.1)</b>		<b>2</b>
	<b>CV (%)</b>		<b>6</b>
	<b>Pr&gt;F</b>		<b>0.0001</b>

<b>Table 19. Cultural Practices for Soybean Variety Tests in 2019</b>				
	<b>Type of</b>	<b>Date</b>	<b>Row</b>	<b>Herbicide</b>
<b>Location</b>	<b>test</b>	<b>planted</b>	<b>width</b>	<b>used</b>
			<i>- inches -</i>	
<b>Belle Mina</b>	<b>Early Plant Group IV</b>	<b>April 23</b>	<b>30</b>	<b>Section</b>
	<b>Late Group IV</b>	<b>May 14</b>	<b>30</b>	<b>Section, Storm</b>
	<b>Group V-VI</b>	<b>May 14</b>	<b>30</b>	<b>Section, Storm</b>
<b>Crossville</b>	<b>Early Plant Group IV</b>	<b>May 21</b>	<b>30</b>	<b>Basagran</b>
	<b>Late Group IV</b>	<b>May 22</b>	<b>30</b>	<b>Basagran</b>
	<b>Group V-VI</b>	<b>May 24</b>	<b>30</b>	<b>Basagran</b>
<b>Tallassee</b>	<b>Group IV</b>	<b>May 9</b>	<b>30</b>	<b>Classic, Storm</b>
<b>Shorter</b>	<b>Mid-Late IV</b>	<b>May 23</b>	<b>36</b>	<b>Basagran, Intensity</b>
	<b>Group V-VI</b>	<b>June 5</b>	<b>36</b>	<b>Basagran, Intensity</b>
<b>Marion Junction</b>	<b>Group IV (Sumter)</b>	<b>May 22</b>	<b>36</b>	<b>Section, Ultra Blazer</b>
	<b>Group V-VI (Sumter)</b>	<b>May 22</b>	<b>36</b>	<b>Section, Ultra Blazer</b>
	<b>Group IV (Vaiden)</b>	<b>May 22</b>	<b>36</b>	<b>Section, Ultra Blazer</b>
	<b>Group V-VI (Vaiden)</b>	<b>May 22</b>	<b>36</b>	<b>Section, Ultra Blazer</b>
<b>Brewton</b>	<b>Mid-Late IV</b>	<b>May 30</b>	<b>36</b>	<b>Intensity, Section</b>
	<b>Group V</b>	<b>May 30</b>	<b>36</b>	<b>Intensity, Section</b>
	<b>Group VI-VII</b>	<b>May 30</b>	<b>36</b>	<b>Intensity, Section</b>
<b>Fairhope</b>	<b>Group IV-V</b>	<b>June 24</b>	<b>38</b>	<b>First Rate, Reflex</b>
	<b>Group VI-VII</b>	<b>June 24</b>	<b>38</b>	<b>First Rate, Reflex</b>

**Table 20. Rainfall at Test Locations During Growing Season, 2019**

Month	Days	Belle	Crossville	Shorter	Tallassee	Marion	Brewton	Fairhope
		Mina				Junction		
----- inches -----								
<b>May</b>	1-5	1.31	2.27	1.01	1.93	0.57	0.00	0.20
	6-10	0.78	0.43	1.09	0.75	1.52	2.16	0.33
	11-15	1.64	1.89	2.75	1.42	1.32	2.80	2.70
	16-20	0.37	0.25	0.83	0.24	0.18	0.00	0.02
	21-25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	26-31	0.15	0.00	0.00	0.00	0.00	0.00	0.00
<b>June</b>	1-5	0.00	0.00	0.03	0.05	0.00	0.00	0.05
	6-10	2.27	2.34	2.94	3.30	2.85	1.23	8.83
	11-15	0.00	0.65	0.00	0.05	0.56	0.00	0.11
	16-20	1.07	1.00	1.05	0.77	0.46	0.68	4.00
	21-25	0.25	0.18	0.23	0.18	0.00	0.11	0.00
	26-31	0.84	0.09	0.03	0.86	1.15	0.00	0.34
<b>July</b>	1-5	0.12	0.00	0.04	0.07	0.04	2.48	0.00
	6-10	0.25	0.10	0.05	0.85	0.17	1.07	0.36
	11-15	2.57	0.81	0.05	0.82	0.27	1.29	7.07
	16-20	1.62	0.84	1.33	1.12	0.00	0.00	0.19
	21-25	0.15	0.17	0.02	0.01	0.37	4.11	0.79
	26-31	0.00	0.02	0.08	0.49	0.00	0.00	0.00
<b>August</b>	1-5	0.15	3.58	0.17	0.24	1.53	0.08	0.24
	6-10	0.74	0.09	0.77	0.74	0.56	1.79	0.31
	11-15	0.44	0.55	0.00	0.00	0.40	0.66	0.20
	16-20	0.20	0.00	0.00	0.00	0.13	1.12	0.31
	21-25	0.01	3.53	0.40	0.50	1.43	0.13	0.30
	26-31	1.05	1.77	0.28	0.27	1.35	1.90	2.40
<b>September</b>	1-5	0.15	0.00	0.01	0.01	0.00	0.82	0.02
	6-10	0.00	0.00	0.10	0.28	0.00	0.00	0.00
	11-15	0.61	0.13	0.00	0.00	0.00	0.08	0.00
	16-20	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	21-25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	26-31	0.01	0.01	0.00	0.00	0.00	0.00	0.00

**Table 21. Entries and Sources for 2019**

<b>Source</b>	<b>Entry</b>
AgriGold Hybrids St. Francisville, Illinois	AgriGold brand varieties
BASF Spring Hope, North Carolina	Credenz CZ brand varieties
Dyna-Gro (Nutrien AG Solutions) Kinston, Alabama	Dyna-Gro brand varieties
Local Seed Company Memphis, Tennessee	Local Seed brand varieties
Monsanto St. Louis, Missouri	Asgrow AG brand varieties
Stratton Seed Stuttgart, Arkansas	GoSoy brand varieties
Syngenta Greensboro, North Carolina	NK Seeds brand varieties
Terral Seed, Inc. Lake Providence, Louisiana	Terral REV brand varieties
UniSouth Genetics, Inc. Dickson, Tennessee	USG brand varieties
University of Georgia Athens, Georgia	UGA G13-2842R2*, UGA G12-2062R2*, UGA G13-2114R2*
University of Missouri Portageville, Missouri	S13-1955C*, S14-9017R*, S14-15146C*, S14-15138R*, S11-20242C*, S15-10434C*
* Experimental lines	



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### **Alabama Experiment Station Outlying Units with Annual Row Crop Variety Trials**

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