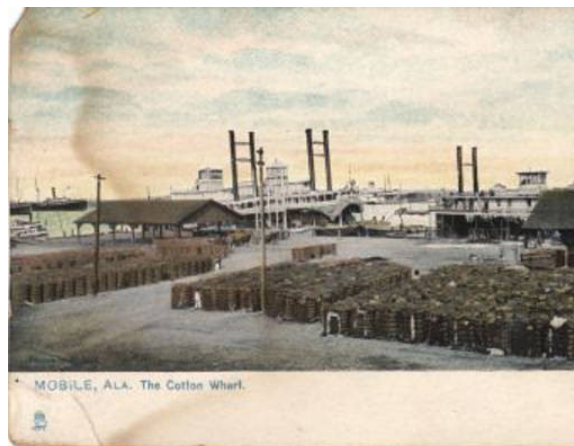


Performance of Cotton Varieties in Alabama, 2019

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Performance of Cotton Varieties 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

Varieties in early and full season trials were arranged in a randomized complete block experimental design with 4 replications. Plot size was 2 rows, 36- to 38-inches wide, and 20 to 25 feet long. Trials were managed according to the location and local practices (Table 1). All tests were fertilized according to soil test recommendations. Varieties were harvested utilizing a mechanical picker from the center 2 rows of each plot. Seed cotton weights were recorded, samples ginned for turnout, and fiber quality was determined by the USDA Cotton Classing Office in Macon, Georgia.

Seed cotton samples were ginned on a 10-saw laboratory gin without lint cleaners, therefore lint turnout is higher than can be expected when processed by a commercial gin with cleaners. However, differences between varieties are relative.

Table 1. Soil type, test, planting date and harvest date. 2019				
Location	Soil Type	Test	Planting Date	Harvest Date
Belle Mina	Decatur silt loam	Early Season Flex	May 7	September 23
		Full Season Flex	May 7	September 24
		Irrigated Early Season Flex	May 7	October 15
		Irrigated Full Season Flex	May 7	October 16
Prattville	Lucedale fine sandy loam	Early Season Flex	May 14	November 19
		Full Season Flex	May 1	November 18
		Irrigated Early Season Flex	May 14	November 5
		Irrigated Full Season Flex	May 1	November 4
Shorter	Compass loamy sand	Early Season Flex	June 3	October 22
		Full Season Flex	May 8	October 2
	Marvyn sandy loam	Irrigated Early Season Flex	June 3	October 23
		Irrigated Full Season Flex	May 9	October 3
Headland	Dothan sandy loam	Early Season Flex	May 20	November 20
		Full Season Flex	May 6	November 14
		Irrigated Early Season Flex	May 20	November 7
		Irrigated Full Season Flex	May 7	November 12
Fairhope	Malbis fine sandy loam	Early Season Flex	May 16	November 4
		Full Season Flex	May 1	November 6

Tables

**Abbreviations: REC, Research and Extension Center; ARU, Agricultural Research Unit*

2019 Cotton Variety Yield Performance

Table No.	Description
1	Soil type, planting date and harvest date for cotton variety trials, 2018
Non-Irrigated Trials - North Alabama	
2	Early season cotton varieties, Tennessee Valley REC - Belle Mina, AL
3	Full season cotton varieties, Tennessee Valley REC - Belle Mina, AL
Non-Irrigated Trials - Central Alabama	
4	Early season cotton varieties, Prattville ARU - Prattville, AL
5	Full season cotton varieties, Prattville ARU - Prattville, AL
6	Early season cotton varieties, E.V. Smith REC Field Crops Unit - Shorter, AL
7	Full season cotton varieties, E.V. Smith REC Field Crops Unit - Shorter, AL
Non-Irrigated Trials - South Alabama	
8	Early season cotton varieties, Gulf Coast REC - Fairhope, AL
9	Full season cotton varieties, Gulf Coast REC - Fairhope, AL
10	Early season cotton varieties, Wiregrass REC - Headland, AL
11	Full season cotton varieties, Wiregrass REC - Headland, AL
Irrigated Trials - North Alabama	
12	Early season cotton varieties, Tennessee Valley REC - Belle Mina, AL
13	Full season cotton varieties, Tennessee Valley REC - Belle Mina, AL
Irrigated Trials - Central Alabama	
14	Early season cotton varieties, Prattville ARU - Prattville, AL
15	Full season cotton varieties, Prattville ARU - Prattville, AL
16	Early season cotton varieties, E.V. Smith REC Field Crops Unit - Shorter, AL
17	Full season cotton varieties, E.V. Smith REC Field Crops Unit - Shorter, AL
Irrigated Trials - South Alabama	
18	Early season cotton varieties, Wiregrass REC - Headland, AL
19	Full season cotton varieties, Wiregrass REC - Headland, AL
Precipitation and Seed Sources	
20	Irrigation amounts
21	Sources of seed for 2018 cotton variety trials in Alabama

Table 2. Performance of Non-Irrigated, Early Season Cotton Varieties in North Alabama, 2019

Tennessee Valley Research & Extension Center - Belle Mina, AL							
Early Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
Croplan 3527 B2XF	0.46	1728	4.3	1.14	29.1	82.5	
PhytoGen PX3D43W3FE	0.45	1656	4.1	1.14	34.8	83.7	
Dyna-Gro 3317 B3XF	0.47	1636	4.7	1.13	30.9	83.5	
Deltapine DP 1646 B2XF	0.45	1633	4.1	1.23	29.5	83.4	
Deltapine DP 1725 B2XF	0.46	1629	4.4	1.17	30.7	82.7	
PhytoGen PX3D32W3FE	0.42	1596	3.5	1.20	33.4	83.2	
PhytoGen PHY 340 W3FE	0.45	1596	4.4	1.14	32.3	83.0	
Dyna-Gro 3520 B3XF	0.41	1584	3.2	1.23	34.1	84.8	
Stoneville ST 4550GLTP	0.46	1568	4.1	1.19	32.6	83.4	
Dyna-Gro 3570 B3XF	0.44	1568	4.8	1.14	30.5	84.2	
Croplan CP 9608 BX3F	0.47	1548	4.2	1.13	27.9	81.6	
PhytoGen PHY 400 W3FE	0.43	1528	3.8	1.14	31.0	82.1	
Stoneville ST 5471GLTP	0.43	1520	3.9	1.19	32.5	84.5	
Deltapine DP 1916 B3XF	0.45	1513	3.7	1.18	35.1	83.2	
Dyna-Gro 3385 B2XF	0.43	1487	3.6	1.17	29.6	83.9	
PhytoGen PX3C06W3FE	0.43	1455	3.9	1.15	31.1	82.0	
Deltapine DP 1518 B2XF	0.41	1443	3.6	1.16	29.8	82.8	
NexGen NG 3994 B3XF	0.45	1433	4.3	1.11	29.8	80.7	
Americot NG 3729 B2XF	0.42	1427	4.3	1.17	30.2	84.2	
Phytogen PHY 480 W3FE	0.43	1413	3.2	1.16	30.6	84.8	
Stoneville ST BX2076GLTP	0.43	1404	3.7	1.13	30.1	80.8	
Deltapine 18R628NRB3XF	0.46	1397	4.5	1.12	33.4	82.3	
NexGen AMX1828B3XF	0.44	1396	4.4	1.17	31.2	83.6	
Croplan CP 9178 BX3F	0.43	1393	3.9	1.16	34.6	83.3	
Americot NG 5007 B2XF	0.44	1390	4.2	1.14	28.0	81.6	
Deltapine DP 1614 B2XF	0.46	1356	4.6	1.18	31.3	83.3	
NexGen NG 3930 B3XF	0.44	1343	3.7	1.17	30.5	83.5	
NexGen AMX1818B3XF	0.42	1335	3.9	1.20	32.3	84.3	
Phytogen PHY 350 W3FE	0.44	1335	4.3	1.17	32.6	84.0	
NexGen NG 4936 B3XF	0.41	1301	4.2	1.20	29.4	83.9	
NexGen AMX1816B3XF	0.37	1293	3.2	1.21	30.8	83.6	
Deltapine DP 1823 NRB2XF	0.42	1185	4.0	1.19	31.6	84.3	
Trial mean		1471					
LSD (0.1)		85					
CV (%)		8					
Pr>F		0.0001					

Table 3. Performance of Non-Irrigated, Full Season Cotton Varieties in North Alabama, 2019

Tennessee Valley Research & Extension Center - Belle Mina, AL							
Full Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
PhytoGen PX5C05W3FE	0.49	1462	4.7	1.07	31.0	83.5	
PhytoGen PHY 500 W3FE	0.50	1442	4.3	1.13	31.8	83.5	
Deltapine DP 1835 B3XF	0.49	1416	4.4	1.13	30.2	83.0	
Deltapine DP 1646 B2XF	0.46	1408	4.3	1.25	30.2	84.5	
Stoneville ST 6182GLT	0.48	1388	4.6	1.12	30.8	82.9	
PhytoGen PX5E28W3FE	0.45	1384	3.8	1.17	32.1	83.7	
Stoneville ST 5471GLTP	0.44	1374	4.0	1.10	31.8	81.5	
Phytogen PHY 350 W3FE	0.46	1359	4.5	1.12	30.7	83.6	
PhytoGen PX3D43W3FE	0.46	1347	4.3	1.10	32.5	83.1	
PhytoGen PX5C45W3FE	0.49	1328	4.4	1.08	32.1	84.0	
Americot NG 5007 B2XF	0.44	1328	4.4	1.11	26.8	82.3	
Stoneville ST 5707B2XF	0.40	1322	4.2	1.19	33.9	82.3	
PhytoGen PX3D32W3FE	0.45	1309	4.1	1.15	31.8	83.6	
PhytoGen PHY 340 W3FE	0.46	1305	4.4	1.14	31.6	84.0	
PhytoGen PX5E34W3FE	0.43	1301	3.9	1.19	30.8	83.8	
Stoneville BX2076GLTP	0.44	1287	4.3	1.15	32.9	83.6	
Dyna-Gro 3615 B3XF	0.44	1285	3.9	1.12	30.9	82.5	
Stoneville ST 4550GLTP	0.47	1282	4.0	1.18	33.8	83.4	
Deltapine DP 2055 B3XF	0.48	1272	4.6	1.18	31.5	81.7	
Dyna-Gro 3605 B2XF	0.47	1265	4.3	1.17	29.8	81.6	
Deltapine DP 1851 B3XF	0.46	1259	4.1	1.16	34.4	84.0	
PhytoGen PHY 400 W3FE	0.45	1255	4.0	1.15	31.1	82.6	
Americot NG 5711 B3XF	0.43	1255	4.2	1.16	31.9	83.8	
PhytoGen PHY 580 W3FE	0.49	1251	4.2	1.15	32.4	84.4	
PhytoGen PX3C06W3FE	0.45	1231	4.2	1.13	28.3	81.6	
Croplan CP 9830 B3XF	0.48	1206	4.4	1.18	30.2	82.7	
Phytogen PHY 480 W3FE	0.46	1205	4.2	1.11	32.1	84.5	
Stoneville ST 5600B2XF	0.44	1181	4.7	1.14	31.9	83.1	
Deltapine DP 1840 B3XF	0.42	1174	4.4	1.18	33.2	82.4	
Deltapine DP 1555 B2RF	0.48	1156	4.6	1.12	32.4	83.0	
Dyna-Gro 3753 B3XF	0.47	1106	4.6	1.18	32.2	84.7	
Stoneville ST 5818GLT	0.42	1037	3.8	1.17	30.7	82.0	
NexGen NG 4936 B3XF	0.43	1022	4.1	1.18	30.6	84.3	
Trial mean		1279					
LSD (0.1)		130					
CV (%)		14					
Pr>F		0.1616					

Table 4. Performance of Non-Irrigated, Early Season Cotton Varieties in Central Alabama, 2019

Prattville Agricultural Research Unit - Prattville, AL							
Early Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
Stoneville ST BX2076GLTP	0.46	1201	4.9	1.06	29.9	81.8	
PhytoGen PX3D43W3FE	0.46	1163	5.3	1.00	31.2	82.6	
PhytoGen PX3D32W3FE	0.44	1126	5.0	1.11	31.7	83.3	
Phytogen PHY 480 W3FE	0.46	1107	5.2	1.06	31.1	84.0	
Deltapine 18R628NRB3XF	0.46	1043	5.0	1.07	34.6	81.1	
Dyna-Gro 3520 B3XF	0.44	1022	4.5	1.11	30.5	83.8	
PhytoGen PHY 400 W3FE	0.46	1022	5.3	1.07	31.6	81.3	
Deltapine DP 1916 B3XF	0.47	1004	5.0	1.06	32.4	80.3	
Deltapine DP 1646 B2XF	0.46	1004	5.3	1.14	30.2	81.9	
Croplan CP 9608 BX3F	0.47	1003	5.4	1.09	29.5	81.4	
Stoneville ST 5471GLTP	0.43	998	5.3	1.06	31.5	81.4	
Phytogen PHY 350 W3FE	0.43	955	5.4	1.08	30.4	82.9	
PhytoGen PX3C06W3FE	0.45	942	5.1	1.07	30.8	81.3	
Croplan 3527 B2XF	0.45	937	5.6	1.09	29.4	82.0	
Dyna-Gro 3385 B2XF	0.46	935	5.2	1.03	29.1	82.3	
Dyna-Gro 3570 B3XF	0.42	929	5.4	1.07	31.6	82.2	
Americot NG 3729 B2XF	0.43	913	5.3	1.07	29.6	82.6	
Croplan CP 9178 BX3F	0.44	904	5.0	1.11	33.2	82.1	
NexGen NG 3930 B3XF	0.43	900	4.8	1.08	30.4	81.7	
Deltapine DP 1725 B2XF	0.47	894	5.4	1.09	30.0	80.5	
Americot NG 5007 B2XF	0.44	893	4.8	1.12	29.5	82.2	
Stoneville ST 4550GLTP	0.47	863	5.5	1.04	31.0	81.5	
NexGen NG 4936 B3XF	0.42	860	4.9	1.13	31.0	83.5	
Deltapine DP 1518 B2XF	0.43	851	5.3	1.07	28.5	82.9	
NexGen NG 3994 B3XF	0.44	834	5.4	1.07	29.8	81.0	
NexGen AMX1828B3XF	0.43	804	5.4	1.10	32.0	83.0	
Deltapine DP 1614 B2XF	0.45	794	5.4	1.07	31.3	83.2	
PhytoGen PHY 340 W3FE	0.46	785	5.2	1.06	30.4	82.9	
NexGen AMX1816B3XF	0.40	775	4.5	1.07	28.5	81.5	
NexGen AMX1818B3XF	0.42	749	5.3	1.05	31.9	82.0	
Deltapine DP 1823 NRB2XF	0.46	742	4.9	1.05	32.2	82.9	
Dyna-Gro 3317 B3XF	0.44	733	5.1	1.07	31.1	82.7	
Trial mean		928					
LSD (0.1)		78					
CV (%)		12					
Pr>F		0.0001					

Table 5. Performance of Non-Irrigated, Full Season Cotton Varieties in Central Alabama, 2019

Prattville Agricultural Research Unit - Prattville, AL							
Full Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
PhytoGen PX3D43W3FE	0.47	1413	5.1	1.06	30.6	83.1	
PhytoGen PHY 400 W3FE	0.46	1352	4.9	1.05	30.7	80.4	
PhytoGen PHY 580 W3FE	0.48	1339	4.8	1.09	31.1	82.1	
PhytoGen PX5C45W3FE	0.49	1299	4.9	1.02	29.3	81.4	
Stoneville ST 4550GLTP	0.45	1261	5.0	1.09	31.4	81.6	
PhytoGen PHY 500 W3FE	0.45	1259	5.4	1.05	28.9	82.1	
Deltapine DP 2055 B3XF	0.47	1245	4.8	1.14	32.4	82.0	
Stoneville BX2076GLTP	0.47	1240	5.3	1.05	28.2	81.8	
PhytoGen PX5E28W3FE	0.43	1236	4.5	1.08	31.8	82.8	
Dyna-Gro 3753 B3XF	0.46	1208	5.0	1.12	32.9	83.1	
Stoneville ST 5471GLTP	0.43	1190	4.5	1.06	29.7	80.0	
NexGen NG 4936 B3XF	0.44	1189	4.8	1.12	30.3	82.9	
PhytoGen PX3C06W3FE	0.46	1182	5.1	1.09	27.7	80.9	
Dyna-Gro 3605 B2XF	0.47	1175	5.0	1.14	31.1	81.6	
Dyna-Gro 3615 B3XF	0.46	1172	5.1	1.01	29.1	81.5	
Phytogen PHY 480 W3FE	0.46	1170	5.2	1.06	29.8	83.0	
Deltapine DP 1646 B2XF	0.46	1170	5.5	1.12	28.4	81.6	
PhytoGen PX3D32W3FE	0.46	1167	4.7	1.07	31.0	81.2	
Deltapine DP 1555 B2RF	0.46	1152	5.2	1.08	32.4	82.4	
Stoneville ST 5707B2XF	0.42	1151	5.2	1.09	31.3	83.0	
PhytoGen PX5C05W3FE	0.46	1142	5.3	1.02	31.1	82.7	
Stoneville ST 6182GLT	0.49	1131	5.3	1.04	27.9	81.5	
Deltapine DP 1851 B3XF	0.49	1123	4.9	1.10	33.5	83.3	
Stoneville ST 5600B2XF	0.45	1106	5.3	1.06	32.6	82.7	
Phytogen PHY 350 W3FE	0.44	1105	4.9	1.04	29.7	83.4	
Deltapine DP 1840 B3XF	0.43	1097	4.8	1.10	31.4	83.7	
Deltapine DP 1835 B3XF	0.47	1088	4.5	1.12	30.8	81.8	
PhytoGen PX5E34W3FE	0.44	1078	4.7	1.09	29.9	82.4	
Americot NG 5007 B2XF	0.44	1068	4.9	1.10	27.3	81.9	
Stoneville ST 5818GLT	0.44	1058	4.9	1.08	29.4	81.6	
Croplan CP 9830 B3XF	0.48	1044	5.0	1.15	28.8	81.7	
Americot NG 5711 B3XF	0.44	1040	4.8	1.07	31.5	82.3	
PhytoGen PHY 340 W3FE	0.47	1031	5.2	1.05	29.3	82.1	
Trial mean		1172					
LSD (0.1)		86					
CV (%)		11					
Pr>F		0.0007					

Table 6. Performance of Non-Irrigated Early Season Cotton Varieties in Central Alabama

Field Crops Unit - EV Smith Research & Extension Center - Shorter, AL						
Early Season - Flex						
Cultivar	Lint	Yield	Mic	Len	Str	Unif
	(%/100)	(Lint/A)	(units)	(in.)	(g/tex)	(%)
Americot NG 3729 B2XF	0.44	964	5.2	1.07	29.7	82.9
Deltapine DP 1614 B2XF	0.48	963	5.6	1.02	29.7	81.5
Stoneville ST 4550GLTP	0.49	942	5.4	1.04	33.2	82.3
PhytoGen PX3C06W3FE	0.47	935	5.7	1.03	26.8	82.2
Dyna-Gro 3317 B3XF	0.46	904	5.4	1.01	29.2	82.0
Croplan 3527 B2XF	0.46	896	5.2	1.05	29.1	82.2
PhytoGen PX3D43W3FE	0.47	891	5.2	0.99	30.6	82.6
PhytoGen PHY 400 W3FE	0.46	888	5.0	1.04	31.6	82.2
Deltapine DP 1646 B2XF	0.49	884	5.1	1.10	29.9	82.4
NexGen NG 4936 B3XF	0.44	867	5.2	1.08	29.6	83.1
NexGen NG 3930 B3XF	0.45	862	5.2	1.04	27.6	83.4
Americot NG 5007 B2XF	0.46	853	5.1	1.02	27.2	81.9
Croplan CP 9178 BX3F	0.47	852	4.9	1.04	31.0	82.8
Croplan CP 9608 BX3F	0.50	839	5.1	1.05	27.5	81.5
Deltapine DP 1725 B2XF	0.48	836	5.0	1.05	30.1	82.0
Phytogen PHY 480 W3FE	0.46	826	5.2	1.01	28.8	82.8
Deltapine DP 1518 B2XF	0.45	826	5.0	1.01	26.3	81.9
PhytoGen PHY 340 W3FE	0.49	821	5.3	1.04	30.4	82.6
Stoneville BX2076GLTP	0.45	820	4.9	1.05	32.2	81.7
Dyna-Gro 3385 B2XF	0.45	805	5.2	1.03	29.8	81.4
Deltapine 18R628NRB3XF	0.47	805	4.9	1.04	33.6	83.1
Dyna-Gro 3570 B3XF	0.45	797	5.3	1.04	30.1	82.3
Dyna-Gro 3520 B3XF	0.43	795	4.4	1.12	34.5	84.5
NexGen AMX1828B3XF	0.45	772	5.2	1.06	30.8	81.0
Phytogen PHY 350 W3FE	0.45	761	5.2	1.07	30.3	82.3
Deltapine DP 1823 NRB2XF	0.47	751	5.1	1.01	32.3	82.0
NexGen AMX1816B3XF	0.41	750	4.4	1.05	29.1	82.1
Stoneville ST 5471GLTP	0.44	738	4.7	1.02	30.1	81.8
Deltapine DP 1916 B3XF	0.47	734	4.8	1.01	29.7	82.6
NexGen NG 3994 B3XF	0.46	731	5.0	1.05	29.0	81.7
NexGen AMX1818B3XF	0.43	700	5.3	1.04	31.6	80.9
PhytoGen PX3D32W3FE	0.45	584	4.8	1.08	32.8	83.9
Trial mean		825				
LSD (0.1)		93				
CV (%)		16				
Pr>F		0.0544				

Table 7. Performance of Non-Irrigated, Full Season Cotton Varieties in Central Alabama

Field Crops Unit - EV Smith Research & Extension Center - Shorter, AL							
Full Season - Flex							
Cultivar	Lint	Yield	Mic	Len	Str	Unif	
	(%/100)	(Lint/A)	(units)	(in.)	(g/tex)	(%)	
PhytoGen PHY 500 W3FE	0.50	1028	4.6	1.05	30.0	81.9	
PhytoGen PHY 340 W3FE	0.48	1019	4.4	1.05	26.2	82.3	
Dyna-Gro 3753 B3XF	0.50	1016	4.9	1.05	30.2	83.0	
Deltapine DP 1851 B3XF	0.45	1015	4.6	1.05	30.8	83.5	
Americot NG 5007 B2XF	0.45	1015	4.3	1.02	25.6	81.7	
NexGen NG 4936 B3XF	0.44	1001	4.8	1.08	30.1	83.0	
PhytoGen PX5C05W3FE	0.48	982	4.9	1.00	30.7	81.7	
PhytoGen PHY 580 W3FE	0.46	960	4.3	1.05	28.8	82.8	
Deltapine DP 1835 B3XF	0.48	953	4.5	1.06	30.1	81.9	
Phytogen PHY 480 W3FE	0.45	953	4.2	1.03	29.5	82.0	
Deltapine DP 1840 B3XF	0.43	941	4.2	1.08	28.5	82.1	
Stoneville ST 6182GLT	0.48	937	4.8	1.03	25.5	82.8	
Stoneville ST 5707B2XF	0.40	937	4.8	1.09	33.8	83.1	
PhytoGen PHY 400 W3FE	0.45	921	4.1	1.05	30.0	81.6	
PhytoGen PX5E28W3FE	0.44	904	4.3	1.06	29.2	82.3	
PhytoGen PX3C06W3FE	0.44	903	4.3	1.05	25.5	79.9	
Americot NG 5711 B3XF	0.44	897	4.4	1.06	28.2	82.1	
Stoneville ST 4550GLTP	0.47	882	4.2	1.04	31.3	81.9	
Dyna-Gro 3605 B2XF	0.45	880	4.7	1.09	28.0	81.6	
Phytogen PHY 350 W3FE	0.41	880	4.5	1.07	27.2	82.2	
Deltapine DP 1646 B2XF	0.47	878	4.4	1.07	25.9	81.2	
PhytoGen PX5E34W3FE	0.44	871	4.6	1.03	31.4	82.1	
PhytoGen PX3D32W3FE	0.44	864	3.9	1.09	29.8	82.0	
Stoneville ST 5600B2XF	0.44	843	4.7	1.07	31.2	83.3	
Deltapine DP 2055 B3XF	0.46	840	4.5	1.12	29.4	81.7	
PhytoGen PX3D43W3FE	0.41	833	4.8	1.01	28.5	81.7	
PhytoGen PX5C45W3FE	0.46	812	4.6	1.01	28.3	81.6	
Croplan CP 9830 B3XF	0.45	808	4.0	1.13	27.1	81.0	
Stoneville BX2076GLTP	0.43	806	4.3	1.05	29.3	81.5	
Deltapine DP 1555 B2RF	0.44	805	4.4	1.04	29.9	82.1	
Stoneville ST 5471GLTP	0.40	786	3.9	1.08	27.5	81.2	
Dyna-Gro 3615 B3XF	0.44	770	4.7	1.03	29.7	81.3	
Stoneville ST 5818GLT	0.40	707	4.1	1.09	27.4	81.8	
Trial mean		898					
LSD (0.1)		100					
CV (%)		16					
Pr>F		0.1234					

Table 8. Performance of Non-Irrigated, Early Season Cotton Varieties in South Alabama, 2019

Gulf Coast Research & Extension Center - Fairhope, AL							
Early Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
Deltapine DP 1646 B2XF	0.44	1721	5.0	1.19	29.6	83.5	
Croplan CP 9178 BX3F	0.45	1572	5.4	1.12	34.5	83.3	
Deltapine DP 1518 B2XF	0.45	1538	4.8	1.11	28.7	83.7	
Deltapine DP 1916 B3XF	0.43	1509	5.2	1.13	31.5	83.4	
Phytogen PHY 480 W3FE	0.43	1478	5.0	1.14	31.1	83.9	
NexGen AMX1828B3XF	0.40	1445	5.2	1.13	30.0	84.9	
Croplan CP 9608 BX3F	0.43	1426	5.2	1.12	28.6	83.0	
PhytoGen PHY 340 W3FE	0.44	1421	5.3	1.12	31.5	83.6	
Deltapine DP 1725 B2XF	0.45	1417	4.8	1.17	30.3	83.0	
PhytoGen PHY 400 W3FE	0.42	1408	4.9	1.15	31.6	83.4	
Phytogen PHY 350 W3FE	0.41	1392	5.1	1.10	31.3	81.8	
PhytoGen PX3C06W3FE	0.41	1385	4.9	1.16	30.8	82.7	
Stoneville ST 5471GLTP	0.39	1378	5.0	1.13	30.9	82.5	
PhytoGen PX3D32W3FE	0.44	1374	4.6	1.19	33.8	83.7	
Deltapine 18R628NRB3XF	0.43	1363	4.7	1.11	33.6	83.6	
Dyna-Gro 3520 B3XF	0.40	1342	4.7	1.20	31.9	83.6	
NexGen NG 3994 B3XF	0.44	1332	5.4	1.15	32.0	83.8	
Dyna-Gro 3385 B2XF	0.41	1326	5.3	1.10	28.3	83.8	
Americot NG 3729 B2XF	0.40	1316	5.1	1.16	30.1	82.4	
Stoneville ST 4550GLTP	0.43	1311	5.2	1.13	32.7	82.9	
Deltapine DP 1614 B2XF	0.43	1304	5.2	1.19	30.7	84.8	
Dyna-Gro 3570 B3XF	0.43	1302	5.4	1.12	31.2	83.6	
Croplan 3527 B2XF	0.43	1289	5.4	1.15	28.5	84.0	
Americot NG 5007 B2XF	0.42	1237	4.9	1.13	28.6	83.0	
NexGen NG 4936 B3XF	0.37	1206	4.6	1.18	31.5	83.8	
PhytoGen PX3D43W3FE	0.41	1205	5.1	1.09	32.3	83.8	
Stoneville BX2076GLTP	0.40	1174	5.5	1.15	34.2	83.1	
NexGen AMX1816B3XF	0.37	1143	4.3	1.16	29.7	83.8	
Dyna-Gro 3317 B3XF	0.40	1134	5.3	1.10	30.3	83.4	
NexGen NG 3930 B3XF	0.40	1132	5.2	1.13	30.6	83.7	
Deltapine DP 1823 NRB2XF	0.40	1113	4.7	1.12	30.3	83.1	
NexGen AMX1818B3XF	0.40	1109	4.9	1.17	32.0	84.2	
Trial mean		1338					
LSD (0.1)		128					
CV (%)		14					
Pr>F		0.0003					

Table 9. Performance of Non-Irrigated, Full Season Cotton Varieties in South Alabama, 2019

Gulf Coast Research & Extension Center - Fairhope, AL							
Full Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
Dyna-Gro 3605 B2XF	0.41	1585	4.6	1.23	30.6	82.4	
Dyna-Gro 3615 B3XF	0.43	1584	5.4	1.19	32.1	83.3	
PhytoGen PHY 400 W3FE	0.43	1545	4.8	1.13	31.5	82.4	
Deltapine DP 1646 B2XF	0.44	1486	5.1	1.22	28.5	83.5	
Deltapine DP 2055 B3XF	0.44	1477	5.3	1.19	29.5	83.3	
PhytoGen PX3C06W3FE	0.41	1476	5.1	1.18	29.9	84.0	
Croplan CP 9830 B3XF	0.44	1475	4.7	1.28	30.5	85.8	
Deltapine DP 1840 B3XF	0.40	1447	4.7	1.20	32.5	82.9	
Deltapine DP 1835 B3XF	0.45	1441	5.3	1.19	30.7	83.2	
PhytoGen PHY 580 W3FE	0.44	1429	5.3	1.14	30.7	83.8	
Stoneville ST 5471GLTP	0.39	1422	4.9	1.19	32.8	84.4	
PhytoGen PX5C05W3FE	0.43	1414	5.3	1.08	30.2	83.2	
Phytogen PHY 480 W3FE	0.41	1395	4.8	1.15	30.5	84.6	
Deltapine DP 1851 B3XF	0.42	1377	5.0	1.14	35.2	83.4	
Stoneville ST 5818GLT	0.38	1351	4.7	1.21	32.1	83.6	
PhytoGen PX5C45W3FE	0.43	1349	4.6	1.15	32.8	84.6	
PhytoGen PHY 500 W3FE	0.40	1334	4.5	1.12	34.6	84.0	
Deltapine DP 1555 B2RF	0.39	1329	5.3	1.17	31.0	83.7	
Stoneville ST 4550GLTP	0.45	1328	5.1	1.15	31.8	84.2	
Dyna-Gro 3753 B3XF	0.43	1279	5.1	1.16	31.6	83.9	
Phytogen PHY 350 W3FE	0.41	1267	5.3	1.17	32.4	85.2	
PhytoGen PX3D43W3FE	0.41	1265	5.4	1.15	33.2	85.5	
NexGen NG 4936 B3XF	0.42	1265	5.1	1.19	29.7	85.3	
PhytoGen PX5E34W3FE	0.41	1261	4.7	1.18	31.7	83.0	
Stoneville ST 5707B2XF	0.38	1260	5.3	1.15	32.5	83.4	
PhytoGen PX5D28W3FE	0.42	1253	4.1	1.16	31.2	83.8	
Americot NG 5711 B3XF	0.43	1225	5.0	1.17	33.2	82.9	
PhytoGen PHY 340 W3FE	0.44	1224	4.9	1.13	30.0	83.2	
Stoneville ST 5600B2XF	0.43	1211	5.5	1.20	33.1	84.6	
PhytoGen PX3D32W3FE	0.40	1197	4.4	1.21	35.5	83.6	
Stoneville BX2076GLTP	0.44	1196	5.6	1.11	32.6	83.5	
Stoneville ST 6182GLT	0.42	1188	5.2	1.15	28.5	83.8	
Americot NG 5007 B2XF	0.41	1156	4.8	1.13	27.8	83.5	
Trial mean		1348					
LSD (0.1)		103					
CV (%)		11					
Pr>F		0.0001					

Table 10. Performance of Non-Irrigated, Early Season Cotton Varieties in Southeast Alabama, 2019

Wiregrass Research & Extension Center - Headland, AL							
Early Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
Croplan CP 9178 BX3F	0.45	1460	4.9	1.11	31.4	82.5	
Croplan CP 9608 BX3F	0.44	1395	4.8	1.12	30.0	83.0	
PhytoGen PHY 400 W3FE	0.43	1391	4.6	1.10	33.6	81.7	
Deltapine DP 1725 B2XF	0.44	1382	4.9	1.16	34.2	84.3	
PhytoGen PX3D43W3FE	0.44	1339	4.9	1.12	35.4	84.6	
PhytoGen PX3D32W3FE	0.44	1306	4.9	1.15	32.5	83.8	
NexGen AMX1828B3XF	0.42	1304	4.7	1.17	35.3	84.1	
Dyna-Gro 3520 B3XF	0.41	1291	4.1	1.18	33.3	83.9	
Stoneville ST 4550GLTP	0.44	1290	4.6	1.14	33.8	82.7	
Americot NG 5007 B2XF	0.42	1286	4.4	1.11	28.8	83.8	
Croplan 3527 B2XF	0.42	1247	5.4	1.15	29.7	84.1	
Deltapine DP 1646 B2XF	0.42	1247	4.6	1.18	30.9	82.8	
PhytoGen PX3C06W3FE	0.43	1246	4.6	1.13	29.5	81.5	
Phytogen PHY 480 W3FE	0.42	1242	4.8	1.13	32.6	85.4	
Dyna-Gro 3385 B2XF	0.41	1232	5.2	1.09	30.0	84.1	
Stoneville ST 5471GLTP	0.37	1209	4.9	1.11	33.3	84.2	
Deltapine DP 1916 B3XF	0.45	1198	4.9	1.10	32.1	83.1	
PhytoGen PHY 340 W3FE	0.43	1198	5.3	1.10	30.8	82.4	
NexGen NG 4936 B3XF	0.40	1193	4.9	1.17	31.6	84.3	
Deltapine 18R628NRB3XF	0.43	1185	4.9	1.11	33.6	83.8	
Deltapine DP 1518 B2XF	0.41	1161	5.0	1.12	29.3	83.2	
Americot NG 3729 B2XF	0.41	1140	5.2	1.13	29.7	84.6	
Dyna-Gro 3570 B3XF	0.44	1138	4.9	1.11	31.0	83.1	
Deltapine DP 1614 B2XF	0.41	1099	5.0	1.16	30.7	82.9	
Deltapine DP 1823 NRB2XF	0.43	1097	4.5	1.14	33.0	84.7	
Dyna-Gro 3317 B3XF	0.42	1073	4.9	1.09	31.0	83.4	
NexGen AMX1816B3XF	0.39	1071	4.3	1.15	30.7	83.2	
NexGen NG 3930 B3XF	0.42	1063	4.9	1.13	31.0	84.5	
NexGen AMX1818B3XF	0.40	1057	5.0	1.10	30.2	84.3	
Phytogen PHY 350 W3FE	0.41	980	4.9	1.13	31.1	84.5	
Stoneville BX2076GLTP	0.40	936	4.5	1.12	34.0	81.9	
NexGen NG 3994 B3XF	0.44	888	4.9	1.12	30.8	82.0	
Trial mean		1198					
LSD (0.1)		124					
CV (%)		15					
Pr>F		0.0007					

Table 11. Performance of Non-Irrigated, Full Season Cotton Varieties in Southeast Alabama, 2019

Wiregrass Research & Extension Center - Headland, AL							
Full Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
PhytoGen PX5C45W3FE	0.47	1421	5.1	1.05	31.1	82.5	
Dyna-Gro 3615 B3XF	0.44	1412	5.1	1.12	30.2	82.3	
Dyna-Gro 3753 B3XF	0.46	1308	5.2	1.09	30.5	82.6	
Deltapine DP 1646 B2XF	0.43	1303	4.6	1.10	28.1	79.7	
PhytoGen PHY 580 W3FE	0.47	1292	4.9	1.03	30.5	81.6	
PhytoGen PX3D43W3FE	0.44	1282	4.7	1.06	30.7	82.8	
Deltapine DP 1851 B3XF	0.44	1275	5.1	1.11	32.0	83.4	
Stoneville ST 5707B2XF	0.41	1262	5.3	1.11	30.7	83.2	
Deltapine DP 2055 B3XF	0.45	1255	5.1	1.12	29.4	80.5	
PhytoGen PHY 400 W3FE	0.44	1254	4.4	1.10	30.1	81.3	
Phytogen PHY 480 W3FE	0.42	1254	4.8	1.10	31.2	83.4	
PhytoGen PX3C06W3FE	0.44	1249	4.6	1.04	26.6	79.0	
Stoneville ST 5818GLT	0.39	1242	4.3	1.06	28.9	80.5	
PhytoGen PX5C05W3FE	0.46	1241	5.0	1.06	30.4	83.1	
Stoneville ST 5600B2XF	0.42	1240	5.6	1.10	31.1	82.6	
Stoneville BX2076GLTP	0.44	1236	5.5	1.06	29.1	81.3	
Croplan CP 9830 B3XF	0.44	1217	4.6	1.17	31.0	82.2	
Phytogen PHY 350 W3FE	0.42	1215	4.8	1.07	30.3	82.3	
Deltapine DP 1840 B3XF	0.44	1209	4.7	1.07	27.8	80.6	
NexGen NG 4936 B3XF	0.41	1191	4.2	1.06	28.3	81.6	
PhytoGen PHY 340 W3FE	0.44	1183	4.8	1.10	29.1	82.6	
Stoneville ST 6182GLT	0.46	1182	5.0	1.08	28.5	82.0	
Stoneville ST 5471GLTP	0.41	1165	4.5	1.09	30.6	81.7	
Dyna-Gro 3605 B2XF	0.45	1152	4.1	1.18	30.8	82.1	
PhytoGen PX5E34W3FE	0.41	1148	4.2	1.11	32.2	82.3	
Stoneville ST 4550GLTP	0.44	1129	5.1	1.04	29.6	81.7	
Americot NG 5711 B3XF	0.42	1120	4.6	1.08	27.8	82.6	
Deltapine DP 1835 B3XF	0.42	1109	5.0	1.11	28.9	82.6	
PhytoGen PHY 500 W3FE	0.45	1103	4.5	1.11	32.9	82.6	
Americot NG 5007 B2XF	0.42	1102	4.5	1.03	26.1	79.4	
PhytoGen PX5E28W3FE	0.42	1101	4.5	1.07	28.4	82.7	
PhytoGen PX3D32W3FE	0.42	1097	4.5	1.13	31.4	83.0	
Trial mean		1217					
LSD (0.1)		93					
CV (%)		11					
Pr>F		0.0415					

Table 12. Performance of Irrigated, Early Season Cotton Varieties in North Alabama, 2019

Tennessee Valley Research & Extension Center - Belle Mina, AL							
Early Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
Deltapine DP 1646 B2XF	0.46	2262	4.4	1.24	29.6	82.7	
Stoneville ST 4550GLTP	0.46	2184	4.4	1.17	32.6	83.0	
Deltapine DP 1725 B2XF	0.47	2162	4.7	1.15	29.3	82.8	
NexGen NG 3994 B3XF	0.46	2151	4.5	1.11	30.1	82.0	
Croplan 3527 B2XF	0.44	2138	4.7	1.17	28.2	82.7	
PhytoGen PHY 340 W3FE	0.46	2111	4.1	1.15	30.9	83.5	
PhytoGen PX3B07W3FE	0.45	2101	3.9	1.16	30.4	84.5	
Croplan CP 9608 BX3F	0.46	2090	4.2	1.14	28.0	80.9	
PhytoGen PX3C06W3FE	0.44	2086	4.4	1.16	28.4	81.6	
Dyna-Gro 3317 B3XF	0.44	2071	4.7	1.13	28.9	83.3	
NexGen NG 4936 B3XF	0.42	2062	4.3	1.23	29.9	83.9	
Deltapine DP 1916 B3XF	0.46	2041	4.0	1.16	33.9	82.4	
PhytoGen PX3D43W3FE	0.45	2040	4.2	1.15	32.2	83.8	
Stoneville ST 5471GLTP	0.44	2038	4.5	1.15	33.1	84.6	
NexGen NG 3930 B3XF	0.43	2030	4.1	1.15	31.7	82.5	
Dyna-Gro 3520 B3XF	0.42	2030	3.5	1.23	30.6	83.9	
Dyna-Gro 3385 B2XF	0.43	2024	4.4	1.16	29.1	84.8	
Americot NG 3729 B2XF	0.44	2009	4.8	1.18	28.7	83.6	
Phytogen PHY 350 W3FE	0.42	2003	4.1	1.21	29.6	84.3	
PhytoGen PX3D32W3FE	0.41	1994	3.9	1.22	32.6	82.4	
Dyna-Gro 3570 B3XF	0.43	1988	4.9	1.13	29.7	83.8	
Croplan CP 9178 BX3F	0.44	1971	4.1	1.15	34.1	83.9	
Phytogen PHY 480 W3FE	0.45	1958	3.8	1.16	33.9	82.8	
Americot NG 5007 B2XF	0.44	1955	4.4	1.16	27.8	82.7	
Deltapine 18R628NRB3XF	0.45	1925	4.2	1.14	31.6	83.4	
NexGen AMX1818B3XF	0.42	1917	4.4	1.20	31.4	84.5	
Stoneville ST BX2076GLTP	0.44	1903	4.1	1.15	29.5	82.5	
Deltapine DP 1823 NRB2XF	0.43	1828	4.1	1.17	31.1	84.0	
Deltapine DP 1518 B2XF	0.44	1827	3.8	1.17	30.1	83.6	
NexGen AMX1816B3XF	0.38	1813	3.7	1.21	30.5	84.6	
Deltapine DP 1614 B2XF	0.44	1771	4.8	1.17	28.8	82.7	
NexGen AMX1828B3XF	0.43	1755	4.5	1.20	30.7	84.9	
Trial mean		2007					
LSD (0.1)		106					
CV (%)		8					
Pr>F		0.0003					

Table 13. Performance of Irrigated, Full Season Cotton Varieties in North Alabama, 2019

Tennessee Valley Research & Extension Center - Belle Mina, AL							
Full Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
Deltapine DP 2055 B3XF	0.47	2076	4.3	1.21	31.4	83.2	
Deltapine DP 1646 B2XF	0.44	2061	4.3	1.22	31.8	82.7	
PhytoGen PX3C06W3FE	0.45	2010	4.4	1.16	27.6	83.2	
Stoneville ST 4550GLTP	0.47	2008	4.2	1.11	31.7	82.4	
Deltapine DP 1835 B3XF	0.45	1988	4.2	1.15	31.2	82.3	
PhytoGen PX5C45W3FE	0.46	1969	4.4	1.14	32.0	84.3	
Dyna-Gro 3605 B2XF	0.45	1957	4.3	1.25	31.3	83.7	
Stoneville ST 6182GLT	0.46	1957	4.4	1.14	30.2	83.2	
Americot NG 5007 B2XF	0.44	1942	4.4	1.12	29.1	81.5	
NexGen NG 4936 B3XF	0.42	1932	4.2	1.20	31.5	85.0	
Deltapine DP 1851 B3XF	0.43	1912	4.4	1.18	32.9	82.7	
PhytoGen PX3D43W3FE	0.43	1905	4.5	1.12	33.1	82.3	
PhytoGen PX5C05W3FE	0.47	1891	4.4	1.09	31.0	83.2	
PhytoGen PX3D32W3FE	0.42	1856	4.0	1.18	32.9	82.7	
PhytoGen PHY 340 W3FE	0.44	1828	3.9	1.14	32.7	83.0	
PhytoGen PHY 400 W3FE	0.45	1827	3.9	1.17	33.9	82.9	
Croplan CP 9830 B3XF	0.46	1825	4.0	1.22	30.1	82.5	
Dyna-Gro 3753 B3XF	0.46	1819	4.6	1.16	31.6	84.4	
Stoneville BX2076GLTP	0.42	1801	4.8	1.18	32.8	84.1	
PhytoGen PHY 580 W3FE	0.44	1798	4.4	1.17	32.0	83.8	
PhytoGen PHY 500 W3FE	0.45	1788	3.6	1.12	33.2	82.8	
PhytoGen PX5E34W3FE	0.42	1767	3.6	1.17	31.3	83.2	
Phytogen PHY 350 W3FE	0.42	1759	4.2	1.17	31.2	84.1	
Deltapine DP 1840 B3XF	0.41	1750	4.2	1.19	32.4	83.5	
Stoneville ST 5471GLTP	0.42	1747	4.1	1.15	31.3	82.7	
PhytoGen PX5E28W3FE	0.41	1742	3.6	1.18	32.8	83.3	
Stoneville ST 5818GLT	0.42	1714	4.9	1.14	29.6	82.0	
Phytogen PHY 480 W3FE	0.43	1713	4.0	1.15	31.1	83.8	
Stoneville ST 5707B2XF	0.39	1677	4.5	1.17	35.9	84.1	
Americot NG 5711 B3XF	0.42	1649	4.3	1.22	31.5	84.4	
Deltapine DP 1555 B2RF	0.43	1645	4.2	1.18	33.5	83.4	
Dyna-Gro 3615 B3XF	0.43	1570	4.2	1.11	31.3	81.5	
Stoneville ST 5600B2XF	0.44	1569	4.8	1.13	31.7	83.6	
Trial mean		1832					
LSD (0.1)		107					
CV (%)		8					
Pr>F		0.0001					

Table 14. Performance of Irrigated, Early Season Cotton Varieties in Central Alabama, 2019

Prattville Agricultural Research Unit - Prattville, AL							
Early Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
PhytoGen PHY 400 W3FE	0.46	1762	4.5	1.11	31.2	84.0	
Phytogen PHY 480 W3FE	0.43	1592	4.8	1.12	30.2	84.8	
Stoneville ST 5471GLTP	0.41	1587	5.0	1.11	30.8	83.4	
Stoneville ST BX2076GLTP	0.45	1568	5.0	1.12	31.0	82.8	
Stoneville ST 4550GLTP	0.47	1542	5.3	1.11	32.0	83.9	
PhytoGen PX3C06W3FE	0.46	1526	4.6	1.05	26.6	81.3	
Croplan 3527 B2XF	0.46	1509	5.1	1.14	28.5	83.4	
NexGen NG 3994 B3XF	0.46	1485	4.8	1.14	30.1	82.3	
Deltapine DP 1725 B2XF	0.44	1474	5.2	1.09	29.5	81.7	
Americot NG 3729 B2XF	0.40	1470	4.8	1.12	30.2	83.5	
Deltapine DP 1646 B2XF	0.45	1453	4.8	1.19	29.6	83.9	
Dyna-Gro 3385 B2XF	0.44	1448	4.9	1.13	29.7	83.3	
Americot NG 5007 B2XF	0.43	1445	4.4	1.11	28.2	81.4	
Dyna-Gro 3570 B3XF	0.43	1440	5.1	1.08	30.1	83.8	
Deltapine DP 1916 B3XF	0.46	1439	5.1	1.11	30.6	83.3	
NexGen NG 4936 B3XF	0.41	1433	4.5	1.16	31.1	84.1	
PhytoGen PX3D32W3FE	0.42	1408	4.5	1.18	33.3	84.5	
Croplan CP 9178 BX3F	0.45	1359	5.2	1.14	33.5	84.5	
PhytoGen PX3D43W3FE	0.44	1358	4.9	1.12	32.8	84.6	
NexGen AMX1828B3XF	0.43	1348	4.9	1.13	31.6	83.2	
Croplan CP 9608 BX3F	0.47	1322	4.0	1.15	31.3	82.3	
Deltapine 18R628NRB3XF	0.45	1321	4.3	1.08	34.2	82.3	
PhytoGen PHY 340 W3FE	0.47	1306	4.6	1.09	30.2	83.1	
Dyna-Gro 3520 B3XF	0.41	1240	4.1	1.20	32.2	84.2	
Deltapine DP 1614 B2XF	0.43	1240	5.1	1.21	31.0	84.9	
Deltapine DP 1823 NRB2XF	0.44	1239	4.6	1.15	32.0	84.4	
Dyna-Gro 3317 B3XF	0.43	1236	4.9	1.11	30.3	83.6	
Deltapine DP 1518 B2XF	0.41	1223	4.0	1.14	29.8	83.5	
NexGen NG 3930 B3XF	0.42	1210	4.8	1.18	29.1	84.0	
NexGen AMX1818B3XF	0.42	1199	5.0	1.14	33.0	83.5	
Phytogen PHY 350 W3FE	0.42	1170	4.9	1.14	31.9	84.2	
NexGen AMX1816B3XF	0.37	925	4.0	1.16	30.8	84.3	
Trial mean		1384					
LSD (0.1)		137					
CV (%)		14					
Pr>F		0.0001					

Table 15. Performance of Irrigated, Full Season Cotton Varieties in Central Alabama, 2019

Prattville Agricultural Research Unit - Prattville, AL						
Full Season - Flex						
Cultivar	Lint	Yield	Mic	Len	Str	Unif
	(%/100)	(Lint/A)	(units)	(in.)	(g/tex)	(%)
PhytoGen PHY 400 W3FE	0.47	1933	4.5	1.14	30.6	83.0
Dyna-Gro 3615 B3XF	0.47	1901	5.1	1.09	29.9	81.5
PhytoGen PX3C06W3FE	0.46	1814	5.1	1.10	27.9	81.3
PhytoGen PHY 500 W3FE	0.49	1800	4.9	1.11	29.3	83.6
Phytogen PHY 480 W3FE	0.47	1770	4.7	1.11	30.0	84.1
PhytoGen PHY 580 W3FE	0.45	1755	4.6	1.12	30.6	84.2
Deltapine DP 1646 B2XF	0.45	1729	4.7	1.20	30.0	83.5
Deltapine DP 2055 B3XF	0.47	1715	4.9	1.20	30.4	84.0
Dyna-Gro 3605 B2XF	0.45	1707	4.7	1.20	30.8	83.5
PhytoGen PHY 340 W3FE	0.47	1695	5.0	1.13	30.3	84.6
Stoneville ST 4550GLTP	0.46	1693	5.1	1.08	31.0	83.6
Stoneville ST 5471GLTP	0.44	1692	4.6	1.12	30.5	83.3
PhytoGen PX5C45W3FE	0.48	1680	4.7	1.09	29.3	83.8
PhytoGen PX5C05W3FE	0.47	1670	4.9	1.08	30.6	83.5
PhytoGen PX3D43W3FE	0.47	1664	5.1	1.09	32.1	83.9
PhytoGen PX3D32W3FE	0.48	1662	5.2	1.15	30.2	84.3
Deltapine DP 1555 B2RF	0.46	1627	4.6	1.15	33.4	84.2
Croplan CP 9830 B3XF	0.47	1623	4.5	1.22	29.8	83.9
Deltapine DP 1840 B3XF	0.43	1620	4.7	1.16	31.6	83.7
Stoneville ST 6182GLT	0.47	1605	5.0	1.11	29.5	83.4
Deltapine DP 1835 B3XF	0.46	1600	4.9	1.18	31.8	83.8
PhytoGen PX5E34W3FE	0.43	1591	4.3	1.12	31.8	84.1
NexGen NG 4936 B3XF	0.43	1582	4.7	1.17	30.0	85.2
Americot NG 5711 B3XF	0.43	1575	4.7	1.15	31.0	83.7
Stoneville BX2076GLTP	0.46	1568	5.0	1.12	30.2	83.2
PhytoGen PX5E28W3FE	0.42	1549	4.2	1.16	31.3	83.9
Stoneville ST 5818GLT	0.42	1548	4.9	1.13	30.3	82.6
Americot NG 5007 B2XF	0.43	1547	4.7	1.15	28.2	83.1
Dyna-Gro 3753 B3XF	0.47	1482	4.9	1.16	32.5	84.6
Stoneville ST 5600B2XF	0.44	1467	5.5	1.15	32.4	84.5
Deltapine DP 1851 B3XF	0.45	1433	4.8	1.15	32.8	84.0
Stoneville ST 5707B2XF	0.41	1388	5.2	1.14	33.6	84.8
Phytogen PHY 350 W3FE	0.44	1374	5.0	1.11	30.8	84.1
Trial mean		1638				
LSD (0.1)		104				
CV (%)		9				
Pr>F		0.0001				

Table 16. Performance of Irrigated, Early Season Cotton Varieties in Central Alabama

Field Crops Unit - EV Smith Research & Extension Center - Shorter, AL							
Early Season - Flex							
Cultivar	Lint	Yield	Mic	Len	Str	Unif	
	(%/100)	(Lint/A)	(units)	(in.)	(g/tex)	(%)	
Stoneville ST 4550GLTP	0.47	1220	5.1	1.06	30.9	83.2	
Americot NG 5007 B2XF	0.45	1134	5.0	1.06	28.3	83.0	
Croplan 3527 B2XF	0.46	1134	5.1	1.13	31.0	83.7	
Dyna-Gro 3385 B2XF	0.44	1124	5.1	1.10	30.4	83.6	
Dyna-Gro 3317 B3XF	0.46	1097	4.9	1.06	30.5	82.5	
Americot NG 3729 B2XF	0.42	1086	4.5	1.11	33.0	83.6	
NexGen NG 4936 B3XF	0.44	1080	4.8	1.12	32.3	84.9	
Deltapine DP 1614 B2XF	0.47	1073	5.2	1.12	32.1	85.1	
Deltapine DP 1646 B2XF	0.48	1050	4.6	1.13	29.5	83.2	
Deltapine DP 1725 B2XF	0.47	1041	5.0	1.09	30.1	83.0	
PhytoGen PX3D43W3FE	0.48	1024	5.0	1.06	32.3	83.3	
Deltapine DP 1518 B2XF	0.43	1016	4.8	1.11	30.1	82.9	
NexGen NG 3930 B3XF	0.42	999	4.5	1.11	30.6	84.1	
PhytoGen PHY 340 W3FE	0.50	992	4.8	1.08	31.7	83.2	
PhytoGen PX3C06W3FE	0.47	991	5.2	1.08	30.5	81.8	
Dyna-Gro 3570 B3XF	0.46	985	5.2	1.08	30.7	83.2	
Phytogen PHY 480 W3FE	0.47	978	4.9	1.11	32.8	82.9	
NexGen AMX1816B3XF	0.39	965	4.0	1.12	31.6	83.8	
Deltapine 18R628NRB3XF	0.47	963	4.8	1.04	32.0	82.8	
PhytoGen PX3B07W3FE	0.47	959	4.8	1.07	32.3	84.5	
NexGen AMX1818B3XF	0.42	937	4.7	1.11	33.4	84.3	
Stoneville BX2076GLTP	0.45	934	5.2	1.08	32.4	82.9	
Croplan CP 9178 BX3F	0.45	915	5.2	1.07	33.2	82.5	
PhytoGen PX3D32W3FE	0.45	913	4.9	1.10	31.8	83.9	
NexGen AMX1828B3XF	0.45	912	4.9	1.11	32.5	83.5	
Dyna-Gro 3520 B3XF	0.43	910	4.5	1.16	34.2	85.3	
Phytogen PHY 350 W3FE	0.44	906	5.2	1.09	33.1	83.9	
Stoneville ST 5471GLTP	0.44	904	4.6	1.08	31.7	83.4	
NexGen NG 3994 B3XF	0.44	878	4.9	1.10	30.5	82.0	
Deltapine DP 1916 B3XF	0.47	877	4.7	1.07	32.2	83.2	
Croplan CP 9608 BX3F	0.48	872	4.8	1.09	29.0	82.6	
Deltapine DP 1823 NRB2XF	0.45	846	5.2	1.09	31.2	82.9	
Trial mean		991					
LSD (0.1)		88					
CV (%)		13					
Pr>F		0.0023					

Table 17. Performance of Irrigated, Full Season Cotton Varieties in Central Alabama - 2019

Field Crops Unit - EV Smith Research & Extension Center - Shorter, AL						
Full Season - Flex						
Cultivar	Lint	Yield	Mic	Len	Str	Unif
	(%/100)	(Lint/A)	(units)	(in.)	(g/tex)	(%)
Dyna-Gro 3753 B3XF	0.47	1700	5.3	1.05	32.8	83.4
Deltapine DP 1555 B2RF	0.47	1657	5.1	1.08	32.9	82.7
Deltapine DP 2055 B3XF	0.47	1624	4.9	1.09	29.7	81.8
Americot NG 5711 B3XF	0.44	1595	4.5	1.08	30.3	82.8
Croplan CP 9830 B3XF	0.47	1585	5.0	1.12	29.8	81.6
PhytoGen PX5C45W3FE	0.48	1573	5.0	1.01	31.4	82.0
Phytogen PHY 480 W3FE	0.46	1559	4.6	1.06	30.5	82.8
Deltapine DP 1835 B3XF	0.47	1559	4.6	1.08	31.3	82.6
PhytoGen PX3D43W3FE	0.44	1544	5.0	1.05	31.8	83.2
PhytoGen PHY 400 W3FE	0.46	1543	4.5	1.11	32.9	83.7
Stoneville BX2076GLTP	0.46	1540	5.2	1.10	31.6	83.8
Stoneville ST 4550GLTP	0.48	1521	5.6	1.04	29.9	82.9
Americot NG 5007 B2XF	0.44	1514	5.1	1.02	25.2	81.3
Deltapine DP 1646 B2XF	0.46	1473	4.6	1.15	30.8	83.5
Dyna-Gro 3615 B3XF	0.46	1465	5.2	1.08	30.8	82.1
Dyna-Gro 3605 B2XF	0.45	1454	4.6	1.09	28.9	81.0
PhytoGen PX3C06W3FE	0.46	1454	4.8	1.06	28.8	82.4
Phytogen PHY 350 W3FE	0.42	1440	4.8	1.09	32.5	83.6
Stoneville ST 6182GLT	0.47	1439	5.3	1.08	29.8	83.6
PhytoGen PHY 580 W3FE	0.48	1430	5.1	1.02	29.5	82.5
Stoneville ST 5471GLTP	0.40	1412	4.8	1.10	30.0	82.5
PhytoGen PX3D32W3FE	0.40	1408	4.7	1.10	31.4	82.6
Deltapine DP 1840 B3XF	0.40	1369	4.6	1.09	30.4	81.8
PhytoGen PX5C05W3FE	0.47	1364	5.1	0.99	28.5	82.5
PhytoGen PHY 500 W3FE	0.47	1346	4.7	1.04	32.3	81.9
Stoneville ST 5707B2XF	0.41	1342	5.0	1.10	32.7	83.1
Stoneville ST 5818GLT	0.44	1337	4.7	1.07	30.3	82.1
PhytoGen PHY 340 W3FE	0.47	1332	4.9	1.04	31.4	82.5
PhytoGen PX5E28W3FE	0.42	1324	4.1	1.09	32.8	83.8
NexGen NG 4936 B3XF	0.42	1318	5.3	1.14	31.5	84.8
Deltapine DP 1851 B3XF	0.44	1309	4.9	1.08	33.1	83.9
Stoneville ST 5600B2XF	0.42	1256	5.4	1.07	33.1	82.5
PhytoGen PX5E34W3FE	0.42	1205	4.5	1.06	31.6	82.8
Trial mean		1454				
LSD (0.1)		141				
CV (%)		14				
Pr>F		0.0766				

Table 18. Performance of Irrigated, Early Season Cotton Varieties in Southeast Alabama, 2019

Wiregrass Research & Extension Center - Headland, AL						
Early Season - Flex						
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)
Stoneville ST 4550GLTP	0.48	1908	5.2	1.08	32.0	84.6
Deltapine DP 1916 B3XF	0.44	1893	5.0	1.12	34.3	83.2
Deltapine DP 1646 B2XF	0.47	1841	4.9	1.16	30.8	83.1
PhytoGen PX3D43W3FE	0.45	1801	5.3	1.11	33.5	84.4
NexGen AMX1828B3XF	0.43	1790	5.3	1.14	32.5	83.8
Phytogen PHY 350 W3FE	0.42	1774	4.9	1.13	31.1	83.6
PhytoGen PHY 340 W3FE	0.44	1743	5.1	1.14	31.8	85.1
Stoneville ST 5471GLTP	0.42	1740	4.9	1.13	31.6	83.3
Stoneville BX2076GLTP	0.44	1734	5.7	1.11	32.0	83.9
Croplan CP 9608 BX3F	0.46	1727	5.0	1.12	29.7	82.0
PhytoGen PX3C06W3FE	0.44	1707	5.2	1.12	29.6	82.6
PhytoGen PHY 400 W3FE	0.46	1697	4.9	1.11	33.5	83.4
Deltapine DP 1823 NRB2XF	0.44	1682	4.8	1.14	32.2	85.0
NexGen NG 3994 B3XF	0.45	1672	5.2	1.16	34.1	83.8
Deltapine DP 1518 B2XF	0.41	1663	4.7	1.11	30.5	83.2
Americot NG 5007 B2XF	0.43	1659	5.0	1.12	29.3	83.3
Deltapine DP 1725 B2XF	0.46	1649	5.1	1.11	31.0	83.1
Dyna-Gro 3570 B3XF	0.43	1617	5.4	1.11	31.4	84.0
Deltapine DP 1614 B2XF	0.47	1596	5.6	1.11	31.0	84.2
Dyna-Gro 3385 B2XF	0.45	1565	5.6	1.11	29.1	84.8
Dyna-Gro 3317 B3XF	0.44	1548	5.4	1.09	32.6	84.0
NexGen AMX1816B3XF	0.39	1544	4.6	1.17	32.3	84.7
Phytogen PHY 480 W3FE	0.44	1532	5.2	1.14	30.9	84.8
NexGen NG 4936 B3XF	0.41	1532	5.2	1.18	30.5	85.5
PhytoGen PX3D32W3FE	0.42	1513	5.2	1.16	33.7	84.5
Croplan CP 9178 BX3F	0.46	1502	5.4	1.09	31.7	83.4
Croplan 3527 B2XF	0.48	1494	5.7	1.11	29.1	83.9
Americot NG 3729 B2XF	0.42	1457	5.5	1.12	30.5	84.7
Deltapine 18R628NRB3XF	0.45	1457	5.0	1.09	34.8	83.9
NexGen NG 3930 B3XF	0.42	1456	5.0	1.13	30.2	84.3
Dyna-Gro 3520 B3XF	0.42	1406	4.4	1.18	34.2	86.0
NexGen AMX1818B3XF	0.41	1357	5.0	1.19	36.2	85.6
Trial mean		1633				
LSD (0.1)		119				
CV (%)		10				
Pr>F		0.0001				

Table 19. Performance of Irrigated, Full Season Cotton Varieties in Southeast Alabama, 2019

Wiregrass Research & Extension Center - Headland, AL							
Full Season - Flex							
Cultivar	Lint (%/100)	Yield (Lint/A)	Mic (units)	Len (in.)	Str (g/tex)	Unif (%)	
Dyna-Gro 3615 B3XF	0.45	1962	5.0	1.11	30.2	80.6	
PhytoGen PX5C05W3FE	0.47	1816	5.1	1.05	30.5	83.1	
Dyna-Gro 3605 B2XF	0.44	1795	4.7	1.16	28.8	81.4	
Dyna-Gro 3753 B3XF	0.46	1721	5.3	1.10	29.3	84.0	
Phytogen PHY 480 W3FE	0.44	1700	5.0	1.09	28.3	83.9	
Deltapine DP 1851 B3XF	0.43	1680	4.7	1.09	33.0	82.3	
Stoneville ST 4550GLTP	0.45	1671	4.8	1.08	31.4	82.7	
Croplan CP 9830 B3XF	0.46	1660	4.3	1.18	30.3	81.4	
Deltapine DP 1840 B3XF	0.41	1659	4.8	1.13	30.9	82.7	
Deltapine DP 2055 B3XF	0.46	1648	4.5	1.19	30.4	81.9	
PhytoGen PX3C06W3FE	0.43	1646	5.0	1.10	27.4	82.2	
PhytoGen PX5C45W3FE	0.44	1643	4.7	1.11	32.3	83.1	
PhytoGen PX3D43W3FE	0.44	1633	4.9	1.10	32.7	83.2	
Stoneville BX2076GLTP	0.46	1621	5.1	1.11	30.8	83.1	
Deltapine DP 1646 B2XF	0.46	1615	4.6	1.07	25.3	81.2	
PhytoGen PHY 400 W3FE	0.45	1610	4.8	1.11	30.4	82.0	
Deltapine DP 1835 B3XF	0.44	1602	5.0	1.16	31.7	84.0	
PhytoGen PX5E28W3FE	0.42	1600	4.6	1.09	29.3	82.7	
PhytoGen PHY 500 W3FE	0.48	1597	4.6	1.10	32.1	82.3	
PhytoGen PHY 580 W3FE	0.44	1593	4.8	1.10	30.6	82.9	
Phytogen PHY 350 W3FE	0.42	1582	5.1	1.08	27.6	82.5	
Stoneville ST 5471GLTP	0.41	1580	4.9	1.12	30.6	81.9	
Stoneville ST 6182GLT	0.46	1523	5.0	1.11	30.0	82.9	
Stoneville ST 5600B2XF	0.45	1517	5.7	1.10	30.2	82.8	
Stoneville ST 5707B2XF	0.41	1499	5.1	1.13	32.2	82.7	
PhytoGen PHY 340 W3FE	0.45	1486	5.0	1.05	29.4	82.0	
Americot NG 5007 B2XF	0.42	1482	4.6	1.09	26.3	82.4	
NexGen NG 4936 B3XF	0.42	1442	4.8	1.14	29.8	83.5	
Americot NG 5711 B3XF	0.40	1439	4.6	1.15	29.9	83.7	
PhytoGen PX3D32W3FE	0.41	1429	5.0	1.14	32.6	83.1	
Stoneville ST 5818GLT	0.41	1418	4.9	1.14	30.0	81.9	
PhytoGen PX5E34W3FE	0.41	1188	4.4	1.12	31.3	82.3	
Trial mean		1596					
LSD (0.1)		156					
CV (%)		14					
Pr>F		0.0484					

Table 20. Irrigation amounts for Irrigated cotton trials, 2019					
TVREC	Irrigated cotton trials:		5.2	inches irrigation water	
PARU	Irrigated cotton trials:		3.4	inches irrigation water	
EVREC	Irrigated cotton trials:		6.7	inches irrigation water	
WGREC	Irrigated cotton trials:		6.5	inches irrigation water	

Table 21. Sources of Seed for the 2019 Cotton Variety Trials

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<u>Bayer Crop Sciences, St Louis, Missouri</u>	
Deltapine DP 1555 B2RF	Deltapine DP 1823 NR B2XF
Deltapine DP 1518 B2XF	Deltapine DP 1835 B3XF
Deltapine DP 1614 B2XF	Deltapine DP 1840 B3XF
Deltapine DP 1646 B2XF	Deltapine DP 1851 B3XF
Deltapine DP 1725 B2XF	Deltapine DP 2055 B3XF
Deltapine DP 1916 B3XF	MON 18R628NR B3XF
<u>Dyna-Gro, Kinston, Alabama</u>	
Dyna-Gro 3385 B2XF	Dyna-Gro 3570 B3XF
Dyna-Gro 3605 B2XF	Dyna-Gro 3753 B3XF
Dyna-Gro 3520 B3XF	Dyna-Gro 3615 B3XF
Dyna-Gro 3317 B3XF	
<u>BASF Corporation, Research Triangle Park, North Carolina</u>	
Stoneville ST 4550GLTP	Stoneville ST 5818GLT
Stoneville ST 5471GLTP	Stoneville ST 6182GLT
Stoneville ST 5600B2XF	Stoneville BX 2075GLTP
Stoneville ST 5707B2XF	
<u>PhytoGen, Shellman, Georgia</u>	
PhytoGen PHY 340 W3FE	PX3C06W3FE
PhytoGen PHY 350 W3FE	PX3D32W3FE
PhytoGen PHY 400 W3FE	PX3D43W3FE
PhytoGen PHY 480 W3FE	PX5C05W3FE
PhytoGen PHY 500 W3FE	PX5C45W3FE
PhytoGen PHY 580 W3FE	PX5E28W3FE
	PX5E34W3FE
<u>Americot, Inc., Lubbock, Texas</u>	
NG 3729 B2XF	NG 5007 B2XF
NG 3930 B3XF	NG 5711 B3XF
NG 3994 B3XF	AMX 1816 B3XF
NG 4936 B3XF	AMX 1818 B3XF
	AMX 1828 B3XF
<u>Winfield Solutions LLC, Frisco, Texas</u>	
Croplan 3527 B2XF	Croplan 9178 B3XF
Croplan 9608 B3XF	Croplan 9830 B3XF

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