

2018 Evaluation of Cotton Varieties at Jay, Florida

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This report summarizes results from the 2018 cotton demonstration variety trial at West Florida Research and Education Center, Jay, Florida. It shows the performance of 28 cotton varieties. This data represents only one year, results should be considered over several locations and years before conclusions are valid.

The study area soil type was a Red Bay sandy loam. Cotton varieties were planted on 17 May under strip tillage. Demonstration plots were eight rows 1640 to 1680 feet long with 36-in. row spacing. Standard production practices for non-irrigated cotton production were followed throughout the season. Fertilizer was applied on 22 June (320 lb 19-7.8-21.9/A) and 10 July (290 lbs 24-0-19.8/A). Herbicides were applied as follows: Prowl H₂O 1 qt/A + Liberty 1qt/A on 18 May; Roundup 22 oz/A + Dual Magnum 1.3 pt/A on 20 June; and Roundup 22 oz/A on 16 July. Priaxor fungicide was applied at 4 oz/A on 6 August. The plant growth regulator Protenza was applied at 1 pt/A on 30 July and 1 pt/A on 6 August. Cotton was harvested with a conventional spindle picker.

Weather data was obtained from Florida Automated Weather Network (FAWN) station located on Jay research farm (Table 1). Seed cotton yields according to variety are shown in Table 2.

Table 1. Weather Conditions During 2018 Cotton Demonstration Trial.

Month	Total Rainfall (in)	Average minimum air temperature (°F)	Average maximum air temperature (°F)
May	3.73	54.8	95.9
June	7.40	65.5	95.0
July	6.80	68.9	95.6
August	6.42	67.1	96.1
September	13.23	69.0	95.1
October	2.12	46.1	91.9
Total	39.70		

Table 2. 2018 Cotton Yields

Brand	Variety	Seed Cotton Yield (lb/A)	Cotton Yield (bales/A)*
Americot	NG 3729 B2XF	1253	0.99
Americot	NG 5007 B2XF	1314	1.04
Americot	NG 5711 B3XF	1296	1.03
Deltapine	DP 1555 B2RF	1361	1.08
Deltapine	DP 1639 B2XF	1491	1.18
Deltapine	DP 1646 B2XF	1335	1.06
Deltapine	DP 1725 B2XF	1150	0.91
Deltapine	DP 1747 NRB2XF	1443	1.14
Deltapine	DP 1840 B3XF	1350	1.07
Deltapine	DP 1851 B3XF	1839	1.46
Dyna-Gro	DG 3445	1348	1.07
Dyna-Gro	DG 3757	1234	0.98
Dyna-Gro	DG3605	1891	1.50
PhytoGen	PHY 300	1793	1.42
PhytoGen	PHY 330	1830	1.45
PhytoGen	PHY 350	1655	1.31
PhytoGen	PHY 430	1501	1.19
PhytoGen	PHY 440	1178	0.93
PhytoGen	PHY 444	1306	1.03
PhytoGen	PHY 480	1483	1.17
PhytoGen	PHY 530	1264	1.00
Stoneville	ST 4949 GLT	1132	0.90
Stoneville	ST 5020 GLT	908	0.72
Stoneville	ST 5122 GLT	1188	0.94
Stoneville	ST 5471 GLTP	1569	1.24
Stoneville	ST 5517 GLTP	1204	0.95
Stoneville	ST 5818 GLT	1044	0.83
Stoneville	ST 6182 GLT	1175	0.93

*Assumes a ginning turnout of 38% and a bale weight of 480 lb.