2005 Alabama Cotton Variety Report

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2005 ALABAMA COTTON VARIETY REPORT

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INTRODUCTION

The Alabama Cotton Variety Test is a continuing evaluation of available cotton varieties from private companies and state agricultural experiment stations. Breeding lines that are likely to be released as varieties are also tested. Tests are conducted on units of the Alabama Agricultural Experiment Station by Experiment Station personnel. Cultural practices are those generally recommended by the Alabama Cooperative Extension System to producers. Data are reported on irrigated tests at Belle Mina and Headland. No other tests received scheduled supplemental irrigation. Every effort is made to test the varieties and present the results in an unbiased manner.

EXPERIMENTAL CONDITIONS

Tests were split into early season and full season varieties. The maturity category for each variety was chosen by the company or cooperator. Deltapine DP 555BRR and FiberMax FM 960BR were included in both early and full season tests for comparison. Plot size was two rows at Prattville, Headland, Belle Mina, Shorter, and Fairhope. Row length varied at different locations from 20 to 120 feet. A randomized complete block design with four replications was used in all tests.

A Flex cotton trial was added at three locations: Belle Mina, Prattville, and Fairhope. These trials were split into early and full season maturity groups. Fiber Max FM 960BR, Deltapine DP 444BRR, Deltapine DP 555BRR, and Stoneville ST 5599BR were include in both early and full season trials for comparison. Because these non-Flex checks were included, Flex trials were managed as regular Round-up Ready varieties.

Cotton disease trials were established by Dr. Kathy Lawrence, Dept. of Plant Pathology and Entomology. Trials were planted 5 May at the Gulf Coast Research and Extension Center, Fairhope, AL. The soil type was a Malbis fine sandy loam. Plots consisted of 2 rows, 25 ft long, with a between-row spacing of 38 in. Plots were arranged in a randomized complete-block design with four replications. A 10-ft alley separated blocks. Cotton boll rot was evaluated by recording the number of healthy bolls and diseased bolls from a 45 squarefoot section within each plot. All plots were maintained throughout the season with standard herbicide, insecticide, and fertility production practices as recommended by the Alabama Cooperative Extension System. Plots were harvested 19 Sep. Data were statistically analyzed using PROC GLM, and means were compared with Fisher's protected least significant difference test ($P < 0.10$).

Weather conditions were favorable for high incidence of boll rot as this area endured rains from two tropical storms, Arleen and Cindy, as well as three hurricanes, Dennis, Katrina, and Rita. No correlation was observed between seed cotton yield and boll rot disease incidence in any of the four trials (Tables 30-34).

EXPLANATION OF DATA

Harvest of Seed Cotton

A 50-boll sample was taken by hand for ginning, then test plots were harvested by a mechanical spindle picker at all locations. Average seed cotton yield was determined for each variety at each location.

Lint Percentage

Seed cotton samples from each variety were ginned on a 10-saw gin. Lint percentage was calculated by dividing weight of lint by seed cotton weight.

Yield of Lint

Lint yield was determined by multiplying the lint percentage by seed cotton yield.

Fiber Properties

Fiber qualities of all varieties were measured by the USDA-AMS Classing Office in Birmingham, Alabama using High Volume Instrumentation (HVI). Data are reported on a single composite sample of each variety from each location including the regional tests at Shorter and Belle Mina.

Micronaire: This measures the fineness of the cotton fibers. The smaller the micronaire reading, the finer and/or more immature the fibers.

Length: This is the fiber length measured with the HVI instrument. This measurement of length is similar to the classer's staple.

Strength: This is a measure of breaking strength of a standard fiber bundle with the holding jaws separated by 1/8 inch. "Tex" is a size measurement of the fiber bundle and the data given are the force in grams needed to break this bundle.

Uniformity: This is the ratio between the mean length and the upper half mean length of the fibers and is expressed as a percentage. Cotton with a low length uniformity may be difficult to process.

Earliness: Earliness is reported as the percentage of the total yield harvested at the first picking where more than one harvest was made.

Fusarium Wilt: Reaction of varieties to *Fusarium oxysporum* f. *vasinfectum* (Fusarium wilt) was evaluated at the Plant Breeding Unit, Tallassee. Breeder lines and selected released varieties were grown in a field with a high natural incidence of the fusarium wilt disease. In 2005, incidence of Fusarium wilt was moderate. The incidence ratings can be found in the 2005 National Fusarium Wilt Cotton Report, Departmental Series No. 271.

STATISTICAL ANALYSIS

Appropriate analyses of the yield data were made. For each location, the variability in the test was measured and expressed as a percentage of the test mean, i.e., the coefficient of variation (C.V.). An indication of the magnitude of difference between variety averages necessary to be considered a real difference is given for each location. It is designated as the Least Significance Difference ($L.S.D._{.10}$). Appropriate care should be taken when using multi-location or multi-year averages. The genotype x environment interaction is often a significant source of variation, indicating that the varietal rankings are not consistent from one location to another or from one year to the next. Using multi-environment means in these instances can be grossly misleading.

ACKNOWLEDGMENTS

Appreciation is also expressed to the following supervisory personnel of the outlying units whose quality work makes this a reliable source of information for farmers in their areas:

Chet Norris and David Harkins, Tennessee Valley Research and Extension Center; Don Moore, Prattville Research Field; Bobby Durbin, E.V. Smith Research Center; Larry Wells and Brian Gamble, Wiregrass Research and Extension Center; Ronnie McDaniel and Malcomb Pegues, Gulf Coast Research and Extension Center.

TABLE 1. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT BELLE MINA, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Deltapine DP 444BG/RR	1099	43	1242	1261
Fiber Max FM 960BR	1023	40	1233	1160
Stoneville ST 4892BR	971	43	1157	1156
PhytoGen PHY 410RR	879	40	1051	1050
Deltapine DP 445BG/RR	1115	42	1248	.
Deltapine DP 432 RR	1004	41	1218	.
Stoneville ST 4686R	902	42	1155	.
Fiber Max FM 958LL	897	42	1128	.
Deltapine DP 555 BG/RR	939	44	1122	.
Stoneville ST5242BR	948	41	1114	.
Deltapine DP 434 RR	963	42	1111	.
Fiber Max FM 960RR	826	39	1092	.
Stoneville ST 4575BR	896	41	1061	.
Deltapine DP 393	741	40	1051	.
Deltapine DP 424 BGII/RR	891	37	1036	.
Fiber Max FM 960B2R	837	40	1028	.
Fiber Max FM 966LL	815	40	1027	.
Deltapine DP 455BG/RR	829	42	1016	.
PhytoGen PHY 310R	1087	43	.	.
Deltapine DP 454BG/RR	993	43	.	.
PhytoGen PHY 480WR	914	41	.	.
PhytoGen PHY 440W	904	41	.	.
PhytoGen PHY 470WR	841	41	.	.
PhytoGen PHY 370WR	823	43	.	.
Deltapine DPLX04Y170BR	796	42	.	.
Deltapine DPLX03X179R	796	41	.	.
Stoneville STX0416B2R	766	39	.	.
PM 2167R	690	37	.	.
Trial mean	900	41	1116	1157
LSD(0.10)	119.7	1.3	78.7	44.5
%CV	14.6	3.4	10.9	7.2

TABLE 2. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT BELLE MINA, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Stoneville ST 5599BR	958	41	1090	1068
Deltapine DP 491	1008	42	1105	1048
Fiber Max FM 989 RR	931	41	1033	996
Deltapine DP 555 BG/RR	899	43	982	992
Deltapine DP 449 BG/RR	926	41	979	970
Stoneville ST 5303R	788	42	969	970
Deltapine DP 493	807	45	975	961
Fiber Max FM 991BR	881	40	979	946
Fiber Max FM 989 BR	863	39	946	945
Fiber Max 991R	853	39	906	902
Deltapine DP 445BG/RR	990	42	1085	.
Stoneville ST 6848R	972	39	1054	.
Stoneville ST 6636BR	930	40	1047	.
Deltapine DP 494 RR	891	42	1037	.
Deltapine DP 455BG/RR	953	43	1028	.
Deltapine DP 488 BR	686	42	935	.
Fiber Max FM 991B2R	739	38	877	.
Deltapine DP 543BGII/RR	782	40	867	.
Deltapine DP 454BG/RR	1049	43	.	.
Fiber Max FM 960BR	1029	40	.	.
Deltapine DPLX04Y170BR	961	43	.	.
Deltapine DPLX03X179R	851	42	.	.
PhytoGen PHY 510RR	831	40	.	.
Deltapine DPLX05X648DR	775	42	.	.
PhytoGen Phy 72 Acala	740	40	.	.
Fiber Max FM 989B2R	732	36	.	.
Trial mean	878	41	994	980
LSD(0.10)	130.1	0.9	89.1	66.4
%CV	16.2	2.3	13.9	12.9

TABLE 3. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT PRATTVILLE, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Fiber Max FM 960BR	1403	39	1040	1180
Deltapine DP 444BG/RR	1364	42	882	1092
PhytoGen PHY 410RR	1242	39	876	934
Fiber Max FM 960RR	1372	40	1047	.
Deltapine DP 455BG/RR	1483	42	1046	.
Deltapine DP 432 RR	1478	41	1037	.
Deltapine DP 445BG/RR	1438	41	1004	.
Stoneville ST5242BR	1485	40	1003	.
Deltapine DP 393	1439	41	1001	.
Fiber Max FM 960B2R	1246	39	977	.
Deltapine DP 434 RR	1388	42	963	.
Stoneville ST 4575BR	1393	42	955	.
Deltapine DP 555 BG/RR	1246	40	955	.
Fiber Max FM 958LL	1261	40	954	.
Stoneville ST 4686R	1328	42	935	.
Deltapine DP 424 BGII/RR	1264	36	929	.
Fiber Max FM 966LL	1105	37	858	.
PhytoGen PHY 470WR	1445	42	.	.
PhytoGen PHY 310R	1426	42	.	.
Deltapine DPLX03X179R	1422	43	.	.
Deltapine DP 454BG/RR	1382	41	.	.
Deltapine DPLX04Y170BR	1353	39	.	.
Stoneville STX0416B2R	1352	39	.	.
PhytoGen PHY 440W	1337	39	.	.
PhytoGen PHY 370WR	1333	40	.	.
PhytoGen PHY 480WR	1332	37	.	.
Trial mean	1358	40	968	1069
LSD(0.10)	96.7	1.4	57.8	32.7
%CV	7.8	3.7	9.3	5.6

TABLE 4. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT PRATTVILLE, ALABAMA, 2005

Variety	2005 lint		Average lint yld	
	yield	percentage	2-yr	3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Stoneville ST 5599BR	1279	39	1055	1393
Fiber Max FM 989 BR	1288	40	997	1268
Deltapine DP 555 BG/RR	1254	41	958	1262
Deltapine DP 449 BG/RR	1262	39	985	1246
Fiber Max FM 991BR	1360	41	1014	1233
Deltapine DP 491	1187	42	985	1197
Fiber Max FM 989 RR	1194	39	943	1173
Deltapine DP 493	1169	42	883	1165
Stoneville ST 5303R	1276	39	943	1152
Fiber Max 991R	1179	38	941	1144
Deltapine DP 455BG/RR	1348	41	1027	.
Deltapine DP 445BG/RR	1336	40	965	.
Deltapine DP 488 BR	1176	39	960	.
Deltapine DP 494 RR	1231	41	953	.
Stoneville ST 6848R	1226	36	912	.
Stoneville ST 6636BR	1305	41	904	.
Deltapine DP 543BGII/RR	1117	38	883	.
Fiber Max FM 991B2R	1138	39	869	.
Deltapine DPLX04Y170BR	1411	38	.	.
Deltapine DP 454BG/RR	1349	43	.	.
Deltapine DPLX03X179R	1298	41	.	.
PhytoGen PHY 510RR	1272	39	.	.
Fiber Max FM 960BR	1257	39	.	.
Deltapine DPLX05X648DR	1120	42	.	.
Fiber Max FM 989B2R	1047	37	.	.
Trial mean	1243	40	954	1223
LSD(0.10)	106	1	62	55
%CV	9	2	10	9

TABLE 5. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT SHORTER, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Stoneville ST 4892BR	1692	42	1394	1565
Deltapine DP 444BG/RR	1648	44	1338	1496
Fiber Max FM 960BR	1531	41	1347	1474
PhytoGen PHY 410RR	1487	40	1240	1390
Deltapine DP 432 RR	1851	42	1580	.
Deltapine DP 555 BG/RR	1656	44	1409	.
Deltapine DP 393	1743	43	1404	.
Stoneville ST5242BR	1719	42	1401	.
Deltapine DP 434 RR	1652	43	1389	.
Deltapine DP 455BG/RR	1585	44	1387	.
Stoneville ST 4575BR	1683	43	1386	.
Stoneville ST 4686R	1680	43	1374	.
Fiber Max FM 960RR	1483	41	1365	.
Deltapine DP 445BG/RR	1740	44	1363	.
Deltapine DP 424 BGII/RR	1496	38	1309	.
Fiber Max FM 966LL	1428	40	1263	.
Fiber Max FM 960B2R	1328	40	1254	.
Fiber Max FM 958LL	1411	41	1226	.
Deltapine DP 454BG/RR	1841	44	.	.
PhytoGen PHY 310R	1757	44	.	.
Deltapine DPLX04Y170BR	1673	44	.	.
PhytoGen PHY 440W	1665	42	.	.
PhytoGen PHY 480WR	1597	41	.	.
Stoneville STX0416B2R	1594	40	.	.
PhytoGen PHY 370WR	1589	43	.	.
Deltapine DPLX03X179R	1584	45	.	.
PhytoGen PHY 470WR	1438	41	.	.
PM 2167R	1090	38	.	.
Trial mean	1594	42	1357	1481
LSD(0.10)	87.3	0.7	67.1	81.6
%CV	6.0	1.9	7.7	10.3

TABLE 6. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT SHORTER, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Stoneville ST 5599BR	1770	41	1490	1560
Deltapine DP 493	1839	45	1522	1533
Deltapine DP 555 BG/RR	1665	44	1400	1459
Deltapine DP 491	1664	42	1419	1393
Stoneville ST 5303R	1603	41	1315	1359
Fiber Max FM 989 BR	1630	39	1387	1332
Fiber Max 991R	1613	39	1338	1325
Deltapine DP 449 BG/RR	1569	40	1348	1322
Fiber Max FM 991BR	1464	39	1236	1287
Fiber Max FM 989 RR	1528	40	1268	1265
Deltapine DP 445BG/RR	1863	41	1503	.
Deltapine DP 494 RR	1703	41	1422	.
Deltapine DP 488 BR	1587	40	1408	.
Deltapine DP 455BG/RR	1514	43	1374	.
Stoneville ST 6636BR	1684	40	1332	.
Stoneville ST 6848R	1627	38	1278	.
Deltapine DP 543BGII/RR	1477	40	1274	.
Fiber Max FM 991B2R	1234	37	1141	.
Deltapine DP 454BG/RR	2063	43	.	.
Deltapine DPLX03X179R	1824	43	.	.
Deltapine DPLX04Y170BR	1656	42	.	.
Fiber Max FM 960BR	1576	39	.	.
Deltapine DPLX05X648DR	1553	42	.	.
PhytoGen PHY 510RR	1546	40	.	.
PhytoGen Phy 72 Acala	1528	40	.	.
Fiber Max FM 989B2R	1341	36	.	.
Trial mean	1620	41	1359	1383
LSD(0.10)	112.7	0.7	82.0	64.7
%CV	7.6	1.9	9.4	8.9

TABLE 7. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT HEADLAND, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Fiber Max FM 960BR	1737	40	1399	1473
Deltapine DP 444BG/RR	1674	41	1265	1381
PhytoGen PHY 410RR	1740	42	1345	1358
Deltapine DP 555 BG/RR	1880	45	1506	.
Deltapine DP 455BG/RR	1860	44	1462	.
Deltapine DP 434 RR	1816	42	1440	.
Fiber Max FM 966LL	1668	39	1427	.
Stoneville ST 4575BR	1869	42	1391	.
Deltapine DP 432 RR	1630	41	1372	.
Fiber Max FM 958LL	1739	41	1361	.
Deltapine DP 424 BGII/RR	1649	36	1340	.
Deltapine DP 393	1709	41	1335	.
Stoneville ST 4686R	1663	42	1314	.
Deltapine DP 445BG/RR	1620	43	1306	.
Stoneville ST5242BR	1725	41	1247	.
Fiber Max FM 960RR	1398	41	1241	.
Fiber Max FM 960B2R	1556	40	1238	.
PhytoGen PHY 440W	1959	41	.	.
PhytoGen PHY 370WR	1911	42	.	.
PhytoGen PHY 310R	1855	43	.	.
Deltapine DP 454BG/RR	1817	44	.	.
PhytoGen PHY 480WR	1766	41	.	.
Deltapine DPLX04Y170BR	1649	42	.	.
PhytoGen PHY 470WR	1623	39	.	.
Deltapine DPLX03X179R	1512	42	.	.
Stoneville STX0416B2R	1447	38	.	.
Trial mean	1711	41	1352	1404
LSD(0.10)	199.6	1.3	121.6	130.1
%CV	12.8	3.3	13.9	17.0

TABLE 8. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT HEADLAND, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Deltapine DP 555 BG/RR	1656	45	1390	1594
Deltapine DP 493	1633	43	1402	1549
Stoneville ST 5599BR	1774	41	1355	1490
Deltapine DP 491	1620	43	1400	1430
Stoneville ST 5303R	1723	40	1307	1423
Deltapine DP 449 BG/RR	1674	40	1314	1399
Fiber Max 991R	1402	39	1169	1375
Fiber Max FM 991BR	1530	41	1244	1355
Fiber Max FM 989 BR	1639	40	1269	1339
Fiber Max FM 989 RR	1324	39	1091	1226
Deltapine DP 455BG/RR	1804	42	1467	.
Deltapine DP 494 RR	1709	45	1433	.
Stoneville ST 6636BR	1712	39	1306	.
Deltapine DP 488 BR	1556	40	1302	.
Deltapine DP 445BG/RR	1480	41	1238	.
Deltapine DP 543BGII/RR	1489	39	1195	.
Stoneville ST 6848R	1450	39	1119	.
Fiber Max FM 991B2R	1031	36	982	.
Deltapine DP 454BG/RR	1755	42	.	.
Fiber Max FM 960BR	1708	39	.	.
Deltapine DPLX03X179R	1667	43	.	.
Fiber Max FM 989B2R	1573	39	.	.
Deltapine DPLX05X648DR	1541	42	.	.
PhytoGen PHY 510RR	1509	39	.	.
Deltapine DPLX04Y170BR	1487	41	.	.
Trial mean	1578	41	1277	1418
LSD(0.10)	196.1	1.5	126.0	137.3
%CV	13.6	3.9	15.3	18.4

Table 9. Performance of Early Season Cotton Varieties at Fairhope, Alabama, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
PhytoGen PHY 310R	1105	42	†	†
Stoneville ST5242BR	1016	38	†	†
Fiber Max FM 960RR	1012	37	†	†
Stoneville STX0416B2R	1010	37	†	†
Fiber Max FM 966LL	1001	37	†	†
PhytoGen PHY 370WR	997	39	†	†
PhytoGen PHY 440W	985	38	†	†
Deltapine DPLX03X179R	955	41	†	†
PhytoGen PHY 410RR	939	37	†	†
Deltapine DP 555 BG/RR	937	40	†	†
Deltapine DP 393	925	39	†	†
PhytoGen PHY 470WR	919	37	†	†
Stoneville ST 4575BR	910	39	†	†
Deltapine DP 432 RR	907	37	†	†
Deltapine DP 434 RR	888	39	†	†
Fiber Max FM 958LL	885	37	†	†
Deltapine DP 445BG/RR	878	39	†	†
PhytoGen PHY 480WR	822	36	†	†
Deltapine DP 454BG/RR	813	41	†	†
Deltapine DPLX04Y170BR	801	41	†	†
Fiber Max FM 960B2R	795	38	†	†
Fiber Max FM 960BR	778	37	†	†
Stoneville ST 4686R	775	39	†	†
Deltapine DP 424 BGII/RR	774	37	†	†
Deltapine DP 444BG/RR	766	39	†	†
Deltapine DP 455BG/RR	744	40	†	†
Trial mean	898	38		
LSD(0.10)	174.8	0.9		
%CV	21.3	2.5		

†This test was harvested after receiving 3 inches of rain from Hurricane Rita, which caused losses before harvest. Fairhope also endured two tropical storms (Arlene and Cindy) and three hurricanes (Dennis, Katrina, and Rita) during the growing season.

TABLE 10. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Deltapine DP 454BG/RR	1141	42	†	†
Deltapine DP 455BG/RR	1024	41	†	†
Deltapine DP 543BGII/RR	989	38	†	†
Deltapine DPLX04Y170BR	969	40	†	†
Fiber Max FM 989 BR	949	38	†	†
Fiber Max FM 989 RR	929	38	†	†
Deltapine DP 449 BG/RR	928	39	†	†
PhytoGen PHY 510RR	912	39	†	†
Stoneville ST 6636BR	912	37	†	†
Deltapine DPLX03X179R	910	41	†	†
Deltapine DP 555 BG/RR	909	40	†	†
Deltapine DPLX05X648DR	883	41	†	†
Deltapine DP 445BG/RR	876	41	†	†
Stoneville ST 5303R	872	38	†	†
Fiber Max FM 960BR	868	38	†	†
Fiber Max FM 991BR	866	38	†	†
Deltapine DP 493	855	43	†	†
Deltapine DP 491	840	39	†	†
Deltapine DP 488 BR	839	38	†	†
Fiber Max FM 989B2R	835	36	†	†
Fiber Max FM 991B2R	821	37	†	†
Stoneville ST 5599BR	804	39	†	†
Stoneville ST 6848R	801	37	†	†
Deltapine DP 494 RR	748	39	†	†
Fiber Max 991R	722	38	†	†
Trial mean	888	39		
LSD(0.10)	132.3	0.7		
%CV	16.3	1.9		

†This test was harvested after receiving 3 inches of rain from Hurricane Rita, which caused losses before harvest. Fairhope also endured two tropical storms (Arlene and Cindy) and three hurricanes (Dennis, Katrina, and Rita) during the growing season.

TABLE 11. PERFORMANCE OF EARLY SEASON COTTON VARIETIES IN ALABAMA, AVERAGE OF ALL LOCATIONS, 2005

	Lint yield			Lint percentage		
Variety	2005	2-yr	3-yr	2005	2-yr	3-yr
	lbs/acre			%		
Fiber Max FM 960BR	1295	1255	1319	39	41	40
Deltapine DP 444BG/RR	1310	1182	1307	42	43	43
PhytoGen PHY 410RR	1257	1128	1186	39	40	40
Deltapine DP 432 RR	1374	1302	.	40	41	.
Deltapine DP 555 BG/RR	1332	1248	.	43	44	.
Deltapine DP 445BG/RR	1358	1230	.	42	43	.
Deltapine DP 455BG/RR	1300	1228	.	42	43	.
Deltapine DP 434 RR	1341	1226	.	41	43	.
Stoneville ST 4575BR	1350	1199	.	41	42	.
Deltapine DP 393	1312	1198	.	41	42	.
Stoneville ST 4686R	1269	1195	.	42	42	.
Stoneville ST5242BR	1379	1191	.	41	42	.
Fiber Max FM 960RR	1218	1186	.	39	41	.
Fiber Max FM 958LL	1239	1167	.	40	41	.
Deltapine DP 424 BGII/RR	1215	1154	.	37	38	.
Fiber Max FM 966LL	1204	1144	.	39	40	.
Fiber Max FM 960B2R	1152	1124	.	39	40	.
PhytoGen PHY 310R	1446	.	.	43	.	.
Stoneville ST 4892BR	1371	.	.	41	.	.
PhytoGen PHY 440W	1370	.	.	40	.	.
Deltapine DP 454BG/RR	1369	.	.	43	.	.
PhytoGen PHY 370WR	1331	.	.	42	.	.
PhytoGen PHY 480WR	1286	.	.	39	.	.
Deltapine DPLX04Y170BR	1254	.	.	41	.	.
Deltapine DPLX03X179R	1254	.	.	42	.	.
PhytoGen PHY 470WR	1253	.	.	40	.	.
Stoneville STX0416B2R	1234	.	.	39	.	.
PM 2167R	929	.	.	37	.	.
Trial mean	1239	1146	1251	40	41	41
LSD(0.10)	85.7	20.7	13.2	0.6	0.2	0.1
%CV	13.2	5.6	4.0	2.9	1.8	1.3

TABLE 12. PERFORMANCE OF FULL SEASON COTTON VARIETIES IN ALABAMA, AVERAGE OF ALL LOCATIONS, 2005

Variety	Lint yield			Lint percentage		
	2005	2-yr	3-yr	2003	2-yr	3-yr
	lbs/acre			*%*		
Stoneville ST 5599BR	1317	1248	1378	40	42	41
Deltapine DP 555 BG/RR	1277	1183	1327	43	44	44
Deltapine DP 493	1261	1195	1302	44	44	44
Deltapine DP 491	1264	1227	1267	42	43	43
Deltapine DP 449 BG/RR	1272	1157	1234	40	40	40
Stoneville ST 5303R	1252	1134	1226	40	41	41
Fiber Max FM 989 BR	1274	1150	1221	39	40	40
Fiber Max FM 991BR	1220	1118	1205	40	40	40
Fiber Max 991R	1154	1088	1187	39	39	39
Fiber Max FM 989 RR	1181	1084	1165	40	40	40
Deltapine DP 455BG/RR	1329	1224	.	42	43	.
Deltapine DP 494 RR	1256	1211	.	42	42	.
Deltapine DP 445BG/RR	1309	1198	.	41	42	.
Deltapine DP 488 BR	1169	1151	.	40	42	.
Stoneville ST 6636BR	1308	1147	.	39	40	.
Stoneville ST 6848R	1215	1091	.	38	39	.
Deltapine DP 543BGII/RR	1171	1055	.	39	40	.
Fiber Max FM 991B2R	992	967	.	37	38	.
Deltapine DP 454BG/RR	1472	.	.	42	.	.
Deltapine DPLX03X179R	1310	.	.	42	.	.
Deltapine DPLX04Y170BR	1297	.	.	41	.	.
Fiber Max FM 960BR	1288	.	.	39	.	.
PhytoGen PHY 510RR	1214	.	.	39	.	.
Deltapine DPLX05X648DR	1174	.	.	42	.	.
PhytoGen Phy 72 Acala	1124	.	.	40	.	.
Fiber Max FM 989B2R	1106	.	.	37	.	.
Trial mean	1239	1146	1251	40	41	41
LSD(0.10)	85.7	20.7	13.2	0.6	0.2	0.1
%CV	13.2	5.6	4.0	2.9	1.8	1.3

TABLE 13. PERFORMANCE OF EARLY SEASON IRRIGATED COTTON VARIETIES AT BELLE MINA, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Deltapine DP 444BG/RR	1631	43	1569	1598
Fiber Max FM 960BR	1326	40	1352	1413
Deltapine DP 432 RR	1521	40	1541	.
Stoneville ST5242BR	1416	41	1527	.
Deltapine DP 434 RR	1397	42	1406	.
Stoneville ST 4575BR	1408	41	1386	.
Fiber Max FM 960B2R	1308	40	1314	.
Fiber Max FM 966LL	1214	39	1260	.
Deltapine DP 555 BG/RR	1285	42	1235	.
Deltapine DP 454BG/RR	1576	42	.	.
PhytoGen PHY 470WR	1385	40	.	.
PhytoGen PHY 370WR	1263	42	.	.
Trial mean	1394	41	1399	1505
LSD(0.10)	117.9	0.5	77.2	58.8
%CV	9.1	1.4	8.5	6.9

TABLE 14. PERFORMANCE OF FULL SEASON IRRIGATED COTTON VARIETIES AT BELLE MINA, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Stoneville ST 5599BR	1380	40	1417	1474
Deltapine DP 555 BG/RR	1301	42	1239	1315
Deltapine DP 488 BR	1358	40	1365	.
Deltapine DP 494 RR	1351	42	1302	.
Fiber Max FM 991BR	1051	39	1106	.
Fiber Max FM 991B2R	1090	38	1099	.
Deltapine DP 454BG/RR	1560	42	.	.
Fiber Max FM 960BR	1432	39	.	.
PhytoGen PHY 510RR	1347	39	.	.
Stoneville ST 6636BR	1312	39	.	.
Trial mean	1318	40	1255	1394
LSD(0.10)	107.1	0.9	85.1	63.6
%CV	8.7	2.2	10.4	8.1

TABLE 15. PERFORMANCE OF IRRIGATED COTTON VARIETIES AT HEADLAND, ALABAMA, 2005

Variety	2005 lint yield	2005 lint percentage	Average lint yld 2-yr	Average lint yld 3-yr
	lbs/acre	*%*	----- *lbs/acre* ----	
Deltapine DP 555 BG/RR	2095	42	1680	1657
Stoneville ST 5599BR	2119	39	1753	1607
Deltapine DP 444BG/RR	1723	40	1532	1499
Deltapine DP 493	2120	43	1776	.
Fiber Max FM 991BR	2067	38	1705	.
Deltapine DP 488 BR	1757	39	1589	.
Stoneville ST5242BR	1737	38	1552	.
Fiber Max FM 960B2R	1621	36	1537	.
Deltapine DP 494 RR	1775	40	1530	.
Fiber Max FM 966LL	1636	37	1480	.
Stoneville ST 4575BR	1692	40	1385	.
Deltapine DP 424 BGII/RR	1538	33	1314	.
Fiber Max FM 991B2R	1444	36	1298	.
Deltapine DP 454BG/RR	1969	40	.	.
Deltapine DP 455BG/RR	1951	41	.	.
PhytoGen PHY 370WR	1934	41	.	.
PhytoGen PHY 440W	1927	40	.	.
Stoneville STX0416B2R	1925	37	.	.
Stoneville ST 6636BR	1900	36	.	.
PhytoGen PHY 480WR	1879	38	.	.
Fiber Max FM 958LL	1875	39	.	.
Deltapine DP 543BGII/RR	1797	39	.	.
Fiber Max FM 960BR	1762	39	.	.
Deltapine DP 491	1739	38	.	.
Deltapine DPLX05X648DR	1738	40	.	.
Deltapine DP 445BG/RR	1628	39	.	.
PhytoGen PHY 470WR	1480	36	.	.
Trial mean	1808	39	1549	1588
LSD(0.10)	152.7	0.9	105.8	114.9
%CV	9.2	2.5	10.6	13.3

TABLE 16. RELATIVE YIELD RANKINGS BY LOCATION OF EARLY SEASON COTTON VARIETIES, 2005

	Belle Mina		Prattville		Shorter		Fairhope		Headland	
Variety	lbs/acre	Rank	lbs/acre	Rank	lbs/acre	Rank	lbs/acre	Rank	lbs/acre	Rank
AllTex Atlas	675	30	.		655	30			.	
Deltapine DP 393	741	27	1439	5	1743	4	925	11	1709	14
Deltapine DP 424 BGII/RR	891	16	1264	21	1496	21	774	24	1649	18
Deltapine DP 432 RR	1004	5	1478	3	1851	1	907	14	1630	20
Deltapine DP 434 RR	963	8	1388	11	1652	13	888	15	1816	8
Deltapine DP 444BG/RR	1099	2	1364	14	1648	14	766	25	1674	15
Deltapine DP 445BG/RR	1115	1	1438	6	1740	5	878	17	1620	22
Deltapine DP 454BG/RR	993	6	1382	12	1841	2	813	19	1817	7
Deltapine DP 455BG/RR	829	20	1483	2	1585	18	744	26	1860	5
Deltapine DP 555 BG/RR	939	10	1246	24	1656	12	937	10	1880	3
Deltapine DPLX03X179R	796	25	1422	8	1584	19	955	8	1512	24
Deltapine DPLX04Y170BR	796	24	1353	15	1673	10	801	20	1649	19
Fiber Max FM 958LL	897	14	1261	22	1411	26	885	16	1739	11
Fiber Max FM 960B2R	837	19	1246	23	1328	27	795	21	1556	23
Fiber Max FM 960BR	1023	4	1403	9	1531	20	778	22	1737	12
Fiber Max FM 960RR	826	21	1372	13	1483	23	1012	3	1398	26
Fiber Max FM 966LL	815	23	1105	26	1428	25	1001	5	1668	16
PhytoGen PHY 310R	1087	3	1426	7	1757	3	1105	1	1855	6
PhytoGen PHY 370WR	823	22	1333	18	1589	17	997	6	1911	2
PhytoGen PHY 410RR	879	17	1242	25	1487	22	939	9	1740	10
PhytoGen PHY 440W	904	12	1337	17	1665	11	985	7	1959	1
PhytoGen PHY 470WR	841	18	1445	4	1438	24	919	12	1623	21
PhytoGen PHY 480WR	914	11	1332	19	1597	15	822	18	1766	9
PM 2167R	690	28	.	.	1090	28	.	.	.	.
Stoneville ST 4575BR	896	15	1393	10	1683	8	910	13	1869	4
Stoneville ST 4686R	902	13	1328	20	1680	9	775	23	1663	17
Stoneville ST 4892BR	971	7	.	.	1692	7	.	.	.	.
Stoneville ST5242BR	948	9	1485	1	1719	6	1016	2	1725	13
Stoneville STX0416B2R	766	26	1352	16	1594	16	1010	4	1447	25
Trial mean	900	.	1358	.	1594	.	898	.	1711	.
LSD(0.10)	69	.	56	.	50	.	101	.	115	.
%CV	15	.	8	.	6	.	21	.	13	.

TABLE 17. RELATIVE YIELD RANKINGS BY LOCATION OF FULL SEASON COTTON VARIETIES, 2004

	Belle Mina		Prattville		Shorter		Fairhope		Headland	
Variety	lbs/acre	Rank	lbs/acre	Rank	lbs/acre	Rank	lbs/acre	Rank	lbs/acre	Rank
Acala 1517-99	822	20	.		843	28			.	
Deltapine DP 445BG/RR	990	4	1336	5	1863	2	876	13	1480	21
Deltapine DP 449 BG/RR	926	11	1262	12	1569	17	928	7	1674	8
Deltapine DP 454BG/RR	1049	1	1349	3	2063	1	1141	1	1755	3
Deltapine DP 455BG/RR	953	8	1348	4	1514	22	1024	2	1804	1
Deltapine DP 488 BR	686	26	1176	20	1587	15	839	19	1556	15
Deltapine DP 491	1008	3	1187	18	1664	9	840	18	1620	13
Deltapine DP 493	807	19	1169	21	1839	3	855	17	1633	12
Deltapine DP 494 RR	891	13	1231	15	1703	6	748	24	1709	6
Deltapine DP 543BGII/RR	782	21	1117	24	1477	23	989	3	1489	19
Deltapine DP 555 BG/RR	899	12	1254	14	1665	8	909	11	1656	10
Deltapine DPLX03X179R	851	17	1298	7	1824	4	910	10	1667	9
Deltapine DPLX04Y170BR	961	6	1411	1	1656	10	969	4	1487	20
Deltapine DPLX05X648DR	775	22	1120	23	1553	18	883	12	1541	16
Fiber Max 991R	853	16	1179	19	1613	13	722	25	1402	23
Fiber Max FM 960BR	1029	2	1257	13	1576	16	868	15	1708	7
Fiber Max FM 989 BR	863	15	1288	8	1630	11	949	5	1639	11
Fiber Max FM 989 RR	931	9	1194	17	1528	21	929	6	1324	24
Fiber Max FM 989B2R	732	25	1047	25	1341	25	835	20	1573	14
Fiber Max FM 991B2R	739	24	1138	22	1234	26	821	21	1031	25
Fiber Max FM 991BR	881	14	1360	2	1464	24	866	16	1530	17
PhytoGen PHY 510RR	831	18	1272	11	1546	19	912	8	1509	18
PhytoGen Phy 72 Acala	740	23	.	.	1528	20	.	.	.	.
Stoneville ST 5303R	788	20	1276	10	1603	14	872	14	1723	4
Stoneville ST 5599BR	958	7	1279	9	1770	5	804	22	1774	2
Stoneville ST 6636BR	930	10	1305	6	1684	7	912	9	1712	5
Stoneville ST 6848R	972	5	1226	16	1627	12	801	23	1450	22
Trial mean	878	.	1243	.	1620	.	888	.	1578	.
LSD(0.10)	75	.	61	.	65	.	76	.	113	.
%CV	16	.	9	.	8	.	16	.	14	.

Table 18. Performance of Early Season Flex Cotton Varieties in Alabama, 2005

	Belle Mina		Prattville		Fairhope	
Variety	lbs/acre	% lint	lbs/acre	% lint	lbs/acre	% lint
Deltapine DP 444BG/RR	1050	45	1296	43	922	41
Fiber Max FM 960BR	987	42	1288	38	973	39
CG 3020 B2RF	947	39	1271	38	1113	41
CG 3520 B2RF	1001	41	1241	40	988	38
CG 4020 B2RF	1019	42	1254	39	1163	40
Vigoro CX 601	1058	40	1174	37	968	38
Vigoro CX 621	881	41	1295	40	1049	40
DP 108 RF	901	42	1137	40	895	40
DP 110 RF	798	42	1168	41	897	39
DP 113 B2RF	892	40	1115	39	894	40
DP 117 B2RF	895	41	1080	38	1013	41
PHY 415 RF	1001	43	1404	40	975	40
PHY 425 RF	808	42	1296	41	969	41
PHY 475 WRF	956	43	1286	42	964	41
PHY 485 WRF	1000	44	1353	41	975	40
xBCG - 9124 - BBII/Flex	1094	41	1342	41	1005	40
xBCG - 8391 - BBII/Flex	909	39	1221	37	865	37
xBCG - 4630 - BBII/Flex	898	41	1427	40	1137	40
xBCG - 4153 - BBII/Flex	938	39	1226	39	944	39
xBCG - 3255 - BBII/Flex	959	39	1350	40	941	38
xBCG - 1004 - BBII/Flex	942	40	1274	39	1032	39
xBCG - 4575 - BBII/Flex	902	39	1219	35	928	38
xBCG - 1505 - Flex	881	40	893	38	710	38
xBCG - 0105 - Flex	772	36	975	37	772	37
STX 4554B2RF	941	42	1304	39	1167	41
STX 4664RF	1010	44	1328	43	959	41
DG 2100 B2RF	929	39	1318	40	845	37
DG 2520 B2RF	970	43	1266	41	994	39
Trial mean	941	41	1243	40	966	39
LSD(0.10)	96.5	1.1	84.7	1.3	83.8	1.1
%CV	11.2	2.9	7.5	3.4	9.5	2.9

†The test at Fairhope was harvested after receiving 3 inches of rain from Hurricane Rita, which caused losses before harvest. Fairhope also endured two tropical storms (Arlene and Cindy) and three hurricanes (Dennis, Katrina, and Rita) during the growing season.

Table 19. Performance of Full Season Flex Cotton Varieties in Alabama, 2005

	Belle Mina		Prattville		Fairhope	
Variety	lbs/acre	% lint	lbs/acre	% lint	lbs/acre	% lint
Stoneville ST 5599BR	1085	44	1433	40	983	41
Deltapine DP 555 BG/RR	1002	46	1492	44	1017	43
DP 167 RF	1022	42	1217	38	834	40
DP 147 RF	1155	42	1261	41	921	39
DP 152 RF	1006	41	1070	38	814	38
DP 164 B2RF	859	42	1242	41	930	40
DP 143 B2RF	1007	40	1240	38	883	39
DP 156 B2RF	871	40	1126	39	972	41
STX 5885B2RF	776	38	1147	37	908	37
ST 6611B2RF	1006	39	1216	37	920	39
STX 0414B2RF	837	40	1303	38	987	38
ST 6622B2RF	987	42	1332	40	954	41
ST 4357B2RF	1070	41	1276	40	1039	40
ST 5007B2RF	985	38	1175	37	928	39
Trial mean	976	41	1252	39	935	40
LSD(0.10)	119.5	0.9	71.9	1.2	67.6	1.4
%CV	13.3	2.3	6.2	3.2	7.8	3.8

†The test at Fairhope was harvested after receiving 3 inches of rain from Hurricane Rita, which caused losses before harvest. Fairhope also endured two tropical storms (Arlene and Cindy) and three hurricanes (Dennis, Katrina, and Rita) during the growing season.

TABLE 20.A. COTTON FIBER ANALYSIS, HVI, OF EARLY SEASON COTTON VARIETIES AT BELLE MINA, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
Early season				
Deltapine DP 393	4.1	1.10	29.2	80
Deltapine DP 424 BGII/RR	3.8	1.05	27.4	82
Deltapine DP 432 RR	4.4	1.13	31.4	83
Deltapine DP 434 RR	3.7	1.18	29.1	84
Deltapine DP 444BG/RR	3.8	1.11	24.6	84
Deltapine DP 445BG/RR	3.8	1.14	32.6	83
Deltapine DP 454BG/RR	3.3	1.09	29.2	83
Deltapine DP 455BG/RR	3.6	1.10	27.2	82
Deltapine DP 555 BG/RR	4.2	1.07	26.9	81
Deltapine DPLX03X179R	4.3	1.15	34.4	84
Deltapine DPLX04Y170BR	4.1	1.08	27.9	83
Fiber Max FM 958LL	3.9	1.15	30.4	82
Fiber Max FM 960B2R	4.0	1.11	34.6	82
Fiber Max FM 960BR	3.7	1.03	32.1	82
Fiber Max FM 960RR	3.1	1.12	29.2	82
Fiber Max FM 966LL	3.3	1.09	34.7	82
PhytoGen PHY 310R	4.2	1.05	27.8	82
PhytoGen PHY 370WR	4.1	1.02	27.6	82
PhytoGen PHY 410RR	4.2	1.10	28.6	83
PhytoGen PHY 440W	3.6	1.13	28.6	83
PhytoGen PHY 470WR	3.9	1.06	28.6	83
PhytoGen PHY 480WR	4.1	1.11	29.2	83
PM 2167R	3.8	1.01	26.1	83
Stoneville ST 4575BR	4.2	1.07	30.8	83
Stoneville ST 4686R	4.1	1.11	27.7	81
Stoneville ST 4892BR	4.4	1.10	30.1	82
Stoneville ST5242BR	3.7	1.07	26.8	82
Stoneville STX0416B2R	3.8	1.08	29.9	83

Table 20.b. Cotton Fiber Analysis, HVI, of Full Season Cotton Varieties at Belle Mina, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
	Full season			
Deltapine DP 445BG/RR	3.8	1.14	30.9	83
Deltapine DP 449 BG/RR	3.5	1.09	29.4	81
Deltapine DP 454BG/RR	3.4	1.07	29.8	81
Deltapine DP 455BG/RR	3.8	1.11	29.7	81
Deltapine DP 488 BG/RR	3.9	1.11	29.3	81
Deltapine DP 491	4.0	1.11	30.1	81
Deltapine DP 493	4.8	1.12	29.9	81
Deltapine DP 494 RR	3.6	1.10	30.4	83
Deltapine DP 543BGII/RR	3.9	1.02	26.1	80
Deltapine DP 555 BG/RR	4.5	1.10	27.7	82
Deltapine DPLX03X179R	4.3	1.09	31.5	83
Deltapine DPLX04Y170BR	4.5	1.10	30.5	82
Deltapine DPLX05X648DR	4.8	1.03	23.7	80
Fiber Max 991R	4.4	1.11	30.4	82
Fiber Max FM 960BR	3.7	1.08	34.1	82
Fiber Max FM 989 BR	3.5	1.07	28.5	82
Fiber Max FM 989 RR	3.8	1.11	32.4	82
Fiber Max FM 989B2R	3.6	1.10	30.9	83
Fiber Max FM 991B2R	4.6	1.12	31.8	82
Fiber Max FM 991BR	4.6	1.11	30.4	82
PHY 72	4.1	1.19	33.9	84
PhytoGen PHY 510RR	4.0	1.06	31.0	81
Stoneville ST 5303R	4.3	1.03	29.8	82
Stoneville ST 5599BR	4.0	1.08	31.0	82
Stoneville ST 6636BR	4.3	1.14	31.4	82
Stoneville ST 6848R	4.4	1.12	34.8	83

TABLE 21.A. COTTON FIBER ANALYSIS, HVI, OF EARLY SEASON COTTON VARIETIES AT PRATTVILLE, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
Early season				
Deltapine DP 393	4.7	1.22	31.9	85
Deltapine DP 424 BGII/RR	4.1	1.17	30.6	84
Deltapine DP 432 RR	4.1	1.18	31.9	85
Deltapine DP 434 RR	3.9	1.25	30.3	84
Deltapine DP 444BG/RR	4.1	1.16	30.8	84
Deltapine DP 445BG/RR	4.7	1.21	32.0	85
Deltapine DP 454BG/RR	3.9	1.14	31.9	84
Deltapine DP 455BG/RR	3.6	1.18	33.5	83
Deltapine DP 555 BG/RR	4.5	1.17	31.7	83
Deltapine DPLX03X179R	4.5	1.19	34.6	85
Deltapine DPLX04Y170BR	4.8	1.18	31.5	83
Fiber Max FM 958LL	4.5	1.22	35.2	83
Fiber Max FM 960B2R	4.4	1.20	34.8	84
Fiber Max FM 960BR	4.5	1.12	36.3	83
Fiber Max FM 960RR	3.9	1.19	35.1	83
Fiber Max FM 966LL	4.2	1.15	36.4	84
PhytoGen PHY 310R	4.5	1.12	30.5	84
PhytoGen PHY 370WR	4.0	1.18	32.1	85
PhytoGen PHY 410RR	4.9	1.15	31.8	84
PhytoGen PHY 440W	4.3	1.19	31.1	84
PhytoGen PHY 470WR	4.4	1.16	30.5	84
PhytoGen PHY 480WR	4.6	1.20	32.0	85
Stoneville ST 4575BR	4.6	1.16	31.7	85
Stoneville ST 4686R	4.4	1.16	32.4	83
Stoneville ST5242BR	4.3	1.14	29.6	84
Stoneville STX0416B2R	4.6	1.17	32.9	84

Table 21.b. Cotton Fiber Analysis, HVI, of Full Season Cotton Varieties at Prattville, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
	Full season			
Deltapine DP 445BG/RR	4.2	1.21	30.5	85
Deltapine DP 449 BG/RR	4.2	1.20	33.6	86
Deltapine DP 454BG/RR	3.9	1.13	29.8	84
Deltapine DP 455BG/RR	3.6	1.17	31.3	84
Deltapine DP 488 BR	4.6	1.23	32.1	86
Deltapine DP 491	4.3	1.26	32.4	85
Deltapine DP 493	4.8	1.18	31.5	85
Deltapine DP 494 RR	4.6	1.20	32.9	85
Deltapine DP 543BGII/RR	4.6	1.19	32.3	83
Deltapine DP 555 BG/RR	4.5	1.16	30.9	84
Deltapine DPLX03X179R	4.2	1.20	34.2	85
Deltapine DPLX04Y170BR	4.4	1.20	33.6	85
Deltapine DPLX05X648DR	4.7	1.16	28.9	83
Fiber Max 991R	3.9	1.20	34.0	84
Fiber Max FM 960BR	4.3	1.14	33.9	84
Fiber Max FM 989 BR	4.3	1.17	32.6	85
Fiber Max FM 989 RR	4.0	1.15	34.1	85
Fiber Max FM 989B2R	4.2	1.18	34.0	85
Fiber Max FM 991B2R	4.3	1.20	33.3	84
Fiber Max FM 991BR	4.8	1.16	32.9	84
PhytoGen PHY 510RR	4.5	1.22	33.6	85
Stoneville ST 5303R	4.3	1.13	33.0	85
Stoneville ST 5599BR	4.4	1.16	32.6	83
Stoneville ST 6636BR	4.6	1.12	29.5	83
Stoneville ST 6848R	4.4	1.20	33.6	85

TABLE 22.A. COTTON FIBER ANALYSIS, HVI, OF EARLY SEASON COTTON VARIETIES AT SHORTER, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
Early season				
Deltapine DP 393	4.7	1.18	30.9	85
Deltapine DP 424 BGII/RR	4.9	1.13	29.1	84
Deltapine DP 432 RR	4.6	1.10	29.2	84
Deltapine DP 434 RR	4.6	1.16	27.1	84
Deltapine DP 444BG/RR	4.1	1.11	29.0	83
Deltapine DP 445BG/RR	4.7	1.14	28.8	83
Deltapine DP 454BG/RR	4.5	1.07	29.4	83
Deltapine DP 455BG/RR	4.5	1.11	30.3	83
Deltapine DP 555 BG/RR	4.3	1.10	29.0	83
Deltapine DPLX03X179R	4.9	1.13	32.4	84
Deltapine DPLX04Y170BR	4.7	1.13	29.9	83
Fiber Max FM 958LL	4.2	1.20	33.3	84
Fiber Max FM 960B2R	4.8	1.16	32.1	83
Fiber Max FM 960BR	5.0	1.08	31.6	83
Fiber Max FM 960RR	4.5	1.14	32.6	83
Fiber Max FM 966LL	4.2	1.11	33.8	83
PhytoGen PHY 310R	4.7	1.07	31.1	84
PhytoGen PHY 370WR	4.8	1.11	30.0	83
PhytoGen PHY 410RR	4.7	1.10	30.3	84
PhytoGen PHY 440W	4.2	1.14	29.5	83
PhytoGen PHY 470WR	4.6	1.09	29.2	83
PhytoGen PHY 480WR	4.7	1.13	32.3	84
PM 2167R	4.4	1.02	28.7	82
Stoneville ST 4575BR	5.0	1.08	30.0	84
Stoneville ST 4686R	4.6	1.08	29.3	83
Stoneville ST 4892BR	4.9	1.09	29.5	83
Stoneville ST5242BR	4.8	1.05	27.9	82
Stoneville STX0416B2R	5.1	1.11	31.0	84

Table 22.b. Cotton Fiber Analysis, HVI, of Full Season Cotton Varieties at Shorter, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
	Full season			
Deltapine DP 445BG/RR	4.3	1.12	31.8	84
Deltapine DP 449 BG/RR	4.7	1.09	32.1	83
Deltapine DP 454BG/RR	4.2	1.14	26.1	84
Deltapine DP 455BG/RR	4.3	1.14	31.2	82
Deltapine DP 488 BR	4.2	1.19	29.2	85
Deltapine DP 491	4.5	1.20	31.9	84
Deltapine DP 493	5.0	1.11	31.1	83
Deltapine DP 494 RR	4.5	1.15	35.1	83
Deltapine DP 543BGII/RR	4.8	1.12	29.6	82
Deltapine DP 555 BG/RR	4.6	1.11	27.8	83
Deltapine DPLX03X179R	4.6	1.16	30.8	84
Deltapine DPLX04Y170BR	4.6	1.11	30.7	83
Deltapine DPLX05X648DR	4.8	1.11	28.6	83
Fiber Max 991R	4.6	1.13	31.4	83
Fiber Max FM 960BR	4.2	1.07	33.6	81
Fiber Max FM 989 BR	4.2	1.14	31.4	83
Fiber Max FM 989 RR	3.9	1.12	37.2	83
Fiber Max FM 989B2R	4.3	1.13	32.3	83
Fiber Max FM 991B2R	4.0	1.16	33.8	82
Fiber Max FM 991BR	4.5	1.13	34.2	83
PhytoGen Phy 72 Acala	4.3	1.16	32.4	83
PhytoGen PHY 510RR	4.3	1.12	31.1	83
Stoneville ST 5303R	5.0	1.06	33.5	83
Stoneville ST 5599BR	4.7	1.11	32.0	83
Stoneville ST 6636BR	4.5	1.13	31.0	84
Stoneville ST 6848R	4.4	1.13	34.6	84

TABLE 23.A. COTTON FIBER ANALYSIS, HVI, OF EARLY SEASON COTTON VARIETIES AT HEADLAND, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
Early season				
Deltapine DP 393	4.8	1.14	30.3	84
Deltapine DP 424 BGII/RR	4.6	1.11	26.8	83
Deltapine DP 432 RR	4.7	1.12	29.8	83
Deltapine DP 434 RR	4.5	1.15	28.4	82
Deltapine DP 444BG/RR	4.1	1.17	31.8	85
Deltapine DP 445BG/RR	4.9	1.12	29.5	83
Deltapine DP 454BG/RR	4.6	1.14	27.1	83
Deltapine DP 455BG/RR	4.4	1.16	30.1	82
Deltapine DP 555 BG/RR	4.6	1.14	28.9	82
Deltapine DPLX03X179R	4.9	1.16	30.4	84
Deltapine DPLX04Y170BR	4.6	1.14	29.5	82
Fiber Max FM 958LL	4.7	1.21	32.5	84
Fiber Max FM 960B2R	4.7	1.17	30.7	82
Fiber Max FM 960BR	4.7	1.11	31.9	82
Fiber Max FM 960RR	4.0	1.20	33.8	83
Fiber Max FM 966LL	4.7	1.14	32.3	82
PhytoGen PHY 310R	4.9	1.14	29.0	83
PhytoGen PHY 370WR	4.6	1.10	30.2	83
PhytoGen PHY 410RR	4.6	1.15	29.5	84
PhytoGen PHY 440W	4.6	1.17	28.1	83
PhytoGen PHY 470WR	4.3	1.13	28.9	83
PhytoGen PHY 480WR	4.8	1.17	29.6	83
Stoneville ST 4575BR	4.8	1.13	28.5	83
Stoneville ST 4686R	5.1	1.14	29.7	83
Stoneville ST5242BR	4.4	1.11	27.3	83
Stoneville STX0416B2R	4.7	1.13	30.2	83

TABLE 23.B. COTTON FIBER ANALYSIS, HVI, OF FULL SEASON COTTON VARIETIES AT HEADLAND, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
	Full season			
Deltapine DP 445BG/RR	4.7	1.14	30.0	82
Deltapine DP 449 BG/RR	4.7	1.12	29.8	83
Deltapine DP 454BG/RR	4.2	1.14	29.7	83
Deltapine DP 455BG/RR	4.3	1.13	31.0	83
Deltapine DP 488 BR	4.7	1.23	30.2	83
Deltapine DP 491	4.6	1.22	31.1	83
Deltapine DP 493	5.0	1.12	30.3	83
Deltapine DP 494 RR	4.7	1.16	31.3	83
Deltapine DP 543BGII/RR	4.8	1.15	31.8	83
Deltapine DP 555 BG/RR	4.7	1.11	28.3	81
Deltapine DPLX03X179R	5.0	1.16	31.6	84
Deltapine DPLX04Y170BR	5.0	1.12	28.1	83
Deltapine DPLX05X648DR	4.5	1.14	28.7	82
Fiber Max 991R	4.8	1.13	30.2	83
Fiber Max FM 960BR	4.9	1.08	32.9	83
Fiber Max FM 989 BR	4.5	1.17	32.6	83
Fiber Max FM 989 RR	4.4	1.11	34.8	83
Fiber Max FM 989B2R	4.2	1.17	32.7	83
Fiber Max FM 991B2R	4.3	1.15	32.6	83
Fiber Max FM 991BR	4.9	1.13	31.7	82
PhytoGen PHY 510RR	4.8	1.15	32.5	82
Stoneville ST 5303R	4.8	1.12	33.4	84
Stoneville ST 5599BR	4.8	1.16	30.9	83
Stoneville ST 6636BR	4.7	1.14	30.5	83
Stoneville ST 6848R	4.8	1.12	33.5	83

TABLE 24A. COTTON FIBER ANALYSIS, HVI, OF EARLY SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
	Early season			
Deltapine DP 393	4.7	1.18	32.2	83
Deltapine DP 424 BGII/RR	4.0	1.14	34.0	84
Deltapine DP 432 RR	4.2	1.17	31.2	83
Deltapine DP 434 RR	3.5	1.24	30.7	84
Deltapine DP 444BG/RR	3.2	1.16	31.4	84
Deltapine DP 445BG/RR	4.4	1.17	31.2	83
Deltapine DP 454BG/RR	3.4	1.11	31.3	82
Deltapine DP 455BG/RR	3.8	1.16	31.0	82
Deltapine DP 555 BG/RR	4.2	1.13	31.8	81
Deltapine DPLX03X179R	4.5	1.19	34.1	83
Deltapine DPLX04Y170BR	4.2	1.15	31.1	83
Fiber Max FM 958LL	3.9	1.22	35.3	83
Fiber Max FM 960B2R	4.1	1.20	36.2	83
Fiber Max FM 960BR	4.3	1.11	35.9	83
Fiber Max FM 960RR	3.8	1.15	32.2	82
Fiber Max FM 966LL	4.2	1.13	36.8	83
PhytoGen PHY 310R	4.2	1.11	32.4	83
PhytoGen PHY 370WR	4.4	1.12	30.7	83
PhytoGen PHY 410RR	4.1	1.14	32.3	84
PhytoGen PHY 440W	3.9	1.18	29.6	83
PhytoGen PHY 470WR	4.0	1.11	31.8	82
PhytoGen PHY 480WR	4.0	1.17	32.6	83
Stoneville ST 4575BR	3.9	1.16	30.9	82
Stoneville ST 4686R	4.1	1.13	32.1	83
Stoneville ST5242BR	3.4	1.11	31.8	82
Stoneville STX0416B2R	4.2	1.12	32.8	82

†The test at Fairhope was harvested after receiving 3 inches of rain from Hurricane Rita, which caused losses before harvest. Fairhope also endured two tropical storms (Arlene and Cindy) and three hurricanes (Dennis, Katrina, and Rita) during the growing season.

Table 24b. Cotton Fiber Analysis, HVI, of Full Season Cotton Varieties at Fairhope, Alabama, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
	Full season			
Deltapine DP 445BG/RR	3.7	1.20	31.9	85
Deltapine DP 449 BG/RR	3.9	1.17	33.1	83
Deltapine DP 454BG/RR	3.7	1.15	30.9	83
Deltapine DP 455BG/RR	3.6	1.19	31.1	83
Deltapine DP 488 BR	3.9	1.22	32.3	83
Deltapine DP 491	4.0	1.25	33.4	83
Deltapine DP 493	4.0	1.15	31.5	84
Deltapine DP 494 RR	4.4	1.21	34.3	84
Deltapine DP 543BGII/RR	4.3	1.16	33.1	82
Deltapine DP 555 BG/RR	3.7	1.13	29.5	81
Deltapine DPLX03X179R	4.4	1.21	32.7	85
Deltapine DPLX04Y170BR	4.0	1.16	31.3	83
Deltapine DPLX05X648DR	4.3	1.14	29.4	82
Fiber Max 991R	3.9	1.18	33.8	83
Fiber Max FM 960BR	4.1	1.17	32.7	83
Fiber Max FM 989 BR	4.0	1.19	31.9	83
Fiber Max FM 989 RR	3.9	1.17	33.6	84
Fiber Max FM 989B2R	3.7	1.19	33.2	84
Fiber Max FM 991B2R	4.4	1.19	31.7	83
Fiber Max FM 991BR	4.6	1.17	32.3	83
PhytoGen PHY 510RR	4.0	1.16	31.9	83
Stoneville ST 5303R	3.9	1.11	32.8	83
Stoneville ST 5599BR	4.0	1.15	30.5	83
Stoneville ST 6636BR	4.2	1.20	33.5	83
Stoneville ST 6848R	4.5	1.17	32.6	84

†The test at Fairhope was harvested after receiving 3 inches of rain from Hurricane Rita, which caused losses before harvest. Fairhope also endured two tropical storms (Arlene and Cindy) and three hurricanes (Dennis, Katrina, and Rita) during the growing season.

TABLE 25. COTTON FIBER ANALYSIS, HVI, OF IRRIGATED COTTON VARIETIES AT BELLE MINA, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
Early season				
Deltapine DP 432 RR	4.4	1.17	31.1	85
Deltapine DP 434 RR	3.9	1.18	29.8	84
Deltapine DP 444BG/RR	3.8	1.13	30.8	84
Deltapine DP 454BG/RR	3.9	1.14	30.4	85
Deltapine DP 555 BG/RR	3.7	1.17	32.2	84
Fiber Max FM 960B2R	4.2	1.23	34.6	84
Fiber Max FM 960BR	4.4	1.11	34.9	84
Fiber Max FM 966LL	3.8	1.15	35.5	85
PhytoGen PHY 370WR	4.0	1.15	30.7	85
PhytoGen PHY 470WR	4.0	1.16	30.2	85
Stoneville ST 4575BR	4.4	1.16	30.3	84
Stoneville ST5242BR	4.1	1.12	28.0	84
Full season				
Deltapine DP 454BG/RR	3.8	1.13	29.5	83
Deltapine DP 488 BR	3.7	1.20	32.2	85
Deltapine DP 494 RR	4.2	1.19	31.9	86
Deltapine DP 555 BG/RR	3.6	1.14	32.2	83
Fiber Max FM 960BR	4.1	1.16	33.6	84
Fiber Max FM 991B2R	4.0	1.18	36.8	85
Fiber Max FM 991BR	4.4	1.17	35.5	84
PhytoGen PHY 510RR	4.1	1.20	32.6	84
Stoneville ST 5599BR	4.1	1.15	30.9	83
Stoneville ST 6636BR	4.2	1.22	31.6	85

Table 26. Cotton Fiber Analysis, HVI, of Irrigated Cotton Varieties at Headland, Alabama, 2005

Variety	Micronaire	Length	Strength	Uniformity
	units	*in.*	*g/tex*	*pct.*
Deltapine DP 424 BGII/RR	4.2	1.13	27.2	81
Deltapine DP 444BG/RR	4.3	1.14	30.2	82
Deltapine DP 445BG/RR	4.6	1.14	30.0	82
Deltapine DP 454BG/RR	4.3	1.15	31.1	84
Deltapine DP 455BG/RR	4.0	1.17	31.9	82
Deltapine DP 488 BR	4.9	1.20	32.9	83
Deltapine DP 491	5.0	1.26	33.3	83
Deltapine DP 493	5.3	1.11	29.8	81
Deltapine DP 494 RR	4.7	1.20	34.4	84
Deltapine DP 543BGII/RR	5.0	1.12	30.7	81
Deltapine DP 555 BG/RR	4.7	1.09	29.5	81
Deltapine DPLX05X648DR	5.0	1.12	28.7	81
Fiber Max FM 958LL	4.8	1.19	33.3	83
Fiber Max FM 960B2R	5.1	1.15	33.5	81
Fiber Max FM 960BR	4.6	1.10	32.7	81
Fiber Max FM 966LL	4.5	1.14	35.7	82
Fiber Max FM 991B2R	4.7	1.18	32.7	81
Fiber Max FM 991BR	4.9	1.13	32.8	82
PhytoGen PHY 370WR	4.7	1.08	28.5	81
PhytoGen PHY 440W	4.7	1.13	29.7	82
PhytoGen PHY 470WR	4.6	1.13	30.9	82
PhytoGen PHY 480WR	4.7	1.16	29.7	83
Stoneville ST 4575BR	4.7	1.12	30.2	82
Stoneville ST 5599BR	4.9	1.15	30.1	81
Stoneville ST 6636BR	4.9	1.14	34.0	83
Stoneville ST5242BR	4.4	1.14	29.4	83
Stoneville STX0416B2R	4.8	1.14	33.1	83

TABLE 27. COTTON FIBER ANALYSIS, HVI, OF FLEX COTTON VARIETIES AT BELLE MINA, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
Early season				
CG 3020 B2RF	3.1	1.12	26.8	84
CG 3520 B2RF	3.4	1.17	28.8	84
CG 4020 B2RF	3.8	1.17	27.7	83
Deltapine DP 444BG/RR	3.5	1.12	28.5	84
DP 113 B2RF	3.2	1.12	31.4	83
DP 117 B2RF	3.4	1.17	33.5	83
DP 108 RF	3.4	1.13	27.8	82
DP 110 RF	3.4	1.15	33.5	83
DG 2100 B2RF	3.4	1.11	27.3	84
DG 2520 B2RF	3.9	1.17	28.0	84
Fiber Max FM 960BR	3.8	1.09	29.9	83
PHY 415 RF	4.1	1.08	28.1	85
PHY 425 RF	4.1	1.13	30.1	84
PHY 475 WRF	4.1	1.07	29.3	84
PHY 485 WRF	4.1	1.10	29.6	84
ST 4554B2RF	4.2	1.10	31.6	82
ST 4664RF	3.9	1.11	28.1	83
Vigoro CX 601	3.5	1.13	27.4	84
Vigoro CX 621	3.5	1.17	27.5	84
xBCG - 0105 - Flex	3.0	1.21	26.9	82
xBCG - 1004 - BBII/Flex	3.5	1.15	27.1	83
xBCG - 1505 - Flex	3.5	1.13	31.8	84
xBCG - 3255 - BBII/Flex	3.1	1.12	25.9	84
xBCG - 4153 - BBII/Flex	3.3	1.13	26.6	83
xBCG - 4575 - BBII/Flex	2.9	1.13	26.4	84
xBCG - 4630 - BBII/Flex	3.8	1.19	27.1	82
xBCG - 8391 - BBII/Flex	3.6	1.20	29.6	85
xBCG - 9124 - BBII/Flex	3.5	1.19	26.8	84
Full season				
Deltapine DP 555 BG/RR	4.6	1.10	32.1	81
DP 164 B2RF	4.2	1.17	32.1	82
DP 167 RF	4.2	1.15	30.9	83
DP 143 B2RF	3.9	1.22	29.9	83
DP 156 B2RF	3.9	1.17	31.2	83
DP 147 RF	3.8	1.23	30.8	83
DP 152 RF	3.8	1.18	29.2	83
Stoneville ST 5599BR	4.4	1.10	32.7	82
STX 0414B2RF	4.1	1.13	33.2	83
ST 4357B2RF	3.7	1.18	28.9	84
ST 5007B2RF	3.3	1.24	30.5	85
STX 5885B2RF	4.5	1.17	32.9	83
ST 6611B2RF	4.5	1.16	32.8	84
ST 6622B2RF	4.0	1.17	31.8	84

TABLE 28. COTTON FIBER ANALYSIS, HVI, OF FLEX COTTON VARIETIES AT PRATTVILLE, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
Early season				
CG 3020 B2RF	3.9	1.12	28.6	83
CG 3520 B2RF	4.4	1.17	28.4	83
CG 4020 B2RF	4.1	1.22	28.7	85
Deltapine DP 444BG/RR	4.0	1.12	29.2	83
DP 113 B2RF	4.2	1.19	32.2	83
DP 117 B2RF	4.3	1.16	34.4	83
DP 108 RF	4.1	1.16	33.4	83
DP 110 RF	4.0	1.10	31.7	83
DG 2100 B2RF	4.4	1.16	29.8	85
DG 2520 B2RF	4.3	1.18	29.1	84
Fiber Max FM 960BR	4.2	1.15	36.2	84
PHY 415 RF	4.3	1.12	29.9	84
PHY 425 RF	5.0	1.12	31.7	84
PHY 475 WRF	4.7	1.16	32.3	84
PHY 485 WRF	4.5	1.15	30.9	84
ST 4554B2RF	4.2	1.15	30.0	83
ST 4664RF	4.3	1.14	30.4	83
Vigoro CX 601	4.0	1.15	28.5	83
Vigoro CX 621	4.1	1.21	30.3	84
xBCG - 0105 - Flex	3.5	1.20	30.0	83
xBCG - 1004 - BBII/Flex	4.0	1.18	28.5	85
xBCG - 1505 - Flex	4.1	1.15	32.6	83
xBCG - 3255 - BBII/Flex	4.2	1.12	28.2	84
xBCG - 4153 - BBII/Flex	4.2	1.18	29.1	83
xBCG - 4575 - BBII/Flex	3.6	1.13	29.2	83
xBCG - 4630 - BBII/Flex	4.2	1.20	28.7	83
xBCG - 8391 - BBII/Flex	3.8	1.24	29.6	85
xBCG - 9124 - BBII/Flex	4.2	1.21	28.7	84
Full season				
Deltapine DP 555 BG/RR	4.9	1.15	30.5	82
DP 164 B2RF	4.9	1.20	31.9	84
DP 167 RF	4.2	1.21	31.7	83
DP 143 B2RF	4.4	1.26	30.9	84
DP 156 B2RF	4.5	1.19	28.9	83
DP 147 RF	4.4	1.22	31.7	84
DP 152 RF	4.2	1.18	29.5	83
Stoneville ST 5599BR	4.5	1.16	32.6	82
STX 0414B2RF	4.5	1.12	29.5	83
ST 4357B2RF	4.4	1.19	27.9	84
ST 5007B2RF	4.4	1.20	29.5	84
STX 5885B2RF	4.5	1.20	32.1	83
ST 6611B2RF	4.7	1.16	31.0	84
ST 6622B2RF	4.6	1.16	32.7	84

TABLE 29. COTTON FIBER ANALYSIS, HVI, OF FLEX COTTON VARIETIES AT FAIRHOPE, 2005

Variety	Micronaire *units*	Length *in.*	Strength *g/tex*	Uniformity *pct.*
Early season				
CG 3020 B2RF	4.3	1.15	30.1	83
CG 3520 B2RF	4.2	1.23	31.7	84
CG 4020 B2RF	4.1	1.24	30.1	83
Deltapine DP 444BG/RR	3.8	1.16	32.3	83
DP 113 B2RF	4.2	1.15	32.9	81
DP 117 B2RF	4.1	1.13	34.3	82
DP 108 RF	4.2	1.12	33.2	82
DP 110 RF	4.3	1.15	31.2	82
DG 2100 B2RF	4.1	1.13	29.9	81
DG 2520 B2RF	4.0	1.18	30.7	81
Fiber Max FM 960BR	4.4	1.09	36.1	81
PHY 415 RF	4.3	1.17	34.3	82
PHY 425 RF	4.6	1.16	33.1	84
PHY 475 WRF	4.0	1.14	30.8	82
PHY 485 WRF	4.5	1.17	33.0	83
ST 4554B2RF	4.4	1.15	32.9	81
ST 4664RF	4.5	1.15	30.7	82
Vigoro CX 601	3.8	1.13	30.5	82
Vigoro CX 621	3.8	1.21	31.8	83
xBCG - 0105 - Flex	3.3	1.19	32.2	81
xBCG - 1004 - BBII/Flex	4.2	1.19	28.6	82
xBCG - 1505 - Flex	3.9	1.13	33.7	81
xBCG - 3255 - BBII/Flex	3.7	1.13	28.8	82
xBCG - 4153 - BBII/Flex	4.1	1.15	28.2	81
xBCG - 4575 - BBII/Flex	3.8	1.14	29.8	82
xBCG - 4630 - BBII/Flex	4.1	1.19	30.4	83
xBCG - 8391 - BBII/Flex	4.5	1.22	30.8	83
xBCG - 9124 - BBII/Flex	4.1	1.21	30.2	83
Full season				
Deltapine DP 555 BG/RR	4.8	1.11	30.5	82
DP 164 B2RF	4.5	1.22	31.4	84
DP 167 RF	4.2	1.20	31.7	84
DP 143 B2RF	3.9	1.23	29.6	82
DP 156 B2RF	4.1	1.16	29.3	81
DP 147 RF	3.7	1.26	30.1	82
DP 152 RF	4.3	1.20	29.8	83
Stoneville ST 5599BR	4.2	1.16	31.8	83
STX 0414B2RF	4.3	1.16	33.2	83
ST 4357B2RF	4.4	1.24	28.5	84
ST 5007B2RF	4.1	1.24	29.5	84
STX 5885B2RF	3.9	1.19	30.9	83
ST 6611B2RF	4.9	1.14	30.8	83
ST 6622B2RF	4.8	1.17	32.9	84

†The test at Fairhope was harvested after receiving 3 inches of rain from Hurricane Rita, which caused losses before harvest. Fairhope also endured two tropical storms (Arlene and Cindy) and three hurricanes (Dennis, Katrina, and Rita) during the growing season.

TABLE 30. DISEASE INDEX, SEED COTTON YIELD, AND LINT PERCENTAGE OF EARLY SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 2005

Variety	Disease index[†] 16 Sep		Seed cotton lbs/acre	% lint
PhytoGen PHY 310R	33.0	a-d[‡]	1105	0.42
Stoneville ST5242BR	34.8	a-d	1016	0.38
Fiber Max FM 960RR	34.1	a-d	1012	0.37
Stoneville STX0416B2R	30.1	a-e	1010	0.37
Fiber Max FM 966LL	36.8	abc	1001	0.37
PhytoGen PHY 370WR	22.4	e	997	0.39
PhytoGen PHY 440W	26.2	de	985	0.38
Deltapine DPLX03X179R	27.3	b-e	955	0.41
PhytoGen PHY 410RR	32.6	a-e	939	0.37
Deltapine DP 555 BG/RR	31.1	a-e	937	0.40
Deltapine DP 393	28.6	a-e	925	0.39
PhytoGen PHY 470WR	26.7	cde	919	0.37
Stoneville ST 4575BR	27.3	b-e	910	0.39
Deltapine DP 432 RR	29.3	a-e	907	0.37
Deltapine DP 434 RR	27.6	a-e	888	0.39
Fiber Max FM 958LL	30.6	a-e	885	0.37
Deltapine DP 445BG/RR	37.6	a	878	0.39
PhytoGen PHY 480WR	25.6	de	822	0.36
Deltapine DP 454BG/RR	28.4	a-e	813	0.41
Deltapine DPLX04Y170BR	34.4	a-d	801	0.41
Fiber Max FM 960B2R	32.9	a-d	795	0.38
Fiber Max FM 960BR	35.1	a-d	778	0.37
Stoneville ST 4686R	37.4	ab	775	0.39
Deltapine DP 424 BGII/RR	33.4	a-d	774	0.37
Deltapine DP 444BG/RR	26.7	cde	766	0.39
Deltapine DP 455BG/RR	33.5	a-d	744	0.40
LSD (0.10)	10.2		175	

[†] Disease index = (# diseased bolls / total # healthy bolls)*100.

[‡] Means within columns followed by different letters are significantly different according to Fisher's protected LSD ($P \leq 0.10$).

TABLE 31. DISEASE INDEX, SEED COTTON YIELD, AND LINT PERCENTAGE OF FULL SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 2005

Variety	Disease index† 16 Sep	Seed cotton lb/A	Lint %
Deltapine DP 454BG/RR	11.5‡	1141	0.42
Deltapine DP 455BG/RR	11.7	1024	0.41
Deltapine DP 543BGII/RR	7.5	989	0.38
Deltapine DPLX04Y170BR	7.3	969	0.40
Fiber Max FM 989 BR	18.7	949	0.38
Fiber Max FM 989 RR	9.0	929	0.38
Deltapine DP 449 BG/RR	10.3	928	0.39
PhytoGen PHY 510RR	6.1	912	0.39
Stoneville ST 6636BR	11.8	912	0.37
Deltapine DPLX03X179R	6.8	910	0.41
Deltapine DP 555 BG/RR	11.4	909	0.40
Deltapine DPLX05X648DR	13.4	883	0.41
Deltapine DP 445BG/RR	12.5	876	0.41
Stoneville ST 5303R	11.9	872	0.38
Fiber Max FM 960BR	8.5	868	0.38
Fiber Max FM 991BR	7.8	866	0.38
Deltapine DP 493	10.9	855	0.43
Deltapine DP 491	10.3	840	0.39
Deltapine DP 488 BG/RR	15.9	839	0.38
Fiber Max FM 989B2R	15.6	835	0.36
Fiber Max FM 991B2R	10.9	821	0.37
Stoneville ST 5599BR	9.4	804	0.39
Stoneville ST 6848R	18.0	801	0.37
Deltapine DP 494 RR	8.1	748	0.39
Fiber Max 991R	14.4	722	0.38
LSD (0.10)	7.5	132.3	

† Disease index = (# diseased bolls / total # healthy bolls)*100.

‡ Means within columns followed by different letters are significantly different according to Fisher's protected LSD ($P \leq 0.10$).

TABLE 32. DISEASE INDEX, SEED COTTON YIELD, AND LINT PERCENTAGE OF EARLY SEASON-FLEX RR COTTON VARIETIES AT FAIRHOPE, ALABAMA, 2005

Variety	Disease index† 16 Sep		Seed cotton lbs/acre	% lint
STX 4554B2RF	21.3	ab‡	1167	0.41
CG 4020 B2RF	20.8	abc	1163	0.40
xBCG - 4630 - BBII/Flex	12.9	b-g	1137	0.40
CG 3020 B2RF	11.7	b-g	1113	0.41
Vigoro CX 621	6.7	fg	1049	0.40
xBCG - 1004 - BBII/Flex	18.6	a-d	1032	0.39
DP 117 B2RF	9.4	efg	1013	0.41
xBCG - 9124 - BBII/Flex	15.9	b-f	1005	0.40
DynaGro 2520 B2 RF	27.2	a	994	0.39
CG 3520 B2RF	18.8	a-d	988	0.38
PHY 415 RF	10.5	d-g	975	0.40
PHY 485 WRF	5.4	g	975	0.40
Fiber Max FM 960BR	13.0	b-g	973	0.39
Vigoro CX 601	16.0	b-f	968	0.38
PHY 425 RF	10.0	efg	969	0.41
PHY 475 WRF	14.1	b-g	964	0.41
STX 4664RF	11.2	c-g	959	0.41
xBCG - 4153 - BBII/Flex	9.5	efg	944	0.39
xBCG - 3255 - BBII/Flex	8.6	fg	941	0.38
xBCG - 4575 - BBII/Flex	7.1	fg	928	0.38
Deltapine DP 444BG/RR	11.0	c-g	922	0.41
DP 110 RF	10.7	d-g	896	0.39
DP 108 RF	26.9	a	895	0.40
DP 113 B2RF	20.8	abc	894	0.40
xBCG - 8391 - BBII/Flex	16.5	b-f	865	0.37
DynaGro 2100 B2 RF	20.0	a-d	845	0.37
LSD (.10)	9.9		83.8	

† Disease index = (# diseased bolls / total # healthy bolls)*100.

‡ Means within columns followed by different letters are significantly different according to Fisher's protected LSD ($P \leq 0.10$).

TABLE 33. DISEASE INDEX, SEED COOTTON YIELD, AND LINT PERCENTAGE OF FULL SEASON-FLEX RR COTTON VARIETIES AT FAIRHOPE, ALABAMA, 2005

Variety	Disease index† 16 Sep	Seed cotton lbs/acre	% lint
Stoneville ST 4357B2RF	8.43‡	1039	0.40
Deltapine DP 555 BG/RR	5.34	1018	0.43
Deltapine DP 164 B2RF	15.19	987	0.40
Deltapine DP 167 RF	14.46	832	0.40
Deltapine DP 143 B2RF	10.89	883	0.39
Deltapine DP 156 B2RF	11.57	973	0.41
Deltapine DP 147 RF	5.65	921	0.39
Deltapine DP 152 RF	10.19	813	0.38
Stoneville ST 5599BR	16.02	983	0.41
Stoneville STX 0414B2RF	12.48	987	0.38
Stoneville ST 5007B2RF	7.65	928	0.39
Stoneville STX 5885B2RF	11.71	908	0.37
Stoneville STX 6611B2RF	16.83	920	0.39
Stoneville ST 6622B2RF	5.72	955	0.41
LSD(0.10)	9.66	67.5	

† Disease index = (# diseased bolls / total # healthy bolls)*100.

‡ Means within columns followed by different letters are significantly different according to Fisher's protected LSD ($P \leq 0.10$).

TABLE 34. GROWING SEASON RAINFALL, 2003-2005

Test location	Year	Monthly rainfall (inches)							7-month total
		Mar.	Apr.	May	June	July	Aug.	Sept.	
Belle Mina	2005	3.6	5.4	1.4	3.7	6.6	3.5	3.4	27.6
	2004	5.4	4.3	3.2	5.1	7.8	3.0	3.5	32.3
	2003	2.2	4.3	9.8	5.0	4.6	3.0	8.6	37.5
Shorter	2005	11.1	7.8	2.2	3.1	10.1	3.2	2.0	39.5
	2004	0.8	3.1	4.0	7.4	2.4	4.9	6.4	29.0
	2003	6.7	9.1	6.0	6.6	7.8	6.9	4.5	47.6
Prattville	2005	8.5	6.8	3.4	4.0	9.2	3.9	3.2	39.0
	2004	1.4	3.5	5.2	8.8	2.0	5.7	6.0	32.6
	2003	5.2	8.8	4.8	7.4	6.6	8.0	2.2	43.0
Headland	2005	5.5	9.2	3.1	11.1	5.3	7.9	1.7	43.8
	2004	0.5	4.4	3.9	9.8	4.4	2.1	7.1	32.2
	2003	6.0	9.2	3.4	8.8	7.5	6.1	4.7	45.7
Fairhope	2005	4.3	20.5	7.1	10.4	11.4	11.4	4.7	69.8
	2004	0.1	2.3	2.0	10.8	4.7	8.3	12.6	41.4
	2003	5.2	3.1	5.8	9.5	18.4	5.2	3.7	50.9

TABLE 35. SOIL TYPES FOR 2005 COTTON TRIAS

Test location	Soil type
Belle Mina	Decatur silt loam
E.V. Smith Research Center	
Field Crops Unit, Shorter	Compass sandy loam
Prattville	Lucedale fine sandy loam
Headland	Dothan sandy loam
Fairhope	Malbis fine sandy loam

TABLE 36. SOURCES OF SEED FOR THE 2005 COTTON VARIETY TRIALS

Delta and Pine Land Co., Scott, Mississippi

Deltapine DP 393
Deltapine DP 491
Deltapine DP 493
Deltapine DP 432RR
Deltapine DP 434RR
Deltapine DP 494RR
Deltapine DP 444BRR
Deltapine DP 445BRR
Deltapine DP 449BRR
Deltapine DP 454BRR
Deltapine DP 455BRR
Deltapine DP 488BRR
Deltapine DP 555BRR
Deltapine DP 424BII/RR
Deltapine DP 543BII/RR
Deltapine DPLX04Y170BR
Deltapine DPLX03X179R
Deltapine DPLX05X648DR
Deltapine DP 113 B2RF
Deltapine DP 117 B2RF
Deltapine DP 143 B2RF
Deltapine DP 156 B2RF
Deltapine DP 164 B2RF
Deltapine DP 108 RF
Deltapine DP 110 RF
Deltapine DP 147 RF
Deltapine DP 152 RF
Deltapine DP 167 RF

Aventis Crop Sciences, Collierville, Tennessee

FiberMax FM 958LL
FiberMax FM 966LL
FiberMax FM 960RR
FiberMax FM 960BR
FiberMax FM 960B2R
FiberMax FM 991B2R
FiberMax FM 991RR
FiberMax FM 991BR
FiberMax FM 989RR
FiberMax FM 989BR
FiberMax FM 989B2R

PhytoGen Seed Company, Leland, Mississippi

PhytoGen PHY 310 RR
PhytoGen PHY 370 RR
PhytoGen PHY 410 RR
PhytoGen PHY 440 W
PhytoGen PHY 470 WR
PhytoGen PHY 480 WR
PhytoGen PHY 510 RR
PhytoGen PHY 415 RF
PhytoGen PHY 425 RF
PhytoGen PHY 475 WRF
PhytoGen PHY 485 WRF

TABLE 36. CONTINUED

Stoneville Pedigreed Seed Co., Stoneville, Mississippi

Stoneville ST 5303R
Stoneville ST 4686R
Stoneville ST 6848R
Stoneville ST 4575BR
Stoneville ST 5242BR
Stoneville ST 5599BR
Stoneville ST 6636BR
Stoneville STX0416B2R
Stoneville ST 4664RF
Stoneville ST 6622RF
Stoneville ST 4554B2RF
Stoneville STX5885B2RF
Stoneville ST 6611B2RF
Stoneville STX0414B2RF
Stoneville STX0509B2RF
Stoneville STX0510B2RF

Beltwide Cotton Genetics, McCrory, Arkansas

xBCG-9124-BBII/Flex
xBCG-8391-BBII/Flex
xBCG-4630-BBII/Flex
xBCG-4153-BBII/Flex
xBCG-3255-BBII/Flex
xBCG-1004-BBII/Flex
xBCG-4575-BBII/Flex
xBCG-1505-Flex
xBCG-0105-Flex

United Agri Products, Kinston, Alabama

DynaGro 2100 B2RF
DynaGro 2520 B2RF

Croplan Genetics, Memphis, Tennessee

Croplan Genetics CG 3020 B2RF
Croplan Genetics CG 3250 B2RF
Croplan Genetics CG 4020 B2RF

Royster Clark, Inc., Washington CH, Ohio

Vigoro CX 601
Vigoro CX 621

CPCS Distributor, Shafter, California

Acala 1517-99
AllTex Atlas