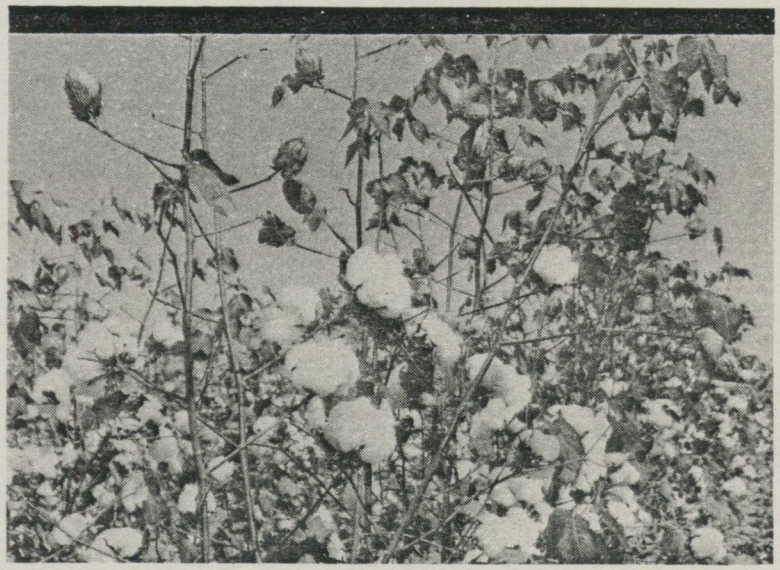

1985 Alabama Cotton Variety Report

Agronomy and Soils Departmental Series No. 106 January 1986
Alabama Agricultural Experiment Station Auburn University
David H. Teem, Acting Director Auburn University, Alabama

TABLE OF CONTENTS

1985 Alabama Cotton Variety Report

A Report of the Performance of Cotton Varieties Tested in Alabama

W.C. Johnson and Darrell Williams[1]

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 Auburn University to farmers. Every effort is made to test the varieties and present the results in an unbiased manner.

EXPERIMENTAL CONDITIONS

A randomized block experimental design with four replications was used at each location. Plot row length at different locations varied from 40 to 120 feet. Plots were two-row at Prattville, Headland, Belle Mina, Shorter, and Crossville. Single-row plots were used at Tallassee, Brewton, and Monroeville. Climatic conditions were hot and dry until mid-June throughout Alabama. July and August were near normal, with September being wetter than usual in southern areas and dryer in northern Alabama. Generally, the season was better than average as evidenced by the 1,033-pound average lint yield for all tests.

---

[1] Respectively, Professor and Research Associate (resigned) of Agronomy and Soils.

EXPLANATION OF DATA

Harvest of Seed Cotton

Tests at Prattville, Brewton, Monroeville, Tallassee, Belle Mina, and Shorter were harvested by a mechanical spindle picker. Tests at Headland and Crossville were harvested by hand. Average yield of seed cotton was determined for each variety at each location.

Lint Percentage

A sample of seed cotton from each variety at each location was taken at harvest and ginned on a 10-saw gin. Lint percentage was calculated by dividing weight of lint by weight of seed cotton.

Yield of Lint

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

Fiber Properties

Fiber qualities of all varieties from selected locations were determined by Starlab, a commercial fiber testing laboratory in Knoxville, Tennessee.

Span Length. This is the fiber length measured with the digital fibrograph. The 2.5 percent length is the average length of the longest 2.5 percent of the fibers and the 50 percent length is the average length of the longest 50 percent of the fibers. The 2.5 percent length is about the same as the classer's staple.

Stelometer. T_1 is a measure of breaking strength of a standard fiber bundle with the holding jaws separated by 1/8 inch. This is a measurement similar to Pressley strength except the figures are in grams per tex. Tex is a size measurement of the fiber bundle. The larger the T_1, the stronger the fibers. E_1 measures the percentage stretch before the fibers break.

Micronaire. This measures the fineness and maturity of the cotton fibers. The smaller the micronaire reading, the finer and/or more immature the fibers. The desirable range of micronaire is 3.5 to 4.9.

Earliness

Where more than one harvest was made, earliness is reported as the percentage of the total yield harvested at the first picking.

Fusarium wilt

Reaction of varieties to Fusarium oxysporum f. vasinfectum (fusarium wilt) was evaluated at the Plant Breeding Unit, Tallassee. The varieties were grown in a field with a high natural incidence of the fusarium wilt disease. Severity of the disease varies from year to year and also within the experimental area in the same year. Therefore, several years' data are necessary to realistically characterize a variety's wilt reaction. Stoneville 213 and Stoneville 825 have consistently shown a high incidence of wilt. All other reported varieties that have been tested for at least 3 years have acceptable tolerance to fusarium wilt.

Verticillium wilt is being more frequently identified in northern Alabama than previously. Varietal comparisons reported in table 10 do not apply in any way to this disease.

NEW AND EXPERIMENTAL VARIETIES

The cotton variety tested under the experimental designation GAT 72-56 has been named Tifcot 56 and released by the Georgia Agricultural Experiment Station at Tifton. Seed will not be available for the 1986 season. The experimental line KNX 2019 has been released by Northrup King Co., but not yet named. Some seed will be available for planting in 1986. PD-1 and PD-2 are new varieties developed at the Pee Dee

Experiment Station in South Carolina. Seed information is available from the South Carolina Department of Seed Certification, Clemson, South Carolina. Stoneville 112 has been released and seed will be available for 1986. Both Coker 81-102 and Coker 81-139 are still experimental lines and will not be available for this season. Deltapine 20 is a new release with seed available for 1986.

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 avarages necessary to be considered a real difference is given for each location. It is designated Least Significant Difference ($L.S.D._{.05}$).

LOCATIONS OF EXPERIMENTS

Tennessee Valley Substation, Belle Mina - W.B. Webster, Superintendent
Sand Mountain Substation, Crossville - J.T. Eason, Superintendent
Prattville Experiment Field - D.P. Moore, Superintendent
E.V. Smith Research Center, Shorter - W.B. Gordon, Superintendent
Plant Breeding Unit, Tallassee - S.P. Nightengale, Superintendent
Brewton Experiment Field - J.R. Akridge, Superintendent
Monroeville Experiment Field - J.R. Akridge, Superintendent
Wiregrass Substation, Headland - H.W. Ivey, Superintendent

TABLE 1. PERFORMANCE OF COTTON VARIETIES AT BELLE MINA, ALABAMA, 1985

VARIETY	1985 LINT/ACRE	1985 LINT EARLINESS	1985	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LBS.	PCT.	PCT.	LBS.	LBS.
DELTAPINE 50	1191	38	86	1212	945
KNX 2019	1171	40	80	-	-
COKER 3131	1133	42	81	1095	840
COKER 208	1119	41	87	1106	850
PD-1	1108	42	82	1114	854
COKER 81-139	1107	40	83	-	-
MCNAIR 235	1090	40	82	1057	835
GAT 72-56	1079	42	88	1080	-
COKER 310	1066	40	85	1038	808
MCNAIR 220	1042	39	87	1033	812
STONEVILLE 112	1041	39	83	1027	-
DELTAPINE 61	1022	41	88	1031	791
DELCOT 311	1016	38	82	1087	830
STONEVILLE 825	1011	40	88	1013	817
DELTAPINE 20	1008	40	90	1074	846
COKER 315	1006	41	81	1028	793
DES 422	998	40	85	1029	824
PD-2	986	39	85	-	-
COKER 304	980	40	86	1049	811
COKER 81-102	970	41	81	1005	-
STONEVILLE 213	969	39	88	1021	821
MCNAIR 308	950	39	84	-	-
STONEVILLE 506	939	39	87	1030	800
DELTAPINE 90	927	39	84	1025	801
DELTAPINE 41	905	43	90	864	684
PAYMASTER 145	880	39	80	897	-
ACALA SJC-1	718	38	77	760	-
TEST MEAN	1016				
L.S.D. (.05)	165				
C.V.	12%				

TABLE 2. PERFORMANCE OF COTTON VARIETIES AT CROSSVILLE, ALABAMA, 1985

VARIETY	1985 LINT/ACRE	1985 LINT	1985 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
COKER 3131	684	38	-	905	795
DELTAPINE 20	683	39	-	829	708
DELTAPINE 41	676	40	-	819	658
MCNAIR 220	657	37	-	871	759
DES 422	653	40	-	902	756
DELTAPINE 50	645	35	-	849	724
STONEVILLE 506	619	36	-	826	712
KNX 2019	617	37	-	-	-
DELTAPINE 61	609	38	-	831	668
DELCOT 311	606	37	-	696	636
COKER 81-139	593	36	-	-	-
PD-2	592	35	-	-	-
MCNAIR 308	577	37	-	-	-
MCNAIR 235	571	36	-	801	700
COKER 310	557	39	-	752	640
COKER 304	556	38	-	807	663
PD-1	555	37	-	-	-
STONEVILLE 112	548	36	-	722	-
STONEVILLE 825	546	37	-	815	684
COKER 315	530	40	-	829	673
COKER 81-102	503	39	-	702	-
STONEVILLE 213	456	36	-	679	588
COKER 208	423	36	-	654	572
DELTAPINE 90	366	37	-	658	577
TEST MEAN	576				
L.S.D. (.05)	131				
C.V.	16%				

TABLE 3. PERFORMANCE OF COTTON VARIETIES AT PRATTVILLE, ALABAMA, 1985

VARIETY	1985 LINT/ACRE	1985 LINT	1985 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DELTAPINE 90	1333	42	88	1448	1315
COKER 81-139	1282	41	91	-	-
DELTAPINE 61	1256	42	85	1314	1178
DES 422	1255	42	91	1342	1243
STONEVILLE 825	1244	42	88	1336	1206
STONEVILLE 213	1241	41	90	1349	1197
COKER 315	1234	43	87	1373	1196
DELTAPINE 41	1230	45	89	1302	1210
COKER 310	1213	41	88	1283	1156
COKER 3131	1209	42	89	1312	1158
DELTAPINE 50	1201	40	90	1311	1193
STONEVILLE 112	1185	41	89	1309	-
STONEVILLE 506	1183	39	91	1276	1162
DELCOT 311	1174	40	91	1207	1108
COKER 208	1171	41	87	1332	1198
DELTAPINE 20	1136	41	89	1257	1161
COKER 304	1124	41	90	1288	1108
MCNAIR 235	1114	40	92	1121	1061
MCNAIR 220	1108	41	92	1223	1126
KNX 2019	1104	41	87	-	-
PD-1	1087	42	88	-	-
COKER 81-102	1087	42	89	1299	-
PD-2	1059	39	92	-	-
MCNAIR 308	860	39	88	-	-
TEST MEAN	1170				
L.S.D. (.05)	115				
C.V.	7%				

TABLE 4. PERFORMANCE OF COTTON VARIETIES AT TALLASSEE, ALABAMA, 1985

VARIETY	1985 LINT/ACRE	1985 LINT EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	LB.	LB.
DELTAPINE 90	1040	41	1034	1087
DELTAPINE 41	988	43	1024	1127
DELTAPINE 20	936	40	1039	1073
KNX 2019	930	40	-	-
MCNAIR 220	920	40	991	1061
COKER 315	918	42	882	1005
COKER 3131	875	41	1023	1030
DELTAPINE 50	845	38	967	1045
MCNAIR 235	845	39	887	1021
COKER 81-139	837	40	-	-
DES 422	824	40	878	953
DELTAPINE 61	805	40	937	1034
STONEVILLE 825	800	41	972	1026
PD-1	775	41	-	-
COKER 81-102	775	40	972	-
STONEVILLE 112	773	40	912	-
STONEVILLE 213	757	39	990	1036
COKER 310	738	41	914	1008
COKER 208	705	38	886	1012
STONEVILLE 506	690	39	909	972
COKER 304	671	39	789	922
MCNAIR 308	671	38	-	-
PD-2	658	38	-	-
DELCOT 311	640	38	821	901
TEST MEAN	809			
L.S.D. (.05)	147			
C.V.	13%			

TABLE 5. PERFORMANCE OF COTTON VARIETIES AT SHORTER, ALABAMA, 1985

VARIETY	1985 LINT/ACRE LBS.	1985 LINT EARLINESS PCT.	2-YR. AV. LINT/ACRE LBS.	3-YR. AV. LINT/ACRE LBS.
GAT 72-56	1351	41	-	1278	-
COKER 315	1305	42	-	1208	953
STONEVILLE 213	1285	43	-	1107	933
COKER 3131	1233	41	-	1112	929
STONEVILLE 506	1223	41	-	1077	884
DELTAPINE 90	1201	40	-	1122	956
MCNAIR 235	1193	41	-	1063	889
COKER 208	1142	40	-	1117	881
DELCOT 311	1139	39	-	1066	884
PD-2	1131	40	-	-	-
COKER 81-102	1120	39	-	1073	-
DELTAPINE 41	1116	43	-	1007	808
DELTAPINE 50	1107	37	-	1032	889
MCNAIR 308	1096	38	-	-	-
COKER 310	1085	40	-	1064	874
PD-1	1071	42	-	1031	843
MCNAIR 220	1070	40	-	1045	870
KNX 2019	1046	40	-	-	-
STONEVILLE 112	1034	40	-	1056	-
DELTAPINE 61	999	40	-	950	834
COKER 304	976	41	-	1025	840
STONEVILLE 825	971	42	-	933	809
DELTAPINE 20	963	41	-	935	773
COKER 81-139	947	40	-	-	-
DES 422	902	40	-	993	885
ACALA SJC-1	857	40	-	873	-
PAYMASTER 145	856	38	-	906	-
TEST MEAN	1089				
L.S.D. (.05)	348				
C.V.	23%				

TABLE 6. PERFORMANCE OF COTTON VARIETIES AT MONROEVILLE, ALABAMA, 1985

VARIETY	1985 LINT/ACRE LBS.	1985 LINT PCT.	1985 EARLINESS PCT.	2-YR. AV. LINT/ACRE LBS.	3-YR. AV. LINT/ACRE LBS.
COKER 81-139	1363	41	87	-	-
KNX 2019	1360	42	85	-	-
DELTAPINE 20	1279	40	88	1147	1071
COKER 208	1246	41	87	1257	1111
COKER 315	1225	45	87	1153	1019
COKER 3131	1218	42	87	1059	966
DELTAPINE 61	1213	41	82	1221	1047
DELTAPINE 50	1168	38	84	1149	1035
STONEVILLE 112	1150	40	89	1094	-
COKER 81-102	1148	42	83	1297	-
DES 422	1140	41	89	1159	1038
STONEVILLE 506	1118	40	88	1122	994
COKER 310	1112	43	87	1187	1056
MCNAIR 220	1112	40	90	1181	1018
DELTAPINE 90	1095	41	83	1279	1175
DELTAPINE 41	1079	44	86	1132	1040
PD-1	1078	43	87	-	-
COKER 304	1072	42	86	1149	1010
STONEVILLE 825	1067	42	90	1097	985
DELCOT 311	1019	39	92	1033	917
MCNAIR 308	1015	40	89	-	-
PD-2	991	39	88	-	-
STONEVILLE 213	936	42	82	1159	1038
MCNAIR 235	934	40	89	1094	1021
TEST MEAN	1131				
L.S.D. (.05)	239				
C.V.	15%				

TABLE 7. PERFORMANCE OF COTTON VARIETIES AT BREWTON, ALABAMA, 1985

VARIETY	1985 LINT/ACRE	1985 LINT EARLINESS	1985 LINT EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DELTAPINE 90	1446	42	86	1343	1225
PD-1	1426	45	91	-	-
STONEVILLE 825	1367	42	89	1194	1117
KNX 2019	1359	42	88	-	-
COKER 310	1335	43	90	1181	1118
DELTAPINE 50	1320	39	87	1230	1138
DELTAPINE 41	1270	44	91	1121	1006
STONEVILLE 213	1260	41	88	1157	1079
COKER 208	1256	42	90	1252	1119
DELTAPINE 61	1247	42	86	1146	1003
COKER 315	1238	43	87	1200	1129
COKER 81-102	1227	43	87	1163	-
STONEVILLE 506	1218	41	91	1068	998
MCNAIR 220	1217	41	90	1100	1060
STONEVILLE 112	1206	42	92	1020	-
COKER 304	1196	42	90	1161	1050
COKER 81-139	1191	42	88	-	-
DELTAPINE 20	1187	41	91	1034	971
DES 422	1180	42	90	1030	1016
MCNAIR 235	1180	42	90	1034	1032
MCNAIR 308	1170	40	91	-	-
COKER 3131	1104	43	91	1063	925
DELCOT 311	1046	40	91	1031	969
PD-2	1042	39	90	-	-
TEST MEAN	1237				
L.S.D. (.05)	150				
C.V.	9%				

TABLE 8. PERFORMANCE OF COTTON VARIETIES AT HEADLAND, ALABAMA, 1985

VARIETY	1985 LINT/ACRE LBS.	1985 LINT EARLINESS PCT.	2-YR. AV. LINT/ACRE LBS.	3-YR. AV. LINT/ACRE LBS.
DELTAPINE 90	1601	42	-	1436	1182
DELTAPINE 41	1461	46	-	1433	1195
MCNAIR 235	1363	42	-	1304	1053
DES 422	1350	42	-	1392	1140
DELTAPINE 61	1298	42	-	1240	1017
COKER 315	1271	43	-	1331	1121
MCNAIR 308	1263	40	-	-	-
COKER 3131	1257	40	-	1348	1130
STONEVILLE 825	1250	43	-	1319	1089
KNX 2019	1237	41	-	-	-
DELTAPINE 50	1225	38	-	1269	1071
DELTAPINE 20	1221	43	-	1297	1055
DELCOT 311	1202	41	-	1197	1044
COKER 304	1194	42	-	1187	1030
STONEVILLE 213	1193	43	-	1273	1106
MCNAIR 220	1171	41	-	1202	1008
COKER 81-102	1170	42	-	1257	-
STONEVILLE 506	1168	42	-	1217	1014
COKER 208	1164	40	-	1250	1065
PD-1	1153	43	-	-	-
STONEVILLE 112	1140	41	-	1222	-
COKER 310	1126	43	-	1182	1017
COKER 81-139	1099	40	-	-	-
PD-2	1092	41	-	-	-
TEST MEAN	1236				
L.S.D. (.05)	248				
C.V.	14%				

TABLE 9. PERFORMANCE OF COTTON VARIETIES IN ALABAMA, AVERAGE OF ALL LOCATIONS

VARIETY	YIELD, LINT/ACRE			LINT			EARLINESS		
	1985	1985-84	1985-83	1985	1985-84	1985-83	1985	1985-84	1985-83
	LB.	LB.	LB.	PCT.	PCT.	PCT.	PCT.	PCT.	PCT.
DELTAPINE 90	1126	1168	1040	40	41	41	85	78	82
DELTAPINE 50	1088	1127	1005	38	38	39	87	84	86
COKER 315	1091	1125	986	42	42	42	85	82	84
DES 422	1038	1091	982	41	41	41	89	84	86
COKER 208	1028	1107	976	40	40	40	88	83	85
STONEVILLE 213	1012	1092	975	40	41	41	87	81	83
COKER 3131	1089	1115	972	41	41	42	87	83	85
STONEVILLE 825	1032	1085	967	41	41	41	89	85	86
DELTAPINE 41	1091	1088	966	43	43	43	89	84	85
MCNAIR 220	1037	1081	964	40	40	40	90	87	88
COKER 310	1029	1075	960	41	41	41	87	83	85
DELTAPINE 20	1052	1076	957	41	41	40	89	85	87
MCNAIR 235	1036	1045	952	40	40	40	88	84	86
DELTAPINE 61	1056	1084	947	41	40	40	85	81	83
STONEVILLE 506	1020	1066	942	40	40	39	89	85	87
COKER 304	971	1057	929	41	41	40	88	84	85
DELCOT 311	980	1017	911	39	40	39	89	84	86
COKER 81-102	1000	1096	-	41	42	-	85	81	-
STONEVILLE 112	1010	1045	-	40	40	-	88	83	-
PD-2	944	-	-	39	-	-	89	-	-
COKER 81-139	1052	-	-	40	-	-	87	-	-
KNX 2019	1103	-	-	40	-	-	85	-	-
MCNAIR 308	950	-	-	39	-	-	88	-	-
THESE VARIETIES AT 2 LOCATIONS ONLY.									
PD-1	1032	1043	829	42	41	41	87	81	83
GAT 72-56	1215	1179	-	41	41	-	88	84	-
PAYMASTER 145	868	901	-	38	39	-	80	81	-
ACALA SJC-1	788	817	-	39	40	-	77	73	-

Table 10. Percentage of Plants Showing Symptoms of Fusarium Wilt, Tallassee, Alabama[1]

Variety	Average wilt percentage										
	1 yr. 1985	2 yr. 1984-85	3 yr. 1983-85	4 yr. 1982-85	5 yr. 1981-85	6 yr. 1980-85	7 yr. 1979-85	8 yr. 1978-85	9 yr. 1977-85	10 yr. 1976-85	13 yr. 1973-85
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Stoneville 213	40.0	26.7	25.5	25.5	22.7	30.3	35.3	30.0	34.2	32.4	37.7
Coker 310	10.9	11.5	16.8	17.1	14.1	17.6	20.0	19.0	19.0	18.5	21.6
Coker 304	17.6	21.9	19.9	22.9	18.6	21.9	21.9	20.5	20.2	18.9	21.6
Deltapine 61	45.4	25.8	21.9	22.0	19.0	20.8	21.7	19.7	19.2	19.0	
McNair 220	13.0	7.5	11.1	14.3	10.8	15.1	15.0	14.0	14.2	13.4	
Coker 315	23.9	14.7	18.9	18.8	15.9	20.7	21.4	19.7	20.4		
Deltapine 41	5.8	17.5	14.7	15.7	14.5	20.8	21.6	19.7			
McNair 235	8.8	8.0	8.3	10.8	9.4	12.4	12.7	12.0			
Stoneville 825	85.6	62.3	51.7	48.1	41.4	48.3	48.7				
Coker 3131	22.5	18.8	18.6	19.2	17.7	20.8					
Delcot 311	3.2	4.0	6.3	7.0	5.8	9.1					
Stoneville 506	8.4	6.5	8.7	9.4	8.5	12.7					
Coker 208	42.0	25.0	24.9	24.4	19.0						
Deltapine 90	0.5	4.2	5.9	7.2	7.7						
Deltapine 50	6.8	10.3	12.0	12.2							
DES 422	5.0	7.3	9.9								
Deltapine 20	2.1	3.2	14.2								
Coker 81-102	11.7	13.8									
Stoneville 112	7.8	7.8									
Coker 81-139	6.4										
Gumbo	4.7										
KNX 2019	10.8										
McNair 308	27.1										
PD-1	34.6										
PD-2	27.9										

[1] Data were taken from a field severely infested with the fusarium wilt fungus and root-knot nematodes.

Table 11. Fiber Properties of Cotton Varieties at Crossville, Alabama, 1985

Variety	Micronaire	Fibrograph		Stelometer	
		50%	2.5%	T1	E1
	Reading	In.	In.	g/tex	Pct.
Coker 310	3.0	0.55	1.21	18.95	8.5
Coker 304	3.2	.55	1.18	18.60	7.8
Coker 3131	3.8	.55	1.16	18.90	10.0
Coker 315	3.1	.55	1.23	19.75	8.3
Coker 208	3.8	.55	1.15	18.30	8.0
Deltapine 61	3.8	.60	1.23	17.75	9.8
Deltapine 41	3.2	.57	1.20	19.80	8.3
McNair 235	3.5	.55	1.15	19.25	8.3
McNair 220	3.5	.58	1.18	19.15	7.5
Stoneville 213	3.7	.54	1.14	18.20	8.5
Stoneville 825	4.1	.55	1.14	17.55	7.8
Stoneville 506	2.9	.57	1.19	19.40	9.0
Stoneville 112	3.6	.56	1.16	18.40	8.8
Delcot 311	3.7	.57	1.15	20.05	10.5
PD-1	3.4	.59	1.23	20.80	7.8
DES 422	3.1	.56	1.18	19.35	8.8
PD-2	3.3	.55	1.17	19.45	8.3
Deltapine 50	3.5	.58	1.19	16.95	11.0
Deltapine 90	3.4	.56	1.19	21.10	9.0
Deltapine 20	2.8	.53	1.13	17.85	11.5
Coker 81-102	3.1	.56	1.19	19.35	7.5
Coker 81-139	3.6	.58	1.22	18.50	8.0
KNX 2019	4.3	.55	1.21	17.80	8.5
McNair 308	3.3	.55	1.19	18.95	8.8

Table 12. Fiber Properties of Cotton Varieties at Prattville, Alabama, 1985

Variety	Micronaire	Fibrograph		Stelometer	
		50%	2.5%	T1	E1
	Reading	In.	In.	g/tex	Pct.
Coker 310	4.6	0.56	1.19	19.85	6.5
Coker 304	4.2	.56	1.19	19.25	6.8
Coker 3131	4.0	.56	1.18	18.30	8.3
Coker 315	4.2	.56	1.21	18.50	7.5
Coker 208	4.7	.54	1.13	18.75	6.8
Deltapine 61	4.8	.59	1.20	19.40	7.8
Deltapine 41	4.3	.55	1.15	19.20	7.3
McNair 235	4.6	.54	1.15	19.15	6.5
McNair 220	4.6	.56	1.16	19.10	6.0
Stoneville 213	4.8	.55	1.13	17.75	7.8
Stoneville 825	5.2	.54	1.13	18.45	6.5
Stoneville 506	4.5	.54	1.14	17.80	7.8
Stoneville 112	4.4	.55	1.16	18.95	8.0
Delcot 311	4.1	.58	1.14	20.70	8.8
PD-1	4.1	.57	1.19	21.00	6.3
DES 422	4.4	.55	1.16	18.70	7.3
PD-2	4.1	.55	1.15	18.50	7.0
Deltapine 50	4.7	.55	1.17	17.50	8.3
Deltapine 90	5.0	.54	1.12	20.05	7.3
Deltapine 20	4.6	.54	1.12	16.80	9.3
Coker 81-102	4.4	.57	1.21	20.05	7.0
Coker 81-139	4.7	.55	1.19	18.95	6.5
KNX 2019	5.1	.54	1.16	17.75	6.0
McNair 308	3.9	.57	1.20	18.55	7.0

Table 13. Fiber Properties of Cotton Varieties at Brewton, Alabama, 1985

Variety	Micronaire	Fibrograph		Stelometer	
		50%	2.5%	T1	E1
	Reading	In.	In.	g/tex	Pct.
Coker 310	3.9	0.58	1.19	19.24	7.0
Coker 304	4.3	.58	1.22	19.00	6.8
Coker 3131	3.9	.54	1.14	19.19	8.3
Coker 315	3.8	.57	1.22	19.34	7.3
Coker 208	4.4	.56	1.12	19.39	6.8
Deltapine 61	4.3	.56	1.17	19.82	7.0
Deltapine 41	4.2	.56	1.13	20.49	7.0
McNair 235	4.0	.55	1.14	20.83	6.5
McNair 220	4.0	.55	1.14	19.34	6.5
Stoneville 213	3.8	.54	1.12	19.82	7.3
Stoneville 825	4.0	.56	1.15	18.28	7.0
Stoneville 506	3.7	.54	1.14	19.48	7.0
Stoneville 112	3.6	.55	1.12	19.29	8.0
Delcot 311	3.7	.58	1.11	20.30	9.8
PD-1	4.3	.57	1.17	22.37	5.8
DES 422	3.6	.57	1.13	19.82	7.5
PD-2	3.7	.57	1.17	21.26	6.8
Deltapine 50	4.1	.56	1.17	19.15	8.5
Deltapine 90	4.2	.56	1.15	21.46	6.5
Deltapine 20	4.2	.55	1.15	18.38	8.5
Coker 81-102	3.9	.59	1.22	20.40	6.0
Coker 81-139	4.2	.56	1.17	19.63	6.8
KNX 2019	4.5	.58	1.19	19.00	7.0
McNair 308	3.8	.56	1.19	20.16	6.8

Table 14. Sources of Seed for the 1985 Cotton Variety Tests

Deltapine 61 Deltapine 41 Deltapine 90 Deltapine 50 Deltapine 20	Delta and Pine Land Co. Scott, Mississippi
Stoneville 213 Stoneville 825 Stoneville 506 Stoneville 112	Stoneville Pedigreed Seed Co. Stoneville, Mississippi
Coker 310 Coker 304 Coker 315 Coker 3131 Coker 208 Coker 81-102 Coker 81-139	Coker's Pedigreed Seed Co. Hartsville, South Carolina
Delcot 311	Delta Center Portageville, Missouri
KNX 2019 McNair 235 McNair 220 McNair 308	Northrup King Co. Leland, Mississippi
DES 422	Delta Branch Experiment Station Stoneville, Mississippi
PD-1 PD-2	Pee Dee Experiment Station Florence, South Carolina

RECOMMENDED COTTON VARIETIES FOR ALABAMA

The list of recommended varieties given below was prepared by a committee composed of the authors of this report and Dr. Louie J. Chapman, Head of Extension Agronomy, Alabama Cooperative Extension Service, based on variety test performance for at least 3 years. Varieties differ in performance at individual locations, so selection should be based largely on variety performance at a site that most nearly represents the grower's local situation. The recommended varieties are listed in order of 3-year average lint yield.

Deltapine 90
Deltapine 50
Coker 315
DES 422
Coker 208
Stoneville 213*
Coker 3131
Stoneville 825*
Deltapine 41
McNair 220
Coker 310
Deltapine 20
McNair 235
Deltapine 61
Stoneville 506
Coker 304
Delcot 311

---

* Not suited for soils where fusarium wilt has been a problem.