



**1988**  
**Alabama**  
**Cotton**  
**Variety Report**



Agronomy and Soils Departmental Series No. 130 February 1989  
Alabama Agricultural Experiment Station  
Auburn University Auburn University, Alabama  
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Information contained herein is available to all persons regardless of race, color, sex, or national origin.

## 1988 Alabama Cotton Variety Report

A Report of the Performance of Cotton Varieties Tested in Alabama

W. C. Johnson<sup>1</sup>

### 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 complete block experimental design with four replications was used at each location. Row length varied at different locations from 40 to 120 feet. Plot width was two-rows at Prattville, Headland, Belle Mina, Shorter, Tallassee, Fairhope, and Crossville, and one row at Brewton and Monroeville. Climatic conditions at all locations were generally favorable during early season. Favorable conditions continued for most of southern Alabama; however, central and northern areas experienced severe drouth and high temperatures for the remainder of the season.

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<sup>1</sup>Professor 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

Seed cotton samples from each variety were ginned on a 10-saw gin. Lint percentage was calculated by dividing weight of lint by weight of seed cotton. Seed cotton samples at Shorter were accidentally destroyed. A consistent lint percentage of 39 percent was used for this location.

### 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 Presley 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. During 1988 fusarium wilt was moderately severe. 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 825 has 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 11 do not apply in any way to this disease.

## NEW AND EXPERIMENTAL VARIETIES

Several new varieties were tested in 1988. HS 46 is a recently released variety from Sun Valley Seed Co., Tempe, Arizona. Stoneville BR 110 was recently acquired by Stoneville Pedigreed Seed Co. and tested previously in the strains tests as BR110. Coker 320 is recently released and was tested previously as an experimental strain under the labels Coker 118-6903 and Coker 118. GAT 225 is still not released and has been tested previously as an experimental strain GT 81-225. Both Deltapine 50-469 and Coker 84-828 are advanced experimental lines and are not released varieties.

## 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 Least Significance 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 - R.R. Duffield, 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

Gulf Coast Substation, Fairhope - E.L. Carden, Superintendent

TABLE 1. PERFORMANCE OF COTTON VARIETIES AT BELLE MINA, ALABAMA, 1988

VARIETY	1988			2-YR. AV.	3-YR. AV.
	LINT/ACRE	LINT	EARLINESS	LINT/ACRE	LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DELTAPINE 20	870	40	-	815	814
KC 380	862	38	-	809	857
DELCOT 390	834	39	-	759	743
COKER 315	826	40	-	722	736
DELCOT 311	777	39	-	695	734
TIFCOT 56	767	38	-	691	722
COKER 139	763	37	-	738	775
DES 119	756	38	-	765	807
STONEVILLE 453	747	41	-	754	-
MCNAIR 235	734	37	-	696	738
COKER 84-828	727	39	-	-	-
COKER 130	726	40	-	712	-
DELTAPINE 50	726	36	-	697	779
TERRA C 40	723	39	-	697	-
COKER 208	716	38	-	696	696
DELTAPINE 41	710	39	-	669	734
GAT 225	703	37	-	709	768
COKER 320	702	38	-	690	-
STONEVILLE 112	701	38	-	720	790
STONEVILLE 825	700	39	-	718	777
DELTAPINE 50-469	697	37	-	-	-
HS 46	693	38	-	-	-
DELCOT 344	689	38	-	669	714
TERRA C 30	684	35	-	655	-
STONEVILLE BR 110	665	39	-	-	-
MCNAIR 220	641	36	-	683	678
ARKOT 518	637	37	-	654	714
PAYMASTER 145	626	36	-	620	647
DELTAPINE 90	626	37	-	676	742
STONEVILLE 506	625	37	-	661	735
PD 3	597	38	-	649	-
ACALA 1517-75	585	36	-	531	-
TEST MEAN	714				
L. S. D. (.05)	125				
C. V.	13%				

TABLE 2. PERFORMANCE OF COTTON VARIETIES AT CROSSVILLE, ALABAMA, 1988

VARIETY	1988			2-YR. AV.	3-YR. AV.
	LINT/ACRE	LINT	EARLINESS	LINT/ACRE	LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
COKER 320	805	43	-	562	-
MCNAIR 235	771	42	-	551	716
STONEVILLE 453	740	44	-	497	-
DELTAPINE 50	734	40	-	533	657
COKER 130	723	43	-	531	-
DELCOT 390	723	42	-	522	661
ARKOT 518	717	41	-	521	685
DES 119	703	44	-	530	695
GAT 225	698	43	-	489	653
KC 380	653	41	-	471	647
TIFCOT 56	651	41	-	497	640
STONEVILLE 112	648	42	-	494	573
DELTAPINE 50-469	648	42	-	-	-
STONEVILLE 506	645	40	-	475	598
DELTAPINE 20	642	42	-	472	610
MCNAIR 220	633	42	-	473	666
DELCOT 311	631	41	-	487	641
DELTAPINE 90	627	43	-	490	641
TERRA C 30	624	41	-	493	-
COKER 315	617	43	-	483	608
COKER 84-828	612	43	-	-	-
TERRA C 40	610	42	-	465	-
COKER 139	608	42	-	501	637
DELCOT 344	563	41	-	449	612
PD 3	517	41	-	423	-
COKER 208	510	41	-	424	549
HS 46	494	44	-	-	-
DELTAPINE 41	476	43	-	390	510
STONEVILLE 825	465	42	-	401	563
STONEVILLE BR 110	351	42	-	-	-
TEST MEAN	628				
L. S. D. (.05)	161				
C. V.	18%				

TABLE 3. PERFORMANCE OF COTTON VARIETIES AT PRATTVILLE, ALABAMA, 1988

VARIETY	1988			2-YR. AV.	3-YR. AV.
	LINT/ACRE	LINT	EARLINESS	LINT/ACRE	LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DELTAPINE 50	941	38	-	936	824
HS 46	885	41	-	-	-
STONEVILLE BR 110	879	41	-	-	-
PD 3	873	39	-	947	-
DELTAPINE 90	859	40	-	947	835
COKER 130	837	40	-	925	-
DELTAPINE 50-469	802	39	-	-	-
STONEVILLE 453	799	41	-	865	-
MCNAIR 235	797	39	-	863	771
COKER 320	796	38	-	821	-
DES 119	793	39	-	859	789
DELCOT 344	788	40	-	816	733
KC 380	784	38	-	968	833
TERRA C 30	783	36	-	851	-
COKER 84-828	781	40	-	-	-
DELTAPINE 41	771	41	-	803	729
STONEVILLE 825	771	38	-	873	798
COKER 208	768	38	-	869	756
TIFCOT 56	763	37	-	844	753
GAT 225	755	37	-	820	735
ARKOT 518	754	38	-	784	709
COKER 139	734	39	-	814	730
STONEVILLE 112	717	39	-	812	743
MCNAIR 220	704	37	-	829	744
DELTAPINE 20	690	37	-	826	751
TERRA C 40	687	38	-	809	-
COKER 315	680	39	-	792	714
DELCOT 390	675	38	-	747	658
STONEVILLE 506	661	37	-	791	731
DELCOT 311	616	39	-	733	655
TEST MEAN	771				
L. S. D. (.05)	115				
C. V.	11%				

TABLE 4. PERFORMANCE OF COTTON VARIETIES AT TALLASSEE, ALABAMA, 1988

VARIETY	1988			2-YR. AV.	3-YR. AV.
	LINT/ACRE	LINT	EARLINESS	LINT/ACRE	LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DELTAPINE 90	1,101	40	91	739	603
HS 46	1,098	42	94	-	-
DELTAPINE 50-469	966	41	95	-	-
KC 380	957	40	96	629	540
COKER 320	933	40	95	703	-
TERRA C 40	929	41	96	554	-
STONEVILLE 453	879	44	95	646	-
DELTAPINE 50	865	39	97	598	482
DELTAPINE 20	844	43	95	562	461
STONEVILLE 112	824	40	91	526	473
COKER 130	819	41	95	616	-
MCNAIR 220	814	40	93	578	510
COKER 84-828	800	40	96	-	-
MCNAIR 235	800	39	96	620	557
DELCOT 390	779	38	96	544	476
DELCOT 311	775	39	94	546	487
COKER 208	751	39	97	515	452
DELCOT 344	747	39	96	539	495
COKER 315	742	43	93	543	438
TIFCOT 56	731	40	92	551	482
ARKOT 518	728	40	95	492	432
STONEVILLE 506	718	40	95	523	445
DES 119	715	40	96	534	465
DELTAPINE 41	712	41	91	525	445
GAT 225	670	40	95	502	455
STONEVILLE 825	658	41	94	416	367
COKER 139	643	40	96	506	465
TERRA C 30	629	39	94	525	-
PD 3	607	41	94	520	-
STONEVILLE BR 110	547	41	94	-	-
TEST MEAN	793				
L. S. D. (.05)	238				
C. V.	21%				

TABLE 5. PERFORMANCE OF COTTON VARIETIES AT SHORTER, ALABAMA, 1988

VARIETY	1988			2-YR. AV.	3-YR. AV.
	LINT/ACRE	LINT	EARLINESS	LINT/ACRE	LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DELTAPINE 50-469	696	39	-	-	-
KC 380	602	39	-	686	808
MCNAIR 235	592	39	-	669	794
GAT 225	586	39	-	645	778
COKER 320	586	39	-	614	-
TERRA C 30	579	39	-	617	-
DELTAPINE 50	554	39	-	614	720
DELCOT 390	543	39	-	620	737
COKER 315	539	39	-	612	711
DELTAPINE 20	535	39	-	665	741
COKER 130	535	39	-	667	-
DES 119	535	39	-	623	761
DELCOT 311	522	39	-	538	708
TERRA C 40	519	39	-	564	-
STONEVILLE 453	509	39	-	601	-
COKER 84-828	509	39	-	-	-
MCNAIR 220	501	39	-	622	743
COKER 208	493	39	-	574	737
ARKOT 518	490	39	-	556	719
DELCOT 344	474	39	-	500	667
TIFCOT 56	455	39	-	594	726
DELTAPINE 90	424	39	-	568	728
HS 46	417	39	-	-	-
PD 3	414	39	-	548	-
STONEVILLE 825	404	39	-	552	700
COKER 139	403	39	-	555	707
STONEVILLE 112	382	39	-	516	664
DELTAPINE 41	373	39	-	524	678
STONEVILLE 506	372	39	-	512	628
PAYMASTER 145	363	39	-	414	593
STONEVILLE BR 110	314	39	-	-	-
ACALA 1517-75	274	39	-	416	-
TEST MEAN	484				
L. S. D. (.05)	118				
C. V.	17%				

TABLE 6. PERFORMANCE OF COTTON VARIETIES AT MONROEVILLE, ALABAMA, 1988

VARIETY	1988			2-YR. AV.	3-YR. AV.
	LINT/ACRE	LINT	EARLINESS	LINT/ACRE	LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
HS 46	908	42	93	-	-
COKER 320	866	42	91	906	-
DELTAPINE 90	840	41	88	832	739
GAT 225	837	41	89	807	692
KC 380	824	41	90	906	802
MCNAIR 235	802	40	90	914	764
COKER 130	778	43	87	939	-
STONEVILLE 453	762	44	89	811	-
DELCOT 390	729	40	95	758	662
COKER 208	724	40	87	859	743
DES 119	721	42	90	811	698
DELCOT 344	709	41	88	801	679
COKER 315	704	43	85	733	613
COKER 84-828	687	42	91	-	-
COKER 139	655	41	88	834	704
TERRA C 40	644	41	89	709	-
DELTAPINE 50-469	642	41	88	-	-
ARKOT 518	639	41	89	644	581
TIFCOT 56	622	39	89	805	697
PD 3	618	41	79	810	-
DELTAPINE 41	598	44	88	622	570
DELCOT 311	589	41	88	714	613
STONEVILLE BR 110	584	42	84	-	-
DELTAPINE 50	583	39	87	711	645
MCNAIR 220	560	41	89	759	641
STONEVILLE 112	550	40	90	640	588
STONEVILLE 825	542	42	89	641	620
TERRA C 30	475	40	86	598	-
DELTAPINE 20	453	41	86	650	594
STONEVILLE 506	419	40	90	627	597
TEST MEAN	669				
L. S. D. (.05)	153				
C. V.	16%				

TABLE 7. PERFORMANCE OF COTTON VARIETIES AT BREWTON, ALABAMA, 1988

VARIETY	1988			2-YR. AV.	3-YR. AV.
	LINT/ACRE	LINT	EARLINESS	LINT/ACRE	LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
HS 46	725	40	72	-	-
DELTAPINE 50-469	725	37	67	-	-
COKER 208	722	39	64	1,047	1,080
STONEVILLE BR 110	714	39	59	-	-
DELTAPINE 90	695	37	62	856	938
DES 119	664	37	69	912	993
KC 380	646	40	65	1,054	1,064
DELTAPINE 50	622	37	64	823	896
COKER 320	614	39	72	922	-
DELCOT 344	607	39	68	866	967
COKER 84-828	604	40	71	-	-
COKER 315	602	40	66	923	1,018
TERRA C 30	599	36	69	830	-
GAT 225	598	38	75	865	982
COKER 130	584	41	70	928	-
PD 3	584	40	77	936	-
COKER 139	570	38	71	917	995
DELCOT 390	560	39	67	872	915
TIFCOT 56	548	38	72	912	979
DELCOT 311	532	37	70	804	904
DELTAPINE 20	524	38	72	799	894
MCNAIR 220	522	38	80	806	912
TERRA C 40	511	38	75	810	-
STONEVILLE 453	510	40	75	839	-
DELTAPINE 41	506	40	81	746	857
STONEVILLE 112	505	37	74	695	815
MCNAIR 235	503	39	73	839	904
STONEVILLE 825	499	39	67	815	914
STONEVILLE 306	472	36	77	737	838
ARKOT 518	419	39	85	729	840
TEST MEAN	583				
L. S. D. (.05)	89				
C. V.	11%				



TABLE 8. PERFORMANCE OF COTTON VARIETIES AT HEADLAND, ALABAMA, 1988

VARIETY	1988			2-YR. AV.	3-YR. AV.
	LINT/ACRE	LINT	EARLINESS	LINT/ACRE	LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
KC 380	1,191	41	-	804	798
DELTAPINE 90	1,105	40	-	768	711
COKER 84-828	929	42	-	-	-
DELCOT 390	924	41	-	651	614
COKER 130	896	42	-	632	-
STONEVILLE 453	881	45	-	640	-
HS 46	875	42	-	-	-
PD 3	871	41	-	618	-
COKER 208	864	40	-	656	675
DELTAPINE 50	863	39	-	621	647
STONEVILLE 112	854	40	-	619	638
DES 119	842	41	-	624	613
STONEVILLE 506	842	42	-	640	681
COKER 139	834	40	-	637	624
TIFCOT 56	818	40	-	630	664
COKER 315	816	42	-	603	593
DELTAPINE 20	809	41	-	620	627
ARKOT 518	796	42	-	624	632
MCNAIR 220	790	40	-	617	610
STONEVILLE 825	783	42	-	635	660
DELTAPINE 50-469	775	40	-	-	-
MCNAIR 235	767	39	-	598	597
GAT 225	767	40	-	582	598
STONEVILLE BR 110	762	41	-	-	-
TERRA C 30	755	39	-	578	-
COKER 320	721	41	-	531	-
DELTAPINE 41	719	42	-	577	594
DELCOT 344	710	41	-	569	593
TERRA C 40	701	41	-	598	-
DELCOT 311	592	39	-	479	547
TEST MEAN	828				
L. S. D. (.05)	235				
C. V.	20%				

TABLE 9. PERFORMANCE OF COTTON VARIETIES AT FAIRHOPE, ALABAMA, 1988

VARIETY	1988			2-YR. AV.	3-YR. AV.
	LINT/ACRE	LINT	EARLINESS	LINT/ACRE	LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
HS 46	960	43	-	-	-
DELTAPINE 90	930	42	-	834	-
DELTAPINE 50-469	850	42	-	-	-
TERRA C 40	841	41	-	-	-
DES 119	827	43	-	-	-
DELTAPINE 50	803	40	-	786	-
KC 380	791	43	-	845	-
TERRA C 30	789	41	-	-	-
DELTAPINE 20	764	43	-	-	-
DELTAPINE 41	737	43	-	-	-
STONEVILLE BR 110	736	42	-	669	-
COKER 130	730	44	-	-	-
STONEVILLE 825	706	42	-	-	-
GAT 225	697	44	-	-	-
COKER 320	697	43	-	-	-
COKER 315	691	44	-	716	-
COKER 84-828	688	44	-	-	-
DELCOT 344	667	43	-	-	-
PD 3	659	44	-	-	-
STONEVILLE 453	643	42	-	-	-
STONEVILLE 112	631	40	-	704	-
STONEVILLE 506	620	41	-	-	-
MCNAIR 220	610	41	-	-	-
TIFCOT 56	594	41	-	681	-
COKER 139	591	41	-	-	-
MCNAIR 235	589	42	-	-	-
COKER 208	569	43	-	779	-
DELCOT 390	537	43	-	-	-
DELCOT 311	503	41	-	-	-
ARKOT 518	405	42	-	-	-
TEST MEAN	695				
L. S. D. (.05)	120				
C. V.	12%				

TABLE 10. PERFORMANCE OF COTTON VARIETIES IN ALABAMA, AVERAGE OF ALL LOCATIONS

VARIETY	YIELD, LINT/ACRE			LINT			EARLINESS		
	1988	1987-88	1986-88	1988	1987-88	1986-88	1988	1987-88	1986-88
	LB.	LB.	LB.	PCT.	PCT.	PCT.	PCT.	PCT.	PCT.
KC 380	812	797	798	40	40	40	84	83	85
DELTAPINE 90	801	745	749	40	40	40	80	81	84
DES 119	728	714	732	40	40	41	85	83	86
MCNAIR 235	706	711	725	40	40	40	86	85	88
COKER 208	680	713	717	40	40	40	83	84	87
DELTAPINE 50	744	702	713	39	38	39	83	83	86
GAT 225	701	677	707	40	40	40	86	86	88
TIFCOT 56	661	690	707	39	39	39	84	84	86
COKER 139	645	684	702	40	40	40	85	85	88
DELTAPINE 20	681	681	690	40	41	41	84	83	86
MCNAIR 220	642	669	687	39	40	40	87	86	88
DELCOT 344	661	651	683	40	40	40	84	84	86
COKER 315	691	681	682	41	41	41	81	82	85
STONEVILLE 825	614	637	679	40	41	41	83	84	86
DELCOT 390	700	674	676	40	40	40	86	86	88
STONEVILLE 112	646	636	666	39	40	40	85	83	85
STONEVILLE 506	597	622	658	39	39	40	87	85	86
DELCOT 311	615	617	656	39	40	40	84	84	86
ARKOT 518	621	612	655	40	40	40	90	88	90
DELTAPINE 41	622	614	644	41	42	42	87	84	86
COKER 130	737	743	-	41	41	-	84	84	-
COKER 320	747	716	-	40	40	-	86	85	-
STONEVILLE 453	719	702	-	42	42	-	86	85	-
PD 3	638	683	-	40	40	-	83	83	-
TERRA C 40	685	661	-	40	40	-	87	84	-
TERRA C 30	658	651	-	38	38	-	83	82	-
STONEVILLE BR 110	617	610	-	41	39	-	79	-	-
HS 46	784	-	-	41	-	-	86	-	-
DELTAPINE 50-469	756	-	-	40	-	-	83	-	-
COKER 84-828	704	-	-	41	-	-	86	-	-

THESE VARIETIES AT 2 LOCATIONS ONLY

PAYMASTER 145	494	517	620	37	38	38	-	-	-
ACALA 1517-75	429	474	-	37	38	-	-	-	-

Table 11. Percentage of Plants Showing Symptoms of Fusarium Wilt, Tallapoosa, Alabama

Variety	1 yr.,	2 yr.,	3 yr.,	4 yr.,	5 yr.,	6 yr.,	7 yr.,	8 yr.,	9 yr.,	10 yr.,	11 yr.,	12 yr.,
	1988	87-88	86-88	85-88	84-88	83-88	82-88	81-88	80-88	79-88	78-88	77-88
	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>	<u>Pct.</u>
McNair 220	2.8	22.2	24.4	21.6	17.7	17.8	18.7	15.9	18.2	17.8	16.8	16.7
Coker 315	6.0	40.2	42.0	37.4	31.0	30.5	28.7	25.7	27.8	27.6	25.7	25.7
Deltapine 41	3.8	31.2	30.5	24.3	25.2	22.6	22.1	20.5	24.0	24.2	22.6	
McNair 235	18.0	35.6	29.9	24.6	21.1	19.1	19.0	17.0	18.3	17.8	16.8	
Stoneville 825	62.8	79.9	74.6	77.4	69.7	63.1	59.5	53.9	57.0	56.5		
Delcot 311	18.0	24.2	19.7	15.6	13.4	13.0	12.4	11.0	12.7			
Stoneville 506	30.3	44.8	37.8	30.5	25.3	23.3	21.6	19.5	21.1			
Coker 208	36.3	55.9	52.3	49.7	41.3	38.6	36.3	31.5				
Deltapine 90	6.8	12.4	17.6	13.3	12.2	11.7	11.7	11.4				
Deltapine 50	24.3	38.2	39.4	31.2	27.7	25.7	23.9					
Deltapine 20	7.8	38.9	37.6	28.7	23.9	25.9						
Stoneville 112	8.8	40.7	35.3	28.5	24.3							
Coker 139	29.5	45.0	42.9	33.8								
Delcot 344	17.5	33.0	26.0									
Delcot 390	24.5	42.7	39.1									
DES 119	27.8	44.1	37.5									
gat 225	25.3	46.4	41.0									
Tifcot 56	43.0	52.3	52.7									
Arkot 518	25.8	47.4	46.2									
Coker 320	39.3	53.2										
KC 380	43.8	57.4										
Terra C 30	16.3	46.6										
Stoneville 453	51.0	66.7										
PD 3	21.0	32.0										
Terra C 40	17.3	40.2										
Stoneville BR 110	13.0	50.2										
Coker 84-828	16.3											
HS 46	22.0											
Deltapine 50-469	18.8											
Coker 130	20.3											

Table 12. Fiber Properties of Cotton Varieties at Crossville, Alabama, 1988

Variety	Micronaire Reading	Fibrograph		Stelometer	
		50% In.	2.5% In.	T1 g/tex	E1 Pct.
Coker 130	5.0	0.53	1.12	20.30	8.5
Coker 139	5.4	.55	1.14	19.90	9.0
Coker 208	4.9	.54	1.07	18.15	8.5
Coker 315	4.7	.54	1.16	18.50	8.8
Coker 320	5.3	.58	1.14	20.55	7.5
Coker 84-828	5.1	.55	1.11	19.45	8.8
Deltapine 20	5.1	.54	1.11	19.05	10.0
Deltapine 41	5.0	.54	1.11	19.40	8.8
Deltapine 50	5.2	.53	1.13	17.85	10.0
Deltapine 90	5.2	.54	1.10	22.25	9.3
Deltapine 50-469	5.0	.51	1.10	17.55	10.0
McNair 220	5.2	.52	1.07	19.35	10.5
McNair 235	5.4	.53	1.12	18.55	8.0
Stoneville 112	4.8	.54	1.11	20.55	8.5
Stoneville 453	5.2	.55	1.11	18.65	9.3
Stoneville 506	5.1	.54	1.13	18.40	9.0
Stoneville 825	5.5	.54	1.11	19.55	8.0
Stoneville BR 110	5.0	.53	1.12	22.20	8.5
Delcot 311	4.6	.56	1.11	21.05	10.5
Delcot 344	4.9	.56	1.16	20.20	8.5
Delcot 390	4.9	.54	1.09	20.15	9.5
HS 46	4.7	.55	1.14	22.10	9.8
PD 3	5.0	.55	1.15	20.75	8.3
DES 119	5.1	.56	1.15	19.55	9.5
Tifcot 56	5.2	.55	1.14	19.65	9.3
KC 380	5.1	.54	1.17	18.20	8.0
Arkot 518	4.8	.52	1.17	19.00	9.3
GAT 225	4.9	.51	1.10	19.15	8.0
Terra C 30	4.9	.53	1.11	18.95	9.8
Terra C 40	4.9	.54	1.12	18.70	10.3

Table 13. Fiber Properties of Cotton Varieties at Brewton, Alabama, 1988

Variety	Micronaire Reading	Fibrograph		Stelometer	
		50%	2.5%	T1	E1
		In.	In.	g/tex	Pct.
Coker 130	4.0	0.54	1.16	20.40	7.0
Coker 139	4.0	.53	1.16	19.40	7.5
Coker 208	4.2	.51	1.09	18.25	7.0
Coker 315	3.8	.53	1.18	18.90	7.8
Coker 320	4.1	.54	1.15	18.95	7.5
Coker 84-828	3.8	.53	1.14	18.20	7.8
Deltapine 41	3.8	.52	1.13	19.15	8.8
Deltapine 50	3.9	.53	1.17	17.75	9.5
Deltapine 90	3.8	.55	1.13	19.50	7.8
Deltapine 50-469	3.6	.53	1.16	17.35	9.5
McNair 220	3.9	.54	1.10	18.45	7.3
McNair 235	4.0	.51	1.11	17.75	7.5
Stoneville 112	3.9	.52	1.13	18.00	8.8
Stoneville 453	4.0	.52	1.11	18.25	8.8
Stoneville 506	3.5	.52	1.13	18.00	8.5
Stoneville 825	4.5	.52	1.10	17.65	7.3
Stoneville BR 110	3.9	.53	1.14	19.55	7.5
Delcot 311	3.9	.54	1.10	19.20	9.3
Delcot 344	3.9	.56	1.19	19.20	7.5
Delcot 390	4.0	.52	1.11	19.25	8.3
HS 46	3.6	.53	1.15	20.00	8.0
PD 3	3.8	.54	1.12	19.60	7.5
DES 119	4.3	.51	1.12	18.30	9.5
Tifcot 56	4.1	.54	1.14	18.30	8.3
KC 380	4.6	.52	1.14	17.75	7.5
Arkot 518	3.9	.53	1.16	18.00	8.0
GAT 225	4.1	.51	1.13	19.05	7.8
Terra C 30	3.8	.52	1.14	17.25	8.8

Table 14. Sources of Seed for the 1988 Cotton Variety Tests

Deltapine 41 Deltapine 90 Deltapine 50 Deltapine 20 Deltapine 50-469	Delta and Pine Land Co. Scott, Mississippi
Stoneville 825 Stoneville 506 Stoneville 112 Stoneville 453 Stoneville BR 110	Stoneville Pedigreed Seed Co. Stoneville, Mississippi
Coker 315 Coker 208 Coker 139 Coker 130 Coker 320 Coker 84-828	Coker's Pedigreed Seed Co. Hartsville, South Carolina     (New Northrup King Co.)
Delcot 311 Delcot 390 Delcot 344	University of Missouri Delta Center Portageville, Missouri
KC 380 McNair 235 McNair 220	Northrup King Co. Leland, Mississippi
DES 119	Delta Branch Experiment Station Stoneville, Mississippi
PD-3	Pee Dee Experiment Station Florence, South Carolina
Tifcot 56 GAT - 225	Georgia Coastal Plain Experiment Station Tifton, Georgia
Arkot 518	Cotton Branch Experiment Station Marianna, Arkansas
Terra C-30 Terra C-40	Terra International Inc. Memphis, Tennessee
HS 46	Sun Valley Seed Co. Tempe, Arizona

## RECOMMENDED COTTON VARIETIES FOR ALABAMA

The list of recommended varieties given below was prepared by the author of this report and Louie J. Chapman, Extension Agronomist and Acting Department Head, 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. As a general rule, a yield difference in the order of 10 percent is needed for varieties to be considered truly different. The recommended varieties are listed in order of 3-year average lint yield.

KC380  
Deltapine 90  
McNair 235  
DES 119  
Coker 208  
Tifcot 56  
Deltapine 50  
Coker 139  
McNair 220  
Deltapine 20  
Delcot 390  
Delcot 344  
Coker 315  
Stoneville 825\*  
Arkot 518  
Delcot 311  
Stoneville 112  
Stoneville 506  
Deltapine 41

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