1990 Alabama Cotton Variety Report

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Auburn University
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1990 ALABAMA COTTON VARIETY REPORT

A Report of the Performance of Cotton Varieties Tested in Alabama

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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 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 36 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 except Belle Mina were generally favorable during early season. At Belle Mina, a severe wind storm killed the seedling plants by sand blasting. The test was replanted in mid-May. After early July, rainfall was less than normal at all locations. In northern Alabama, the drouth was especially severe.

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[1]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.

Yield of Lint

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

Fiber Properties

Fiber qualities of all varieties were determined by the Auburn University Textile Engineering fiber testing laboratory using High Volume Instrumentation (HVI). Data are reported on two samples of each variety from Shorter, Tallassee, Prattville, Crossville, and Belle Mina. One sample of each variety was tested from the other locations.

Length. This is the fiber length measured with the HVI instrument. This measurement of length is about the same as the classer's staple.

Strength. 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.

Elongation. A measure of the percentage stretch before the fibers break.

Micronaire. This measures the fineness 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 1990 fusarium wilt was severe in the test area. 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.

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, 1990

VARIETY	1990 LINT/ACRE	1990 LINT	1990 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DELTAPINE 5415	713	43	88	-	-
KC 380	699	41	89	987	946
DELTAPINE 20	692	42	90	862	865
DES 119	680	42	91	924	868
STONEVILLE 453	663	45	87	938	-
DELTAPINE 51	653	41	89	911	840
DELTAPINE 5690	650	41	86	-	-
STONEVILLE 825	648	43	90	823	782
CHEMBRED 219	645	41	90	-	-
DELTAPINE 90	639	41	87	826	759
DELTAPINE 50	636	38	89	852	810
SUREGROW 1001	626	41	87	810	-
HS 46	622	42	88	784	754
STONEVILLE LA 887	620	43	87	-	-
DELCOT 344	612	41	91	835	786
CHEMBRED 407	609	41	86	-	-
CHEMBRED 1135	604	40	89	-	-
TERRA 207	599	41	92	-	-
COKER 84-828	599	40	91	804	778
TERRA C 40	592	41	90	799	773
DELTAPINE 5614	591	38	91	-	-
KC 311	584	40	84	790	-
STONEVILLE 506	581	40	87	762	716
TIFCOT 56	579	39	88	763	765
COKER 315	575	41	92	805	812
SUREGROW 55	572	43	89	872	-
TROPICAL 225	566	40	87	733	-
GEORGIA KING	566	41	87	-	-
COKER 139	560	39	88	-	-
PD 3	540	39	86	793	728
ACALA 1517-88	538	41	89	-	-
HS 23	535	39	91	-	-
HARTZ 1014	527	44	78	-	-
COKER 320	518	40	90	754	736
COKER 130	518	41	86	824	791
PAYMASTER HS-26	454	35	82	-	-
STONEVILLE 907	450	41	88	692	-
TEST MEAN	596				
L.S.D. (.05)	100				
C.V.	12%				

TABLE 2. PERFORMANCE OF COTTON VARIETIES AT CROSSVILLE, ALABAMA, 1990

VARIETY	1990 LINT/ACRE LB.	1990 LINT PCT.	1990 EARLINESS PCT.	2-YR. AV. LINT/ACRE LB.	3-YR. AV. LINT/ACRE LB.
STONEVILLE 453	699	47	-	590	-
DELTAPINE 50	691	43	-	549	611
DELTAPINE 20	681	44	-	539	573
DELCOT 344	681	43	-	486	511
TERRA C 40	676	44	-	537	562
DES 119	648	44	-	476	552
STONEVILLE 907	638	44	-	500	-
HS 23	628	43	-	-	-
DELTAPINE 51	624	43	-	470	529
CHEMBRED 1135	615	43	-	-	-
CHEMBRED 219	610	43	-	-	-
DELTAPINE 5690	607	45	-	-	-
STONEVILLE 825	603	44	-	446	452
STONEVILLE LA 887	602	44	-	-	-
TERRA 207	601	44	-	-	-
TROPICAL 225	589	42	-	463	-
STONEVILLE 506	588	43	-	449	515
CHEMBRED 407	588	43	-	-	-
TIFCOT 56	581	43	-	469	529
PD 3	564	44	-	508	511
SUREGROW 1001	549	44	-	385	-
COKER 84-828	548	43	-	455	507
DELTAPINE 5614	547	42	-	-	-
DELTAPINE 90	537	44	-	423	491
SUREGROW 55	536	46	-	524	-
DELTAPINE 5415	507	45	-	-	-
COKER 320	504	43	-	395	531
GEORGIA KING	498	44	-	-	-
KC 311	496	43	-	387	-
HS 46	489	45	-	367	409
HARTZ 1014	472	44	-	-	-
COKER 139	470	42	-	-	-
COKER 315	468	45	-	392	467
KC 380	460	43	-	455	521
COKER 130	428	45	-	370	488
TEST MEAN	572				
L.S.D. (.05)	103				
C.V.	13%				

TABLE 3. PERFORMANCE OF COTTON VARIETIES AT PRATTVILLE, ALABAMA, 1990

VARIETY	1990 LINT/ACRE	1990 LINT	1990 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
STONEVILLE 453	1,027	42	94	875	-
CHEMBRED 407	1,006	39	93	-	-
HS 46	983	39	91	910	902
DELTAPINE 5415	978	40	93	-	-
DES 119	974	38	92	840	824
TROPICAL 225	963	39	94	787	-
CHEMBRED 219	962	38	95	-	-
KC 380	948	39	95	891	855
COKER 84-828	947	40	93	790	787
CHEMBRED 1135	938	38	94	-	-
DELTAPINE 90	932	40	91	845	850
DELCOT 344	911	39	92	813	804
SUREGROW 1001	910	39	91	854	-
DELTAPINE 5690	907	40	93	-	-
DELTAPINE 51	904	38	93	848	833
STONEVILLE 825	893	40	96	817	802
HS 23	889	38	94	-	-
TERRA 207	877	39	94	-	-
TERRA C 40	868	39	92	762	737
COKER 320	864	39	94	756	770
KC 311	861	39	91	803	-
DELTAPINE 5614	860	38	95	-	-
COKER 139	849	38	95	-	-
SUREGROW 55	841	41	92	737	-
STONEVILLE 907	836	39	94	683	-
DELTAPINE 50	826	37	93	797	845
GEORGIA KING	816	41	92	-	-
PD 3	815	38	92	729	777
DELTAPINE 20	800	39	92	738	722
HARTZ 1014	799	41	91	-	-
STONEVILLE LA 887	790	41	91	-	-
COKER 315	783	39	93	752	728
STONEVILLE 506	766	38	95	736	711
COKER 130	765	40	94	676	730
TIFCOT 56	745	38	91	706	725
TEST MEAN	881				
L.S.D. (.05)	139				
C.V.	11%				

TABLE 4. PERFORMANCE OF COTTON VARIETIES AT TALLASSEE, ALABAMA, 1990

VARIETY	1990 LINT/ACRE	1990 LINT	1990 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DES 119	1,555	42	-	1,173	1,020
STONEVILLE LA 887	1,489	44	-	-	-
PD 3	1,461	42	-	1,144	965
DELTAPINE 5415	1,409	43	-	-	-
GEORGIA KING	1,400	42	-	-	-
TROPICAL 225	1,389	39	-	975	-
DELTAPINE 5614	1,374	39	-	-	-
COKER 84-828	1,364	43	-	999	933
CHEMBRED 219	1,351	39	-	-	-
COKER 315	1,347	43	-	927	865
DELTAPINE 51	1,323	40	-	1,007	993
COKER 139	1,320	41	-	-	-
DELTAPINE 90	1,319	40	-	993	1,029
DELTAPINE 5690	1,304	42	-	-	-
KC 311	1,280	40	-	1,097	-
STONEVILLE 825	1,279	41	-	959	859
HS 23	1,266	41	-	-	-
DELCOT 344	1,252	41	-	1,023	931
TERRA 207	1,244	40	-	-	-
KC 380	1,237	41	-	1,046	1,016
TIFCOT 56	1,221	40	-	895	840
SUREGROW 1001	1,219	41	-	950	-
STONEVILLE 453	1,218	42	-	971	-
CHEMBRED 1135	1,215	41	-	-	-
CHEMBRED 407	1,210	40	-	-	-
COKER 320	1,199	41	-	956	948
DELTAPINE 50	1,170	39	-	932	910
COKER 130	1,167	42	-	901	873
TERRA C 40	1,149	39	-	839	869
HARTZ 1014	1,140	41	-	-	-
DELTAPINE 20	1,137	41	-	915	891
HS 46	1,074	41	-	869	945
STONEVILLE 506	1,051	41	-	785	762
STONEVILLE 907	1,049	39	-	812	-
SUREGROW 55	1,047	42	-	818	-
TEST MEAN	1,264				
L.S.D. (.05)	266				
C.V.	15%				

TABLE 5. PERFORMANCE OF COTTON VARIETIES AT SHORTER, ALABAMA, 1990

VARIETY	1990 LINT/ACRE	1990 LINT	1990 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
CHEMBRED 219	1,473	41	-	-	-
DES 119	1,442	43	-	996	843
DELCOT 344	1,425	43	-	986	815
STONEVILLE LA 887	1,422	44	-	-	-
SUREGROW 1001	1,378	41	-	971	-
HS 46	1,361	42	-	974	788
DELTAPINE 5415	1,351	43	-	-	-
STONEVILLE 453	1,349	44	-	977	-
GEORGIA KING	1,343	44	-	-	-
DELTAPINE 90	1,335	42	-	958	780
DELTAPINE 51	1,310	42	-	893	827
CHEMBRED 1135	1,294	41	-	-	-
TROPICAL 225	1,293	41	-	895	-
PD 3	1,293	41	-	882	726
CHEMBRED 407	1,290	42	-	-	-
COKER 315	1,287	42	-	911	787
HARTZ 1014	1,276	42	-	-	-
STONEVILLE 825	1,276	43	-	878	720
COKER 84-828	1,262	42	-	897	768
DELTAPINE 5690	1,262	43	-	-	-
DELTAPINE 50	1,256	40	-	945	815
TERRA C 40	1,255	42	-	848	738
COKER 320	1,246	42	-	850	762
TIFCOT 56	1,244	41	-	901	752
SUREGROW 55	1,221	44	-	929	-
STONEVILLE 907	1,216	42	-	831	-
COKER 139	1,208	42	-	-	-
DELTAPINE 20	1,208	42	-	897	776
COKER 130	1,207	43	-	792	706
TERRA 207	1,204	42	-	-	-
KC 311	1,199	40	-	798	-
KC 380	1,194	41	-	911	808
STONEVILLE 506	1,179	41	-	806	661
DELTAPINE 5614	1,172	39	-	-	-
HS 23	1,169	40	-	-	-
ACALA 1517-88	1,098	41	-	-	-
PAYMASTER HS-26	989	40	-	-	-
TEST MEAN	1,270				
L.S.D. (.05)	182				
C.V.	10%				

TABLE 6. PERFORMANCE OF COTTON VARIETIES AT MONROEVILLE, ALABAMA, 1990

VARIETY	1990 LINT/ACRE	1990 LINT	1990 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
CHEMBRED 1135	543	40	-	-	-
CHEMBRED 219	540	40	-	-	-
DELTAPINE 5614	522	40	-	-	-
CHEMBRED 407	508	41	-	-	-
DES 119	506	41	-	625	657
PD 3	501	38	-	620	619
DELTAPINE 20	492	38	-	644	581
DELTAPINE 5690	486	41	-	-	-
DELTAPINE 90	475	38	-	618	692
DELTAPINE 50	473	37	-	577	579
STONEVILLE 506	471	39	-	552	508
STONEVILLE 453	460	42	-	603	-
COKER 84-828	455	40	-	568	608
TERRA 207	447	40	-	-	-
TIFCOT 56	442	39	-	623	623
COKER 320	440	40	-	574	671
STONEVILLE 825	438	40	-	550	548
GEORGIA KING	438	40	-	-	-
HS 46	437	41	-	560	676
DELCOT 344	434	40	-	597	634
STONEVILLE 907	430	38	-	471	-
SUREGROW 1001	417	38	-	533	-
HS 23	411	39	-	-	-
TROPICAL 225	408	39	-	542	-
COKER 139	401	39	-	-	-
DELTAPINE 5415	389	39	-	-	-
HARTZ 1014	385	38	-	-	-
COKER 130	384	41	-	523	608
TERRA C 40	377	39	-	499	547
COKER 315	376	39	-	578	620
STONEVILLE LA 887	375	34	-	-	-
KC 311	357	38	-	643	-
SUREGROW 55	357	41	-	534	-
KC 380	337	39	-	711	749
DELTAPINE 51	327	40	-	441	508
TEST MEAN	435				
L.S.D. (.05)	87				
C.V.	14%				

TABLE 7. PERFORMANCE OF COTTON VARIETIES AT BREWTON, ALABAMA, 1990

VARIETY	1990 LINT/ACRE	1990 LINT	1990 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
KC 380	1,813	42	87	1,524	1,231
DELTAPINE 5690	1,725	43	91	-	-
GEORGIA KING	1,707	45	91	-	-
CHEMBRED 219	1,690	43	91	-	-
HS 46	1,616	41	89	1,397	1,173
KC 311	1,604	40	90	1,258	-
CHEMBRED 1135	1,603	42	91	-	-
DELTAPINE 20	1,585	41	88	1,299	1,041
CHEMBRED 407	1,562	42	91	-	-
STONEVILLE 453	1,538	45	91	1,292	-
DELCOT 344	1,537	42	89	1,322	1,083
DES 119	1,528	43	91	1,305	1,091
TIFCOT 56	1,509	42	92	1,251	1,016
COKER 315	1,500	41	90	1,322	1,082
PD 3	1,489	42	87	1,311	1,069
DELTAPINE 5415	1,483	42	86	-	-
STONEVILLE LA 887	1,462	45	88	-	-
TERRA C 40	1,449	41	88	1,090	897
DELTAPINE 51	1,441	40	86	1,207	1,046
DELTAPINE 5614	1,432	41	96	-	-
COKER 139	1,417	40	91	-	-
DELTAPINE 90	1,400	41	89	1,295	1,095
COKER 84-828	1,391	43	92	1,149	967
STONEVILLE 825	1,390	43	92	1,099	899
COKER 320	1,377	41	88	1,221	1,019
COKER 130	1,358	43	91	1,226	1,012
SUREGROW 1001	1,348	41	91	1,120	-
TERRA 207	1,325	41	90	-	-
TROPICAL 225	1,323	40	89	1,176	-
DELTAPINE 50	1,306	39	86	1,137	965
HARTZ 1014	1,254	43	88	-	-
HS 23	1,250	41	90	-	-
STONEVILLE 506	1,165	40	86	1,006	828
STONEVILLE 907	1,045	41	92	885	-
SUREGROW 55	983	42	89	857	-
TEST MEAN	1,446				
L.S.D. (.05)	298				
C.V.	15%				

TABLE 8. PERFORMANCE OF COTTON VARIETIES AT HEADLAND, ALABAMA, 1990

VARIETY	1990 LINT/ACRE	1990 LINT	1990 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DELTAPINE 51	805	41	-	694	721
TERRA C 40	756	39	-	739	726
DELTAPINE 5690	747	38	-	-	-
CHEMBRED 219	737	39	-	-	-
DES 119	726	39	-	731	768
STONEVILLE 453	724	41	-	720	-
DELTAPINE 20	720	37	-	693	732
COKER 84-828	719	40	-	734	799
CHEMBRED 407	708	38	-	-	-
DELTAPINE 90	704	38	-	695	832
COKER 320	701	39	-	730	727
TROPICAL 225	699	38	-	736	-
STONEVILLE 825	693	40	-	667	705
KC 311	691	38	-	697	-
SUREGROW 1001	691	37	-	633	-
DELTAPINE 50	684	36	-	745	784
DELTAPINE 5415	683	39	-	-	-
TIFCOT 56	682	37	-	695	736
GEORGIA KING	681	41	-	-	-
COKER 139	672	39	-	-	-
TERRA 207	669	39	-	-	-
DELCOT 344	667	39	-	721	717
STONEVILLE LA 887	665	40	-	-	-
HS 46	663	38	-	742	786
CHEMBRED 1135	658	38	-	-	-
DELTAPINE 5614	654	38	-	-	-
HS 23	650	38	-	-	-
PD 3	642	38	-	644	719
HARTZ 1014	632	40	-	-	-
COKER 130	632	39	-	665	742
STONEVILLE 907	617	37	-	684	-
COKER 315	613	39	-	669	718
STONEVILLE 506	611	38	-	641	708
KC 380	584	38	-	738	889
SUREGROW 55	569	38	-	701	-
TEST MEAN	679				
L.S.D. (.05)	92				
C.V.	10%				

TABLE 9. PERFORMANCE OF COTTON VARIETIES AT FAIRHOPE, ALABAMA, 1990

VARIETY	1990 LINT/ACRE	1990 LINT	1990 EARLINESS	2-YR. AV. LINT/ACRE	3-YR. AV. LINT/ACRE
	LB.	PCT.	PCT.	LB.	LB.
DES 119	1,140	43	-	1,146	1,040
DELTAPINE 20	1,118	40	-	1,098	987
TROPICAL 225	1,075	40	-	1,051	-
DELTAPINE 5614	1,037	39	-	-	-
CHEMBRED 407	1,034	42	-	-	-
SUREGROW 1001	1,011	42	-	1,092	-
DELCOT 344	1,001	40	-	1,101	956
DELTAPINE 51	997	40	-	1,055	987
CHEMBRED 219	997	40	-	-	-
CHEMBRED 1135	991	41	-	-	-
HS 46	984	42	-	1,066	1,031
DELTAPINE 50	979	37	-	996	932
TERRA C 40	977	40	-	894	877
GEORGIA KING	973	42	-	-	-
DELTAPINE 90	962	42	-	1,110	1,050
KC 380	961	40	-	1,111	1,004
DELTAPINE 5690	961	41	-	-	-
SUREGROW 55	958	45	-	966	-
DELTAPINE 5415	949	43	-	-	-
COKER 315	943	42	-	917	842
STONEVILLE 907	924	41	-	983	-
STONEVILLE 453	921	44	-	856	-
STONEVILLE 506	918	40	-	908	812
COKER 84-828	910	40	-	863	805
TERRA 207	902	39	-	-	-
TIFCOT 56	899	41	-	947	830
COKER 139	887	41	-	-	-
STONEVILLE 825	882	41	-	876	820
STONEVILLE LA 887	870	43	-	-	-
PD 3	864	40	-	996	883
KC 311	859	40	-	1,038	-
HARTZ 1014	832	43	-	-	-
HS 23	827	38	-	-	-
COKER 130	796	42	-	800	777
COKER 320	766	41	-	895	829
TEST MEAN	946				
L.S.D. (.05)	144				
C.V.	11%				

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

VARIETY	YIELD, LINT/ACRE			LINT			EARLINESS		
	1990	1989-90	1988-90	1990	1989-90	1988-90	1990	1989-90	1988-90
	LB.	LB.	LB.	PCT.	PCT.	PCT.	PCT.	PCT.	PCT.
KC 380	915	930	891	40	40	40	90	89	87
DES 119	1022	913	851	42	41	41	91	92	90
DELTAPINE 90	923	863	842	41	41	40	89	89	86
HS 46	914	852	829	41	41	41	89	88	88
DELTAPINE 51	931	836	809	41	40	40	89	89	87
DELTAPINE 50	891	837	806	38	38	38	89	89	87
DELCOT 344	947	876	804	41	40	40	91	90	88
DELTAPINE 20	937	854	796	40	40	40	90	91	88
PD 3	908	847	777	40	40	40	88	88	86
COKER 320	846	792	777	41	41	41	91	89	88
COKER 84-828	911	807	772	41	41	41	92	92	90
COKER 315	877	808	769	41	41	41	92	90	87
TIFCOT 56	878	806	757	40	39	39	90	90	88
COKER 130	806	753	747	42	42	42	90	90	88
TERRA C 40	900	779	747	40	40	40	90	89	88
STONEVILLE 825	900	791	732	42	41	41	93	93	90
STONEVILLE 506	815	738	691	40	40	40	89	89	89
STONEVILLE 453	956	869	-	44	43	-	91	91	-
KC 311	881	834	-	40	40	-	88	88	-
TROPICAL 225	923	817	-	40	39	-	90	89	-
SUREGROW 1001	905	816	-	40	40	-	90	90	-
SUREGROW 55	787	771	-	42	42	-	90	91	-
STONEVILLE 907	800	727	-	40	40	-	91	92	-
CHEMBRED 219	1000	-	-	40	-	-	92	-	-
CHEMBRED 407	946	-	-	41	-	-	90	-	-
GEORGIA KING	936	-	-	42	-	-	90	-	-
STONEVILLE LA 887	922	-	-	42	-	-	89	-	-
HARTZ 1014	813	-	-	42	-	-	86	-	-
CHEMBRED 1135	940	-	-	40	-	-	91	-	-
HS 23	847	-	-	40	-	-	92	-	-
TERRA 207	874	-	-	41	-	-	92	-	-
DELTAPINE 5614	910	-	-	39	-	-	94	-	-
DELTAPINE 5690	961	-	-	42	-	-	90	-	-
DELTAPINE 5415	940	-	-	42	-	-	89	-	-
COKER 139	865	-	-	40	-	-	91	-	-
THESE VARIETIES AT 2 LOCATIONS ONLY									
PAYMASTER HS-26	721	-	-	38	-	-	82	-	-
ACALA 1517-88	818	-	-	41	-	-	89	-	-

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

Variety	Average wilt percentage										
	1 yr. 1990	2 yr. 89-90	3 yr. 88-90	4 yr. 87-90	5 yr. 86-90	8 yr. 83-90	9 yr. 82-90	10 yr. 81-90	11 yr. 80-90	12 yr. 79-90	14 yr. 77-90
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Coker 315	76.8	60.4	42.3	50.3	49.4	38.0	35.7	32.6	33.7	33.1	30.1
Stoneville 825	87.3	91.6	82.0	85.7	81.4	70.2	66.6	61.5	63.3	62.1	
Stoneville 506	36.3	35.7	33.6	40.2	37.0	26.3	24.7	22.7	23.8		
Deltapine 90	12.3	23.3	17.8	17.9	19.9	14.6	14.3	13.7			
Deltapine 50	53.3	39.1	34.2	38.6	39.3	29.1	27.3				
Deltapine 20	56.0	37.4	27.5	38.2	37.5	28.7					
Delcot 344	22.0	24.8	21.7	28.9	25.5						
DES 119	48.5	41.9	37.2	43.0	39.2						
Tifcot 56	57.3	55.2	51.1	53.7	53.7						
Coker 320	50.0	34.8	36.3	43.9							
KC 380	67.3	61.1	55.3	59.2							
Terra C 40	44.0	41.7	33.5	40.9							
Stoneville 453	62.0	50.5	50.7	58.6							
PD 3	50.8	41.4	34.6	36.7							
Coker 84-828	44.0	51.0	39.5								
HS 46	47.3	53.4	43.0								
Deltapine 51	36.3	25.9	23.6								
Coker 130	44.5	36.7	31.2								
KC 311	33.0	25.5									
Tropical 225	33.5	32.4									
Suregrow 1001	47.3	38.9									
Suregrow 55	49.0	43.5									
Stoneville 907	29.5	32.2									
Georgia King	45.0										
Chembred 407	34.0										
Auburn 56	20.5										
HS 23	38.5										
Hartz 1014	82.0										
Terra C 207	50.5										
Stoneville LA 887	27.8										
Chembred 219	38.5										
Deltapine 5690	34.0										
Chembred 1135	35.8										
Deltapine 5415	22.5										
Deltapine 5614	18.3										
Chembred 232	25.0										
CBX 1232	38.5										
Coker 139	49.8										

Table 12. Cotton Fiber Analysis, HVI, Belle Mina, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 219	3.4	1.02	83	19.5	7.2
	3.6	1.00	78	19.0	7.2
Chembred 407	3.9	1.05	84	25.0	8.6
	4.5	1.01	83	23.0	8.0
Chembred 1135	3.7	1.03	81	21.5	7.4
	4.0	1.02	83	22.0	7.4
Coker 130	3.9	1.03	80	21.5	7.2
	3.4	1.03	80	21.0	7.4
Coker 139	3.7	1.07	81	25.0	8.4
	3.9	1.07	85	23.0	7.0
Coker 315	3.7	1.03	80	20.5	7.6
	3.4	1.02	78	21.0	8.2
Coker 320	4.2	1.04	82	21.5	8.0
	3.6	1.06	81	20.5	7.8
Coker 84-828	3.8	1.10	80	22.5	8.6
	3.8	1.07	81	22.0	8.4
Delcot 344	4.0	1.05	82	22.5	8.8
	3.9	1.02	82	22.0	9.0
Deltapine 20	4.0	1.02	83	20.0	9.2
	4.0	1.00	81	22.0	10.0
Deltapine 50	3.9	1.10	81	22.0	8.8
	3.7	1.01	80	21.0	9.2
Deltapine 51	4.0	1.04	79	18.5	8.6
	4.0	.99	80	22.0	9.2
Deltapine 90	3.8	1.06	82	28.0	7.8
	4.4	.99	80	23.5	8.4
Deltapine 5415	4.1	1.06	82	26.5	8.4
	4.0	1.05	83	25.5	9.4
Deltapine 5614	4.7	1.01	82	19.0	6.8
	4.2	1.06	82	24.0	7.6
Deltapine 5690	3.9	1.05	83	29.0	8.4
	4.7	1.01	81	25.5	8.0
DES 119	4.2	1.03	84	22.0	9.4
	4.2	1.04	83	22.5	10.0
Georgia King	3.9	1.07	80	20.5	8.2
	4.2	1.08	83	22.5	7.8
Hartz 1014	4.1	1.00	81	22.0	9.0
	4.3	1.00	81	21.5	8.8
HS 23	3.7	1.05	82	18.0	8.4
	3.7	1.02	80	20.0	7.2
HS 46	4.6	1.06	84	25.0	8.8
	4.2	1.07	82	25.5	8.4
KC 311	4.5	1.05	84	24.5	8.2
	4.1	1.02	82	30.0	8.4

(Cont'd)

Table 12 (Continued). Cotton Fiber Analysis, HVI, Belle Mina, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
KC 380	4.2	1.08	85	21.5	8.6
	3.9	1.06	83	23.5	8.0
PD 3	3.6	1.07	81	24.0	7.8
	3.0	1.01	79	21.0	7.4
Stoneville 453	3.6	1.00	79	20.5	7.2
	3.9	.96	78	20.0	7.4
Stoneville 506	3.7	1.10	80	21.5	8.0
	3.9	1.04	80	23.0	8.6
Stoneville 825	4.7	1.00	82	19.5	7.2
	4.5	.99	81	19.5	6.2
Stoneville 907	4.6	.98	82	20.5	8.4
	4.0	1.00	81	23.5	8.6
Stoneville LA 887	4.6	1.06	83	24.0	8.6
	4.0	1.07	82	25.0	8.6
Suregrow 55	4.3	1.03	82	25.5	9.6
	4.4	1.01	82	26.5	9.8
Suregrow 1001	3.9	1.08	83	25.5	8.2
	4.2	1.00	80	24.0	8.4
Terra C 40	4.0	.98	81	22.5	8.8
	4.1	1.00	81	20.5	9.4
Terra 207	4.2	1.04	82	22.5	8.6
	3.5	1.10	83	20.0	8.8
Tifcot 56	3.8	.99	81	22.5	7.8
	3.6	1.04	79	25.0	7.6
Tropical 225	3.8	1.09	82	23.0	7.6
	4.0	1.07	79	22.0	8.8
Acala 1517-88	4.2	1.09	80	25.5	7.4
	3.8	1.04	82	24.5	7.4
Paymaster HS-26	3.5	1.06	85	22.0	9.0
	3.6	.99	82	25.5	8.8

Table 13. Cotton Fiber Analysis, HVI, Crossville, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 219	4.5	1.06	83	21.0	8.0
	4.0	.99	79	20.0	7.4
Chembred 407	5.1	1.03	82	26.0	8.0
	4.3	1.11	81	25.5	7.8
Chembred 1135	4.3	1.09	82	23.5	7.4
	4.5	1.12	87	21.0	8.2
Coker 130	4.7	1.06	84	24.0	7.2
	4.3	1.05	84	25.5	8.8
Coker 139	4.7	1.09	84	23.0	7.2
	4.6	1.07	85	21.0	7.4
Coker 315	4.6	1.03	82	23.0	7.2
	4.5	1.02	82	23.0	7.6
Coker 320	4.4	1.06	83	22.5	7.6
	4.5	1.06	84	22.0	7.0
Coker 84-828	4.8	1.03	81	23.0	7.6
	4.1	1.07	83	24.0	8.0
Delcot 344	4.5	1.09	84	21.5	9.0
	4.2	1.04	83	24.0	8.8
Deltapine 20	4.4	1.02	84	21.0	9.0
	3.9	1.01	82	21.0	9.4
Deltapine 50	4.6	1.06	83	20.0	9.4
	4.5	1.04	81	21.0	9.0
Deltapine 51	4.1	1.02	80	20.5	9.0
	4.8	1.03	80	20.5	9.2
Deltapine 90	4.5	1.07	85	29.0	8.0
	4.3	1.04	81	27.5	7.8
Deltapine 5415	4.6	1.08	84	23.5	9.8
	4.7	1.03	82	25.0	9.2
Deltapine 5614	5.1	1.08	86	22.5	6.8
	5.0	1.10	86	25.0	7.2
Deltapine 5690	4.2	.98	80	25.0	7.8
	4.3	1.00	82	25.5	8.2
DES 119	4.5	1.06	82	23.0	10.2
	4.2	1.04	83	24.5	10.0
Georgia King	4.9	1.10	84	26.0	7.8
	4.3	1.09	85	23.0	6.6
Hartz 1014	4.3	1.06	79	22.5	8.4
	4.8	1.09	81	26.0	7.6
HS 23	4.2	1.05	83	20.0	6.6
	4.1	1.09	82	21.0	7.2
HS 46	4.4	1.04	80	26.0	8.0
	4.1	1.00	81	24.0	8.6
KC 311	4.8	1.07	82	27.0	8.0
	4.2	1.09	86	28.0	8.0
KC 380	5.1	1.07	82	22.5	6.6
	4.9	1.07	86	23.0	6.6

(Cont'd)

Table 13 (Continued). Cotton Fiber Analysis, HVI, Crossville, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
PD 3	4.6	1.06	83	22.0	6.2
	4.0	1.03	83	23.0	7.2
Stoneville 453	4.3	1.00	82	20.5	7.4
	4.2	1.06	84	22.0	7.4
Stoneville 506	4.2	1.05	81	23.0	8.0
	4.0	1.07	85	20.5	6.8
Stoneville 825	4.4	.97	81	22.0	7.6
	4.7	1.00	82	21.0	7.4
Stoneville 907	5.0	1.00	80	24.0	9.0
	4.1	.98	78	23.0	9.0
Stoneville LA 887	4.8	1.04	83	25.0	8.4
	4.7	1.05	81	20.0	7.6
Suregrow 55	4.1	1.04	82	21.5	9.8
	4.1	1.09	84	26.0	9.0
Suregrow 1001	4.4	.99	81	26.5	7.6
	4.7	1.03	82	27.0	8.4
Terra C 40	3.8	.98	82	22.0	9.8
	4.4	.98	86	16.5	8.2
Terra 207	4.5	1.02	82	21.5	9.0
	4.9	1.04	84	20.5	9.0
Tifcot 56	4.3	1.00	80	24.0	8.0
	3.7	1.08	83	26.0	7.8
Tropical 225	3.8	1.05	81	25.5	7.6
	4.0	1.04	82	22.0	7.8

Table 14. Cotton Fiber Analysis, HVI, Prattville, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 219	3.6	1.16	83	24.5	7.0
	3.4	1.13	79	24.5	7.2
Chembred 407	3.9	1.14	82	26.5	7.8
	3.9	1.12	82	27.0	7.8
Chembred 1135	3.5	1.13	81	26.0	7.6
	3.7	1.11	78	24.5	7.2
Coker 130	4.0	1.11	81	24.0	6.8
	3.9	1.11	82	24.5	8.0
Coker 139	3.9	1.16	82	26.0	7.2
	4.1	1.12	82	24.0	6.4
Coker 315	3.6	1.21	80	27.5	7.8
	3.9	1.19	80	25.0	7.4
Coker 320	4.1	1.18	84	25.5	7.6
	3.8	1.13	80	23.5	6.6
Coker 84-828	4.4	1.17	82	24.5	7.8
	4.3	1.13	80	24.5	7.0
Delcot 344	4.0	1.17	84	24.0	9.8
	3.8	1.13	81	24.0	9.2
Deltapine 20	3.8	1.11	80	23.0	9.2
	4.0	1.20	84	27.5	8.6
Deltapine 50	4.1	1.11	81	21.0	9.0
	4.6	1.17	85	20.5	8.8
Deltapine 51	4.0	1.16	81	22.0	9.0
	4.2	1.15	82	22.0	8.2
Deltapine 90	4.5	1.14	83	28.5	7.4
	4.2	1.10	81	27.5	8.2
Deltapine 5415	4.4	1.17	84	24.0	9.8
	4.2	1.17	85	26.5	8.8
Deltapine 5614	4.5	1.12	82	23.5	6.6
	4.4	1.12	84	22.5	7.4
Deltapine 5690	4.1	1.11	82	28.0	7.8
	4.3	1.16	82	28.5	7.4
DES 119	4.0	1.18	81	26.0	9.4
	3.9	1.12	81	24.0	6.4
Georgia King	4.5	1.13	84	24.5	8.2
	4.5	1.16	83	25.5	7.0
Hartz 1014	3.8	1.19	79	26.0	8.6
	3.9	1.21	81	24.5	8.2
HS 23	3.6	1.17	83	25.0	8.0
	3.7	1.14	82	25.5	6.8
HS 46	3.8	1.15	82	25.0	7.4
	-	-	-	-	-
KC 311	4.7	1.13	84	27.5	7.6
	4.3	1.15	84	26.0	7.4
KC 380	4.6	1.13	83	21.0	7.0
	4.6	1.15	83	23.5	6.4

(Cont'd)

Table 14 (Continued). Cotton Fiber Analysis, HVI, Prattville, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
PD 3	3.6	1.19	82	26.0	7.8
	3.9	1.10	83	23.5	7.0
Stoneville 453	3.9	1.13	83	23.0	8.2
	4.1	1.13	82	22.5	7.6
Stoneville 506	3.4	1.14	80	25.0	8.8
	4.1	1.12	81	24.0	8.0
Stoneville 825	4.3	1.09	83	25.0	7.2
	3.8	1.11	81	22.5	6.4
Stoneville 907	4.3	1.13	84	26.0	9.2
	4.5	1.13	81	25.5	8.8
Stoneville LA 887	4.1	1.20	81	26.0	8.8
	3.6	1.13	80	29.0	8.8
Suregrow 55	3.8	1.14	84	27.0	9.0
	3.5	1.17	82	27.5	9.4
Suregrow 1001	3.9	1.15	83	27.0	8.2
	4.5	1.14	83	26.5	7.4
Terra C 40	3.8	1.12	83	22.0	9.0
	3.8	1.16	86	22.5	9.2
Terra 207	4.1	1.16	82	24.0	9.0
	4.1	1.17	81	23.5	9.0
Tifcot 56	4.1	1.14	83	26.0	7.2
	4.1	1.12	85	26.0	7.2
Tropical 225	3.7	1.17	83	27.5	7.8
	3.7	1.14	81	23.5	7.8

Table 15. Cotton Fiber Analysis, HVI, Tallassee, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 219	4.1	1.15	82	24.0	7.0
	4.4	1.20	88	24.0	6.8
Chembred 407	4.3	1.11	84	26.5	8.0
	4.3	1.11	83	27.5	7.0
Chembred 1135	4.4	1.13	83	25.0	7.0
	3.9	1.13	83	27.5	7.0
Coker 130	4.0	1.14	82	22.5	6.8
	5.0	1.11	82	23.5	7.0
Coker 139	4.5	1.13	81	22.0	6.8
	4.3	1.13	82	24.0	7.2
Coker 315	4.7	1.10	84	24.5	8.6
	4.2	1.21	83	23.5	7.2
Coker 320	4.4	1.14	86	24.5	7.2
	5.0	1.09	84	22.5	6.6
Coker 84-828	4.3	1.17	82	26.0	6.8
	4.8	1.13	87	23.5	7.2
Delcot 344	4.8	1.14	82	25.0	8.8
	4.6	1.17	86	25.5	8.6
Deltapine 20	4.6	1.07	83	23.0	8.8
	4.1	1.09	83	23.5	9.0
Deltapine 50	4.8	1.12	84	20.5	8.4
	4.4	1.13	81	22.5	9.0
Deltapine 51	4.8	1.13	82	21.0	8.8
	4.7	1.11	84	20.5	8.8
Deltapine 90	4.7	1.14	83	24.0	6.6
	4.8	1.13	83	27.5	7.2
Deltapine 5415	5.4	1.15	83	24.0	8.6
	4.9	1.17	85	25.0	8.4
Deltapine 5614	4.8	1.18	84	26.5	7.4
	4.7	1.14	84	25.5	7.2
Deltapine 5690	4.4	1.17	87	28.5	6.8
	4.1	1.10	84	29.0	7.8
DES 119	4.6	1.20	83	23.5	9.0
	5.1	1.15	85	25.0	9.6
Georgia King	4.4	1.15	83	25.0	7.4
	4.6	1.18	82	26.0	6.4
Hartz 1014	4.1	1.08	80	23.5	8.0
	4.1	1.20	81	26.0	8.2
HS 23	4.3	1.17	85	23.0	7.0
	4.2	1.19	84	26.5	7.6
HS 46	4.1	1.13	80	28.0	8.2
	4.5	1.15	81	26.0	7.8
KC 311	3.9	1.16	84	26.5	7.6
	4.9	1.16	83	28.5	7.8

(Cont'd)

Table 15 (Continued). Cotton Fiber Analysis, HVI, Tallassee, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
KC 380	4.4	1.09	82	21.5	6.8
	4.9	1.16	81	24.5	7.0
PD 3	4.6	1.19	81	24.5	6.6
	4.6	1.13	83	26.0	6.2
Stoneville 453	4.4	1.14	83	23.0	7.4
	5.0	1.11	82	22.0	7.8
Stoneville 506	4.3	1.13	81	23.5	7.2
	4.5	1.14	83	22.5	8.2
Stoneville 825	4.6	1.12	81	22.5	5.6
	5.0	1.15	83	24.0	6.0
Stoneville 907	4.3	1.08	79	24.5	8.4
	4.7	1.12	82	26.0	8.8
Stoneville LA 887	4.0	1.18	81	27.5	8.2
	3.9	1.17	85	26.5	8.2
Suregrow 55	3.6	1.14	82	25.0	9.2
	4.4	1.12	82	25.5	9.4
Suregrow 1001	4.2	1.10	83	29.0	7.2
	5.0	1.14	83	26.0	7.4
Terra C 40	4.2	1.10	81	21.0	9.6
	4.4	1.13	83	22.5	9.2
Terra 207	4.3	1.17	86	21.5	8.6
	4.4	1.17	85	23.5	8.2
Tifcot 56	3.8	1.12	83	28.0	7.0
	4.6	1.12	81	25.0	6.8
Tropical 225	4.3	1.16	82	24.0	7.6
	4.2	1.20	81	27.0	7.6

Table 16. Cotton Fiber Analysis, HVI, Shorter, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 219	4.5	1.08	79	25.0	8.2
	4.8	1.07	82	22.0	8.2
Chembred 407	5.7	1.06	81	26.0	8.0
	4.9	1.06	82	23.5	8.8
Chembred 1135	4.2	1.12	81	26.0	8.2
	4.9	1.08	81	25.0	8.0
Coker 130	5.0	1.05	80	25.5	8.0
	5.0	1.11	83	23.0	7.4
Coker 139	5.1	1.07	83	24.0	8.0
	5.3	1.11	83	26.0	8.8
Coker 315	4.7	1.11	82	23.5	8.4
	4.7	1.19	81	26.5	8.0
Coker 320	5.2	1.07	81	23.5	7.6
	5.1	1.06	82	24.0	8.2
Coker 84-828	4.7	1.13	82	24.5	8.6
	5.0	1.08	80	24.5	8.4
Delcot 344	5.1	1.07	81	26.0	9.2
	5.0	1.06	79	25.0	9.4
Deltapine 20	4.7	1.08	83	24.0	10.0
	5.1	1.07	81	21.5	10.0
Deltapine 50	5.3	1.11	84	23.0	9.2
	5.1	1.11	84	20.5	9.4
Deltapine 51	5.2	1.08	83	21.5	9.2
	5.5	1.12	84	21.5	9.8
Deltapine 90	5.0	1.11	84	27.0	9.6
	5.1	1.07	82	24.5	8.4
Deltapine 5415	5.3	1.02	82	26.0	9.6
	5.7	1.07	82	23.5	9.4
Deltapine 5614	5.4	1.04	83	23.0	7.6
	5.2	1.10	82	24.5	8.4
Deltapine 5690	5.0	1.07	83	25.5	8.2
	4.9	1.11	82	27.0	8.2
DES 119	5.0	1.06	83	25.0	10.0
	5.1	1.07	83	26.0	10.0
Georgia King	5.1	1.08	81	25.0	8.4
	5.3	1.12	80	24.5	8.6
Hartz 1014	4.7	1.10	84	24.5	8.6
	4.6	1.15	81	26.5	8.8
HS 23	4.8	1.05	79	22.5	7.6
	4.2	1.10	81	21.5	8.4
HS 46	4.8	1.08	82	24.5	8.4
	4.6	1.09	81	26.5	8.6
KC 311	5.0	1.05	82	28.0	8.4
	4.8	1.10	85	27.0	8.4

(Cont'd)

Table 16 (Continued). Cotton Fiber Analysis, HVI, Shorter, Alabama ,1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
KC 380	5.0	1.07	81	25.0	8.0
	5.4	1.07	82	24.0	8.4
PD 3	5.1	1.11	84	27.5	7.4
	5.0	1.08	82	22.5	7.8
Stoneville 453	5.0	1.04	81	22.5	8.8
	5.0	1.10	82	21.5	8.4
Stoneville 506	4.9	1.08	82	23.5	8.6
	4.9	.94	77	19.5	9.0
Stoneville 825	4.9	1.04	79	23.0	8.2
	5.4	1.09	83	20.5	8.2
Stoneville 907	5.5	1.08	83	21.5	9.8
	5.5	1.09	85	25.0	8.6
Stoneville LA 887	5.4	1.07	81	25.5	9.0
	5.1	1.11	87	24.5	9.8
Suregrow 55	4.6	1.11	84	27.0	9.6
	4.6	1.04	81	27.5	9.4
Suregrow 1001	5.4	1.08	82	25.5	8.4
	4.4	1.08	80	29.0	8.6
Terra C 40	4.8	1.03	81	21.5	9.6
	4.5	1.06	81	22.5	10.0
Terra 207	5.6	1.11	84	23.0	9.8
	5.1	1.03	83	22.0	9.4
Tifcot 56	5.0	1.05	84	24.5	8.2
	5.4	1.07	82	23.0	7.8
Tropical 225	4.8	1.07	81	26.0	8.4
	4.7	1.13	83	25.0	8.4
Acala 1517-88	4.2	1.15	82	26.5	8.2
	4.5	1.11	82	27.5	7.8
Paymaster HS-26	4.7	1.00	84	28.0	9.2
	5.0	1.00	83	24.0	10.0

Table 17. Cotton Fiber Analysis, HVI, Monroeville, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 219	3.8	1.17	82	24.5	7.4
Chembred 407	4.9	1.11	82	26.5	7.4
Chembred 1135	4.1	1.11	84	24.5	7.6
Coker 130	4.1	1.12	84	24.5	7.6
Coker 139	4.3	1.12	81	23.0	7.8
Coker 315	4.0	1.17	84	24.5	7.8
Coker 320	4.0	1.17	82	24.5	7.4
Coker 84-828	4.2	1.11	82	24.0	7.0
Delcot 344	4.4	1.16	84	22.5	9.0
Deltapine 20	4.4	1.09	83	20.5	6.2
Deltapine 50	3.8	1.06	78	23.0	9.2
Deltapine 51	4.5	1.10	82	19.5	9.0
Deltapine 90	3.9	1.12	86	27.5	8.2
Deltapine 5415	4.4	1.13	84	28.0	9.2
Deltapine 5614	4.4	1.17	84	27.0	8.0
Deltapine 5690	4.1	1.14	84	26.5	8.0
DES 119	4.2	1.15	85	24.0	9.4
Georgia King	3.9	1.15	81	24.5	8.2
Hartz 1014	3.9	1.17	75	25.5	9.2
HS 23	3.9	1.12	81	22.0	7.0
HS 46	4.0	1.13	83	29.0	8.2
KC 311	4.1	1.15	84	30.0	8.0
KC 380	4.1	1.09	79	22.0	7.8
PD 3	3.8	1.16	83	25.5	7.6
Stoneville 453	4.3	1.17	82	22.5	6.8
Stoneville 506	3.9	1.15	82	24.5	8.0
Stoneville 825	4.4	1.09	83	20.5	6.2
Stoneville 907	3.9	1.14	86	25.5	9.0
Stoneville LA 887	4.1	1.13	84	23.5	8.4
Suregrow 55	3.3	1.15	83	24.0	9.4
Suregrow 1001	4.0	1.14	81	27.5	7.4
Terra C 40	4.1	1.11	82	21.5	9.0
Terra 207	3.9	1.15	85	24.5	8.8
Tifcot 56	4.0	1.07	81	25.0	7.6
Tropical 225	4.1	1.15	82	25.0	7.6

Table 18. Cotton Fiber Analysis, Brewton, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 219	4.5	1.12	86	26.5	6.6
Chembred 407	4.6	1.10	84	27.0	7.6
Chembred 1135	3.9	1.11	84	25.0	7.4
Coker 130	4.6	1.10	85	22.5	6.8
Coker 139	4.6	1.16	83	25.0	7.2
Coker 315	4.0	1.15	82	25.5	7.6
Coker 320	4.4	1.13	84	26.0	7.8
Coker 84-828	4.5	1.14	84	26.0	7.4
Delcot 344	4.4	1.15	87	24.5	9.0
Deltapine 20	4.5	1.11	86	23.0	9.0
Deltapine 50	4.6	1.12	83	21.0	8.6
Deltapine 51	4.4	1.13	83	22.0	9.2
Deltapine 90	4.5	1.09	81	28.5	7.6
Deltapine 5415	4.8	1.14	84	23.0	9.0
Deltapine 5614	5.2	1.11	86	22.5	7.4
Deltapine 5690	4.8	1.09	83	26.0	7.6
DES 119	4.8	1.14	83	24.5	9.2
Georgia King	4.2	1.09	82	23.5	8.2
Hartz 1014	4.1	1.15	83	25.0	8.2
HS 23	3.8	1.11	83	25.0	6.8
HS 46	4.0	1.10	82	29.5	8.6
KC 311	4.6	1.14	85	28.5	7.0
KC 380	4.7	1.06	80	22.0	7.0
PD 3	4.6	1.14	84	22.5	7.6
Stoneville 453	4.4	1.09	82	21.5	8.0
Stoneville 506	4.4	1.19	85	25.0	7.6
Stoneville 825	5.1	1.08	83	22.5	7.0
Stoneville 907	4.7	1.11	84	26.0	9.0
Stoneville LA 887	4.6	1.11	83	26.5	8.8
Suregrow 55	4.6	1.13	84	26.0	9.6
Suregrow 1001	4.3	1.14	83	28.5	7.4
Terra C 40	4.6	1.08	83	21.0	9.2
Terra 207	4.6	1.07	83	24.0	8.6
Tifcot 56	4.8	1.08	81	26.0	7.4
Tropical 225	4.2	1.15	82	27.5	8.2

Table 19. Cotton Fiber Analysis, HVI, Headland, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 219	3.7	1.14	83	23.5	7.4
Chembred 407	3.8	1.11	81	28.5	7.8
Chembred 1135	3.8	1.11	81	23.5	7.8
Coker 130	3.5	1.10	81	22.5	7.6
Coker 139	3.9	1.18	82	28.5	7.6
Coker 315	3.2	1.15	81	25.5	7.6
Coker 320	3.6	1.12	81	24.0	7.8
Coker 84-828	3.7	1.12	81	24.5	7.4
Delcot 344	3.9	1.11	83	25.0	9.0
Deltapine 20	3.3	1.07	82	21.5	9.4
Deltapine 50	3.8	1.10	81	21.5	8.8
Deltapine 51	4.0	1.15	83	23.0	8.8
Deltapine 90	3.9	1.10	82	28.5	7.6
Deltapine 5415	3.8	1.14	84	27.5	9.4
Deltapine 5614	3.9	1.13	85	26.5	7.2
Deltapine 5690	3.9	1.08	80	27.0	7.2
DES 119	3.9	1.13	84	24.0	9.2
Georgia King	3.8	1.14	83	24.5	7.4
Hartz 1014	3.6	1.19	82	25.0	7.8
HS 23	3.2	1.09	81	23.5	6.8
HS 46	3.2	1.14	82	25.5	8.0
KC 311	3.7	1.10	80	29.5	7.8
KC 380	3.3	1.11	81	24.0	8.0
PD 3	3.6	1.12	80	25.0	7.4
Stoneville 453	3.7	1.13	78	20.0	7.0
Stoneville 506	3.5	1.12	82	22.5	8.0
Stoneville 825	3.4	1.15	82	24.0	6.6
Stoneville 907	3.2	1.18	78	29.0	8.6
Stoneville LA 887	3.6	1.15	83	27.5	8.2
Suregrow 55	3.5	1.11	83	30.0	7.6
Suregrow 1001	3.9	1.11	85	27.5	8.0
Terra C 40	3.6	1.13	85	24.0	9.2
Terra 207	3.8	1.10	82	23.0	9.4
Tifcot 56	3.5	1.17	81	25.5	8.0
Tropical 225	3.7	1.08	82	25.0	7.8

Table 20. Cotton Fiber Analysis, HVI, Fairhope, Alabama, 1990

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 219	3.3	1.07	79	24.5	7.2
Chembred 407	3.5	1.05	79	26.5	7.2
Chembred 1135	3.3	1.08	80	23.5	7.2
Coker 130	3.5	1.16	82	23.0	7.8
Coker 139	3.5	1.12	79	24.0	7.4
Coker 315	3.2	1.08	79	23.5	7.0
Coker 320	3.8	1.09	80	23.0	6.2
Coker 84-828	3.4	1.10	77	25.5	6.6
Delcot 344	3.5	1.12	84	22.5	8.8
Deltapine 20	3.8	1.06	84	19.5	9.0
Deltapine 50	3.8	1.14	80	21.5	8.6
Deltapine 51	4.2	1.10	81	22.0	8.4
Deltapine 90	3.9	1.09	83	25.5	7.2
Deltapine 5415	3.5	1.10	82	27.0	8.6
Deltapine 5614	4.3	1.11	83	22.0	7.0
Deltapine 5690	3.8	1.06	81	24.5	6.8
DES 119	3.7	1.12	81	27.0	9.4
Georgia King	3.9	1.07	80	23.0	7.6
Hartz 1014	3.3	1.20	78	26.0	7.8
HS 23	3.1	1.10	81	21.5	7.8
HS 46	3.2	1.06	78	25.0	7.2
KC 311	3.8	1.07	82	24.5	7.6
KC 380	4.4	1.11	78	21.0	7.0
PD 3	3.5	1.14	82	21.0	7.2
Stoneville 453	3.9	1.11	80	22.0	7.4
Stoneville 506	3.2	1.16	82	22.5	8.0
Stoneville 825	3.5	1.08	81	20.0	6.8
Stoneville 907	3.7	1.13	79	26.5	8.4
Stoneville LA 887	3.6	1.12	84	23.0	8.4
Suregrow 55	3.5	1.11	81	24.5	8.8
Suregrow 1001	3.2	1.10	83	25.5	7.4
Terra C 40	4.0	1.09	79	20.5	8.8
Terra 207	3.6	1.14	82	24.0	8.4
Tifcot 56	3.6	1.09	79	24.0	7.8
Tropical 225	3.6	1.13	80	22.5	7.0

Table 21. Sources of Seed for the 1990 Cotton Variety Tests

Deltapine 90 Deltapine 50 Deltapine 51 Deltapine 20 Deltapine 5415 Deltapine 5614 Deltapine 5690 DES 119	Delta and Pine Land Co. Scott, Mississippi
Stoneville 907 Stoneville 825 Stoneville 506 Stoneville 453 Stoneville LA 887 KC 311 KC 380 Coker 315 Coker 130 Coker 320 Coker 139 Coker 84-828	Stoneville Pedigreed Seed Co. Stoneville, Mississippi
Delcot 344	University of Missouri Delta Center Portageville, Missouri
PD 3	Pee Dee Experiment Station Florence, South Carolina
Tifcot 56 Georgia King	Georgia Coastal Plain Experiment Station Tifton, Georgia
Terra C 40 Terra 207	Terra International,Inc. Memphis, Tennessee
HS 23 HS 46 Tropical 225	Hy Performer Seed Co. Memphis, Tennessee
Suregrow 55 Suregrow 1001	Ellis Brothers Seed, Inc. Centre, Alabama
Hartz 1014	Jacob Hartz Seed Co., Inc. Stuttgart, Arkansas
Chembred 219 Chembred 407 Chembred 1135	Chembred, Inc. Maricopa, Arizona

RECOMMENDED COTTON VARIETIES FOR ALABAMA

The list of recommended varieties given below was prepared by the author of this report and Keith Edmisten, Extension Agronomist, 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 averge lint yield.

Coker 130
Coker 139
Coker 315
Coker 320
Delcot 344
Deltapine 20
Deltapine 50
Deltapine 51
Deltapine 90
DES 119
HS 46
KC 380
PD 3
Stoneville 453**
Stoneville 506
Stoneville 825*
Terra C 40
Tifcot 56

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

**Has been tested for two years and is recommended on a conditional basis.