



**1995  
ALABAMA  
COTTON  
VARIETY  
REPORT**

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## TABLE OF CONTENTS

	Page
INTRODUCTION.....	1
EXPERIMENTAL CONDITIONS.....	1
EXPLANATION OF DATA.....	2
STATISTICAL ANALYSIS.....	4
LOCATIONS OF EXPERIMENTS.....	4
TABLE 1. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT BELLE MINA, ALABAMA, 1995.....	5
TABLE 2. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT BELLE MINA, ALABAMA, 1995.....	6
TABLE 3. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT PRATTVILLE, ALABAMA, 1995.....	6
TABLE 4. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT PRATTVILLE, ALABAMA, 1995.....	7
TABLE 5. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT SHORTER, ALABAMA, 1995.....	8
TABLE 6. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT SHORTER, ALABAMA, 1995.....	9
TABLE 7. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT MONROEVILLE, ALABAMA, 1995.....	10
TABLE 8. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT MONROEVILLE, ALABAMA, 1995.....	11
TABLE 9. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT HEADLAND, ALABAMA, 1995.....	12
TABLE 10. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT HEADLAND, ALABAMA, 1995.....	13
TABLE 11. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 1995.....	13
TABLE 12. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 1995.....	14
TABLE 13. PERFORMANCE OF EARLY SEASON COTTON VARIETIES IN ALABAMA, AVERAGE OF ALL LOCATIONS.....	15

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TABLE 14.	PERFORMANCE OF FULL SEASON COTTON VARIETIES IN ALABAMA, AVERAGE OF ALL LOCATIONS.....	16
TABLE 15.	PERFORMANCE OF EARLY SEASON IRRIGATED COTTON VARIETIES AT BELLE MINA, ALABAMA, 1995.....	17
TABLE 16.	PERFORMANCE OF FULL SEASON IRRIGATED COTTON VARIETIES AT BELLE MINA, ALABAMA, 1995.....	18
TABLE 17.	PERFORMANCE OF EARLY SEASON IRRIGATED COTTON VARIETIES AT SHORTER, ALABAMA, 1995.....	18
TABLE 18.	PERFORMANCE OF FULL SEASON IRRIGATED COTTON VARIETIES AT SHORTER, ALABAMA, 1995.....	19
TABLE 19.	PERCENTAGE OF PLANTS SHOWING SYMPTOMS OF FUSARIUM WILT, TALLASSEE, ALABAMA,.....	19
TABLE 20.	COTTON FIBER ANALYSIS, HVI, BELLE MINA, ALABAMA, 1995.....	20
TABLE 21.	COTTON FIBER ANALYSIS, HVI, PRATTVILLE, ALABAMA, 1995.....	21
TABLE 22.	COTTON FIBER ANALYSIS, HVI, SHORTER, ALABAMA, 1995.....	22
TABLE 23.	COTTON FIBER ANALYSIS, HVI, MONROEVILLE, ALABAMA, 1995.....	23
TABLE 24.	COTTON FIBER ANALYSIS, HVI, HEADLAND, ALABAMA, 1995.....	24
TABLE 25.	COTTON FIBER ANALYSIS, HVI, FAIRHOPE, ALABAMA, 1995.....	25
TABLE 26.	COTTON FIBER ANALYSIS, HVI, IRRIGATED COTTON, BELLE MINA, ALABAMA, 1995.....	26
TABLE 27.	COTTON FIBER ANALYSIS, HVI, IRRIGATED COTTON, SHORTER, ALABAMA, 1995.....	26
TABLE 28.	GROWING SEASON RAINFALL, 1993-95.....	27
TABLE 29.	SOIL TYPES FOR COTTON TRIALS, 1995.....	27
TABLE 30.	SOURCES OF SEED FOR THE 1995 COTTON VARIETY TRIALS.....	28

*Information contained herein is available to all persons regardless of race,  
color, sex, or national origin.*

# 1995 ALABAMA COTTON VARIETY REPORT

## A REPORT OF THE PERFORMANCE OF COTTON VARIETIES TESTED IN ALABAMA

*K. M. Glass, C. D. Monks, C. H. Burmester and D. I. Bransby<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 the Auburn University Extension Service to producers. Data is reported on an irrigated test at both Belle Mina and Shorter. 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. A comparative basis for early season was DES 119 and full season was Deltapine Acala 90. The maturity category for each variety was chosen by the company or cooperator. Plot width was two rows at Prattville, Headland, Belle Mina, Shorter, and Fairhope, and one row at Monroeville.

A randomized complete block experimental design with four replications was used in both tests at each location. Row length varied at different locations from 20 to 120 feet.

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<sup>1</sup>Research Assistant, Extension Cotton and Soybean Specialist, Extension Agronomist, and Professor of Agronomy and Soils.

At most locations, rainfall was inadequate and yields were reduced. At Fairhope, yields were reduced due to Hurricane Erin in early August with 50+ mph wind. All cotton was laid flat on the ground, which increased the potential for boll rot and created problems harvesting and in using ground spraying equipment. Hurricane Opal occurred in early October with 11 inches of rain. Full season cotton was again blown over with some lint lost on the ground. There were no varieties that withstood the storms better than others. Most plants regained a 45° angle and most initiated growing new terminals on secondary branches.

All locations had moderate to severe infestations of bollworm and budworm.

## EXPLANATION OF DATE

### **Harvest of Seed Cotton**

Tests at Belle Mina, Headland, and Shorter were harvested by a mechanical spindle picker. The tests at Prattville, Monroeville, and Fairhope 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 a single composite sample of each variety from all locations including the regional tests at Shorter and Belle Mina.

**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.

**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.

#### **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. Selected varieties were grown in a field with a high natural incidence of the fusarium wilt disease. In 1991 and 1993, 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.

Verticillium wilt is being identified more frequently in northern Alabama than

previously reported. Varietal comparisons reported in Table 19 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 as the Least Significance Difference (L.S.D.<sub>.05</sub>).

### LOCATION OF EXPERIMENTS

<b>Tennessee Valley Substation.....</b>	<i>B. E. Noms, Acting Superintendent H.E. Burgess</i>
<b>Prattville Experiment Field.....</b>	<i>D.P. Moore, Superintendent</i>
<b>E.V. Smith Research Center.....</b>	<i>J. S. Bannon, Director</i>
<b>Field Crops Research Unit, Shorter..</b>	<i>D. R. Williamson, Superintendent</i>
<b>Plant Breeding Unit, Tallassee.....</b>	<i>S. P. Nightengale, Superintendent</i>
<b>Monroeville Experiment Field.....</b>	<i>J.R. Akridge, Superintendent</i>
<b>Wiregrass Substation, Headland.....</b>	<i>L. N. Wells, Acting Superintendent B.E. Gamble</i>
<b>Gulf Coast Substation, Fairhope.....</b>	<i>E.L. Carden, Superintendent N.R. McDaniel, M.D. Pegues</i>

Appreciation is also expressed to *Mien-Huei Tzeng*, Applied Statistics Division, Discrete and Statistical Sciences, for the computation, summarization, and analysis of the data in this report.



TABLE 1. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT BELLE MINA, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre Lb.	3-yr. av. Lint/Acre Lb.
	Lint/Acre Lb.	Lint Pct.	Earliness Pct.		
Suregrow 125*	755	42	-	1,038	1,054
Suregrow 501	756	43	-	1,034	1,023
Suregrow 404	582	40	-	971	960
Stoneville 474	747	44	-	1,010	957
DES 119*	666	41	-	996	930
Chembred 1135	673	41	-	973	917
Suregrow 1001**	695	40	-	943	917
Deltapine 50	653	39	-	901	915
Deltapine 51	661	40	-	909	906
Chembred 333	667	40	-	914	890
Deltapine 20	694	42	-	932	878
Terra C 40	683	41	-	941	875
Stoneville 132	567	42	-	884	864
Terra 207	692	41	-	915	862
Deltapine DP 5409	564	42	-	893	851
HS 23	593	39	-	921	845
Terra 292	554	39	-	884	845
Deltapine Acala 90**	702	41	-	906	844
Paymaster HS-26	522	40	-	811	766
Hartz H 1215	767	41	-	1,030	-
Hartz H 1380	625	40	-	975	-
Hartz Var H 1244	741	41	-	971	-
Hartz H 1220	765	41	-	967	-
Stoneville 495	682	40	-	935	-
Hartz Var H 1330	621	41	-	932	-
Terra 366	643	40	-	923	-
Terra 302	578	41	-	863	-
Chembred 232	679	40	-	-	-
DPX 0227	660	40	-	-	-
UAP X 001	642	40	-	-	-
UAP X 006	627	40	-	-	-
Hartz H 1277	612	43	-	-	-
AP X 003	552	40	-	-	-
Test Mean	655				
L.S.D. (.05)	101				
C.V.	11%				

\*Early season check variety.

\*\*Full season check variety

TABLE 2. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT BELLE MINA, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Suregrow 125*.....	837	41	-	1,079	1,081
KC 311.....	842	39	-	1,049	991
Deltapine DP 5415.....	795	42	-	1,027	982
Stoneville LA 887.....	768	42	-	1,037	981
Deltapine DP 5690.....	814	41	-	981	972
HS 44.....	791	39	-	1,013	964
Suregrow 1001**.....	826	39	-	1,009	961
Georgia King .....	730	42	-	989	944
DES 119*.....	680	41	-	1,003	935
Chembred 407.....	780	40	-	999	934
HS 46.....	721	41	-	953	933
HY 39.....	799	39	-	981	924
Chembred 1233.....	725	40	-	940	910
Deltapine Acala 90**..	756	40	-	932	862
Acala 1517-88.....	613	39	-	789	774
Hartz H 1560.....	753	42	-	-	-
Test Mean.....	764				
L.S.D. (.05).....	98				
C.V.....	9%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 3. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT PRATTVILLE, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Suregrow 125*.....	345	41	-	852	782
Suregrow 501.....	339	42	-	834	777
Deltapine Acala 90**.....	282	38	-	816	745
Stoneville 474.....	340	41	-	795	744
Deltapine DP 5409.....	379	41	-	844	741
Suregrow 404.....	306	38	-	843	738
Suregrow 1001**.....	338	39	-	787	734
Deltapine 51.....	337	38	-	781	709
Chembred 333.....	332	40	-	787	703
Chembred 1135.....	333	39	-	765	690

Con't

TABLE 3. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT PRATTVILLE, ALABAMA, 1995  
Con't

Brand-variety	1995		Earliness	2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint			
	Lb.	Pct.	Pct.	Lb.	Lb.
DES 119*	298	40	-	739	676
Deltapine 20	276	38	-	754	674
Deltapine 50	320	37	-	734	666
Terra C 40	313	40	-	743	662
Terra 292	344	38	-	755	657
Terra 207	341	38	-	744	638
HS 23	272	39	-	706	637
Stoneville 132	271	43	-	692	625
Stoneville 495	280	39	-	788	-
Hartz Var H 1244	334	41	-	787	-
Terra 302	328	40	-	771	-
Hartz H 1215	376	42	-	748	-
Terra 366	303	38	-	746	-
Hartz H 1220	312	41	-	744	-
Hartz H 1380	255	38	-	720	-
Hartz Var H 1330	262	39	-	692	-
Chembred 232	366	38	-	-	-
DPX 0227	333	38	-	-	-
UAP X 001	235	39	-	-	-
Hartz H 1277	225	40	-	-	-
UAP X 006	224	40	-	-	-
UAP X 003	210	38	-	-	-
Test Mean	307				
L.S.D. (.05)	74				
C.V.	17%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 4. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT PRATTVILLE, ALABAMA, 1995

Brand-variety	1995		Earliness	2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint			
	Lb.	Pct.	Pct.	Lb.	Lb.
Suregrow 125*	253	41	-	807	751
Deltapine DP 5690	203	40	-	805	739
HS 46	186	39	-	804	735
Chembred 407	256	39	-	812	731
Deltapine Acala 90**	212	40	-	781	722

Con't

TABLE 4. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT PRATTVILLE, ALABAMA, 1995  
Con't

Brand-variety	1995		Earliness	2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint			
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Stoneville LA 887.....	230	40	-	768	713
HS 44.....	204	39	-	766	707
Deltapine DP 5415.....	222	40	-	794	704
Suregrow 1001**.....	211	38	-	723	692
Chembred 1233 .....	259	39	-	739	690
HY 39.....	231	39	-	739	681
DES 119*.....	191	38	-	686	641
Georgia King.....	177	38	-	668	619
Hartz H 1560.....	209	39	-	-	-
Test Mean.....	218				
L.S.D. (.05).....	49				
C.V. ....	16%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 5. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT SHORTER, ALABAMA, 1995

Brand-variety	1995		Earliness	2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint			
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Suregrow 125*.....	488	43	-	868	999
Stoneville 474.....	389	44	-	763	992
Deltapine DP 5409.....	449	43	-	843	948
Stoneville 132.....	365	43	-	664	937
Deltapine 50.....	413	40	-	689	921
DES 119*.....	425	42	-	752	901
Deltapine 20.....	509	44	-	806	897
Suregrow 404.....	391	41	-	770	887
Deltapine Acala 90**.....	476	40	-	687	881
Terra C 40.....	465	43	-	745	873
Deltapine 51.....	452	40	-	781	872
Suregrow 501.....	429	44	-	710	831
Terra 207.....	413	41	-	645	822
Chembred 333.....	457	41	-	666	817
Chembred 1135.....	376	39	-	713	788
HS 23 .....	363	42	-	629	787
Paymaster HS-26.....	424	39	-	547	718
Suregrow 1001**.....	427	40	-	637	707

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TABLE 5. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT SHORTER, ALABAMA, 1995  
Con't

Brand-variety	1995		Earliness	2-yr. av.	3-yr. av.
	Lint/Acre	Lint		Lint/Acre	Lint/Acre
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Terra 292.....	415	40	-	578	693
Hartz Var H 1244.....	545	41	-	883	-
Stoneville 495.....	492	42	-	800	-
Hartz H 1220.....	510	42	-	777	-
Hartz H 1215.....	517	43	-	760	-
Terra 302.....	431	43	-	759	-
Terra 366.....	377	41	-	715	-
Hartz H 1380.....	338	41	-	688	-
Hartz Var H 1330 .....	378	41	-	642	-
DPX 0227.....	467	41	-	-	-
Chembred 232 .....	447	40	-	-	-
Hartz H 1277.....	425	44	-	-	-
UAP X 003.....	422	39	-	-	-
UAP X 001.....	419	40	-	-	-
UAP X 006.....	385	40	-	-	-
Test Mean.....	433				
L.S.D. (.05).....	82				
C.V. ....	13%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 6. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT SHORTER, ALABAMA, 1995

Brand-variety	1995		Earliness	2-yr. av.	3-yr. av.
	Lint/Acre	Lint		Lint/Acre	Lint/Acre
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Suregrow 125*.....	393	41	-	821	967
Stoneville LA 887.....	440	40	-	794	895
DES 119*.....	395	42	-	737	891
HS 46.....	357	38	-	705	876
Deltapine Acala 90**.....	407	39	-	653	858
Deltapine DP 5415.....	394	40	-	717	854
Chembred 1233 .....	405	41	-	669	839
Chembred 407.....	438	39	-	692	834
HS 44.....	54	39	-	695	812
HY 39.....	411	38	-	640	808
KC 311.....	406	38	-	640	756
Deltapine DP 5690.....	426	39	-	659	756
Georgia King.....	368	41	-	583	755

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TABLE 6. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT SHORTER, ALABAMA, 1995  
Con't

Brand-variety	1995		Earliness	2-yr. av.	3-yr. av.
	Lint/Acre	Lint		Lint/Acre	Lint/Acre
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Suregrow 1001**.....	430	39	-	638	708
Acala 1517-88.....	258	39	-	474	624
Hartz H 1560.....	369	40	-	-	-
Test Mean	397				
L.S.D. (.05)	59				
C.V.	10%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 7. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT MONROEVILLE, ALABAMA, 1995

Brand-variety	1995		Earliness	2-yr. av.	3-yr. av.
	Lint/Acre	Lint		Lint/Acre	Lint/Acre
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Suregrow 404 .....	716	39	-	859	951
DES 119*.....	656	40	-	863	950
Stoneville 474.....	85	41	-	923	940
Deltapine 51.....	687	39	-	948	935
Suregrow 501.....	569	40	-	929	924
Deltapine 20.....	667	40	-	783	909
Deltapine 50.....	643	37	-	839	904
Suregrow 1001**.....	616	38	-	827	883
Suregrow 125*.....	576	41	-	768	874
Terra C 40.....	665	39	-	826	869
HS 23 .....	709	38	-	837	859
Chembred 333 .....	634	38	-	773	857
Chembred 1135 .....	705	38	-	814	854
Terra 292.....	600	37	-	805	854
Deltapine DP 5409.....	590	39	-	760	843
Stoneville 132.....	581	42	-	781	811
Deltapine Acala 90** .....	608	39	-	847	807
Terra 207.....	602	38	-	749	784
Stoneville 495.....	688	40	-	860	-
Hartz H 1380.....	622	40	-	854	-
Hartz H 1220.....	672	41	-	845	-
Hartz Var H 1244.....	639	41	-	819	-
Terra 366.....	635	38	-	814	-
Terra 302.....	566	39	-	769	-
Hartz Var H 1330.....	544	39	-	715	-
Hartz H 1215.....	552	41	-	712	-

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TABLE 7. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT MONROEVILLE, ALABAMA, 1995  
Con't

Brand-variety	1995			2-yr. av. Lint/Acre Lb.	3-yr. av. Lint/Acre Lb.
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
UAP X 003.....	642	39	-	-	-
DPX 0227.....	617	39	-	-	-
UAP X 001.....	575	38	-	-	-
Chembred 232.....	573	38	-	-	-
Hartz H 1277.....	559	40	-	-	-
UAP X 006 .....	535	38	-	-	-
Test Mean.....	626				
L.S.D. (.05).....	106				
C.V. ....	12%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 8. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT MONROEVILLE, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre Lb.	3-yr. av. Lint/Acre Lb.
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Stoneville LA 887.....	691	39	-	922	964
DES 119*.....	640	37	-	855	944
HS 44 .....	700	38	-	892	932
Suregrow 125*.....	723	39	-	841	924
Chembred 1233.....	645	39	-	868	902
Suregrow 1001**.....	660	38	-	849	897
Deltapine DP 5415 .....	697	39	-	787	887
Deltapine DP 5690.....	717	38	-	830	883
HS 46.....	694	38	-	822	880
HY 39.....	632	37	-	821	871
Chembred 407.....	682	40	-	835	871
Deltapine Acala 90**.....	619	38	-	852	810
Georgia King .....	581	40	-	704	748
Hartz H 1560.....	752	39	-	-	-
Test Mean.....	674				
L.S.D. (.05).....	109				
C.V.....	11%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 9. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT HEADLAND, ALABAMA, 1995

Brand-variety	1995			2-yr. av.	3-yr. av.
	Lint/Acre	Lint	Earliness	Lint/Acre	Lint/Acre
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Stoneville 474.....	1,552	42	-	1,655	1,450
Suregrow 125*.....	1,464	42	-	1,541	1,381
Suregrow 501.....	1,434	42	-	1,527	1,342
Deltapine Acala 90**.....	1,510	40	-	1,493	1,266
Deltapine DP 5409.....	1,409	41	-	1,426	1,265
Suregrow 1001**.....	1,368	40	-	1,400	1,252
Chembred 1135.....	1,361	40	-	1,438	1,230
Suregrow 404.....	1,273	37	-	1,431	1,205
Deltapine 20.....	1,328	39	-	1,401	1,202
HS 23.....	1,309	38	-	1,402	1,186
Deltapine 51.....	1,424	39	-	1,431	1,184
Chembred 333.....	1,231	37	-	1,284	1,181
Terra C 40.....	1,354	40	-	1,364	1,158
Terra 292.....	1,277	37	-	1,295	1,141
Deltapine 50.....	1,306	38	-	1,344	1,137
Terra 207.....	1,209	38	-	1,296	1,087
DES 119*.....	971	40	-	1,175	1,077
Stoneville 132.....	1,217	39	-	1,235	1,031
Hartz H 1220 .....	1,444	40	-	1,484	-
Stoneville 495.....	1,407	41	-	1,453	-
Hartz H 1215.....	1,328	42	-	1,416	-
Hartz Var H 1244.....	1,327	43	-	1,414	-
Hartz Var H 1330.....	1,369	40	-	1,385	-
Hartz H 1380.....	1,421	42	-	1,383	-
Terra 302.....	1,341	42	-	1,284	-
Terra 366.....	1,206	37	-	1,276	-
Chembred 232 .....	1,402	38	-	-	-
DPX 0227.....	1,311	39	-	-	-
UAP X 003.....	1,232	39	-	-	-
Hartz H 1277.....	1,229	40	-	-	-
UAP X 006.....	1,227	39	-	-	-
UAP X 001.....	1,169	40	-	-	-
Test Mean.....	1,325				
L.S.D. (.05).....	213				
C.V.....	11%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 10. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT HEADLAND, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Suregrow 125*	1,556	41	-	1,587	1,412
Chembred 1233	1,539	39	-	1,567	1,374
Stoneville LA 887	1,546	43	-	1,615	1,327
HS 44	1,457	39	-	1,463	1,325
Deltapine DP 5690	1,393	39	-	1,403	1,298
Chembred 407	1,372	40	-	1,449	1,296
Suregrow 1001**	1,459	39	-	1,446	1,282
HS 46	1,427	41	-	1,450	1,255
HY 39	1,450	39	-	1,516	1,253
Deltapine Acala 90**	1,431	39	-	1,453	1,240
Deltapine DP 5415	1,449	42	-	1,453	1,230
Georgia King	1,339	39	-	1,347	1,188
DES 119*	1,235	40	-	1,307	1,165
Hartz H 1560	1,518	42	-	-	-
Test Mean	1,441				
L.S.D. (.05)	154				
C.V.	7%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 11. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Stoneville 474	1,105	39	-	1,312	1,270
Suregrow 501	847	36	-	1,305	1,262
Deltapine 51	940	35	-	1,281	1,207
Suregrow 404	962	33	-	1,250	1,192
Suregrow 125*	933	37	-	1,185	1,191
Deltapine 20	1,026	36	-	1,226	1,178
Terra C 40	918	37	-	1,239	1,163
Terra 292	816	31	-	1,195	1,151
Chembred 333	807	33	-	1,153	1,148
Chembred 1135	673	34	-	1,121	1,121
DES 119*	729	34	-	1,083	1,117
Deltapine DP 5409	835	34	-	1,085	1,112
Deltapine 50	858	34	-	1,140	1,079

Con't

TABLE 11. PERFORMANCE OF EARLY SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>		
HS 23 .....	661	32	-	1,089	1,039
Suregrow 1001** .....	796	35	-	1,060	1,026
Deltapine Acala 90** .....	744	34	-	1,084	1,023
Terra 207.....	627	34	-	947	967
Stoneville 132.....	627	37	-	911	886
Stoneville 495.....	971	35	-	1,275	-
Terra 302.....	831	36	-	1,131	-
Terra 366.....	849	33	-	1,120	-
Hartz H 1220.....	895	36	-	1,090	-
Hartz Var H 1244.....	874	38	-	1,043	-
Hartz H 1380.....	647	36	-	1,004	-
Hartz Var H 1330.....	633	34	-	992	-
Hartz H 1215.....	734	35	-	952	-
Chembred 232 .....	968	33	-	-	-
DPX 0227.....	854	35	-	-	-
Hartz H 1277.....	784	34	-	-	-
UAP X 003 .....	705	33	-	-	-
UAP X 006.....	701	34	-	-	-
UAP X 001.....	624	35	-	-	-
Test Mean .....	812				
L.S.D. (.05).....	184				
C.V.....	16%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 12. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>		
Deltapine DP 5415 .....	984	38	-	1,264	1,171
HS 46.....	813	37	-	1,206	1,166
Suregrow 125* .....	800	37	-	1,118	1,147
Chembred 407.....	823	35	-	1,180	1,135
Georgia King.....	732	36	-	1,155	1,133
DES 119*.....	757	37	-	1,097	1,126
HS 44 .....	957	37	-	1,219	1,122

Con't



TABLE 12. PERFORMANCE OF FULL SEASON COTTON VARIETIES AT FAIRHOPE, ALABAMA, 1995  
Con't

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Deltapine DP 5690.....	774	38	-	1,126	1,112
HY 39.....	764	36	-	1,134	1,090
Chembred 1233.....	867	37	-	1,182	1,081
Stoneville LA 887.....	748	38	-	1,135	1,079
Suregrow 1001**.....	846	37	-	1,085	1,042
Deltapine Acala 90**.....	726	37	-	1,075	1,017
Hartz H 1560.....	794	37	-	-	-
Test Mean.....	813				
L.S.D. (.05).....	136				
C.V.....	12%				

\*Early season check variety.  
\*\*Full season check variety.

TABLE 13. PERFORMANCE OF EARLY SEASON COTTON VARIETIES IN ALABAMA,  
AVERAGE OF ALL LOCATIONS

Brand-variety	Yield, Lint/Acre			Lint			Earliness		
	1995	1994-95	1993-95	1995	1994-95	1993-95	1995	1994-95	1993-95
	Lb.	Lb.	Lb.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Stoneville 474 .....	820	1,076	1,076	42	42	43	-	-	-
Suregrow 125*.....	760	1,042	1,053	41	41	41	-	-	-
Suregrow 501.....	729	1,057	1,037	41	41	42	-	-	-
Suregrow 404.....	705	1,021	1,010	38	38	39	-	-	-
Deltapine 51.....	750	1,022	1,001	39	39	39	-	-	-
Deltapine 20.....	750	984	972	40	39	40	-	-	-
Deltapine DP 5409.....	704	975	967	40	40	40	-	-	-
DES 119*.....	624	935	955	40	40	40	-	-	-
Deltapine Acala 90**..	720	972	951	39	39	40	-	-	-
Deltapine 50.....	699	941	949	38	37	38	-	-	-
Terra C 40.....	733	976	949	40	40	40	-	-	-
Suregrow 1001**.....	707	942	942	39	39	39	-	-	-
Chembred 1135 .....	687	971	940	39	39	39	-	-	-
Chembred 333.....	688	930	936	38	39	39	-	-	-
HS 23.....	651	931	914	38	38	39	-	-	-
Terra 292.....	668	919	905	37	37	38	-	-	-

Con't

TABLE 13. PERFORMANCE OF EARLY SEASON COTTON VARIETIES IN ALABAMA,  
AVERAGE OF ALL LOCATIONS

Con't

Brand-variety	Yield, Lint/Acre			Lint			Earliness		
	1995	1994-95	1993-95	1995	1994-95	1993-95	1995	1994-95	1993-95
	<i>Lb.</i>	<i>Lb.</i>	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Stoneville 132.....	605	861	878	41	40	41	-	-	-
Terra 207.....	647	883	873	38	38	39	-	-	-
Stoneville 495.....	753	1,019	-	40	39	-	-	-	-
Hartz Var H 1244.....	743	986	-	41	40	-	-	-	-
Hartz H 1220.....	766	984	-	40	39	-	-	-	-
Hartz H 1380.....	651	937	-	40	40	-	-	-	-
Hartz H 1215.....	712	937	-	41	39	-	-	-	-
Terra 366.....	669	932	-	38	38	-	-	-	-
Terra 302.....	679	929	-	40	40	-	-	-	-
Hartz Var H 1330.....	634	893	-	39	39	-	-	-	-
Chembred 232.....	739	-	-	38	-	-	-	-	-
DPX 0227.....	707	-	-	39	-	-	-	-	-
Hartz H 1277.....	639	-	-	40	-	-	-	-	-
UAP X 003.....	627	-	-	38	-	-	-	-	-
UAP X 006.....	617	-	-	39	-	-	-	-	-
UAP X 001.....	611	-	-	39	-	-	-	-	-

This variety at 2 locations only.

Paymaster HS-26.....	473	679	742	40	38	38	-	-	-
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\*Early season check variety.

\*\*Full season check variety.

TABLE 14. PERFORMANCE OF FULL SEASON COTTON VARIETIES IN ALABAMA,  
AVERAGE OF ALL LOCATIONS

Brand-variety	Yield, Lint/Acre			Lint			Earliness		
	1995	1994-95	1993-95	1995	1994-95	1993-95	1995	1994-95	1993-95
	<i>Lb.</i>	<i>Lb.</i>	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Suregrow 125* .....	760	1,042	1,053	40	40	41	-	-	-
Stoneville LA 887.....	737	1,045	1,022	40	41	42	-	-	-
Deltapine DP 5415.....	757	1,007	990	40	40	41	-	-	-
HS 44.....	760	1,008	989	39	39	39	-	-	-
HS 46.....	700	990	980	39	40	40	-	-	-
Chembred 407.....	725	994	979	39	39	40	-	-	-
Chembred 1233.....	740	994	976	39	39	39	-	-	-

Con't

TABLE 14. PERFORMANCE OF FULL SEASON COTTON VARIETIES IN ALABAMA,  
AVERAGE OF ALL LOCATIONS

Con't

Brand-variety	Yield, Lint/Acre			Lint			Earliness		
	1995	1994-95	1993-95	1995	1994-95	1993-95	1995	1994-95	1993-95
	<i>Lb.</i>	<i>Lb.</i>	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Deltapine DP 5690.....	721	967	969	39	39	40	-	-	-
DES 119*.....	650	947	964	39	40	40	-	-	-
Suregrow 1001**.....	739	958	953	38	39	39	-	-	-
HY 39.....	714	972	951	38	38	39	-	-	-
Deltapine Acala 90**..	692	958	942	39	39	40	-	-	-
Georgia King.....	654	908	909	39	40	41	-	-	-
Hartz H 1560.....	732	-	-	40	-	-	-	-	-

These Varieties at 2 Locations Only.

KC 311.....	624	844	851	39	39	39	-	-	-
Acala 1517-88.....	436	631	699	39	40	39	-	-	-

\*Early season check variety.

\*\*Full season check variety.

TABLE 15. PERFORMANCE OF EARLY SEASON IRRIGATED COTTON VARIETIES AT  
BELLE MINA, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>		
Suregrow 501.....	619	38	-	1,033	1,056
Deltapine DP 5409.....	690	36	-	1,078	1,025
Chembred 1135.....	475	35	-	995	1,007
Deltapine 51.....	574	36	-	922	967
Suregrow 125*.....	701	38	-	1,126	-
Hartz Var H 1244.....	860	38	-	-	-
Suregrow 404.....	860	36	-	-	-
Hartz H 1380.....	610	40	-	-	-
Terra C 40.....	593	38	-	-	-
Stoneville 474.....	586	39	-	-	-
Deltapine Acala 90**.....	462	35	-	-	-
Chembred 333.....	404	36	-	-	-
Test Mean.....	619				
L.S.D. (.05).....	118				
C.V.....	13%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 16. PERFORMANCE OF FULL SEASON IRRIGATED COTTON VARIETIES AT BELLE MINA, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Stoneville LA 887.....	658	39	-	1,018	1,087
Deltapine DP 5690.....	702	37	-	1,044	1,086
Chembred 1233.....	606	37	-	1,018	1,077
Deltapine DP 5415.....	682	39	-	1,002	1,074
HS 46.....	705	39	-	1,019	1,032
Suregrow 125* .....	867	39	-	1,210	-
HS 44.....	747	38	-	1,086	-
Deltapine Acala 90**.....	34	37	-	-	-
Test Mean.....	700				
L.S.D. (.05).....	115				
C.V.....	11%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 17. PERFORMANCE OF EARLY SEASON IRRIGATED COTTON VARIETIES AT SHORTER, ALABAMA, 1995

Brand-variety	1995			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Suregrow 125*.....	971	44	-	1,220	-
Deltapine DP 5409.....	865	41	-	1,113	-
Deltapine 51.....	778	40	-	1,051	-
Suregrow 501.....	752	43	-	1,006	-
Chembred 1135.....	713	39	-	936	-
Hartz Var H 1244.....	906	42	-	-	-
Terra C 40.....	833	41	-	-	-
Deltapine Acala 90**.....	797	40	-	-	-
Suregrow 404.....	792	40	-	-	-
Stoneville 474.....	755	43	-	-	-
Chembred 333.....	751	40	-	-	-
Hartz H 1380.....	725	40	-	-	-
Test Mean.....	803				
L.S.D. (.05).....	110				
C.V.....	10%				

\*Early season check variety.

\*\*Full season check variety.

TABLE 18. PERFORMANCE OF FULL SEASON IRRIGATED COTTON VARIETIES AT SHORTER, ALABAMA, 1995

Brand-variety	1995			2-yr. av.	3-yr. av.
	Lint/Acre	Lint	Earliness	Lint/Acre	Lint/Acre
	<i>Lb.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Lb.</i>	<i>Lb.</i>
Deltapine DP 5415.....	864	41	-	1,166	-
Suregrow 125*.....	856	43	-	1,162	-
HS 44.....	795	42	-	1,029	-
Stoneville LA 887.....	749	42	-	1,029	-
Deltapine DP 5690.....	824	41	-	1,008	-
HS 46.....	648	40	-	951	-
Deltapine Acala 90**.....	732	41	-	-	-
Test Mean .....	781				
L.S.D. (.05).....	89				
C.V.....	8%				

\*Early season check variety.  
 \*\*Full season check variety.

TABLE 19. PERCENTAGE OF PLANTS SHOWING SYMPTOMS OF FUSARIUM WILT, TALLASSEE, ALABAMA

Brand - variety	1 yr. 1995	2 yr. 94-95	3 yr. 93-95	4 yr. 92-95	5 yr. 91-95	6 yr. 90-95	7 yr. 89-95	8 yr. 88-95
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Hy Performer HS 46.....	36.0	36.0	55.9	53.1	53.9	52.8	53.8	49.9
Chembred 1233.....	37.2	25.1	37.0	30.0				
Deltapine DP 5409.....	41.4	42.2	54.3	47.3				
Hy Performer HS 44.....	25.7	28.4	40.2					
Stoneville 474.....	56.0	49.5	63.5					
Suregrow 125.....	48.1	45.6	54.7					
Suregrow 404.....	25.3	24.2	37.3					
Stoneville 495.....	40.6	29.8						
Terra 302.....	43.5	30.2						
Terra 366.....	45.7	38.3						
M-315 *.....	7.0	8.0						
Deltapine DPX 0227.....	50.6							
Hartz H 1277.....	24.6							
Hartz H 1560.....	17.3							
Chembred 232.....	24.6							
UAP X 001.....	62.5							
UAP X 003.....	55.1							

\* M-315 is a resistant check variety.



TABLE 20. COTTON FIBER ANALYSIS, HVI, BELLE MINA, ALABAMA, 1995

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<i>Units</i>	<i>In.</i>	<i>Pct.</i>	<i>g/tex</i>	<i>Pct.</i>
<b>Early season</b>					
Chembred 232 .....	5.3	1.09	83	24.0	7.8
Chembred 333 .....	4.8	1.11	85	26.0	7.8
Chembred 1135 .....	5.3	1.08	85	26.5	7.2
Deltapine 20 .....	5.3	1.11	86	20.5	8.2
Deltapine 50 .....	5.3	1.08	83	22.0	8.2
Deltapine 51 .....	5.3	1.17	86	23.0	8.4
Deltapine DP 5409 .....	5.2	1.11	82	25.5	7.8
Deltapine DPX 0227 .....	4.9	1.15	86	27.0	8.4
DES 119 .....	4.8	1.14	86	29.0	8.6
Hartz H 1215 .....	5.1	1.11	83	26.0	7.8
Hartz H 1220 .....	5.2	1.11	88	28.0	8.2
Hartz H 1244 .....	5.2	1.07	87	24.5	8.2
Hartz H 1277 .....	4.9	1.02	82	24.0	7.8
Hartz H 1330 .....	5.1	1.08	83	26.0	7.8
Hartz H 1380 .....	4.8	1.15	87	25.5	7.8
HS 23 .....	4.1	1.12	82	29.0	7.4
Stoneville 132 .....	5.2	1.07	86	25.5	7.8
Stoneville 474 .....	5.5	1.09	85	24.5	8.0
Stoneville 495 .....	5.3	1.11	83	25.0	7.2
Suregrow 125 .....	5.1	1.12	85	23.5	8.8
Suregrow 404 .....	5.5	1.07	86	26.5	7.4
Suregrow 501 .....	5.1	1.10	83	29.0	7.8
Terra C 40 .....	4.1	1.13	81	26.0	8.4
Terra 207 .....	5.1	1.11	83	24.5	8.0
Terra 292 .....	5.2	1.10	80	24.0	8.0
Terra 302 .....	5.1	1.10	83	22.5	7.8
Terra 366 .....	5.0	1.10	80	23.0	7.4
UAP X 001 .....	4.9	1.04	80	23.0	7.8
UAP X 003 .....	4.9	1.10	83	24.5	7.4
UAP X 006 .....	4.8	1.10	82	24.5	7.2
<b>Full season</b>					
Chembred 407 .....	4.8	1.13	84	30.5	7.2
Chembred 1233 .....	4.8	1.11	86	23.5	8.6
Deltapine Acala 90 .....	4.9	1.09	84	28.0	9.4
Deltapine DP 5415 .....	4.9	1.12	83	26.0	8.2
Deltapine DP 5690 .....	4.9	1.12	85	31.5	7.2
Georgia King .....	4.8	1.11	85	28.5	7.4
Hartz H 1560 .....	4.7	1.12	85	27.5	8.6
HS 44 .....	4.8	1.14	86	28.5	7.4
HS 46 .....	4.5	1.15	84	30.0	7.4
HY 39 .....	4.5	1.19	84	31.0	6.8
Stoneville LA 887 .....	4.8	1.17	87	28.5	8.2
Suregrow 1001 .....	4.5	1.15	86	32.0	7.2

TABLE 21. COTTON FIBER ANALYSIS, HVI, PRATTVILLE, ALABAMA, 1995

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<i>Units</i>	<i>In.</i>	<i>Pct.</i>	<i>g/tex</i>	<i>Pct.</i>
<b>Early season</b>					
Chembred 232 .....	5.1	1.02	84	24.5	8.4
Chembred 333 .....	5.1	1.03	84	26.5	7.4
Chembred 1135 .....	4.8	1.02	83	28.5	6.8
Deltapine 20 .....	4.9	1.07	84	26.5	8.0
Deltapine 50 .....	5.1	1.07	84	25.0	8.4
Deltapine 51 .....	5.0	1.07	84	24.0	8.2
Deltapine DP 5409 .....	5.0	1.07	84	29.5	8.0
Deltapine DPX 0227 .....	4.8	1.06	83	31.5	7.4
DES 119 .....	5.2	1.12	85	28.0	8.2
Hartz H 1215 .....	5.1	1.05	85	29.0	8.0
Hartz H 1220 .....	5.2	1.07	87	31.0	7.8
Hartz H 1244 .....	4.8	1.08	86	29.0	8.4
Hartz H 1277 .....	5.2	1.05	84	24.5	8.2
Hartz H 1330 .....	5.0	1.04	84	27.0	7.8
Hartz H 1380 .....	4.5	1.06	83	24.0	8.4
HS 23 .....	4.6	1.07	84	26.0	7.4
Stoneville 132 .....	5.1	1.02	86	28.0	7.6
Stoneville 474 .....	5.2	1.09	83	27.0	8.2
Stoneville 495 .....	5.1	1.06	83	24.5	7.4
Suregrow 125 .....	4.8	1.07	84	25.5	8.6
Suregrow 404 .....	5.0	1.04	85	28.5	7.8
Suregrow 501 .....	4.9	1.06	87	31.0	8.2
Terra C 40 .....	5.1	1.03	85	25.5	8.0
Terra 207 .....	4.8	1.04	82	28.0	7.6
Terra 292 .....	4.9	1.07	85	24.5	8.2
Terra 302 .....	4.8	1.02	83	24.5	8.0
Terra 366 .....	5.2	1.09	85	24.0	7.0
UAP X 001 .....	4.5	1.02	82	26.5	7.6
UAP X 003 .....	4.8	1.05	85	24.5	7.8
UAP X 006 .....	4.4	1.01	82	24.5	7.6
<b>Full season</b>					
Chembred 407 .....	5.0	1.05	83	28.5	6.4
Chembred 1233 .....	4.8	1.08	86	30.0	7.2
Deltapine Acala 90 .....	5.3	1.05	84	30.0	6.4
Deltapine DP 5415 .....	5.1	1.10	84	28.5	8.4
Deltapine DP 5690 .....	5.4	1.06	83	30.5	6.0
Georgia King .....	5.0	1.13	83	31.0	7.2
Hartz H 1560 .....	5.0	1.11	87	30.0	7.8
HS 44 .....	5.3	1.10	84	31.5	7.2
HS 46 .....	4.9	1.13	85	34.0	7.2
HY 39 .....	4.9	1.06	82	29.5	6.6
Stoneville LA 887 .....	5.0	1.11	84	31.5	8.2
Suregrow 1001 .....	5.1	1.06	84	30.5	7.4

TABLE 22. COTTON FIBER ANALYSIS, HVI, SHORTER, ALABAMA, 1995

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<i>Units</i>	<i>In.</i>	<i>Pct.</i>	<i>g/tex</i>	<i>Pct.</i>
<b>Early season</b>					
Chembred 232 .....	4.9	1.03	83	22.5	7.8
Chembred 333 .....	4.8	0.95	81	23.5	7.4
Chembred 1135 .....	4.4	1.02	82	28.0	7.4
Deltapine 20 .....	4.6	0.99	82	22.0	7.4
Deltapine 50 .....	4.6	1.00	82	21.0	7.2
Deltapine 51 .....	4.8	1.06	83	19.5	7.4
Deltapine DP 5409 .....	5.0	0.98	82	25.0	7.6
Deltapine DPX 0227 .....	4.9	1.02	83	26.5	8.2
DES 119 .....	4.8	1.04	83	26.0	8.6
Hartz H 1215 .....	5.1	1.01	84	26.0	7.8
Hartz H 1220 .....	4.5	1.02	85	25.5	8.0
Hartz H 1244 .....	4.1	1.01	85	29.5	7.8
Hartz H 1277 .....	4.6	0.97	87	20.5	7.4
Hartz H 1330 .....	4.4	1.01	81	22.0	7.8
Hartz H 1380 .....	4.5	1.01	80	23.0	7.4
HS 23 .....	4.5	0.97	80	20.5	6.6
Stoneville 132 .....	4.9	0.95	83	25.0	7.2
Stoneville 474 .....	4.9	0.98	83	23.5	7.2
Stoneville 495 .....	5.0	1.03	81	23.5	6.0
Suregrow 125 .....	4.6	1.03	82	25.5	7.4
Suregrow 404 .....	5.1	1.00	83	24.5	6.8
Suregrow 501 .....	4.8	0.99	83	25.5	8.2
Terra C 40 .....	4.6	0.96	82	23.6	7.6
Terra 207 .....	4.6	0.99	81	23.5	8.2
Terra 292 .....	4.7	0.98	82	21.5	7.4
Terra 302 .....	4.7	0.99	82	21.0	7.4
Terra 366 .....	4.7	0.98	81	18.5	6.8
UAP X 001 .....	4.7	1.05	82	21.5	7.8
UAP X 003 .....	4.6	0.99	82	22.0	6.8
UAP X 006 .....	4.4	0.99	81	23.5	7.4
<b>Full season</b>					
Chembred 407 .....	4.6	1.03	83	23.0	6.4
Chembred 1233 .....	5.0	0.97	81	26.5	7.4
Deltapine Acala 90 .....	4.9	1.03	83	29.0	7.0
Deltapine DP 5415 .....	4.8	1.05	82	27.0	7.8
Deltapine DP 5690 .....	4.7	1.00	82	27.0	6.8
Georgia King .....	4.6	1.00	83	24.5	7.2
Hartz H 1560 .....	4.7	1.04	83	26.5	7.6
HS 44 .....	4.8	1.02	82	26.0	7.2
HS 46 .....	4.4	1.05	83	30.0	7.2
HY 39 .....	4.5	1.02	80	26.0	6.6
Stoneville LA 887 .....	4.7	1.12	80	29.0	7.6
Suregrow 1001 .....	4.7	1.05	84	29.5	7.2

TABLE 23. COTTON FIBER ANALYSIS, HVI, MONROEVILLE, ALABAMA, 1995

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<i>Units</i>	<i>In.</i>	<i>Pct.</i>	<i>g/tex</i>	<i>Pct.</i>
<b>Early season</b>					
Chembred 232 .....	4.9	1.11	84	24.5	7.4
Chembred 333 .....	4.4	1.09	84	27.0	7.4
Chembred 1135 .....	3.8	1.13	83	29.0	6.0
Deltapine 20 .....	4.3	1.10	82	26.0	8.4
Deltapine 50 .....	4.2	1.15	82	25.0	8.0
Deltapine 51 .....	4.5	1.15	85	23.5	7.8
Deltapine DP 5409 .....	4.3	1.15	83	28.5	7.6
Deltapine DPX 0227 .....	4.1	1.10	84	31.0	7.8
DES 119 .....	4.5	1.13	86	29.5	8.4
Hartz H 1215 .....	4.2	1.09	83	28.5	8.4
Hartz H 1220 .....	5.1	1.10	83	28.5	8.4
Hartz H 1244 .....	4.1	1.12	86	26.5	8.6
Hartz H 1277 .....	4.3	1.07	83	24.5	8.2
Hartz H 1330 .....	4.5	1.14	82	27.0	7.8
Hartz H 1380 .....	4.2	1.14	84	24.5	8.0
HS 23 .....	4.3	1.12	83	28.0	6.8
Stoneville 132 .....	4.5	1.07	83	27.0	7.8
Stoneville 474 .....	4.7	1.11	87	27.0	7.6
Stoneville 495 .....	4.8	1.13	84	24.5	6.8
Suregrow 125 .....	4.2	1.16	83	25.5	8.2
Suregrow 404 .....	4.8	1.08	84	29.0	7.6
Suregrow 501 .....	4.5	1.13	87	31.0	8.2
Terra C 40 .....	4.5	1.12	85	28.0	8.2
Terra 207 .....	4.0	1.12	83	26.0	8.2
Terra 292 .....	4.4	1.08	81	25.0	7.8
Terra 302 .....	4.2	1.09	83	24.0	7.4
Terra 366 .....	4.4	1.11	82	24.0	7.4
UAP X 001 .....	4.0	1.11	81	26.5	7.8
UAP X 003 .....	4.3	1.04	81	23.5	7.6
UAP X 006 .....	4.1	1.10	82	28.0	8.2
<b>Full season</b>					
Chembred 407 .....	4.5	1.12	83	27.5	5.6
Chembred 1233 .....	5.0	1.11	85	30.5	6.8
Deltapine Acala 90 .....	4.2	1.08	82	32.5	7.0
Deltapine DP 5415 .....	4.4	1.17	85	31.5	8.0
Deltapine DP 5690 .....	4.2	1.11	82	31.5	6.8
Georgia King .....	4.9	1.12	82	30.0	7.2
Hartz H 1560 .....	4.5	1.14	85	30.5	8.0
HS 44 .....	4.8	1.13	83	29.0	7.5
HS 46 .....	4.1	1.17	82	31.0	7.2
HY 39 .....	4.3	1.13	81	31.0	7.0
Stoneville LA 887 .....	4.2	1.19	84	30.0	8.2
Suregrow 1001 .....	4.5	1.12	84	30.0	7.2

TABLE 24. COTTON FIBER ANALYSIS, HVI, HEADLAND, ALABAMA, 1995

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<i>Units</i>	<i>In.</i>	<i>Pct.</i>	<i>g/tex</i>	<i>Pct.</i>
<b>Early season</b>					
Chembred 232 .....	4.7	1.10	84	24.5	8.0
Chembred 333 .....	4.6	1.07	83	25.0	7.4
Chembred 1135 .....	4.6	1.11	85	26.0	6.6
Deltapine 20 .....	4.5	1.08	83	25.5	8.6
Deltapine 50 .....	4.4	1.10	84	25.5	7.2
Deltapine 51 .....	4.3	1.12	84	26.5	7.8
Deltapine DP 5409 .....	4.7	1.13	82	28.5	7.8
Deltapine DPX 0227 .....	4.5	1.09	86	29.5	8.0
DES 119 .....	4.9	1.10	86	24.0	8.4
Hartz H 1215 .....	4.7	1.08	83	29.5	8.0
Hartz H 1220 .....	4.9	1.11	87	28.0	9.0
Hartz H 1244 .....	4.4	1.06	84	29.0	8.2
Hartz H 1277 .....	4.5	1.10	83	25.0	7.8
Hartz H 1330 .....	4.6	1.12	84	26.5	7.4
Hartz H 1380 .....	4.7	1.11	83	24.0	7.8
HS 23 .....	4.2	1.14	84	28.5	7.0
Stoneville 132 .....	4.9	1.03	84	27.5	7.4
Stoneville 474 .....	4.9	1.08	84	26.5	7.8
Stoneville 495 .....	4.8	1.15	82	27.0	7.0
Suregrow 125 .....	4.8	1.13	83	25.0	8.4
Suregrow 404 .....	4.7	1.10	85	23.0	7.6
Suregrow 501 .....	4.6	1.07	83	30.5	8.4
Terra C 40 .....	4.5	1.10	83	24.5	8.4
Terra 207 .....	4.5	1.08	82	26.5	7.6
Terra 292 .....	4.7	1.10	82	23.5	8.0
Terra 302 .....	4.6	1.12	86	25.0	7.8
Terra 366 .....	4.5	1.08	82	24.5	7.6
UAP X 001 .....	4.3	1.08	83	24.0	7.4
UAP X 003 .....	4.7	1.10	83	23.5	7.4
UAP X 006 .....	3.8	1.11	81	28.0	7.0
<b>Full season</b>					
Chembred 407 .....	4.4	1.12	84	29.0	6.6
Chembred 1233 .....	4.3	1.11	84	28.5	7.0
Deltapine Acala 90 .....	4.7	1.06	84	29.5	6.8
Deltapine DP 5415 .....	4.8	1.09	86	32.0	8.0
Deltapine DP 5690 .....	4.4	1.07	83	29.5	6.4
Georgia King .....	4.6	1.09	86	30.0	7.8
Hartz H 1560 .....	4.4	1.14	84	30.5	7.8
HS 44 .....	4.9	1.13	86	28.5	7.4
HS 46 .....	4.1	1.13	82	30.5	7.2
HY 39 .....	4.2	1.13	83	32.0	6.6
Stoneville LA 887 .....	4.4	1.13	82	30.0	7.0
Suregrow 1001 .....	4.4	1.08	84	31.5	7.2



TABLE 25. COTTON FIBER ANALYSIS, HVI, FAIRHOPE, ALABAMA, 1995

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<i>Units</i>	<i>In.</i>	<i>Pct.</i>	<i>g/tex</i>	<i>Pct.</i>
<b>Early season</b>					
Chembred 232 .....	4.6	1.12	84	26.0	7.8
Chembred 333 .....	4.4	1.14	85	28.5	7.0
Chembred 1135 .....	4.3	1.12	84	29.5	6.8
Deltapine 20 .....	4.3	1.10	83	26.0	8.0
Deltapine 50 .....	3.6	1.15	83	25.0	8.0
Deltapine 51 .....	4.3	1.15	83	24.5	7.6
Deltapine DP 5409 .....	3.9	1.13	83	28.5	7.6
Deltapine DPX 0227 .....	4.4	1.09	86	31.5	7.4
DES 119 .....	4.6	1.14	85	30.0	7.8
Hartz H 1215 .....	4.3	1.20	86	30.0	8.2
Hartz H 1220 .....	4.2	1.13	83	29.5	8.4
Hartz H 1244 .....	4.6	1.14	84	30.5	7.6
Hartz H 1277 .....	4.3	1.16	83	28.0	7.6
Hartz H 1330 .....	4.7	1.14	85	28.0	6.8
Hartz H 1380 .....	3.7	1.11	82	26.5	7.2
HS 23 .....	3.9	1.14	83	30.5	6.8
Stoneville 132 .....	3.6	1.09	81	28.0	7.8
Stoneville 474 .....	4.8	1.13	86	29.0	7.4
Stoneville 495 .....	4.5	1.18	86	28.0	6.8
Suregrow 125 .....	4.6	1.15	84	27.5	7.8
Suregrow 404 .....	4.4	1.15	87	31.5	7.4
Suregrow 501 .....	4.6	1.15	84	32.5	7.6
Terra C 40 .....	4.5	1.13	85	29.5	7.4
Terra 207 .....	4.0	1.12	83	29.5	7.2
Terra 292 .....	4.0	1.15	84	25.5	7.8
Terra 302 .....	3.7	1.11	84	24.5	7.6
Terra 366 .....	4.5	1.15	83	27.0	7.2
UAP X 001 .....	4.1	1.12	84	27.5	8.2
UAP X 003 .....	4.7	1.15	85	26.5	7.2
UAP X 006 .....	4.1	1.16	86	27.0	7.0
<b>Full season</b>					
Chembred 407 .....	4.6	1.10	85	28.0	6.6
Chembred 1233 .....	4.6	1.16	88	27.5	7.2
Deltapine Acala 90 .....	4.8	1.11	87	31.0	6.8
Deltapine DP 5415 .....	5.2	1.14	86	28.0	7.6
Deltapine DP 5690 .....	4.6	1.10	85	31.5	6.8
Georgia King .....	4.7	1.15	86	30.5	7.0
Hartz H 1560 .....	4.5	1.17	86	29.5	7.4
HS 44 .....	5.1	1.15	85	29.0	6.4
HS 46 .....	4.5	1.14	83	31.0	6.8
HY 39 .....	4.8	1.15	85	30.5	6.4
Stoneville LA 887 .....	4.7	1.16	87	29.0	7.8
Suregrow 1001 .....	4.8	1.11	87	28.0	6.8

TABLE 26. COTTON FIBER ANALYSIS, HVI, IRRIGATED COTTON, BELLE MINA, ALABAMA, 1995

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<i>Units</i>	<i>In.</i>	<i>Pct.</i>	<i>g/tex</i>	<i>Pct.</i>
<b>Early season</b>					
Chembred 333 .....	3.5	1.16	82	26.5	7.7
Chembred 1135 .....	3.4	1.16	82	28.0	7.0
Deltapine 51 .....	3.8	1.22	82	26.0	8.2
Deltapine DP 5409 .....	3.4	1.16	80	27.5	7.8
Hartz H 1244 .....	3.6	1.13	84	28.5	8.4
Hartz H 1380 .....	3.3	1.17	80	26.5	8.0
Stoneville 474 .....	3.6	1.19	86	28.5	8.4
Suregrow 125 .....	3.7	1.21	83	27.0	8.8
Suregrow 404 .....	3.9	1.21	86	31.5	7.8
Suregrow 501 .....	3.9	1.19	86	28.0	7.6
Terra C 40 .....	3.4	1.19	83	26.5	8.6
<b>Full season</b>					
Chembred 1233 .....	3.7	1.18	85	30.5	7.0
Deltapine Acala 90 .....	3.9	1.12	82	31.0	6.8
Deltapine DP 5415 .....	4.4	1.16	85	25.0	8.2
Deltapine DP 5690 .....	4.1	1.15	83	31.5	7.0
HS 44 .....	4.2	1.21	84	30.5	7.6
HS 46 .....	3.6	1.13	81	30.5	6.8
Stoneville LA 887 .....	3.8	1.18	83	30.5	7.8

TABLE 27. COTTON FIBER ANALYSIS, HVI, IRRIGATED COTTON, SHORTER, ALABAMA, 1995

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<i>Units</i>	<i>In.</i>	<i>Pct.</i>	<i>g/tex</i>	<i>Pct.</i>
<b>Early season</b>					
Chembred 333 .....	4.8	1.04	82	26.0	7.0
Chembred 1135 .....	4.8	1.06	81	29.5	6.6
Deltapine 51 .....	5.1	1.05	82	25.5	7.8
Deltapine DP 5409 .....	5.2	1.09	83	30.0	7.8
Hartz H 1244 .....	5.1	1.04	84	30.0	8.2
Hartz H 1380 .....	4.8	1.12	83	25.5	7.4
Stoneville 474 .....	5.6	1.06	85	26.5	7.4
Suregrow 125 .....	5.4	1.06	81	25.0	8.2
Suregrow 404 .....	5.3	1.12	83	31.0	7.4
Suregrow 501 .....	4.9	1.07	85	32.0	7.8
Terra C 40 .....	5.0	1.03	83	26.5	8.4
<b>Full season</b>					
Deltapine Acala 90 .....	5.3	1.08	83	30.5	7.2
Deltapine DP 5415 .....	5.3	1.09	82	29.5	7.6
Deltapine DP 5690 .....	5.4	1.04	83	29.0	8.6
HS 44 .....	5.2	1.05	83	29.0	7.2
HS 46 .....	4.9	1.07	83	30.5	7.2
Stoneville LA 887 .....	5.0	1.12	87	28.5	7.8

TABLE 28. GROWING SEASON RAINFALL, 1993-95

Test location	Year	Monthly rainfall (inches)							7-month total
		Mar.	Apr.	May	June	July	Aug.	Sept.	
Belle Mina ..	1995	3.6	4.8	1.8	2.7	2.9	3.7	7.6	27.1
	1994	8.6	2.5	5.7	7.4	3.9	1.6	4.0	33.7
	1993	6.6	3.0	4.7	3.0	2.6	5.5	5.3	30.7
Shorter .....	1995	4.6	4.2	1.2	1.8	1.5	1.9	6.3	21.5
	1994	5.8	2.1	2.2	7.2	10.9	1.2	2.1	31.5
	1993	6.5	2.5	2.9	6.3	0.6	5.9	2.8	27.5
Prattville ....	1995	3.9	4.3	1.9	2.2	1.4	2.3	2.8	18.8
	1994	4.6	3.7	1.5	5.3	7.7	1.9	4.5	29.2
	1993	5.7	2.9	2.3	2.2	2.1	6.4	0.9	22.5
Monroeville .	1995	4.2	5.1	4.4	1.0	7.4	10.2	0.8	33.1
	1994	4.2	6.6	7.8	8.6	10.8	2.6	3.0	43.6
	1993	6.2	3.1	3.4	2.9	8.2	7.0	1.3	32.1
Fairhope ....	1995	10.0	6.7	6.0	4.5	8.7	9.6	3.1	48.6
	1994	7.8	4.7	2.9	7.3	10.9	5.1	1.5	40.2
	1993	7.3	2.6	5.8	3.4	8.1	7.6	5.0	39.8
Headland ...	1995	5.2	4.5	2.8	3.8	5.3	5.2	1.7	28.5
	1994	6.5	6.9	0.6	9.4	19.4	3.6	3.5	49.9
	1993	8.5	1.6	1.3	1.7	5.3	1.5	4.8	24.7

TABLE 29. SOIL TYPES FOR COTTON TRIALS, 1995

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

TABLE 30. SOURCES OF SEED FOR THE 1995 COTTON VARIETY TESTS

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Deltapine Acala 90 Deltapine 50 Deltapine 51 Deltapine 20 Deltapine DP 5415 Deltapine DP 5690 Deltapine DP 5409 Deltapine DPX 0227 DES 119	Delta and Pine Land Co. Scott, Mississippi
Stoneville 474 Stoneville 495 Stoneville 132 Stoneville LA 887 Georgia King KC 311	Stoneville Pedigreed Seed Co. Stoneville, Mississippi
Terra C 40 Terra 366 Terra 302 Terra 292 Terra 207	Terra International, Inc. Memphis, Tennessee
HS 46 HS 44 HS 23 HY 39	Hy Performer Seed Co. Memphis, Tennessee
Suregrow 1001 Suregrow 501 Suregrow 404 Suregrow 125	Sure Grow Seed, Inc. Centre, Alabama
Chembred CB 1233 Chembred CB 1135 Chembred CB 407 Chembred CB 333 Chembred CB 232	Chembred, Inc. Phoenix, Arizona
Paymaster HS 26	Cargill Hybrid Seed Aiken, Texas
Acala 1517-88	New Mexico State University Las Cruces, New Mexico
Hartz H 1380 Hartz H 1330 Hartz H 1244 Hartz H 1220 Hartz H 1215 Hartz H 1277 Hartz H 1560	Jacob Hartz Seed Co. Stuttgart, Arkansas
UAPX 001 UAPX 003 UAPX 006	Mid Valley Chemicals, Inc. Weslaco, Texas

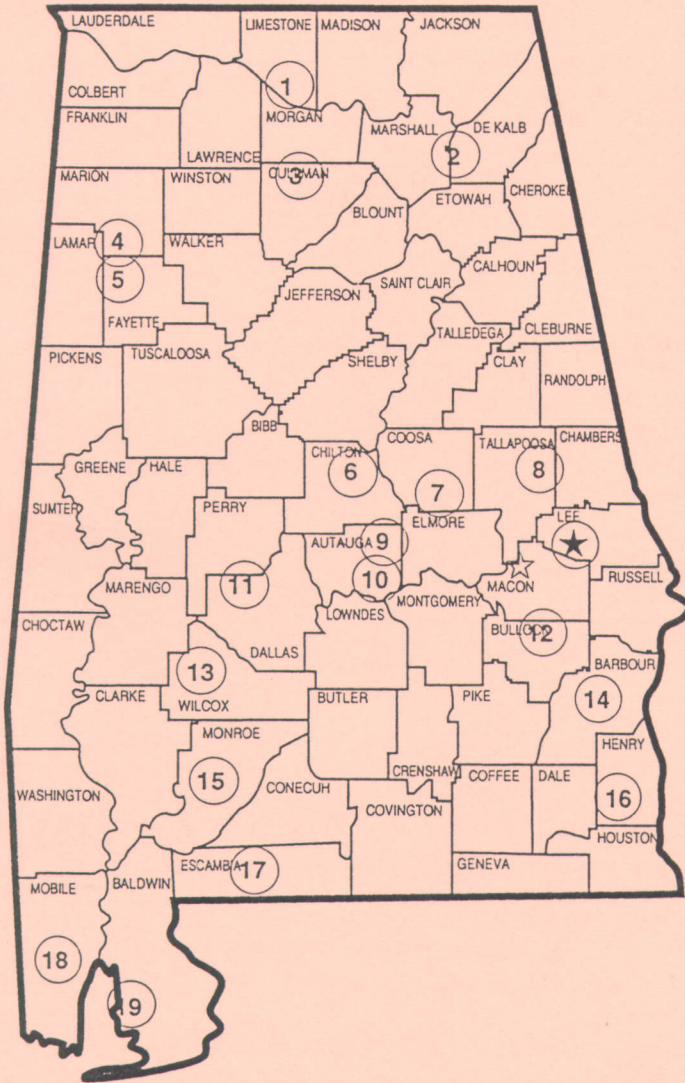
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# Alabama's Agricultural Experiment Station System AUBURN UNIVERSITY

- ★ Main Agricultural Experiment Station, Auburn.
- ☆ E. V. Smith Research Center, Shorter.



1. Tennessee Valley Substation, Belle Mina.
2. Sand Mountain Substation, Crossville.
3. North Alabama Horticulture Substation, Cullman.
4. Upper Coastal Plain Substation, Winfield.
5. Forestry Unit, Fayette County.
6. Chilton Area Horticulture Substation, Clanton.
7. Forestry Unit, Coosa County.
8. Piedmont Substation, Camp Hill.
9. Forestry Unit, Autauga County.
10. Prattville Experiment Field, Prattville.
11. Black Belt Substation, Marion Junction.
12. The Turnipseed-Ikenberry Place, Union Springs.
13. Lower Coastal Plain Substation, Camden.
14. Forestry Unit, Barbour County.
15. Monroeville Experiment Field, Monroeville.
16. Wiregrass Substation, Headland.
17. Brewton Experiment Field, Brewton.
18. Ornamental Horticulture Substation, Spring Hill.
19. Gulf Coast Substation, Fairhope.