

**1994**

**Alabama**

**Cotton**

**Variety**

**Report**



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

# 1994 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 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

A randomized complete block experimental design with four replications was used at each location. Row length varied at different locations from 20 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. Rainfall was generally adequate at all locations during the spring. The harvest season was warm and favorable for maturing and harvesting the crop.

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<sup>1</sup>Research Assistant and Professor of Agronomy and Soils.

# EXPLANATION OF DATA

## 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 approximately 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. 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 12 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>).

## LOCATIONS OF EXPERIMENTS

Tennessee Valley Substation, Belle Mina . . . . .	W.B. Webster, Superintendent H.E. Burgess, B.E. Norris
Prattville Experiment Field . . . . .	D.P. Moore, Superintendent
E.V. Smith Research Center Field Crops Research Unit, Shorter . . . . .	D. Williamson, Superintendent
Monroeville Experiment Field. . . . .	J.R. Akridge, Superintendent
Wiregrass Substation, Headland. . . . .	H.W. Ivey, Superintendent L N. Wells, B.E. Gamble
Gulf Coast Substation, Fairhope . . . . .	E.L. Carden, Superintendent N.R. McDaniel, M.D. Pegues

Appreciation is also expressed to Mien-Huei Tzeng, Research Data Analysis, for the computation, summarization, and analysis of the data in this report.



Table 1. Performance of Cotton Varieties at Belle Mina, Alabama, 1994

Brand-variety	1994			2-yr. av.	3-yr. av.
	Lint/Acre	Lint	Earliness	Lint/Acre	Lint/Acre
	Lb.	Pct.	Pct.	Lb.	Lb.
Deltapine DP 5415....	1,259	40	79	1,076	1,179
Suregrow 501.....	1,313	44	88	1,157	1,167
Stoneville 453.....	1,196	43	91	1,073	1,128
Stoneville LA 887....	1,307	44	86	1,088	1,124
DES 119.....	1,327	44	90	1,062	1,123
HS 46.....	1,184	43	88	1,039	1,111
Chembred 407.....	1,218	43	87	1,011	1,092
Chembred 1135.....	1,273	42	88	1,039	1,084
KC 311.....	1,255	43	85	1,065	1,082
Suregrow 1001.....	1,191	43	86	1,028	1,082
Deltapine DP 5690....	1,149	42	86	1,050	1,075
Deltapine DP 5409....	1,223	42	90	995	1,071
Deltapine 50.....	1,148	39	88	1,045	1,071
Deltapine 51.....	1,156	42	85	1,028	1,069
Stoneville 132.....	1,200	43	90	1,013	1,065
Georgia King.....	1,248	44	83	1,051	1,064
Deltapine 20.....	1,169	41	89	970	1,052
Chembred 333.....	1,161	42	87	1,002	1,052
Chembred 1233.....	1,154	40	83	1,003	1,046
Terra C 40.....	1,199	42	82	970	1,017
HS 23.....	1,250	40	91	971	992
Terra 207.....	1,139	41	90	947	976
Deltapine Acala 90...	1,109	41	86	916	960
Paymaster HS-26.....	1,100	41	79	888	951
Acala 1517-88.....	965	43	93	855	906
Suregrow 125.....	1,321	42	91	1,203	-
Suregrow 404.....	1,360	44	90	1,149	-
Stoneville 474.....	1,274	45	91	1,063	-
HS 44.....	1,235	41	84	1,050	-
Terra 292.....	1,213	40	87	990	-
HY 39.....	1,164	40	86	986	-
Suregrow 223.....	1,325	45	92	-	-
Hartz H 1380.....	1,325	45	86	-	-
Hartz H 1215.....	1,294	42	92	-	-
Hartz Var. H 1330....	1,243	42	91	-	-
Mycogen 2006.....	1,205	42	82	-	-
Terra 366.....	1,202	40	90	-	-
Hartz Var. H 1244....	1,201	42	92	-	-
GC 9033.....	1,192	41	84	-	-
Stoneville X 94332...	1,187	42	89	-	-
Mycogen 2009.....	1,187	42	88	-	-
Hartz H 1220.....	1,169	41	94	-	-
Mycogen 3076.....	1,153	42	86	-	-
Terra 302.....	1,149	43	82	-	-
GC 210.....	1,138	43	88	-	-
Mycogen 3081.....	1,112	42	88	-	-
Mycogen 3075.....	1,097	41	87	-	-
Test Mean.....	1,205				
L.S.D. (.05).....	123				
C.V.....	7%				

Table 2. Performance of Cotton Varieties at Prattville, Alabama, 1994

Brand-variety	1994			2-yr. av. Lint/Acre Lb.	3-yr. av. Lint/Acre Lb.
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Deltapine DP 5690....	1,406	37	-	1,008	1,077
HS 46.....	1,421	38	-	1,010	1,076
Stoneville LA 887....	1,306	40	-	955	1,062
Chembred 407.....	1,368	38	-	968	1,059
Chembred 1233.....	1,219	36	-	905	1,032
Deltapine Acala 90...	1,349	39	-	977	1,032
Suregrow 1001.....	1,236	38	-	932	1,002
Suregrow 501.....	1,328	39	-	997	1,001
Deltapine DP 5415....	1,366	39	-	945	998
Chembred 333.....	1,243	37	-	889	996
Deltapine DP 5409....	1,309	38	-	922	977
Deltapine 51.....	1,224	36	-	895	974
Stoneville 132.....	1,113	38	-	803	972
Deltapine 20.....	1,232	37	-	873	959
Terra C 40.....	1,172	37	-	837	947
Chembred 1135.....	1,196	37	-	868	936
Terra 207.....	1,147	38	-	787	915
DES 119.....	1,180	38	-	865	912
Georgia King.....	1,159	39	-	839	897
Deltapine 50.....	1,148	35	-	839	886
HS 23.....	1,139	37	-	820	857
Suregrow 125.....	1,360	39	-	1,000	-
HS 44.....	1,328	38	-	958	-
Suregrow 404.....	1,381	37	-	954	-
Stoneville 474.....	1,250	40	-	947	-
HY 39.....	1,246	36	-	906	-
Terra 292.....	1,165	36	-	814	-
Suregrow 223.....	1,368	40	-	-	-
Mycogen 3076.....	1,317	37	-	-	-
GC 9033.....	1,315	38	-	-	-
Stoneville X 94332...	1,297	38	-	-	-
Mycogen 2006.....	1,254	38	-	-	-
Hartz Var. H 1244....	1,239	38	-	-	-
Terra 302.....	1,214	38	-	-	-
Mycogen 2009.....	1,199	35	-	-	-
GC 210.....	1,190	39	-	-	-
Terra 366.....	1,190	36	-	-	-
Hartz H 1380.....	1,185	39	-	-	-
Hartz H 1220.....	1,175	36	-	-	-
Hartz Var. H 1330....	1,121	37	-	-	-
Hartz H 1215.....	1,121	37	-	-	-
Mycogen 3075.....	1,017	38	-	-	-
Mycogen 3081.....	920	37	-	-	-
Test Mean.....	1,235				
L.S.D. (.05).....	113				
C.V.....	7%				

Table 3. Performance of Cotton Varieties at Shorter, Alabama, 1994

Brand-variety	1994			2-yr. av.	3-yr. av.
	Lint/Acre	Lint	Earliness	Lint/Acre	Lint/Acre
	Lb.	Pct.	Pct.	Lb.	Lb.
Stoneville LA 887....	1,147	40	-	1,123	1,254
Deltapine DP 5409....	1,237	39	-	1,198	1,252
Stoneville 132.....	963	38	-	1,222	1,228
HS 46.....	1,053	39	-	1,135	1,174
DES 119.....	1,079	38	-	1,140	1,174
Chembred 1233.....	933	36	-	1,057	1,165
Suregrow 501.....	991	39	-	1,032	1,163
Deltapine DP 5415....	1,041	39	-	1,084	1,161
Stoneville 453.....	1,164	40	-	1,115	1,157
Deltapine 50.....	964	35	-	1,176	1,151
Terra C 40.....	1,024	37	-	1,078	1,131
Deltapine 20.....	1,104	37	-	1,091	1,120
Chembred 407.....	945	36	-	1,032	1,111
HS 23.....	896	37	-	999	1,110
Deltapine Acala 90...	899	37	-	1,083	1,088
Deltapine 51.....	1,111	36	-	1,081	1,084
Chembred 333.....	874	37	-	997	1,070
KC 311.....	875	35	-	931	1,049
Terra 207.....	878	35	-	1,027	1,036
Chembred 1135.....	1,050	38	-	994	1,035
Georgia King.....	798	39	-	949	1,032
Deltapine DP 5690....	892	37	-	920	1,019
Suregrow 1001.....	846	35	-	847	926
Paymaster HS-26.....	671	33	-	865	805
Acala 1517-88.....	689	38	-	807	798
Stoneville 474.....	1,137	41	-	1,293	-
Suregrow 125.....	1,249	39	-	1,254	-
Suregrow 404.....	1,150	37	-	1,135	-
HY 39.....	870	36	-	1,006	-
HS 44.....	936	38	-	991	-
Terra 292.....	741	33	-	832	-
Hartz Var. H 1244....	1,221	38	-	-	-
Suregrow 223.....	1,212	41	-	-	-
Stoneville X 94332...	1,107	38	-	-	-
Terra 302.....	1,086	39	-	-	-
Terra 366.....	1,054	34	-	-	-
Hartz H 1220.....	1,044	36	-	-	-
Hartz H 1380.....	1,038	39	-	-	-
Mycogen 2009.....	1,021	37	-	-	-
Hartz H 1215.....	1,003	36	-	-	-
Mycogen 2006.....	968	35	-	-	-
GC 210.....	967	38	-	-	-
Hartz Var. H 1330....	906	37	-	-	-
Mycogen 3076.....	897	36	-	-	-
GC 9033.....	875	36	-	-	-
Mycogen 3081.....	863	37	-	-	-
Mycogen 3075.....	788	37	-	-	-
Test Mean.....	984				
L.S.D. (.05).....	200				
C.V.....	15%				

Table 4. Performance of Cotton Varieties at Monroeville, Alabama, 1994

Brand-variety	1994			2-yr. av.	3-yr. av.
	Lint/Acre	Lint	Earliness	Lint/Acre	Lint/Acre
	Lb.	Pct.	Pct.	Lb.	Lb.
Stoneville LA 887....	1,153	41	-	1,101	1,149
Suregrow 501.....	1,289	42	-	1,102	1,112
Deltapine 51.....	1,209	39	-	1,059	1,095
DES 119.....	1,069	39	-	1,097	1,094
Chembred 1233.....	1,091	39	-	1,030	1,083
Deltapine 20.....	899	39	-	1,031	1,059
Stoneville 132.....	982	40	-	926	1,046
Suregrow 1001.....	1,038	39	-	1,016	1,039
Deltapine DP 5415....	877	41	-	982	1,027
Deltapine 50.....	1,035	37	-	1,035	1,026
Deltapine DP 5690....	944	39	-	966	1,016
HS 46.....	951	40	-	974	1,009
Chembred 407.....	989	39	-	965	993
Chembred 1135.....	923	39	-	929	987
Terra C 40.....	986	38	-	970	983
HS 23.....	965	38	-	933	974
Deltapine DP 5409....	931	38	-	970	958
Deltapine Acala 90...	1,085	40	-	906	944
Chembred 333.....	913	39	-	969	918
Georgia King.....	827	40	-	831	897
Terra 207.....	897	37	-	875	874
Suregrow 404.....	1,003	37	-	1,068	-
HS 44.....	1,084	39	-	1,049	-
Suregrow 125.....	960	42	-	1,024	-
Stoneville 474.....	1,061	43	-	1,017	-
HY 39.....	1,010	40	-	991	-
Terra 292.....	1,010	37	-	981	-
Hartz H 1380.....	1,087	42	-	-	-
Mycogen 3076.....	1,053	39	-	-	-
Stoneville X 94332...	1,033	39	-	-	-
Mycogen 2006.....	1,030	39	-	-	-
Hartz H 1220.....	1,019	39	-	-	-
GC 9033.....	1,013	38	-	-	-
Hartz Var. H 1244....	1,000	38	-	-	-
Terra 366.....	992	37	-	-	-
GC 210.....	988	39	-	-	-
Suregrow 223.....	977	43	-	-	-
Terra 302.....	973	39	-	-	-
Mycogen 2009.....	917	39	-	-	-
Hartz Var. H 1330....	885	39	-	-	-
Hartz H 1215.....	872	37	-	-	-
Mycogen 3081.....	870	40	-	-	-
Mycogen 3075.....	816	38	-	-	-
Test Mean.....	993				
L.S.D. (.05).....	287				
C.V.....	21%				

Table 5. Performance of Cotton Varieties at Headland, Alabama, 1994

Brand-variety	1994			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.	Lb.	Lb.
Chembred 1233.....	1,595	43	-	1,291	1,434
Stoneville LA 887....	1,683	44	-	1,218	1,404
Deltapine DP 5690....	1,413	41	-	1,251	1,377
Chembred 407.....	1,525	40	-	1,257	1,369
Suregrow 1001.....	1,432	40	-	1,193	1,357
Deltapine Acala 90...	1,475	41	-	1,144	1,357
Suregrow 501.....	1,621	42	-	1,296	1,356
Chembred 1135.....	1,514	41	-	1,164	1,354
Chembred 333.....	1,338	40	-	1,155	1,329
HS 46.....	1,474	41	-	1,169	1,321
Deltapine DP 5409....	1,443	41	-	1,193	1,313
Deltapine DP 5415....	1,456	42	-	1,120	1,300
Georgia King.....	1,356	44	-	1,112	1,281
Deltapine 20.....	1,473	40	-	1,138	1,268
HS 23.....	1,495	40	-	1,124	1,263
Terra C 40.....	1,374	41	-	1,060	1,256
Deltapine 51.....	1,438	42	-	1,065	1,219
DES 119.....	1,379	41	-	1,129	1,200
Deltapine 50.....	1,381	38	-	1,052	1,186
Terra 207.....	1,383	40	-	1,026	1,177
Stoneville 132.....	1,253	42	-	938	1,128
Stoneville 474.....	1,758	44	-	1,399	-
Suregrow 125.....	1,618	44	-	1,340	-
HS 44.....	1,469	41	-	1,259	-
Suregrow 404.....	1,589	40	-	1,171	-
HY 39.....	1,583	41	-	1,155	-
Terra 292.....	1,313	38	-	1,073	-
Suregrow 223.....	1,801	44	-	-	-
Hartz H 1220.....	1,524	40	-	-	-
Hartz H 1215.....	1,505	40	-	-	-
Hartz Var. H 1244....	1,501	41	-	-	-
Stoneville X 94332...	1,500	39	-	-	-
GC 9033.....	1,422	41	-	-	-
Mycogen 3076.....	1,405	41	-	-	-
Hartz Var. H 1330....	1,401	39	-	-	-
Mycogen 2009.....	1,349	42	-	-	-
Terra 366.....	1,345	39	-	-	-
Hartz H 1380.....	1,345	44	-	-	-
GC 210.....	1,344	44	-	-	-
Mycogen 2006.....	1,312	41	-	-	-
Terra 302.....	1,227	42	-	-	-
Mycogen 3075.....	1,149	42	-	-	-
Mycogen 3081.....	998	40	-	-	-
Test Mean.....	1,441				
L.S.D. (.05).....	154				
C.V.....	8%				

Table 6. Performance of Cotton Varieties at Fairhope, Alabama, 1994

Brand-variety	1994			2-yr. av. Lint/Acre Lb.	3-yr. av. Lint/Acre Lb.
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Suregrow 501.....	1,763	42	-	1,469	1,494
HS 46.....	1,599	42	-	1,343	1,410
Georgia King.....	1,578	41	-	1,333	1,391
Deltapine 51.....	1,622	38	-	1,340	1,389
Chembred 333.....	1,500	38	-	1,319	1,389
DES 119.....	1,437	39	-	1,310	1,380
Chembred 1135.....	1,569	38	-	1,345	1,365
Deltapine 20.....	1,426	37	-	1,254	1,337
Deltapine DP 5415....	1,543	41	-	1,264	1,328
Stoneville LA 887....	1,522	41	-	1,245	1,322
Chembred 407.....	1,536	39	-	1,291	1,318
Deltapine DP 5690....	1,477	40	-	1,281	1,312
Deltapine DP 5409....	1,336	38	-	1,251	1,309
Terra C 40.....	1,559	42	-	1,286	1,306
HS 23.....	1,518	40	-	1,229	1,288
Chembred 1233.....	1,497	38	-	1,188	1,272
Deltapine 50.....	1,421	36	-	1,190	1,261
Suregrow 1001.....	1,324	39	-	1,141	1,261
Deltapine Acala 90...	1,424	40	-	1,163	1,232
Terra 207.....	1,266	37	-	1,137	1,176
Stoneville 132.....	1,195	38	-	1,015	1,077
Stoneville 474.....	1,518	40	-	1,352	-
Suregrow 125.....	1,437	39	-	1,321	-
Terra 292.....	1,574	38	-	1,318	-
Suregrow 404.....	1,537	38	-	1,307	-
HY 39.....	1,505	38	-	1,254	-
HS 44.....	1,481	38	-	1,205	-
GC 9033.....	1,682	40	-	-	-
Suregrow 223.....	1,648	42	-	-	-
Stoneville X 94332...	1,578	40	-	-	-
Mycogen 2006.....	1,463	40	-	-	-
Mycogen 2009.....	1,442	36	-	-	-
Terra 302.....	1,432	40	-	-	-
Terra 366.....	1,392	37	-	-	-
Hartz H 1380.....	1,362	39	-	-	-
Hartz Var. H 1330....	1,351	38	-	-	-
Mycogen 3076.....	1,332	39	-	-	-
GC 210.....	1,310	40	-	-	-
Hartz H 1220.....	1,286	39	-	-	-
Mycogen 3075.....	1,251	39	-	-	-
Hartz Var. H 1244....	1,213	39	-	-	-
Hartz H 1215.....	1,171	37	-	-	-
Mycogen 3081.....	1,031	38	-	-	-
Test Mean.....	1,444				
L.S.D. (.05).....	185				
C.V.....	9%				

Table 7. Performance of Cotton Varieties in Alabama, Average of All Locations

Brand-variety	Yield, Lint/Acre			Lint			Earliness		
	1994	1993-94	1992-94	1994	1993-94	1992-94	1994	1993-94	1992-94
	Lb.	Lb.	Lb.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Stoneville LA 887...	1,353	1,126	1,175	42	42	42	86	85	79
Suregrow 501.....	1,384	1,174	1,165	41	42	42	88	86	79
HS 46.....	1,280	1,099	1,117	41	41	41	88	85	78
Deltapine 51.....	1,293	1,090	1,109	39	40	39	85	84	79
Chembred 1233.....	1,248	1,063	1,105	39	39	39	83	82	78
DES 119.....	1,245	1,099	1,100	40	41	40	90	87	84
Deltapine DP 5409...	1,246	1,077	1,099	39	41	40	90	87	82
Deltapine DP 5415...	1,257	1,071	1,095	40	41	41	79	78	73
Deltapine 20.....	1,217	1,057	1,088	39	40	39	89	87	83
Chembred 407.....	1,263	1,077	1,088	39	40	40	87	83	77
Deltapine DP 5690...	1,214	1,068	1,084	39	40	40	86	82	76
Chembred 333.....	1,171	1,040	1,071	39	40	39	87	85	80
Chembred 1135.....	1,254	1,046	1,067	39	39	39	88	84	80
Terra C 40.....	1,219	1,039	1,060	40	40	40	82	83	79
Stoneville 132.....	1,118	991	1,058	40	41	41	90	88	85
Deltapine 50.....	1,183	1,050	1,058	37	38	37	88	85	81
Suregrow 1001.....	1,178	1,030	1,054	39	40	40	86	81	76
Georgia King.....	1,161	1,014	1,053	41	42	42	83	82	78
HS 23.....	1,210	1,011	1,053	39	40	39	91	87	83
Deltapine Acala 90..	1,224	1,034	1,045	40	40	40	86	84	76
Terra 207.....	1,118	964	984	38	39	39	90	87	83
Stoneville 474.....	1,333	1,182	-	42	43	-	91	88	-
Suregrow 125.....	1,324	1,181	-	41	42	-	91	88	-
Suregrow 404.....	1,337	1,139	-	39	40	-	90	88	-
HS 44.....	1,255	1,075	-	39	40	-	84	83	-
HY 39.....	1,229	1,046	-	38	39	-	86	84	-
Terra 292.....	1,169	1,001	-	37	38	-	87	84	-
Suregrow 223.....	1,389	-	-	43	-	-	92	-	-
Stoneville X 94332..	1,284	-	-	39	-	-	89	-	-
GC 9033.....	1,250	-	-	39	-	-	84	-	-
Hartz Var. H 1244...	1,229	-	-	39	-	-	92	-	-
Hartz H 1380.....	1,224	-	-	41	-	-	86	-	-
Mycogen 2006.....	1,205	-	-	39	-	-	82	-	-
Hartz H 1220.....	1,203	-	-	39	-	-	94	-	-
Terra 366.....	1,196	-	-	37	-	-	90	-	-
Mycogen 3076.....	1,192	-	-	39	-	-	86	-	-
Mycogen 2009.....	1,186	-	-	39	-	-	88	-	-
Terra 302.....	1,180	-	-	40	-	-	82	-	-
Hartz H 1215.....	1,161	-	-	38	-	-	92	-	-
GC 210.....	1,156	-	-	41	-	-	88	-	-
Hartz Var. H 1330...	1,151	-	-	39	-	-	91	-	-
Mycogen 3075.....	1,020	-	-	39	-	-	87	-	-
Mycogen 3081.....	966	-	-	39	-	-	88	-	-
These varieties at 2 locations only									
Stoneville 453.....	1,180	1,016	1,068	42	42	42	91	89	83
KC 311.....	1,065	938	1,010	39	40	40	85	82	76
Paymaster HS-26.....	885	876	878	37	37	37	79	82	79
Acala 1517-88.....	827	831	852	41	39	39	93	93	89

Table 8. Performance of Irrigated Cotton Varieties at Belle Mina, Alabama, 1994

Brand-variety	1994			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Chembred 1135.....	1,515	41	87	1,272	1,409
Chembred 1233.....	1,430	41	89	1,313	1,391
Deltapine DP 5415....	1,322	41	77	1,270	1,379
DES 119.....	1,520	42	90	1,252	1,371
Deltapine DP 5690....	1,385	41	85	1,277	1,365
Deltapine 20.....	1,382	41	90	1,212	1,362
Suregrow 1001.....	1,430	42	81	1,211	1,316
Deltapine 51.....	1,271	39	83	1,163	1,290
HS 46.....	1,333	42	89	1,196	1,286
Chembred 407.....	1,408	42	90	1,154	1,228
Stoneville LA 887....	1,379	42	91	1,301	-
Suregrow 501.....	1,446	42	78	1,275	-
Deltapine DP 5409....	1,466	42	89	1,193	-
Stoneville 132.....	1,265	41	92	1,133	-
Suregrow 125.....	1,552	42	92	-	-
HS 44.....	1,424	41	83	-	-
HY 39.....	1,397	41	87	-	-
Test Mean.....	1,407				
L.S.D. (.05).....	165				
C.V.....	8%				

Table 9. Performance of Irrigated Cotton Varieties at Shorter, Alabama, 1994

Brand-variety	1994			2-yr. av. Lint/Acre	3-yr. av. Lint/Acre
	Lint/Acre	Lint	Earliness		
	Lb.	Pct.	Pct.		
Suregrow 125.....	1,469	42	-	-	-
Deltapine DP 5415....	1,467	42	-	-	-
Deltapine DP 5409....	1,362	39	-	-	-
DES 119.....	1,336	40	-	-	-
Deltapine 20.....	1,333	38	-	-	-
Stoneville 132.....	1,325	40	-	-	-
Deltapine 51.....	1,323	38	-	-	-
Stoneville LA 887....	1,308	41	-	-	-
HS 44.....	1,263	40	-	-	-
Suregrow 501.....	1,261	42	-	-	-
HS 46.....	1,254	41	-	-	-
Deltapine DP 5690....	1,192	39	-	-	-
Suregrow 1001.....	1,187	40	-	-	-
Chembred 1135.....	1,160	39	-	-	-
HY 39.....	1,127	39	-	-	-
Chembred 1233.....	1,116	39	-	-	-
Chembred 407.....	1,093	39	-	-	-
Test Mean.....	1,269				
L.S.D. (.05).....	124				
C.V.....	7%				



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

Brand - variety	1 yr.	2 yr.	3 yr.	4 yr.	5 yr.	6 yr.	7 yr.	8 yr.	9 yr.	12 yr.	13yr.	14yr.
	1994	93-94	92-94	91-94	90-94	89-94	88-94	87-94	86-94	83-94	82-94	81-94
	<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>
Deltapine Acala 90 . . .	41.0	53.0	37.0	40.5	34.9	34.8	30.8	29.2	29.0	23.1	22.4	23.1
Deltapine 50. . . . .	26.0	49.3	37.5	43.7	45.6	42.2	39.6	41.1	41.2	33.9	32.4	
Deltapine 20. . . . .	19.0	39.4	33.3	30.2	36.9	33.8	30.1	35.2	35.1	29.8		
DES 119 . . . . .	17.0	44.2	33.9	39.1	40.1	40.0	38.3	41.1	39.1			
Terra C 40. . . . .	25.0	39.8	32.2	34.6	36.5	36.9	34.2	37.8				
Stoneville 453. . . . .	48.0	68.7	50.1	55.5	56.8	53.9	53.5	57.1				
Hy Performer HS 46 . . .	36.0	65.9	58.8	58.4	56.2	56.8	51.9					
Deltapine 51. . . . .	23.0	43.2	33.3	36.7	36.5	33.0	31.1					
Stoneville KC 311 . . .	32.0	46.3	34.1	40.2	38.8	35.3						
Suregrow 1001 . . . . .	30.0	53.3	40.5	43.5	44.3	41.9						
Georgia King . . . . .	18.0	45.7	34.1	41.6	42.2							
Chembred 407 . . . . .	43.0	53.5	41.6	42.9	41.2							
Hy Performer HS 23 . . .	11.0	28.5	24.7	25.4	28.0							
Terra 207 . . . . .	14.0	34.2	24.5	22.0	27.8							
Stoneville LA 887. . . .	9.0	29.3	20.3	23.8	24.6							
Deltapine DP 5690 . . .	28.0	42.9	34.5	35.1	34.9							
Chembred 1135. . . . .	24.0	45.7	35.5	34.4	34.6							
Deltapine DP 5415 . . .	33.0	51.5	40.7	43.4	39.2							
Chembred 333 . . . . .	36.0	50.0	35.9	66.8								
Chembred 1233 . . . . .	13.0	36.9	27.6									
Deltapine DP 5409 . . .	43.0	60.8	49.3									
Stoneville 132. . . . .	18.0	27.8	19.6									
Suregrow 501 . . . . .	52.0	64.0	54.9									
Hy Performer HY 39 . . .	29.0	48.5										
Hy Performer HS 44 . . .	31.0	47.4										
Stoneville 474. . . . .	43.0	67.3										
Suregrow 125. . . . .	43.0	58.0										
Suregrow 404. . . . .	23.0	43.3										
Terra 292 . . . . .	16.0	43.7										
GC 210 . . . . .	52.0											
GC 9033 . . . . .	31.0											
Hartz H 1215 . . . . .	57.0											
Hartz H 1220 . . . . .	55.0											
Hartz H 1244 . . . . .	44.0											
Hartz H 1330 . . . . .	30.0											
Hartz H 1380 . . . . .	20.0											
Mycogen 2006 . . . . .	36.0											
Mycogen 2009 . . . . .	25.0											
Mycogen 3075 . . . . .	4.0											
Mycogen 3076 . . . . .	27.0											
Mycogen 3081 . . . . .	15.0											
Stoneville X94332 . . .	19.0											
Suregrow 223. . . . .	44.0											
Terra 302 . . . . .	17.0											
Terra 366 . . . . .	31.0											
M-315* . . . . .	9.0											

\* M-315 is a resistant check variety.

Table 11. Cotton Fiber Analysis, HVI, Belle Mina, Alabama, 1994

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 333 . . . . .	3.6	1.15	84	26.0	8.4
Chembred 407 . . . . .	3.9	1.15	82	27.0	8.2
Chembred 1135 . . . . .	4.1	1.15	83	28.0	7.8
Chembred 1233 . . . . .	4.1	1.15	84	27.0	9.8
Deltapine 20. . . . .	4.0	1.11	82	25.0	10.4
Deltapine 50. . . . .	3.8	1.14	81	25.5	10.2
Deltapine 51. . . . .	4.0	1.17	83	23.0	9.8
Deltapine Acala 90 . . . . .	4.2	1.13	83	28.5	8.4
Deltapine DP 5409 . . . . .	3.8	1.14	83	25.0	9.8
Deltapine DP 5415 . . . . .	4.2	1.15	85	26.5	9.8
Deltapine DP 5690 . . . . .	3.7	1.11	82	29.5	8.4
DES 119 . . . . .	4.1	1.16	87	27.0	10.6
GC 210 . . . . .	3.7	1.16	83	25.0	10.2
GC 9033. . . . .	3.6	1.11	82	29.5	8.8
Georgia King . . . . .	3.9	1.15	85	26.5	8.4
Hartz H 1215 . . . . .	3.7	1.07	82	26.5	10.2
Hartz H 1220 . . . . .	3.8	1.08	83	25.5	10.8
Hartz H 1244 . . . . .	3.7	1.05	82	25.5	10.6
Hartz H 1330 . . . . .	4.1	1.16	83	26.0	9.4
Hartz H 1380 . . . . .	3.9	1.15	83	24.5	10.2
HS 23 . . . . .	3.4	1.14	81	26.0	8.6
HS 44 . . . . .	4.1	1.15	83	29.0	8.4
HS 46 . . . . .	3.6	1.13	82	28.5	8.8
HY 39. . . . .	3.7	1.17	83	29.5	8.6
KC 311 . . . . .	4.2	1.11	84	28.0	8.2
Mycogen 2006 . . . . .	4.0	1.20	86	28.0	9.4
Mycogen 2009 . . . . .	3.8	1.13	84	27.5	7.8
Mycogen 3075 . . . . .	3.9	1.14	82	30.0	8.0
Mycogen 3076 . . . . .	3.9	1.13	84	30.5	8.8
Mycogen 3081 . . . . .	3.8	1.12	84	29.0	7.6
Stoneville X94332 . . . . .	4.1	1.14	83	25.0	8.6
Stoneville LA 887. . . . .	4.1	1.15	86	26.0	9.2
Stoneville 132. . . . .	4.0	1.10	82	25.0	10.0
Stoneville 453. . . . .	3.5	1.10	80	25.0	9.6
Stoneville 474. . . . .	4.1	1.14	84	29.5	9.6
Suregrow 125. . . . .	3.9	1.11	84	23.5	10.4
Suregrow 223. . . . .	4.6	1.14	84	28.0	9.8
Suregrow 404. . . . .	3.9	1.15	82	27.0	8.2
Suregrow 501. . . . .	4.3	1.12	84	27.0	9.8
Suregrow 1001 . . . . .	4.0	1.14	82	29.5	8.4
Terra C 40. . . . .	4.3	1.14	83	27.0	10.4
Terra 207 . . . . .	4.0	1.16	82	25.0	8.6
Terra 292 . . . . .	4.1	1.17	82	24.5	9.0
Terra 302 . . . . .	4.3	1.11	84	23.0	10.4
Terra 366 . . . . .	3.9	1.13	84	24.0	9.4

Table 12. Cotton Fiber Analysis, HVI, Prattville, Alabama, 1994

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<u>Units</u>	<u>In.</u>	<u>Pct.</u>	<u>g/tex</u>	<u>Pct.</u>
Chembred 333 . . . . .	3.7	1.16	83	28.0	8.6
Chembred 407 . . . . .	4.1	1.16	83	30.5	7.4
Chembred 1135 . . . . .	3.2	1.16	82	28.0	8.8
Chembred 1233 . . . . .	3.7	1.19	84	28.0	9.8
Deltapine 20 . . . . .	3.5	1.13	82	27.0	10.4
Deltapine 50 . . . . .	3.6	1.20	83	27.5	10.0
Deltapine 51 . . . . .	3.7	1.20	85	29.0	10.0
Deltapine Acala 90 . . . . .	3.8	1.14	83	30.0	8.4
Deltapine DP 5409 . . . . .	4.0	1.18	85	28.0	9.2
Deltapine DP 5415 . . . . .	4.3	1.17	85	26.0	9.0
Deltapine DP 5690 . . . . .	4.0	1.19	84	31.0	8.2
DES 119 . . . . .	3.8	1.19	86	28.0	10.2
GC 210 . . . . .	3.4	1.18	83	30.0	9.6
GC 9033 . . . . .	3.9	1.15	85	29.5	8.4
Georgia King . . . . .	3.8	1.17	84	31.0	8.8
Hartz H 1215 . . . . .	3.8	1.13	83	29.5	10.0
Hartz H 1220 . . . . .	3.6	1.12	83	28.0	10.4
Hartz H 1244 . . . . .	3.7	1.10	84	29.0	10.8
Hartz H 1330 . . . . .	3.9	1.15	86	28.5	8.8
Hartz H 1380 . . . . .	3.4	1.18	83	26.0	9.2
HS 23 . . . . .	3.8	1.16	84	29.0	7.8
HS 44 . . . . .	3.9	1.16	82	29.5	8.8
HS 46 . . . . .	3.4	1.22	84	31.5	8.8
HY 39 . . . . .	4.0	1.18	85	30.5	8.0
Mycogen 2006 . . . . .	3.8	1.20	83	29.5	8.6
Mycogen 2009 . . . . .	4.1	1.19	86	30.0	8.2
Mycogen 3075 . . . . .	3.9	1.20	83	30.5	8.2
Mycogen 3076 . . . . .	4.0	1.20	84	31.5	8.0
Mycogen 3081 . . . . .	3.6	1.14	82	29.0	7.6
Stoneville X94332 . . . . .	4.3	1.17	82	29.5	8.2
Stoneville LA 887 . . . . .	3.6	1.16	83	28.5	8.8
Stoneville 132 . . . . .	3.1	1.11	83	29.5	9.6
Stoneville 474 . . . . .	3.7	1.14	84	30.5	9.6
Suregrow 125 . . . . .	4.0	1.19	84	26.5	9.8
Suregrow 223 . . . . .	4.4	1.20	85	29.5	9.4
Suregrow 404 . . . . .	4.1	1.17	85	31.0	9.6
Suregrow 501 . . . . .	4.1	1.17	83	29.5	9.6
Suregrow 1001 . . . . .	4.1	1.17	83	31.0	9.0
Terra C 40 . . . . .	3.9	1.18	84	27.0	9.8
Terra 207 . . . . .	3.9	1.19	83	27.5	9.4
Terra 292 . . . . .	3.7	1.18	84	29.0	8.6
Terra 302 . . . . .	3.8	1.15	84	27.0	9.8
Terra 366 . . . . .	3.7	1.16	83	27.0	9.4

Table 13. Cotton Fiber Analysis, HVI, Shorter, Alabama, 1994

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 333 . . . . .	4.2	1.15	85	28.0	8.2
Chembred 407 . . . . .	3.9	1.17	85	28.0	7.4
Chembred 1135 . . . . .	4.3	1.12	82	30.0	6.8
Chembred 1233 . . . . .	4.1	1.14	82	29.5	9.2
Deltapine 20. . . . .	3.7	1.08	82	26.0	10.2
Deltapine 50. . . . .	3.9	1.14	82	26.0	9.8
Deltapine 51. . . . .	3.7	1.14	84	26.0	9.6
Deltapine Acala 90 . . . . .	4.2	1.09	83	32.0	8.6
Deltapine DP 5409 . . . . .	3.8	1.16	85	29.0	9.6
Deltapine DP 5415 . . . . .	4.2	1.11	83	28.5	9.8
Deltapine DP 5690 . . . . .	4.3	1.17	85	32.0	8.4
DES 119 . . . . .	3.9	1.12	85	27.0	10.0
GC 210 . . . . .	4.1	1.17	85	27.0	10.0
GC 9033. . . . .	4.0	1.12	82	34.0	8.4
Georgia King . . . . .	3.8	1.12	85	29.0	8.6
Hartz H 1215 . . . . .	4.1	1.06	82	27.0	9.4
Hartz H 1220 . . . . .	4.3	1.09	82	26.5	9.6
Hartz H 1244 . . . . .	3.8	1.05	83	25.0	10.6
Hartz H 1330 . . . . .	3.9	1.14	84	27.5	8.2
Hartz H 1380 . . . . .	3.6	1.15	80	26.0	8.8
HS 23 . . . . .	3.7	1.08	81	27.0	8.4
HS 44 . . . . .	4.7	1.17	86	30.5	8.4
HS 46 . . . . .	3.9	1.15	83	29.5	8.4
HY 39 . . . . .	4.1	1.19	84	33.0	7.8
KC 311 . . . . .	4.6	1.11	86	31.0	8.4
Mycogen 2006 . . . . .	4.5	1.15	83	31.0	7.6
Mycogen 2009 . . . . .	4.6	1.13	84	28.0	7.8
Mycogen 3075 . . . . .	3.7	1.14	85	31.5	8.0
Mycogen 3076 . . . . .	4.0	1.11	84	33.0	8.2
Mycogen 3081 . . . . .	3.7	1.15	85	32.5	8.0
Stoneville X94332 . . . . .	4.0	1.17	85	27.0	8.6
Stoneville LA 887. . . . .	4.0	1.14	85	31.0	9.0
Stoneville 132. . . . .	3.7	1.09	83	27.0	9.8
Stoneville 453. . . . .	3.9	1.10	83	28.5	8.8
Stoneville 474. . . . .	4.6	1.11	85	28.0	9.2
Suregrow 125 . . . . .	4.3	1.17	85	23.0	10.0
Suregrow 223 . . . . .	4.6	1.18	87	29.0	9.4
Suregrow 404 . . . . .	4.4	1.14	86	29.0	9.6
Suregrow 501 . . . . .	4.0	1.13	85	31.0	9.4
Suregrow 1001 . . . . .	4.2	1.11	83	31.5	7.4
Terra C 40. . . . .	4.1	1.10	84	27.5	10.4
Terra 207 . . . . .	4.1	1.17	84	28.0	9.0
Terra 292 . . . . .	4.2	1.14	82	26.0	9.6
Terra 302 . . . . .	4.1	1.12	84	28.0	9.6
Terra 366 . . . . .	3.8	1.11	82	26.0	8.8

Table 14. Cotton Fiber Analysis, HVI, Monroeville, Alabama, 1994

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 333 . . . . .	3.5	1.10	81	30.5	8.6
Chembred 407 . . . . .	3.8	1.15	83	30.0	7.8
Chembred 1135 . . . . .	3.6	1.17	85	34.0	7.8
Chembred 1233 . . . . .	4.1	1.13	83	30.0	9.4
Deltapine 20 . . . . .	4.0	1.10	83	27.0	9.8
Deltapine 50 . . . . .	3.8	1.15	85	26.5	9.8
Deltapine 51 . . . . .	3.8	1.16	85	27.0	9.4
Deltapine Acala 90 . . . . .	3.8	1.11	85	32.0	8.6
Deltapine DP 5409 . . . . .	3.9	1.16	85	30.5	9.4
Deltapine DP 5415 . . . . .	4.3	1.16	84	32.0	9.8
Deltapine DP 5690 . . . . .	3.9	1.15	85	32.0	8.4
DES 119 . . . . .	3.8	1.17	85	31.5	10.0
GC 210 . . . . .	4.0	1.18	83	31.0	9.6
GC 9033 . . . . .	4.0	1.13	85	35.0	8.6
Georgia King . . . . .	3.6	1.13	84	34.0	8.4
Hartz H 1215 . . . . .	3.7	1.16	83	32.5	9.8
Hartz H 1220 . . . . .	3.9	1.13	83	30.0	10.2
Hartz H 1244 . . . . .	3.9	1.13	85	32.5	10.0
Hartz H 1330 . . . . .	4.2	1.19	84	30.0	8.2
Hartz H 1380 . . . . .	3.5	1.17	82	28.0	9.8
HS 23 . . . . .	3.7	1.12	83	29.5	7.8
HS 44 . . . . .	4.1	1.12	84	33.0	9.2
HS 46 . . . . .	3.7	1.16	85	32.5	8.0
HY 39 . . . . .	3.6	1.17	84	36.0	8.0
Mycogen 2006 . . . . .	3.9	1.13	81	33.0	8.8
Mycogen 2009 . . . . .	3.8	1.13	86	36.0	7.6
Mycogen 3075 . . . . .	3.8	1.18	84	37.0	7.8
Mycogen 3076 . . . . .	4.0	1.15	83	37.0	8.6
Mycogen 3081 . . . . .	3.7	1.11	84	36.0	7.8
Stoneville X94332 . . . . .	4.3	1.16	84	30.0	8.4
Stoneville LA 887 . . . . .	4.0	1.13	82	31.5	9.2
Stoneville 132 . . . . .	3.6	1.09	84	29.5	9.6
Stoneville 474 . . . . .	4.2	1.08	84	31.0	9.8
Suregrow 125 . . . . .	3.9	1.16	83	28.0	10.2
Suregrow 223 . . . . .	4.4	1.17	88	32.0	10.0
Suregrow 404 . . . . .	4.1	1.14	85	34.0	9.2
Suregrow 501 . . . . .	4.0	1.14	82	31.5	9.8
Suregrow 1001 . . . . .	3.7	1.15	84	35.5	8.6
Terra C 40 . . . . .	3.7	1.14	85	31.0	9.6
Terra 207 . . . . .	3.9	1.18	83	30.0	8.6
Terra 292 . . . . .	4.0	1.15	83	26.5	9.8
Terra 302 . . . . .	4.3	1.12	84	28.0	9.4
Terra 366 . . . . .	4.1	1.14	84	29.0	9.0

Table 15. Cotton Fiber Analysis, HVI, Headland, Alabama, 1994

Cotton variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Embred 333	4.0	1.17	85	28.0	8.6
Embred 407	4.3	1.22	85	33.0	8.4
Embred 1135	4.0	1.19	85	29.5	7.4
Embred 1233	4.0	1.14	82	28.5	9.4
Mapine 20	4.1	1.16	84	26.5	10.6
Mapine 50	4.0	1.18	86	27.0	9.4
Mapine 51	4.0	1.21	90	24.5	9.6
Mapine Acala 90	4.3	1.17	82	33.5	8.0
Mapine DP 5409	3.7	1.14	83	30.5	9.2
Mapine DP 5415	4.5	1.16	81	31.0	9.8
Mapine DP 5690	4.2	1.18	85	34.5	7.4
Mapine 119	4.2	1.21	86	28.0	10.6
Mapine 210	3.8	1.18	86	28.0	9.8
Mapine 9033	3.8	1.16	81	30.0	8.2
Mapine Georgia King	4.2	1.20	87	31.5	8.2
Mapine H 1215	3.8	1.14	81	29.0	9.8
Mapine H 1220	4.2	1.17	90	27.5	10.6
Mapine H 1244	4.0	1.14	84	28.0	9.4
Mapine H 1330	4.2	1.17	81	26.0	8.6
Mapine H 1380	4.0	1.20	86	29.0	9.2
Mapine 23	3.4	1.15	83	27.0	7.2
Mapine 44	4.7	1.21	84	29.5	8.0
Mapine 46	4.0	1.19	86	28.5	8.6
Mapine 39	4.1	1.12	82	28.5	7.2
Mapine Dogen 2006	4.6	1.19	87	25.5	7.4
Mapine Dogen 2009	4.1	1.20	87	31.5	8.0
Mapine Dogen 3075	3.9	1.17	84	28.5	7.2
Mapine Dogen 3076	4.6	1.15	84	31.0	8.6
Mapine Dogen 3081	3.8	1.15	86	32.5	7.6
Mapine Neville X94332	4.0	1.17	83	26.5	8.2
Mapine Neville LA 887	4.5	1.19	86	29.5	9.0
Mapine Neville 132	3.9	1.24	85	28.5	9.4
Mapine Neville 474	4.4	1.14	87	27.5	9.6
Mapine Segrow 125	4.4	1.19	83	26.5	9.8
Mapine Segrow 223	4.5	1.16	87	27.0	9.0
Mapine Segrow 404	4.6	1.18	87	29.5	9.4
Mapine Segrow 501	4.5	1.15	84	30.0	9.6
Mapine Segrow 1001	4.1	1.22	88	32.5	8.4
Mapine Vera C 40	4.4	1.17	84	27.5	10.0
Mapine Vera 207	4.2	1.21	82	26.5	9.6
Mapine Vera 292	3.8	1.22	88	26.0	9.6
Mapine Vera 302	4.4	1.15	81	27.5	9.0
Mapine Vera 366	4.0	1.16	82	27.5	9.2

Table 16. Cotton Fiber Analysis, HVI, Fairhope, Alabama, 1994

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	<u>Units</u>	<u>In.</u>	<u>Pct.</u>	<u>g/tex</u>	<u>Pct.</u>
Chembred 333 . . . . .	3.7	1.15	84	29.5	8.2
Chembred 407 . . . . .	4.1	1.16	84	29.0	7.2
Chembred 1135 . . . . .	3.5	1.18	82	28.5	7.4
Chembred 1233 . . . . .	3.9	1.15	83	28.0	8.8
Deltapine 20 . . . . .	4.0	1.13	81	27.0	10.0
Deltapine 50 . . . . .	3.8	1.18	82	26.0	9.8
Deltapine 51 . . . . .	4.0	1.19	84	24.5	9.2
Deltapine Acala 90 . . . . .	3.8	1.15	82	33.0	7.2
Deltapine DP 5409 . . . . .	4.0	1.14	84	28.5	9.2
Deltapine DP 5415 . . . . .	4.4	1.19	82	30.0	9.4
Deltapine DP 5690 . . . . .	4.3	1.15	84	30.5	7.0
DES 119 . . . . .	3.9	1.18	85	29.0	10.0
GC 210 . . . . .	3.6	1.20	83	28.0	10.2
GC 9033 . . . . .	4.1	1.16	84	30.0	7.4
Georgia King . . . . .	3.8	1.14	82	30.0	8.0
Hartz H 1215 . . . . .	3.9	1.15	84	30.0	10.0
Hartz H 1220 . . . . .	3.7	1.11	82	30.0	10.6
Hartz H 1244 . . . . .	3.4	1.12	82	29.5	9.6
Hartz H 1330 . . . . .	3.7	1.18	80	29.0	8.6
Hartz H 1380 . . . . .	3.4	1.21	82	26.0	9.8
HS 23 . . . . .	3.9	1.15	84	28.5	8.4
HS 44 . . . . .	4.5	1.15	84	31.0	7.8
HS 46 . . . . .	3.8	1.17	84	30.0	8.4
HY 39 . . . . .	4.0	1.19	85	30.0	8.2
Mycogen 2006 . . . . .	3.9	1.19	82	31.5	8.0
Mycogen 2009 . . . . .	3.8	1.18	84	30.5	7.2
Mycogen 3075 . . . . .	3.8	1.13	83	31.0	7.0
Mycogen 3076 . . . . .	3.8	1.16	84	33.0	8.2
Mycogen 3081 . . . . .	4.2	1.20	83	29.5	6.8
Stoneville X94332 . . . . .	4.2	1.19	85	28.5	8.4
Stoneville LA 887 . . . . .	3.9	1.16	84	30.0	8.8
Stoneville 132 . . . . .	3.3	1.14	84	27.5	8.6
Stoneville 474 . . . . .	4.2	1.13	81	28.0	8.4
Suregrow 125 . . . . .	3.6	1.18	83	27.0	10.6
Suregrow 223 . . . . .	4.4	1.18	86	28.5	9.6
Suregrow 404 . . . . .	4.4	1.13	84	28.0	9.2
Suregrow 501 . . . . .	4.4	1.16	87	31.0	9.2
Suregrow 1001 . . . . .	4.0	1.12	84	31.5	7.8
Terra C 40 . . . . .	3.9	1.18	85	27.0	9.0
Terra 207 . . . . .	3.8	1.19	84	26.0	9.4
Terra 292 . . . . .	4.2	1.19	83	26.0	9.0
Terra 302 . . . . .	3.9	1.15	82	26.0	9.2
Terra 366 . . . . .	4.1	1.17	82	27.0	9.8

Table 17. Cotton Fiber Analysis, HVI, Irrigated Cotton, Belle Mina, Alabama, 1994

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 407 . . . . .	3.6	1.16	81	27.5	8.6
Chembred 1135 . . . . .	3.8	1.17	84	28.0	8.8
Chembred 1233 . . . . .	4.0	1.18	85	28.0	9.4
Deltapine 20 . . . . .	3.5	1.16	85	26.0	10.4
Deltapine 51 . . . . .	3.6	1.20	83	26.5	9.8
Deltapine DP 5409 . . . . .	3.7	1.17	83	25.5	9.6
Deltapine DP 5415 . . . . .	4.0	1.16	83	28.5	10.2
Deltapine DP 5690 . . . . .	3.6	1.15	83	32.0	8.8
DES 119 . . . . .	4.1	1.17	86	26.5	10.6
HS 44 . . . . .	3.7	1.20	82	30.5	9.4
HS 46 . . . . .	3.4	1.17	84	28.5	9.4
HY 39 . . . . .	3.7	1.18	81	30.5	8.0
Stoneville LA 887 . . . . .	3.2	1.18	84	31.5	9.2
Stoneville 132 . . . . .	3.3	1.09	82	27.0	10.4
Suregrow 125 . . . . .	3.6	1.20	85	25.5	11.0
Suregrow 501 . . . . .	4.0	1.18	86	27.5	10.0
Suregrow 1001 . . . . .	3.7	1.17	84	31.5	8.8

Table 18. Cotton Fiber Analysis, HVI, Irrigated Cotton, Shorter, Alabama, 1994

Brand-variety	Micronaire	Length	Uniformity	Strength	Elongation
	Units	In.	Pct.	g/tex	Pct.
Chembred 407 . . . . .	4.2	1.20	83	30.5	8.0
Chembred 1135 . . . . .	3.7	1.18	86	31.0	8.8
Chembred 1233 . . . . .	3.8	1.17	82	29.0	9.0
Deltapine 20 . . . . .	4.0	1.12	83	25.0	10.4
Deltapine 51 . . . . .	4.0	1.18	85	26.0	10.2
Deltapine DP 5409 . . . . .	4.0	1.16	82	29.0	9.6
Deltapine DP 5415 . . . . .	4.2	1.18	86	29.0	9.8
Deltapine DP 5690 . . . . .	4.3	1.17	83	32.0	7.8
DES 119 . . . . .	4.0	1.17	85	29.0	10.6
HS 44 . . . . .	4.3	1.17	83	32.0	9.2
HS 46 . . . . .	4.0	1.20	85	31.0	8.6
HY 39 . . . . .	4.2	1.18	84	32.0	7.6
Stoneville LA 887 . . . . .	4.1	1.20	84	31.0	10.0
Stoneville 132 . . . . .	4.0	1.12	85	26.0	10.0
Suregrow 125 . . . . .	4.2	1.23	85	27.0	10.2
Suregrow 501 . . . . .	4.4	1.16	85	30.0	9.6
Suregrow 1001 . . . . .	4.3	1.15	83	31.0	8.6



Table 19. Growing Season Rainfall, 1992-94

Test location	Year	Monthly rainfall (inches)							7-month total
		Mar.	Apr.	May	June	July	Aug.	Sept.	
Belle Mina . . .	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
	1992	4.8	1.8	2.3	9.0	6.3	4.3	5.2	33.7
Shorter . . . .	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
	1992	3.6	2.8	1.7	3.4	7.4	5.1	2.9	26.9
Prattville . . .	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
	1992	3.3	3.9	1.7	4.1	6.1	3.0	2.4	24.5
Monroeville . .	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
	1992	4.2	3.2	2.2	8.5	5.8	11.6	2.6	38.1
Fairhope . . . .	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
	1992	2.9	2.7	2.4	4.6	5.0	6.2	1.4	25.2
Headland . . . .	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
	1992	7.5	0.6	2.5	3.8	7.4	4.9	0.4	27.1

Table 20. Soil Types for Cotton Trials, 1994

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 21. Sources of Seed for the 1994 Cotton Variety Tests

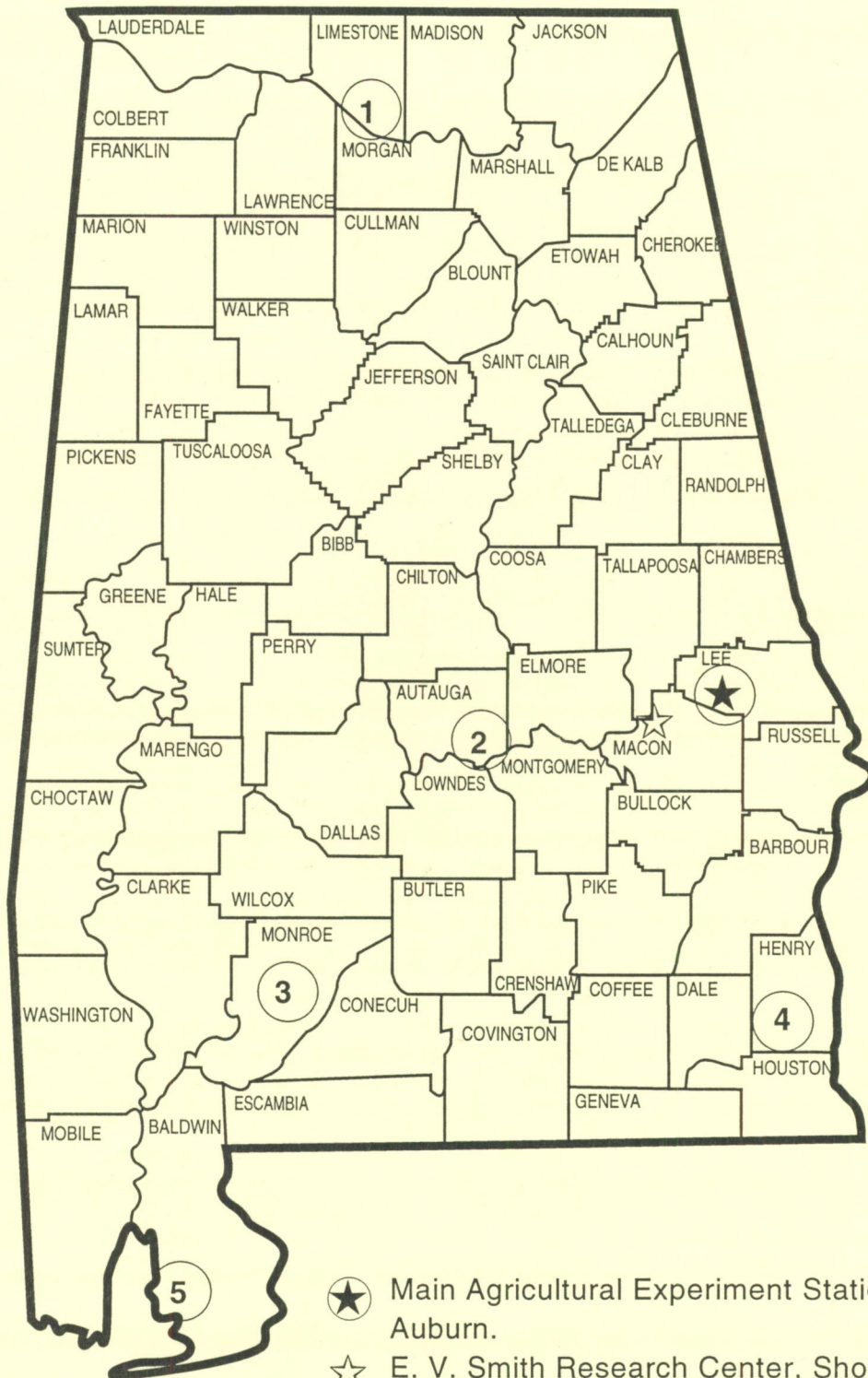
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Deltapine Acala 90 Deltapine 50 Deltapine 51 Deltapine 20 Deltapine DP 5415 Deltapine DP 5690 Deltapine DP 5409 DES 119	Delta and Pine Land Co. Scott, Mississippi
Stoneville 474 Stoneville 453 Stoneville 132 Stoneville LA 887 Stoneville X94332 Georgia 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 223 Suregrow 125	Ellis Brothers Seed, Inc. Centre, Alabama
Chembred CB 1233 Chembred CB 1135 Chembred CB 407 Chembred CB 333	Chembred, Inc. Phoenix, Arizona
Paymaster HS 26	Cargill Hybrid Seed Aiken, Texas
Acala 1517-88	New Mexico State University Las Cruces, New Mexico
Mycogen 2009 Mycogen 2006 Mycogen 3081 Mycogen 3076 Mycogen 3075	Mycogen Plant Sciences Goodyear, Arizona
GC 9033 GC 210	Germain's Seeds Bakersfield, California
Hartz H 1380 Hartz H 1330 Hartz H 1244 Hartz H 1220 Hartz H 1215	Jacob Hartz Seed Co. Stuttgart, Arkansas

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# Locations of Participating Research Units



- ★ Main Agricultural Experiment Station, Auburn.
- ☆ E. V. Smith Research Center, Shorter.
- 1. Tennessee Valley Substation, Belle Mina.
- 2. Prattville Experiment Field, Prattville.
- 3. Monroeville Experiment Field, Monroeville.
- 4. Wiregrass Substation, Headland.
- 5. Gulf Coast Substation, Fairhope.