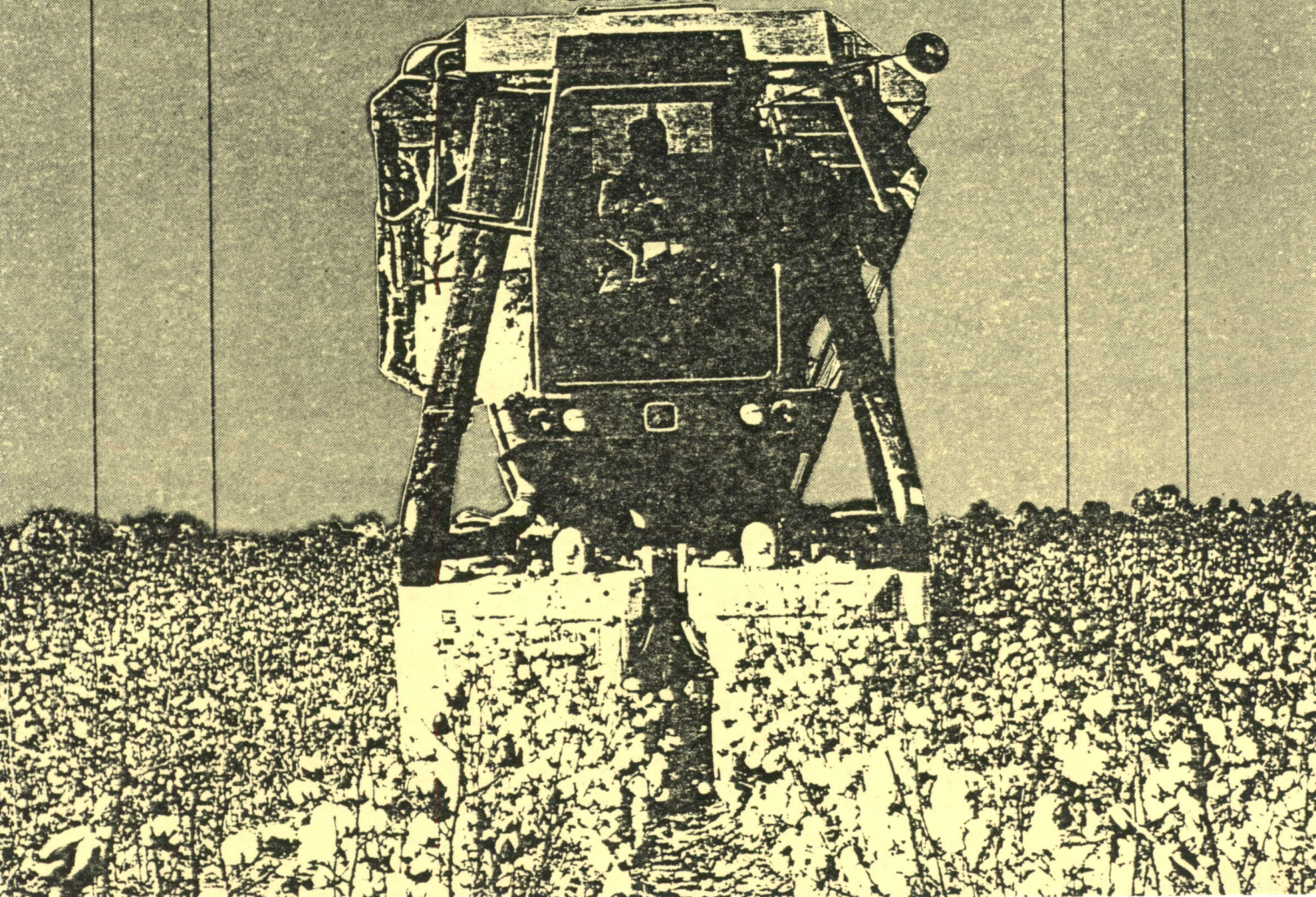


Department of Agronomy and Soils  
Department Series No. 73  
Alabama Agricultural Experiment Station  
Auburn University  
Gale A. Buchanan, Director Auburn, Alabama

February 1982

# ALABAMA COTTON VARIETY REPORT, 1981





# 1981 ALABAMA COTTON VARIETY REPORT<sup>1/</sup>

A Report of the Performance of Cotton Varieties  
Tested at Nine Locations in Alabama During 1981

Wiley C. Johnson <sup>2/</sup>

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 usually conducted on units of the Agricultural Experiment Station by Experiment Station personnel. In 1981, the Winfield test was planted on a private farm near the Upper Coastal Plain Substation. Cultural practices are those generally recommended by Auburn University to farmers. Every effort is made to test the varieties and present the data in an unbiased manner.

## Experimental Conditions

A randomized block experimental design with four replications was used at each location. Plot row length at different locations varied from 34.5 to 100 feet. Plots were two-row at Prattville, Headland, Belle Mina, and Crossville. Single row plots were used at the other locations. Rainfall was adequate early in the season but slightly deficient during July and August at most locations in 1981. September and October were dry throughout Alabama. The drouth was most severe at Winfield and at the E. V. Smith Research Center near Shorter (Macon County). Season temperatures were near normal throughout Alabama. Insect control was generally adequate.

---

<sup>1/</sup> January 1982

<sup>2/</sup> Professor, Department of Agronomy and Soils

### Explanation of Data

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

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

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

Fiber Properties: Fiber qualities were determined by the Department of Textile Engineering, Auburn University.

(a) Span length: This is the fiber length measured on the digital fibrograph. The figures given are the distance spanned by 2.5% and/or 50% of the fibers, where the initial point of scanning is 100%. The 2.5% length, in inches, approximates classer's staple. The ratio of the 2.5% and 50% span lengths is a measure of fiber length uniformity.

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

(c) Micronaire: This measures the fineness and maturity of the cotton fibers. The smaller the micronaire reading, the finer and/or or more immature the fibers. The desirable range of micronaire is 3.5 - 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 wilt was evaluated by Dr. A. J. Kappelman, Jr., at the Plant Breeding Unit, Tallassee.

The varieties were grown in a field with a high natural incidence of the fusarium wilt-root-knot nematode complex. Severity of the disease varies from year to year and also within the experimental area in the same year.

Therefore, several years' data are necessary to realistically characterize a variety's wilt reaction. Stoneville 213, Hancock, and Stoneville 825 have consistently shown a high incidence of wilt. All other reported varieties that have been tested for at least 3 years have acceptable tolerance to fusarium wilt.

#### New and Experimental Varieties

Deltapine 90 has been developed for the San Joaquin Valley area of California.

However, preliminary testing indicates it is a high quality, smoothleaf

variety with broad adaptation. Deltapine NSL is a nectariless, smoothleaf

variety. Deltapine 62 is a new variety that appears to be quite similar to

the familar and widely-grown Deltapine 61. Deltapine 7148 and Deltapine (DPL)

7537-6150 are experimental lines and have not been released.

Coker 208 is an advanced line that will probably be released and available for 1983. It is quite similar to Coker 201, a reliable favorite in Alabama

that has been discontinued. Coker 80903 is a high quality line that has not been released.

Acala SJ-5 and Lockett 77 are varieties adapted to the western areas of cotton production and are included in certain Alabama variety tests as national standard varieties. GAT 72-56 and PD 4548 are experimental lines.

#### 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, 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, Least Significant Difference (L.S.D. .05).

#### Locations of Experiments

Tennessee Valley Substation, Belle Mina - W. B. Webster, Superintendent

Sand Mountain Substation, Crossville - J. T. Eason, Superintendent

Upper Coastal Plain Substation, Winfield - R. A. Moore, Superintendent  
(test grown on farm of Mr. Ronnie Lawrence)

Experiment Field, Prattville - F. T. Glaze, Superintendent

E. V. Smith Research Center, Shorter - J. R. Akridge, Superintendent

Plant Breeding Unit, Tallassee - L. L. Walker, Superintendent

Experiment Field, Brewton - J. A. Pitts, Superintendent

Experiment Field, Monroeville - J. A. Pitts, Superintendent

Wiregrass Substation, Headland - J. G. Starling, Superintendent

Table 1. Performance of Cotton Varieties at Crossville, Alabama, 1981

Variety	1981			2-yr. av.	3-yr. av.
	Lint/acre	Lint %	% Earliness	Lint/acre	Lint/acre
	Lb.	Pct.	Pct.	Lb.	Lb.
Coker 3131	1098	42	49	816	
Delcot 311	1036	39	41	787	
DPL 7537-6150	1026	40	54		
Hancock	1003	41	68	775	831
McNair 220	971	40	59	768	632
Coker 3114	958	42	36	733	752
McNair 235	957	40	48	793	872
DES 56	953	38	51	796	803
GAT 72-56	948	39	43		
Coker 80903	919	40	55		
Deltapine NSL	906	39	46		
Coker 304	903	40	43	717	827
Deltapine 90	879	40	46		
Coker 208	872	40	48		
Lockett 77	870	38	69		
Coker 310	852	39	37	706	794
Stoneville 506	771	38	44		
Coker 315	764	40	26	634	735
PD 4548	754	40	38		
Deltapine 61	751	37	45	627	702
Deltapine 41	740	40	49	654	723
Deltapine 55	723	40	46	671	743
GP 3774	720	37	62	664	
Deltapine 62	703	40	46		
Stoneville 825	686	38	45	628	691
Acala SJ-5	676	37	42	540	484
Deltapine 26	625	39	39		
Deltapine 7148	603	39	41	582	
Stoneville 213	564	38	44	554	642
L.S.D. .05	119				
C.V. = 10%					

Table 2. Performance of Cotton Varieties at Belle Mina, Alabama, 1981

	1981			2-yr. av.	3-yr. av.
	Lint/acre	Lint %	% Earliness	Lint/acre	Lint/acre
	Lb.	Pct.	Pct.	Lb.	Lb.
Stoneville 825	884	43	87	909	979
DPL 7537-6150	826	43	85		
Deltapine 7148	818	43	79	851	
McNair 235	802	42	87	866	961
McNair 220	799	42	85	897	943
DES 56	798	42	89	803	905
Coker 80903	793	43	87		
Hancock	793	43	87	789	873
Coker 3131	792	45	82	781	
Deltapine 55	789	44	83	788	856
Stoneville 506	784	42	86	833	
Deltapine 90	773	41	88		
Coker 3114	770	46	85	801	849
Deltapine 26	762	43	83		
Coker 310	751	42	83	772	858
Deltapine 62	746	41	86		
Stoneville 213	735	42	86	814	886
Deltapine 61	732	41	87	808	891
Coker 304	709	43	83	779	849
Coker 315	704	43	85	734	863
Delcote 311	692	41	90	808	
Deltapine 41	690	45	87	795	895
Deltapine NSL	681	42	84		
Coker 208	675	42	87		
GP 3774	669	41	79	670	
L.S.D. .05	115				
C.V. = 11%					



Table 3. Performance of Cotton Varieties at Winfield, Alabama, 1981

Variety	1981		2-yr. av.	3-yr. av.
	Lint/acre	Lint %	Lint/acre	Lint/acre
	Lb.	Pct.	Lb.	Lb.
Hancock	273	41	203	262
Coker 304	267	39	230	253
Deltapine 90	259	40		
Stoneville 825	255	40	210	275
Deltapine 41	248	42	202	329
Deltapine 61	245	55	194	246
Deltapine 7148	240	40	189	
Delcot 311	235	39	185	
Coker 80903	232	40		
McNair 235	231	41	232	279
DPL 7537-6150	230	40		
Deltapine NSL	228	39		
DES 56	224	39	204	259
GP 3774	219	39	200	
Stoneville 213	211	40	216	256
Coker 3131	210	42	165	
Deltapine 62	210	39		
Deltapine 26	198	40		
McNair 220	192	41	181	226
Coker 310	187	39	153	218
Deltapine 55	186	41	214	263
Stoneville 506	183	40	234	
Coker 208	173	40		
Coker 3114	166	42	180	197
Coker 315	155	39	171	230

L.S.D. .05 98

C.V. = 32%

Table 4. Performance of Cotton Varieties at Brewton, Alabama, 1981

Variety	1981			2-yr. av.	3-yr. av.
	Lint/acre	Lint %	% Earliness	Lint/acre	Lint/acre
	Lb.	Pct.	Pct.	Lb.	Lb.
Coker 80903	1249	43	88		
Coker 3114	1151	45	81	1083	966
Coker 310	1139	40	83	1019	902
DES 56	1130	42	83	1043	916
Coker 315	1122	42	81	1074	940
Deltapine 90	1108	44	84		
Stoneville 825	1078	42	85	1000	911
Deltapine 41	1060	47	81	972	864
McNair 220	994	41	88	937	792
Coker 3131	985	43	80	981	
DPL 7537-6150	964	42	81		
Deltapine 61	951	40	80	906	861
McNair 235	944	42	85	969	845
Stoneville 213	941	40	84	944	861
Coker 304	938	40	83	1007	880
Coker 208	937	41	83		
Deltapine 26	928	45	79	946	853
Deltapine 62	911	40	80		
Stoneville 506	910	41	87	914	
Deltapine NSL	900	41	83		
Deltapine 7148	897	42	81		
Delcot 311	833	40	88	934	
Hancock	810	43	84	825	771
Deltapine 55	799	43	82	854	770
GP 3774	766	41	86	848	
L.S.D. .05	152				
C.V. = 11%					

Table 5. Performance of Cotton Varieties at Headland, Alabama, 1981

Variety	1981		2-yr. av.	3-yr. av.
	Lint/acre	Lint %	Lint/acre	Lint/acre
	Lb.	Pct.	Lb.	Lb.
McNair 220	1328	38	1376	1040
Coker 3131	1286	42	1399	
Deltapine	1278	41		
Deltapine NSL	1257	40		
Coker 208	1242	39		
Deltapine 55	1240	41	1384	1056
Coker 3114	1228	42	1311	1001
Coker 304	1222	40	1303	1047
McNair 235	1218	38	1312	1095
Deltapine 26	1212	41	1320	1038
Deltapine 41	1201	42	1346	1106
Deltapine 7148	1196	40		
Coker 315	1187	39	1237	1045
Stoneville 825	1185	39	1306	1056
Delcot 311	1177	38	1230	
Coker 80903	1172	39		
Stoneville 213	1145	40	1304	1059
Deltapine 61	1133	38	1248	992
Deltapine 62	1129	40		
DES 56	1127	37	1276	1045
Stoneville 506	1119	38	1251	
DPL 7537-6150	1110	38		
Hancock	1100	37	1193	940
Coker 310	1050	39	1207	1052
GP 3774	1030	37	1180	
L.S.D. .05	133			
C.V. = 8%				

Table 6. Performance of Cotton Varieties at Monroeville, Alabama, 1981

Variety	1981			2-yr. av.	3-yr. av.
	Lint/acre	Lint %	% Earliness	Lint/acre	Lint/acre
	Lb.	Pct.	Pct.	Lb.	Lb.
Deltapine 90	1061	40	81		
Coker 208	1025	41	81		
Deltapine 41	988	43	80	721	696
Coker 315	978	40	80	707	686
Deltapine 55	971	42	82	715	676
DPL 7537-6150	959	40	81		
McNair 220	958	40	79	678	702
Deltapine 7148	957	41	85		
Deltapine 62	930	39	78		
Coker 310	929	41	78	673	670
McNair 235	928	40	83	675	608
Stoneville 506	916	38	87	688	
Coker 3114	913	42	80	702	663
Coker 3131	907	42	76	709	
Deltapine NSL	891	40	82		
Deltapine 26	879	40	82	677	648
Coker 304	874	40	77	672	660
Deltapine 61	857	40	82	684	684
DES 56	847	40	80	678	658
Stoneville 825	844	39	85	688	684
Delcot 311	827	39	85	660	
Coker 80903	816	39	84		
Stoneville 213	812	40	76	668	664
Hancock	728	40	80	601	628
GP 3774	727	39	82	566	

L.S.D. .05 129

C.V. = 10%

Table 7. Performance of Cotton Varieties at Prattville, Alabama, 1981

Variety	1981			2-yr. av.	3-yr. av.
	Lint/acre	Lint/%	% Earliness	Lint/acre	Lint/acre
	Lb.	Pct.	Pct.	Lb	Lb
Deltapine 7148	880	42	67		
Deltapine 90	838	41	67		
Deltapine 41	829	43	65	602	656
Delcot 311	829	38	72	649	
DPL 7537-6150	828	40	62		
Stoneville 825	822	39	74	666	694
Deltapine NSL	822	40	65		
Deltapine 26	788	41	64	619	647
Stoneville 506	777	38	67	642	
Stoneville 213	772	41	71	571	607
McNair 235	771	41	65	615	682
Coker 3131	762	43	61	568	
Coker 80903	750	40	59		
Deltapine 55	747	41	69	590	636
Deltapine 61	727	39	68	570	608
GP 3774	727	37	68	578	
Coker 3114	715	41	55	554	592
DES 56	710	39	70	565	631
McNair 220	700	40	69	649	606
Coker 315	691	39	63	527	573
Deltapine 62	686	38	59		
Coker 208	673	40	64		
Coker 310	663	38	62	524	568
Coker 304	643	39	60	510	565
Hancock	578	38	66	480	607
L.S.D. .05	99				
C.V. = 9%					

Table 8. Performance of Cotton Varieties at Tallassee, Alabama, 1981

Variety	1981			2-yr. av.	3-yr. av.
	Lint/acre	Lint %	% Earliness	Lint/acre	Lint/acre
	Lb.	Pct.	Pct.	Lb.	Lb.
Deltapine 90	1137	39	87		
McNair 220	1120	39	87	861	761
McNair 235	1109	39	88	892	812
Coker 3131	1053	40	88	815	
Stoneville 213	1053	37	88	863	783
Deltapine 55	1047	38	86	780	698
Coker 315	1039	38	84	766	764
DES 56	1034	38	91	775	738
DPL 7537-6150	1018	38	84		
Deltapine 61	998	38	86	799	732
Deltapine 26	992	38	89	792	705
Coker 208	973	39	89		
Stoneville 825	970	38	92	856	746
Coker 310	958	37	87	785	726
Deltapine NSL	949	38	86		
Coker 3114	926	41	80	723	699
Deltapine 41	926	40	82	752	660
Deltapine 62	918	36	82		
Coker 80903	898	37	85		
Coker 304	897	38	87	768	722
Delcot 311	884	38	89	704	
Deltapine 7148	870	38	85		
Stoneville 506	864	37	87		
Hancock	843	38	82	673	612
GP 3774	749	36	88	589	
L.S.D. .05	215				
C.V. = 16%					

Table 9. Performance of Cotton Varieties at Shorter, Alabama, 1981

Variety	1981		2-yr. av.	3-yr. av.
	Lint/acre	Lint %	Lint/acre	Lint/acre
	Lb.	Pct.	Lb.	Lb.
GAT 72-56	537	39		
Deltapine 90	511	38		
McNair 235	496	39	358	380
McNair 220	496	38	358	395
Coker 315	492	39	327	328
Coker 208	492	39		
Coker 310	473	38	311	320
Delcot 311	454	38	332	
DPL 7537-6150	452	38		
Lockett 77	447	38		
DES 56	439	36	320	358
Coker 3114	436	41	299	294
Deltapine 26	435	39	326	327
Coker 80903	433	39		
Coker 304	431	39	300	318
Coker 3131	420	41	319	
Deltapine 61	417	36	297	312
Stoneville 213	415	37	306	336
Stoneville 825	414	37	337	353
Deltapine 41	409	40	303	319
Deltapine 55	407	39	303	329
Deltapine 7148	407	38		
Hancock	399	39	287	313
Deltapine NSL	399	37		
PD 4548	398	40		
Stoneville 506	391	36	272	
Deltapine 62	388	36		
GP 3774	387	37	299	210
Acala SJ-5	298	37	194	
L.S.D. .05	74			
C.V. = 12%				

Table 10. Performance of Cotton Varieties in Alabama, Average All (9) locations

Variety	Yield lint/acre			Percent lint			Percent earliness		
	1981	1980-81	1979-81	1981	1980-81	1979-81	1981	1980-81	1979-81
	Lb.	Lb.	Lb.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
McNair 235	828	746	726	40	41	40	76	73	73
Stoneville 825	793	733	710	39	40	40	78	78	77
DES 56	807	718	702	39	39	39	77	76	76
Deltapine 41	788	705	694	42	42	42	74	74	73
Coker 315	792	686	685	40	40	40	70	72	72
Coker 304	765	698	680	40	40	40	72	74	74
Coker 310	778	686	679	39	39	39	72	73	73
McNair 220	840	734	677	40	40	40	78	75	73
Stoneville 213	739	693	677	39	40	39	75	75	74
Deltapine 61	757	682	670	40	40	39	75	73	72
Deltapine 55	768	700	670	41	41	41	75	76	74
Coker 3114	807	709	668	42	42	42	70	71	71
Hancock	725	647	649	40	40	40	78	75	75
Deltapine 26 (1)	758	780	703	41	41	41	73	73	72
Acala SJ-5 (2)	487	367	347	37	38	38	73	77	
Coker 3131	835	728		42	42		78	78	
Delcot 311	774	699		39	39		78	79	
Stoneville 506	746	694		39			73	78	
CP 3774	666	622		38	38		73	71	
Deltapine 7148 (3)	763	541		40	41		76		
Deltapine 90	872			40			75		
DPL 7537-6150	824			40			76		
Coker 80903	807			40			75		
Coker 208	785			40			74		
Deltapine NSL	781			39			76		
Deltapine 62	736			39					
GAT 72-56 (2)	742			39					
Lockett 77 (2)	658			38					
PD 4548 (2)	576			40					

(1) 6 locations for the 2- and 3-year averages



Table 11. Percentage of Plants Showing Symptoms of Fusarium Wilt<sup>1/</sup>

Variety	Average wilt percentage									
	1981	<u>2-yr.</u> 1980-81	<u>3-yr.</u> 1979-81	<u>4-yr.</u> 1978-81	<u>5-yr.</u> 1977-81	<u>6-yr.</u> 1976-81	<u>9-yr.</u> 1973-81	<u>10-yr.</u> 1972-81	<u>13-yr.</u> 1969-81	<u>15-yr.</u> 1967-81
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Auburn 56	0.6	17.5	21.0	18.5	17.9	15.5	20.2	19.1	20.7	18.7
Stoneville 213	11.4	40.1	48.3	40.5	41.2	37.1	43.1	41.9	50.1	52.7
Coker 310	1.7	18.5	24.0	21.0	20.8	19.3	23.6	22.2	23.4	
Coker 304	0.9	19.5	20.5	18.0	18.0	16.3	20.9	20.8		
Deltapine 55	7.1	16.8	17.2	14.1	16.9	15.5	20.3	20.1		
Hancock	16.3	49.1	50.7	48.1	49.4	46.4	51.0			
Deltapine 26	1.4	21.5	23.4	16.3	20.4	13.9				
Deltapine 61	7.3	18.6	21.4	17.4	16.9	17.2				
McNair 220	0.5	16.7	16.0	13.6	14.2	12.7				
Coker 315	4.5	24.4	24.9	20.6	21.8					
Coker 3114	5.1	22.4	20.2	18.5	20.1					
Deltapine 41	9.8	31.1	29.4	23.9						
McNair 235	4.2	14.4	15.3	13.1						
DES 56	8.4	22.0	23.3							
Stoneville 825	14.3	48.6	49.4							
Coker 3131	11.8	23.9								
Delcot 311	1.4	13.3								
Deltapine 7148	10.5	22.5								
GP 3774	7.1	26.3								
Stoneville 506	4.8	19.3								
Coker 208	2.0									
Coker 80903	7.7									
Deltapine 62	26.9									
Deltapine 90	9.8									
Deltapine NSL	4.9									

<sup>1/</sup> Data were taken from a field severely infested with the fusarium wilt fungus and root-knot nematodes, Plant Breeding Unit, Tallassee, Alabama.

Table 12. Fiber Properties of Cotton Varieties at Crossville, Alabama, 1981

Variety	Micronaire Units	Fibrograph			Stelometer	
		50% In.	2.5% In.	Uniformity ratio Pct.	Tl g/tex	El Pct.
Acala SJ-5	4.2	.582	1.148	50.7	19.5	7.1
Coker 208	4.1	.564	1.139	49.5	19.0	6.1
Coker 304	4.4	.578	1.185	48.8	20.6	6.5
Coker 310	4.0	.538	1.170	46.0	18.9	6.0
Coker 315	3.5	.505	1.138	44.4	20.1	6.2
Coker 3114	4.4	.532	1.188	44.8	20.1	6.4
Coker 3131	4.4	.565	1.130	49.9	19.7	8.2
Coker 80903	4.3	.601	1.202	50.0	19.0	6.6
Delcot 311	4.0	.575	1.142	50.4	20.1	8.1
DES 56	4.1	.566	1.177	48.1	18.4	7.4
Deltapine 26	4.3	.531	1.149	46.2	20.3	7.5
Deltapine 41	4.2	.542	1.173	46.2	21.9	7.2
Deltapine 55	4.2	.545	1.162	48.2	18.4	7.1
Deltapine 61	4.4	.561	1.187	47.3	19.2	8.9
Deltapine 62	3.9	.559	1.184	47.2	19.7	7.2
Deltapine 90	4.1	.588	1.180	49.8	20.8	6.1
Deltapine 7148	4.2	.532	1.136	46.8	18.1	7.5
DPL 7537-6150	4.6	.535	1.102	48.5	17.2	7.7
Deltapine NSL	4.5	.542	1.113	48.7	17.4	8.3
GAT 72-56	3.6	.545	1.170	46.6	19.3	6.9
GP 3774	3.6	.454	1.042	43.6	16.9	7.3
Hancock	3.8	.483	1.054	45.8	17.0	6.6
Lockett 77	3.3	.489	1.103	44.3	17.6	6.9
McNair 220	3.6	.496	1.066	46.5	20.2	6.1
McNair 235	4.0	.519	1.143	45.4	18.5	6.1
PD 4548	4.3	.431	1.173	46.3	20.5	6.2
Stoneville 213	4.1	.499	1.118	44.6	18.2	7.3
Stoneville 506	4.4	.496	1.141	43.5	16.8	7.5
Stoneville 825	4.4	.505	1.128	44.8	19.3	6.1

Table 13. Fiber Properties of Cotton Varieties at Belle Mina, Alabama, 1981

Variety	Micronaire	Fibrograph			Stelometer	
		50%	2.5 %	Uniformity ratio	T1	E1
		Units	In.	In.	Pct.	g/tex
Coker 208	5.5	.476	.969	49.1	20.8	5.9
Coker 304	4.9	.549	1.132	48.5	19.7	7.1
Coker 310	5.2	.523	1.101	47.5	20.5	6.4
Coker 315	5.1	.506	1.045	48.4	18.9	6.2
Coker 3114	5.1	.458	1.103	41.5	17.8	6.6
Coker 3131	5.1	.512	1.045	49.0	19.1	7.1
Coker 80903	4.9	.580	1.116	55.2	20.0	6.8
Delcot 311	5.0	.574	1.077	53.3	22.1	8.4
DES 56	4.9	.534	1.096	48.7	19.9	7.2
Deltapine 26	5.0	.550	1.067	51.5	19.1	7.0
Deltapine 41	5.1	.531	1.050	50.6	18.6	7.0
Deltapine 55	5.0	.540	1.078	50.1	19.1	6.4
Deltapine 61	5.2	.565	1.133	49.9	18.6	7.7
Deltapine 62	5.2	.555	1.129	49.2	19.6	7.4
Deltapine 90	5.0	.552	1.122	49.2	20.5	7.1
Deltapine 7147	5.2	.522	1.073	48.6	19.9	7.5
DPL 7537-6150	5.0	.597	1.089	54.8	18.4	7.7
Deltapine NSL	5.1	.503	1.024	49.1	19.3	6.3
GP 3774	4.6	.484	1.006	48.1	18.4	7.8
Hancock	5.2	.529	.981	53.9	19.6	7.2
McNair 220	4.7	.515	1.044	49.3	20.1	6.2
McNair 235	4.7	.551	1.116	49.4	16.7	6.4
Stoneville 213	5.6	.514	1.044	49.2	19.2	6.9
Stoneville 506	5.1	.552	1.130	48.8	18.3	6.5
Stoneville 825	5.3	.549	1.124	48.8	18.9	6.0

Table 14. Fiber Properties of Cotton Varieties at Winfield, Alabama, 1981

Variety	Micronaire Units	Fibrograph			Stelometer	
		50% In.	2.5% In.	Uniformity ratio Pct.	Tl g/tex	El Pct.
Coker 208	4.8	.507	1.076	47.1	18.1	5.4
Coker 304	4.4	.508	1.104	46.4	19.9	5.1
Coker 310	4.5	.505	1.115	45.3	18.5	4.9
Coker 315	4.7	.496	1.095	45.3	20.3	5.5
Coker 3114	4.8	.544	1.131	48.1	20.8	5.5
Coker 3131	4.5	.481	1.044	47.2	18.7	6.4
Coker 80903	4.4	.504	1.111	45.4	19.0	5.5
Delcot 311	4.5	.511	1.068	47.8	21.0	6.6
DES 56	4.7	.524	1.078	48.6	21.0	6.2
Deltapine 26	4.6	.498	1.096	45.4	18.9	5.6
Deltapine 41	4.5	.517	1.084	47.7	18.7	5.3
Deltapine 55	4.3	.488	1.088	44.8	19.7	6.7
Deltapine 61	4.7	.480	1.060	45.3	19.7	7.0
Deltapine 62	4.5	.515	1.106	46.6	20.6	5.6
Deltapine 90	4.7	.520	1.099	47.3	19.6	6.6
Deltapine 7148	5.0	.484	1.081	44.8	19.3	7.5
DRL 7537-6150	5.2	.471	1.045	45.1	18.9	6.4
Deltapine NSL	4.8	.491	1.045	47.0	20.1	7.1
GP 3774	4.1	.477	1.049	45.5	18.3	6.1
Hancock	4.8	.469	1.001	46.9	17.6	4.8
McNair 220	4.8	.520	1.069	48.6	21.0	5.9
McNair 235	4.7	.467	1.052	44.4	18.2	5.2
Stoneville 213	4.8	.471	1.057	44.6	18.7	6.2
Stoneville 506	4.8	.508	1.095	46.4	17.9	5.6
Stoneville 825	4.6	.473	1.083	43.7	18.9	5.7

Table 15. Fiber properties of Cotton Varieties at Brewton, Alabama, 1981.

Variety	Fibrograph				Stelometer	
	Micronaire	50%	2.5 %	Uniformity ratio	Tl	El
	Units	In.	In.	Pct.	g/tex	Pct.
Coker 208	5.4	.502	1.064	47.2	18.6	5.1
Coker 304	5.1	.568	1.146	49.6	20.3	6.0
Coker 310	4.9	.556	1.135	49.0	17.9	5.5
Coker 315	5.3	.449	1.048	42.8	20.2	5.6
Coker 3114	5.3	.531	1.093	48.6	20.3	6.1
Coker 3131	4.8	.516	1.069	48.3	19.1	6.9
Coker 80903	5.0	.514	1.123	45.8	20.5	5.9
Delcot 311	4.8	.554	1.074	51.6	18.1	7.0
DES 56	4.8	.525	1.128	46.5	17.9	6.1
Deltapine 26	5.6	.509	1.079	47.2	19.7	6.1
Deltapine 41	5.5	.522	1.086	48.1	19.4	6.0
Deltapine 55	5.0	.522	1.108	47.1	19.0	6.1
Deltapine 61	5.2	.551	1.113	49.5	18.4	7.3
Deltapine 62	5.4	.545	1.127	48.4	21.6	5.9
Deltapine 90	5.2	.519	1.063	48.8	21.9	5.7
Deltapine 7148	5.5	.549	1.099	50.0	19.4	7.4
DPL 7537-6150	5.6	.508	1.044	48.7	16.2	7.0
Deltapine NSL	5.3	.478	1.000	47.8	17.6	7.6
GP 3774	4.3	.466	.985	47.3	15.6	6.6
Hancock	4.8	.478	1.000	47.8	16.8	5.6
McNair 220	5.2	.538	1.109	48.5	18.5	5.8
McNair 235	5.2	.550	1.076	51.1	19.3	5.5
Stoneville 213	5.2	.520	1.064	48.9	18.1	6.4
Stoneville 506	5.1	.516	1.069	48.3	18.6	6.6
Stoneville 825	5.7	.536	1.091	49.1	18.9	5.4

Table 16. Fiber Properties of Cotton Varieties at Headland, Alabama, 1981

Variety	Micronaire Units	Fibrograph			Stelometer	
		50% In.	2.5% In.	Uniformity ratio Pct.	El g/tex	Tl Pct.
Coker 208	4.5	.501	1.073	46.7	19.6	6.3
Coker 304	4.6	.555	1.153	48.1	21.0	5.7
Coker 310	4.3	.486	1.113	43.7	18.2	6.3
Coker 315	4.5	.496	1.109	44.7	19.2	5.2
Coker 3114	4.7	.524	1.136	46.1	19.9	6.0
Coker 3131	4.8	.506	1.131	44.7	18.4	6.4
Coker 80903	4.0	.487	1.122	43.4	20.2	5.4
Delcot 311	4.2	.490	1.071	45.8	17.8	5.7
DES 56	4.4	.525	1.117	47.0	17.1	6.5
Deltapine 26	4.8	.505	1.087	46.5	20.3	6.3
Deltapine 41	4.5	.495	1.091	45.4	17.5	5.9
Deltapine 55	4.2	.478	1.080	44.3	19.9	6.8
Deltapine 61	4.2	.494	1.118	44.2	17.8	7.3
Deltapine 62	4.4	.485	1.109	43.7	20.2	6.6
Deltapine 90	4.4	.515	1.096	47.0	19.9	6.8
Deltapine 7148	5.0	.485	1.080	44.9	19.0	6.9
DPL 7537-6150	4.0	.451	1.057	42.7	20.0	5.8
Deltapine NSL	4.3	.492	1.048	46.9	17.3	7.6
GP 3774	3.7	.439	1.025	42.8	16.8	6.8
Hancock	4.0	.503	1.072	46.9	17.1	5.9
McNair 220	4.5	.447	1.058	42.2	18.2	7.2
McNair 235	4.1	.509	1.092	46.6	17.8	5.9
Stoneville 213	4.7	.476	1.078	44.2	17.4	7.1
Stoneville 506	4.4	.503	1.124	44.8	19.2	6.4
Stoneville 825	4.6	.418	1.033	40.5	18.3	5.9

Table 17. Fiber Properties of Cotton Varieties at Monroeville, Alabama, 1981

Variety	Micronaire Units	Fibrograph			Stelometer	
		50% In.	2.5% In.	Uniformity ratio Pct.	Tl g/tex	El Pct.
Coker 208	5.0	.536	1.099	48.8	19.2	6.0
Coker 304	5.0	.532	1.123	47.4	20.2	5.7
Coker 310	4.9	.558	1.160	48.1	21.0	5.6
Coker 315	5.2	.577	1.185	48.7	20.8	5.7
Coker 3114	4.9	.565	1.188	47.6	19.0	6.0
Coker 3131	4.9	.544	1.122	48.5	19.2	6.9
Coker 80903	4.9	.573	1.188	48.2	20.8	5.7
Delcot 311	4.7	.584	1.127	51.8	22.4	7.3
DES 56	5.0	.503	1.121	44.9	20.2	6.9
Deltapine 26	5.3	.550	1.128	48.8	21.1	6.7
Deltapine 41	5.3	.538	1.124	47.9	21.9	7.0
Deltapine 55	5.0	.555	1.148	48.3	20.6	6.1
Deltapine 61	5.0	.536	1.146	46.8	20.3	7.7
Deltapine 62	5.2	.595	1.179	50.5	19.7	6.3
Deltapine 90	5.5	.577	1.140	50.6	20.8	5.7
Deltapine 7148	5.6	.580	1.158	50.1	20.2	7.1
DPL 7537-6150	5.8	.541	1.102	49.1	20.2	7.5
Deltapine NSL	5.2	.521	1.103	47.2	17.9	7.4
GP 3774	4.5	.527	1.096	48.1	18.2	6.3
Hancock	5.2	.463	.994	46.6	19.5	6.7
McNair 220	5.0	.567	1.133	50.0	20.8	5.9
McNair 235	5.0	.571	1.138	50.2	20.4	6.1
Stoneville 213	5.5	.574	1.141	50.3	19.7	6.5
Stoneville 506	5.4	.541	1.147	47.2	20.9	6.3
Stoneville 825	5.1	.478	1.128	42.2	19.9	6.2

Table 18. Fiber Properties of Cotton Varieties at Prattville, Alabama, 1981

Variety	Micronaire Units	Fibrograph			Stelometer	
		50% In.	2.5% In.	Uniformity ratio Pct.	Tl g/tex	El Pct.
Coker 208	5.3	.551	1.087	50.7	20.3	5.7
Coker 304	5.0	.600	1.169	51.3	18.8	7.9
Coker 310	4.9	.571	1.161	49.2	20.6	6.5
Coker 315	4.9	.591	1.165	50.7	18.3	5.7
Coker 3114	5.1	.589	1.141	51.6	20.0	5.7
Coker 3131	5.1	.534	1.087	49.1	20.2	7.2
Coker 80903	4.6	.607	1.219	49.8	18.5	5.8
Delcot 311	4.5	.625	1.132	55.2	19.6	7.9
DES 56	4.8	.506	1.101	46.0	18.7	5.8
Deltapine 26	4.9	.549	1.117	49.1	18.3	7.4
Deltapine 41	5.1	.554	1.119	49.5	19.9	6.3
Deltapine 55	4.7	.518	1.086	47.7	19.9	7.2
Deltapine 61	5.2	.555	1.110	50.0	19.6	8.0
Deltapine 62	5.0	.596	1.177	50.6	20.8	6.9
Deltapine 90	5.1	.540	1.112	48.6	20.8	6.1
Deltapine 7148	5.2	.572	1.125	42.0	21.8	6.0
DPL 7537-6150	5.6	.561	1.090	51.5	18.5	7.3
Deltapine NSL	5.0	.553	1.132	48.9	17.7	7.8
GP 3774	4.8	.547	1.101	47.7	20.8	5.7
Hancock	4.6	.504	1.042	48.4	19.4	6.4
McNair 220	5.1	.577	1.121	51.5	19.9	6.1
McNair 235	4.9	.541	1.141	47.4	20.0	6.4
Stoneville 213	5.3	.542	1.107	47.3	18.0	6.4
Stoneville 506	5.2	.477	1.070	44.6	17.7	7.0
Stoneville 825	5.3	.554	1.139	48.6	18.7	6.7



Table 19. Fiber Properties of Cotton Varieties at Tallassee, Alabama, 1981

Variety	Micronaire Units	Fibrograph			Stelometer	
		50% In.	2.5% In.	Uniformity ratio Pct.	Tl g/tex	El Pct.
Coker 208	5.0	.591	1.151	51.3	21.0	7.1
Coker 304	4.7	.576	1.231	46.8	19.9	6.4
Coker 310	4.5	.587	1.234	47.6	20.6	6.5
Coker 315	4.4	.579	1.216	47.6	20.2	6.4
Coker 3114	4.4	.602	1.261	47.7	21.6	6.4
Coker 3131	4.8	.510	1.095	46.6	20.2	7.0
Coker 80903	4.3	.633	1.262	50.2	20.4	6.4
Delcot 311	4.6	.621	1.167	53.2	22.0	7.8
DES 56	4.6	.553	1.165	47.5	21.0	5.9
Deltapine 26	4.3	.565	1.188	47.6	20.7	6.6
Deltapine 41	4.6	.593	1.242	47.7	21.4	6.6
Deltapine 55	4.5	.577	1.220	47.3	20.7	6.9
Deltapine 61	4.7	.593	1.215	48.8	19.6	7.6
Deltapine 62	4.8	.618	1.272	48.6	20.9	6.7
Deltapine	5.0	.651	1.231	52.9	20.7	6.4
Deltapine 7148	5.0	.604	1.207	50.0	19.6	7.8
DPL 7537-6150	4.8	.558	1.162	48.0	19.7	7.1
Deltapine NSL	4.7	.567	1.130	50.2	21.3	6.0
GP 3774	4.1	.581	1.185	49.0	17.9	6.5
Hancock	4.4	.580	1.192	48.7	20.6	6.5
McNair 220	4.7	.581	1.186	49.0	20.9	6.3
McNair 235	4.8	.604	1.220	49.5	21.0	6.5
Stoneville 213	5.2	.595	1.200	49.6	19.0	7.5
Stoneville 506	4.4	.603	1.220	49.4	19.6	6.9
Stoneville 825	5.4	.546	1.153	47.3	20.7	5.6

Table 20. Fiber Properties of Cotton Varieties at Shorter, Alabama, 1981

Variety	Micronaire	Fibrograph			Stelometer	
		50%	2.5%	Uniformity ratio	T1	E1
		In.	In.	Pct.	g/tex	Pct.
Coker 208	5.2	.558	1.116	50.0	19.5	5.7
Coker 3114	5.0	.570	1.181	48.3	21.4	6.5
Coker 3131	5.4	.566	1.103	51.3	18.4	6.8
Coker 80903	5.0	.562	1.176	47.8	20.0	6.3
Delcot 311	4.8	.526	1.108	47.5	19.5	8.0
DES 56	5.2	.541	1.112	48.7	20.4	6.4
Deltapine 26	5.3	.559	1.127	49.6	21.7	6.5
Deltapine 61	5.4	.607	1.184	51.2	18.7	7.0
Deltapine 90	5.6	.510	1.085	47.0	22.7	6.7
Deltapine 7148	5.7	.566	1.127	50.2	19.0	7.2
DPL 7537-6150	5.9	.557	1.099	50.7	20.1	7.0
Deltapine NSL	5.8	.537	1.097	48.7	18.1	7.3
GP 3774	4.9	.490	1.077	45.5	18.6	6.7
Hancock	4.9	.496	1.015	48.9	19.7	6.3

Source of Seed for the 1981 Cotton Variety Tests

---

---

Deltapine 55	
Deltapine 26	
Deltapine 61	
Deltapine 41	Delta and Pine Land Co.
Deltapine 62	Scott, MS 38772
Deltapine NSL	
Deltapine 90	
Deltapine 7148	
Deltapine 7537-6150	
<hr/>	
Stoneville 213	
Stoneville 824	Stoneville Pedigreed Seed Co.
Stoneville 506	Stoneville, MS 38776
<hr/>	
Coker 310	
Coker 304	
Coker 315	Coker's Pedigreed Seed Co.
Coker 3131	Hartsville, SC 29550
Coker 3114	
Coker 80903	
Coker 208	
<hr/>	
Delcot 311	Delta Center
	Portageville, MO 63873
<hr/>	
McNair 235	Northrup King Co.
McNair 220	Leland, MS 38756
<hr/>	
Hancock	West Tennessee Experiment Station
	Jackson, TN 38301
<hr/>	
DES 56	Delta Branch Experiment Station
	Stoneville, MS 38776
<hr/>	
GP 3774	G and P Seed Co., Inc.
	Aquilla, TX 76622

---

---





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