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MAFES

MISSISSIPPI AGRICULTURAL & FORESTRY EXPERIMENT STATION
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MISSISSIPPI COTTON VARIETY TESTS FOR 1974

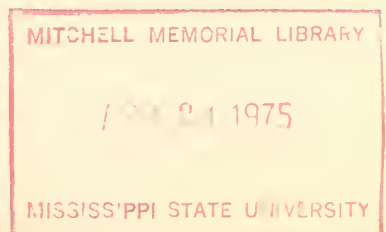
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**Mississippi Agricultural and Forestry Experiment Station
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Mississippi Cotton Variety Tests for 1974

Delta locations

Cotton variety tests were conducted at five Delta locations in 1974; Delta Branch Experiment Station, Stoneville, Schaefer Plantation near Yazoo City, Mitchner Plantation near Sumner, and Arnold Farms near Tunica. Variety tests were conducted on two test sites at Stoneville. One site was on a Bosket very fine sandy loam and another on a mixed soil type.

Fifteen varieties were grown on three of the test sites and five additional varieties were grown at Stoneville and Tunica. Varieties grown at Stoneville and Tunica were included in a cooperative, regional variety testing program. Six entries were tested for the first time at all locations. These were Stoneville 256, Stoneville 151, Coker 220, Brycot 4, DES 06-020-24 and DES 2134-018.

Results are reported for each location for the 1974 variety test. Yield data were based on the weight of cotton harvested from 2-row plots. The rows were spaced 40-inches apart at all locations except Sumner, where a modified skip-row pattern was used. Each entry was randomized and replicated six times. Lint percentages and fiber property determinations were obtained from hand-picked samples. Fiber property data were determined by the U.S. Cotton Fiber Laboratory of the Agriculture Research Service, U.S. Department of Agriculture, Knoxville, Tennessee.

Performance data of varieties tested in 1974 at individual locations are presented in Tables 1 through 5. Unseasonably cool weather and excessive rain during the latter part of August and in September caused a delay in maturity. The slow maturity resulted in reduced lint yields of most varieties, but the later maturing varieties probably suffered more extensively than the early maturing varieties.

Table 1 shows the results of the variety test conducted on a Bosket very fine sandy loam soil at Stoneville. This test was planted on April 25 and good stands were obtained. The test was irrigated on July 22 and relatively high yields were obtained. Lint yields ranged from 792 to 1168 pounds per acre.

Table 2 gives the results of the variety test conducted on a Dundee silt loam soil at Sumner. This test was planted on April 30 in a modified skip-row pattern. The planting pattern was 2 rows, 40 inches apart and 60-inch skips. The crop matured slower than normally but relatively high yields were obtained. Yields at Sumner ranged from 977 to 1133 pounds of lint per acre.

Results at Yazoo City on a sandy loam soil are presented in Table 3. This test site was planted on April 18 and lint yields ranged from 789 to 1022 pounds per acre. The early planting date and limited moisture during the summer allowed this

test to mature relatively early. Due to earlier maturity, this test was harvested only once on October 22. The fiber length of all varieties was shorter and micronaire values higher at this location, which was probably due to the limited rainfall during the summer and to the earlier maturity.

Results at Tunica are presented in Table 4. This test was planted on May 1, but excessive rainfall and cool fall temperatures caused the crop to mature very slowly. These conditions probably reduced the yields of some of the later maturing varieties. Yields ranged from 427 to 803 pounds of lint per acre.

Results at Stoneville on a mixed soil are presented in Table 5. This test was planted on April 19 and good stands were obtained. The test was irrigated on July 23 and relatively high yields for this soil type were obtained. Lint yields ranged from 581 to 699 pounds per acre.

The average performance of 15 varieties grown at five locations in 1974 is presented in Table 6. These data indicate that early maturity played a major role in the lint yields obtained in 1974, as the earliest maturing entries generally had the highest yields.

The average performance of ten cotton varieties at five Delta locations over a 2-year period (1973-74) is presented in Table 7.

Table 1. Results of 1974 Cotton Variety Test - Stoneville, Mississippi.*

Variety	LINT PER ACRE			Lint %	Seed index	Boll size grams	FIBER PROPERTIES				
	Total	First pick	% First pick				Length		Strength g/tex	Elonga- tion	Micro- naire
							2.5%	50%			
DES 2134-018	1168	1029	88	39.5	10.6	5.45	1.16	.56	19.26	7.7	4.4
DES 06-020-24	1144	1004	88	40.2	11.6	6.63	1.17	.57	19.85	7.7	4.8
Coker 220	1102	881	80	40.9	11.1	6.03	1.20	.56	20.88	6.8	4.6
Coker 310	1084	840	77	40.6	11.2	5.70	1.20	.58	18.35	6.4	4.5
Deltapine 652	1075	882	82	41.0	10.0	5.64	1.14	.54	16.99	7.5	4.2
Coker 312	1061	852	80	40.6	11.1	5.80	1.20	.57	17.79	6.3	4.7
Stoneville 213	1058	901	85	39.8	11.0	5.83	1.13	.53	17.78	6.3	4.7
DES 21326-04	1052	941	89	37.5	10.4	5.52	1.18	.54	18.67	7.0	4.4
Brycot 4	1023	865	84	39.4	11.1	5.58	1.12	.53	16.00	6.1	4.6
Stoneville 7A	1020	844	83	39.3	11.1	5.71	1.15	.54	16.21	6.2	4.5
Deltapine 45A	1018	837	82	39.4	11.3	5.73	1.12	.54	19.36	8.3	4.7
Deltapine 25	1017	817	80	40.2	10.9	5.72	1.13	.54	17.96	6.8	4.7
Deltapine 5916-65	1012	786	78	39.2	11.6	6.14	1.16	.58	20.61	9.5	5.2
Stoneville 256	980	802	82	38.9	10.9	5.70	1.14	.53	17.59	6.0	4.5
Deltapine 16	979	696	71	38.8	11.4	6.34	1.16	.57	19.48	9.5	4.6
Stoneville 151	969	748	77	38.6	11.8	5.80	1.16	.55	18.29	5.7	4.5
Delcot 277	955	837	87	38.7	12.1	6.82	1.17	.57	18.34	8.2	4.1
Lockett 4789A	868	729	84	36.5	12.4	6.50	1.10	.54	17.33	6.6	4.3
Acala 1517-70	794	626	79	36.5	12.3	5.84	1.19	.56	22.40	5.4	4.2
Stoneville 603	792	610	77	37.4	11.4	5.77	1.13	.53	17.14	7.2	4.2
C.V.	5.1	6.8									
LSD .05	59	64									

Planted: April 25, 1974

Harvested: September 24 and November 1, 1974

*Soil: Bosket very fine sandy loam

Table 2. Results of 1974 Cotton Variety Test - Sumner, Mississippi.

Variety	LINT PER ACRE			Lint %	Seed index	Boll size grams	FIBER PROPERTIES				
	Total	First pick	% First pick				Length		Strength g/tex	Elonga- tion	Micro- naire
							2.5%	50%			
DES 06-020-24	1133	973	86	40.4	11.0	5.65	1.18	.58	20.36	8.5	4.5
Stoneville 213	1131	896	79	40.3	10.7	5.65	1.15	.57	18.23	7.6	4.6
Stoneville 256	1104	915	83	41.3	10.1	5.34	1.15	.56	18.44	7.3	4.8
Deltapine 5916-65	1087	861	79	40.3	9.8	5.57	1.19	.59	19.50	9.7	4.6
Coker 220	1065	850	80	39.7	11.1	5.77	1.24	.60	21.28	7.7	4.2
DES 2134-018	1062	914	86	39.7	10.4	5.24	1.18	.59	19.38	8.1	4.5
Deltapine 652	1060	837	79	42.0	9.6	5.34	1.18	.57	18.82	8.1	4.4
Coker 310	1060	859	81	40.3	10.4	5.69	1.24	.61	20.74	7.4	4.3
Stoneville 7A	1046	861	82	40.7	10.3	5.34	1.15	.54	18.00	6.8	4.7
DES 21326-04	1027	889	87	37.6	10.1	5.30	1.20	.57	20.22	7.9	4.2
Deltapine 16	1027	815	79	39.5	10.4	5.82	1.18	.58	19.66	9.1	4.5
Stoneville 151	1025	793	77	39.5	11.7	5.52	1.19	.58	20.55	7.0	4.6
Coker 312	1014	856	84	39.5	10.5	5.21	1.24	.58	20.74	7.9	4.2
Deltapine 45A	989	796	80	40.1	10.3	5.25	1.14	.58	19.36	8.9	4.4
Deltapine 25	977	713	73	40.3	10.2	5.36	1.20	.59	19.63	7.9	4.5
C.V.	6.0	6.5									
LSD .05	73	64									

Planted: April 30, 1974

Harvested: October 14 and November 7, 1974

Soil: Dundee silty loam

Planting pattern: 2 rows, 40 inches apart and 60 inch skips

Table 3. Results of 1974 Cotton Variety Test - Yazoo City, Mississippi.

Variety	LINT PER ACRE		Lint %	Seed index	Boll size grams	FIBER PROPERTIES				
	Total	First pick				Length		Strength g/tex	Elongation	Micro-naire
						2.5%	50%			
DES 2134-018	1022		40.3	10.5	5.64	1.10	.53	19.22	7.3	5.1
DES 06-020-24	1003		40.6	11.3	6.45	1.11	.55	19.72	8.2	5.2
Stoneville 7A	998		41.0	11.1	6.23	1.11	.53	18.79	6.1	5.3
Stoneville 213	993		40.9	10.8	6.44	1.10	.55	18.46	7.4	5.4
Stoneville 256	938		41.0	10.6	5.95	1.13	.55	17.11	6.3	5.2
Coker 312	925		41.3	11.6	6.18	1.18	.56	19.36	6.8	5.3
Deltapine 45A	914		39.2	11.7	6.16	1.10	.55	19.11	8.0	5.2
Coker 310	913		41.8	11.7	6.59	1.14	.54	19.11	6.8	5.2
Deltapine 25	897		40.8	10.7	5.86	1.13	.56	19.01	7.4	5.2
Stoneville 151	878		40.2	12.1	5.83	1.13	.54	20.30	6.3	5.3
Coker 220	872		41.1	11.9	6.95	1.13	.56	19.30	7.0	5.1
Deltapine 5916-65	856		39.9	11.4	6.08	1.14	.58	19.69	9.0	5.4
Deltapine 16	832		40.6	11.1	6.76	1.10	.54	18.58	8.9	5.4
DES 21326-04	800		38.4	10.6	5.88	1.14	.54	19.44	6.6	4.8
Deltapine 652	789		42.0	10.3	5.86	1.09	.53	19.31	7.8	5.1
C.V.	10.9									
LSD .05	114									

Planted: April 18, 1974

Harvested: October 22, 1974

Soil: Sandy loam

Table 4. Results of 1974 Cotton Variety Test - Tunica, Mississippi.

Variety	LINT PER ACRE			Lint %	Seed index	Boll size grams	FIBER PROPERTIES				
	Total	First pick	% First pick				Length		Strength g/tex	Elongation	Micro-naire
							2.5%	50%			
DES 06-020-24	803	666	83	38.4	11.8	5.98	1.21	.59	21.00	7.9	4.6
Stoneville 256	787	642	81	38.3	11.1	5.52	1.19	.57	18.11	6.0	4.7
Stoneville 213	752	605	80	37.2	11.2	5.48	1.21	.58	18.92	7.2	4.6
DES 2134-018	731	586	80	37.6	10.9	5.22	1.20	.59	18.65	7.2	4.5
Brycot 4	726	560	77	36.6	11.5	5.28	1.18	.56	18.05	6.0	4.8
Delcot 277	722	543	75	37.0	12.5	6.22	1.25	.61	20.59	8.6	4.1
DES 21326-04	719	616	86	36.1	10.3	5.23	1.26	.60	20.51	6.9	4.2
Stoneville 7A	719	573	80	37.6	10.9	5.25	1.18	.55	17.44	6.1	4.6
Stoneville 151	719	544	76	37.2	12.4	5.25	1.22	.58	19.92	6.4	4.5
Coker 220	715	597	83	38.4	11.3	5.69	1.23	.58	19.33	7.1	4.2
Deltapine 652	713	544	76	39.2	9.8	4.93	1.19	.55	18.43	6.6	4.2
Deltapine 5916-65	711	549	77	37.6	10.3	5.25	1.23	.61	19.88	8.9	4.7
Coker 310	685	572	83	38.1	10.7	5.02	1.27	.58	19.72	7.4	4.3
Deltapine 16	681	521	76	37.6	10.7	5.35	1.23	.58	19.15	9.2	4.4
Deltapine 25	645	462	72	38.5	10.5	4.91	1.21	.58	20.38	7.9	4.5
Coker 312	636	538	84	38.6	10.5	4.90	1.26	.60	21.42	7.0	4.4
Acala 1517-70	634	523	82	34.2	13.5	6.03	1.25	.61	23.31	6.1	4.4
Deltapine 45A	594	466	78	35.9	11.2	5.25	1.16	.57	19.51	8.2	4.4
Stoneville 603	541	416	77	35.3	11.8	5.73	1.17	.55	18.72	7.4	4.6
Lockett 4789A	427	357	84	34.3	12.0	5.93	1.17	.58	19.34	6.6	4.0
C.V.	15.3	14.5									
LSD .05	118	119									

Planted: May 1, 1974

Harvested: October 17 and December 4, 1974

Soil: Sandy loam

Table 5. Results of 1974 Cotton Variety Test - Stoneville, Mississippi.

Variety	LINT PER ACRE			Lint %	Seed index	Boll size grams	FIBER PROPERTIES				
	Total	First pick	% First pick				Length	Strength g/tex	Elonga- tion	Micro- naire	
											2.5%
Stoneville 151	699	598	85	39.1	11.5	5.45	1.18	.57	20.04	5.8	4.8
DES 06-020-24	689	617	89	39.6	11.1	5.40	1.21	.59	20.78	7.4	4.6
Coker 220	687	586	85	40.1	10.9	5.58	1.23	.59	18.94	6.4	4.7
Stoneville 256	675	606	90	39.3	10.5	5.46	1.19	.57	19.04	6.1	4.7
Deltapine 16	657	542	82	38.2	11.7	5.58	1.20	.58	18.90	8.1	4.8
Deltapine 25	655	577	88	40.4	10.9	5.25	1.17	.57	19.65	7.2	4.9
Stoneville 7A	642	576	90	38.9	10.7	5.42	1.18	.56	19.04	6.1	4.6
Deltapine 5916-65	634	552	87	39.0	10.7	5.67	1.18	.58	19.66	8.3	5.2
DES 2134-018	631	576	91	39.0	10.5	4.78	1.16	.55	18.31	7.3	4.6
Coker 312	624	554	89	39.9	11.2	5.40	1.24	.58	19.33	7.3	4.9
Deltapine 45A	612	531	87	38.6	10.9	5.46	1.12	.55	18.57	7.7	4.9
Coker 310	609	522	86	39.1	11.0	5.35	1.23	.58	19.28	6.3	4.6
Stoneville 213	608	543	89	38.9	10.7	5.25	1.17	.55	18.13	6.3	4.8
DES 21326-04	596	534	90	36.3	10.1	4.70	1.22	.56	19.16	6.2	4.3
Deltapine 652	581	501	86	40.7	10.2	5.50	1.16	.55	18.30	7.3	4.5
C.V.	10.0	10.3									
LSD .05	74	67									

Planted: April 19, 1974

Harvested: October 4 and November 4, 1974

Soil: Mixed soil

Table 6. Average Performance of 15 Cotton Varieties at 5 Delta Locations in 1974.

Variety	LINT PER ACRE		Lint %	Seed index	Boll size grams	FIBER PROPERTIES				
	Total	%First pick*				Length	Strength g/tex	Elonga- tion	Micro- naire	
										2.5%
DES 06-020-24	954	86.5	39.8	11.4	6.02	1.18	.58	20.34	7.9	4.7
DES 2134-018	923	86.2	39.2	10.6	5.27	1.16	.56	18.96	7.5	4.6
Stoneville 213	908	83.2	39.4	10.9	5.73	1.15	.56	18.30	7.0	4.8
Stoneville 256	897	84.0	39.8	10.6	5.59	1.16	.56	18.06	6.3	4.8
Coker 220	888	82.0	40.0	11.3	6.00	1.21	.58	19.95	7.0	4.6
Stoneville 7A	885	83.7	39.5	10.8	5.59	1.15	.54	17.90	6.3	4.7
Coker 310	870	81.7	40.0	11.0	5.67	1.22	.58	19.44	6.9	4.6
Deltapine 5916-65	860	80.2	39.2	10.8	5.74	1.18	.59	19.87	9.1	5.0
Stoneville 151	858	78.7	38.9	11.9	5.57	1.18	.56	19.82	6.2	4.7
Coker 312	852	84.0	40.0	11.0	5.50	1.22	.58	19.73	7.0	4.7
Deltapine 652	844	80.7	41.0	10.0	5.45	1.15	.55	18.37	7.5	4.5
DES 21326-04	839	88.0	37.2	10.3	5.33	1.20	.56	19.60	6.9	4.4
Deltapine 25	838	78.2	40.0	10.6	5.42	1.17	.57	19.33	7.4	4.8
Deltapine 16	835	77.0	38.9	11.1	5.97	1.17	.57	19.15	9.0	4.7
Deltapine 45A	825	81.7	38.6	11.1	5.57	1.13	.56	19.18	8.2	4.7

* % first pick is an average of 4 locations.

Table 7. Average Performance of 10 Cotton Varieties at 5 Delta Locations for a 2-Year Period (1973-74).

Variety	LINT PER ACRE		Lint %	Seed index	Boll size grams	FIBER PROPERTIES			
	Total	% First pick*				Length 2.5%	Strength g/tex	Elonga- tion	Micro- naire
Deltapine 5916-65	941	84	39.4	10.8	5.73	1.17	19.83	8.8	5.1
Stoneville 7A	940	85	39.1	10.8	5.60	1.15	18.25	6.0	4.9
DES 21326-04	933	90	37.2	10.6	5.25	1.19	19.62	6.7	4.5
Deltapine 652	917	84	40.8	10.2	5.44	1.15	18.86	7.3	4.6
Coker 310	907	84	39.9	11.2	5.54	1.22	19.77	6.8	4.7
Deltapine 25	903	81	40.1	10.8	5.53	1.16	19.45	7.2	4.9
Coker 312	902	86	39.7	11.3	5.51	1.22	19.79	6.7	4.7
Deltapine 16	899	82	38.6	11.3	5.93	1.17	19.47	8.8	4.7
Deltapine 45A	892	84	38.7	11.5	5.77	1.13	19.25	8.0	4.8

* % first pick is an average of 7 environments.

Hill Section locations

Cotton variety tests were conducted at six locations in the Hill Section of Mississippi; Mississippi State, Raymond, Verona, Holly Springs, Pontotoc, and Brooksville.

Eighteen varieties were included in the tests at all locations. Yield data were based on the weight of cotton harvested from one-row plots. Each entry was replicated either six or eight times. Lint percentage and fiber property determinations were obtained from hand-picked samples. Fiber property data were determined by the Cotton Fiber Laboratory, Delta Branch Experiment Station, Stoneville, Mississippi.

Performance data of varieties tested at individual locations are presented in Tables 8 through 13. The average performance of 18 varieties grown at six locations in the Hill Section is presented in Table 14.

Wet Spring weather resulted in late planting at most locations and cool, wet fall weather resulted in a late maturing crop. The data from some locations are variable, which

is partially due to late plantings and extremes in the weather that prevailed throughout the season.

Results at Mississippi State on a Leeper fine sandy loam soil are presented in Table 8. This test was harvested only once on October 23 and yields ranged from 652 to 1065 pounds of lint per acre.

Results at Raymond are presented in Table 9. This test was planted May 7 on a Grenada silt loam soil. Due to unfavorable weather conditions this test was not harvested until December 3, but lint yields were high. Lint yields ranged from 954 to 1106 pounds per acre, but significant differences in variety performance were not measured.

Table 10 shows the results of the variety test conducted on a Grenada silt loam soil at Holly Springs. This test was planted on May 10 and harvested once on November 13. Lint yields ranged from 425 to 647 pounds per acre and were good considering that on October 3 the temperature dropped to 31 degrees and frost damage was observed.

Results at Verona on a Catalpa silty clay loam soil are presented in Table 11. This test was planted on May 30, which is a late planting date for cotton. Due to the late planting date and unfavorable weather throughout the season, the lint yield of all varieties was low. The lint yields ranged from 141 to 341 pounds per acre.

The performance of varieties tested at Brooksville on a Houston clay soil are presented in Table 12. This test was also planted very late on May 31, and yields ranged from 404 to 607 pounds of lint per acre.

Results at Pontotoc on an Atwood silt loam soil are presented in Table 13. Due to excessive rain this test was planted on June 4, which is usually too late for planting cotton. Lint yields ranged from 473 to 725 pounds per acre, but due to a large amount of plot variability a significant difference between varieties was not detected.

The average performance of 18 cotton varieties tested at six locations in the Hill Section are presented in Table 14.

Table 8. Results of 1974 Cotton Variety Test at MAFES Headquarters, Mississippi State, MS.

Variety	LINT		Boll size grams	FIBER PROPERTIES				
	PER ACRE	Lint %		Length		Strength g/tex	Elonga- tion	Micro- naire
				2.5%	50%			
Dixie King III	1065	40.3	7.02	1.16	.57	21.39	8.7	4.4
Delcot 277	1003	39.2	6.48	1.22	.60	20.93	9.6	4.1
Coker 310	986	39.9	5.57	1.26	.60	22.42	8.0	4.2
Hancock	984	40.7	6.25	1.12	.51	18.82	8.1	4.1
Stoneville 603	941	40.0	5.60	1.18	.54	19.62	7.6	4.7
Coker 312	936	40.7	5.33	1.27	.58	22.85	7.8	4.4
DES 2134-13	906	39.7	4.96	1.25	.58	21.39	9.0	4.0
Coker 220	904	41.2	5.69	1.21	.56	20.36	9.1	4.5
Stoneville 213	891	40.4	5.26	1.18	.57	20.58	9.3	4.5
Stoneville 7A	889	40.8	5.90	1.18	.56	19.40	7.0	4.8
Deltapine 25	879	40.9	5.36	1.19	.58	20.94	8.6	4.7
McNair 511	848	39.4	4.60	1.15	.55	20.80	9.2	4.4
Deltapine 652	830	41.7	5.07	1.19	.54	21.53	9.2	4.3
Hybee 100A	830	39.4	6.22	1.20	.55	20.07	8.1	4.4
Deltapine 16	824	39.1	5.39	1.19	.57	20.87	10.2	4.4
Deltapine 45A	772	39.8	5.30	1.16	.57	20.28	9.6	4.5
Hybee 200A	736	38.8	5.83	1.21	.58	20.00	8.9	4.7
McNair 612	652	41.5	5.03	1.15	.52	20.87	7.7	4.4
C.V.	15.5							
LSD .05	164							

Planted: May 9, 1974

Harvested: October 23, 1974

Soil: Leeper fine sandy loam

Table 9. Results of 1974 Cotton Variety Test at Brown Loam Branch Experiment Station, Raymond, MS.

Variety	LINT		Boll size grams	FIBER PROPERTIES				
	PER ACRE	Lint %		Length		Strength g/tex	Elonga- tion	Micro- naire
				2.5%	50%			
Coker 220	1106	40.3	5.66	1.15	.55	18.46	9.4	4.8
Coker 312	1092	39.4	5.34	1.17	.57	20.42	7.8	4.7
Stoneville 213	1067	39.4	6.08	1.15	.56	19.04	9.6	5.0
McNair 511	1064	39.3	5.62	1.15	.55	19.41	8.5	4.8
Stoneville 7A	1044	38.6	5.89	1.10	.52	18.16	7.6	4.8
Hancock	1037	39.6	6.84	1.08	.51	19.27	9.2	4.6
Hybee 100A	1036	39.2	5.69	1.12	.52	19.12	9.4	4.9
DES 2134-13	1016	38.7	5.43	1.17	.56	19.70	9.1	4.7
Coker 310	1014	39.0	6.03	1.16	.52	19.19	9.8	5.1
Delcot 277	1011	39.2	5.92	1.11	.54	18.75	9.6	4.7
Hybee 200A	1006	39.6	5.30	1.13	.54	20.22	9.2	5.0
McNair 612	1005	39.5	5.54	1.10	.54	19.12	8.7	5.0
Deltapine 16	993	39.7	6.10	1.12	.52	18.25	10.8	4.8
Stoneville 603	991	38.4	6.17	1.12	.54	18.16	8.0	4.9
Deltapine 25	986	40.7	6.13	1.15	.55	19.97	8.7	4.9
Dixie King III	980	39.0	5.80	1.12	.55	19.63	8.3	4.6
Deltapine 652	976	39.3	5.79	1.11	.52	19.56	8.9	4.7
Deltapine 45A	954	39.6	5.92	1.12	.56	19.04	9.2	5.0
C.V.	10.1							
LSD .05	N.S.							

Planted: May 7, 1974

Harvested: December 3, 1974

Soil: Grenada silt loam

Table 10. Results of 1974 Cotton Variety Test at North Mississippi Branch Experiment Station, Holly Springs, MS.

Variety	LINT	Lint %	Boll size grams	FIBER PROPERTIES				
	PER ACRE			Length		Strength g/tex	Elonga- tion	Micro- naire
	Total			2.5%	50%			
Hancock	647	39.5	5.91	1.11	.54	17.24	8.4	4.0
Delcot 277	639	38.8	6.25	1.19	.59	20.35	10.6	3.8
Stoneville 213	635	39.4	5.23	1.16	.55	18.72	9.1	4.2
Stoneville 603	603	39.1	5.15	1.16	.55	18.35	8.3	4.3
DES 2134-13	567	38.8	4.58	1.21	.55	19.38	9.7	3.7
Hybee 100A	562	38.9	5.91	1.16	.56	18.79	9.9	4.3
Dixie King III	559	39.8	5.91	1.13	.55	19.31	8.7	3.9
Stoneville 7A	558	39.8	5.23	1.18	.57	18.39	7.8	4.1
Hybee 200A	556	37.8	5.05	1.17	.56	18.20	10.6	4.2
Coker 220	547	40.8	5.29	1.22	.56	19.90	9.0	3.9
Coker 310	525	39.9	4.98	1.22	.60	19.90	8.2	3.8
Deltapine 16	503	38.5	5.25	1.18	.55	19.90	10.6	4.2
Deltapine 652	494	40.7	4.88	1.15	.52	18.87	9.9	4.0
Coker 312	494	40.1	5.07	1.22	.58	20.20	8.8	4.0
McNair 511	470	38.8	4.50	1.13	.54	20.42	9.9	4.1
Deltapine 25	469	40.9	4.84	1.13	.55	19.83	10.1	4.2
McNair 612	448	40.8	5.06	1.16	.57	19.02	8.5	4.4
Deltapine 45A	425	37.6	4.81	1.14	.57	19.31	10.7	4.0
C.V.	12.0							
LSD .05	66							

Planted: May 10, 1974

Harvested: November 13, 1974

Soil: Grenada silt loam

Table 11. Results of 1974 Cotton Variety Test at Northeast Branch Experiment Station, Verona, MS.

Variety	LINT	Lint %	Boll size grams	FIBER PROPERTIES				
	PER ACRE			Length		Strength g/tex	Elonga- tion	Micro- naire
	Total			2.5%	50%			
Hancock	341	37.8	5.70	1.13	.54	19.26	8.9	3.8
Coker 312	312	38.5	4.53	1.21	.56	20.80	9.5	3.6
Coker 220	307	37.7	5.16	1.23	.58	20.29	9.2	3.5
Hybee 100A	277	36.3	4.57	1.18	.56	19.03	10.3	3.9
Deltapine 16	275	36.1	4.66	1.20	.56	19.77	11.1	3.5
DES 2134-13	265	34.5	4.00	1.21	.54	21.53	10.0	3.2
Coker 310	250	36.4	4.94	1.22	.55	20.73	9.9	3.3
Delcot 277	248	35.3	4.64	1.22	.59	21.02	10.9	3.4
Deltapine 652	234	38.0	4.44	1.18	.57	19.91	10.3	3.6
Hybee 200A	226	35.1	4.19	1.15	.54	19.62	10.9	3.4
Dixie King III	225	36.0	4.86	1.15	.56	19.84	9.8	3.8
Stoneville 603	215	36.1	4.06	1.16	.55	19.48	9.0	4.1
Stoneville 7A	211	35.2	4.51	1.16	.54	19.55	8.4	3.4
Deltapine 25	204	34.1	4.53	1.19	.59	21.61	9.7	3.5
Deltapine 45A	204	33.9	4.40	1.15	.54	20.80	10.8	3.2
Stoneville 213	197	34.9	4.58	1.15	.54	19.11	8.6	3.6
McNair 612	182	37.5	4.47	1.16	.55	19.77	9.7	3.7
McNair 511	141	34.5	4.57	1.13	.52	20.80	10.7	3.5
C.V.	25							
LSD .05	70							

Planted: May 30, 1974

Harvested: November 11, 1974

Soil: Catalpa silty clay loam

Table 12. Results of 1974 Cotton Variety Test at Black Belt Branch Experiment Station, Brooksville, MS.

Variety	LINT	Lint %	Boll size grams	FIBER PROPERTIES				
	PER ACRE			Length		Strength g/tex	Elonga- tion	Micro- naire
	Total			2.5%	50%			
Hybee 200A	607	36.4	6.09	1.23	.60	19.13	10.3	4.1
Deltapine 16	590	36.7	6.13	1.23	.60	18.83	10.6	4.2
Deltapine 652	525	37.8	5.57	1.21	.57	20.00	9.2	4.1
Hybee 100A	504	36.7	6.68	1.18	.57	18.76	9.0	4.3
Hancock	497	36.7	6.72	1.14	.56	18.32	7.8	4.2
Coker 312	495	38.5	5.84	1.25	.58	21.60	8.5	3.7
DES 2134-13	491	35.0	5.46	1.25	.59	21.24	8.9	4.0
Dixie King III	488	36.3	7.17	1.19	.56	20.37	8.4	4.0
Coker 310	487	37.3	6.84	1.26	.57	20.95	8.3	3.6
Coker 220	486	36.9	6.83	1.24	.59	21.24	8.8	3.6
Deltapine 25	484	37.5	5.62	1.22	.60	20.44	8.5	4.3
McNair 612	476	38.5	6.00	1.22	.61	20.29	8.0	4.5
Stoneville 603	475	36.3	5.64	1.22	.58	20.29	7.2	4.4
Delcot 277	471	35.6	6.28	1.24	.59	20.66	10.7	3.6
Stoneville 213	438	36.1	6.57	1.19	.56	18.98	7.5	4.3
Deltapine 45A	437	36.3	6.16	1.20	.60	20.80	9.2	4.1
McNair 511	405	35.9	6.49	1.18	.57	20.44	9.0	4.0
Stoneville 7A	404	35.8	6.56	1.21	.58	19.42	7.0	4.3
C.V.	13.4							
LSD .05	75							

Planted: May 31, 1974

Harvested: December 17, 1974

Soil: Houston clay

Table 13. Results of 1974 Cotton Variety Test at Pontotoc Ridge - Flatwoods Branch Experiment Station, Pontotoc, MS.

Variety	LINT	Lint %	Boll size grams	FIBER PROPERTIES				
	PER ACRE			Length		Strength g/tex	Elonga- tion	Micro- naire
	Total			2.5%	50%			
Hancock	725	37.7	6.90	1.14	.57	18.96	10.0	4.1
Coker 312	703	38.2	6.60	1.15	.54	19.26	10.2	3.8
Deltapine 16	676	37.5	5.60	1.23	.59	21.09	9.3	3.8
Coker 220	666	39.3	5.82	1.18	.55	19.33	10.7	3.8
Hybee 200A	661	37.1	5.86	1.16	.53	19.62	11.0	3.8
Stoneville 213	642	37.4	5.90	1.15	.55	19.57	11.0	4.0
McNair 612	630	37.7	5.97	1.15	.56	20.21	9.9	4.0
Dixie King III	626	37.6	6.70	1.15	.56	19.25	9.7	3.8
Stoneville 603	626	39.7	6.20	1.20	.57	20.06	9.7	4.0
Deltapine 652	626	38.1	5.48	1.13	.55	19.26	9.8	4.0
Hybee 100A	604	37.3	6.06	1.14	.54	18.74	10.2	4.2
Coker 310	589	36.5	6.44	1.19	.57	19.62	11.3	3.7
DES 2134-13	587	36.4	5.87	1.21	.55	20.43	10.4	3.8
Deltapine 25	493	37.0	5.29	1.15	.55	20.28	11.0	3.8
Delcot 277	478	37.2	6.27	1.17	.56	19.55	11.1	3.8
Stoneville 7A	478	37.3	5.82	1.15	.53	19.70	10.2	3.9
McNair 511	475	35.5	5.28	1.17	.55	21.31	10.6	3.7
Deltapine 45A	473	37.4	6.12	1.16	.56	20.43	10.1	4.0
LSD .05	N.S.							
C.V.	30							

Planted: June 4, 1974

Harvested: January 22, 1975

Soil: Atwood silt loam

Table 14. Average Performance of 18 Cotton Varieties Tested at Six Locations in the Hill Section in 1974.

Variety	LINT		Boll size grams	FIBER PROPERTIES				
	PER ACRE			Length		Strength g/tex	Elonga- tion	Micro- naire
	Total	Lint %		2.5%	50%			
Hancock	705	38.7	6.38	1.12	.54	18.64	8.7	4.1
Coker 312	672	39.2	5.45	1.21	.57	20.85	8.7	4.0
Coker 220	669	39.4	5.74	1.21	.56	19.93	9.4	4.0
Dixie King III	657	38.1	6.24	1.15	.56	19.96	8.9	4.1
Stoneville 213	645	37.9	5.60	1.16	.55	19.33	9.2	4.3
Deltapine 16	643	37.9	5.52	1.19	.56	19.78	10.4	4.1
Stoneville 603	642	38.3	5.47	1.17	.55	19.32	8.3	4.4
Delcot 277	642	37.5	5.97	1.19	.59	20.21	10.4	3.9
Coker 310	642	38.2	5.80	1.22	.57	20.47	9.2	4.0
DES 2134-13	639	37.2	5.05	1.22	.56	20.61	9.5	3.9
Hybee 100A	635	38.0	5.85	1.16	.55	19.08	9.5	4.3
Hybee 200A	632	37.5	5.38	1.17	.56	19.46	10.2	4.2
Deltapine 652	614	39.3	5.20	1.16	.54	19.85	9.5	4.2
Stoneville 7A	597	37.9	5.65	1.16	.55	19.10	8.0	4.2
Deltapine 25	586	38.5	5.29	1.17	.57	20.51	9.4	4.2
McNair 511	567	37.2	5.17	1.15	.55	20.53	9.6	4.1
McNair 612	565	39.2	5.34	1.16	.56	19.88	8.7	4.3
Deltapine 45A	544	37.4	5.45	1.15	.57	20.11	9.9	4.1