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1972 Performance of Cotton Varieties

University of Tennessee Agricultural Experiment Station

P. E. Hoskinson

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by
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The University of Tennessee
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1972
PERFORMANCE
OF COTTON VARIETIES

by
P. E. Hoskinson*

Data for 1972 with summaries of results from previous years

Station Hatch Project No. 79

Cotton Variety Improvement

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RECOMMENDED COTTON VARIETIES

Early – Auburn M., Hancock
Mid-Season to Early – Coker 310, Stoneville 603
Mid-Season – Hy-Bee 200 A, Stoneville 213.
Mid-Season to Late – Deltapine 16, Dixie King II

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CHARACTERISTICS OF RECOMMENDED COTTON VARIETIES

AUBURN M: A dwarfy, very early maturing variety released by Missouri. Has done especially well, comparatively, when planted after May 20. Yields well on bottoms, but may cut-out too quickly on upland when moisture is scarce. Has adequate Fusarium wilt resistance, but little Verticillium wilt tolerance. Auburn M's earliness enables it to set good crops when wilt conditions are moderate. Lint percentage has ranged from 36 to 39. Fiber properties for 3 years, 1969-1971, averaged: Length (1.10), strength (17.64), micronaire (4.45), and yarn strength (109).

COKER 310: A moderately early variety with small bolls. Has an outstanding lint percentage of 40 to 42. Plants are dwarfy, have average seedling vigor, and have good Fusarium wilt resistance, but have little or no Verticillium wilt tolerance. Coker 310 has been tested for 4 years and has yielded very well at all locations except at Fort Pillow. Has the longest fiber length of any currently recommended variety. Average fiber properties are: Length (1.18), strength (18.96), micronaire (4.75), and yarn strength (118).

DELTAPINE 16: A medium to late variety with a lint percentage of 37 to 41 and with small bolls. Plants are slightly smaller than average, have smooth leaves, average seedling vigor, and are tolerant to Verticillium wilt. Deltapine 16 has yielded especially well in the Delta and very well on other bottom soils. Tends to become later in Middle Tennessee. Excellent grades have been obtained from Deltapine 16 lint. Average fiber properties are: Length (1.14), strength (18.49), micronaire (4.67), and yarn strength (116).

DIXIE KING II: A medium to late variety that has large bolls. Is widely adapted on upland soils across Tennessee. Chief advantage of Dixie King II over Dixie King is its increased lint percentage. May grow too rank in bottoms as its lateral limbs tend to be longer than some varieties. May retain its leaves longer than some varieties. Dixie King II exhibits an indeterminate growth habit when moisture is not limiting. Dixie King II has a lint percentage of 37 to 40. Is tolerant to Fusarium wilt. Fiber properties are: Length (1.08), strength (17.16), micronaire (4.62), and yarn strength (112).

HANCOCK: A very early large boll variety with lint percentage of 38 to 41. Good seedling vigor and very good gin turnout characterize this variety. Is susceptible to Verticillium and Fusarium wilts. Has yielded especially well on upland soils across Tennessee. May be slightly shorter staple than many other varieties. May show rank growth in some bottoms, but may continue to grow and fruit longer than more determinate varieties under dry upland management. Fiber properties are: Length (1.07), strength (17.59), micronaire (4.61), and yarn strength (113).

HY-BEE 200A: A mid-season variety that has small bolls. Has yielded well in Tennessee tests. Its indeterminate growth habit produces larger than average

plants. Has little tolerance to Verticillium wilt. Plant type is not as uniform as many varieties. Has above average fiber properties. Fiber properties are: Length (1.13), strength (17.80), micronaire (4.80), and yarn strength (112).

STONEVILLE 213: Very widely adapted in Tennessee. Yields well on both upland and bottom soils. Has some tolerance to Verticillium wilt, and yields very well when wilt is not too severe. Has highest micronaire of any variety commonly grown in Tennessee. Stoneville 213 has small bolls with a lint percentage of 38 to 41. It has performed as a mid-season variety for the last 3 years in the Tennessee variety tests. It is highly responsive to available mositure and may be early under dry conditions and late under others; average plant height. Fiber properties are: Length (1.11), strength (17.88), micronaire (5.00), and yarn strength (112).

STONEVILLE 603: Has highest average yield during the last 4 years. It has small bolls, is moderately early, and has adequate Fusarium wilt resistance. Has about the same tolerance to Verticillium wilt as Stoneville 213. Lint percentage has ranged from 37 to 39.5. Will lodge under a heavy green boll load, but plants become erect as bolls open. Has slightly better fiber length and strength than Stoneville 213 and average micronaire. Fiber properties are: Length (1.12), strength (18.70), micronaire (4.66), and yarn strength (114).

PERFORMANCE OF COTTON VARIETIES

The 1972 Cotton Variety Tests were conducted at Jackson, Ames Plantation, Milan, Lake County, and Lawrence County. All tests except Lawrence County were harvested twice. A 1-row spindle picker was used to harvest the tests at Jackson and Ames Plantation. All other tests were harvested with 2-row spindle pickers.

The tests at Jackson and Ames Plantation consisted of 23 entries. Although extensive spot replanting was required, the test at Ames Plantation was reasonably uniform and yielded very well. Cotton varieties at Jackson were taller than at Ames. Yields at Jackson were generally disappointing. Verticillium wilt is becoming more and more troublesome at Jackson and probably influenced relative varietal performance.

The test at Lake County consisted of 24 entries. Rainfall was well below normal at this site during May, June, and most of July, so cotton plants were quite dwarfy. The test was early, uniform, and yielded well. The test averaged 783 pounds of lint per acre at first harvest on September 22.

Two tests were conducted at Milan (one on Falaya silt loam and another on Memphis silt loam). Each test at Milan consisted of 16 entries. Yields were highly acceptable on the Falaya and were outstanding on the Memphis soil. Cotton varieties on the Memphis soil were considerably earlier than the same varieties grown on the Falaya soil. Verticillium wilt "hot spots" were distributed throughout the Falaya test, so the test was not very uniform.

Very low micronaire values were obtained from most cotton experiments and production fields at Milan in 1972. Reasons for this phenomenon are not readily apparent at the present time.

Excessive rainfall from planting to harvest resulted in rank, late cotton in Lawrence County. Full-season varieties did not yield competitively in this test. An early freeze would have severely limited yields of everything except the earliest varieties.

Two boll samples of each variety were taken at Jackson, Ames Plantation, and Lake County prior to first harvest and one sample of each variety at Milan and Lawrence County. These hand-picked samples were ginned on a 10-saw laboratory gin. Lint percentage, seed index, and boll size were obtained from these samples. A grab sample from each replication of each variety from the spindle-picked cotton was taken, weighed, and composited for ginning on a modified commercial gin with seed cotton and lint cleaners. The gin turnout from the modified gin was used to calculate lint yields.

Fiber data are not available for 1972 because it takes several months to process samples in the laboratory. The 2.5% span length, micronaire fineness reading, fiber strength (T_1 and E_1), and yarn strength for 1971 are presented. The 2.5% span length and 50% span length were measured on a digital fibrograph; 2.5% span length approximates classers' length while 50% span length indicates the modal length of all fibers in the bundle and gives an indication of the uniformity of those fibers. The micronaire reading is a relative measure of fine-

ness of the fiber. Fibers with micronaire values above 4.9 are penalized for being too coarse; fibers with micronaire values less than 3.5 are penalized for being too fine. The fiber strength (T_1) was measured on a stelometer. Higher T_1 values indicate fiber of greater strength and lower values indicate fiber of lesser strength. Higher yarn strength values indicate better spinning qualities at 27 tx.

Coker 310 and Hancock were the leading yielders in 1972, and both varieties did well at most locations. Coker 5110, Dixie King II, and Deltapine 25 also yielded well in most tests. Coker 310 produced the highest average lint yield in Tennessee in 1971 and 1972. Stoneville 213 continued as a yield leader. Stoneville 603 did not yield as well as it did from 1969 through 1971. Relative varietal yield was fairly consistent at the different locations in 1972. Highly determinate varieties yielded very poorly at all locations except Lawrence County.

In 1972, Quapaw and Coker 5110 were included in the Tennessee tests for the first time. Quapaw is very early and determinate. Quapaw tends to lodge under a heavy boll load and does not defoliate as readily as other varieties. It does produce better than average grades at first harvest. Coker 5110 has been released as a stripper variety for the Texas High Plains. Plants are of average height, but respond readily to moisture and will get entirely too tall under excessive moisture conditions.

All yield data were analyzed statistically using Duncan's New Multiple Range Test of Significance for comparing varietal mean values at the .05 probability level. Min L.S.R. is the minimum least significant range and may be used for comparing two adjacent means when they are arranged in ascending or descending order of magnitude. Max L.S.R. is the maximum least significant range and may be used for comparing the two most divergent means in a test. Means which are neither the most different nor adjacent when all means are ranked, may be compared by significant range values intermediate between minimum and maximum L.S.R. values. C.V.% is the coefficient of variation and gives information concerning the uniformity of the entire experiment.

Yield data and other characteristics of the varieties tested at each location are shown in Tables 1-34.

Table 1. Average lint yield and other characteristics of 16 cotton varieties grown at six locations in 1972

Variety	Lint yield per A.	First Harvest[1]	Lint[2]	Bolls[2] per lb.	Seed[2] Index	Gin[3] turnout
	Lb.	%	%	No.		%
Coker 310	1013	84	40.8	77	10.0	36.6
Hancock	1001	85	39.7	64	11.3	34.9
Stoneville 213	981	79	38.9	75	10.6	34.7
Coker 5110	968	82	38.9	71	10.5	34.8
Dixie King II	957	74	39.5	59	11.7	34.4
Deltapine 25	941	76	40.8	76	10.4	36.3
Delcot 277	936	85	38.8	63	11.7	34.2
Stoneville 603	933	82	38.0	75	11.2	34.0
Hy-Bee 200A	926	76	38.2	75	10.9	34.2
Coker 8103	921	82	38.5	70	10.6	34.4
Deltapine 16	919	74	38.9	72	10.7	34.6
Brycot 4	896	78	39.4	73	10.7	34.7
Auburn M	864	82	37.3	66	12.4	33.1
T59-538	839	88	37.5	67	10.9	33.4
McNair 210	828	86	35.9	68	11.9	31.8
Quapaw	817	85	36.0	63	12.6	32.1
Average	921	81	38.6	70	11.1	34.2

[1]The Lawrence County Test was harvested only once, so percent first harvest data are the average of 5 locations.

[2]Lint percent, bolls per pound, and seed index were derived from hand-picked samples obtained prior to first harvest.

[3]Percent gin turnout was obtained from spindle-picked seed cotton and ginned on a modified commercial gin.

Table 2. Lint yield of 23 cotton varieties grown at three locations in 1972

Variety	POUNDS PER ACRE			
	Avg.	Jackson[1]	Ames[2] Plantation	Lake[3] County
Coker 310	1053	800	1174	1185
Hancock	1052	911	1176	1068
Coker 201	996	804	1152	1033
Stoneville 213	996	826	1137	1024
Coker 5110	988	771	1138	1056
Deltapine 25	977	842	1107	981
Dixie King II	970	794	1140	977
Coker 417	967	833	1074	993
Hy-Bee 200A	947	765	1076	999
Coker 8103	947	828	1047	965
Brycot	946	698	1162	977
Delcot 277	945	694	1067	1075
Stoneville 603	941	748	1065	1010
Deltapine 16	940	808	1020	992
Deltapine 45A	931	747	1070	976
Hy-Bee 100A	896	677	1022	988
T59-538	891	749	1028	895
McNair 511	879	809	962	866
Auburn M	875	761	976	888
McNair 210	851	785	937	830
Quapaw	823	699	926	843
Lockett 4789A	767	592	896	812
Acala 1517-70	674	510	765	747
Stoneville 7A	— — —	— — —	— — —	1093
Average	924	759	1049	970
Min L.S.R. .05		81	90	87
Max L.S.R. .05		101	112	109
C.V. %		9.4	7.6	7.9

[1]Memphis silt loam (0% to 2% slopes).
[2]Loring silt loam (2% to 5% slopes).
[3]Tiptonville silt loam (0% to 2% slopes).

Table 3. Lint yield of 16 cotton varieties grown at three locations in 1972

Variety	POUNDS PER ACRE			
	Avg.	Milan[1] Upland	Milan[2] Bottom	Lawrence[3] County
Coker 310	974	1243	1063	615
Stoneville 213	966	1282	1064	551
Hancock	950	1297	949	605
Coker 5110	947	1294	951	597
Dixie King II	943	1315	960	554
Delcot 277	927	1155	961	665
Stoneville 603	925	1214	969	593
Hy-Bee 200A	906	1203	1029	485
Deltapine 25	905	1269	1013	433
Deltapine 16	898	1114	1007	574
Coker 8103	895	1283	939	464
Auburn M	854	1109	882	570
Brycot 4	845	1209	904	423
Quapaw	811	1147	711	576
McNair 210	805	1025	830	559
T59-538	788	1035	812	516
Average	896.3	1200	940	549
Min L.S.R. .05		115	147	112
Max L.S.R. .05		139	164	136
C.V. %		8.3	13.6	17.7

[1]Memphis silt loam (2% to 5% slopes).
[2]Falaya silt loam (0% to 2% slopes).
[3]Pembroke silt loam (2% to 5% slopes).

Table 4. Lint yield and other characteristics of 23 cotton varieties grown at Jackson in 1972[1]

Variety	Lint yield per acre	First harvest	Lint	Bolls per lb.	Seed Index	Gin turnout
	Lb.	%	%	No.		%
Hancock	911	83	39.7	63	10.8	33.0
Deltapine 25	842	70	40.4	74	9.8	35.3
Coker 417	833	71	38.5	70	10.3	32.0
Coker 8103	828	75	38.4	67	10.2	31.8
Stoneville 213	826	71	38.6	73	10.1	32.0
McNair 511	809	66	37.6	76	10.1	31.6
Deltapine 16	808	58	38.2	73	9.9	32.7
Coker 201	804	62	39.4	71	10.3	33.3
Coker 310	800	70	40.2	74	10.0	33.5
Dixie King II	794	60	39.4	60	11.0	31.5
McNair 210	785	84	35.3	69	11.2	30.2
Coker 5110	771	73	38.3	70	9.6	32.2
Hy-Bee 200A	765	66	37.4	77	9.9	32.0
Auburn M	761	77	37.1	68	10.8	31.3
T59-538	749	85	37.1	69	10.2	31.5
Stoneville 603	748	72	37.0	75	10.1	31.4
Deltapine 45A	747	73	38.3	75	10.0	33.2
Quapaw	699	78	36.1	63	11.6	29.5
Brycot 4	698	72	39.0	75	10.3	33.5
Delcot 277	694	76	38.0	63	11.3	31.2
Hy-Bee 100A	677	68	38.8	72	10.0	30.9
Lockett 4789A	592	69	35.8	71	10.3	30.3
Acala 1517-70	510	70	36.7	75	10.8	28.5
Average	759	72	38.0	71	10.3	31.8
Min L.S.R. .05	81					
Max L.S.R. .05	100					
C.V. %	9.4					

[1]Memphis silt loam (0% to 2% slopes)

Table 5. Lint yield and other characteristics of 23 cotton varieties grown at Ames Plantation in 1972[1]

Variety	Lint yield per acre	First harvest	Lint	Bolls per lb.	Seed Index	Gin turnout
	Lb.	%	%	No.		%
Hancock	1176	84	41.3	60	12.2	36.6
Coker 310	1174	83	42.2	70	11.4	37.9
Brycot 4	1162	84	39.8	67	11.4	36.7
Coker 201	1152	81	41.5	65	11.8	37.5
Dixie King II	1140	81	40.3	54	12.5	35.6
Coker 5110	1138	83	39.5	62	11.8	36.5
Stoneville 213	1137	79	39.1	66	11.6	35.9
Deltapine 25	1107	78	40.9	69	11.5	37.8
Hy-Bee 200A	1076	78	39.1	67	11.8	36.0
Coker 417	1074	83	39.6	66	11.2	35.3
Deltapine 45A	1070	78	39.8	67	11.8	35.7
Delcot 277	1067	87	39.2	58	12.6	36.7
Stoneville 603	1065	81	38.5	69	12.1	34.5
Coker 8103	1047	83	39.9	63	12.1	35.8
T59-538	1028	88	38.5	64	11.9	34.5
Hy-Bee 100A	1022	80	40.9	62	11.6	35.8
Deltapine 16	1020	77	39.4	65	11.7	35.9
Auburn M	976	79	38.2	60	13.7	34.3
McNair 511	962	71	38.9	73	11.2	34.8
McNair 210	937	81	37.0	63	12.9	33.1
Quapaw	926	85	36.5	58	13.4	32.8
Lockett 4789A	896	75	37.9	58	12.9	32.9
Acala 1517-70	765	77	37.8	67	12.5	33.1
Average	1049	81	39.4	64	12.1	35.5
Min L.S.R. .05	90					
Max L.S.R. .05	112					
C.V. %	7.6					

[1]Loring Silt Loam (2% to 5% Slopes)

Table 6. Lint yield and other characteristics of 24 cotton varieties grown in Lake County[1] in 1972

Variety	Lint yield per A.	First harvest	Lint	Bolls per lb.	Seed Index	Gin turnout
	Lb.	%	%	No.		%
Coker 310	1185	91	41.2	74	10.9	37.4
Stoneville 7A	1093	78	39.7	86	10.7	36.6
Delcot 277	1075	89	38.6	70	13.1	35.2
Hancock	1068	89	39.7	70	11.7	35.6
Coker 5110	1056	87	39.1	71	11.5	35.3
Coker 201	1033	88	40.5	75	11.3	37.1
Stoneville 213	1024	86	39.5	79	11.4	36.3
Stoneville 603	1010	89	38.0	77	11.9	35.4
Hy-Bee 200A	999	76	39.0	79	11.6	35.2
Coker 417	993	88	38.4	73	11.9	35.3
Deltapine 16	992	77	38.9	71	12.1	35.8
Hy-Bee 100A	988	82	39.4	73	11.8	35.1
Deltapine 25	981	82	41.4	79	11.0	37.2
Dixie King II	977	73	38.4	57	13.2	34.1
Brycot 4	977	76	39.5	79	11.5	35.4
Deltapine 45A	976	83	40.0	74	11.9	36.3
Coker 8103	965	83	38.2	71	11.7	34.4
T59-538	895	92	36.7	70	12.1	34.1
Auburn M	888	89	36.9	66	13.2	33.6
McNair 511	866	74	38.3	79	11.9	33.5
Quapaw	843	90	36.4	66	13.5	33.7
McNair 210	830	90	35.8	72	13.0	32.2
Lockett 4789A	812	86	35.9	78	12.0	34.0
Acala 1517-70	747	80	37.0	77	12.7	33.4
Average	970	88	38.6	74	12.0	35.1
Min L.S.R. .05	87					
Max L.S.R. .05	109					
C. V. %	7.9					

[1]Tiptonville Silt Loam (0% to 2% slopes).

Table 7. Lint yield and other characteristics of 16 cotton varieties grown on Memphis Silt Loam at Milan in 1972

Variety	Lint yield per A.	First harvest	Lint	Bolls per lb.	Seed Index	Gin turnout
	Lb.	%	%	No.		%
Dixie King II	1315	86	41.5	64	10.1	37.4
Hancock	1297	90	39.5	71	10.9	36.4
Coker 5110	1294	91	40.5	88	9.6	36.9
Coker 8103	1283	92	40.1	79	9.5	37.4
Stoneville 213	1282	91	40.8	83	9.0	37.3
Deltapine 25	1269	88	42.7	81	9.5	38.1
Coker 310	1243	92	41.8	87	8.5	38.6
Stoneville 603	1214	91	39.3	80	10.2	36.3
Brycot 4	1209	88	41.8	77	9.4	37.4
Hy-Bee 200A	1203	91	39.0	80	10.4	36.1
Delcot 277	1155	93	39.9	63	10.9	36.4
Quapaw	1147	91	36.8	67	11.6	34.4
Deltapine 16	1114	90	40.5	80	9.4	35.7
Auburn M	1109	89	39.0	67	12.0	35.7
T59-538	1035	92	38.6	67	10.1	35.9
McNair 210	1025	93	36.5	71	10.5	34.0
Average	1200	90	39.9	75	10.1	36.5
Min L.S.R. .05	115					
Max L.S.R. .05	139					
C. V. %	8.3					

Table 8. Lint yield and other characteristics of 16 cotton varieties grown on Falaya Silt Loam at Milan in 1972

Variety	Lint yield per A.	First harvest	Lint	Bolls per lb.	Seed Index	Gin turnout
	Lb.	%	%	No.		%
Stoneville 213	1064	66	39.2	75	10.2	34.4
Coker 310	1063	82	39.8	89	8.8	38.3
Hy-Bee 200A	1029	71	38.3	76	10.5	34.9
Deltapine 25	1013	63	40.6	74	10.2	36.7
Deltapine 16	1007	70	39.7	73	10.3	34.7
Stoneville 603	969	74	38.0	77	10.7	33.4
Delcot 277	961	79	39.7	66	11.3	34.3
Dixie King II	960	68	40.5	61	10.6	35.2
Coker 5110	951	77	39.7	68	10.0	34.7
Hancock	949	80	39.8	66	10.1	34.8
Coker 8103	939	78	39.1	75	9.3	34.7
Brycot 4	904	69	39.6	72	10.1	35.1
Auburn M	882	77	36.2	72	12.0	33.3
McNair 210	830	82	35.4	75	10.9	31.0
T59-538	812	83	37.5	72	9.3	33.2
Quapaw	711	82	35.4	65	12.4	32.2
Average	940	75	38.7	72	10.4	34.4
Min L.S.R. .05	147					
Max L.S.R. .05	164					
C. V. %	13.6					

Table 9. Lint yield and other characteristics of 16 cotton varieties grown in Lawrence County in 1972[1]

Variety	Lint yield per A.	Gin turnout	Lint	Bolls per lb.	Seed Index
	Lb.	%	%	No.	
Delcot 277	665	31.5	37.4	57	11.5
Coker 310	615	34.1	39.5	68	10.6
Hancock	605	33.1	38.4	55	12.4
Coker 5110	597	33.4	36.2	64	10.9
Stoneville 603	593	32.7	37.0	72	12.0
Quapaw	576	29.9	35.0	61	13.2
Deltapine 16	574	32.6	36.6	72	10.7
Auburn M	570	30.6	36.5	62	13.0
McNair 210	559	30.3	35.2	59	12.9
Dixie King II	554	32.4	37.0	56	12.7
Stoneville 213	551	32.0	36.4	76	11.1
T59-538	516	31.0	36.7	58	11.8
Hy-Bee 200A	485	31.1	36.3	73	11.1
Coker 8103	464	32.1	36.0	67	11.1
Deltapine 25	433	32.8	39.0	77	10.4
Brycot 4	423	30.0	36.5	71	11.4
Average	549	31.8	36.9	65.5	11.7
Min L.S.R. .05	112				
Max L.S.R. .05	136				
C. V. %	17.7				

[1]Pembroke silt loam (2% – 5% slopes).

Table 10. Four-year average[1] yields and percent first harvest for the Tennessee Cotton Variety Tests

Variety	3 locations average[2]		5 locations average[3]	
	Lint per A.	Percent first harvest	Lint per A.	Percent first harvest
Stoneville 603	952	83	952	78
Stoneville 213	917	80	950	76
Coker 310	917	81	945	78
Hancock	909	85	921	81
Hy-Bee 200A	902	78	921	75
Deltapine 16	893	76	916	73
Coker 417	889	79		
Coker 201	870	79		
Dixie King II	862	77	885	73
Auburn M	864	83	878	81
Delcot 277	864	85		
T59-538	850	87		
Deltapine 45A	849	79		
Average	887	81	921	77

[1]These data are weighed to reflect only the number of tests actually harvested. Twenty tests were harvested over the 4-year period, 1969-1972; only 17 tests were harvested twice.

[2]Fort Pillow on Collins Silt Loam in 1969-71, Lake County on Tiptonville Silt Loam in 1972.

[3]Tests were conducted on Milan Upland and Milan Bottom soils during the 4-year period. The 1972 results from Lawrence County have been included in the data.

Table 11. Average plant height in inches for 23 cotton varieties grown at Jackson, Ames Plantation, and Lake County in 1972

Variety	LOCATION			Avg.
	Jackson[1]	Ames Plantation[2]	Lake County[3]	
Hy-Bee 200A	52.3	41.5	34.5	42.8
Deltapine 25	51.7	43.2	33.2	42.7
Deltapine 45A	50.5	41.2	33.5	41.7
Hy-Bee 100A	50.8	41.5	31.8	41.4
Stoneville 213	50.3	42.0	31.2	41.2
Coker 8103	48.2	41.8	33.7	41.2
Coker 201	52.0	41.7	28.8	40.8
Deltapine 16	52.3	39.5	30.7	40.8
Acala 1517-70	49.3	38.3	34.5	40.7
Dixie King II	49.0	40.2	32.8	40.7
Brycot 4	48.3	39.5	34.2	40.7
Hancock	48.5	40.8	30.8	40.1
McNair 511	47.3	40.5	30.5	39.4
Lockett 4789A	48.3	41.0	28.7	39.3
Delcot 277	47.5	38.5	30.8	38.9
Stoneville 603	47.8	38.7	29.3	38.6
Coker 5110	48.2	39.0	28.5	38.6
Coker 417	47.7	39.2	28.5	38.4
Coker 310	46.2	39.2	27.2	37.5
Auburn M	44.0	36.5	27.3	35.9
McNair 210	42.8	36.7	26.7	35.4
T59-538	42.5	33.7	24.3	33.5
Quapaw	42.3	32.7	25.2	33.4
Stoneville 7A			33.3	
Average	48.2	39.4	30.4	39.3
Min L.S.R. .05	3.1	2.6	2.8	1.5
Max L.S.R. .05	3.8	3.3	3.5	1.8
C. V. %	5.6	5.9	8.1	6.3

[1]Memphis silt loam (0% to 2% slope).

[2]Loring silt loam (2% to 5% slope).

[3]Tiptonville silt loam (0% to 2% slope).

Table 12. Average plant height in inches for 16 cotton varieties grown on a Milan upland soil[1], Milan bottom soil[2], and in Lawrence County[3]

Variety	LOCATION			Avg.
	Milan Upland	Milan Bottom	Lawrence	
Stoneville 213	44.7	54.2	61.0	53.3
Hy-Bee 200A	44.3	52.5	62.5	53.1
Deltapine 25	45.5	53.3	59.7	52.8
Brycot 4	44.0	50.3	61.2	51.8
Coker 8103	40.7	48.8	62.3	50.6
Deltapine 16	41.0	49.7	60.5	50.4
Hancock	44.5	47.2	58.3	50.0
Coker 5110	42.5	44.8	59.3	48.9
Dixie King II	42.3	48.0	55.5	48.6
Delcot 277	41.7	48.5	52.7	47.6
Stoneville 603	40.8	47.2	52.5	46.8
Coker 310	38.7	46.0	54.5	46.4
McNair 210	36.8	44.7	52.3	44.6
Auburn M	37.8	44.2	48.7	43.6
Quapaw	37.3	39.0	48.8	41.7
T59-538	34.0	40.7	46.5	40.4
Average	41.0	47.4	56.0	48.2
Min L.S.R. .05	2.9	3.0	3.8	2.6
Max L.S.R. .05	3.6	3.7	4.7	3.1
C.V. %	6.2	5.6	6.0	6.3

[1]Memphis Silt Loam (2%-5% Slope).
[2]Falaya Silt Loam (0%-2% Slope).
[3]Pembroke Silt Loam (0%-2% Slope).

Table 13. Average classers' staple and micronaire values[1] for 16 cotton varieties mechanically harvested at six locations in 1972

Variety	FIRST HARVEST		SECOND HARVEST	
	Staple in 32's	Micro-naire	Staple in 32's	Micro-naire
Dixie King II	34.5	3.82	34.0	3.36
Stoneville 213	34.5	3.88	34.8	3.60
Auburn M	34.3	3.57	33.8	3.36
Hancock	34.7	3.73	34.2	3.64
Hy-Bee 200A	34.8	3.88	33.8	3.68
Deltapine 16	35.0	3.68	34.8	3.42
T59-538	35.2	3.23	34.2	3.16
Delcot 277	35.2	3.28	34.8	3.22
Stoneville 603	35.0	3.73	34.4	3.32
Coker 310	35.2	3.65	34.6	3.30
McNair 210	34.7	3.78	34.4	3.44
Deltapine 25	34.8	3.92	33.8	3.44
Brycot 4	34.7	3.92	34.4	3.56
Coker 5110	35.5	3.52	34.4	3.24
Coker 8103	35.2	3.60	34.4	3.24
Quapaw	34.3	3.83	33.8	3.56
Average	34.9	3.69	34.3	3.41

[1]Mechanically harvested and ginned on a modified commercial gin.

Table 14. Average classers' staple and micronaire values[1] for 23 cotton varieties grown at three locations in 1972

Variety	FIRST HARVEST		SECOND HARVEST	
	Staple in 32's	Micro-naire	Staple in 32's	Micro-naire
Dixie King II	34.3	4.17	34.3	3.63
Stoneville 213	34.7	4.20	35.0	3.97
Auburn M	34.0	3.87	34.0	3.60
Hancock	34.3	3.97	34.0	3.77
Hy-Bee 200A	34.7	4.17	33.7	3.90
Deltapine 45A	34.7	4.13	34.0	3.87
Coker 201	34.3	4.03	33.7	3.97
Deltapine 16	35.0	4.00	34.7	3.77
T59-538	35.0	3.40	34.0	3.40
Delcot 277	35.0	3.57	35.0	3.53
Stoneville 603	34.7	4.00	34.7	3.67
Coker 310	35.0	4.00	34.3	3.63
Coker 417	35.3	3.73	34.0	3.43
Acala 1517-70	35.7	3.67	34.3	3.73
McNair 511	34.0	4.13	34.3	3.77
McNair 210	34.3	4.07	34.0	3.77
Deltapine 25	34.3	4.13	33.3	3.73
Brycot 4	34.7	4.27	34.0	4.00
Hy-Bee 100A	35.0	4.13	33.7	3.93
Lockett 4789A	34.3	3.87	33.7	3.83
Coker 5110	35.0	3.80	34.0	3.63
Coker 8103	34.7	3.80	34.0	3.50
Quapaw	34.0	4.07	33.7	3.87
Average	34.6	3.97	34.1	3.74

[1]Mechanically harvested and ginned on a modified commercial gin.

Table 15. Classers' grade, staple, and micronaire for 23 cotton varieties mechanically harvested at Jackson in 1972

Variety	FIRST HARVEST			SECOND HARVEST		
	Grade	Staple in 32's	Micronaire	Grade	Staple in 32's	Micronaire
Dixie King II	LM Lt.Sp.	34	3.8	LM	33	3.4
Stoneville 213	SGO	34	3.8	SGO[1]	35	4.0
Auburn M	LM Lt.Sp.	34	3.4	LM	33	3.3
Hancock	SGO	34	3.5	SGO[1]	34	3.6
Hy-Bee 200A	GO[1]	34	3.7	LM	33	3.7
Deltapine 45A	SGO	34	3.5	LM	33	3.4
Coker 201	LM Lt.Sp.	34	3.5	LM	33	3.6
Deltapine 16	LM Lt.Sp.	34	3.4	LM	34	3.7
T59-538	SGO	35	2.8	SGO	33	3.1
Delcot 277	SGO	34	3.2	SGO[1]	34	3.4
Stoneville 603	SGO	34	3.4	SGO	33	3.4
Coker 310	LM Lt.Sp.	34	3.6	LM	34	3.6
Coker 417	LM Lt.Sp.	35	3.1	LM Lt.Sp.	33	3.2
Acala 1517-70	LM Lt.Sp.	36	3.4	SGO+	34	3.5
McNair 511	LM Lt.Sp.	34	3.7	LM	34	3.6
McNair 210	LM Lt.Sp.	34	3.6	LM	33	3.4
Deltapine 25	SGO	34	3.6	LM	32	3.7
Brycot 4	LM Lt.Sp.	34	3.5	LM	34	3.7
Hy-Bee 100A	LM Lt.Sp.	35	3.6	SGO[1]	33	3.6
Lockett 4789A	LM Lt.Sp.	34	3.4	LM	32	3.8
Coker 5110	SGO	34	3.3	SGO	33	3.4
Coker 8103	LM Lt.Sp.	34	3.5	SGO[1]	33	3.3
Quapaw	LM Lt.Sp.	34	3.3	LM	33	3.7
Average		34	3.5		33	3.5

[1]One full grade reduction due to bark.

Table 16. Classers' grade, staple, and micronaire for 23 cotton varieties mechanically harvested at Ames Plantation in 1972

Variety	FIRST HARVEST			SECOND HARVEST		
	Grade	Staple in 32's	Micronaire	Grade	Staple in 32's	Micronaire
Dixie King II	LM	34	4.4	LM Lt.Sp.[1]	35	3.7
Stoneville 213	SLM Lt.Sp.	34	4.5	LM	35	3.9
Auburn M	LM	34	4.4	LM Lt.Sp.[2]	35	3.8
Hancock	LM	35	4.4	LM Lt.Sp.	35	4.1
Hy-Bee 200A	LM+	35	4.4	LM[1]	35	4.0
Deltapine 45A	LM+	34	4.3	LM	35	4.0
Coker 201	LM+	34	4.4	LM+	34	4.2
Deltapine 16	SLM	35	4.2	SLM	35	3.8
T59-538	LM	34	3.8	SGO	34	3.6
Delcot 277	LM	36	3.9	SGO	35	3.6
Stoneville 603	LM	35	4.4	LM	36	3.9
Coker 310	LM+	35	4.1	LM	34	3.9
Coker 417	LM+	35	4.2	LM[1]	34	3.8
Acala 1517-70	LM+	36	3.8	LM Lt.Sp.	34	3.8
McNair 511	LM+	34	4.5	LM	34	4.1
McNair 210	LM+	34	4.5	LM	35	4.2
Deltapine 25	LM+	34	4.4	LM	34	3.7
Brycot 4	LM+	34	4.7	LM	34	3.9
Hy-Bee 100A	LM+	34	4.4	LM	35	4.0
Lockett 4789A	LM	34	4.6	LM	34	3.9
Coker 5110	LM	35	4.1	SGO	35	4.0
Coker 8103	LM+	35	4.1	LM Lt.Sp.	35	3.9
Quapaw	LM	34	4.4	LM	34	3.8
Average		35	4.3		35	3.9

[1]One full grade reduction due to grass.
[2]One full grade reduction due to bark.

Table 17. Classers' grade, staple, and micronaire for 23 cotton varieties mechanically harvested at Lake County in 1972

Variety	FIRST HARVEST			SECOND HARVEST		
	Grade	Staple in 32's	Micro-naire	Grade	Staple in 32's	Micro-naire
Dixie King II	SLM	35	4.3	SGO	35	3.8
Stoneville 213	SLM	36	4.3	SGO	35	4.0
Auburn M	SLM	34	3.8	SGO	34	3.7
Hancock	SLM	34	4.0	SGO	33	3.6
Hy-Bee 200A	SLM	35	4.4	SGO	33	4.0
Deltapine 45A	LM+	36	4.6	SGO	34	4.2
Coker 201	SLM	35	4.2	SGO	34	4.1
Deltapine 16	M	36	4.4	SGO	35	3.8
T59-538	LM+	36	3.6	SGO	35	3.5
Delcot 277	SLM	35	3.6	SGO	36	3.6
Stoneville 603	LM+	35	4.2	SGO	35	3.7
Coker 310	SLM	36	4.3	SGO	35	3.4
Coker 417	SLM	36	3.9	SGO	35	3.3
Acala 1517-70	SLM	35	3.8	SGO	35	3.9
McNair 511	LM	34	4.2	SGO	35	3.6
McNair 210	SLM	35	4.1	SGO	34	3.7
Deltapine 25	SLM	35	4.4	SGO	34	3.8
Brycot 4	LM+	36	4.6	SGO	34	4.4
Hy-Bee 100A	LM+	36	4.4	SGO	33	4.2
Lockett 4789A	SLM	35	3.6	SGO	35	3.8
Coker 5110	LM+	36	4.0	SGO	34	3.5
Coker 8103	SLM	35	3.8	SGO	34	3.3
Quapaw	SLM+	34	4.5	SLM Lt. gray	34	4.1
Stoneville 7A	LM+	35	4.7	SGO	33	4.0
Average		35	4.1		34	3.8

Table 18. Classers' grade, staple, and micronaire for 16 cotton varieties mechanically harvested at Milan[1] in 1972

Variety	FIRST HARVEST			SECOND HARVEST		
	Grade	Staple in 32's	Micro-naire	Grade	Staple in 32's	Micro-naire
Dixie King II	LM+	35	3.9	LM	33	3.0
Stoneville 213	SLM	35	3.9	SGO[2]	35	3.0
Auburn M	SLM	35	3.3	LM	33	3.0
Hancock	LM+	36	3.6	SGO[2]	35	3.9
Hy-Bee 200A	LM+	35	3.6	LM	34	3.7
Deltapine 16	SLM	35	3.6	LM	35	2.8
T59-538	SGO	36	3.2	SGO	34	2.8
Delcot 277	LM	37	3.2	SGO	34	2.8
Stoneville 603	LM+	36	3.8	SGO	34	2.7
Coker 310	LM+	35	3.4	SGO	35	2.9
McNair 210	LM+	35	3.7	SGO	35	3.0
Deltapine 25	SLM	36	4.0	SGO	35	3.0
Brycot 4	SLM	35	3.9	SGO[2]	35	2.8
Coker 5110	LM+	37	3.6	SGO	35	2.6
Coker 8103	SLM	36	3.8	SGO	35	2.9
Quapaw	SLM	36	3.8	SGO	34	3.2
Average		36	3.6		34	3.0

[1]Memphis Silt Loam (2% to 5% slopes).
[2]One full grade reduction due to bark.

Table 19. Classers' grade, staple, and micronaire for 16 cotton varieties mechanically harvested at Milan[1] in 1972.

Variety	FIRST HARVEST			SECOND HARVEST		
	Grade	Staple in 32's	Micronaire	Grade	Staple in 32's	Micronaire
Dixie King II	LM	35	3.3	LM	34	2.9
Stoneville 213	LM+	35	3.6	LM	34	3.1
Auburn M	SLM	35	3.2	LM Lt.Sp.	34	3.0
Hancock	LM	35	3.3	SGO	34	3.0
Hy-Bee 200A	SLM	36	3.8	SGO	34	3.0
Deltapine 16	SLM	36	3.5	LM	35	3.0
T59-538	LM	36	3.0	SGO	35	2.8
Delcot 277	SLM Lt.Sp.	35	3.0	SGO[2]	35	2.7
Stoneville 603	LM	36	3.6	LM	34	2.9
Coker 310	LM	37	3.3	SGO[2]	35	2.7
McNair 210	LM+	36	3.4	SGO[2]	35	2.9
Deltapine 25	LM+	36	3.9	LM	34	3.0
Brycot 4	LM	35	3.8	SGO+	35	3.0
Coker 5110	LM	37	3.2	SGO[2]	35	2.7
Coker 8103	LM+	37	3.2	LM	35	2.8
Quapaw	SLM	34	3.5	LM Lt.Sp.	34	3.0
Average		36	3.4		35	2.9

[1]Falaya Silt Loam (0% to 2% slopes).
[2]One full grade reduction due to bark.

Table 20. Classers' grade, staple, and micronaire for 16 cotton varieties mechanically harvested at Lawrence County in 1972

Variety	Grade	Staple in 32's	Micronaire
Dixie King II	SLM Lt.Sp.	34	3.2
Stoneville 213	LM Lt.Sp.	33	3.2
Auburn M	SLM Lt.Sp.	34	3.3
Hancock	LM	34	3.6
Hy-Bee 200A	LM	34	3.4
Deltapine 16	SLM	34	3.0
T59-538	LM	34	3.0
Delcot 277	LM	34	2.8
Stoneville 603	LM	34	3.0
Coker 310	LM	34	3.2
McNair 210	SLM Lt.Sp.	34	3.4
Deltapine 25	LM	34	3.2
Brycot 4	LM	34	3.0
Coker 5110	LM	34	2.9
Coker 8103	SLM Lt.Sp.	34	3.2
Quapaw	SLM	34	3.5
Average		34	3.2

Table 21. Average fiber and spinning data from hand-picked samples obtained prior to first harvest of 16 cotton varieties tested at five locations in 1971

Variety	LENGTH		STRENGTH		Micronaire	Yarn strength 27 tx
	2.5SL	.50SL	T_1	E_1		
Dixie King II	1.10	.53	16.53	7.39	4.33	106
Stoneville 213	1.12	.55	17.39	8.36	4.62	111
Auburn M	1.11	.55	17.29	7.93	4.14	107
Hancock	1.08	.52	17.39	7.73	4.33	112
Hy-Bee 200A	1.16	.55	17.73	8.47	4.33	114
Deltapine 45A	1.12	.54	18.12	8.33	4.30	113
Deltapine 16	1.17	.55	17.86	9.27	4.29	114
T59-538	1.17	.54	17.26	8.08	3.77	115
TH-149	1.15	.57	19.35	7.10	4.38	122
Delcot 277	1.19	.58	19.54	9.70	3.91	124
Stoneville 603	1.12	.54	18.14	8.77	4.51	112
Coker 310	1.19	.55	18.61	7.74	4.43	118
McNair 210	1.11	.54	17.74	7.11	4.51	119
Deltapine 25	1.13	.55	19.02	8.15	4.53	117
Brycot XP-4	1.12	.54	17.70	7.25	4.58	114
Hy-Bee 100A	1.17	.56	17.97	7.96	4.28	113
Average	1.14	.55	17.98	8.08	4.33	114

Table 22. Average fiber and spinning data from hand-picked samples obtained prior to first harvest of 23 cotton varieties tested at three locations in 1971

Variety	LENGTH		STRENGTH		Micronaire	Yarn strength 27 tx
	2.5SL	.50SL	T_1	E_1		
Dixie King II	1.11	.53	16.05	7.40	4.34	106
Stoneville 213	1.13	.54	17.46	8.26	4.58	110
Auburn M	1.12	.55	16.91	7.88	4.24	103
Hancock	1.09	.53	17.15	7.66	4.27	112
Hy-Bee 200A	1.15	.54	17.67	8.63	4.42	114
Deltapine 45A	1.13	.54	17.89	8.25	4.37	113
Coker 201	1.13	.54	17.81	7.16	4.45	114
Deltapine 16	1.18	.55	17.86	9.24	4.31	114
T59-538	1.17	.54	17.23	8.17	3.79	113
Acala SJ-1	1.15	.56	19.72	7.25	4.29	124
TH-149	1.15	.57	19.10	7.09	4.34	118
Delcot 277	1.19	.57	19.44	9.31	3.89	124
Stoneville 603	1.13	.54	18.26	8.58	4.50	112
Coker 310	1.21	.55	18.67	7.65	4.43	119
Coker 417	1.19	.57	19.06	7.49	4.19	124
Paymaster III	1.08	.52	17.17	7.13	4.37	107
Coker 711	1.12	.54	18.53	7.75	4.42	116
McNair 511	1.12	.55	18.95	7.77	4.44	119
McNair 210	1.11	.54	18.08	6.87	4.51	120
McNair 9512	1.07	.52	18.39	8.26	4.40	118
Deltapine 25	1.15	.55	19.03	8.06	4.48	117
Brycot XP-4	1.13	.54	17.43	7.30	4.57	113
Hy-Bee 100A	1.18	.56	17.60	7.63	4.35	113
Average	1.14	.54	18.06	7.86	4.35	115

Table 23. Fiber and spinning data from hand-picked samples obtained prior to first harvest of 23 cotton varieties tested at Jackson in 1971

Variety	LENGTH		STRENGTH		Micronaire	Yarn strength 27 tx
	2.5SL	.50SL	T_1	E_1		
Dixie King II	1.08	.52	15.77	7.44	4.38	108
Stoneville 213	1.10	.54	17.92	8.17	4.58	115
Auburn M	1.09	.55	17.21	8.34	4.35	110
Hancock	1.09	.53	16.75	8.42	4.18	114
Hy-Bee 200A	1.15	.55	18.28	8.92	4.60	116
Deltapine 45A	1.15	.56	18.05	8.34	4.44	114
Coker 201	1.12	.54	18.11	7.41	4.35	116
Deltapine 16	1.16	.54	17.70	9.49	4.49	109
T59-538	1.17	.55	17.61	8.66	3.85	117
Acala SJ-1	1.14	.56	20.28	7.36	4.20	129
TH-149	1.14	.56	18.69	7.73	4.41	121
Delcot 277	1.17	.57	19.41	9.20	4.00	129
Stoneville 603	1.10	.53	17.95	8.61	4.53	115
Coker 310	1.21	.57	18.51	7.51	4.42	119
Coker 417	1.19	.56	18.67	7.21	4.24	124
Paymaster 111	1.09	.54	17.96	7.20	4.20	112
Coker 711	1.11	.54	18.27	7.55	4.18	119
McNair 511	1.12	.56	19.25	8.16	4.30	126
McNair 210	1.10	.52	18.37	7.48	4.40	123
McNair 9512	1.06	.52	18.91	7.95	4.35	120
Deltapine 25	1.14	.56	19.38	8.22	4.41	117
Brycot XP-4	1.13	.55	18.39	7.48	4.71	117
Hy-Bee 100A	1.17	.56	18.32	7.55	4.36	119
Average	1.13	.55	18.25	8.02	4.34	118

Table 24. Fiber and spinning data from hand-picked samples obtained prior to first harvest of 23 cotton varieties tested at Ames Plantation in 1971

Variety	LENGTH		STRENGTH		Micronaire	Yarn strength 27tx
	2.5SL	.50SL	T_1	E_1		
Dixie King II	1.12	.54	16.05	7.03	4.57	107
Stoneville 213	1.17	.58	17.41	8.12	4.75	112
Auburn M	1.12	.55	16.06	8.35	4.45	106
Hancock	1.10	.54	17.49	7.22	4.52	114
Hy-Bee 200A	1.17	.56	17.43	8.63	4.45	119
Deltapine 45A	1.11	.54	17.69	8.24	4.55	119
Coker 201	1.14	.57	17.21	7.23	4.82	112
Deltapine 16	1.17	.57	17.47	9.43	4.65	121
T59-538	1.19	.56	17.67	7.71	3.92	122
Acala SJ-1	1.17	.59	20.37	7.44	4.70	138
TH-149	1.16	.58	19.81	6.47	4.40	118
Delcot 277	1.20	.61	19.18	9.64	3.95	132
Stoneville 603	1.17	.58	17.89	9.04	4.62	114
Coker 310	1.20	.57	18.65	7.62	4.60	123
Coker 417	1.18	.57	19.08	7.67	4.37	131
Paymaster 111	1.08	.54	17.23	7.01	4.72	111
Coker 711	1.12	.56	19.11	8.28	4.82	116
McNair 511	1.12	.56	18.44	7.34	5.05	117
McNair 210	1.12	.55	18.29	6.33	4.60	123
McNair 9512	1.06	.52	18.21	8.66	4.55	121
Deltapine 25	1.15	.56	19.24	8.49	4.85	122
Brycot XP-4	1.13	.55	16.64	7.35	4.80	111
Hy-Bee 100A	1.20	.59	16.96	8.04	4.69	112
Average	1.15	.56	17.98	7.88	4.58	118

Table 25. Fiber and spinning data from hand-picked samples obtained prior to first harvest of 24 cotton varieties tested at Fort Pillow in 1971

Variety	LENGTH		STRENGTH		Micro-naire	Yarn strength 27tx
	2.5SL	.50SL	T_1	E_1		
Dixie King II	1.12	.52	16.33	7.73	4.08	103
Stoneville 7A	1.12	.52	17.17	7.43	4.42	106
Stoneville 213	1.11	.51	17.06	8.50	4.40	104
Auburn M	1.14	.54	17.46	7.95	3.92	93
Hancock	1.07	.51	17.20	7.34	4.10	107
Hy-Bee 200A	1.14	.52	17.29	8.35	4.20	107
Deltapine 45A	1.12	.51	17.94	8.16	4.11	107
Coker 201	1.14	.52	18.12	6.83	4.18	114
Deltapine 16	1.20	.54	18.40	8.79	3.80	113
T59-538	1.15	.51	16.42	8.15	3.61	100
Acala SJ-1	1.13	.52	18.50	6.95	3.98	105
TH-149	1.14	.56	18.81	7.08	4.21	115
Delcot 277	1.19	.54	19.72	9.09	3.73	112
Stoneville 603	1.11	.52	18.94	8.08	4.35	107
Coker 310	1.21	.51	18.86	7.83	4.26	116
Coker 417	1.20	.57	19.44	7.58	3.96	116
Paymaster 111	1.06	.48	16.33	7.19	4.19	98
Coker 711	1.12	.52	18.21	7.42	4.26	113
McNair 511	1.11	.54	19.16	7.82	3.97	113
McNair 210	1.12	.54	17.58	6.80	4.54	114
McNair 9512	1.09	.52	18.05	8.18	4.31	114
Deltapine 25	1.16	.52	18.47	7.47	4.18	111
Brycot XP-4	1.13	.52	17.27	7.08	4.19	110
Hy-Bee 100A	1.18	.53	17.51	7.29	4.05	108
Average	1.14	.53	17.93	7.71	4.13	109

Table 26. Fiber and spinning data from hand-picked samples obtained prior to first harvest of 16 cotton varieties tested at Milan on Memphis Silt Loam in 1971

Variety	LENGTH		STRENGTH		Micro-naire	Yarn strength 27tx
	2.5SL	.50SL	T_1	E_1		
Dixie King II	1.08	.54	17.55	6.97	4.35	110
Stoneville 213	1.10	.54	16.10	8.74	4.60	110
Auburn M	1.08	.55	17.52	7.89	4.10	111
Hancock	1.04	.49	17.20	7.96	4.52	113
Hy-Bee 200A	1.15	.57	17.41	8.41	4.35	114
Deltapine 45A	1.07	.54	17.97	8.62	4.47	105
Deltapine 16	1.15	.55	17.33	9.67	4.50	109
T59-538	1.17	.55	16.59	7.79	3.75	118
TH-149	1.16	.57	19.49	7.26	4.65	129
Delcot 277	1.18	.57	18.70	10.82	3.95	115
Stoneville 603	1.10	.53	18.13	8.77	4.55	111
Coker 310	1.15	.53	18.02	8.23	4.45	116
McNair 210	1.11	.53	17.88	7.29	4.45	115
Deltapine 25	1.11	.56	18.60	8.68	4.75	117
Brycot XP-4	1.08	.53	17.44	7.57	4.75	115
Hy-Bee 100A	1.14	.55	17.95	8.33	4.60	111
Average	1.12	.54	17.74	8.31	4.42	114

Table 27. Fiber and spinning data from hand-picked samples obtained prior to first harvest of 16 cotton varieties tested at Milan on Falaya Silt Loam in 1971

Variety	LENGTH		STRENGTH		Micro-naire	Yarn strength 27tx
	2.5SL	.50SL	T_1	E_1		
Dixie King II	1.09	.53	16.93	7.78	4.25	104
Stoneville 213	1.11	.56	18.47	8.25	4.75	114
Auburn M	1.12	.54	18.22	8.10	3.87	113
Hancock	1.07	.52	18.32	7.73	4.32	112
Hy-Bee 200A	1.17	.55	18.24	8.03	4.05	114
Deltapine 45A	1.13	.57	18.95	8.31	3.92	122
Deltapine 16	1.16	.56	18.40	8.98	4.00	117
T59-538	1.15	.55	18.00	8.10	3.72	116
TH-149	1.15	.58	19.96	6.95	4.25	129
Delcot 277	1.19	.60	20.68	9.74	3.92	130
Stoneville 603	1.12	.56	17.81	9.33	4.50	113
Coker 310	1.19	.57	19.02	7.49	4.40	118
McNair 210	1.09	.54	16.59	7.65	4.55	118
Deltapine 25	1.10	.55	19.40	7.88	4.47	118
Brycot XP-4	1.12	.54	18.76	6.75	4.45	117
Hy-Bee 100A	1.17	.55	19.09	8.60	3.75	116
Average	1.13	.55	18.55	8.10	4.20	117

Table 28. Average fiber and spinning data for 16 varieties grown in five Cotton Variety Tests in Tennessee in 1971*

Variety	Span length		UI	Strength		Micronaire	Yarn strength 27 tx
	.50	2.5		T_1	E_1		
Dixie King II	.468	1.053	44	15.73	7.46	4.17	90
Stoneville 213	.474	1.062	45	16.37	8.73	4.38	91
Auburn M	.459	1.047	44	15.90	8.59	4.01	87
Hancock	.457	1.036	44	15.74	7.79	4.00	91
Hy-Bee 200A	.474	1.106	43	16.92	8.61	4.04	95
Deltapine 45A	.486	1.081	45	17.20	8.21	4.07	95
Deltapine 16	.484	1.112	44	16.97	9.46	3.96	96
T59-538	.466	1.103	42	16.31	8.06	3.53	90
TH-149	.495	1.107	45	17.84	7.06	4.21	102
Delcot 277	.490	1.135	43	18.46	9.36	3.69	101
Stoneville 603	.481	1.082	44	17.18	8.82	4.06	96
Coker 310	.479	1.148	42	17.37	8.11	3.94	99
McNair 210	.481	1.076	45	17.18	7.62	4.10	99
Deltapine 25	.478	1.074	45	17.71	8.13	4.18	96
Brycot XP-4	.468	1.074	44	16.35	7.28	4.19	93
Hy-Bee 100A	.476	1.119	43	16.92	8.20	3.89	97
Average	.479	1.090	44	17.00	8.15	4.05	96

*Spindle picked and ginned on a modified commercial gin.

Table 29. Average fiber and spinning data for 23 varieties grown in three Tennessee Cotton Variety Tests in 1971*

Variety	Span length .50	Span length 2.5	UI	Strength T_1	Strength E_1	Micronaire	Yarn strength 27tx
Dixie King II	.478	1.070	45	15.56	7.29	4.21	90
Stoneville 213	.478	1.073	45	15.92	8.53	4.37	90
Auburn M	.470	1.065	44	16.07	8.49	3.99	87
Hancock	.463	1.053	44	15.75	7.59	4.02	89
Hy-Bee 200A	.482	1.117	43	17.04	8.32	4.10	93
Deltapine 45A	.487	1.090	45	16.86	8.07	4.09	94
Coker 201	.480	1.090	44	16.67	7.40	4.11	93
Deltapine 16	.490	1.135	43	16.86	9.38	3.98	94
T59-538	.472	1.115	42	16.02	7.78	3.52	90
Acala SJ-1	.495	1.120	44	17.58	7.40	4.08	105
TH-149	.500	1.108	45	17.91	6.94	4.30	101
Delcot 277	.493	1.150	43	17.91	9.35	3.63	97
Stoneville 603	.488	1.095	45	17.16	8.60	4.12	95
Coker 310	.488	1.167	42	17.30	8.17	4.03	100
Coker 417	.500	1.170	43	17.87	7.35	3.97	103
Paymaster III	.473	1.065	44	15.76	7.47	4.08	86
Coker 711	.492	1.110	44	17.66	7.71	4.37	97
McNair 511	.497	1.098	45	18.30	8.08	4.22	106
McNair 210	.495	1.095	45	16.88	7.48	4.09	100
McNair 512	.473	1.045	45	17.50	8.54	4.32	101
Deltapine 25	.480	1.088	44	17.16	8.14	4.21	94
Brycot XP-4	.470	1.087	43	16.30	7.16	4.26	91
Hy-Bee 100A	.480	1.135	42	16.53	8.05	3.98	96
Average	.486	1.103	44	16.89	7.96	4.09	95

*Spindle picked and ginned on a modified commercial gin.

Table 30. Fiber and spinning data for 23 cotton varieties grown in the variety test at Jackson, Tennessee in 1971*

Variety	Span length		UI	Strength		Micronaire	Yarn strength 27 tx
	.50	2.5		T_1	E_1		
Dixie King II	.49	1.07	46	16.14	7.45	4.20	94
Stoneville 213	.49	1.08	45	16.70	8.59	4.33	97
Auburn M	.48	1.07	45	16.25	8.37	4.08	89
Hancock	.48	1.05	45	16.27	7.56	3.91	92
Hy-Bee 200A	.48	1.11	43	17.14	8.40	3.98	100
Deltapine 45A	.48	1.08	44	16.84	8.69	3.86	94
Coker 201	.47	1.07	44	17.04	8.17	3.89	98
Deltapine 16	.51	1.14	44	17.25	9.43	3.95	101
T59-538	.48	1.13	42	16.12	8.30	3.31	92
Acala SJ-1	.50	1.13	44	18.63	7.60	3.90	109
TH-149	.50	1.11	45	18.18	6.92	4.20	108
Delcot 277	.50	1.16	43	17.76	9.12	3.50	102
Stoneville 603	.50	1.11	45	16.66	9.32	4.08	97
Coker 310	.50	1.16	43	17.41	8.45	3.99	103
Coker 417	.50	1.18	42	17.35	7.53	3.78	107
Paymaster III	.50	1.08	47	16.07	7.29	3.96	93
Coker 711	.50	1.11	45	17.78	7.61	4.08	100
McNair 511	.51	1.11	46	18.34	8.11	3.98	112
McNair 210	.50	1.10	45	16.20	7.97	3.98	104
McNair 9512	.48	1.06	45	17.92	8.77	4.08	105
Deltapine 25	.50	1.11	45	17.33	7.76	4.10	100
Brycot XP-4	.49	1.10	44	16.55	7.17	4.24	96
Hy-Bee 100A	.50	1.14	43	16.59	7.51	3.70	102
Average	.49	1.11	44	17.07	8.09	3.96	99

*Spindle picked and ginned on a modified commercial gin.

Table 31. Fiber and spinning data for 23 varieties grown in the Cotton Variety Test at Ames Plantation in 1971*

Variety	Span Length		UI	Strength		Micro-naire	Yarn strength 27 tx
	.50	2.5		T_1	E_1		
Dixie King II	.49	1.08	45	16.00	7.18	4.28	91
Stoneville 213	.49	1.10	45	16.00	8.68	4.54	97
Auburn M	.50	1.09	45	16.49	9.08	4.06	95
Hancock	.48	1.08	45	16.39	7.77	4.28	98
Hy-Bee 200A	.51	1.16	44	17.59	8.22	4.25	98
Deltapine 45A	.53	1.12	47	17.34	7.65	4.34	103
Coker 201	.52	1.13	46	16.93	7.00	4.46	101
Deltapine 16	.49	1.14	43	16.62	10.53	4.10	99
T59-538	.52	1.15	45	17.01	7.65	3.71	103
Acala SJ-1	.55	1.16	48	18.86	7.44	4.31	117
TH-149	.54	1.13	47	18.63	7.10	4.48	105
Delcot 277	.53	1.18	45	19.39	10.59	3.70	107
Stoneville 603	.52	1.12	47	17.79	8.59	4.35	101
Coker 310	.51	1.20	43	17.48	8.57	4.15	107
Coker 417	.54	1.20	45	18.08	7.49	4.23	112
Paymaster III	.50	1.12	45	16 68	7.60	4.23	98
Coker 711	.52	1.14	45	17.60	8.10	4.68	102
McNair 511	.51	1.11	46	18.59	8.39	4.45	110
McNair 210	.52	1.11	46	17.88	7.32	3.93	113
McNair 9512	.50	1.05	47	17.71	8.56	4.48	106
Deltapine 25	.51	1.11	46	17.10	8.65	4.38	104
Brycot XP-4	.49	1.11	44	16.19	7.20	4.48	97
Hy-Bee 100A	.51	1.16	44	16.98	8.46	4.43	103
Average	.51	1.13	45	17.36	8.17	4.27	103

*Spindle picked and ginned on a modified commercial gin.

Table 32. Fiber and spinning data for 24 entries in the 1971 Fort Pillow State Cotton Variety Test*

Variety	Span length		UI	Strength		Micronaire	Yarn strength 27 tx
	.50	2.5		T_1	E_1		
Dixie King II	.46	1.06	43	14.54	7.24	4.15	85
Stoneville 7A	.45	1.06	43	15.80	7.09	4.15	82
Stoneville 213	.46	1.04	44	15.05	8.33	4.23	78
Auburn M	.44	1.04	42	15.46	8.03	3.84	79
Hancock	.44	1.04	42	14.59	7.45	3.88	78
Hy-Bee 200A	.46	1.09	42	16.40	8.35	4.08	82
Deltapine 45A	.45	1.07	42	16.39	7.86	4.06	85
Coker 201	.45	1.08	42	16.05	7.03	3.98	81
Deltapine 16	.48	1.13	42	16.72	8.18	3.90	83
T59-538	.42	1.07	39	14.93	7.39	3.55	76
Acala SJ-1	.44	1.08	41	15.25	7.17	4.04	89
TH-149	.47	1.09	43	16.92	6.79	4.23	91
Delcot 277	.45	1.12	40	16.57	8.34	3.68	84
Stoneville 603	.45	1.06	42	17.02	7.48	3.94	87
Coker 310	.46	1.15	40	17.02	7.48	3.95	89
Coker 417	.47	1.14	41	18.19	7.04	3.91	92
Paymaster III	.42	1.00	42	14.54	7.51	4.05	69
Coker 711	.46	1.09	42	17.61	7.41	4.36	91
McNair 511	.47	1.08	44	17.96	7.75	4.23	98
McNair 210	.47	1.08	44	16.57	7.14	4.35	84
McNair 9512	.45	1.03	44	16.86	8.29	4.41	94
Deltapine 25	.44	1.06	41	17.04	8.02	4.16	79
Brycot XP-4	.44	1.06	42	16.17	7.12	4.06	81
Hy-Bee 100A	.44	1.11	40	16.01	8.13	3.80	84
Average	.45	1.07	42	16.24	7.63	4.04	84

*Spindle picked and ginned on a modified commercial gin.

Table 33. Fiber and spinning data for 16 cotton varieties grown on Memphis soil at the Milan Field Station in 1971*

Variety	Span length		UI	Strength		Micro-	Yarn strength
	.50	2.5		T_1	E_1	1 naire	27 tx
Dixie King II	.46	1.03	44	16.07	8.00	4.20	90
Stoneville 213	.47	1.03	45	16.93	8.68	4.54	91
Auburn M	.45	1.02	44	15.73	8.95	4.25	86
Hancock	.46	1.02	45	16.40	8.08	4.00	98
Hy-Bee 200A	.47	1.10	42	16.66	9.34	3.96	98
Deltapine 45A	.50	1.08	46	16.95	8.04	4.28	97
Deltapine 16	.48	1.07	45	17.17	9.36	4.20	98
T59-538	.47	1.09	43	16.71	8.35	3.56	88
TH-149	.51	1.11	46	17.14	7.37	4.20	106
Delcot 277	.51	1.13	45	19.14	9.65	3.98	110
Stoneville 603	.47	1.08	44	16.98	9.21	4.10	95
Coker 310	.47	1.11	42	17.76	7.76	4.11	102
McNair 210	.47	1.06	44	18.27	8.14	4.28	97
Deltapine 25	.48	1.06	45	19.09	8.47	4.24	102
Brycot XP-4	.47	1.06	44	15.93	7.82	4.25	96
Hy-Bee 100A	.48	1.10	44	17.89	8.72	3.89	99
Average	.48	1.07	44	17.18	8.50	4.13	97

* Spindle picked and ginned on a modified commercial gin.

Table 34. Fiber and spinning data for 16 varieties grown on Falaya soil at Milan, Tennessee in the Cotton Variety Test in 1971*

Variety	Span length .50	Span length 2.5	UI	Strength T_1	Strength E_1	Micronaire	Yarn strength 27 tx
Dixie King II	.45	1.03	44	15.89	7.44	4.03	90
Stoneville 213	.47	1.06	44	17.19	9.35	4.25	94
Auburn M	.44	1.03	43	15.58	8.54	3.81	85
Hancock	.44	1.00	44	15.05	8.08	3.93	90
Hy-Bee 200A	.46	1.09	42	16.82	8.75	3.91	96
Deltapine 45A	.48	1.06	45	18.46	8.80	3.80	99
Deltapine 16	.48	1.09	44	17.08	9.81	3.66	101
T59-538	.45	1.09	41	16.76	8.59	3.53	91
TH-149	.47	1.11	43	18.34	7.12	3.95	103
Delcot 277	.47	1.10	42	19.46	9.11	3.60	102
Stoneville 603	.48	1.06	45	17.46	9.10	3.81	99
Coker 310	.47	1.13	41	17.16	8.30	3.49	96
McNair 210	.46	1.04	44	16.97	7.53	3.98	97
Deltapine 25	.47	1.05	45	18.00	7.74	4.00	98
Brycot XP-4	.47	1.06	44	16.92	7.08	3.93	96
Hy-Bee 100A	.46	1.09	42	17.15	8.13	3.63	99
Average	.46	1.07	43	17.14	8.34	3.83	96

*Spindle picked and ginned on a modified commercial gin.

REGIONAL HIGH QUALITY STRAINS TEST

This experiment was conducted cooperatively with USDA and other states. A number of experimental strains, each possessing superior fiber properties, and three commercial checks were tested at 11 locations in 10 states. The commercial checks included one standard south-eastern variety (Coker 310) and one standard Delta variety (Deltapine 16) for yield comparison, and one variety with high quality lint (Acala 1517-70).

Sampling procedure and kind of data obtained were identical to those in the Tennessee testing program. Yields were about equal to those obtained in the variety test at Jackson. Coker 310 was the yield leader in this test. Six experimentals yielded more than Deltapine 16. Acala 1517-70 did not yield competitively in this test. Fiber data for 1972 are not available. Fiber data for 1971 are given since most of the experimentals in the 1972 test were included in the 1971 test.

A number of currently available varieties were evaluated in the Regional High Quality Strains Test before their release. Data are presented in Tables 35-39.

Table 35. Lint yields and other characteristics of 13 cotton varieties and experimental strains grown in the Regional High Quality Strains Test at Jackson in 1972[1]

Variety	Lint yield per acre		First harvest	Plant height
	Total	at 1st harvest		
	Lb.	Lb.	%	In.
Coker 310	903	661	73	47
Stoneville 804	896	728	81	52
PD 4381D	853	650	76	50
PD 8623	847	639	76	49
Coker 8103	834	632	76	50
CP8M1	806	642	80	44
Deltapine 6532	805	648	81	46
Deltapine 16	794	526	66	51
LaDASS 197	773	486	63	57
McNair 9416	730	513	70	51
Bayou 7769	718	449	63	58
T60-83	551	394	72	47
Acala 1517-70	449	272	61	56
Average	766	557	72	50
Min L.S.R. .05	102			3
Max L.S.R. .05	122			4
C.V.%	11.6			6.1

[1]Memphis silt loam (0% to 2% slopes).

Table 36. Gin and boll data for 13 cotton varieties and experimental strains grown in the Regional High Quality Strains Test at Jackson in 1972

Variety	Lint	Bolls per lb.	Seed Index	Gin[1] turnout
	%	No.		%
Coker 310	39.9	76	9.7	33.9
Stoneville 804	39.2	79	9.8	32.0
PD 4381D	37.4	77	10.2	32.7
PD 8623	40.2	76	10.6	34.8
Coker 8103	38.2	71	10.2	32.0
CP 8M1	37.4	71	11.4	31.1
Deltapine 6532	35.2	69	12.1	30.6
Deltapine 16	37.9	77	9.8	32.7
La DASS 197	39.4	79	10.4	31.8
McNair 9416	36.1	65	10.8	30.4
Bayou 7769	37.8	80	10.1	31.6
T60-83	37.0	68	10.8	31.0
Acala 1517-70	35.0	79	10.5	27.6
Average	37.7	74	10.5	31.7

[1]Spindle picked and ginned on a modified commercial gin; all other data from hand-picked samples.

Table 37. Classers' grade, staple, and micronaire for 13 mechanically harvested cotton varieties and experimental strains grown in the Regional High Quality Strains Test at Jackson in 1972

	FIRST HARVEST			SECOND HARVEST		
Variety	Grade	Staple in 32's	Micro-naire	Grade	Staple in 32's	Micro-naire
Acala 1517-70	GO Lt.Sp.	34	3.4	SGO[1]	35	3.4
Bayou 7769	SGO	35	3.6	SGO[1]	35	3.5
Coker 310	SGO	35	3.5	SGO[1]	35	3.5
Coker 8103	SGO	34	3.4	SGO	34	3.2
CP8M1	SGO	34	3.8	SGO[1]	34	3.6
Deltapine 16	LM Lt.Sp.	35	3.6	LM[1]	35	3.3
Deltapine 6532	SGO	35	3.6	SGO[1]	35	3.5
LaDASS 197	SGO	34	3.9	LM	34	3.8
McNair 9416	SGO	35	3.8	SGO[1]	34	3.7
PD 4381D	SGO	34	3.2	SGO[1]	34	3.1
PD 8623	SGO	34	3.5	SGO[1]	35	3.3
Stoneville 804	LM Lt.Sp.	34	3.5	LM	34	3.5
T60-83	LM Lt.Sp.	34	3.5	SGO[1]	35	3.4
Average		34	3.6		34	3.4

[1]One full grade reduction due to bark.

Table 38. Fiber and spinning data from hand-picked samples obtained prior to first harvest of 18 cotton varieties and experimentals tested in the Regional High Quality Strains Test at Jackson in 1971

Variety	Length		Strength		Micro-naire	Yarn strength 27 tx
	2.5SL	.50SL	T_1	E_1		
Acala SJ-1	1.14	.57	20.68	7.90	4.43	131
Coker 201	1.11	.53	17.74	7.70	4.38	112
Coker 310-1901	1.17	.55	18.09	8.18	4.59	120
Coker 8103	1.14	.55	18.21	7.38	4.23	128
Coker 423-70911	1.13	.57	19.98	7.28	4.45	125
Coker 8215	1.15	.58	20.36	7.44	4.63	126
CP828	1.10	.56	21.22	6.38	4.43	125
CP820589	1.13	.58	20.61	6.48	4.55	132
Deltapine 607	1.11	.57	19.47	7.44	4.40	122
McNair 9416	1.06	.56	18.40	6.89	4.54	121
MO. 63-079A	1.14	.57	18.88	8.66	4.15	120
PD8619	1.15	.59	21.15	7.67	4.45	133
PeeDee 4381-54	1.13	.57	19.59	7.02	4.56	120
PeeDee 4381-567	1.13	.57	19.78	6.69	4.30	127
Stoneville 804	1.11	.55	20.61	6.88	4.28	123
LaDASS 5175	1.09	.54	18.92	7.37	4.45	124
Bayou 7769	1.11	.55	20.42	8.24	4.08	130
T60-30	1.11	.54	19.53	7.90	4.49	122
Average	1.12	.56	19.65	7.42	4.41	125

Table 39. Fiber and spinning data for 18 cotton varieties grown in the Regional High Quality Strains Test at Jackson, Tennessee in 1971*

Variety	Span Length .50	Span Length 2.5	UI	Strength T_1	Strength E_1	Micronaire	Yarn strength 27tx
Acala SJ-1	.51	1.10	46	18.65	7.59	4.14	115
Coker 201	.49	1.10	45	16.38	8.09	4.29	100
Coker 310-1901	.49	1.15	43	17.66	8.35	3.84	106
Coker 8103	.51	1.13	45	18.41	7.85	4.01	113
Coker 423	.52	1.12	47	17.71	7.44	4.09	112
Coker 8215	.51	1.10	46	19.88	8.03	4.13	113
CP 828	.49	1.09	45	19.91	7.25	4.13	113
CP 820589	.48	1.06	45	19.48	6.86	4.13	114
Deltapine 607	.49	1.10	45	18.39	7.99	3.84	107
McNair 9416	.48	1.08	45	17.97	7.31	3.95	102
MO. 63-079A	.48	1.09	44	17.14	9.96	3.63	100
PD 8619	.51	1.11	46	18.91	8.45	4.06	123
PD 4381-54	.48	1.08	44	18.46	6.77	4.16	111
PD 4381-67	.47	1.06	44	17.72	8.09	3.90	109
Stoneville 804	.47	1.05	45	17.89	7.39	4.20	105
LaDass 5175	.44	1.02	43	17.65	7.29	4.11	102
Bayou 7769	.46	1.04	44	18.40	8.51	3.78	109
T60-30	.47	1.02	46	19.09	7.76	4.38	105
Average	.49	1.08	45	18.32	7.83	4.04	109

*Spindle picked and ginned on a modified commerical gin.

ADVANCED STRAINS TEST

An advanced strains test consisting of 14 experimental strains and two commercial checks was conducted at Milan in 1972. Advanced strains from breeding programs of Tennessee, surrounding states, and southeastern and Delta commercial companies were included in the test. Numerous varieties that are currently available were included in the Advanced Strains Test before they were released. Strains that did not perform well were discarded.

Outstanding yields were obtained from all entries in the 1972 test. The four Stoneville experimentals yielded more than Hancock, the higher yielding commercial check. Staple length was good, but micronaire values were low.

Fiber data for 1971 are given, since many of the 1971 experimentals were included in the 1972 test. Data are presented in Tables 40-42.

Table 40. Lint yield and other characteristics of 16 cotton varieties and experimental strains grown in the Advanced Strains Test at Milan in 1972[1]

Variety	Lint yield per A.	First harvest	Plant height	Gin turnout	
				First harvest	Second harvest
	Lb.	%	In.	%	%
Dixie King 375	1380	90	45	36.5	35.9
Stoneville 256	1350	90	44	38.0	35.9
Stoneville 603-526	1345	90	41	36.1	34.8
Stoneville 213-151	1337	90	43	38.7	36.3
Hancock	1320	92	42	37.6	34.0
Coker 70-112	1257	91	39	37.4	32.8
McNair 9512	1254	85	44	35.5	34.7
Deltapine 652-679-72	1252	91	41	40.2	36.1
Coker 8304	1244	91	39	38.5	36.7
McNair 0612	1241	93	39	38.4	34.8
Coker 70-110	1216	90	40	36.7	35.7
McNair 0718	1196	88	40	35.3	35.2
Deltapine 16	1163	88	42	37.6	35.7
T59-538	1162	91	35	35.1	32.4
T70-1	1135	85	43	36.3	34.0
Pope G1s.	1131	93	39	35.8	32.8
Average	1249	90	41	37.1	34.9
Min L.S.R. .05	89				
Max L.S.R. .05	108				
C.V. %	6.9				

[1]Memphis silt loam (2% to 5% slope).

Table 41. Classers' grade, staple, and micronaire for 16 cotton varieties and experimental strains harvested by spindle-picker in the Advanced Strains Test at Milan in 1972

	FIRST HARVEST			SECOND HARVEST		
Variety	Grade	Staple in 32's	Micro-naire	Grade	Staple in 32's	Micro-naire
Deltapine 16	SLM	36	3.7	LM	34	3.0
Deltapine 652-679-72	SLM	37	4.0	LM Lt.Sp.	34	3.1
McNair 0612	SLM	35	3.8	SGO	34	2.9
McNair 0718	SLM	36	3.9	LM	33	3.1
McNair 9512	SLM	35	3.9	LM	34	3.1
Dixie King 375	LM+	35	3.7	SGO[1]	34	3.0
Stoneville 256	SLM	35	3.9	SGO+	35	3.0
Stoneville 213-151	SLM	35	3.7	SGO	34	3.0
Stoneville 603-526	SLM	36	3.8	LM	35	3.1
Coker 70-110	SLM	37	3.9	LM[1]	34	3.1
Coker 70-112	LM+	35	3.8	LM	35	3.1
Coker 8304	LM+	36	3.5	SGO	34	2.9
Hancock	SLM	34	3.7	SGO	34	3.2
Pope G1s.	SLM	34	3.6	LM Lt.Sp.	33	2.6
T70-1	LM+	35	3.7	LM	34	3.2
T59-538	LM+	37	3.3	SGO	34	2.9
Average		35	3.7		34	3.0

[1]One full grade reduction due to bark.

Table 42. Fiber and spinning data for 18 entries in the Advanced Strains Test grown at Milan, Tennessee in 1971*

Variety	Span length		UI	Strength		Micronaire	Yarn strength 27 tx
	.50	2.5		T_1	E_1		
Stoneville 256	.46	1.05	44	16.36	7.84	4.11	92
Stoneville 279	.46	1.03	45	16.60	9.02	4.22	93
Dixie King 375	.46	1.03	45	17.52	7.98	4.16	105
Deltapine 652	.47	1.04	45	17.48	8.67	3.80	101
Deltapine 16	.46	1.09	42	16.87	8.47	3.95	101
T57-480	.45	1.05	43	16.53	7.28	3.90	95
T59-538	.47	1.09	43	16.54	7.93	3.72	94
T60-30	.48	1.07	45	19.16	7.35	4.10	107
T60-83	.50	1.06	47	18.29	7.77	4.17	99
T66-1	.47	1.05	45	16.67	7.55	4.10	95
T70-1	.47	1.06	44	17.34	7.98	3.81	94
Hancock	.48	1.04	46	16.95	7.44	4.11	98
Rex 69 gls.	.47	1.05	45	16.59	8.36	4.18	89
Quapaw	.46	1.01	45	15.80	7.21	4.29	89
Coker 310-70903	.49	1.14	43	17.05	8.06	4.10	96
Coker 5110	.48	1.12	43	16.97	8.45	3.93	101
Coker 8313	.48	1.14	42	16.71	8.38	3.80	95
Coker 8103	.51	1.13	45	18.64	7.20	3.89	113
Average	.47	1.07	44	17.12	7.94	4.02	98

*Spindle picked and ginned on a modified commerical gin.

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